

# Living in Australia

Both Indigenous Australians and early European settlers to Australia made decisions about where to live based on the availability of resources they needed to survive – things like water, food and shelter. The factors that influence where people live today are more varied. As well as needing access to food, water and shelter, people also choose where to live based on things like access to services (such as hospitals and schools), environmental quality (such as access to clean air and parklands) and safety. Connections to family, friends and places also influence where we live. Where we choose to live can also change over time due to a range of factors, such as work and property prices. In retirement, many people opt for a sea change or tree change to enjoy a more relaxed lifestyle.



Source 1 An oblique aerial photograph of the Melbourne showing the suburb of St Kilda in the foreground

## chapter 4

### 4A

Where do Australians live and why?

- 1 What features shown in Source 1 tell you that many people live in the suburb of St Kilda?
- 2 Why do you think people choose to live in St Kilda?

### 4B

How do people connect to places?

- 1 What common interests or hobbies might people who live in St Kilda share?
- 2 How might the lifesavers at St Kilda Beach be considered a community of their own?



# 4.1 Why we live where we do

The **liveability** of any place is closely linked to how suitable and enjoyable you think that place is to live in. How liveable you find a place to be depends on your own wants and needs and whether they are met. What we like about places can depend on our age, income, cultural background, lifestyle, values and beliefs. The following questions will help you to determine the features of places that make them most liveable to you.

## What do you like to do?

Access to services and facilities that allow us to do the things we enjoy has an effect on what we think of the place we live. This, in turn, increases how highly we rate its liveability.

Sport and recreation play an important part in our lives. Team sports (such as netball, football and soccer) can be played in most places. Community facilities (such as sports stadiums and sporting parks) are provided in most communities. If your passion is surfing, you might consider a coastal town more liveable than an inland town. Horse riders might prefer to live in a rural area or on the edge of a city, close to open spaces where they can keep their horses.

## Where do you like to go?

The places we like to go to, and how easy they are to get to, also affect the liveability of a place.



**Source 1** Some activities, such as horse riding, require lots of space.



**Source 2** Busy streets in cities can make moving around difficult.

Where do you spend most of your time? Do you like to catch up with friends, go to the movies, or shop at the local shopping centre? How do you get there? Do you walk, ride a bike, or catch a bus, tram or train? Think about how easy it is for you to travel from your home to where you like to go. Is it difficult? This could make you feel negatively about where you live, decreasing its liveability. Is there another place you could live that might make it easier for you to travel to where you like to go? If so, this would increase the liveability of that place for you.

## What are your favourite places?

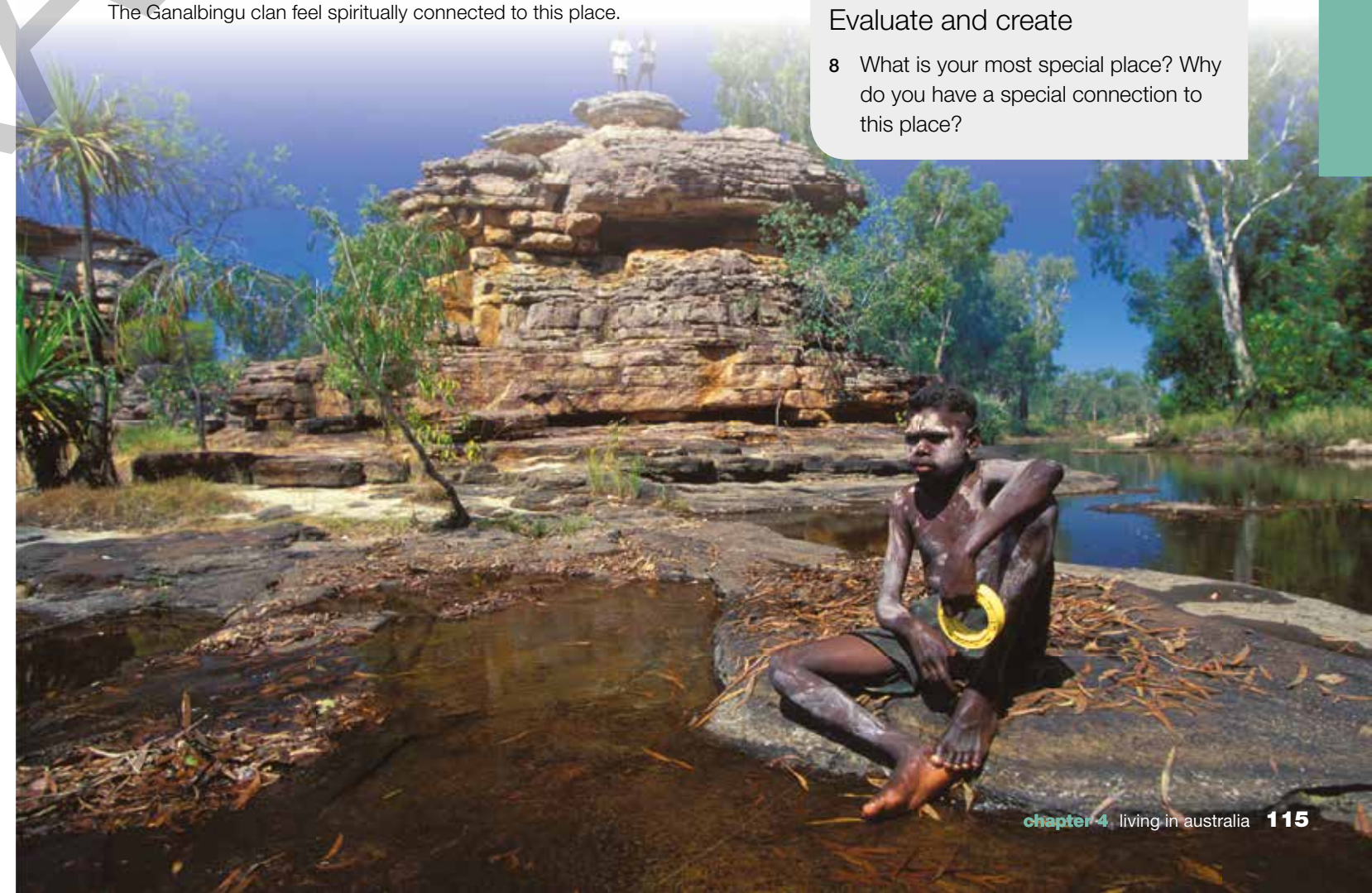
We all have places that are special to us. There are many different reasons for this. Some places appeal because of the way they look. This is known as the aesthetic appeal. Others appeal to us because they are familiar or are attached to memories of things we have done. This is known as sentimental appeal. We may even have a spiritual connection with a particular place. Aboriginal and Torres Strait

Islander peoples have developed very strong connections with their places. Places are a dominant feature of their stories and their lives. These spiritual connections can also increase the liveability of one place over another.

Every year about 5000 Australians are asked to take part in a survey about the factors that they believe make a place liveable. Their replies are often similar to the replies of people from all around the world when asked the same question. Most people agree that a liveable place:

- offers a temperate (mild) climate
- is easy to get around
- is able to offer good health care, work and education opportunities
- is safe
- is affordable
- is diverse
- is sustainable
- is attractive.

**Source 3** An Aboriginal boy fishing in Manbalbirrarri billabong at Djukalajarrang, Arnhem Land. This is a very special place for the Ganalbingu clan because of important rock art, burial caves and secret and sacred sites. The Ganalbingu clan feel spiritually connected to this place.



## Check your learning 4.1

### Remember and understand

- 1 What is meant by the word 'liveability'?
- 2 What characteristics of a place attract us?
- 3 What do you like to do? Where would be a good place to live to enable you to do this?
- 4 Where do you like to go? Where would be a good place to live to enable you to do this?

### Apply and analyse

- 5 Imagine that you could live anywhere. Where would you live and why?
- 6 What are the important aspects of liveability that don't need a lot of money?
- 7 Give an example of how a person of your age and a much older person might have different ideas about the liveability of a place.

### Evaluate and create

- 8 What is your most special place? Why do you have a special connection to this place?



## 4.2 Where early Indigenous Australians lived

It is impossible to work out exactly when the first people arrived in Australia, but many historians estimate it was between 40 000 and 50 000 years ago. At that time, sea levels were lower than they are today. The islands of Indonesia were part of the Asian mainland, and over time people walked and undertook short sea voyages to reach what is now northern Australia. Over thousands of years these people gradually moved south, eventually reaching the south-western and south-eastern corners of Australia. As sea levels rose, Australia became an island and the cultures and traditions of Indigenous Australians developed in isolation.

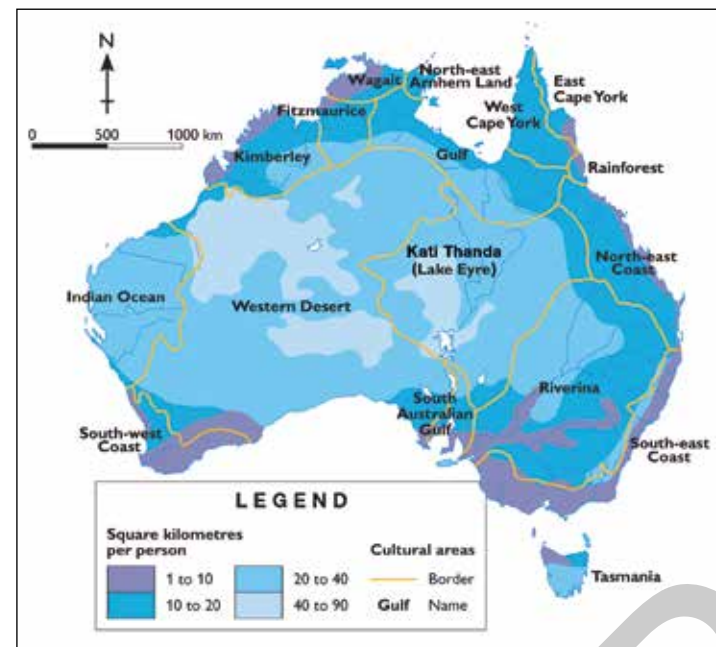
### Factors that influenced where Indigenous Australians lived

Upon reaching the Australian continent, early Indigenous Australians looked for the most liveable places – those that supplied the resources they needed to survive and prosper. Many settled along the northern, eastern and southern coasts as well as along what we now know as the Murray River. In these places they found the resources they needed to survive, particularly fresh water and abundant food.

Indigenous Australians developed a way of life that took advantage of the natural resources available. Trees provided many important resources, including bark to make shelters, canoes and shields, and wood to make fires and spears.

They fished the rivers, in some places building elaborate stone traps to catch eels and fish, and hunted larger game such as kangaroo and wallaby. Birds and lizards living in the trees also supplied much of their food. Early tribes used virtually every part of the natural environment to support their way of life – shells, stones, plant fibres, coloured clay and bones all had their uses, however, a reliable supply of fresh water, usually a river or stream, was perhaps the most important resource.

AUSTRALIA: LOCATION AND DISTRIBUTION OF INDIGENOUS AUSTRALIANS IN 1788



Source 1

Source: Oxford University Press

Source 2 Aboriginal men in northern Queensland demonstrating traditional fishing techniques using a spear



Source 3 In the Western Desert, Aboriginal people use fire to expose the hiding places of goanna.

Further inland, resources were much scarcer. Aboriginal communities living here developed a different way of life suited to the limited resources. Throughout much of Australia, fresh water is hard to find and there are few large animals to supply food. In these desert regions, Aboriginal people had a more seasonal way of life than the coastal and river peoples. Liveable places changed according to the season, so for most of the year they kept on the move, following natural cycles of monsoonal rains, the movement of animals or the fruiting of plants. They became superb trackers and hunters and were able to survive in some of the harshest environments on Earth. They found water in the most unlikely places, even in the roots of desert plants and the bodies of dormant (hibernating) frogs. Much of their food came from animals such as insects, grubs and reptiles, as well as from plants such as the bush tomato.

### A spiritual connection to the land

Aboriginal peoples developed a deep connection with the land that supported them. The land forms the core of their beliefs and spirituality and an integral part of their view of themselves. They do not see themselves as separate from the natural environment but as part of it. Rather than owning land or living off the land, they believe that they live *with* the land and are responsible for looking after it. Their perception of liveability is based on the principle that the land is much more than just a resource to be used. Aboriginal people refer to their land, and their connection to it, as Country.

Part of the reason that Country is such an important concept to Aboriginal Australians is because their Dreaming stories, their way of life and their ancestors are all part of their homelands. When an Aboriginal Australian is in their Country, their spirits and their ancestors keep living through them.

In fact, they see the Country as a living individual. Many Aboriginal Australians choose to live in their traditional homelands or dream of doing so. Like other Australians might long to see a favourite relative or return to a family home, Aboriginal Australians get their sense of belonging from their Country.

### Check your learning 4.2

#### Remember and understand

- 1 How did Indigenous Australians first reach Australia?
- 2 Why did most Aboriginal people live near the coast or along rivers?

#### Apply and analyse

- 3 Compare the ways of life of inland desert Aboriginal people and those who lived near rivers in south-eastern Australia. What were some of the similarities and some of the differences?
- 4 Examine Source 2. What natural resources are these Aboriginal hunters using?
- 5 What factors influenced the liveability of places for early Indigenous Australians? Are these factors the same as those that influence your ideas on what makes a place liveable? Why/why not?

#### Evaluate and create

- 6 What do you think Indigenous Australians may have used each of these resources for: shells, stones, plant fibres, coloured clay and bones?
- 7 When Europeans arrived in Australia they had a different view of land ownership and use than Indigenous Australians. Why did these differences cause tensions and conflicts between these two groups of people?

Source 4 Many modern Aboriginal Australians are moving back to their traditional homelands to reconnect with their ancestors and their beliefs.





## 4.3 Where modern Australians live

In much the same way as the early Indigenous Australians did, modern Australians also make choices about where they live based on how liveable they perceive a place to be. Today, however, many things have changed. In the distant past, people chose where to live based on whether the place gave them access to the basics necessary for survival, such as water and food. Today, modern technology and **infrastructure** make food and water available right across Australia, even in parts of the country, such as the desert, that would have previously been uninhabitable. As a result, the factors that influence where modern Australians live have changed. Today, many Australians make decisions about where to live based on a series of lifestyle factors.

### Factors that influence where modern Australians live

A person's perceptions of liveability often depend on his or her needs, wants or preferences. These needs and wants are changing all the time and are often dependent on what stage of life a person is at. Age has a big influence on what a person wants from where they live. Young adults, for example, often want access to educational opportunities and jobs, while retired people will not be so concerned about these things. The type of household a person is a part of is also significant, as families have different needs from single people.

Despite these differences, many of the factors that people take into consideration when deciding where to live remain constant. A range of these are discussed below.

#### Housing

Suitable housing is a key consideration for people. On a basic level, people make decisions about where they live depending on what they can afford, and the size of house they need. Personal choice also has a big influence, whether, for example, someone wants



**Source 1** Local shopping centres are an attractive feature to many people.

a modern home or a traditional home, a large garden or a low-maintenance apartment.

#### Access to services

People generally like to live within easy reach of the services they need. Public transport and well-maintained roads help people to get around with ease. Access to health care is also important, but even more so for people who need specialist care. Families with children often want access to good schools, childcare and playgrounds. Local shopping centres providing access to shops, banking and other professional services, as well as cafes and restaurants also play an important role in where people settle.

#### Access to jobs

People often move to a place because it offers them the best opportunities for employment, and generally the bigger the place, the more jobs there are. Many young people who have grown up in small country towns end up moving to cities to find employment. Big cities, however, are not the only places to find employment. In recent years, isolated mining towns with very few facilities and services have grown rapidly because of the high-paying jobs on offer there.



#### The climate and environment

Most people in Australia live along the east coast, where the climate is more moderate than other parts of the country. Personal preferences, especially when it comes to climate, are a key factor in determining where people settle. For example, many older people follow the sun, sea and a warmer climate in their retirement by moving to the Gold Coast. Coastal places are very popular with young and old people alike, but on the other hand, someone who enjoys snow-skiing might prefer to live near the mountains.

#### Cultural connections

Many people choose to live near their family and friends, and for this reason may stay in the same town or city suburb for the whole of their lives. Those moving to a new place, particularly from another country, may be attracted to a neighbourhood where others from the same cultural and language backgrounds live. This can offer a sense of security and familiarity, with local shops selling products from home, and local services offered in their native language.

#### Entertainment

People also make choices about where they live based on their leisure activities; for example, whether they want easy access to the outdoors or to museums and theatres found in city centres. People of different ages often want different entertainment options. Many younger people are drawn to the variety of entertainment offered in big cities such as music venues, nightclubs, concerts, theatres, shops and big sporting arenas, whereas these facilities may be of little use to older people.

**Source 2** A mild climate and attractive natural features such as beaches can play a key role in determining where people live.

### Check your learning 4.3

#### Remember and understand

- 1 What are some of the factors that modern Australians take into consideration when deciding where to live?
- 2 How important are climate and environment in influencing where people in Australia live?

#### Apply and analyse

- 3 For each of the following groups, identify some of the liveability factors that would be most likely to influence where they want to live:
  - a a family with school-age children
  - b a retired couple
  - c a surfer in his 20s.
- 4 Consider the local area in which you live.
  - a What are its key liveability factors?
  - b What types/groups of people commonly live in your local area?



**Source 3** Large entertainment events attract big crowds of young people and play a role in where they choose to live.



# 4.4 Living in large cities

Most Australians choose to live in large capital cities. The greatest growth in capital cities usually takes place around the outer edges of metropolitan areas. New suburbs appear on what was once farmland along the **rural–urban fringe**. As new housing estates are built on the farmland or bushland adjoining the suburbs, other services are attracted to these new suburbs to service the growing population. Schools, shopping centres, medical centres and sporting facilities become established to meet the needs of the residents. Industries are also attracted to the cheaper land and rents of the outer suburbs.

## Case study: Blacktown, New South Wales

The suburb of Blacktown is on the fringe of the metropolitan area in western Sydney. It is one of the fastest-growing areas in Australia. At the 2011 census, the area had a population of over 43 000. This population is growing rapidly and it is now one of Australia’s largest suburbs. This is due to a range of factors, including the overall growth of Sydney, the relatively cheap land and the building of major roads, such as the Western Motorway, and other services. Source 1 shows the change in an area in the north of Blacktown between 1997 and 2015.

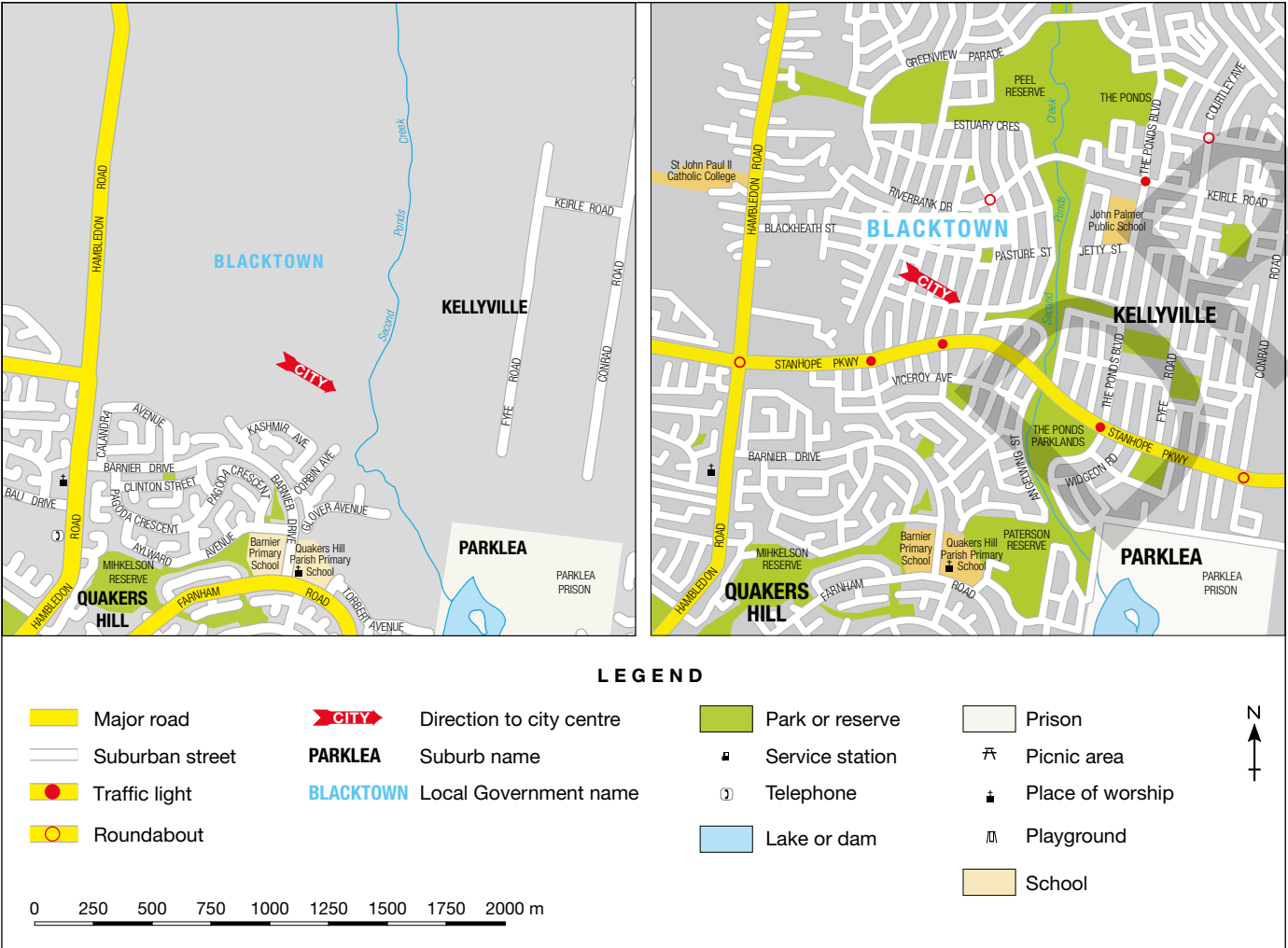
There are a number of schools in the region along with other **amenities**, such as public pools, libraries and a university. Blacktown also has numerous shopping areas, including large shopping centres, shopping strips along major roads and its own central business district (CBD). Blacktown is linked to other parts of Sydney, including its CBD, by a road and rail network. In common with other regions of Australia with rapidly growing populations, Blacktown struggles at times to meet the demands of all its residents. It can be very difficult to find rental accommodation, and some public facilities, such as hospitals, have experienced problems in dealing with a large, growing and diverse population.

Many residents of the western suburbs work closer to the centre of the city and use private vehicles to travel to and from work. This puts hundreds of thousands of cars on the road during the morning and afternoon peak periods, causing traffic jams and long delays. The road system struggles to cope with this heavy demand; at peak hour, the average speed on the freeways and tollways slows from 100 kilometres per hour to less than 30 kilometres per hour. These problems are only set to become worse in the next few decades when the population of western Sydney is expected to reach 4 million.



Source 3 Blacktown has a large population of **refugees** and migrants. These girls are being introduced to AFL football at Blacktown Olympic Park.

BLACKTOWN: 1997 (LEFT) AND 2015 (RIGHT)



Source 1

Source: Oxford University Press



Source 2 An oblique aerial photograph of Blacktown looking towards the Sydney CBD

### Check your learning 4.4

#### Remember and understand

- 1 Where does the greatest growth in capital cities generally occur?
- 2 What change takes place as suburbs spread to the rural–urban fringe?
- 3 Why are some industries attracted to the outer suburban areas?

#### Apply and analyse

- 4 What problems do town planners in Blacktown face?

#### Evaluate and create

- 5
  - a Using Source 1, construct a sketch map of Blacktown in 1997. Show the main roads and label the schools and prison. Shade in green the area of the map used for housing. These are the areas with the short, curving streets.
  - b On your sketch map, add the changes that had occurred by 2015. Shade in red the new housing areas and label any new schools and main roads.
  - c Describe the changes that occurred in this area between 1997 and 2015.
  - d How do you think this area will change in the next 15 years?



## 4.5 Living in rural areas

Many parts of Australia are used to raise animals and grow crops for food. The type of farming carried out in different areas is generally determined by climate and the availability of water. Farms vary from small properties used to grow crops, such as grapes or vegetables, to huge stations the size of European countries where cattle are raised.

Living on a farm can be very different from living in a city. It can be more difficult to access services, such as schools, shops and doctors. The population of many rural areas is declining as people move to cities for better job opportunities and a wider range of education options. There are also many advantages to living on a farm. Farms are often family-run businesses and this gives farmers the opportunity to be their own boss. There is also less air pollution, noise and traffic in rural areas. In recent years, advances in information and communication technology have reduced the disadvantages of living in a rural place.

### Case study: Western District dairy region Victoria

The largest industry in rural Victoria is dairy farming. There are more than 1 million dairy cows in the state and they produce more than 6 billion litres of milk a year. There are three main dairy farming regions in Victoria – in the north near Echuca; south-east of Melbourne; and in the Western District centred on the city of Warrnambool.

Source 1 is a map of the Western District dairy farming region. On the map, each town is shown in the centre of a circle. The size of each circle is determined by the number of people living in the town. The bigger the population, the bigger the circle. This makes it easy to see where the larger towns and cities are located in this region and allows us to see a pattern in this distribution. These circles are called proportional circles.

Near the small town of Condah, in the western district of Victoria, lies the dairy farm of Sam and Kristy Cheetham. In common with many farms in Australia, this dairy farm is a family-run business.

The farm has grown over the years as the family has bought more land. Several workers are employed to help milk the cows twice a day and carry out other farm jobs, such as mending fences and looking after the grazing paddocks. These workers and their families also live on the Cheetham's farm.

The Cheetham's farm is located close to several small towns and some distance from larger towns and cities. The small towns of Condah and Branxholme have very few shops and the Cheethams only visit these places for basic items, such as bread. The closest supermarket is in Heywood, 24 kilometres away, as is the closest bank. Heywood has a population of 1300, which is large enough to support a wider range of retail shops and other services than the smaller towns. These include a doctor, vet and several schools.

Larger towns include Hamilton and Portland, and Warrnambool is the closest regional city. These places have a wide range of shops and other services, such as large hospitals and secondary schools. They

need only visit Victoria's capital city a few times a year for major services, such as an international airport or specialised health care. They also travel to Melbourne for sport and entertainment as most large events of this type are not held in regional areas.

Towns and cities in rural areas tend to be located a certain distance apart. This is determined by the size of the population and the services available in that town or city. Large towns (such as Warrnambool, Portland and Hamilton) offer a large range of goods and services and are spaced well apart. They need to draw in people from a bigger distance to support services they offer. Small towns, such as Condah, only have a few shops and services to support the local community.



Source 4 Branxholme's main shopping street

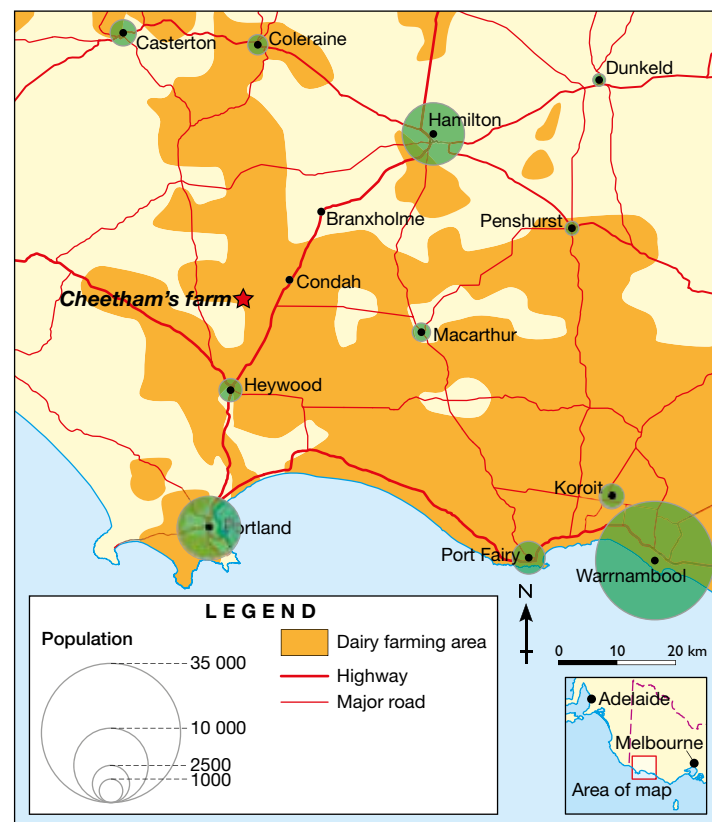


Source 2 Heywood's main shopping street



Source 3 Warrnambool's main shopping street

VICTORIA: WESTERN DISTRICT DAIRY FARMING REGION



Source 1

### Check your learning 4.5

#### Remember and understand

- How does living in a rural area differ from living in a city?
- What are Victoria's three main dairy farming regions?
- What different jobs are done on the Cheetham farm?
- Where would the Cheetham family go to buy each of the following?
  - a loaf of bread
  - a packet of breakfast cereal
  - a pair of jeans
  - a new television
- Look at Source 4. What services and supplies do you think might be available in Branxholme?

#### Apply and analyse

- Look carefully at Source 1.
  - List the three largest towns in the region.
  - What is the approximate population of the largest town?
  - Why do you think there are lots of small towns and only a few large towns?
  - Why are proportional circles useful on a map?

#### Evaluate and create

- List one good and one service that you think would only be available in the very largest towns in the region.
- List one good and one service that people in the region might need to travel to Geelong or Melbourne to purchase.



## 4.6 Living in coastal areas

Eighty-five per cent of all Australians live within 50 kilometres of the coast. As a result, nine of our 10 largest cities sit on the coast. As well as huge cities such as Sydney and Melbourne, there are hundreds of smaller communities dotted along our coastline. Outside the capital cities, these coastal communities tend to be the fastest growing regions in each state. In Queensland, it's the Gold Coast and the Sunshine Coast, and in Victoria, it's the Surf Coast.

Coastal towns and cities are growing in size and population across Australia due to a range of factors. Many people decide to move to the coast because they want a more relaxed lifestyle near natural features such as beaches, bays and other landforms. Geographers refer to this trend as a 'sea change'.

### Case study: Torquay, Victoria

Torquay lies on Victoria's Surf Coast about 100 kilometres south-west of Melbourne. It has long been a popular holiday destination, particularly during the warmer summer months.

VICTORIA: THE BELLARINE PENINSULA



Source 1

Source: Oxford University Press



Source 2 The main surf beach at Torquay in Victoria

On summer weekends, the population of the town can double, as people travel from Melbourne to take advantage of the beaches and relaxed lifestyle of this coastal town. As well as the holiday-makers, the number of permanent residents is also growing. In 2006, the town's population was about 8000. By 2025, the population of Torquay is expected to be three times that number. As with any change, there are both benefits and costs to this population increase.

Coastal towns close to large cities attract sea changers, because they offer the option of living in the coastal town and commuting to work in the city. Torquay's proximity to Melbourne makes it a popular choice for this reason and a new ring road around Geelong has reduced the journey to the Melbourne CBD from Torquay to about 90 minutes.

Torquay also attracts many retirees. In some cases, after retirement people are moving permanently into holiday homes they already own, and in other cases they are building new homes to live in.

As more Australians reach retirement age, it is expected that the demand for new homes and services such as health care, education and roads will increase dramatically in sea-change towns, including Torquay.

While real estate agents and builders welcome the new residents, not everyone feels the same way. Some people are concerned that the once small town of Torquay will become exactly the type of suburban development the sea changers are trying to escape.

Farmland, sand dunes and caravan parks are being redeveloped as retirement villages and housing estates. New businesses such as large hardware stores and food outlets are threatening the survival of smaller, well-established local businesses. Changes like this often cause conflict in the local community.



Source 3 A satellite image of Torquay and surrounding areas

### Check your learning 4.6

#### Remember and understand

- 1 How does living in a coastal area differ from living in a city?
- 2 What has made it possible for residents in Torquay to enjoy both coastal and city life?
- 3 What is a sea change?
- 4 What is Torquay's population expected to be in 2025?

#### Apply and analyse

- 5 Examine Source 1.
  - a What are the largest towns on the Bellarine Peninsula?
  - b Where do you think people on the Bellarine Peninsula would go to shop at department stores or purchase expensive items such as cars?
  - c How far is Torquay from Geelong?

- 6 Explain the following statement: 'Some people are concerned that the once small town of Torquay will become exactly the type of suburban development the sea changers are trying to escape.' Why might some people feel this way?

#### Evaluate and create

- 7 a Draw a sketch map of Source 3. Shade in the area covered by housing. In a different colour, shade those areas that you think may be developed for housing in the next few years. Provide a key and title for your map.
  - b Now give reasons why you selected the land for new housing in part a. What type of land did you select? What type of land didn't you select? Why?

Source 4 New homes cover the hills behind the Torquay Golf Club.





## 4.7 Living in remote areas

Most Australians live in large cities on the coast, with very few people living in the centre of the continent. Much of the interior of Australia is **desert** or semi-desert, with large distances between towns and settlements. Geographers refer to these areas as remote because people living in these areas have difficulty accessing some goods and services. Providing basic services (such as roads, food, water, telephone and Internet access) to remote communities can be difficult and expensive.

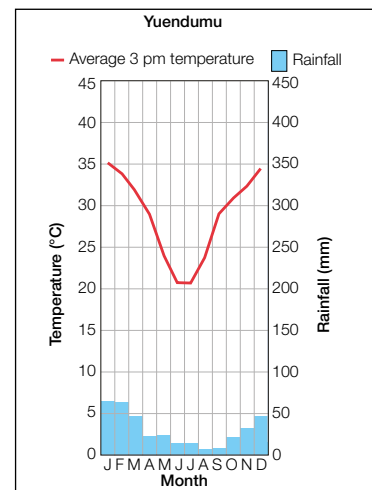
A high proportion of Indigenous Australians live in regional and remote areas – almost half of the population compared with just 13 per cent of the total population. For many Indigenous Australians this decision is based on a deep connection to the land that began thousands of years ago.

### Living in the desert

Australia is the second-driest continent in the world, after Antarctica. Seventy per cent of our continent receives less than 500 millimetres of rainfall each year. This low rainfall has produced large deserts across much of inland Australia. Deserts are some of the harshest places on Earth. The people who live in desert communities must overcome many challenges.



**Source 1** The Yuendumu Pool opened in 2008. Children can only swim here if they regularly go to school.



**Source 2** Yuendumu climate graph

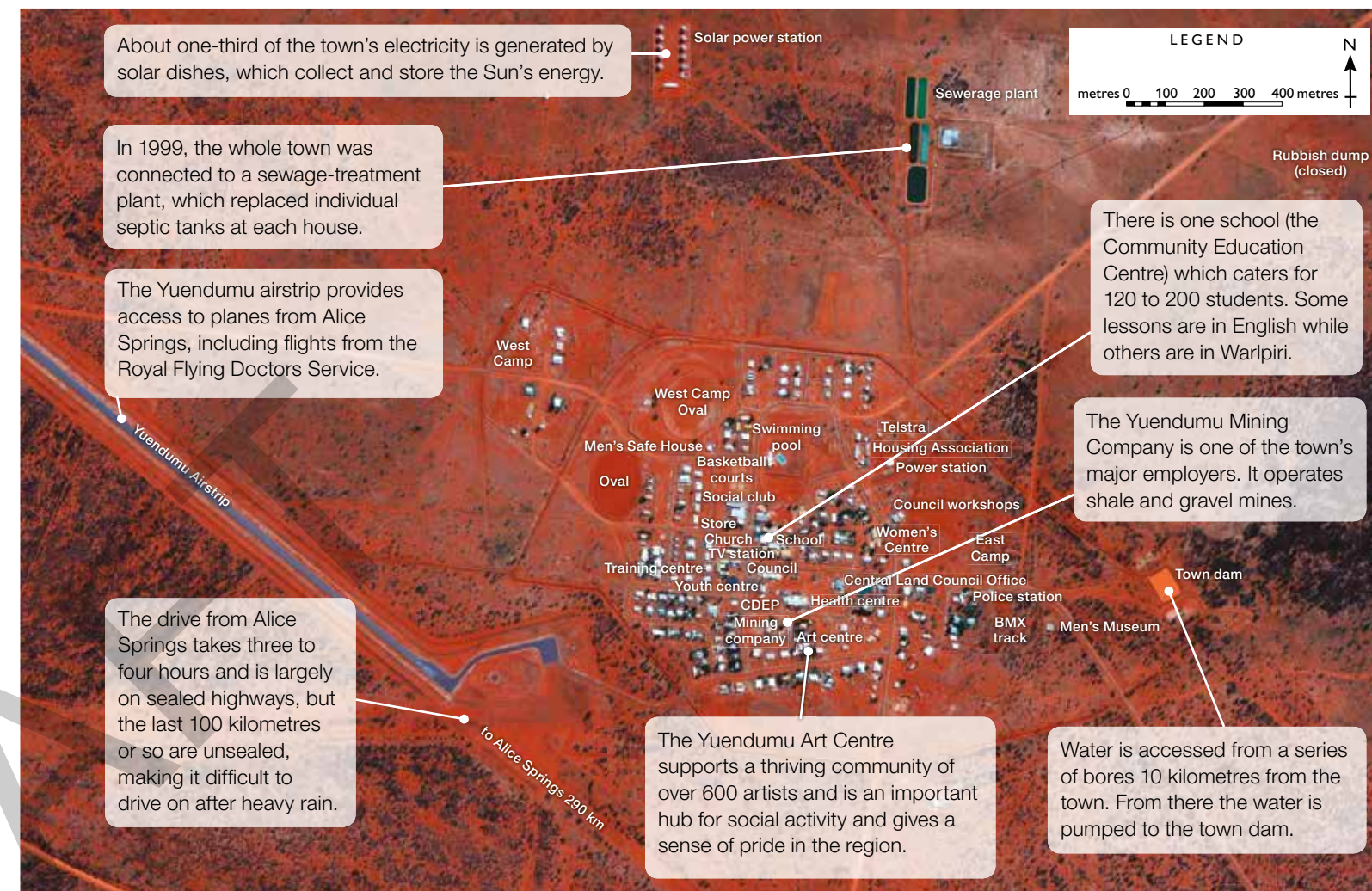
### Case study: Yuendumu

One desert community is based in the town of Yuendumu, located 290 kilometres from Alice Springs in the Northern Territory. Not only is it located in the Tanami Desert, it is also one of the most remote places in the world. It is so remote that few locals have ever seen the sea.

#### The Warlpiri people

The Warlpiri people of Yuendumu do not see land as something to be owned. Instead, they believe that they belong to the land. This deep sense of connection to a particular place can be very difficult for non-Indigenous Australians to understand. In the same way, Warlpiri people find a system of land ownership difficult to understand.

The Warlpiri system of family and relationships is complex. A crucial part of any Warlpiri child's education is to learn about this system. It helps them to understand the natural and social world and a person's place within it. This system binds the Warlpiri people to each other and to the land.



**Source 3** Yuendumu satellite image

#### Problems and challenges

Living in Yuendumu presents many challenges. The isolation from other places is the most obvious of these, however, in recent years sealed roads, the airstrip, telephones, television and the Internet have helped to connect Yuendumu to the outside world. Many older people in the community, however, worry that better transport and communication will break down the customs of the Warlpiri people.

As with other remote Indigenous Australian communities, health problems, such as eye diseases, are common. Substance abuse among young people, particularly petrol-sniffing, was once a serious problem but a strong community response has largely brought an end to this practice. This involved providing young people with a better range of activities and making substance abuse unacceptable.



**Source 4** The solar power station provides 50 per cent of daytime electricity needs to Yuendumu and enables significant reduction in the diesel fuel used in power generators in the community.



Living in the Pilbara

Australia is a mineral-rich country. We have the world’s largest deposits of brown coal, mineral sands, nickel, uranium, zinc and lead. We also rank in the top six in the world for reserves of other minerals, such as bauxite, black coal, diamonds, copper, gold and iron ore. Iron ore is used to produce steel, which is an important part of many industries around the world. Some of the world’s largest and richest iron ore deposits are in an area of Western Australia known as the Pilbara.

Some mining workers live in towns in the Pilbara close to the mines where they work, such as Tom Price, Newman and Paraburdoo. These towns can be hard places in which to live as they tend to be very isolated. Their remote location means that some goods and services can be difficult to access. The perception of these towns as less liveable than other centres in Australia means that workers are offered very attractive salaries and conditions to come and work in the remote Pilbara region. Many miners prefer to live a FIFO (‘fly in, fly out’) lifestyle. This means that they live in large cities, such as Perth, for two weeks and then fly to the mines to work for two weeks. While this type of routine may suit single workers, married workers generally find that this places a strain on their families.

AUSTRALIA: MINERAL, URANIUM AND COAL RESOURCES



Source 5

Case study: Tom Price, Western Australia

In many ways Tom Price is a typical mining town. It is home to about 2700 people, almost all of whom are involved, directly or indirectly, in the mining industry. Of the workers in the town over the age of 15, almost 50 per cent work in the mines. Half of these workers categorise their jobs as machinery operators or drivers.

The children who attend one of the three local schools almost all have at least one parent employed at the mine. The local high school works in partnership with the international mining company that owns and operates the mine, Rio Tinto, to educate students about jobs in mining. The supermarket, milk bars, service stations, vets, chemists, doctors, hardware store and carpet cleaner all rely on the income from miners to keep their businesses running. While this is great for the town when the demand for iron ore is high, it can cause problems when demand falls. Industries and places that rely on selling one resource, such as a particular mineral, are sometimes referred to as being in a ‘boom or bust’ cycle.

Another problem facing the residents of Tom Price is a shortage of homes. During boom times, new workers and people looking for work at the nearby mine arrive regularly and need accommodation. This demand for housing means that house prices go up quickly, making it difficult for young adults in the town to buy a house. In the Pilbara mining town of Newman, for example, houses tripled in price between 2004 and 2008.

Source: Oxford University Press

skilldrill: Data and information

Understanding population pyramids

Population pyramids are bar graphs that show the percentage of males and females of different ages in a population. They help geographers compare different groups within a population and also allow them to identify trends and patterns of change (for example, in a city or country). Follow these steps in order to understand population pyramids:

**Step 1** Be sure to read the title of the population pyramid carefully. This will tell you exactly what population is being studied. Also look at the labels running along the bottom (percentage or total population) and through the middle of the pyramid (age groups).

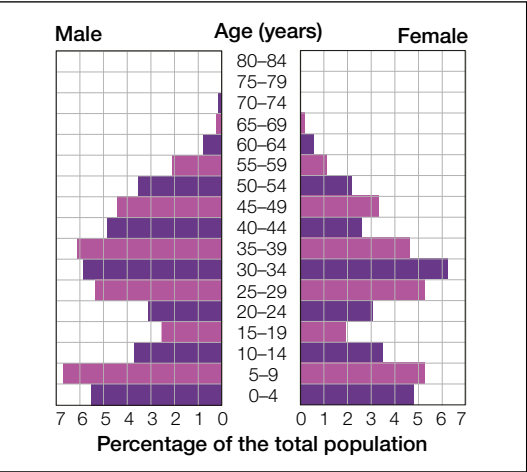
**Step 2** Population pyramids are organised so that the younger age groups are at the bottom and the older age groups are at the top. Percentages (or numbers) of men are always shown on the left-hand side and percentages (or numbers) of females are shown on the right-hand side.

**Step 3** To compare the percentage of males and females in the same age groups, read across the rows. The scale on the male side begins at zero and increases from right to left. The scale on the female side begins at zero and increases from left to right.

**Step 4** To compare the percentage of only males or females, look up and down the columns.

Apply the skill

- 1 Using Source 7, complete the following tasks:
  - a What percentage of the population in Tom Price is girls aged 10–14?
  - b Are there more men or women aged 35 to 39 in Tom Price?
  - c Which is the largest single group in Tom Price?
  - d Is there a greater percentage of males or females in Tom Price? Why might this be the case?
  - e Which group in Tom Price is the smallest? Try to estimate what percentage of the total population is made up by this group.



Source 7 Population pyramid for the town of Tom Price Western Australia

Check your learning 4.7

Remember and understand

- 1 What services are difficult to supply to remote areas?
- 2 Why don’t many people live in the centre of Australia?
- 3 Why don’t the local Warlpiri people just move to a different area with more services?
- 4 How many people live in the town of Tom Price and what work do they do?
- 5 Why do some people choose FIFO?

Apply and analyse

- 6 Use the information provided in Source 3 to create a table listing all of the services available in Yuendumu. List each of the services under the following headings: water and sanitation; transport; power; industry; education; and recreation.
- 7 How does the land tie the people of Tom Price and Yuendumu to their remote locations?

Source 6 Tom Price iron ore mine in Western Australia



4A rich task

Living on Macquarie Island

Macquarie Island is one of the most remote places on Earth. It is located in the Southern Ocean, approximately halfway between Australia and Antarctica. Macquarie Island is an Australian territory and home to about 40 scientists in summer and about 20 in winter. They live and work in the research station on the northern tip of the island. At the station there are facilities such as buildings in which to sleep and eat, a diesel power station, a greenhouse for growing vegetables, helicopter pads and even a brewery. From here the scientists explore the island and try to find out more about the island itself and the animals and birds that live there.



skilldrill: Data and information

Preparing fieldwork sketches

Fieldwork sketching helps geographers record and label important aspects of the landscapes they are investigating. It is a skill that you will need to practise before taking part in any field trips.

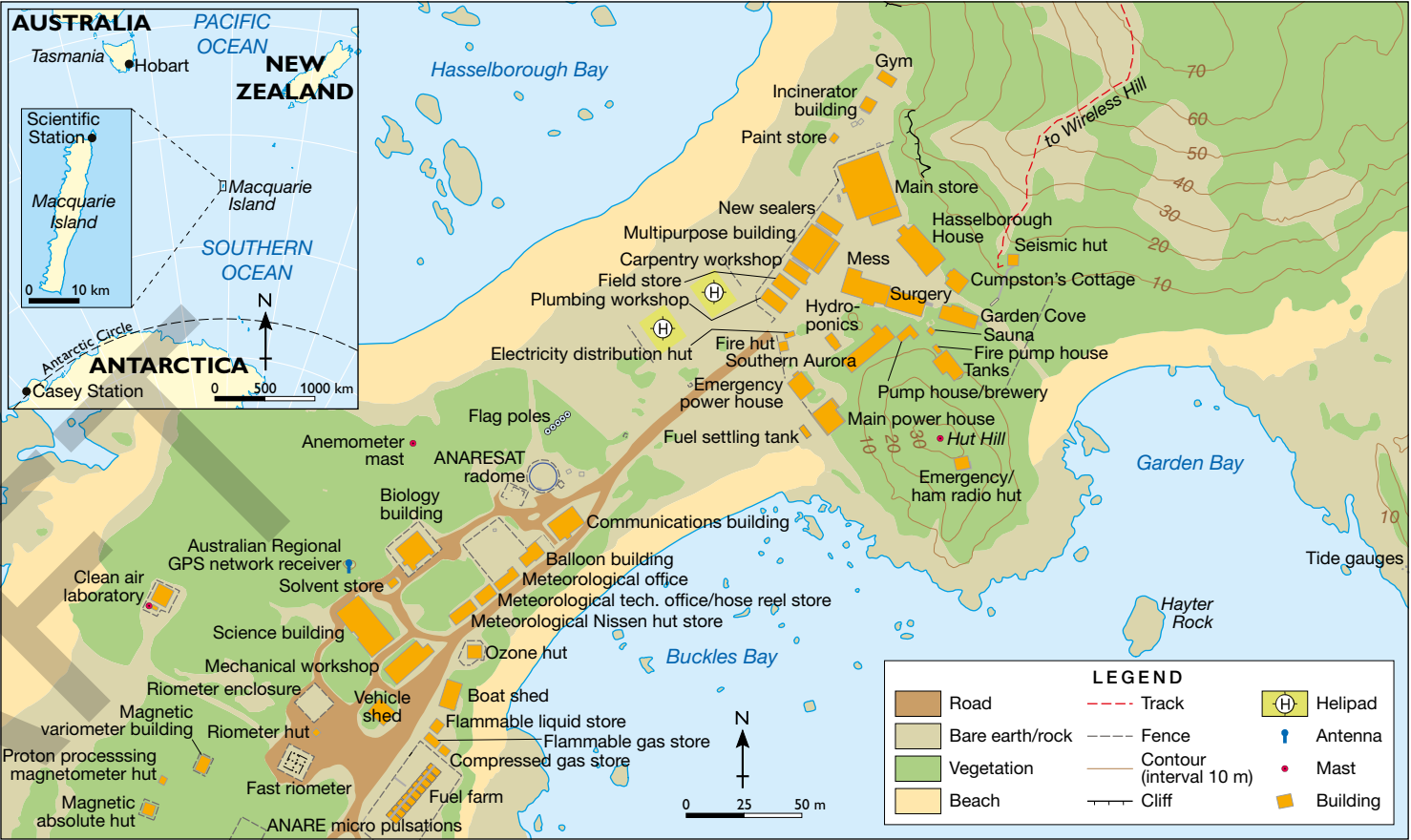
Apply the skill

Imagine you are on a field trip to Macquarie Island and that the scene in Source 1 is in front of you. Follow these steps to create a field sketch of the scene and use the map to help you label the key features.

- Step 1** Boundaries and border: Establish the boundaries of your landscape and draw a border of the correct shape.
- Step 2** Sketch outlines: With a graphite pencil, lightly sketch the main landscape lines. If there is a horizon in the scene put this about one-third from the top of the frame.
- Step 3** Details: Keeping in mind the features on which you want to focus, add detail to your sketch. Label those parts of the scene that you consider to be most important.
- Step 4** Shade: Add shading, which helps to establish depth in your sketch and to show the shape of objects.
- Step 5** Colour: Add some colour if you wish. Do not try to copy every subtle colour of nature; just give a hint of the right colour.
- Step 6** Finishing touches: Label your sketch with the location and date.

Source 1 Oblique aerial view of the scientific base on Macquarie Island

MACQUARIE ISLAND SCIENTIFIC STATION (INSET: MACQUARIE ISLAND'S LOCATION)



Source 2

Source: Oxford University Press

Extend your understanding

- Why is Macquarie Island considered remote?
- Use the scale on Source 2 (inset) to estimate the distance from Hobart to Macquarie Island.
- Consider the challenges faced by those living in remote places.
  - What challenges do you think the scientists on Macquarie Island would face?
  - In what ways are these challenges similar to those faced by people living in a remote region on the Australian mainland? In what ways are they different?
- How do you think people on Macquarie Island access supplies?
- How do you think modern communication technology, such as satellites and the Internet, help to overcome some of the challenges faced by scientists on Macquarie Island?
- What difficulties might the scientists experience travelling to their work sites?
- Macquarie Station is used for scientific research but is also a home to a team of scientists and researchers.
  - Find three features of the station that show that this is a place where people live.
  - Make a list of the buildings that are used for science and research.
  - What do the names of these buildings tell you about the type of research that is undertaken on the island?
- Compare the oblique aerial photograph of the station (Source 1) with the map (Source 2).
  - What is the large circular object in the centre of the photograph?
  - What colour is the hydroponics building? What is hydroponics and why is it important in this place?
  - In which direction was the photographer facing?



# 4.8 Connecting through communities

A community is a group of people who share something in common. It may be the place in which they live, their religion, their interests or hobbies, their **ethnicity**, their school or their language. Every person on Earth is a member of one or more communities, some by choice and some just by being who they are. To make sense of all the world's communities, geographers take into account the features that all members of a community share. One way to classify these features uses the five Ps shown in Source 1.

A group of people who share the same goals and objectives often join together to form communities of purpose. They are able to achieve much more if they work together than if they work as individuals. One of Australia's largest communities of purpose is Surf Life Saving Australia (SLSA), which has over 150 000 members, virtually all of whom are volunteers. The shared vision of SLSA members is 'to save lives, create great Australians and build better communities'.



Source 2 Surf lifesavers making one of the 12 000 rescues carried out in 2011 – they are an example of community of purpose.

## Check your learning 4.8

Remember and understand

- 1 What type of community is a school?
- 2 Explain why SLSA can be considered to be a community of purpose.
- 3 Name three other communities of purpose.
- 4 Classify each of these groups under one of the five types of communities:

- a the Labor Party
- b employees of BHP Billiton
- c residents of Yamba in New South Wales
- d a Scout group
- e your family
- 5 The surf lifesavers in Source 2 are members of a community of purpose. Why is it likely that they are also members of a community of place?



Source 1 Classifying communities

## skilldrill: Data and information

### Drawing a concept map

A **concept map** is a visual tool used to show the links between different ideas or pieces of information. Each idea (or piece of information) is usually represented in a circle or box and the relationship between two ideas is shown by a line or arrow connecting them. Words on the line or arrow explain the relationship between the two ideas. Concept maps can be hand drawn or prepared using computer software.

To draw a concept map, follow these steps:

- Step 1** Draw and name the focus, central idea or main problem you are trying to explore. In the example in Source 3, this is 'My communities'.
- Step 2** Build the concept map by adding ideas related to the central idea.
- Step 3** Add a title to help the reader quickly understand your concept map.

### Apply the skill

- 1 Construct your own concept map to show the communities you are connected to. Place your name in the centre box. Add the types of communities to the connecting lines. Choose from the five types of communities shown in Source 1, such as place.



Source 3 An example of a concept map



# 4.9 Community identity

## Case study: Melbourne's Indian community

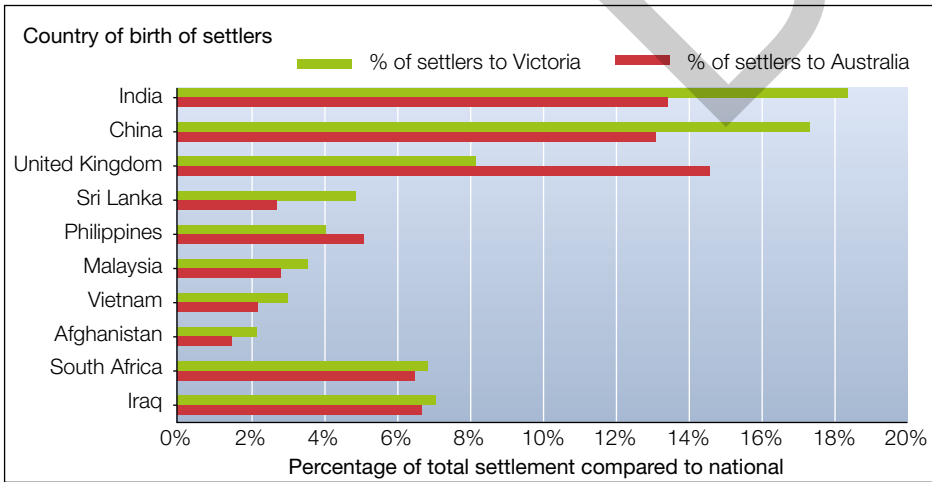
People who share similar histories (such as family, language and ethnic groups) are communities. Melbourne has Australia's second-largest Asian population, including Australia's largest Indian and Sri Lankan communities. The Indian community has influenced the character of Melbourne by sharing its culture, clothing, festivals, beliefs, celebrations and food.

Often communities of past, such as the Indian community, share the same religious and spiritual beliefs, so they are also an example of communities of perspective. Hinduism is the world's third-largest religion and one of its oldest. About 1 billion people today are Hindus and about 98 per cent of them live in India. As Indians migrate to other countries, such as Australia and New Zealand, the number of Hindus in those countries increases. Today there are more than 40000 Hindus in Melbourne and Hinduism has become the city's fastest growing religion.

Belonging to a religious community is a vital part of many people's identity. As a multicultural country there are a wide range of religious communities in Australia and, despite a few isolated examples of intolerance, religions here happily co-exist. This is not always the case overseas; in some countries, religion is often the basis of conflict and war.



Source 1 Shri Shiva Vishnu Hindu temple in Carrum Downs on the outskirts of Melbourne



Source 2 A bar graph comparing the percentage of overseas settlers to Victoria and Australia by country of birth, 2006–2011

### skilldrill: Data and information

#### Reading compound column graphs

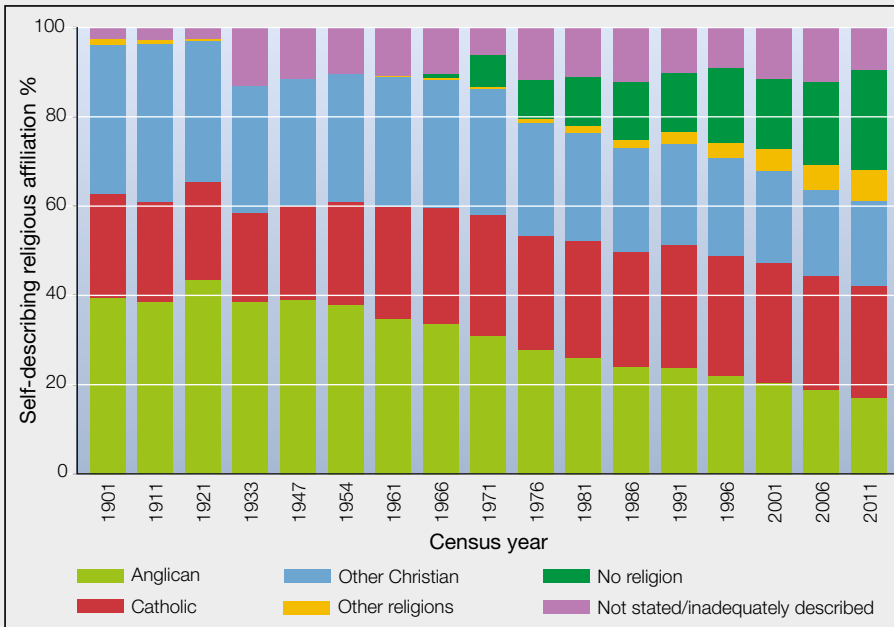
A compound column graph divides each column into its different parts. This allows us to easily see patterns in the information. For example, in Source 3 the columns show religious affiliations in selected years. The columns are divided to show the different religions, such as Anglican or Catholic.

To interpret Source 3 and other compound graphs, follow these steps:

- Step 1** Read the title carefully so that you understand what is being shown on the graph.
- Step 2** Look closely at each scale. In this graph you will notice that the vertical axis shows percentages rather than numbers.
- Step 3** Look closely at the legend and colours so that you understand the divisions within each of the columns.
- Step 4** Look for major patterns. In this graph, there has been an obvious decline in the percentage of Australians who are Anglicans, and an increase in the percentage of people who practise no religion.

#### Apply the skill

- Study Source 3. Which of these statements are true and which are false?
  - Most Australians follow a religion.
  - In 1921, most Australians were Anglicans.
  - In 2011, there were more people with no religion than there were Catholics.
  - Up to the 1970s, all Australians were Christians.



Source 3 A compound column graph comparing the percentage of Australians following various religions, 1901–2011

### Check your learning 4.9

#### Remember and understand

- Look carefully at Source 1. Suggest two ways in which the Indian community has influenced the character of Carrum Downs.
- Look at Source 2. What percentage of settlers in Victoria were from India? How does this compare with settlers from other countries?
- Settlers from China are the next biggest group of migrants moving to Victoria. What impact would you expect this group to have on communities in Victoria?

- The Hindu community of Melbourne is a community of perspective. Explain what this means.

#### Apply and analyse

- Carefully study the compound column graph (Source 3).
  - Describe the changes over time in the religions followed by Australians.
  - Why do you think these changes have occurred?
  - Based on the pattern shown in the compound column graph, do you think Christianity will cease to be the dominant type of religion followed in Australia? If so, when do you think this will occur?



# 4.10 Indigenous communities

Indigenous Australian communities share an ethnic background, have strong family ties and centuries of shared history and beliefs. These factors make them an example of a community of past. Indigenous Australian communities are found throughout Australia and tend to have strong spiritual connections to the land. These factors also make them an example of a community of place.

There are two distinct groups of Indigenous Australians. The largest group is Aboriginal peoples from mainland Australia and Tasmania. The second group is from the Torres Strait Islands, the islands between Australia and Papua New Guinea. Although they are more closely linked (in terms of ethnic origins) to the Melanesian people of Papua New Guinea than to Aboriginal peoples, Torres Strait Islanders are Australian citizens. The border between Australia and Papua New Guinea means that Thursday Island (along with many other islands in the Torres Strait) is considered part of Queensland, not part of Papua New Guinea.

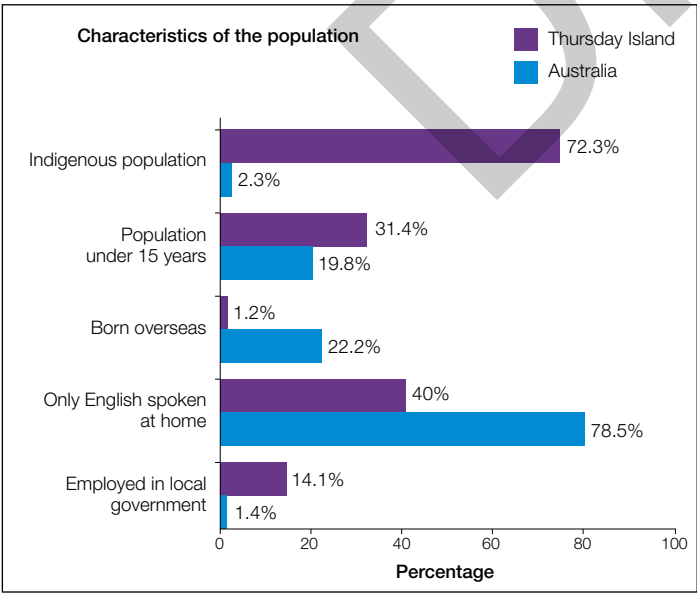
## Case study: Thursday Island communities

Thursday Island lies in a cluster of islands in the Torres Strait just off Cape York, the northernmost tip of Australia. Thursday Island has the largest population of all the Torres Strait Islands, and is where most of the local government functions for the islands are located. As the administrative centre, Thursday Island's 2500 people have access to excellent facilities, including several schools, a TAFE college, a hospital, a childcare centre, a library, a sports stadium with a swimming pool, parks and gardens. There is little fresh water on the island so a pipeline brings water from nearby Horn Island. Daily flights from Cairns to Horn Island and then a short ferry ride to Thursday Island reduce the isolation of life on the island.

With year-round warm temperatures and easy access to tropical reefs, the beach is the main focus of most leisure activities for children on Thursday Island. The islanders are keen fishermen and the warm waters support a great variety of marine life. Many islanders are also passionate about sports, with NRL player Sam Thaiday and basketballer Patrick Mills, both of Torres Strait Islander descent, being particular favourites.

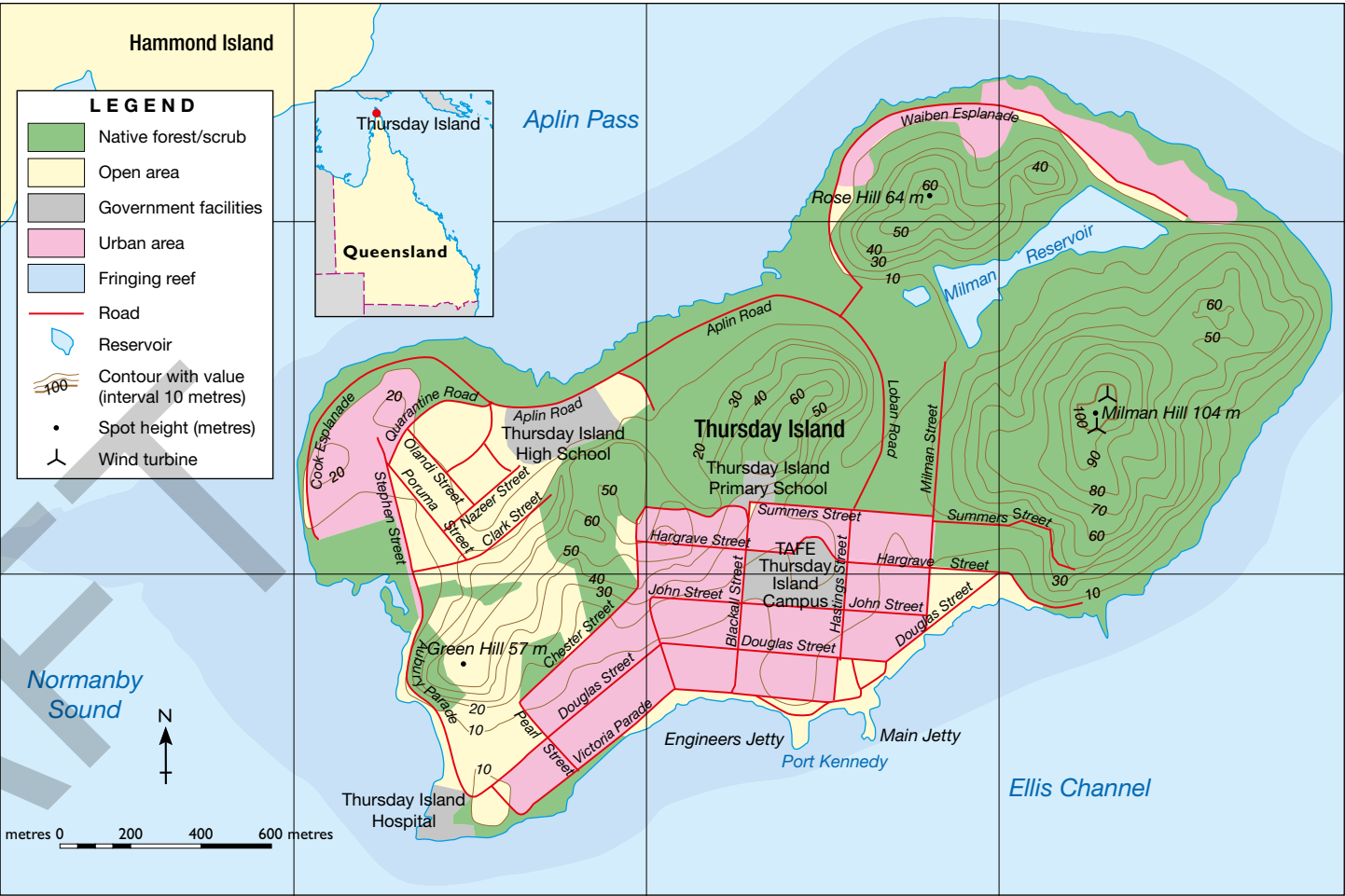


Source 1 Children on Thursday Island play on the beach.



Source 2 A bar graph comparing some key characteristics of the population on Thursday Island with the population of mainland Australia

THURSDAY ISLAND: TOPOGRAPHIC MAP



Source 3

Source: Oxford University Press



Source 4 An oblique aerial photograph of Thursday Island showing the Thursday Island Hospital in the foreground (left) and Hammond Island in the background.

### Check your learning 4.10

#### Remember and understand

- 1 Explain why Torres Strait Islander people have strong connections to Papua New Guinea even though they are Australian.
- 2 What community services are located on Thursday Island?

#### Apply and analyse

- 3 Examine Source 2.
  - a Which of these statistics do you find most surprising? Why?
  - b Explain why so many Thursday Islanders work in local government.
  - c Write a 50-word paragraph comparing key characteristics of the population on Thursday Island with the wider Australian population.
- 4 Examine Source 3.
  - a What are the advantages of the location of the main urban area on Thursday Island? What are the disadvantages?
  - b Where would you have chosen to build the urban centre?



# 4.11 Liveability in communities

A community of place refers to a group of people with a common interest or goal. This common interest may be linked to where they live, work or spend a large part of their time. The word ‘community’ can be used to describe groups like neighbourhoods, towns, workplaces, schools, sports clubs, church groups, or very large groups like members of the same religion, or citizens of the same country.

People connect with places where they feel included and safe. They connect through community services (such as schools, hospitals and libraries), job opportunities (such as the type and amount of work available) and entertainment and recreation (such as concerts, sporting events and festivals).

**Check your learning 4.11**

Remember and understand

1 What is a community of place?

2 How is the liveability of a community measured?

Apply and analyse

3 Use Source 4 to provide a grid reference for:

a a recreation facility

c a source of employment

b a transport hub

d an education facility.

4 Altona and Altona North are largely populated by families. What evidence can you find using Source 4 that the local community is made up of many families?

**Community services**

We are all part of a broad community based on where we live. This may be a suburb in a city, a town or a small settlement, but it can even be as big as a whole country. Governments and local councils supply a range of services to these communities, such as schools, hospitals, libraries, transport, parks and rubbish removal. Different communities require different services. For example, a community with a younger population might require more schools and facilities such as skate parks. An older community might require greater access to health care and retirement villages.



Source 1 Altona P–9 College, E9 on the map opposite

**Job opportunities**

Local communities provide employment opportunities or good access to places of work, training and education. Businesses and industries provide services for the community and jobs. Some examples of businesses found in many local communities include shops, hairdressers, plumbers, banks and solicitors. An industry may be a one-person operation or a large manufacturing business that employs hundreds of people. Industrial areas are usually grouped together. Industries generally require large areas of flat land and access to power, transport and parts.



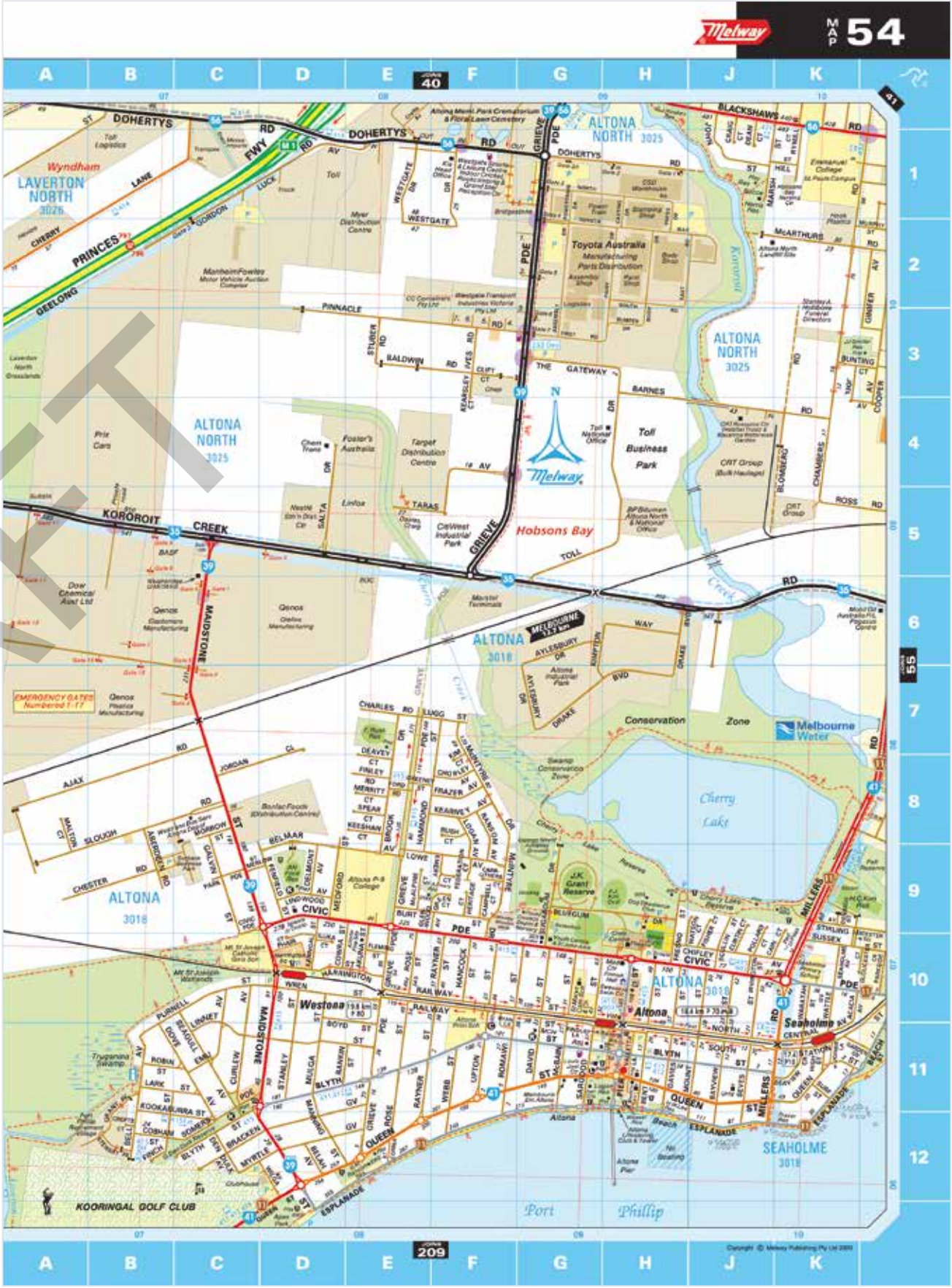
Source 2 The Toyota car factory in Altona North, G2 on the map opposite

**Entertainment and recreation**

Leisure facilities such as basketball courts and skate parks are provided and maintained by local councils. Special areas are also set aside for recreation, such as parklands and sporting fields. These areas allow residents to socialise and exercise outdoors. In addition to these recreation areas, special conservation zones are set up by councils to ensure that native plants and wildlife are protected.



Source 3 The Altona Youth Centre, G10 on the map opposite



Source 4 Street directory map of Altona

Source: Melway



# 4.12 Building safe communities

The most liveable cities are those where people feel safe – not only for themselves, but also for their families and their property. Fear of crime can affect quality of life, reducing social interaction between people and forcing people to avoid certain places. Every year, the Property Council of Australia surveys local residents across Australia about 17 different liveability factors. Each year the results clearly show that safety and security are the most important liveability factors for residents in our cities and towns.

Safety in the community is not just about crime rates, but also about how safe people feel in their community. The compound column graph in Source 1 shows the percentage of Australians (in all states and territories) who feel at risk from a range of different crimes and anti-social behaviours taking place in their communities. (For more information on how to read compound column graphs refer to page 135.) For example, 32 per cent of people surveyed in the Northern Territory feel threatened by people hanging around in groups, whereas in the ACT, it's only 11 per cent.

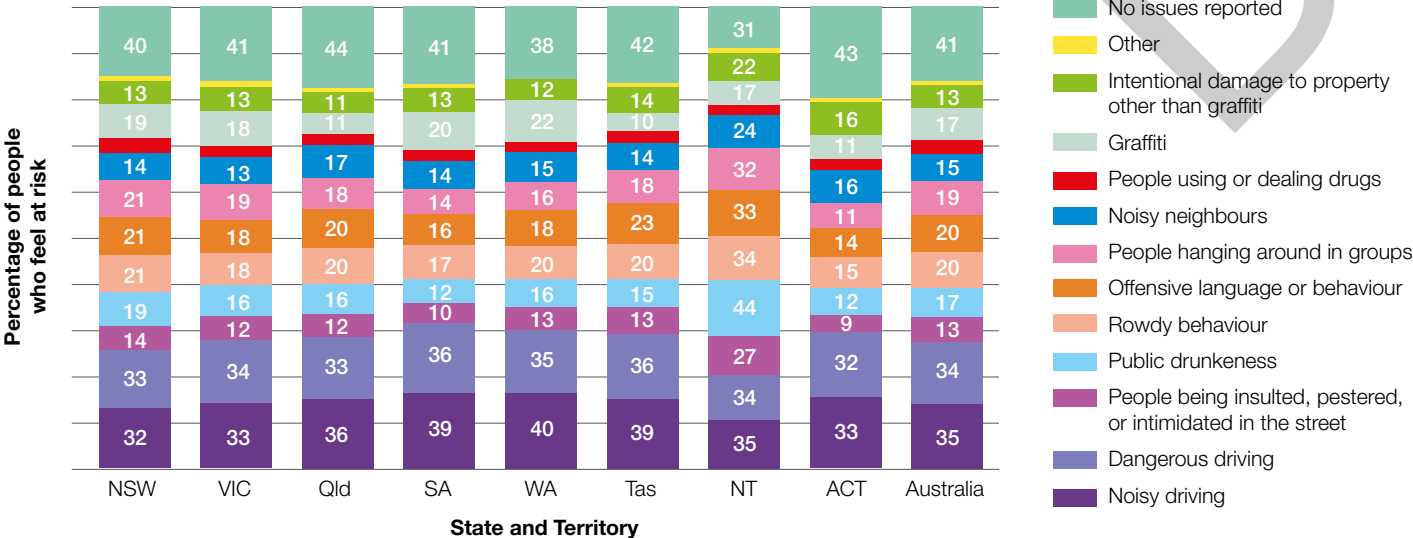
Governments and local councils are always trying to improve the design of local environments to create safer places and encourage community-based activities. Surveys of local areas assist authorities to identify the key issues and map problem areas.

## Safer community design

A key step towards improving local safety has been making public areas more visible. This has been achieved by different methods such as designing buildings to face public space, removing bushes to give a clear line of sight, improving lighting and introducing surveillance cameras. These strategies help reduce the numbers of crimes by making places, and therefore any criminal activity, easier to see.



Source 2 Dark alleyways and parks are places where crimes can go undetected. These areas are generally avoided by local residents.



Source 1 A compound column graph showing the percentage of people who feel at risk from crime and anti-social behaviour across Australia (by state), 2011

Source: Australian Bureau of Statistics

## Community policing

In recent decades, the police have developed community programs to create stronger ties between the general community and the police. The goal here is to involve members of the community in keeping their own streets safe. The most successful of these programs has been Neighbourhood Watch. The police work with local communities to educate communities on safety and security issues and to encourage people to look out for, and report, any suspicious behaviour. The program also encourages community members to get to know each other, share safety concerns and support each other to stay safe.

## Helping at-risk groups

Many government and not-for-profit groups work within local communities to provide outreach services for the most vulnerable members of the community. These services include things such as temporary and permanent housing, food trucks for the homeless and poor, support services for victims of domestic violence, rehabilitation programs for alcoholics and drug addicts, drop-in centres for disadvantaged youths, and home services such as Meals on Wheels for the elderly. These services help to protect and care for those in our communities who need it most.



Source 3 Neighbourhood Watch (along with other community policing programs) has been used to reduce crime in local communities and create stronger ties between the police and members of their communities.



Source 4 Soup kitchens and food vans provide meals for the homeless.

## Check your learning 4.12

### Remember and understand

- 1 Why do you think safety is the most important liveability factor for communities across Australia?
- 2 What example is given of police working with the community to reduce crime and increase feelings of safety?
- 3 How does increased visibility in streets and public spaces help to prevent crime? What strategies help to increase visibility?

### Apply and analyse

- 4 Look carefully at Source 1.
  - a What crime issues were most reported in the survey?
  - b In which categories did the Northern Territory score the highest? What strategies might police introduce to try to reduce this behaviour?
  - c In what state is graffiti considered to be the biggest problem? Why might this be the case?



4B rich task

# Change in Casey

To deal with increasing populations, cities often establish new suburbs on their rural–urban fringes. Housing estates that are built on the edges of cities attract young families by offering cheaper land and affordable houses. As the population grows in a new suburb, services are attracted to the area as well. Schools, shopping centres, medical centres and sporting facilities open to meet the needs of the new community. As these services become more established, the opportunities for people to interact and feel like members of the community increase.



Source 1 An aerial photograph of Narre Warren in the municipality of Casey on the outskirts of Melbourne, 2007.

skilldrill: Data and information

## Drawing overlay maps from street maps

One of the best ways to show how a place has changed over time is to draw an overlay map of the area. An overlay map allows you to show a place at two different times so that you can see any changes that have occurred over time.

To construct an overlay map from the street maps of Narre Warren showing changes between 1985 and 2016, follow these steps:

- Step 1** Draw a base map of Narre Warren in 1985 by tracing the important features from the 1985 street map (Source 2). Show the two main roads and the extent of the Fountain Gate Regional Shopping Centre. Design a legend showing residential areas, recreation areas, education facilities and vacant land and shade these areas on your map. Finish your map with BOLTSS.
- Step 2** Attach a piece of tracing paper to your base map using sticky tape along one edge like a hinge. This allows you to lift it up to easily see the map below. This top map is known as the overlay map.
- Step 3** Use the same legend on the overlay map as you used on the base map to shade in the main land uses as shown in the 2016 street map (Source 3). You will need to give this map a different title, but as it has the same border, orientation, legend, scale and source as the base map you do not need to repeat these on the overlay map. Make sure that your overlay title does not cover any part of the base map title.

### Apply the skill

- 1 Using the steps outlined above, construct an overlay map from the street maps of Narre Warren (Sources 2 and 3).

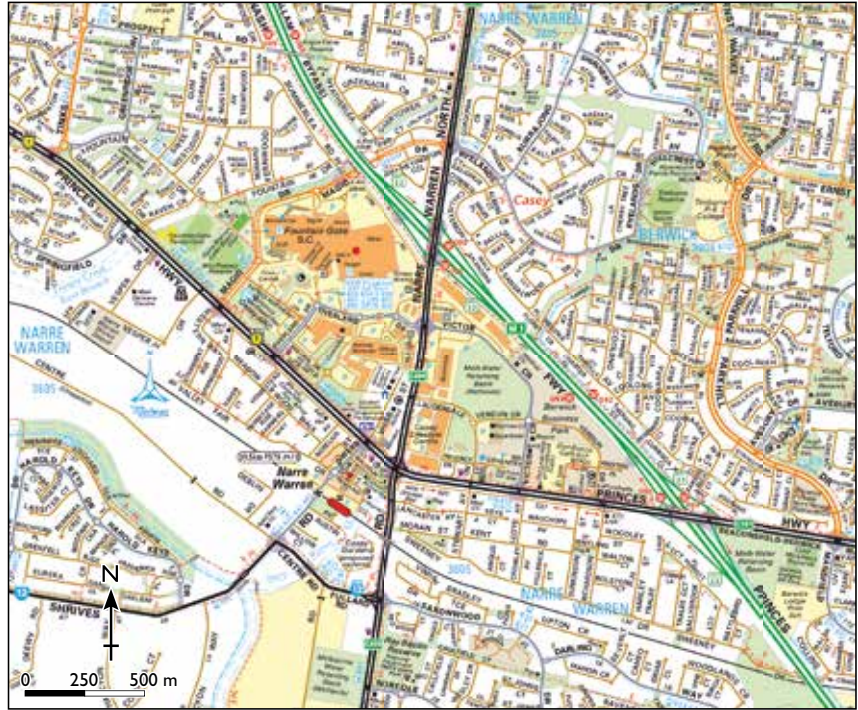
NARRE WARREN, 1985



Source 2

Source: Melway

NARRE WARREN, 2016



Source 3

Source: Melway

Extend your understanding

- 1 Look carefully at the street directory maps (Sources 2 and 3).
  - a What type of land use increased the most between 1985 and 2016?
  - b What land use decreased the most?
  - c What happened to the shopping centre in this time?
  - d Describe the spatial change in the area east of Narre Warren North Road between 1985 and 2016.
- 2 Find the Fountain Gate Primary School in 1985 (Source 2). It had recently moved here when this map was drawn.
  - a What does a new primary school suggest about families moving to the area?
  - b What new services had been added north of the school by 2016?
  - c Why do you think these new services were required?
  - d Describe the distribution of schools in Narre Warren in 2016.
- 3 Source 1 is a **vertical aerial photograph** of a place in Narre Warren.
  - a Use clues in the photograph to identify the key features.
  - b What clues suggest this photograph was taken after 2016?
- 4 What are some of the factors bringing change to this community?
- 5 Describe the changes to transport links in this community between 1985 and 2016.