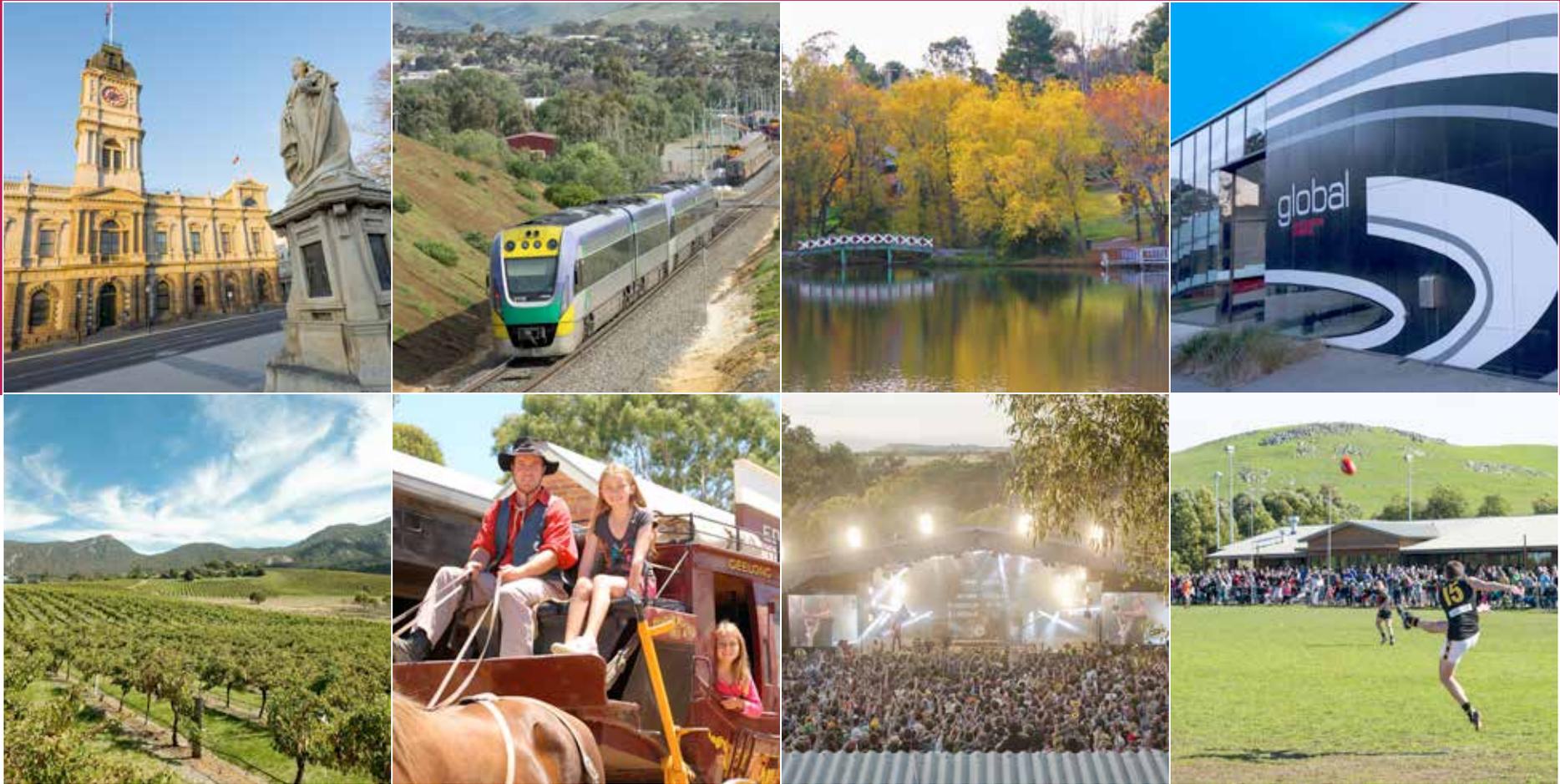


CENTRAL HIGHLANDS REGIONAL GROWTH PLAN



Authorised and published by the Victorian Government, 1 Treasury Place, Melbourne

Printed by Finsbury Green, Melbourne

If you would like to receive this publication in an accessible format,
please telephone 1300 366 356.

This document is also available in Word format at www.dtpli.vic.gov.au/regionalgrowthplans

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May 2014

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EXECUTIVE SUMMARY

The Central Highlands Regional Growth Plan provides a regional approach to land use planning in the Central Highlands. It covers the municipalities of Ararat, Ballarat, Golden Plains, Hepburn, Moorabool and Pyrenees and identifies opportunities to encourage and accommodate growth and manage change over the next 30 years.

The plan identifies:

- where future development will be supported and assessed at a regional scale
- environmental, economic, community and cultural assets and resources of regional significance that should be preserved, maintained or developed
- how the region can respond to opportunities, challenges and long-term drivers of change
- key regional priorities for future infrastructure planning and investment to support growth.

Vision for the Central Highlands

The Central Highlands Regional Strategic Plan identifies that the vision for the Central Highlands region towards 2030 and beyond is to provide a **productive, sustainable and liveable region for its people**. This plan shares the same vision.



Mount Langi Ghiran, Ararat Rural City

Principles and directions for regional growth

The principles and key directions identified to achieve the vision for the Central Highlands region are:

Principle	Overall key directions
1. Population growth should be planned in sustainable locations throughout the region	<ul style="list-style-type: none"> • Direct growth to existing towns with access to transport, services and employment opportunities • Focus urban development in locations where impacts on the surrounding natural resource base and the environment are minimised • Adopt a risk management approach in planning for population growth in areas subject to natural hazards
2. The region's economy should be strengthened so that it is more diversified and resilient	<ul style="list-style-type: none"> • Encourage greater economic self-sufficiency for the region • Pursue economic development opportunities based on the emerging and existing strengths of the region • Support growth through the development of employment opportunities in towns identified for population growth
3. The region should capitalise on its close links with other regions and cities	<ul style="list-style-type: none"> • Locate urban growth in identified settlements along key transport corridors • Build on and enhance links to other centres and regions • Integrate planning for freight and passenger transport with the land use directions and growth opportunities identified in this plan
4. The development of sustainable and vibrant communities should be supported by enhancing the level of access to key services	<ul style="list-style-type: none"> • Encourage services, facilities and housing that meet the diverse needs of the community • Recognise and plan for managing the variable rates of growth and population change expected across the region • Build on local opportunities to support resilience of small towns

Principle	Overall key directions
5. Land use patterns, developments and infrastructure should make the region more self-reliant and sustainable	<ul style="list-style-type: none"> • Support the productive use of energy, water, waste materials, agricultural and earth resource assets • Capitalise on opportunities to enhance water supply and increase energy security • Develop communities that provide local jobs and services • Encourage the efficient use of residential land to support sustainable urban forms
6. Planning for growth should be integrated with the provision of infrastructure	<ul style="list-style-type: none"> • Encourage efficient use of existing infrastructure • Encourage infrastructure that has a range of positive benefits or can support directions in the plan • Coordinate infrastructure provision with planned growth
7. The region's land, soil, water and biodiversity should be managed, protected and enhanced	<ul style="list-style-type: none"> • Protect and enhance regionally significant environmental assets • Capitalise on the region's environmental assets to improve environmental outcomes and support economic development
8. Long-term agricultural productivity should be supported	<ul style="list-style-type: none"> • Promote the growth of the agricultural sector as a regionally important economic activity • Support change and transition to maintain the viability and productivity of agricultural land • Encourage investment in agriculture by providing certainty regarding future land use within rural areas
9. The importance of cultural heritage and landscapes as economic and community assets should be recognised	<ul style="list-style-type: none"> • Identify and protect the region's significant cultural heritage and landscape assets • Recognise the economic development and liveability benefits associated with the region's cultural heritage and landscapes



Daylesford, Hepburn Shire



Ballarat Central Business District

PART A | INTRODUCTION

1. What is a regional growth plan?

Eight regional growth plans have been developed to provide broad direction for land use and development across regional Victoria (see Map 1). They also provide more detailed planning frameworks for key regional cities and centres.

Increasing the growth of regional Victoria will help improve the state's competitiveness by strengthening regional labour markets, expanding markets for local goods and services and providing a greater diversity of affordable housing and employment opportunities.

Regional growth plans, together with the new metropolitan planning strategy, *Plan Melbourne*, have been aligned in a way that builds on the interdependence of our urban settlements and facilitates their development as a networked 'state of cities'. Unlocking the growth potential of these cities – so they can accommodate a greater proportion of the state's future growth, with good transport connections between them and Melbourne – will create a state of cities where there are greater choices for people about where to live, work or start a business. It is likely that demand for housing in regional cities and centres would be accelerated in the future with the imposition of a permanent growth boundary around Melbourne.

The Central Highlands Regional Growth Plan provides land use planning responses to the directions identified in the Central Highlands Regional

Strategic Plan¹, which was prepared collaboratively by councils in 2010. The regional strategic plan identified the need to undertake regional-scale planning strategies to provide a common approach to land use issues affecting the Central Highlands.

Regional growth plans are the next stage in planning for growth and change in regional Victoria. They have been developed in partnership between local government and state agencies and authorities and reflect state and local government objectives.

These plans provide a long-term view of the region to 2041 and beyond, allowing for some short-term actions, and providing long-term strategic land use direction.

This plan provides a regional approach to land use planning in the Central Highlands and identifies opportunities to encourage and accommodate growth and manage change over the next 30 years. The plan covers the municipalities of Ararat, Ballarat, Golden Plains (part only), Hepburn, Moorabool and Pyrenees.

The Central Highlands region is forecast to experience continued population growth between 2012 and 2041. This growth needs to be carefully managed to ensure that desirable social, economic and environmental outcomes are achieved. This plan considers a wide range of land uses including agriculture, tourism, protection of environmental assets, and commercial and residential uses.

¹ The regional strategic plan can be found here: <http://www.rdv.vic.gov.au/victorian-regions/grampians>.

The Central Highlands Regional Strategic Plan

The Central Highlands Regional Strategic Plan was first published in 2010 and sets a framework to deliver on the collective aspirations of communities across the region. The regional strategic plan sets the following vision for the region:

To position the Central Highlands region to 2030 and beyond to provide a productive, sustainable and liveable region for its people.

The regional strategic plan includes a number of guiding principles that form the basis for the principles of this regional growth plan (see Sections 10 and 11).

In 2012 the regional strategic plan was refreshed and updated as a shorter summary document. It identifies the following strategic directions for the region:

1. Plan for growth
2. Improve transport infrastructure and services
3. Raise the region's profile as a tourist and heritage destination
4. Utilise the region's strength in information and communications technology to provide better services to business and communities
5. Improve access to health services and tackle health inequality
6. Provide better access to education and training
7. Continue to foster leadership capacity within the region
8. A productive and resilient landscape.

Under **Strategic Direction 1 – Plan for growth**, the document sets out a plan of action that includes the preparation of the regional growth plan as one of the key outcomes. The plan of action states:

We want to take the initiative in planning for growth within our region. The City of Ballarat and the peri-urban region near Melbourne in our east are growing rapidly. We want to plan for and expand the region's share of regional Victoria's population growth and seek to disperse that growth more evenly throughout the region. This will need integrated planning of land use and infrastructure development, including the provision of water and reticulated sewerage services, with regional-scale plans to manage population growth.

By doing this we will achieve the following outcomes:

- the regional growth plan will address the priority issues of local communities in a regional context
- local councils, government agencies, industry and the community will be clear about the location of growth and the appropriate protection of other uses, particularly farming
- small towns in the region will have appropriate infrastructure identified to accommodate their share of population growth within the region
- the regional community will benefit from population growth because it is planned and the necessary resourcing is identified.

Map 1: The eight regional growth plans



2. Why we need this plan

The regional growth plans translate and integrate emerging statewide regional land use planning policy. They provide the basis for regional coordination and future planning of infrastructure to support regional land use objectives.

This plan:

- establishes a framework for strategic land use and settlement planning that can sustainably accommodate growth
- identifies important economic, environmental, social and cultural resources to be preserved, maintained or developed
- provides direction for accommodating growth and change including residential, employment, industrial, commercial, agricultural and other rural activities
- shows which areas of land can accommodate growth
- identifies opportunities for supporting regional level infrastructure, providing an essential contribution to the long-term sustainability of the region.

The plan will help councils by agreeing on policies common to the region, streamlining planning policy and potentially reducing the strategic workload of councils. It will also contribute to broader regional goals.

The plan is a strategic direction-setting document that identifies long-term land uses and growth objectives. It will guide infrastructure decisions and provide priority for further investigations of regionally significant infrastructure.

Development proposals for specific sites and related processes are outside the scope of this plan.

The plan provides direction on common issues in rural and urban areas across the Central Highlands region but does not replace local planning. For example, the plan will be used to help identify future regionally significant industrial and other employment locations or to develop consistent regional approaches on matters such as planning for key resources, waste, tourism and cultural heritage.

Economic, environmental and social issues and trends have informed the preparation of this plan. Potential future changes have also been considered. Major issues for planning are discussed in more detail in a separate background report² which brings together a range of information and maps the region's strengths, assets, constraints and opportunities.

² The background report is available at: www.dtpli.vic.gov.au/centralhighlands/rgp.

3. How this plan will be used

The key land use planning directions of the plan will be implemented through the Victorian planning system as they are applied by each council in the Central Highlands region. This will support decision making at a local level.

Implementation will occur in a number of ways, such as further specific amendments to planning schemes, preparation of infrastructure plans, land supply monitoring and other projects.

The plan will be used to guide and inform future land use planning work across the region, including subsequent reviews of each council's municipal strategic statement.



Warrenmang Vineyard, Moonambel, Pyrenees Shire

4. How this plan was prepared

The plan was prepared in partnership between the State Government and the municipalities of Ararat, Ballarat, Golden Plains, Hepburn, Moorabool and Pyrenees (see Map 2). It is worth noting that only the northern parts of Golden Plains Shire are included in the Central Highlands region, with the southern areas included as part of the G21 region.

Key stakeholders involved in the preparation of the plan included the neighbouring municipalities of the Central Goldfields and Northern Grampians, respective catchment management authorities, and water corporations. Central Goldfields Shire is covered by the neighbouring Loddon Mallee South Regional Growth Plan, while the Northern Grampians Shire is covered by the Wimmera Southern Mallee Regional Growth Plan. However, due to the close relationships between these municipalities and the Central Highlands region, these municipalities were represented on the project steering committee for this plan.

Initial development of the plan was undertaken through a series of issues papers, regional workshops and analysis of information provided by all partners. From this evidence base, a strategic directions brochure was prepared for public comment. The brochure set out proposed principles for regional growth and a concept plan for regional growth. This was made available for comment in July and August 2012 to test the proposed directions.

A draft regional growth plan and background report were then developed, building on the strategic directions. These were made available for public comment in June and July 2013. Feedback from the consultations has informed the final regional growth plan and background report.

Map 2: Central Highlands region



Source: Department of Transport, Planning and Local Infrastructure

5. Components of this plan

Part A: Introduction – provides an overview of the context of the plan and how it has been prepared.

Part B: Regional overview – provides a snapshot of the region, a vision for the region and land use principles to achieve the vision.

Part C: Towards the regional growth plan — Regional land use framework – outlines land use directions and future actions in relation to the economy, environment and heritage, living in the region and infrastructure.

Part D: Regional growth plan – provides an integrated strategic plan for growth and change, bringing together the key directions outlined in Part C.

Part E: Delivering regional growth – outlines how the plan will be implemented and progress monitored.

A background report that contains additional information about the Central Highlands region was prepared to support the development of this plan. It is available at: www.dtpli.vic.gov.au/regionalgrowthplans



Clunes town centre, Hepburn Shire



Restaurant in Daylesford, Hepburn Shire, image courtesy of Tourism Victoria

PART B | REGIONAL OVERVIEW

This part of the Central Highlands Regional Growth Plan provides a broad overview of the Central Highlands region including what is driving growth and change, what land use challenges the region faces, and a proposed vision statement outlining a desired future for the region.

6. Snapshot of the region

The Central Highlands region has three distinct parts, each with its own particular issues and opportunities:

- Ballarat, which as the largest city influences development and growth in its hinterland
- the eastern area, which is within Melbourne's peri-urban hinterland and has particular population growth pressures around areas with significant landscapes, agricultural, waterway and other environmental assets. Many residents in this area commute to Melbourne for employment and to access higher order services
- the western area, predominantly comprising rural areas and established settlements, with relatively low population growth.

The Western Highway and Melbourne-Adelaide railway corridors (via Ararat) are key east-west transport assets providing links across the region to major centres (refer to Map 3).

The region contains highly productive agricultural and horticultural land used for broadacre grazing and cropping with some areas of intensive agriculture, including horticulture, viticulture and poultry.

The region's rich goldmining history, Aboriginal³ cultural heritage and diverse landscapes attract many visitors and residents. Environmental features include the Grampians National Park at the western end of the region and forests along the Great Dividing Range that make up a large proportion of the north-eastern parts of the region. Environmental assets in the region support industries such as agriculture and nature-based tourism, supply urban water needs and provide important habitat for flora and fauna.

The estimated population of the Central Highlands region in 2011 was approximately 169,300 people (Victoria in Future 2012).

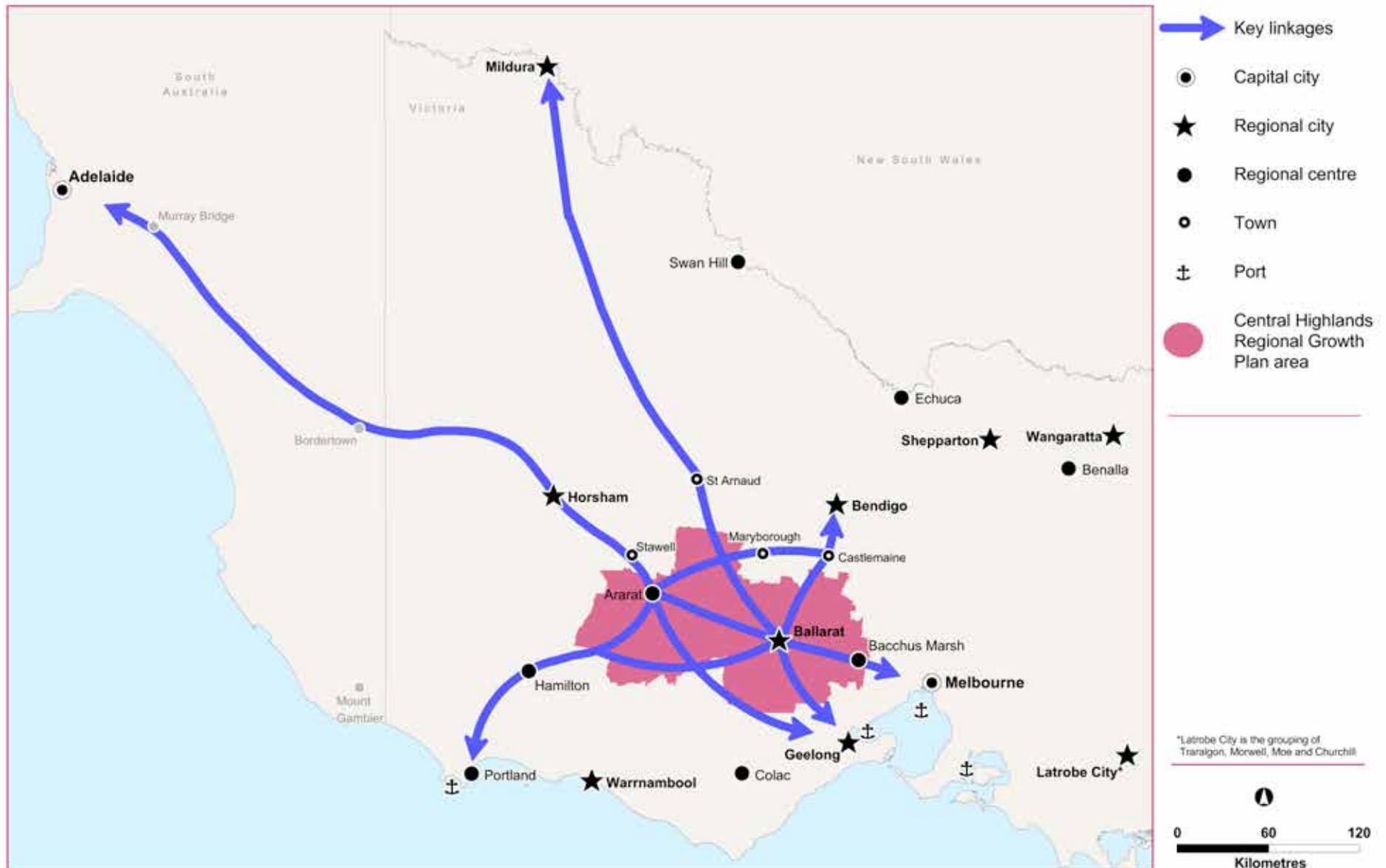
Ballarat is the dominant settlement and provides higher order services and employment to a wide hinterland area. There are also a number of larger towns that provide services to their surrounding districts, including Ararat, Bacchus Marsh and Daylesford and a range of smaller settlements. Bacchus Marsh also has strong links to Melbourne.

The key strategic assets of the region are shown on Map 4.

³ Throughout this document the term 'Aboriginal' is used to refer to both Aboriginal and Torres Strait Islander people. Use of the terms 'Koori', 'Koorie' and 'Indigenous' are retained in the names of programs and initiatives and, unless noted otherwise, are inclusive of both Aboriginal and Torres Strait Islander peoples.

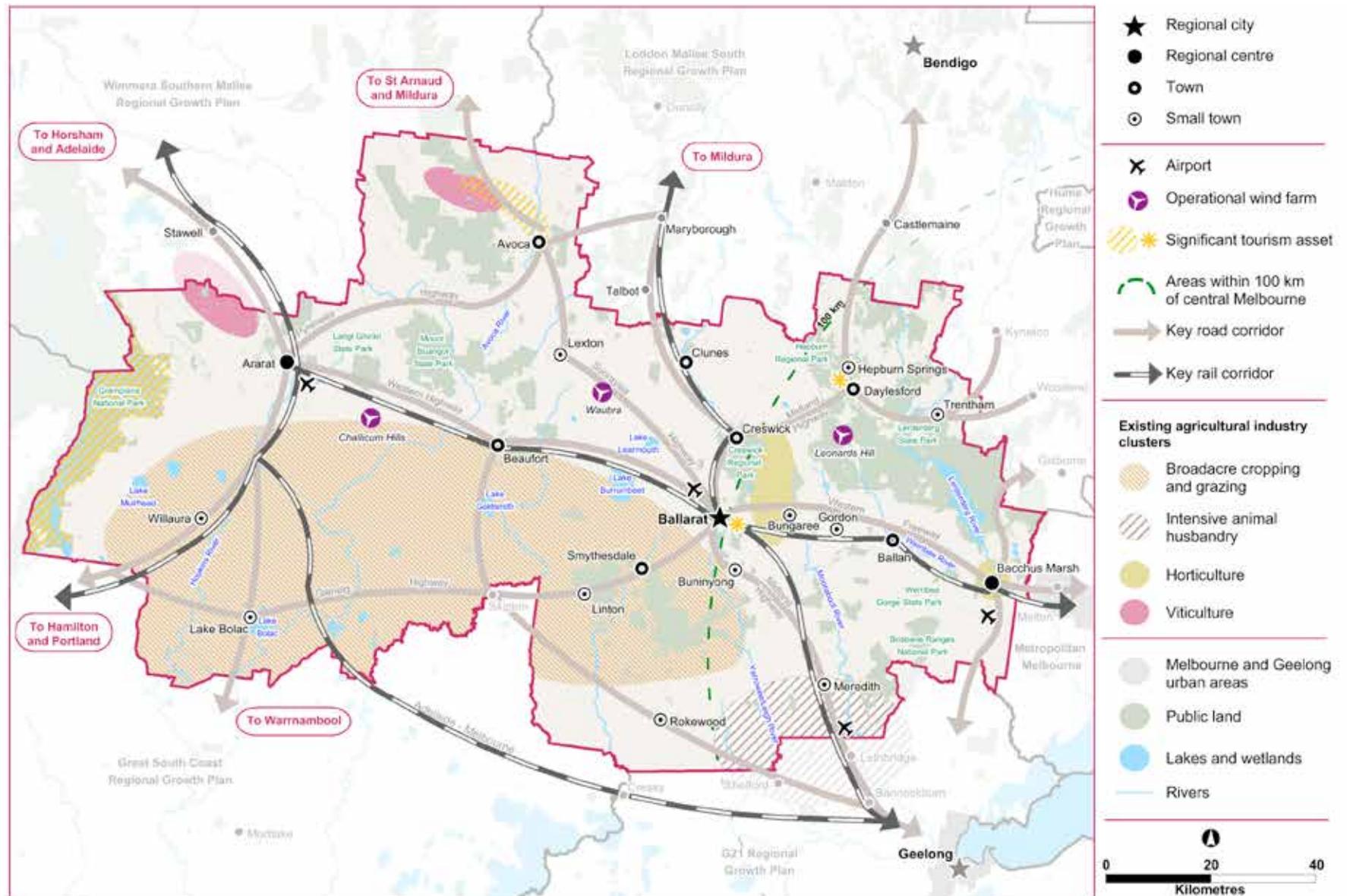
PART B | REGIONAL OVERVIEW

Map 3: Links to surrounding regions



Source: Department of Transport, Planning and Local Infrastructure

Map 4: Central Highlands strategic assets



Source: Department of Transport, Planning and Local Infrastructure

7. Melbourne's peri-urban hinterland

Peri-urban literally means the area around a settlement. Melbourne's peri-urban region is diverse, containing a mix of people, places and experiences. This predominantly rural area includes key urban settlements and townships, which face particular pressures for growth and change. In the Central Highlands region it extends across Moorabool Shire between the western fringe of metropolitan Melbourne and the eastern edge of Ballarat, as well as large parts of Hepburn and Golden Plains shires.

The peri-urban region includes a number of state significant land assets important to the functioning of Melbourne and Victoria as a whole. These include resources, infrastructure, environmental assets and cultural heritage assets (refer to Figure 1). These land assets provide some of our most basic needs that over five million Victorians rely on every day, such as quality air and water, food, fibre, and building materials for our homes and roads. The peri-urban region's unique natural, cultural and recreational assets provide great economic opportunities. This is a significant strength for the state, providing opportunities to maximise our competitive advantage over other cities and regions within Australia and the Asia-Pacific region. The economic opportunities provided by the assets and appropriate growth will contribute to the economy, our quality of life and environmental strengths. Considered land use planning will ensure we, and future generations, can continue to enjoy the benefits that this area provides.

The proximity of the peri-urban region to Melbourne and high standard road and rail infrastructure reinforces strong two-way connections between these areas, providing access to jobs, markets, customers and tourists. The peri-urban region has a particularly strong relationship to the Melbourne population. Visitation, tourism and commuting patterns occur between these areas and recreation and amenity areas are frequented by hundreds of thousands of people during weekends and holiday periods. These interactions have had a strong influence on growth and change within the peri-urban region. These areas have had high percentage increases in population and this trend is projected to continue.

If not managed, development pressures and sprawling growth can increase risks from bushfire, sea level rise and flood, add to infrastructure costs and lead to a loss of important non-urban assets including productive farmland, water catchments, earth resources, biodiversity and natural ecosystems. Retaining the economic and community value of these assets is a key consideration in planning for this area.

Collectively, the metropolitan planning strategy, *Plan Melbourne* and the peri-urban regional growth plans (G21, Central Highlands, Loddon Mallee South, Hume and Gippsland) provide the vision and broad strategic direction for land use and development across this area. The regional growth plans include high level framework plans for towns and cities where urban growth will be supported. *Plan Melbourne* (Chapter 6 – State of Cities) identifies Bacchus Marsh and Ballan as peri-urban towns with potential to attract housing and population growth out of Melbourne. It is likely that demand for housing in these centres would be accelerated in the future with the imposition of a permanent growth boundary around Melbourne.

The government, in partnership with councils, will work to provide specific statements about the peri-urban region to respond to the unique pressures and opportunities that are common to these locations. There is an opportunity to clearly articulate the outcomes envisaged for the complex peri-urban region at a finer grain. Stronger and clearer guidance is needed for making land use planning and development decisions in the peri-urban region, particularly where trade-offs between competing land uses are required.

Understanding the role of regional cities, peri-urban towns and rural communities, and their relationship to one another and to Melbourne, is a critical element in planning for the peri-urban region. Peri-urban councils have already led the preparation of detailed research of many of the issues affecting the area, and have developed policy positions in a number of locations to inform decision making at the strategic land use level. The work of councils and shires, together with *Plan Melbourne* and the regional growth plans, provides a strong foundation for preparation of statements about the peri-urban region.

Figure 1: State significant land uses present within Melbourne’s peri-urban region

Land uses	Why these land uses are considered significant to the state
Resources	
Extractive	The cost of transporting stone and sand products over long distances can account for a substantial proportion of product price at the construction site. Sourcing construction materials from local quarries within the peri-urban region enables cost-efficiencies and energy savings.
Forestry	A number of state forest reserves are located in the peri-urban region. They provide for a variety of uses, including providing timber for sustainable forestry, biodiversity and landscape conservation, protection of water catchments and providing opportunities for recreation.
Productive agriculture	Prime agricultural land provides food and fibre to the Victorian community and supports employment and businesses. It also supports associated rural industries, such as food processing, abattoirs, shearing, irrigation supplies and stock feed producers that contribute to Victoria’s economy.
Water catchments	The peri-urban catchments and storages remain essential to provide potable water for human and domestic animal consumption. The filtering action of the forested surrounds of our reservoirs avoids the need for expensive water treatment facilities for Melbourne and surrounding cities and towns.
Infrastructure	
Transport	The peri-urban region is traversed by an extensive arterial road and rail transport network linking major centres of population and industry across Victoria. Progressive transport expansion and safety improvements continue to influence land use activities and are likely to further improve travel times, reducing the commuting time and improving access between peri-urban areas and with Melbourne.
Utilities	Water treatment plants, as well as electricity, gas and waste management facilities, pipelines and transmission corridors are located within the peri-urban region. These assets support the functioning of Victoria’s urban areas.
Environment	
Biodiversity	Strong natural systems with a diversity of natural habitats for native plant and animals are important for the health and wellbeing of people living in urban areas. Opportunities for close connections with the natural world have high social, economic and educational value.
Landscapes	Landscapes help define the areas in which we live and work, and provide a connection with place and culture.
Parks and reserves	There are a large number of parks and reserves in the peri-urban region. These areas provide ecological, environmental and aesthetic value and the opportunity for leisure and recreation.
Waterways	There are many ecologically significant rivers traversing the peri-urban region, connecting our water catchments with bays.
Cultural	
Heritage	There are various places, sites, structures, relics and flora of heritage significance in the peri-urban region. Heritage assets generate social benefits, such as a sense of identity, direct user benefits through tourism and the benefits stemming from the intrinsic value of preserving these assets for future generations to appreciate and enjoy.
Tourism	The peri-urban region provides key day trip destinations for residents and visitors from interstate and overseas. Attracting visitors to the peri-urban region also results in indirect employment and additional spend in ‘downstream’ industries such as retail suppliers, food production and construction.

8. Drivers of change

Population and demographics

State government projections indicate the Central Highland region's population is expected to grow by around 78,200 persons to 247,500 people by 2041⁴. Most of this growth is forecast to be located in Ballarat and the eastern area. Figure 1 details the growth by municipality to 2031.

Population growth presents challenges in terms of providing services and facilities. Much of the growth expected to occur in the region over the next 30 years is in the Ballarat West Growth Area, and to a lesser degree Bacchus Marsh. Most other parts of the region are forecast to experience limited growth.

The region's population is forecast to age significantly over the next 30 years. However, the age profile of different parts of the region will vary considerably. The existing disparity in population age between areas experiencing growth, such as Bacchus Marsh and Ballarat, which have younger populations, and areas experiencing more limited growth, such as Ararat, Hepburn and Pyrenees shires, which have older populations, is likely to widen over the next 30 years. Population age has implications for the provision of services and facilities, housing needs and the economy. The trend towards larger farms with fewer staff in broadacre farming areas also creates challenges to the viability of smaller communities as employment opportunities are reduced.

Notably, household sizes are projected to decrease, which will increase the number of houses required per head of population.

Figure 2: *Projected change in total population for municipalities in Central Highlands region*

Local Government Area	Total population		
	2011	2021	2031
Ararat (Rural City)	12,000	13,000	14,000
Ballarat (City)	97,800	113,500	130,000
Golden Plains (Shire) (north-west Statistical Local Area)	8200	9000	10,000
Hepburn (Shire)	15,000	17,000	18,500
Moorabool (Shire)	29,400	36,000	43,000
Pyrenees (Shire)	6900	7500	8000
Total Central Highlands Regional Growth Plan	169,300	196,000	223,500

Source: Department of Planning and Community Development, *Victoria in Future 2012*

Economic diversification

The traditional economic strengths of the Central Highlands region, such as agriculture and agribusiness, mining and manufacturing, will remain important towards 2031. However, these sectors are unlikely to be able to provide the same basis for continued growth in the future. The industry outlook to 2031 shows high growth sectors include healthcare and social assistance, professional, scientific and technical services, accommodation and food services and tourism.

Potential future growth industries include information and communications technology and business process services and research and development, high value-added food processing, and gold, copper and mineral sands mining. Improved telecommunications technology is likely to have implications for business, with increased competition from e-commerce and more accessible major centres attracting additional business from residents in smaller settlements.

⁴ Source: Victoria in Future (2012). Note that the Department of Transport, Planning and Local Infrastructure does not publish projected totals for local government areas beyond 20 years.

The region contains areas of rich and versatile soil types, some of which face development pressure for urban or rural residential development. The need to ensure the continued viability and availability of productive agricultural land will be a key challenge for land use planning over the next 30 years.

The ageing of the population has implications for the economy in terms of an available workforce and demands on infrastructure, services and facilities. However, population growth will help to offset the negative economic impacts of an ageing population in those areas where growth is most likely to occur. Where population growth is not expected, the costs and viability of providing services and infrastructure to ageing populations will present a challenge.

Environmental assets in a changing climate

The need to ensure that environmental assets within the Central Highlands region are used sustainably will be a key challenge for the future. The changing climate is driving the need for adaptation to secure water resources and agricultural patterns. It will also require managing the risks of increased bushfire and flood hazards and the loss of biodiversity assets and amenity due to impacts of climatic conditions, such as long-term droughts, widespread flood and an increase in the number of days of extreme heat and fire danger.

Water is a key environmental asset and natural resource with limited availability and competing demands for its use. Large parts of the region are included in declared water supply catchments, which provide potable water for settlements both within and outside the region. This is a significant essential resource to large population centres such as Geelong and Bendigo, their regional surrounds and the communities of the Murray-Darling Basin. Different land uses place varying levels of demand on water use and some land uses can pose threats to water quality and river health if not carefully managed. The need to balance the competing demands for water for both agriculture and domestic use, within and outside the region, will require careful attention.

Proximity and access to Melbourne

A key strength of the Central Highlands region is its excellent access to and links with Melbourne, which supports the region's appeal to residents, visitors and businesses. Melbourne's influence is strongest in the eastern parts of the region, particularly along the Western Highway corridor. This influence will continue into the future with the continued development of Melbourne's western growth corridor and increased population and business opportunities on the region's doorstep, as well as improved access through transport infrastructure upgrades such as the Regional Rail Link. Land use planning needs to respond to the benefits and potential impacts of these opportunities and to address such issues in a manner consistent with the metropolitan planning strategy, *Plan Melbourne*.



Smythesdale streetscape, Golden Plains Shire

9. Challenges for growth

Development pressures in high amenity areas

There is ongoing pressure for urban and rural residential development in high amenity areas, in particular, to cater for 'tree changers' within the eastern parts of the region with good access to Melbourne. These pressures may conflict with planning objectives relating to the protection of state and regionally significant water catchments, environmental assets and ensuring the ongoing availability of versatile and productive agricultural land for primary production.

Land use planning has an important role to play in ensuring agricultural operations are not encroached upon by sensitive uses where such pressures exist, particularly within Moorabool and Golden Plains shires. Natural hazards such as bushfire and flood also need to be carefully managed to protect life and property in many high amenity areas.

Spreading the benefits of population growth

The majority of population growth planned for the Central Highlands region over the next 30 years is likely to occur in the Ballarat West Growth Area and Bacchus Marsh. Therefore, the benefits of population growth for community and economic development will not be evenly distributed throughout the region and this presents challenges in terms of providing for or maintaining services and infrastructure.

There are opportunities for limited population growth in a range of settlements where services and infrastructure are underutilised, particularly where such settlements enjoy good access to larger centres with higher order services and employment, such as Ararat and Ballarat. This approach will support lifestyle choice within the region. The diverse nature of the region means that local characteristics need to inform land use planning, rather than a one-size-fits-all approach.

However, the ability to spread the benefits of population growth will be constrained to a large degree by market demand, with large areas of the western part of the region unlikely to experience significant growth given their distances from Ballarat and Melbourne. The need for population growth to be underpinned by employment growth places limits on where growth should be directed. The continued ageing of the population in areas experiencing limited growth will present considerable challenges regarding workforce participation, housing needs and services.

Employment growth

Population growth should be underpinned by employment growth. However, some residents are reliant on jobs and services in other places. For instance, many residents living on the periphery of Ballarat and Bacchus Marsh commute to Melbourne for employment. Wherever possible, more jobs should be provided locally. Land use planning can help support employment growth by providing sufficient industrial and business zoned land with the right characteristics to attract new investment.

Changing climate

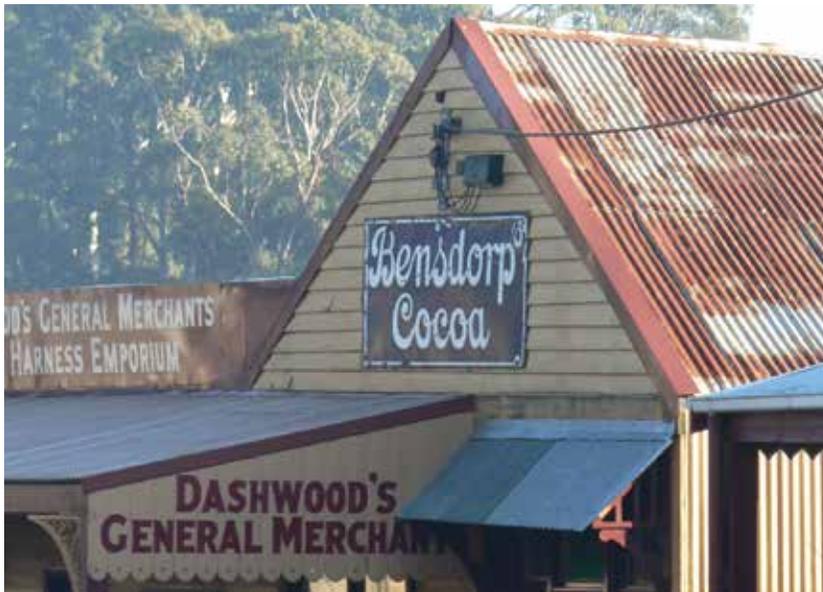
The implications of a changing climate could become a profound challenge to planning. Land use planning will increasingly need to pre-empt and adapt to the increased bushfire, flood and extreme weather event hazards that are forecast to occur. Commodities in the region may change as the agricultural sector adapts to climate change, potentially leading to changes in supporting industries that may require land use planning support.

Providing new services and infrastructure, and maintenance of existing services and infrastructure

The extension of services and infrastructure to locations where growth is planned is a key challenge, dependent on funding. The rate of growth likely to occur in Ballarat West and Bacchus Marsh will continue to present challenges for the provision of infrastructure and services.

Where population growth is unlikely to be strong, the maintenance of existing services and infrastructure will present challenges particularly in terms of the viability of providing facilities and services.

The provision of affordable resources, including heavy construction materials to support settlement growth and cost-effective infrastructure, will be an important consideration for the region.



Trentham, Hepburn Shire

10. Vision for the region

The Central Highlands Regional Strategic Plan outlines a vision for the future of the Central Highlands region to 2030 and beyond to be a **productive, sustainable and liveable region for its people**. This plan shares the same vision.

11. Principles to achieve the vision

A set of regional planning principles has been established to guide growth and change in the Central Highlands region:

1. Population growth should be planned in sustainable locations throughout the region.
2. The region's economy should be strengthened so that it is more diversified and resilient.
3. The region should capitalise on its close links with other regions and cities.
4. The development of sustainable and vibrant communities should be supported by enhancing the level of access to key services.
5. Land use patterns, developments and infrastructure should make the region more self-reliant and sustainable.
6. Planning for growth should be integrated with the provision of infrastructure.
7. The region's land, soil, water and biodiversity should be managed, protected and enhanced.
8. Long-term agricultural productivity should be supported.
9. The importance of cultural heritage and landscapes as economic and community assets should be recognised.



Barkly Street, Ararat

PART C | TOWARDS THE REGIONAL GROWTH PLAN — REGIONAL LAND USE FRAMEWORK

12. Regional economy

12.1 Overview

Despite considerable structural change over the last decade, the Central Highlands region's diverse economy has helped it to adjust to changing economic conditions and to grow at a similar rate to the state average. Ballarat is the economic powerhouse for growth in the region and has experienced one of the highest rates of economic growth in regional Victoria over the last decade. A key issue facing the region is that economic growth has not been evenly spread, with smaller settlements, particularly those in the western parts of the region, experiencing lower rates of growth.

Population growth has been the main driver of economic growth during the last decade, with most population growth occurring in Ballarat and to a lesser extent Bacchus Marsh. Manufacturing continues to be a leading sector of the economy along with healthcare, finance, education and construction. Other important economic activities include retail trade, agriculture, professional services, transport and public administration. The service sectors of finance, administration, tourism and health are becoming increasingly important.

Agriculture is the second highest export sector and a significant employer, especially in Ararat and Pyrenees. However, it has declined in terms of its contribution to the overall regional economy. Production consists mainly of livestock (predominantly sheep), cropping and vegetables. Other industries include a growing organic industry, grapes, and pig and poultry production.

Continued population growth is expected to remain an important driver of economic growth, particularly towards the eastern part of the region. An average annual population growth rate of 1.5 per cent has been forecast for the region over the next 30 years, higher than the regional Victorian average. The continued strong growth of Ballarat will benefit the regional economy as a whole and enhance liveability by improving access to employment and higher order services. Employment opportunities in urban settlements will include manufacturing and high value sectors, such as healthcare and professional services where the highest growth is expected.

The Central Highlands region features one of the most diverse economies in regional Victoria, with a wide range of economic growth opportunities outside areas where population growth is focused, such as food and fibre production, minerals and extractive industries, forestry and renewable energy. The agricultural sector will continue to support many smaller settlements and rural communities, while growth in the tourism sector will benefit areas that are visitor drawcards, such as the Grampians National Park, Daylesford and Hepburn Springs, Clunes and the Pyrenees wine region. The expansion of the Hopkins Correctional Centre will help support the economy of Ararat and its surrounds.

Competitive strengths of the region include its growing regional population base and business networks, well developed and integrated higher education and training networks, excellent road and rail access to major markets including Melbourne, Adelaide, Geelong and Bendigo, its proximity to supply chains and raw materials, and its agricultural products.

This plan supports a more holistic approach to economic development of the region and improved collaboration between stakeholders.

There is a focus across the region on emerging industry sectors. For example, the region has identified an opportunity to be Australia's premier high technology and knowledge-based regional economy. Significant steps have already been made towards achieving this vision, such as the planned expansion of the Ballarat Technology Park. To promote economic resilience and sustainability over the long term, it will be important that the region's economy takes advantage of opportunities to evolve and diversify its base to include these emerging sectors.

A key economic challenge facing the region is the attraction and retention of skilled labour. Land use planning can help the region attract and retain skilled labour by encouraging housing choice, accessible facilities, jobs and services, and enhancing the liveability of settlements.

Key assets and opportunities for the region are identified on Map 5.



Intensive vegetable growing, Central Highlands region

12.2 Commercial development

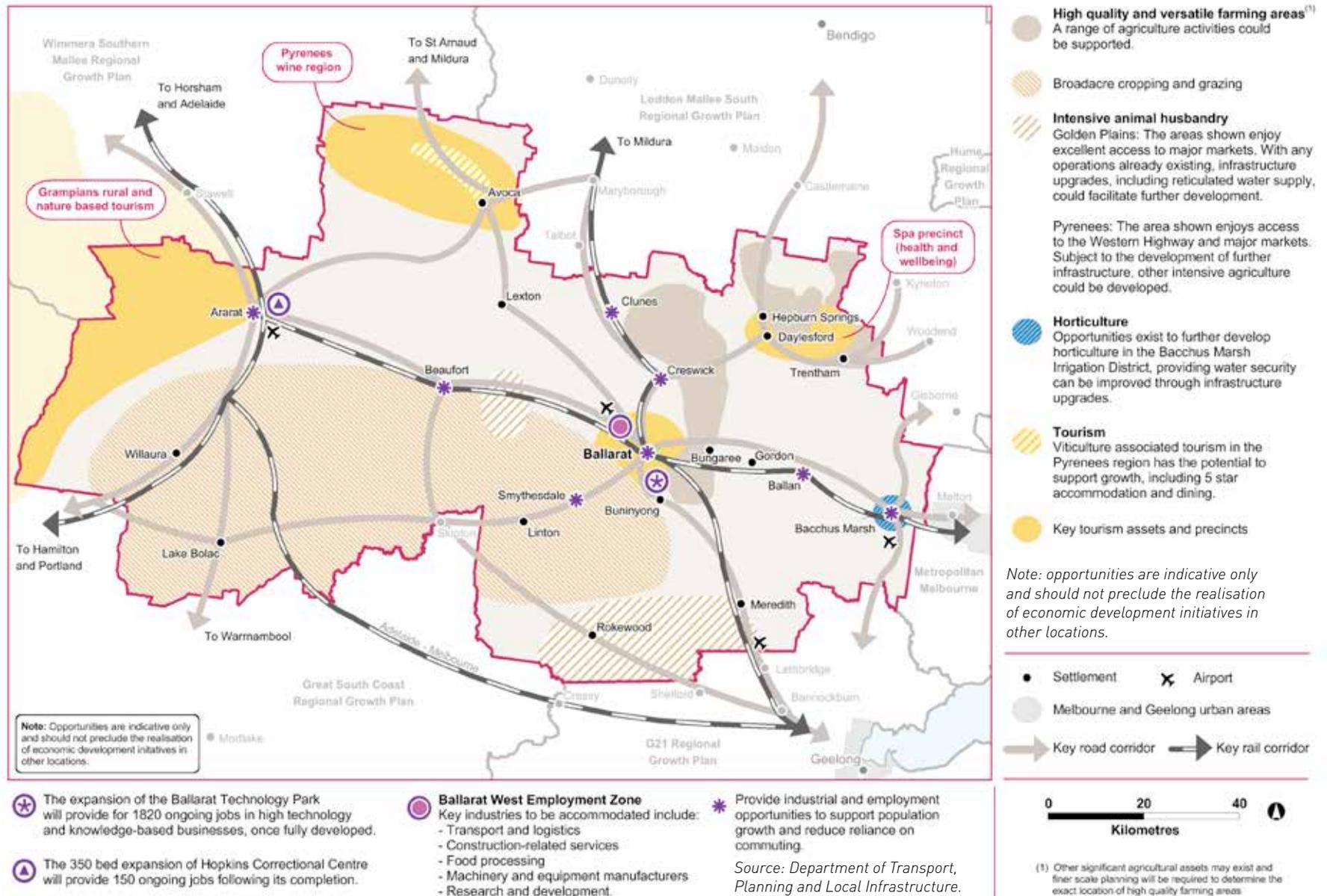
Future directions

- Support commercial development in each settlement that is consistent with the role and function of that settlement within the region
- Support commercial activity that will encourage economic self-sufficiency and reduce trade leakage to Melbourne
- Support commercial development that reinforces the primacy of existing town centres

The service sector is growing and is an important source of employment within the Central Highlands region. The ability to access a wide range of commercial services locally is an important contributor to liveability and economic self-sufficiency. However, economic self-sufficiency is challenged by the region's proximity to Melbourne. Major road and rail infrastructure upgrades and the opportunities associated with Melbourne's adjacent West Growth Corridor will ensure better access for the region to commercial and retail services into the future. A major challenge facing commerce in the region is increased competition from e-commerce. E-commerce represents both a challenge and an opportunity for the region, providing increased competition but also greater potential for local and home-based businesses.

Land use planning plays an important role in supporting commercial activity by ensuring that sufficient land is zoned for commercial uses and that it is appropriately located within settlements. Ensuring the continued primacy of town centres, where the greatest level of public infrastructure investment has occurred, is an important land use planning objective. Out-of-centre commercial activity should be limited to uses such as bulky goods retailing to ensure that it does not detract from the viability and vibrancy of town centres. The development of new commercial centres, particularly in areas experiencing population growth, should be planned within the framework of a municipal retail hierarchy.

Map 5: Key economic development opportunities and assets



Economic development strategies completed by the region's councils recognise the importance of commercial activity for local economies. The central activity areas of settlements should be supported to enhance the vibrancy of town centres and reflect greater investment in public infrastructure in such locations.

Ballarat's Central Business District offers higher order commercial services to the region, attracting visitors from across the region and beyond. Strengthening Ballarat's Central Business District through a greater mix of uses and enhanced public realm will improve access to employment and higher order services and benefit the whole region.

Land use policies, strategies and actions

- Encourage commercial services to be provided to settlements consistent with their role in the regional settlement network, taking into account relationships with other settlements within and outside the region
- Support commercial land uses in designated locations in planning schemes and provide sufficient appropriately zoned land
- Support the consolidation of prime commercial activities within existing town centres
- Regularly review commercial land supply and demand in areas experiencing population growth to ensure that sufficient commercial zoned land is provided
- Support the implementation of economic development strategies to strengthen commercial activity and enhance the quality of retailing in existing town centres

12.3 Rural land use

Future directions

- Recognise the Central Highland region's regionally significant rural and agricultural assets in land use planning, including the areas of highly productive and versatile soils within Moorabool, Ballarat and Hepburn, the Bacchus Marsh Irrigation District and the Pyrenees wine region
- Provide greater certainty of land use in rural areas to encourage new investment in agricultural activities that enables growth of exports, increased productivity and strengthens farming communities
- Manage versatile and productive agricultural areas for primary production by providing for a range of flexible rural uses, while protecting such areas from incompatible land uses
- Support and protect opportunities for intensive agriculture in areas with excellent access to markets, and where potential amenity and water catchment impacts can be appropriately managed

Productive agricultural land is an important source of economic wealth in all parts of the Central Highlands region with considerable potential for further investment. This direction is supported by the State Government's goal to double Victoria's agricultural food and fibre production by 2030. Planning schemes should therefore emphasise the need to promote investment in agriculture. They should also provide long-term certainty regarding the availability of land for agriculture and the primacy of agricultural activities in rural areas over potentially conflicting land uses.

Rural areas should be able to provide for a range of rural uses and related rural industries that complement the productive capability of agricultural areas. The region features highly productive and versatile soils with horticulture, viticulture, broadacre cropping and grazing all strengths of the region. Proximity to markets is likely to become more of a competitive advantage in a carbon constrained economy over the next 30 years and will

make the retention of food resources close to growing markets in Melbourne's peri-urban region increasingly important.

Intensive animal husbandry is also a strength, with parts of the region offering both excellent access to markets and low population density. Intensive animal husbandry should be directed towards areas where land use conflicts can be avoided and with good proximity to processing facilities in Geelong and Melbourne, such as parts of Golden Plains and Pyrenees shires.

The region contains rural areas that are of regional significance in terms of their productivity and potential to support agriculture. Land capability studies have identified areas of highly productive and versatile soils within the Moorabool and Hepburn shires. The Bacchus Marsh Irrigation District supports highly intensive horticulture on the edge of a large growing settlement. The Pyrenees wine region is a significant producer of premium wine and generates significant tourist visitation.

Commercial forestry is a notable industry in the Central Highlands and is likely to evolve through the establishment of native hardwood and softwood plantations, rather than through reliance on harvesting native forests. Settlements such as Creswick and Beaufort have a close relationship to the forestry industry.

Agriculture and other primary production will be affected by climate change in different ways depending on seasonal factors, and the location and type of agricultural activity. Changing seasonal conditions may present opportunities for some producers to develop new practices and increase productivity in some locations and activities. For example, new crops may be grown in some areas that experience a warmer climate and longer growing season, leading to emerging opportunities to diversify agricultural production. Planning needs to support rural land use change that enables farming communities to respond to changing conditions, be they climatic or economic.

A key challenge for land use planning is to enable flexibility in rural land use while avoiding land use conflict. Flexibility should be provided to enable farmers to adapt to changing markets and climatic conditions, while ensuring that land uses that could permanently remove land from productive use or result in land use conflict, such as rural residential uses, are excluded. Section 14.8 of this plan identifies that careful land use planning will be required to ensure rural residential development is located in appropriate and strategically justified locations and does not compromise agricultural activities, landscapes and environmental assets and values.

The sustainable use of natural resources within the region will be important in the context of a changing climate. Water is a key natural resource with limited availability, placing pressure on intensive agricultural uses in some locations such as the Bacchus Marsh Irrigation District and expansion of poultry farms in Golden Plains Shire. Infrastructure investment to achieve greater water security in such locations will become critical to ensure the ongoing viability or further development of intensive agriculture in a changing climate. The need to balance the competing water demands of agriculture and urban uses will require careful attention over the next 30 years, both from within and outside the region.

Opportunities exist for a range of land uses in rural areas that are complementary to agricultural production, including tourism, carbon offset schemes and renewable energy generation, which could provide alternative income streams for farmers. For example, in high amenity areas such as parts of the region close to the Grampians National Park, opportunities exist for on-farm accommodation or activities to broaden the tourism products on offer and augment farm incomes.

Key spatial opportunities in relation to rural land use are shown in Map 5.

Land use policies, strategies and actions

- Review planning schemes to recognise the need to support investment in agriculture by providing:
 - more clarity about the long-term designation of land for primary production
 - flexibility in terms of the types of rural activities that can occur on rural land to support its ongoing viability
- Undertake further investigations into the region's strategic agricultural land assets to ensure a consistent approach across the region
- Identify important agricultural areas and the need to protect them in planning schemes from unplanned loss due to permanent changes of land use
- Recognise the contribution that rural areas make to the landscape values and amenity of the region including as green breaks between settlements in planning schemes
- Provide policy support and direction in planning schemes on appropriate locations for intensive agricultural activities, including in the areas identified by this plan
- Provide policy support in planning schemes for infrastructure projects that will benefit agriculture such as improved transport routes to markets and the supply of reticulated services such as water to intensive agriculture facilities to enable further growth
- Identify locations where changes in land use controls would help facilitate economic development opportunities or better protect existing rural land use assets

12.4 Industry and employment

Future directions

- Encourage local employment opportunities and provide industrial land to support the population growth and economic opportunities identified in this plan
- Identify opportunities for the expansion of existing industries and the establishment of new industries in the region that leverage off the region's competitive strengths, including its workforce, research and knowledge infrastructure, and access to major markets
- Exploit the regional significance of the Ballarat West Employment Zone in providing land for manufacturing, freight and logistics, and commercial uses
- Support infrastructure investment where it provides for the expansion or establishment of new industry and other employment-generating uses

Land use planning plays an important role in supporting employment by ensuring that sufficient employment zoned land, with the correct attributes to support a wide range of uses, is available.

Significant employment-generating uses in the region include manufacturing, service industries, freight and logistics and research and development. Other commercial uses such as retail, office and health services are discussed separately in Section 14 of this plan. A key strength of the Central Highlands region is the strong relationship that exists between business and research and development undertaken by local universities.

The region will continue to attract business through its current competitive strengths, which include its excellent access to major markets and its position in supply chains. Opportunities for the regional economy to evolve

and diversify should be strongly encouraged to significantly expand its economic base in high value innovative industry sectors, and increase the number of knowledge sector jobs. The region should particularly capitalise on new infrastructure, such as the National Broadband Network, and seek to leverage these investments and support industry focused around skills, innovation and technology.

The National Broadband Network will fundamentally improve the accessibility of the region to national and international markets, highly skilled labour and progressive ideas. It will also enable growth in both existing and new high value, niche industries. These emerging industry sectors will play an increasingly important role in supporting long-term employment growth in the region into the future.

Many of the most significant employers within the region are located in Ballarat, where manufacturing has long been a foundation of the economy. Large-scale manufacturing, research and development and freight and logistics development will be directed towards the Ballarat West Employment Zone, located adjacent to Ballarat Aerodrome. The Ballarat West Employment Zone has excellent access to air, road and rail infrastructure and a master-planned approach will ensure the correct attributes are provided for employment-generating uses. The Ballarat West Employment Zone will be developed over the next 20 years and is capable of accommodating up to 9000 jobs once fully developed.

Industrial zoned land is important in many settlements within the region to support local employment opportunities and local economies, such as Ararat's strong manufacturing sector. Local service industry and rural industry associated with agriculture will continue to be an important source of employment in the future for many settlements. Councils have identified the need for more industrial zoned land in certain locations to support local employment opportunities.

For example, Hepburn Shire has identified the need for additional industrial zoned land in Creswick to support the local service industry and Pyrenees Shire has identified a need for industrial zoned land in Beaufort that is not subject to flood hazards. The uptake of newly-released land in

the Avoca Industrial Estate demonstrates that opportunities exist to attract new businesses to smaller settlements within the region where necessary infrastructure is available.

It will be critical to also support the rapid population growth in peri-urban regions by encouraging new employment opportunities to reduce the current reliance on commuting to Melbourne and Geelong. To this end, Moorabool Shire is investigating the Parwan area as a key employment hub for Bacchus Marsh.

Land use planning plays an important role in designating locations for employment land. Councils within the region have undertaken strategies to identify short-, medium- and long-term employment land, such as the Ballarat Review of Future Industrial Areas. Opportunities exist when selecting employment land to exploit synergies between employment-generating uses and other uses, such as the research and development arms of universities.

Good access to transport routes and service infrastructure is often a prerequisite for industrial growth. Priority should be given to resolving transport and service infrastructure constraints where it is cost-effective and will generate employment.

Land use policies, strategies and actions

- Recognise in planning schemes that employment growth needs to underpin population growth to enable residents to work locally and support the region's economy
- Direct infrastructure investment where it will support business investment, including Stage 1 of the Ballarat Western Link Road, which will improve access to the Ballarat West Employment Zone
- Review planning schemes to prevent the encroachment of sensitive uses into buffer areas for industry
- Support the provision of industrial land in settlements designated for growth by providing land and monitoring the supply and demand for industrial land

12.5 Energy

Future directions

- Support opportunities for local energy generation from renewable sources in locations where amenity, landscape and environmental assets and values can be protected and local infrastructure can support this activity

The Central Highlands Regional Strategic Plan proposes that the Central Highlands region can capitalise on renewable energy opportunities to increase energy security and support a low carbon economy. The region has excellent wind resources and is home to a number of existing and proposed wind farms including a large facility at Waubra. Approvals have been granted for a number of wind farms across the region. The continued growth of the renewable energy sector over the next 30 years presents opportunities for the region, which has some of the best wind resources in Victoria.



Challicum Hills Wind Farm, Ararat Rural City

The region is also home to Australia’s only community owned and operated wind farm, located south of Daylesford, a project that reflects the strong desire of communities within the region for more sustainable energy sources. However, renewable energy projects can impact on the amenity of local residents and landscape values, which must be considered when planning future renewable energy projects. Local infrastructure, particularly roads, also needs to be able to support the construction and operation of energy facilities.

The Central Highlands Infrastructure Study (2013) identifies opportunities for small to medium sized power generation across the region. This includes potential locations for biomass generation in proximity to clusters of waste sources, such as in Ballarat, Meredith, Lethbridge and Ararat, and in timber production areas.

Locational requirements for power generation within the region include:

- proximity to the energy source and to parts of the electricity grid with spare capacity
- the ability to create buffers to sensitive land uses
- access to appropriate transport infrastructure.

Land use policies, strategies and actions

- Encourage planning schemes to provide for the expansion of energy supply infrastructure where it is feasible and would support the establishment of new industry or the expansion of existing industry
- Encourage planning schemes to recognise the benefits of local energy generation to support economic development, diversify the local economy and achieve improved sustainability outcomes
- Identify suitable land, protected by appropriate buffers, for the development of renewable energy generators

12.6 Earth resources

Future directions

- Maintain access to productive earth resources
- Plan to manage earth resource projects to maximise benefits and minimise adverse impacts

Land use planning is an important tool for protecting long-term access to valuable earth resources from incompatible development. The scale of major earth resources projects can contribute significantly to economic development, however the benefits of projects tend to be localised rather than spread throughout the region. The viability of projects is dependent on fluctuating external markets, which presents difficulties when trying to plan for projects into the future.

There are significant earth resources in the Central Highlands region, with the Ballarat East Gold Mine, brown coal mining at Maddingley, exploration licences granted for coal and coal seam gas south and west of Bacchus Marsh, and for gold and other precious metals through many parts of the central, northern and western parts of the region. Copper deposits have been identified in the vicinity of Ararat and west of Lake Bolac.

At a national level, the Standing Council on Energy and Resources has endorsed a National Harmonised Regulatory Framework for Natural Gas from Coal Seams (May 2013). The Victorian Government has endorsed the outcomes of the National Framework and will ensure that state legislation is consistent with its findings. While the primary purpose of the framework is to be a guidance document to governments, it will benefit communities, farmers, other land users and industry by providing increased levels of consistency, certainty and transparency in the management of natural gas from coal seams in Australia.

The region is also home to important sand and stone resources, which need to be protected from incompatible development to ensure that they remain accessible for future generations and can be extracted and utilised affordably. Sand and stone resources are particularly important for new construction within the region's settlements, road infrastructure enhancements and maintenance and as a raw material input for some manufacturers in Ballarat.

Sand and stone resources in proximity to Bacchus Marsh include resources used in the production of concrete, clay used for brick making and gravel used for various purposes. One of the key roles of peri-urban parts of the Central Highlands is to protect these resources for the future development of Melbourne.

Extractive industry interest areas occur within the region, which contain areas of known future interest to the extractive minerals industry, for example, sand and stone. Areas are based on suitable geological occurrence and also take into account existing local government planning schemes. They are intended to provide a guide to local government in developing future planning policy. In response to the Economic Development and Infrastructure Committee's *Inquiry into greenfields mineral exploration and project development in Victoria*, the Victorian Government has committed to various activities that will undertake further data gathering and planning to better protect the state's extractive resources for future development. The outcomes of these activities may have implications for future planning provisions. Extractive industry interest areas located in the region are shown in Figure 23 of the background report.

Land use policies, strategies and actions

- Identify, manage and facilitate access to natural resources where appropriate, including sand and stone, minerals, timber and renewable energy potential

12.7 Tourism

Future directions

- Recognise the economic benefits of tourism and promote opportunities across the region
- Support Ballarat, the Grampians, the Pyrenees, and Daylesford, Hepburn Springs and Trentham, as the Central Highlands' iconic tourism precincts
- Encourage tourism development that protects and enhances the region's heritage and environmental assets and values
- Support tourism opportunities associated with the recognition, protection and development of goldfields assets as part of the 'Goldfields – Australia's Premier Heritage Region' project
- Support infrastructure investment where it will maximise the benefits of tourism

The Central Highlands region has a number of major tourism drawcards including its goldmining heritage, viticultural areas, mineral springs and spas, and natural environment such as the Grampians National Park, Brisbane Ranges and Mount Cole State Park (Beeripmo Walk). These features support a strong tourism industry that contributes to being the state's second largest export and has considerable potential for further investment and growth over the next 30 years. Economic development strategies for the region have identified the opportunity to broaden the tourism industry by improving the quality of visitor experiences and upgrading a range of tourism assets.

This plan supports a regional approach to tourism planning that capitalises on the benefits of connecting tourism opportunities within the region. Building on the region's cultural heritage and environmental assets presents a key opportunity, such as bicycle trails in the Ballarat and Hepburn Springs areas, and the various state and national parks.

Opportunities for expansion of tourism within the region include promotion of the goldfields heritage, as the 'Goldfields – Australia's Premier Heritage Region' project seeks to develop the goldfields region as a world-class tourist destination. The goldfields region encompasses all of the municipalities of the region and extends into the Loddon Mallee South region. Economic studies have found that promoting the establishment of the goldfields region in this way will have significant economic and employment benefits through increased tourism and inward population migration. Large and small settlements in the region should promote their common goldmining heritage while complementary interpretative, accommodation, retail and hospitality uses are encouraged.

The State Government has new guidelines relating to private tourism developments in national parks. Opportunities to advance private tourism investment in and around the region's national parks should be investigated.

Opportunities for the region's tourism precincts

Ballarat – capitalise on easy access to Melbourne by both road and rail and promote as a base for exploring the region, including bicycle tourism.

Grampians – focus on developing rural tourism experiences in conjunction with agriculture and opportunities to add value to nature-based and cultural heritage tourism within the Grampians National Park. Improve high-end accommodation options and transport links around the national park.

Pyrenees – broaden the potential of the Pyrenees wine region, with dining and accommodation in keeping with its status as a premium wine production area. Encourage tourism-related development in Moonambel and Avoca to support the growth of the region.

Daylesford, Hepburn Springs and Trentham Spa Precinct – focus on developing nature-based and rural tourism opportunities consistent with the health and wellbeing theme that this area is well known for.

The built heritage of Central Highland settlements, often associated with the region's goldmining past, is a key attraction for visitors. The natural landscapes and environmental features of the region also attract many visitors for nature-based tourism. Land use planning plays an important role in protecting and managing the built environment and environmental assets.

Over the life of the plan it is expected that additional tourism opportunities will emerge. Ongoing planning and investment should occur to develop and protect tourism assets and create new drawcards and regionally significant precincts to attract visitors to the Central Highlands.

Land use policies, strategies and actions

- Assess the infrastructure required to support identified tourism opportunities
- Update planning schemes to recognise tourism precincts and regionally important locations for tourism
- Provide appropriate heritage protection in planning schemes for cultural heritage assets that are important for attracting tourists to the region
- Provide appropriate protection in planning schemes for environmental assets that underpin ecotourism or recreational opportunities
- Provide appropriate guidance in planning schemes to ensure new growth and development does not detract from heritage values
- Update planning schemes to recognise the value of rural landscapes from a tourism perspective and the need to protect significant landscapes from inappropriate development
- Undertake forward planning to ensure new and emerging tourism attractions and precincts are developed to enhance the tourism offer of the region



Mount Buangor, image courtesy of Tourism Victoria

13. Environment and heritage

13.1 Overview

The Central Highlands region features rich and diverse environmental, landscape and heritage assets (refer to Map 6). As recognised by the Central Highlands Regional Strategic Plan, these assets are critical to the region's economy, attractiveness and liveability.

Five catchment management authorities coordinate investment in the protection and enhancement of the environment throughout the region, along with public land managers. The five authorities that intersect with the Central Highlands region are: North Central; Wimmera; Glenelg Hopkins; Corangamite; and Port Phillip and Westernport. These authorities also carry out regional waterway, floodplain and drainage management functions, except within the Port Phillip and Westernport catchment, where Melbourne Water undertakes these functions.

Regional catchment strategies are the primary strategies for achieving improved environmental outcomes in the region including native vegetation conservation and management. This plan can complement catchment management authority activities and initiatives through appropriate land use planning mechanisms. Regionally significant environmental assets⁵ identified in regional catchment strategies should be considered in local planning decisions. Some of the key assets in the region include:

- native grasslands
- extensive water catchments
- national and state parks and state forests, including the Grampians National Park, Brisbane Ranges National Park, Lerderderg State Park, Mount Buangor State Park, Mount Cole State Forest and Wombat State Forest
- wetlands, rivers and lakes.

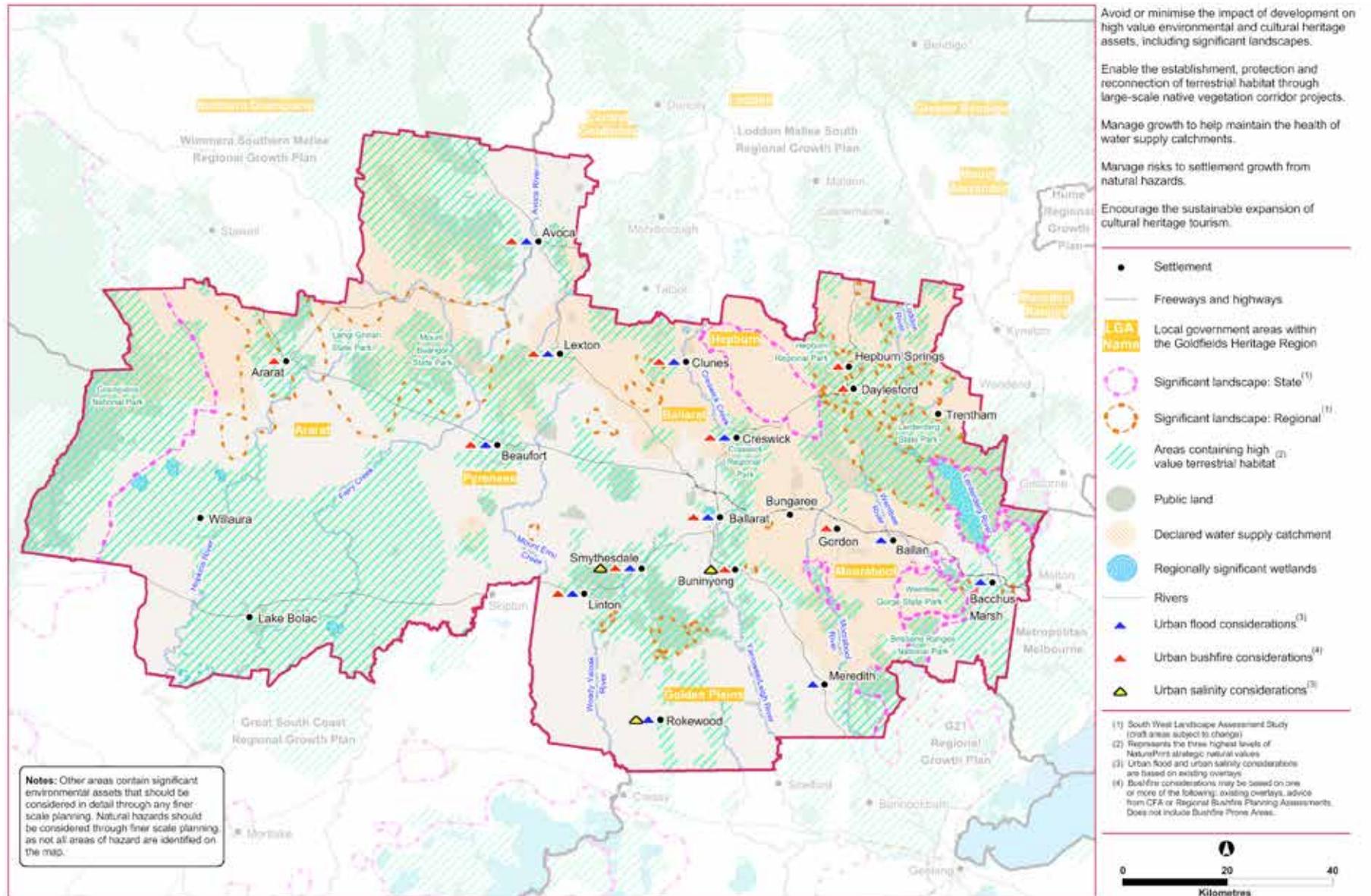
These assets shape the region's biodiversity and natural systems by providing important habitat for flora and fauna.

A key feature of the Central Highlands is its strong links with neighbouring regions, with the region acting as the upper catchment for many rivers and as a source of water supply for external urban centres. As such, land use and resource management decisions in this region can have far-reaching implications.

Distinctive and significant heritage places and landscapes are also notable attributes of the region. The Central Highlands goldfield heritage is of national importance and the Central Highlands Regional Strategic Plan identifies this as a key opportunity to reposition the region as a major tourist destination. There will continue to be significant demand for urban and rural residential development in the region in areas of high amenity and natural value, including areas close to Melbourne. Balancing these pressures along with the natural hazards associated with these areas, such as bushfire, flood and drought, is a key challenge for this plan and more detailed localised planning is needed.

⁵ Regionally significant environmental assets cover all assets that are of regional, state, national or international significance.

Map 6: Strategic environment framework plan



Source: Department of Transport, Planning and Local Infrastructure

13.2 Cultural heritage and significant landscapes

Future directions

- Promote and protect the Central Highlands significant goldfields and Aboriginal cultural heritage as key regional economic and social assets
- Support tourism opportunities that contribute to positive cultural heritage and natural environment outcomes
- Define the region’s valued landscape characteristics and identify landscapes of regional significance
- Protect the rural landscape character of the region as a major contributor to its liveability, tourism and growth
- Support the improvement of knowledge and resources about Aboriginal cultural heritage and historic heritage in the region

Cultural heritage

The Central Highlands region has a rich cultural heritage. The region’s important Aboriginal cultural heritage should be protected and further promoted to help build a comprehensive sense of place and history, both pre-and post-European contact. Aboriginal people have strong relationships with the region’s heritage as well as custodianship and decision making roles in relation to Aboriginal cultural heritage.

Registered Aboriginal Parties will have an important role in planning place-based activity and development. Currently the Dja Dja Wurrung Clans Aboriginal Corporation, Wathaurung Aboriginal Corporation and the Wurundjeri Tribe Land and Compensation Cultural Heritage Council have legislated responsibilities relating to the management of Aboriginal cultural heritage places in the Central Highlands.

This arrangement recognises the key role that Aboriginal traditional owners have in the protection and management of significant Aboriginal cultural heritage places. A few of the key Aboriginal cultural heritage places in the region include Mount Buninyong, Lal Lal Falls, the Lake Bolac and Carisbrook stone arrangements, and the Langi Ghiran art site. There are many others.

Native title is also held over Crown land in part of the region by the Wotjobaluk, Jaadwa, Jadawadjali, Wergaia and Japagulk Peoples and the Dja Dja Wurrung Peoples.

Significant landscapes

The landscape character of the region is both a significant contributor to its amenity and an attractor for residents and tourists. Given the expected growth of western Melbourne, the proximity of the high quality rural and natural character of the Central Highlands will be an important drawcard. As such, the protection of the region’s key rural and natural landscapes will have important economic and social benefits.

The South West Victoria Landscape Assessment Study (2013) assesses the visual character and significance of the landscape. This provides planning guidance for identifying, retaining and respecting significant landscape values. As shown on Map 6, some broad landscapes have been designated as regionally significant and others of state significance (or higher). The region will need to consider a consistent way to apply suitable planning tools to recognise and protect these significant landscapes.

Protection of rural character more generally will be assisted by directing urban development into designated settlements, encouraging clear urban boundaries and strategically directing the location of rural residential development to locations with minimal landscape impacts.

Land use policies, strategies and actions

- Identify opportunities to enhance visitor experiences associated with goldfields tourism through the protection and enhancement of heritage assets and by supporting complementary uses
- Use planning schemes to protect heritage assets and recognise goldfields heritage as a regionally significant asset, including undertaking heritage studies to support protective measures
- Include Aboriginal Traditional Owners (Registered Aboriginal Parties and others) in the identification and protection of significant Aboriginal cultural heritage places and landscapes
- Develop and apply a consistent range of planning measures to protect the identified values of significant landscapes
- Support implementation of the recommendations made by the South West Landscape Assessment Study
- Use planning provisions to create clear urban boundaries and maintain distinctive breaks and open rural landscapes between settlements

13.3 Environmental assets**Future directions**

- Capitalise on environmental assets by advancing tourism and economic diversification opportunities, while protecting and maintaining environmental assets and values
- Direct settlement growth and development to areas where it will avoid impacting on high value environmental assets, including designated water supply catchment areas, strategically important terrestrial habitat, soil health, waterways and wetlands
- Strategically plan for enhancements to environmental assets to:
 - enhance land, water and biodiversity assets, including land critical for connecting areas of high value habitat
 - reduce threats to high value areas and assets

Environmental assets are essential to the region's continued growth, providing foundations and attractors for many industries and people. Their protection and enhancement present many opportunities within the region.

Terrestrial habitat

The Central Highlands region is well known for its significant forested areas, both on public and private land. There are also widespread woodland and grassland areas within the region. Broad areas of high value habitat are identified on Map 6. These assets need to be managed and protected, but also create opportunities especially around nature-based tourism and providing ecosystem services⁶. This is especially true for the region's significant grassland and woodland areas in native vegetation offset markets. Further activities by catchment management authorities to improve the quality of remnant vegetation are encouraged, especially in priority areas as identified by regional catchment strategies.

⁶ Providing ecosystem services through market-based approaches (including competitive tenders such as EcoTender and BushTender) can provide farmers with income for undertaking environmental works that conserve and enhance the environment.

The region would benefit from increased integration of natural resource management and land use planning activities, particularly considering interaction between native vegetation and rural land uses such as agriculture and rural living. This is also relevant when considering other aspects of catchment management, such as water quality and bushfire hazards.

Waterways

The Central Highlands region spans both sides of the Great Dividing Range and includes river catchments that drain to the coast and to the Murray River. Parts of the Avoca, Barwon, Campaspe, Glenelg, Hopkins, Loddon, Maribyrnong, Moorabool, Werribee and Wimmera-Avon river catchments, and the Lake Corangamite catchment, occur within the Central Highlands region. There are numerous nationally important wetlands in the region, including a section of the Lerderderg River, which is recognised as a Victorian Heritage River.

Rivers and wetlands are highly valued by regional communities for their intrinsic environmental values, cultural significance, recreational opportunities, contribution to liveability, and also for providing water to farms, settlements and industry. Many rivers and lakes are critical for supporting the region's tourism offer and for residential amenity, such as Lake Wendouree, Greenhill Lake, Lake Bolac, Lake Learmonth, Lake Burrumbeet, Lake Merrimu and Lake Buninjon.

The mineral waters within Hepburn Shire also require protection given their contribution to a significant tourism asset for the state. Land use planning should help address some of the threats to the region's highly valued rivers, wetlands and lakes from urban and rural land use changes, such as changes to flow regimes and poor water quality. This can be achieved through measures such as sensitive siting of development, encouraging efficient water use and minimising urban water run-off and soil erosion.

There is likely to be residential development pressure around some of the region's lakes. The environmental and landscape values of these lakes should be protected and further planning work may be required to help manage these assets.

Water supply catchments

Water supply is critical for the continued economic success of the region and to complement the proposed population growth within the Central Highlands and neighbouring regions, which are also supplied with water from the region. Significant pressure for increased settlement (urban and rural) exists in some declared (open) water supply catchments, particularly in the east of the region. This needs to be carefully managed to protect both water quality and water supply, given the significant proportion of the region's land that falls within these catchments (refer to Map 6).

There are a number of opportunities available to minimise environmental impacts on water catchments, agricultural areas, landscapes and terrestrial habitat that are encouraged by this plan:

- review of council domestic wastewater management plans to enable effective planning for the type of settlement and economic activity that can occur in these areas
- the ongoing provision of sewer systems to small towns and rural settlements
- strategically planning the siting of rural residential development to have regard to regionally significant assets
- directing most urban growth to seweraged settlements
- water sensitive urban design.

Soils

Healthy and productive soils are essential for the continued economic success of the Central Highlands region, particularly for agricultural enterprises. The region contains considerable areas of highly productive and versatile soils including the Werribee River flats at Bacchus Marsh, the Moorabool River valley near Bannockburn and the volcanic soils to the north and east of Ballarat. However, land traditionally seen as having less production value can be converted to high value production such as intensive animal production industries in the south of the region and vineyards in the Pyrenees.

Identifying strategically significant agricultural land that capitalises on factors such as soil, industry clusters, links to infrastructure, water and transport are important to understand future land use planning across the region.

Land use planning can assist in the protection of the region's soil resource by supporting land use change that does not disturb soils to a level that could result in deterioration of the soil asset, or further contribute to the pollution of waterways. Overlays (such as the Environmental Significance Overlay or the Erosion Management Overlay) can be used in planning schemes to enhance the protection of soils across the region.

Land use policies, strategies and actions

- Plan new development areas in locations that minimise impacts on environmental assets
- Consistently apply planning tools, where appropriate, to recognise the values of threatened vegetation communities including grasslands, grassy woodlands and wetlands across the region
- At a regional level, incorporate into planning schemes updated information on relative habitat value by updating relevant overlays to reflect significant environmental assets across the region
- Local planning authorities collaborate with natural resource managers to:
 - identify opportunities for preferred locations for large-scale vegetation corridors
 - improve the management and use of water resources, to minimise risks to the environment (including risks to surface and groundwater supply) and provide for potential growth and liveability
 - investigate the use of 'retained environmental networks' as part of large-scale developments, to better plan for public and conservation land uses
- Review domestic wastewater management plans, particularly in areas subject to pressure for rural residential development
- Exchange mapped and modelled data of environmental assets and natural hazards to provide for accurate interpretation of the best available data for consideration in planning decisions
- Encourage natural resource management strategic planning exercises to consider implications for land use planning, such as when developing or revising sub-strategies under regional catchment strategies or when identifying strategic locations for environmental works. Examples include vegetation corridors, carbon farming, competitive market approaches such as EcoTender and BushTender and offset market activities
- Identify opportunities to capitalise on the region's environmental assets to support economic development opportunities in a manner which maintains and protects those assets
- Implement planning policies and initiatives to manage and reduce the impacts of dams on water yield and quality

13.4 Natural hazards and risks

Future directions

- Encourage strategic land use planning that promotes adaptable land uses that respond to climate change and enable economic diversification
- Take a precautionary approach in planning new developments by avoiding locations that pose an extreme risk from bushfire or flood
- Carefully consider development in locations where there is significant flood or bushfire risk that cannot be avoided
- Consider natural hazards and risks such as soil erosion and contaminated land in planning for growth and development

Flood

There are a number of urban settlements in the Central Highlands region that are particularly susceptible to flood risk. It is important that this plan addresses any increased hazard posed by potential land use changes in the region, particularly in relation to settlement growth (see Map 6).

The risks presented to land use from flood hazards must be considered in strategic and statutory planning decision making. These decisions should be based on the best quality information on flood hazards to minimise the risk to life, property, infrastructure and environmental assets.

In this regard, accurate flood mapping is critical. Many settlements within the region that are identified for growth have flood risks that must be considered, including Avoca, Bacchus Marsh, Ballan, Ballarat, Beaufort, Creswick, Clunes and Smythesdale. Mapping of the January 2011 flood (the highest on record in some basins) is being assessed for translation into 1 in 100 year flood overlays.

New flood investigations, such as those for Upper Wimmera, Mount William Creek, Burrumbeet Creek, Miners Rest, Canadian Creek and Creswick will help inform a consistent and accurate approach to flood risk management in planning schemes across the region. In particular, there is a need for studies to be undertaken and implemented for key settlements such as Ararat, Ballarat and Avoca.

Multiple different tools are currently applied in the region's planning schemes to manage flood risk. Zones and overlays need to be updated with more recent modelling and a regionally consistent approach implemented to avoid inappropriate development in flood-prone areas.

The directions for individual settlements in Section 14 consider these hazards in identifying growth opportunities. Flood considerations should be considered in detail in more localised strategic and statutory planning.

Bushfire

The Central Highlands region is characterised by many high bushfire hazard areas that intersect with settlements and areas that are experiencing rural residential and tourism expansion. Regional and localised planning consider bushfire hazards in detail, with the assistance of planning tools such as the Bushfire Management Overlay, Regional Bushfire Planning Assessments and Bushfire Prone Areas, as well as input from key stakeholders such as the Country Fire Authority. Some of the settlements identified for focused growth also occur in areas with bushfire hazards, including Ararat, Ballarat, Beaufort, Creswick and Smythesdale. The settlement directions (Section 14) in this plan consider these hazards in identifying potential new growth areas. Localised planning decisions must consider these hazards in more detail.

When addressing bushfire risk, community resilience to bushfire will be strengthened by:

- prioritising the protection of human life over other policy considerations when planning to create or expand settlement at risk from bushfire
- applying a precautionary approach to planning and decision making when assessing the risk to life, property and community infrastructure from bushfire
- taking advantage of existing settlement patterns where new development will not expose the community to increased risk from bushfire.

Climate

Climate change and short-term seasonal climate variability present numerous risks to the Central Highlands region's natural environments and agricultural systems, along with potential economic diversification opportunities. Risks include an increase in natural hazards, including an increase in bushfire hazards and severity of storm events and flood, and reduced water availability. The increased risk of bushfire is especially relevant to the Grampians region, which may have implications for the tourism industry and cultural heritage assets in particular. Opportunities may arise from shifting agricultural commodities and creating new industries within the region.

More information is needed on the likely impacts of climate change on specific industries across the region and the opportunities that may arise from these changes, such as new industries. This will assist with strategic land use planning, including consideration of any potential increase in natural hazards to settlements and the future refinement of and planning for economic development opportunities within the region.

Other agencies, such as catchment management authorities, have initiatives proposed to develop climate change adaptation plans and carbon action plans.

Contaminated land

The extensive mining history of the Central Highlands region, along with its other industrial history, may mean that there are significant areas of contaminated land throughout the region. Contaminated sites may pose immediate or longer-term risks to human health and the environment, depending on the type and extent of the contamination and how the site will be used in the future. The specific locations of all contaminated sites in the region are unknown. The potential for contamination will need to be considered as sites are developed (either through urban expansion or infill), particularly for sensitive uses.

Land use policies, strategies and actions

- Support the preparation and implementation of floodplain modelling studies and flood strategies
- Update planning schemes to reflect known information about bushfire, flood and climate change hazards
- Update planning schemes to take a consistent approach to the designation of flood-prone areas across the region
- Direct development to locations of lower bushfire risk
- Carefully consider development in locations where there is significant bushfire risk that cannot be avoided
- Avoid development in locations of extreme bushfire risk
- Avoid development in areas where planned bushfire protection measures may be incompatible with other environmental objectives
- Monitor, assess and act on the potential impacts and opportunities of climate change across the region and collaborate with other regional climate change adaptation planning activities to inform future land use planning decisions
- Support improved information and mapping of the legacy of mining operations and land contamination

14. Living in the region

14.1 Overview

The settlement and growth patterns of the Central Highlands are highly diverse and heavily influenced by the proximity of its central area to Ballarat and its eastern fringe to Melbourne. A dense network of settlements and rural residential areas exists in the eastern part of the region, while a more dispersed pattern of settlements exists in the west, providing local rural services.

Population projections for the region suggest growth will occur in all parts of the region. However, the amount of growth to be planned for will be significantly greater in the east of the region, particularly in the local government areas of Ballarat and Moorabool. The demographic implications of this population change are also variable. Older age groups are expected to grow at disproportionate levels, although in the east this will be balanced to some extent by growth in the numbers of children and middle-aged people. These changes have implications for planning the number and type of housing needed.

Settlement growth will need to be managed within the context of the Central Highlands' significant environmental and economic assets and risks from natural hazards (especially flood and bushfire). These assets include water catchments, high value environmental assets, agricultural land and landscapes.

A key issue in this regard is the impact of rural settlement. Golden Plains, Hepburn and Moorabool shires, in particular, feature extensive areas of existing land zoned for rural residential development, or small rural-zoned lots situated in attractive rural landscapes with good access to Ballarat, Geelong or Melbourne. These areas are likely to experience increased pressure for this type of use.

14.2 Settlement network and relationships

Future directions

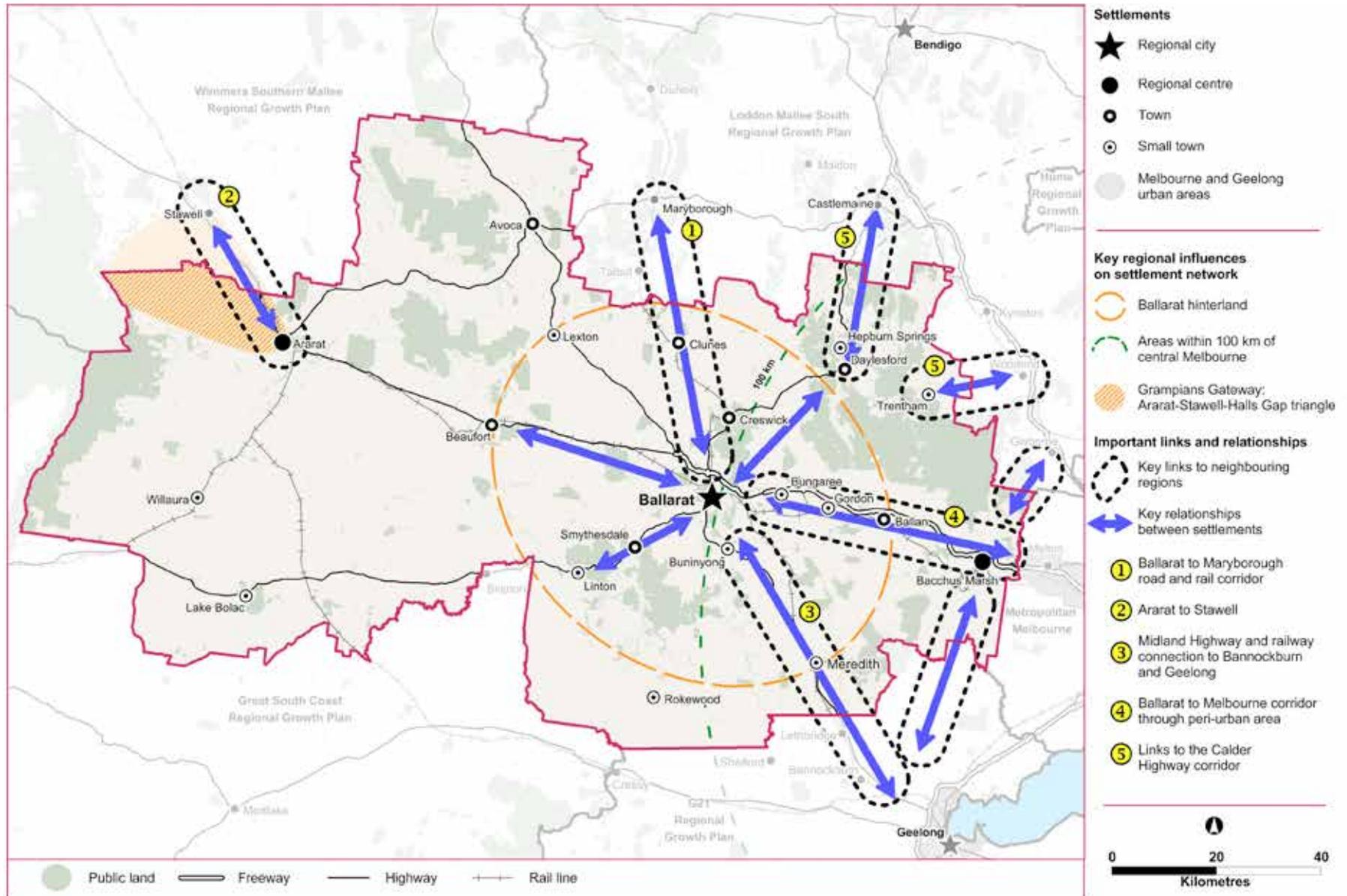
- Ensure planning responds to its regional and inter-regional context, including capitalising on links to other centres and responding to growth pressures associated with proximity to Ballarat and Melbourne
- Balance the development of a highly connected settlement network with the need to encourage the provision of services and business investment that enables local jobs
- Plan for development and facilities shared around clusters of linked settlements, particularly for groups of small settlements, or settlements without easy access to a close major settlement

The Central Highlands settlement network is dominated by Ballarat, which is five times larger than any other settlement in the region and is a focus for regional employment, services and growth. The city also has a strong influence over settlements in its hinterland. At either end of the region, Ararat and Bacchus Marsh are major urban centres, while the remainder of the region is serviced by a network of small to medium-sized settlements located along the key transport corridors. A feature of the region is its close links with neighbouring regions and some of these relationships are illustrated on Map 7.

It is anticipated that settlements and rural areas within commuting distance of Ballarat and Melbourne will experience increasing pressure for growth as these cities expand and people seek alternative lifestyle and housing choices. Planning for settlement near metropolitan Melbourne and within Ballarat's hinterland will need to manage anticipated growth through coordinated, forward planning of development, services, transport and infrastructure.

Future settlement planning should also consider relationships between settlements, including those in neighbouring regions. This will include

Map 7: Key settlement relationships and links



Source: Department of Transport, Planning and Local Infrastructure

identifying access to services, housing and employment available in nearby settlements and along key corridors to determine the suitability of proposals for development and growth. The major transport corridors providing links to external regions should be viewed as key opportunities to facilitate growth and development in designated settlements along those routes.

Settlement planning will, however, need to strike a balance between taking advantage of the Central Highlands' good access to major centres and the objective of creating sustainable communities. Planning should strongly support some degree of self-sufficiency for all settlements, commensurate with their expected size and role in the regional settlement network (see Section 14.3 for more detail). It will be critical that planning for increased population does not neglect the provision of employment and services. This will help the development of communities and make them less reliant on commuting.



Avoca, Pyrenees Shire

Nevertheless, sharing of resources, services and investment between groups of linked settlements (with close social and economic ties) can help support and enhance the viability of communities. This approach is encouraged particularly for clusters of proximate small towns or settlements in the more remote parts of the region, which are seeing a declining population and may not be able to support services.

Land use policies, strategies and actions

- Update planning schemes to identify regional and inter-regional settlement networks and include policies and provisions to manage pressures, opportunities or constraints associated with these relationships and influences
- Develop policies and implement planning scheme provisions that direct development to appropriate locations in the hinterlands of Melbourne and Ballarat
- Encourage proposals for growth that can provide easy access to services and employment
- Undertake local planning to consider how clusters of settlements can work together to provide facilities and manage change
- Support transport infrastructure that improves access to Ballarat and other major centres

14.3 Regional settlement strategy

Future directions

- Direct urban growth, employment and major services to settlements identified in the regional settlement framework, offering good access to services and transport
- Support the role and function of settlements in the regional settlement framework
- Identify the infrastructure required to match the scale of growth anticipated in the region's key settlements

The regional settlement strategy establishes the preferred locations for major growth and the role of settlements within the Central Highlands' settlement network.

Growth is to be directed to existing settlements with the preferred attributes of:

- an ability to accommodate development while managing natural hazards and protecting environmental and heritage assets and productive resources
- existing provision of key utility, community and retail services in the settlement
- good access to higher order services in nearby settlements
- location on key transport corridors, particularly those with access to public transport services
- access to employment opportunities, preferably locally, or within close commuting distance.

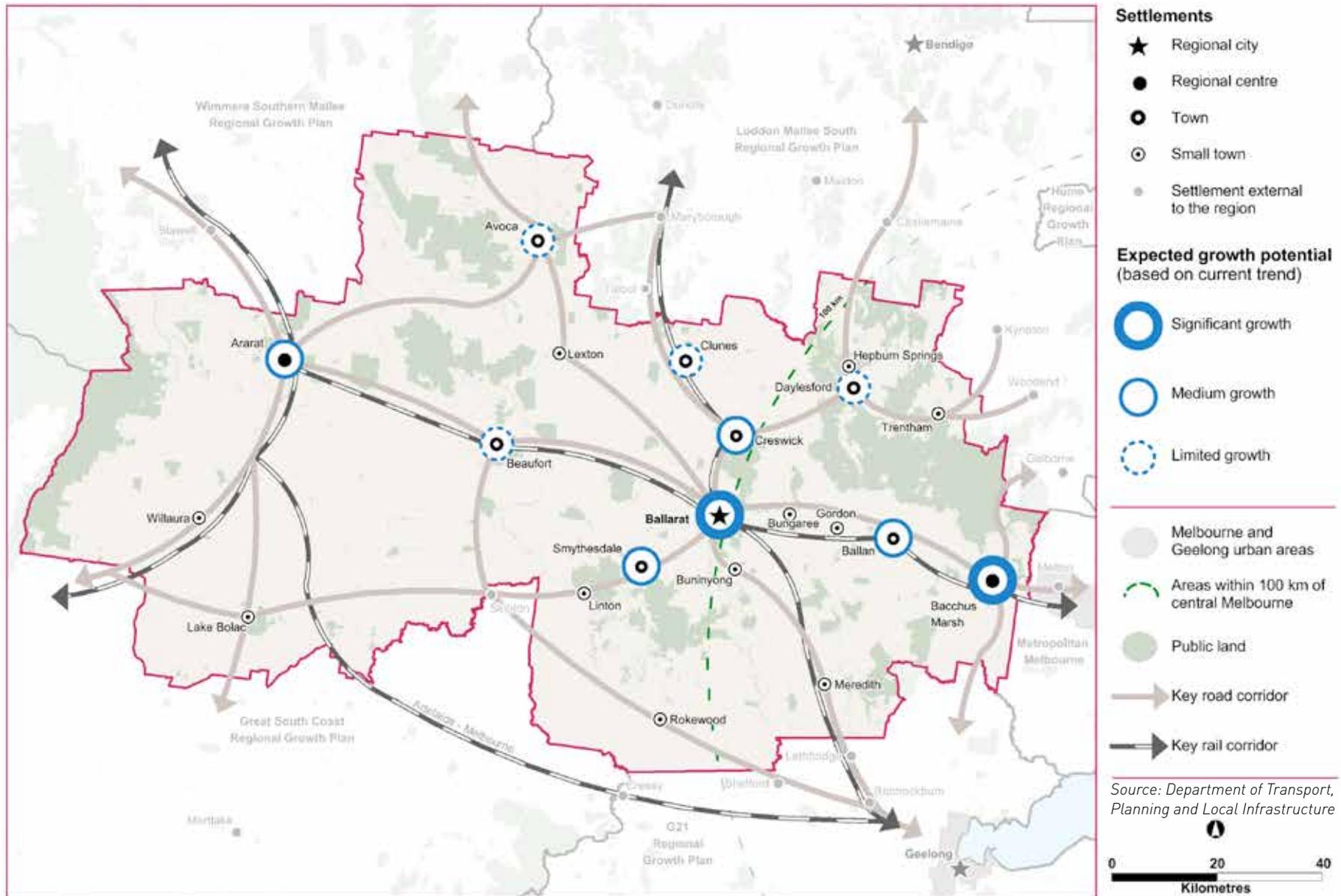
Maps 8 and 9 and the accompanying table at Figure 3 detail the region's settlement framework plan, including:

- the preferred locations for major growth, being settlements that generally meet the criteria above
- the future role of major settlements within the region's settlement network
- the scale of growth anticipated for each settlement
- the planning policy support required to deliver these outcomes.

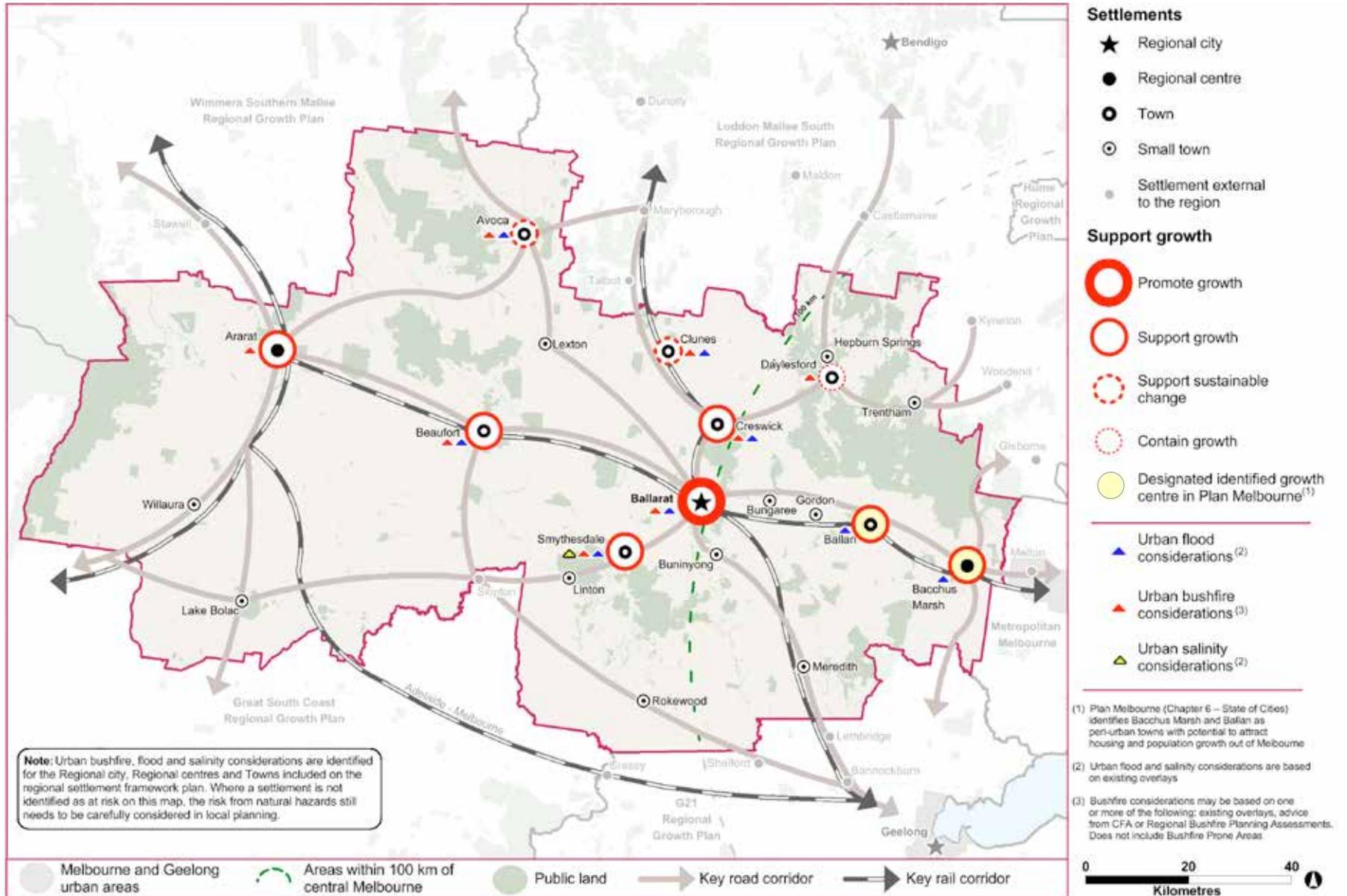
It is expected these settlements will provide for the majority of growth proposed for the next 30 years. In particular, Ballarat and Bacchus Marsh should be supported as the locations that will accommodate the largest increases in population. Other settlements will grow by smaller amounts but should be promoted as the most appropriate locations to manage urban development pressures and provide for a range of lifestyle opportunities across the region. Of the region's key settlements, only Daylesford is to be limited in its outwards expansion due to various environmental assets and natural hazards in the surrounding area.

Although the strategic benefits of major transport corridors were an important determinant for establishing the regional settlement framework, ribbon development along these routes is not supported. Urban development should be located in and around existing settlements, particularly those specified in the regional settlement framework plan where services can be provided. Of particular importance is the need to retain a green break between the western edge of metropolitan Melbourne and Bacchus Marsh to ensure the distinctive rural character of the region is maintained.

Map 8: Regional settlement framework plan – expected growth potential



Map 9: Regional settlement framework plan – support for growth



Direction 6.2 of *Plan Melbourne* seeks to rebalance Victoria's population growth from Melbourne to rural and regional Victoria over the life of the metropolitan planning strategy. Initiative 6.2.1 states: "In partnership with local government develop peri-urban town plans to increase the supply of land for housing and attract population growth out of Melbourne." Bacchus Marsh and Ballan are identified as potential towns for growth.

Despite not being included in the regional settlement framework, the ongoing incremental development of small towns and rural settlements should not be precluded and local councils should plan to support sustainable growth and incremental change in these communities as required.

Land use policies, strategies and actions

- For the regional city, regional centres and towns:
 - encourage the provision and maintenance of a wide range of services and facilities, commensurate with their role in the settlement network
 - provide sufficient residential land to enable projected levels of population growth
 - provide commercial and industrial land as required to support employment growth
 - prioritise infrastructure investment towards supporting growth
- Implement the regional settlement framework in planning schemes
- Develop planning measures that provide for a distinct green break between metropolitan Melbourne and Bacchus Marsh to complement the metropolitan green wedge
- Monitor the regional settlement framework with regard to ongoing technology and infrastructure improvements over the next 30 years and their influence on settlement patterns and growth potential



Ararat Railway Station

Figure 3: Description of role and growth designations for the regional settlement framework plan

Future settlement role	Description of the future role of the settlement and place within the Central Highlands settlement network
Regional city Ballarat	<ul style="list-style-type: none"> • Highest levels of population and employment outside metropolitan Melbourne • Urban areas encompass a variety of residential opportunities with a clear commercial centre and smaller activity centres servicing suburbs • Offers the highest level of goods and services in regional Victoria with at least one major retailing centre and may include the head offices of major regionally-based firms, major retail firms, universities, regional hospitals and headquarters for policing and fire services • Services a network of settlements on a regional scale and can influence the role of smaller settlements surrounding them from a lifestyle and commuter perspective
Regional centre Ararat Bacchus Marsh	<ul style="list-style-type: none"> • Have large diverse populations, housing, retail facilities and employment bases and a variety of education facilities • May include some higher order services, such as hospital/medical services and a variety of general education services • Have well-defined commercial and industrial precincts • Access to specialised goods and services for a rural hinterland • All major utility service provisions are provided for • In the peri-urban region, regional centres also: <ul style="list-style-type: none"> - have good access to Melbourne job markets with high reliance on commuting - have proximity to a Principal Activity Centre in metropolitan Melbourne
Town Beaufort Ballan Creswick Daylesford Smythesdale Clunes Avoca	<ul style="list-style-type: none"> • Have a diverse to moderately diverse population and housing base with retailing, moderate employment and good access to services, including some higher order services, such as medical and hospital services and some education facilities • Some towns have strong employment relationships with larger high order settlements nearby • All utility services are provided for, with some larger towns having access to reticulated gas • Provide an important sub-regional goods and service role, servicing smaller town and rural district needs including local government, policing and ambulance services to a surrounding rural hinterland
Small town Examples include: Bungaree Gordon Lake Bolac Linton Trentham	<ul style="list-style-type: none"> • Lower population levels than towns • Access to services such as a small primary school and limited convenience shopping • Connection to reticulated water is generally available but access to sewer connection varies
Rural settlement Examples include: Dereel Snake Valley	<ul style="list-style-type: none"> • Characterised by small rural dispersed population with some small concentrations of housing and minimal services, for example sole general store and primary school • Reliant on other settlements for wider range of services • Connection to reticulated water may be available • Unlikely to have reticulated sewerage

PART C | TOWARDS THE REGIONAL GROWTH PLAN

Expected growth potential (based on current trend)	The scale of population increase expected for the settlement
Significant growth Bacchus Marsh Ballarat	<ul style="list-style-type: none"> Strong and sustained development of multiple or significant individual new housing areas on fringe or infill sites of cities, centres and towns to meet strong local and external demand Pressure on existing and future infrastructure is evident Has a typical annual population growth rate exceeding 400 people
Medium growth Ararat Ballan Creswick Smythesdale	<ul style="list-style-type: none"> Consistent annual rate of development of planned housing areas in cities, centres and towns and some new areas of subdivision to supply moderate local or external demand Existing infrastructure can generally be augmented to meet demand without constraining land supply. More major works may be needed for some new areas Has a typical annual population growth rate of between 100 and 400 people
Limited growth Avoca Beaufort Clunes Daylesford	<ul style="list-style-type: none"> Slower or sporadic development patterns generally occurring through additional incremental subdivision on the fringes of existing cities, centres and towns, and through infill development to meet demand, which is steady to low and generally localised Has a typical annual population growth rate of between 20 and 100 people

Support for growth	The level of planning policy support for growth of the settlement
Promote growth Ballarat	<ul style="list-style-type: none"> Proactively encourage and facilitate opportunities for major growth Support significant growth in areas identified in municipal strategic statements, framework plans, precinct structure plans, infrastructure planning and delivery programs
Support growth Ararat Bacchus Marsh Ballan Beaufort Creswick Smythesdale	<ul style="list-style-type: none"> Support growth Proposals to be consistent with municipal strategic statements and will be generally initiated by private sector and sometimes councils, with proposals favourably considered, providing usual development requirements are met <i>Plan Melbourne</i> (Chapter 6 – State of Cities) identifies Bacchus Marsh and Ballan as peri-urban towns with potential to attract housing and population growth out of Melbourne
Support sustainable change Avoca Clunes	<ul style="list-style-type: none"> Small-scale residential, commercial and industrial development and change can occur to support more resilient communities Generally this involves redevelopment of vacant land and modest additions to urban zones
Contain growth Daylesford	Growth is contained where: <ul style="list-style-type: none"> the settlement is subject to significant natural hazards there are limited public transport options the impacts of the settlement on the local environment would be severe and difficult to manage it is desired by councils and communities to maintain township character, liveability and heritage values

14.4 Regional city - Ballarat

Ballarat

Future directions

- Support development and investment that is consistent with Ballarat's role as a regional city and the largest settlement in the Central Highlands
- Facilitate growth of the city, particularly through planned development to the west and through infill opportunities
- Encourage the development of Ballarat's Central Business District as a higher order activity centre with major employment, cultural, service and retail attractors
- Provide appropriate social, physical and transport infrastructure to support growth
- Encourage the provision of regionally significant services and ensure they are easily accessible to their regional catchment through integrated land use planning and transport provision

Role and function

Ballarat is a regional city of statewide importance being the largest inland city in Victoria and a major driver of regional growth and development. Its sphere of influence extends into neighbouring regions, particularly towards Maryborough and Horsham.

Within the Central Highlands region, Ballarat will remain the primary urban centre, providing higher order health, education, retail and government services for the region. The growth and prosperity of Ballarat will have implications for the rest of the region, given the city's influence on its hinterland and its role in providing jobs and services for residents in surrounding municipalities.

Enhancement of Ballarat's CBD and high quality rail and road connections to Ballarat will be critical in attracting further investment and services. This will encourage people from around the region as well as external settlements, including Melbourne and Geelong, to access Ballarat for jobs and services.

Urban form and growth

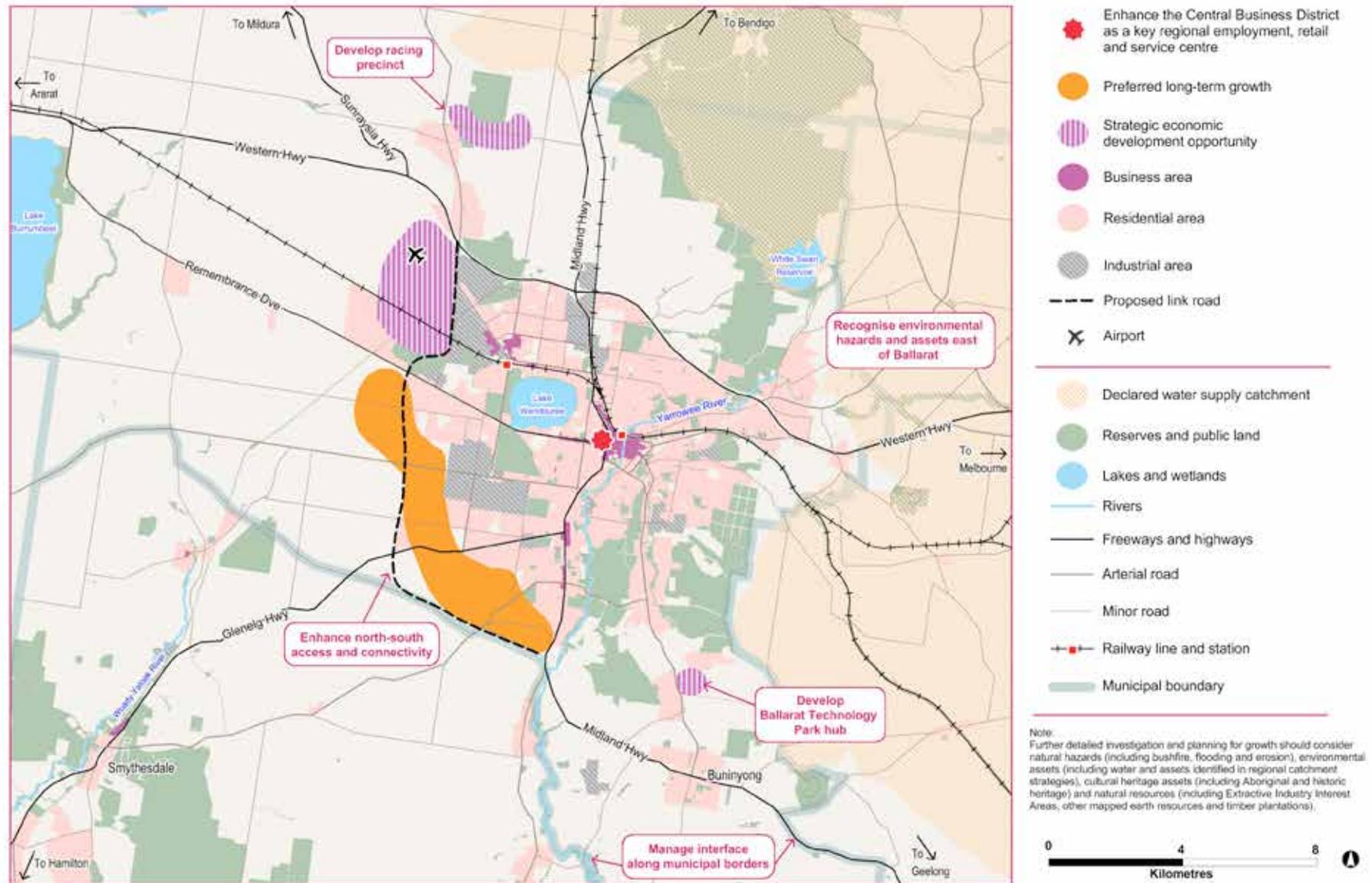
The growth of Ballarat is encouraged to strengthen its role as a regional city and ensure a critical population mass to support higher order services. The Ballarat West Growth Area will provide the main location for population growth in Central Highlands over the next 30 years. Long-term opportunities for further urban expansion are mainly focused to the west and south-west of the city, given there are fewer environmental and agricultural assets and risks from natural hazards than to the east. Transport and social infrastructure need to be provided in a timely manner to ensure Ballarat West develops as a highly liveable and attractive addition to the city. The growth of urban Ballarat should have regard to its links and interface with neighbouring rural areas. Map 10 shows the Ballarat settlement framework plan.



Lydiard Street, Ballarat, image courtesy of Tourism Victoria

PART C | TOWARDS THE REGIONAL GROWTH PLAN

Map 10: Ballarat framework plan



Source: Department of Transport, Planning and Local Infrastructure

Infill development should also be encouraged in appropriate locations to maximise the use of existing infrastructure, services and facilities. A particular opportunity will be to facilitate higher density residential development in Ballarat's CBD. New development should be mindful of Ballarat's renowned heritage character, which is a major tourism drawcard.

Employment

Ballarat is the key regional service and employment centre for western Victoria. To ensure the sustainable growth of the city and the region it will be important to attract business and employment to Ballarat. Projections suggest the potential for 20,000 new jobs within the next 20 years. The expansion of a knowledge-based economy should be encouraged through innovation in the manufacturing sector and expansion of the health, education and technology sectors. This will build on key strategic assets, such as Federation University Australia and the Ballarat Technology Park.

Ballarat's CBD should be supported as the main location for local and regional shopping, services and offices, including major commercial development. There will be a need to provide additional retail and commercial floor space, with an estimated demand of 322,000 square metres to 2031 throughout the city.

The Ballarat West Employment Zone should be developed as the region's landmark location for employment and industrial growth, including a freight hub and research and development centre. Any new employment opportunities should have good links to key transport routes and residential areas. Other opportunities include the development of Dowling Forest as a specialist horse training facility.

Transport and land use planning

Transport provision needs to keep pace with the growth of Ballarat to ensure the city remains accessible and liveable. The Ballarat Western Link Road should be developed to improve access from the major growth area to the Ballarat West Employment Zone and key transport networks. Public transport will also be important to ensure residents can access opportunities in a growing city.

Ballarat's role as a regional city warrants high standard linkages within and beyond the region. Residents in surrounding settlements will continue to rely on Ballarat for jobs and services, while transport and telecommunication connections to Melbourne, Geelong and Bendigo will also be increasingly important to support market opportunities and access to jobs and services.

Land use policies, strategies and actions

- Monitor residential, industrial and commercial land supply to ensure early identification of the need for additional supply, and provide sufficient land to satisfy forecast population and employment growth
- Develop key employment hubs including the Technology Park and Ballarat West Employment Zone
- Encourage growth in the Ballarat West Growth Area
- Encourage urban consolidation, particularly in Ballarat's CBD
- Implement the Ballarat Activity Centres Strategy and CBD Strategy Framework to support the CBD as the primary focus for commercial, retail and service activity in the city and region
- Provide infrastructure to support growth of the city, including implementation of development contributions plans
- Support improvements to regional rail services to Ballarat to underpin the development and function of Ballarat as a regional centre
- Ensure interfaces between the city and its hinterland are strategically planned

14.5 Regional centres

Ararat

Future directions

- Support Ararat as the regional centre for the western part of the Central Highlands
- Develop the cohesive relationship between Ararat and Stawell in the provision of services, housing and employment
- Encourage the provision of a wide range of health, education, retail, municipal and emergency services, including some higher order services and facilities
- Plan for the expansion of the urban area to accommodate future residential and employment growth

Ararat is a regional centre servicing the western part of the Central Highlands. It is part of a triangle of settlements comprising Stawell, Ararat and Halls Gap, which acts as a gateway to the Grampians. The proximity and interdependent relationship between Stawell and Ararat mean that the two settlements can provide a wide range of services, jobs and housing for each other. Stawell is located within the adjoining Wimmera Southern Mallee region. Planning should consider these centres collectively as a significant focus for population, employment and investment in this sub-region.

The proposed duplication of the Western Highway will enhance Ararat's connectivity to both Stawell and Ballarat and further integrate these economic and social relationships. There is also a need to plan for a bypass of the settlement. Future planning for residential and industrial growth opportunities should be integrated with the planning for the bypass to ensure that both long-term growth is not prejudiced and that development can take advantage of access to this key link. The longer-term potential for a bypass would also lead to the liveability of the town being significantly enhanced. Ararat should plan to take

advantage of this change by enhancing the character and identity of the town and leveraging these benefits to provide new opportunities for employment and growth.

The role of Ararat should be supported by retail and industrial employment growth. There is a need to consider whether additional retail land can be supplied in the town centre or alternative locations. The supply of industrial land is highly dispersed and consolidation in strategic locations would be beneficial. Ararat should seek to take advantage of its location at the junction of regional and interstate road and rail networks.

Additional residential land may be required over the life of the plan, and local settlement planning will need to consider the impacts of major developments such as the Hopkins Correctional Centre expansion. This could include both conventional and lower density greenfield development, although infill development should be encouraged to ensure a diversity of housing. Due to constraints on the western side of the regional centre, the long-term opportunities for new housing are expected to be situated to the north, with some incremental growth also expected to the east and south.

Land use policies, strategies and actions

- Focus investment in higher order services, facilities and commercial development in Ararat, the regional centre for the western part of the Central Highlands region
- Prepare and implement a settlement strategy for Ararat
- Plan for the consolidation of existing industrial land and for future supply in strategic locations
- Monitor the need for additional residential land and identify opportunities for infill development and incremental growth to the north, south and east as required
- Protect land to the north of the urban area for long-term growth
- Undertake long-term investigation of possible routes for a road bypass of Ararat

Bacchus Marsh

Future directions

- Support Bacchus Marsh as a regional centre and key growth location for the peri-urban part of the Central Highlands
- Maintain the character and form of a distinct regional settlement, separated from Melbourne's western growth corridor
- Encourage the provision of social, service and transport infrastructure to support significant growth
- Provide a balanced approach to growth by promoting a range of local employment opportunities as an alternative to Bacchus Marsh's role as a commuter centre
- Encourage the development of Bacchus Marsh to protect surrounding regional environmental, heritage, landscape, resource and agricultural assets and consider natural hazards

Bacchus Marsh is the region's second largest settlement and is experiencing considerable growth, which is expected to continue over the life of this plan at around three per cent per annum. Much of this growth pressure derives from Bacchus Marsh's location immediately to the west of Melbourne, with excellent road and railway links to the metropolitan area. The wide range of services provided by the regional centre for its residents and surrounding hinterland will need to be retained and expanded.

There is sufficient residential land supply for around 15 years of growth and it is anticipated that Bacchus Marsh will grow to around 30,000 people within the existing urban growth boundary. Opportunities for infill development that protects urban character should be supported, particularly residential development around the town centre and the railway station.

A key challenge for Bacchus Marsh will be planning for and managing the impacts of growth. Physical and social infrastructure will need to be planned to cater for expected growth, including the implementation of development contribution measures. A critical strategic need for Bacchus Marsh is to improve transport links, particularly new north-south routes to support access between Geelong and the Western Freeway and enhanced public transport within the regional centre and to Melbourne.

There are various constraints associated with expansion of the urban area, including physical limitations and potential natural hazards (especially flood) for future outward growth of the centre. Over the longer term there will be a need to identify a preferred location and form for any future growth areas. This could include self-contained communities or expansion of the existing urban area. When identifying an appropriate location for long-term growth it will be necessary to have regard for protecting regionally significant assets including extractive industry, the irrigated agricultural district, grasslands and prominent landscapes. A non-urban break with Melbourne should also be retained.

A key strategic direction for Bacchus Marsh is to ensure it retains a strong local employment focus to limit its role as a commuter town. The Parwan area has opportunities for a flexible range of rural and industrial uses. The area may require buffers but has access to key transport infrastructure.

Land use policies, strategies and actions

- Focus residential development within the urban boundary of Bacchus Marsh over the short- to medium-term
- Undertake investigation of alternative opportunities for long-term growth outside the existing urban boundary
- Undertake investigations for employment and agribusiness opportunities at the airport and Parwan areas
- Support the development of new north-south transport links
- Identify social, service and transport infrastructure needs and investigate implementation opportunities including development contribution plans
- Identify key assets around Bacchus Marsh to be protected through this plan and the planning scheme



Bacchus Marsh, Moorabool Shire

14.6 Towns

Avoca

Future directions

- Develop Avoca’s role as a settlement providing local services
- Support the development of the town as a key tourism hub for the Pyrenees wine region
- Support further residential growth through infill development and incremental expansion
- Provide for further industrial land as required to protect the role as a settlement providing rural services

Avoca is located on the Sunraysia Highway and acts as the main settlement providing services for the northern part of the Pyrenees Shire. While higher order services are provided in other settlements, such as nearby Maryborough, Avoca should continue to be supported in terms of providing retail and community facilities to service the local population and surrounding rural settlements.

A major opportunity for the town is to capitalise on the nearby Pyrenees wine region, for which Avoca is the key service settlement. It is envisaged that Avoca will provide a basis for tourism uses including boutique retail, accommodation and events. Protecting and enhancing the character of the town will be important to support its role as a tourism hub.

Infill development will be a major component of future growth, although some expansion of conventional and lower density residential development may be required over the medium term, potentially to the north of the town.

Similarly, the supply of industrial land will need to be monitored to ensure Avoca retains its role of providing rural services. Future growth could include an extension to the existing industrial estate or a new area outside the town.

Land use policies, strategies and actions

- Retain and enhance services and facilities appropriate to servicing the Avoca community
- Implement the structure plan for Avoca
- Identify opportunities to encourage tourism uses and events and enhance the streetscape and amenity of the town
- Monitor the need for additional industrial and residential land, having regard for available infill opportunities, and provide for additional supply as necessary

Ballan

Future directions

- Support Ballan as a town providing services consistent with its role in the peri-urban region
- Support residential growth that respects the surrounding rural character and environmental attributes
- Encourage local employment opportunities

Ballan is strategically located between Bacchus Marsh and Ballarat in the heart of the peri-urban part of the Central Highlands region. The town will continue to provide a range of services to surrounding small towns and rural settlements.

Ballan's location adjacent to the Western Freeway and on the Melbourne-Ballarat railway line, and its good access to higher order services and employment in Bacchus Marsh, Ballarat and Melbourne, means it will most likely continue to attract steady growth. It is anticipated development pressure on the town will increase in the long term, when residential development opportunities become scarce in Bacchus Marsh.

Although there is sufficient residential land available to meet demand for the short- to medium-term, including infill opportunities, further residential land supply should be considered to the west or south of the town. Additional infrastructure will be required to service any future growth.

A key attribute of the town is its strong historical and village character within a rural setting and environmentally sensitive landscape. Given the pressures for growth in areas closer to metropolitan Melbourne, it will be important to make sure Ballan's growth is carefully managed and planned for to protect and promote its valued character. A structure plan process will help guide preferred locations for future development and should be focused within a designated urban boundary.

Employment opportunities should be encouraged to reduce the need to commute and should be directed towards either the town centre or the industrial estate in the short to medium term. There is sufficient industrial land supply in the short to medium term, with potential for expansion into larger sites in the surrounding area when the need arises.

Land use policies, strategies and actions

- Finalise and implement a structure plan to identify preferred locations for growth for Ballan
- Focus residential development within the town boundary over the short- to medium-term
- Provide appropriate policy support and provisions in the planning scheme to protect residential character and landscapes
- Retain and enhance services and facilities appropriate to servicing the local community

Beaufort

Future directions

- Support Beaufort as a town providing services in the Ballarat hinterland
- Encourage residential growth to take advantage of existing services
- Support local employment opportunities
- Plan for managing the opportunities and impacts associated with upgrades to the Western Highway

Beaufort is located on the Western Highway and Melbourne-Ballarat railway line, halfway between Ballarat and Ararat, making it one of the key settlements in the Ballarat hinterland. Beaufort's central location provides opportunities to commute to Ballarat or Ararat for employment and access to services. It is also expected that the town will attract retirees and people working in local industries.

Residential development should be encouraged to take advantage of Beaufort's existing services, while having regard for various natural hazards including bushfire and flood. Infill development should be encouraged, while further incremental greenfield development may also occur, particularly to the west of the existing urban area. Local employment opportunities should also be protected and encouraged to ensure the town is not reliant on external settlements for jobs.

Changes in transport infrastructure may lead to a change in the role and function of the town. The impending duplication of the Western Highway may further increase the attractiveness of Beaufort as an alternative location for residential development in Ballarat's hinterland. The longer-term potential for a bypass would also lead to the liveability of the town being significantly enhanced. Planning should ensure that land uses, transport networks and the built environment can take advantage of changes to enhance the character and identity of the town and leverage off these to provide new opportunities for employment and growth.

Land use policies, strategies and actions

- Retain and enhance services and facilities appropriate to servicing the local community
- Provide for residential growth as required, including infill development and development to the west of Beaufort
- Monitor the need for additional industrial land and undertake rezoning of land as required
- Plan for a potential longer-term highway bypass of the town both in terms of a preferred route and in consideration of how to manage any impacts on employment, the existing road network and the character of the town

Clunes

Future directions

- Support the growth of Clunes as a town on the Ballarat-Maryborough corridor
- Favour infill development, with a focus on reinforcing the town's natural and heritage values
- Promote events and activities that advance the cultural renewal of the town to ensure Clunes is a key destination in the goldfields heritage region
- Promote further employment opportunities in the town to reduce the town's role as a commuter centre

Clunes is a small town located 35 kilometres north of Ballarat on the Ballarat-Maryborough road and rail corridor. The town will continue to provide a range of local retail, business, employment, cultural and education services, including the Wesley College campus, but will remain reliant on Ballarat, and to a lesser extent Maryborough, for higher order employment and services.

It is expected that building on the identity of the town as a boutique tourism and cultural destination will support growth and economic development. Clunes can link with the other heritage towns in the goldfields region, offering museums, accommodation, heritage sites and major events such as the Booktown Festival. Encouraging specialist book stores to establish in the town will be important to support this kind of tourism. Future employment opportunities should be encouraged in the retail and commercial industries of the town, while maintaining and improving the streetscape. There is no designated commercial or industrial land within Clunes and the need for such uses should be monitored closely.

The strategic location of the town on transport links between Ballarat and Maryborough supports the further residential growth of the town. There is sufficient scope for further residential development within Clunes' urban growth boundary in areas to the west and east of the township. Development should be sensitive to the town's heritage characteristics, key assets such as water supply catchments, and flood issues.

Land use policies, strategies and actions

- Promote infill development of the existing urban area of Clunes
- Retain and enhance services and facilities appropriate to servicing the local community
- Provide appropriate policy support in the planning scheme to protect the urban character and key environmental assets of the town and its surrounds
- Investigate appropriate locations for new commercial or industrial sites as required
- Investigate options for managing flood-prone land
- Implement initiatives associated with the Advancing Country Towns project that support growth and renewal

Creswick

Future directions

- Support the growth of Creswick as a key settlement in Ballarat's hinterland
- Promote further employment opportunities in the town to reduce its role as a commuter centre
- Encourage the provision of a range of services and facilities for the local community
- Provide for residential growth through infill development and incremental growth

Creswick is a town 20 kilometres north of Ballarat on the Midland Highway and Ballarat-Maryborough railway. Its heritage, rural character and native surrounds, coupled with its access to services and infrastructure, make it an attractive urban centre. Growth of the town is anticipated as an alternative lifestyle opportunity to nearby Ballarat and to take advantage of its location on the Ballarat-Maryborough rail corridor.

The town should continue to provide mid-level services, such as education (including Melbourne University's forestry campus), retail, business, medical and recreational opportunities. The need for these services should be monitored to ensure appropriate facilities are available to service the town's growth and that of surrounding communities. For the most part, Creswick will continue to rely on Ballarat for higher order employment and services such as secondary and tertiary health and education facilities.

Investigation into the allocation of additional industrial land should be carried out to allow the establishment of further local industrial services. Future employment opportunities should be encouraged in the local commercial, tourism and industrial sectors, encouraging a shift from Creswick being a commuter town.

The town will experience residential growth, targeted to areas of infill and towards the west of Creswick, where constraints such as water supply catchments, flood, agricultural values and forested land are reduced. Any development should be mindful of the need to protect and enhance the town's amenity, with particular attention given to its historic heritage and streetscape values. There will also be a need to consider all available information about flood- and bushfire-prone land when determining appropriate locations for growth.

Opportunities to enhance the character and amenity of the town should be pursued to underpin population and economic growth, including tourism. This includes town centre streetscape improvements and measures to manage the impacts of traffic, particularly freight, on a large road reserve that divides the town with limited pedestrian activity.

Land use policies, strategies and actions

- Retain and enhance services and facilities appropriate to servicing the local community and commensurate with the levels of growth envisaged for the town
- Promote infill development of the existing urban area of Creswick and plan for targeted expansion of the town as required
- Protect and enhance the urban character of Creswick, with particular focus on the town's heritage and streetscape values
- Implement the findings of investigations into the management of flood-prone land in the town
- Investigate appropriate locations for industrial and commercial expansion, as required
- Investigate opportunities to minimise the impact of heavy vehicles on the town's main street
- Implement initiatives associated with the Advancing Country Towns project to support growth and renewal

Daylesford

Future directions

- Encourage the provision of a range of local and sub-regional services
- Identify a preferred location for additional industrial land and facilitate development
- Support Daylesford as the key tourism hub for the spa country area
- Provide for residential growth through infill development

Daylesford is in the north-east of the Central Highlands region, located on the Midland Highway, approximately halfway between Ballarat and Bendigo. It provides mid-level services, such as primary and secondary education, retail, business, medical and recreation, which will continue to be important to surrounding settlements such as Hepburn, Musk Vale, Eganstown and Glenlyon. Tourism, especially relating to the spa tourism industry, will continue to be a significant contributor to the town's economy.

Daylesford will continue to rely on Ballarat and Bendigo for higher order employment and services, although attention should be given to strengthening the opportunities Daylesford can offer. The allocation of additional industrial land should be investigated to allow for the establishment of further local industrial services. Future employment opportunities should be encouraged in the local commercial, tourism and industrial sectors.

Daylesford's outward growth is constrained by various environmental assets and potential natural hazards. The town will experience some residential growth, targeted to areas of infill. Issues about housing affordability and diversity of housing stock should be addressed to increase opportunities to live within the town. Any development should be mindful of the need to protect and enhance the town's amenity, with particular attention given to heritage and streetscape values. Further development should also conserve water supply catchment and forested areas and avoid increasing any bushfire risk to the town.

Daylesford is serviced only by V/Line buses and will continue to be dependent on car-based transport. Further public transport options should be encouraged. Opportunities to manage the movement of freight trucks through the town should be investigated to improve its liveability.

Land use policies, strategies and actions

- Promote infill development of the existing urban area of Daylesford and encourage housing diversification and affordability
- Protect and enhance the urban character with particular focus on the town's heritage and streetscape values
- Identify opportunities to encourage tourism uses and events, and enhance the streetscape and amenity of the town
- Investigate appropriate locations for industrial sites
- Investigate opportunities to minimise the impact of heavy vehicles on the town's main street
- Investigate opportunities to enhance public transport access to service the town and its visitors



Bacchus Marsh, Moorabool, photographer Michael McLeod

Smythesdale

Future directions

- Support Smythesdale as the preferred growth town for the northern part of Golden Plains Shire in Ballarat's hinterland
- Promote further employment opportunities and services to reduce the town's role as a commuter centre
- Favour infill development and planned growth areas

Smythesdale is located south-west of Ballarat on the Glenelg Highway. Its heritage and country-living characteristics, coupled with its recreational assets such as the Woody Yaloak Creek precinct, equestrian centre and rail trail are central to making the town an attractive and liveable community.

Smythesdale will be the preferred location for growth in the northern part of the Golden Plains Shire and along the Glenelg Highway corridor. A range of local services, such as primary education, retail, medical and recreation will need to be retained and enhanced to support the role of the town. These services will also be important to surrounding settlements such as Linton, Scarsdale, Haddon, Ross Creek, Enfield and Napoleons. Smythesdale will continue to rely on Ballarat for higher order employment and services.

Future employment opportunities should be encouraged in the retail, rural and nature-based tourism industries to strengthen the town's ability to service itself. This may include additional industrial or mixed use land. Public transport linking Smythesdale to Geelong and Ballarat is limited and therefore enhancements to services and additional local employment are desirable to reduce the reliance on car-based transport.

There is adequate residential land to accommodate the projected population growth of Smythesdale and the current rollout of reticulated sewerage will improve the development potential of the town. Future growth should be directed to infill locations and identified development sites. Developments that incorporate a diversity of housing types will be encouraged and should be mindful of constraints such as flood, significant vegetation, heritage values and bushfire hazards.

Land use policies, strategies and actions

- Promote infill development of the existing urban area of Smythesdale and plan for the development of other identified growth areas
- Retain and enhance services and facilities appropriate to servicing the local community
- Protect the urban character and key environmental and cultural heritage assets including the creek corridor
- Investigate appropriate locations for employment sites

14.7 Small towns and rural settlements

Future directions

- Plan for resilient small towns by building on local opportunities
- Consider the role of small towns within a regional context
- Plan to further strengthen small settlements to be adaptable and resilient to local challenges
- Encourage small settlements to be planned as part of a cluster of settlements to improve access to key services

The Central Highlands region's settlement network includes many small towns and settlements that have strong interrelationships with each other and with larger regional centres and towns.

Although each small settlement in the region will be subject to unique drivers and implications of change dependent on its location, social capital, infrastructure and economic diversification, there are some common themes when planning for the future of these settlements.

This plan encourages and supports small settlements to be resilient when recovering from negative events and adaptable by adjusting effectively to changing circumstances. There are a number of ways land use planning can support these objectives, although a multi-sector response will be needed to address many of the opportunities and challenges.

Facilitating localised responses

Small settlements in the Central Highlands region will have a variety of different roles such as providing a range of lifestyle and housing choices, supporting tourism uses, facilitating rural industry or acting as commuter centres with links to larger settlements. For example, small towns like Gordon and Linton will increasingly provide for residential growth in an attractive semi-rural residential location within commuting distance to Ballarat or Melbourne. On the other hand, Moonambel's growth will be stimulated as a niche tourism centre for the Pyrenees winery district. Other settlements in rural locations may see population losses and will need to plan to promote economic development opportunities.

Councils should develop strategies tailored towards the individual opportunities and threats for each settlement to recognise the diversity of small settlements, having regard for the regional policy framework established by this plan. For example, Moorabool Shire is currently developing a growth strategy to help articulate the strategic direction of its small towns and rural areas.

Clusters of settlements

As discussed in the regional settlement framework above, it will be important for small towns to be planned in clusters to help ensure a critical mass for provision of local services. Such an approach will also help small towns utilise their strengths to serve a greater regional or sub-regional purpose, without needing to provide for all types of uses in each settlement. For example, it is envisaged that Pomonal and Moyston will take on a role of providing housing, including holiday housing, to support the demand for growth at the edge of the Grampians National Park. This role will be important given the considerable constraints to growth of housing in Halls Gap and a desire to focus that settlement as a tourism hub for the region.

Growth and change over time

While this plan has identified small settlements based on their expected size and role within the regional settlement network, these designations may change over time and in future iterations of regional growth plans. Settlements, such as Gordon, Snake Valley and Trentham, may grow considerably as demand increases for housing opportunities within commuting distance to Melbourne or Ballarat. If settlement designations are to change, planning will need to carefully consider supply of land, provision of services and infrastructure, and mechanisms such as growth boundaries to ensure this change can be managed.

Economic diversification

This plan encourages planning controls in small settlements to become more flexible. This will afford small settlements a better chance of adapting to external changes in economic and social conditions. Strategic planning should identify and protect important economic assets such as future industrial land near freight rail lines, tourism nodes or agricultural land.

Providing infrastructure

While many small settlements in the Central Highlands region have a range of lower order services, it is important that physical and social infrastructure continues to evolve in accordance with demographic changes and to ensure population replenishment. This may require new models of service provision such as integrated community hubs. Ongoing improvements to service infrastructure, such as the new Snake Gully sewerage scheme, will also enhance liveability and support economic diversification.

Managing change from significant investment

Strategic planning for small settlements will help them take advantage of infrastructure investments committed to the region. This planning could include structure planning to ensure land is set aside for significant residential and industrial investments such as new intensive agricultural industries in the local area. Over the long term, small towns located on key transport corridors, such as Ballarat-Geelong or Ballarat-Melbourne, may benefit from upgrades to road and rail infrastructure to make them highly accessible and attractive for growth.

Land use policies, strategies and actions

- Encourage planning and service delivery that takes account of settlement clusters, including those across municipal and regional boundaries, shares facilities and supports improved transport access between closely linked settlements
- Encourage the development of integrated planning and economic development policy to identify tailored strategies for individual small settlements, including protecting strategic land for growth
- Undertake planning for settlements affected by major infrastructure to ensure they take advantage of opportunities
- Support ongoing upgrades to infrastructure and new integrated, networked models to deliver community services
- Monitor the role of growing small towns to identify whether they should be elevated in the regional settlement framework

14.8 Rural residential development

Future directions

- Plan for rural residential development on a regional basis to ensure it is directed to locations where it will most benefit the region
- Continue to provide areas for rural residential development in appropriate locations to offer residents lifestyle choice and attract new residents to the region
- Consolidate rural residential development in well-planned locations that support existing settlements, provide investment in infrastructure and services, are safe for residents and are consistent with the environmental, social and economic directions of this plan
- Ensure that new houses in farming areas support agricultural activities and do not impact on farming practices in the future or lead to the permanent loss of land from agricultural production

Rural settlements within the Central Highlands region vary from sparsely settled agricultural areas in the western, northern and southern parts to rural residential areas often located on the periphery of settlements. Rural settlements can also take the form of houses within agricultural areas that are associated with farming activities or are used for de facto rural residential purposes. The region currently has many areas zoned for rural residential development, with some locations far removed from services and employment and exposed to natural hazards such as bushfire. Some parts of the region have a considerable supply of rural residential zoned land, such as the north-west of Golden Plains Shire.

Rural residential development is important for offering lifestyle choice to new and existing residents. The 'tree change' phenomenon will continue to attract people to the region to live in rural areas over the next 30 years, particularly to those areas with high amenity value and good accessibility to Melbourne, Geelong and Ballarat. Areas with these characteristics include land within, and in proximity to, the Western Highway corridor between Bacchus Marsh and Ballarat.

A key challenge for land use planning in this region over the next 30 years is to manage demand for rural residential development to ensure it is directed towards appropriate locations rather than spread ad hoc throughout rural areas. Allowing rural residential uses to establish throughout rural areas is likely to lead to detrimental impacts on farming activities, environmental assets and landscape values. It would increase exposure to natural hazards and lead to highly unsustainable living patterns. It would also result in inefficient use of infrastructure and services and offer little benefit to the region's settlements.

Rural residential development in areas within the strong influence of metropolitan Melbourne may result in new residents adopting unsustainable living patterns such as commuting to Melbourne for employment, expecting higher order services and contributing less to the region's economy and sense of community. The benefits of rural residential development for the Central Highlands region and nearby local communities should be carefully considered when determining where this form of development should be located.

Detailed planning for rural residential development should be undertaken by councils so that this use is directed to carefully selected locations based on strategic land use and policy considerations. In applying the guidance set out in Planning Practice Note 37 – Rural residential development, planning also needs to incorporate regional considerations to ensure this kind of development benefits the regional economy and avoids detrimental impacts on regional assets. Relevant regional considerations include:

- natural hazards at the broad landscape level, including bushfire and flood
- whether residents are likely to orientate strongly to local settlements for employment and services, thus contributing to the region's growth, or will orientate more towards larger centres such as Melbourne
- proximity and access to employment and higher order services located within the region
- the location of declared water supply catchments and any potential impacts on water quality or yield
- consistency with the objectives identified in this plan for regionally significant areas of agricultural production, tourism, landscape and environmental assets
- the existing supply of, and demand for, rural residential lots in the area, including in neighbouring municipalities.

Land use policies, strategies and actions

- Planning schemes recognise regional considerations in planning for rural residential development
- Direct rural residential development to areas where it will minimise exposure to natural hazards, protect regionally significant assets, support existing settlements and make best use of infrastructure and services
- Monitor the supply and demand for rural residential land within the region

14.9 Housing diversity and affordability

Future directions

- Provide social infrastructure that is well located and accessible in relation to residential development, transport services, employment and educational opportunities
- Support opportunities to increase social housing stock and ensure public and social housing meets the needs of residents and communities
- Encourage new housing that responds to the characteristics and requirements of the region's population
- Encourage infill development as a means to encourage housing affordability and provide good access to existing services, transport and facilities

The Central Highlands region has significant challenges in relation to housing. The housing options across the region do not match the current and projected needs of many households, working against the likely future needs of many households and the overall development of the region. Household sizes are getting smaller, single person households are increasing and households are often structured differently to traditional forms and sizes. Additionally, new housing development and residential layouts across the region are not necessarily taking into account the appropriate and early provision of social infrastructure and transport.

Rising house prices are resulting in some populations becoming concentrated in low service areas. Price rises have been driven in part by the 'tree-change' phenomenon in Hepburn and Pyrenees shires, where the largest cohort of home buyers is from Melbourne. Moorabool and Golden Plains shires are attracting buyers from neighbouring municipalities due to value for money and lifestyle change from the larger adjoining cities.

A wider understanding of housing needs across the region is important. In particular, the region would benefit from exploring the role of social housing and supporting various affordable housing options.

Dealing with complex housing market issues will require sustained attention from all levels of government, private housing providers and real estate agents. Land use planning alone cannot address all housing issues. However, key opportunities for intervention through planning schemes exist, including the location and design of new housing areas, provision of support infrastructure and the mix of housing types.

Land use policies, strategies and actions

- Planning schemes provide recognition of the importance of diverse and affordable housing, which takes into account emerging demographic, social and economic trends
- Planning schemes to incorporate principles of universal and adaptable design for new housing
- Provide for increased housing densities in locations that are accessible to shops, transport networks and other community services and facilities
- Develop a regional housing strategy with a focus on choice, availability and affordability
- Identify and address gaps in the housing market that are hindering growth or exacerbating disadvantage
- Support the provision of suitable housing for elderly people and smaller households to cater for the projected demographic change

15. Regional infrastructure

15.1 Transport networks

The transport system facilitates the regional economy and overall liveability. Local transport and internal town and city activities are addressed in municipal and local plans. Urban design and place-based integration with land use is the role of local government. Region-wide and inter-regional transport systems and infrastructure are considered as part of this plan.

This plan seeks to:

- optimise freight-related activities and support efficient and effective operations
- achieve efficiencies and apply sustainable practices while achieving economic and social benefits
- ensure residents have appropriate access and connectivity in their region for work, services, education or leisure
- match long-term access patterns to population, current planned infrastructure, anticipated service demands and identified employment locations
- provide directions for these long-term needs in response to growth and change.

The transport network is a critical facilitator supporting regional growth. In implementing the plan it will be important to maximise sustainable transport options.

Future directions

- Improve the capacity and functioning of the region's transport networks
- Ensure access and connectivity between settlements within and external to the region
- Provide for a safe, reliable and resilient transport network
- Consider technological advancements in the transport provision mix
- Ensure amenity and useability
- Develop integrated freight precincts and related networks as a means of improving the distribution and collection of goods across the region
- Understand and ensure efficient ways to transport products between producers and markets (supply chains)

Transport in the Central Highlands is heavily focused around the Western Highway and rail corridors linking Melbourne to Adelaide and Melbourne to Ararat. Other significant roads include the Glenelg, Pyrenees, Sunraysia and Midland highways providing access to other parts of the region and the state. Rail and road networks service both freight and passenger requirements and are crucial to the local economy.

This is important as the region's economy is increasingly being based around service industries (health and education), which means that transporting people is an important feature of the economy. For example, Federation University Australia attracts students from Melbourne, so reverse commuting (to Ballarat) is also a feature of the transport system and this is likely to continue into the future.

Business and the regional economy rely on an effective freight system including Victoria's connectivity to the Australia-wide system. Regional connections to port facilities in Melbourne and other hubs, such as Portland, Geelong and the future container port at Hastings, are essential. Important airport facilities include those at Melbourne and Avalon, and other regional airports.

The above future directions support the growth opportunities identified by this plan and have synergies with the objectives detailed in the Central Highlands Regional Transport Study. These are detailed in brackets under an outline of each of the future directions (see also Map 11).

Improve the capacity and functioning of the region's transport networks

(Relevant Central Highlands Regional Transport Study objective: Expand transport networks for growing areas)

Ensuring connectivity to growth areas such as links to the west of Ballarat will be important. The Ballarat Western Link Road is intended to improve access from the Ballarat West Growth Area to employment zones as well as create an additional local route for use by freight vehicles. Similarly, in Bacchus Marsh improved north-south access bypassing the town centre is important to improve network capacity.

Localised improvements can also address traffic issues and should include upgraded walking, cycling and public transport links. Examples of improving network capacity and coordination to better meet community needs include:

- enabling or managing diverse travel choices such as walking and cycling links and improved public transport
- expanding road space
- enhancements to rail services, which potentially could include additional passing loops
- improving and modifying the network of public transport services to better meet market needs
- creating off-road bike paths to schools and workplaces.

Ensure access and connectivity between settlements within and external to the region

(Relevant Central Highlands Regional Transport Study objectives: Plan for a 'networked region' in transport and land use; Support the needs of visitors to the region)

Connectivity for people and freight movements within and outside the region is a key consideration. Attracting people to improved services and facilities in the region, such as Federation University Australia, may see an increasing number of people reverse commuting (coming to Ballarat as opposed to going to Melbourne). Strengthening ties with neighbouring settlements in the region, such as Ararat, will also be important due to the facilities and economic opportunities offered by the expansion of the prison.

The Central Highlands region includes a number of iconic tourist destinations and in order to enhance the tourism product, improved access should be considered. This improved accessibility may include a combination of public transport and road link improvements around tourist areas. For example, the Grampians area would benefit from better access to the park and to other attractions in the surrounding area.

Projects being built, planned or investigated that will significantly enhance the connectivity of the region are:

- the Ballarat Western Link Road, which will provide a connection between existing highways, the Ballarat West Employment Zone and the Ballarat West Growth Area
- Regional Rail Link, which will separate Ballarat passenger trains from the metropolitan suburban network
- completion of the duplication of the Western Highway, which will provide a high quality east-west corridor across the entire region

- the Rail Revival Study, which outlines improvements to transport connections between Geelong, Ballarat and Bendigo (via Maryborough and Castlemaine). It recommends increases to coach services in the short-term, with the return of rail services to form part of a longer-term plan for the region.

Transport implementation opportunities for ensuring access and connectivity exist around:

- linking the region more effectively to international airport gateways
- linking the region to cities outside the region, including Melbourne, interstate capitals and regional cities
- intra-regional links, such as regional city urban bus networks including links to their hinterland and surrounding small communities
- cross-border connections
- aligning the public transport network to better service demand
- more accessible transport facilities and services
- enhanced aviation facilities for business, industry, emergency services and passengers.

Provide for a safe, reliable and resilient transport network

(Relevant Central Highlands Regional Transport Study objective: Increase the resilience of the transport system under changing circumstances)

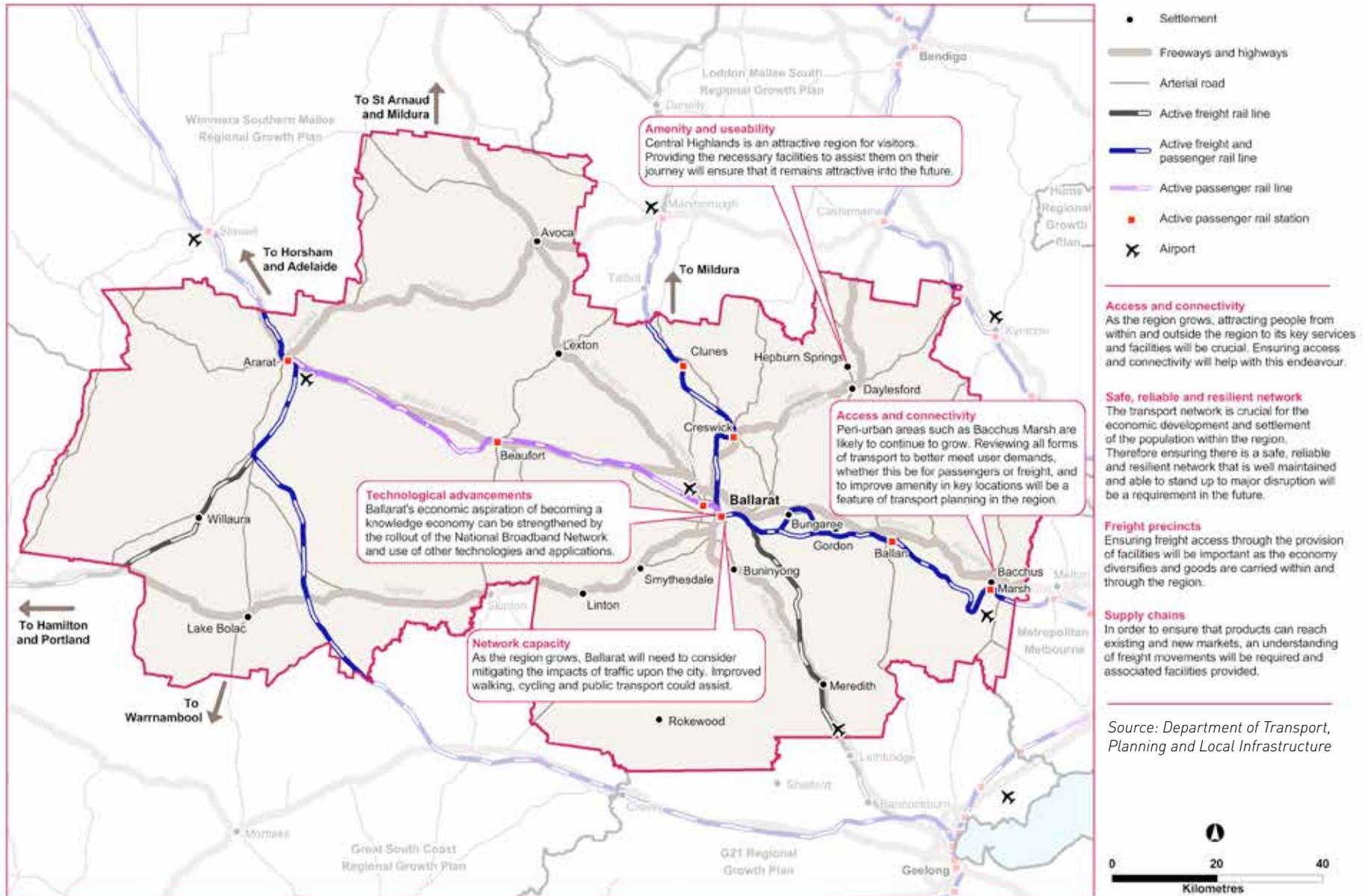
It is important for the regional economy and the region's settlements to support a safe and reliable network that is resilient to major disruption such as flood and fire. Examples of transport implementation opportunities for providing a reliable and resilient network exist around:

- contingency plans for major disruption such as flood and bushfire
- maintenance of rail and road networks
- on-time running limitations, such as upgrading single track railway lines.



Western Highway near Beaufort, Pyrenees Shire

Map 11: Future directions for transport



Source: Department of Transport, Planning and Local Infrastructure

Consider technological advancements in the transport provision mix

The Central Highlands region is already developing a knowledge-based economy, and has aspirations for this to continue into the future. It is a major centre for health and education, with a wider catchment encompassing inter-regional and statewide locations. It will be crucial to the development of the knowledge economy that technology leads the way in improving communications.

The rollout of the National Broadband Network may have a significant impact on the region. It could mean work patterns change and residents work more from home without having to travel to work every day. The health and education sectors are leading the way in using new technology for online courses and rehabilitation of patients. In the future there will be opportunities to enhance and make use of new technologies. It is expected there will also be important benefits for residents of small towns to improve access to services, particularly in more remote parts of the region.

Some transport implementation opportunities for considering technological advancements could include:

- the National Broadband Network
- use of electronic devices, such as tablets, smart phones and portable computers
- alternatively fuelled vehicles
- new vehicle designs.

Ensure amenity and useability

(Relevant Central Highlands Regional Transport Study objective: Manage amenity impacts of freight)

The Central Highlands transport network is used by a variety of people for both business and pleasure. Ensuring the network is maintained in a useable condition will be important into the future. This will be necessary to support a more diverse economy and make best use of tourism products and opportunities. For example, connections between and access to rail trails will be improved. Freight routes could also be reviewed in high amenity areas to reduce potential conflicts in towns, such as Beaufort, Creswick and Daylesford.

The following are some examples of transport implementation opportunities for ensuring amenity and useability:

- tourist routes for all users, including cyclists
- facilities such as wayside rest areas, signage and information hubs
- marketing such as package tours for day trips.

Develop freight precincts as places to collect and distribute goods

(Relevant Central Highlands Regional Transport Study objective: Provide efficient access to markets for the Region's production)

With planned growth in agricultural output and manufacturing, consolidating logistics functions into freight hubs can improve the efficiency of freight distribution to external markets.

Freight gateways and hubs could be established around:

- the Ballarat West Employment Zone – this is a transformational project adjacent to Ballarat Airport
- regional airports, such as Bacchus Marsh and Ararat airports
- activity specific centres such as a distribution warehouse or processing plant.

Understand and ensure efficient ways to transport products between producers and markets (supply chains)

Changes to vehicle and fleet characteristics may mean that small local roads are not able to cope with the number and use of higher volume vehicles taking products to processing or export locations. Within the region, north-south freight movement to ports and markets are of great importance and key routes may require enhancement to support this, such as the Midland Highway or links between Skipton and Geelong. Central Highlands has a strong timber, fruit and horticultural product base that makes use of local roads to get products to markets. Changes to maintenance funding and weight restrictions, for example, may need to be reviewed to ensure freight access and connectivity.

For example, some transport implementation opportunities for efficient supply chains exist around:

- understanding relationships, movements and modes between the farm gate, market, distribution centres and gateways for various commodities such as extractive industries and agricultural products
- enhancing north-south road and rail links to protect amenity and support better access to markets
- taking advantage of technological advancements.

Land use policies, strategies and actions

- Renew, maintain and develop transport infrastructure to meet anticipated population growth identified in the urban settlement framework
- Provide flexible and adaptable freight connectivity to the transport network to cater for commodity growth and technological and logistical advances
- Incorporate future directions into local and regional planning reviews and planning schemes to ensure infrastructure keeps pace with changes in demography and land use, and with economic and social development
- Identify long-term road and rail projects that support regional growth and assess how these may be reflected in planning schemes
- Maximise the use of the existing transport network to encourage settlement and economic growth along existing transport infrastructure

15.2 Social infrastructure

Integrating land use and infrastructure planning is important for building strong and healthy communities. As the region grows, it will be necessary to make best use of existing infrastructure capacity and ensure new infrastructure and services are strategically planned and developed in a timely manner.

Future directions

- Identify and plan for social infrastructure provision in sequence with residential development
- Provide social infrastructure that is well located and accessible in relation to residential development, public transport services, employment and educational opportunities
- Provide multi-purpose, flexible and adaptable health and education infrastructure that can respond to changing and emerging community needs over time
- Protect the operation of existing and planned health and education and training facilities from conflicting land uses

Social infrastructure such as community facilities, services and networks help communities meet their social needs and maximise their potential wellbeing. A desirable outcome is to provide high quality social facilities and living environments that meet education, healthcare and living needs. This will support resilient and liveable communities where people enjoy healthy, happy and productive lives.

Cooperation between service providers can provide cost benefits by maximising the use of sites and help realise the full benefit of community infrastructure.

Access and connectivity is an important factor in linking people to appropriate services and employment within the region.

The peri-urban parts of the region will need particular attention with regards to social infrastructure planning, given the projected population growth and challenge in upgrading facilities to keep pace with change in communities such as Bacchus Marsh.

Education and skills

As the Central Highlands economy evolves and its population increases, the areas of finance, administration, health, tourism and retail trade are expected to grow. This will provide additional employment opportunities. While Ballarat's education and training network is identified as a significant comparative advantage, it will need to be able to respond to shifts in the economy requiring new and different skills.

Improved education will help address skills shortages and strengthen the economy of the Central Highlands.

It is also important that all residents are able to access and participate fully in the changing economy, through appropriate transport links to employment opportunities.

Planning for health

The built form, economic, social and natural environments are important dimensions of health.

A particular issue for the Central Highlands is the difference between sustained and relatively rapid population increases in the eastern part of the region and more limited or decreased population growth, as well as an ageing population, towards the west.

Ballarat's high quality health services support the entire regional catchment, although accessibility is a challenge for the region. An ageing population in the west of the region demands different services to those in the east that have a more balanced demographic.

Some parts of the region have high levels of relative disadvantage and measures in this plan supporting access to employment, public transport and a range of housing can assist in improving community wellbeing.

Other regional health challenges are increasing obesity and access to training and employment opportunities. Open space and recreational facilities could be better supported.



Ballarat Aquatic and Lifestyle Centre

Priorities for social infrastructure planning

Social infrastructure planning in the Central Highlands will centre on:

- building on the higher order services provided in Ballarat and the regional centres of Ararat and Bacchus Marsh
- ensuring appropriate and timely service provision within other centres
- undertaking early forward planning for projected growth in peri-urban regions
- early service provision for new housing developments
- ensuring appropriate and accessible services are available in new housing developments at construction.

Land use policies, strategies and actions

- Encourage updates to the local planning policy frameworks of planning schemes to recognise the importance of planning for social infrastructure
- Investigate social infrastructure needs for the region and target facilities to particular settlements where the need is greatest or planning identifies a strategic direction to grow and maintain the settlement
- Identify land required for the expansion of existing facilities or the development of new infrastructure
- Encourage the growth of settlements where education and health facilities are provided to ensure their long-term sustainability
- Integrate social infrastructure with transport services and infrastructure to maximise accessibility

15.3 Water, energy and utilities

Future directions

- Direct development to locations that make the best use of existing water, energy and utility infrastructure and minimise the need for infrastructure upgrades or expansion
- Prioritise infrastructure investment that facilitates economic growth and urban development
- Identify the potential economic, social and environmental benefits of infrastructure investment and prioritise investment where it will achieve multiple benefits
- Provide water, energy and utilities infrastructure in sequence with urban and agricultural development
- Coordinate infrastructure investment with the expected growth identified in this plan

Power

The Central Highlands Region Infrastructure Study (2013) found that most settlements within the region have capacity in existing electricity infrastructure to accommodate demand generated by new urban development. Larger settlements generally have greater network capacity due to the presence of a zone sub-station and higher voltage feeder lines.

A key siting issue for medium to large power generators, such as the large wind farms that have recently been constructed in the region, is proximity to high voltage transmission lines such as the Ballarat-Horsham transmission line, which makes connections into the energy grid cost-effective. Opportunities for local energy generation are discussed in detail in Section 12.5 of this plan.

Gas

The availability of reliable and cost-effective energy is critical for business, particularly for certain energy intensive types of industry. Economic development may be constrained by a lack of access to reticulated natural gas, such as some areas of industrial land within Ararat. Reticulated gas is currently available to most of Ballarat, Ararat, Bacchus Marsh, Ballan, Buninyong, Creswick, Daylesford, Hepburn Springs and Wallace.

The State Government has been investigating the supply of reticulated gas to Avoca and Bannockburn, which will support households and businesses, including the expanding industrial estate.

There is sufficient spare capacity in existing gas supply infrastructure to supply the growth forecast for this region over the next 30 years. Opportunities exist to establish local gas-fired power generation where high pressure gas pipelines are located close to high voltage transmission lines, such as in Ballarat.

An opportunity has been identified to establish a co-generation plant within the Ballarat West Employment Zone, using both natural gas and biogas (methane produced from the breakdown of waste) to produce energy for local industry.

Water supply

A secure water supply is critical given climate change forecasts that suggest the region's climate will be drier within the next 30 years accompanied by an increased risk of drought conditions. The limited availability of water in drier years may place a constraint on some land uses, such as intensive agriculture and market gardens in Bacchus Marsh.

Much of the eastern parts of the region are within declared water supply catchments that supply potable water to settlements within the region and to large population centres such as Geelong and Bendigo, their surrounds and the communities of the Murray-Darling Basin. A key attribute of the region's water catchments is that they are largely on private land and subject to a range of uses, such as agriculture. As such, protecting water quality and yield will continue to be a key role of land use planning. The Department of Environment and Primary Industries' guidelines for planning permit applications in potable water supply catchments will be a key tool in this regard.

The recently constructed Goldfields Superpipe has connected Ballarat to a wider water grid and has secured potable water supplies to Ballarat for the next 50 years. However, there remains a need to improve water conservation. Land use planning can play a role in subdivisions and developments through innovative water sensitive urban design. Agricultural uses may also take advantage of the Superpipe for irrigation.

The water supply and demand strategies of water corporations in the region generally identify there is adequate water supply to meet demand for the next 30 years or more across the region. Some supply districts may fall short of demand depending on climate change scenarios. In these cases, the water corporations have identified actions necessary to improve efficiency of supply and supplement supplies to meet demand.

When integrated water cycle strategies⁷ are being developed, the growth proposed in this plan will need to be taken into account to identify any potential capacity and infrastructure planning needs. Further consideration will need to be given to the link between the urban and rural water cycle and the implications of reduced water availability when planning for new growth and development.

Sewerage

Sewerage infrastructure is an important prerequisite to urban growth. All of the larger settlements within the Central Highlands region are provided with reticulated sewerage systems. However, some of the smaller settlements rely on septic systems, which may impact on declared water supply catchments. Local government domestic wastewater management plans will play a critical role in how septic systems are managed. The townships of Gordon, Smythesdale, Snake Valley and Waubra have recently been seweraged, providing opportunities for growth. The decision to provide a reticulated sewage system needs to be carefully considered, with business cases measured against environmental factors and anticipated growth and supported by planning policies concerning that settlement.

Wastewater is recycled at a number of locations within the region, including from the Ballarat North Waste Water Treatment Plant, the only treatment plant in the region capable of producing Class A wastewater suitable for a wide range of uses. Opportunities to increase the use of recycled water within the region will become more important with changes in climate. The concentration of residential development in such locations as the Ballarat West Growth Area may present opportunities for the wider use of recycled water.

⁷ Integrated water cycle strategies will be developed by water corporations by 2017 to replace their current water supply demand strategies, and will consider maintaining demand and supply balances, water supply system resilience, and future water cycle services options (including recycling sewage or trade waste, stormwater capture and reuse, and demand management).

Telecommunications

The rollout of the National Broadband Network will be important to enhance the connectivity of the region. It will provide settlements with a range of fibre optic cable and fixed wireless services, with most of the larger settlements receiving fibre optic cable. The fixed wireless system involves a central satellite receiving unit within a settlement that transmits a broadband signal to radio units on premises within the settlement.

Land use and infrastructure planning for the region should seek to take advantage of enhanced telecommunications, particularly in larger settlements that have fibre optic cable connections. Improved infrastructure that enables better connections in areas with poor reception is supported.

Waste management

Regional landfills are located at Smythesdale and Stawell, the latter which is outside the region but services Ararat and its surrounds. Smaller landfill facilities are provided in a number of locations in the region for solid, inert waste. Transfer stations are located in many settlements, which provide collection points for waste to be transported to regional landfill facilities. The Smythesdale regional landfill has the capacity to accommodate demand for the next 30 years, with Stawell having 15–20 years of capacity.

As the region's population and industry grows, there will be an increased demand for waste and resource recovery infrastructure and services within the region. This creates a challenge for securing suitably located land for future waste management facilities, including for sorting and processing, recycling, composting and reprocessing, export, reuse and disposal of waste. Any opportunities for new industries in this field, including advanced resource recovery facilities such as waste to energy, should be explored and supported.

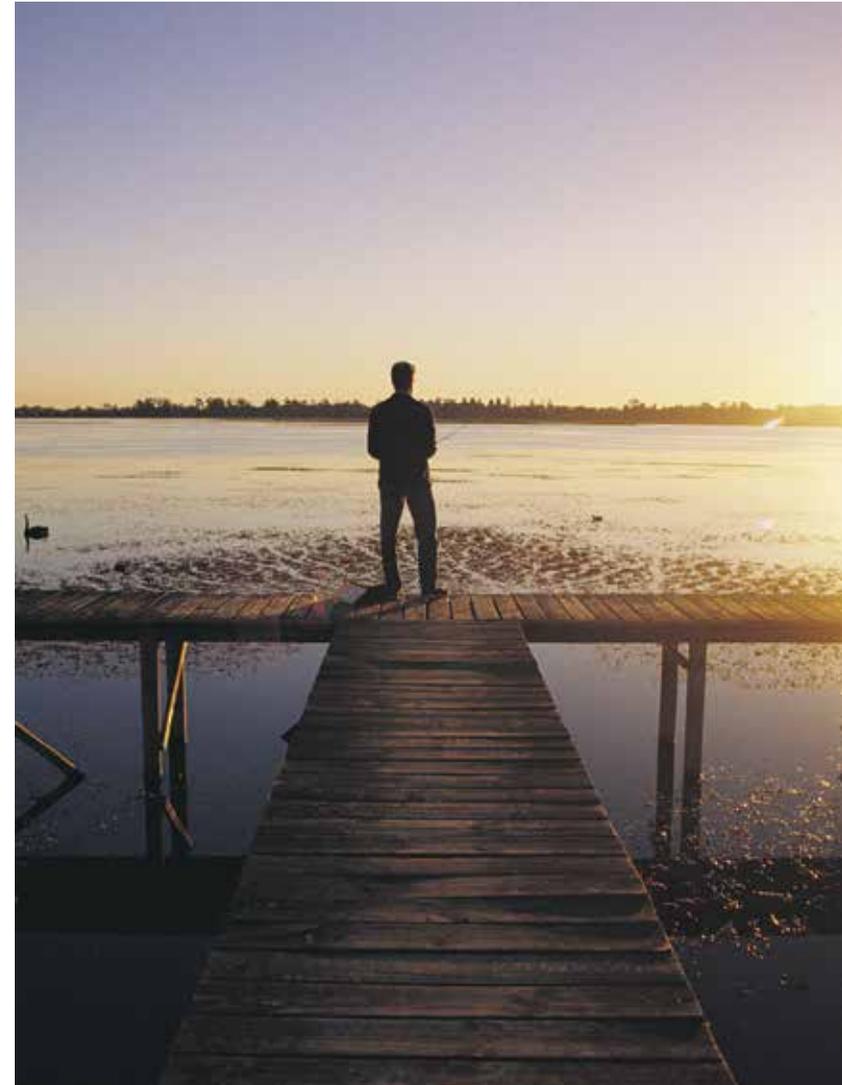
Priorities for water, energy and utilities

The following represents some infrastructure priorities. Infrastructure should receive particular support where it can achieve multiple opportunities such as:

- ongoing upgrades to support the growth areas identified in the regional settlement framework
- use of existing infrastructure to support infill development within existing urban areas
- infrastructure required to support the growth of smaller settlements, where it will deliver environmental benefits such as within declared water supply catchments. This includes reticulated sewage systems that can be viably constructed and maintained
- services that support economic growth and employment-generating uses, including:
 - employment areas in key settlements designated for growth
 - key rural land use opportunities such as intensive animal husbandry in the Golden Plains Shire, viticulture in the Pyrenees Shire or intensive horticulture including the Bacchus Marsh Irrigation District in the Moorabool Shire
 - major tourism areas
- projects that increase the use of recycled water and reduce demand for potable water
- projects that reduce waste streams, such as waste material recycling facilities, composting facilities for green waste and bioenergy plants
- extension of reticulated gas services where it will support industry and employment-generating uses
- renewable energy generation where it makes best use of existing energy distribution infrastructure.

Land use policies, strategies and actions

- Ensure that planning schemes direct growth to areas where it will make the most efficient use of existing infrastructure
- Identify key regional priorities for improved utilities, waste management, energy and telecommunications infrastructure, and seek opportunities to implement these projects
- Promote infrastructure planning that is coordinated with urban development needs and the key locations for growth identified in this plan
- Prepare development contributions plans to fund infrastructure to support growth



Lake Wendouree, Ballarat, image courtesy of Tourism Victoria



Bacchus Marsh Avenue of Honour, Moorabool Shire, image courtesy of Tourism Victoria

PART D | REGIONAL GROWTH PLAN

Part D of the Central Highlands Regional Growth Plan integrates the future directions established in Part C to provide overall key directions for this plan and considers the regional land use planning responses needed to support the proposed growth and change for the region.

16. Future directions for regional growth

Principle	Overall key directions	Rationale	How
1. Population growth should be planned in sustainable locations throughout the region	<ul style="list-style-type: none"> Direct growth to existing towns with access to transport, services and employment opportunities Focus urban development in locations where impacts on the surrounding natural resource base and the environment are minimised Adopt a risk management approach in planning for population growth in areas subject to natural hazards 	Providing for development in designated locations throughout the region will help spread the benefits of growth to a range of communities. Most existing medium to large settlements in the region represent sustainable locations for regionally significant growth as they are located on key transport corridors and have access to services, infrastructure and employment. Consideration of natural hazards will be critical in ensuring new development is enduring and protects human life.	<ul style="list-style-type: none"> Implement the settlement network shown on Map 12 Encourage settlements to grow commensurate with the levels identified on Map 12 Support Ballarat, Bacchus Marsh and Ararat as the key regional locations for higher order services and facilities Locate major urban growth on the key transport links identified on Map 12 Direct settlement growth away from areas subject to natural hazards such as bushfire and flood Limit outward expansion of Daylesford to minimise environmental impacts and exposure to natural hazards
2. The region's economy should be strengthened so that it is more diversified and resilient	<ul style="list-style-type: none"> Encourage greater economic self-sufficiency for the region Pursue economic development opportunities based on the emerging and existing strengths of the region Support growth through the development of employment opportunities in towns identified for population growth 	Population growth in the region will be more manageable if it is accompanied by employment growth and economic development. To this end the region must protect and enhance its key assets, which are integral to its economic base, while encouraging growth sectors to create a diverse and contemporary regional economy.	<ul style="list-style-type: none"> Provide well located industrial and commercial land in settlements, particularly those designated for growth on Map 12 Facilitate the development of higher education, technology and research uses that contribute to a knowledge economy Develop the Ballarat West Employment Zone as a regionally significant employment hub Protect key agricultural resources and rural industries identified on Map 12 and support investment in their productive use Promote and enhance the region's tourism assets and further develop the iconic precincts identified on Map 12 as key regional drawcards Encourage tourism development that also protects landscape, heritage and environmental assets Provide ongoing transport and service infrastructure upgrades to help support economic development opportunities Where appropriate, build on opportunities associated with the region's natural resources including sand and stone, minerals, timber and renewable energy

Principle	Overall key directions	Rationale	How
<p>3. The region should capitalise on its close links with other regions and cities</p>	<ul style="list-style-type: none"> Locate urban growth in identified settlements along key transport corridors Build on and enhance links to other centres and regions Integrate planning for freight and passenger transport with the land use directions and growth opportunities identified in this plan 	<p>Given the importance of transport for residents of the region to access jobs and services, it is critical that most growth is located in identified settlements along key transport corridors that link these settlements and have employment and higher order services. Transport plays a critical role in transporting products to markets in Melbourne and elsewhere and delivering the region's tourism opportunities.</p>	<ul style="list-style-type: none"> Direct development to Ballarat and the regional centres and towns identified on Map 12 Locate industrial land in settlements where it will have good access to the regional transport network Improve freight access to external markets, particularly north-south movements Provide sound transport connections between the regional city, regional centres and Melbourne to ensure access to higher order services and employment, as well as the region's tourism opportunities Develop good transport links to Ballarat's CBD and regional centres to enable these locations to service business and residents from across the region and Melbourne
<p>4. The development of sustainable and vibrant communities should be supported by enhancing the level of access to key services</p>	<ul style="list-style-type: none"> Encourage services, facilities and housing that meets the diverse needs of the community Recognise and plan for managing the variable rates of growth and population change expected across the region Build on local opportunities to support resilience of small towns 	<p>Planning for services and facilities should be linked to anticipated population growth to ensure sustainable communities are created in those parts of the region that are growing rapidly. Nevertheless, it is important that small communities and more remote settlements with limited or no population growth have access to local services. This may require innovative models to deliver services that examine small settlements in clusters and as part of the broader settlement network.</p>	<ul style="list-style-type: none"> Focus key facilities and services in the most accessible locations, particularly the regional city, regional centres and towns shown on Map 12 Examine opportunities to provide facilities that service clusters of small or remote settlements Provide new service and social infrastructure to support the areas of growth shown on Map 12 Support greater housing choice Support local strategic planning initiatives to establish economic and development directions for the region's small towns and rural settlements

Principle	Overall key directions	Rationale	How
<p>5. Land use patterns, developments and infrastructure should make the region more self-reliant and sustainable</p>	<ul style="list-style-type: none"> • Support the productive use of energy, water, waste materials, agricultural and earth resource assets • Capitalise on opportunities to enhance water supply and increase energy security • Develop communities which provide local jobs and services • Encourage the efficient use of residential land to support sustainable urban forms 	<p>Drivers such as a potentially drier climate and increased energy costs mean there are comparative advantages for the region if it positions itself to use resources efficiently and positions itself for a low carbon economy. This will require a broad approach including protecting and investing in key energy, water, earth resource and agricultural assets to increase self-sufficiency. The development of sustainable urban forms and communities that minimise the need for travel to access employment and services will also contribute to this outcome.</p>	<ul style="list-style-type: none"> • Minimise impacts in declared water supply catchments shown on Map 12 by managing development and land use in these areas and improving infrastructure if appropriate • Encourage infrastructure and development that supports urban, economic and environmental initiatives in this plan by enhancing the quality and quantity of water supplies • Plan to provide land for employment and community facilities, particularly in growing settlements • Support new forms of energy generation, minimising impacts upon the amenity of residents, landscapes and environmental assets • Manage residential development and encourage investment to provide for the long-term availability of key regional assets, including agricultural assets nominated on Map 12 and earth resources • Encourage infill development to help manage urban growth
<p>6. Planning for growth should be integrated with the provision of infrastructure</p>	<ul style="list-style-type: none"> • Encourage efficient use of existing infrastructure • Encourage infrastructure that has a range of positive benefits or can support directions in the plan • Coordinate infrastructure provision with planned growth 	<p>Strategically located and well-timed physical and social infrastructure can help support the economic and population growth of the region and facilitate land use initiatives identified in this plan.</p>	<ul style="list-style-type: none"> • Focus growth in existing settlements as shown on Map 12 that already have a sound infrastructure base • Maintain and develop transport, utility and social infrastructure to support the areas of growth shown on Map 12 • Provide infrastructure that will facilitate economic opportunities identified in this plan • Encourage local councils and state government agencies and infrastructure providers to use the long-term framework established by this plan to ensure growing communities are adequately serviced

Principle	Overall key directions	Rationale	How
7. The region's land, soil, water and biodiversity should be managed, protected and enhanced	<ul style="list-style-type: none"> Protect and enhance regionally significant environmental assets Capitalise on the region's environmental assets to improve environmental outcomes and support economic development 	<p>The region's environmental assets are a foundation of the Central Highlands' productive landscape and liveability. Nature-based tourism will be an increasing opportunity for the region's economic diversification. Protection and enhancement is also important due to the notable cross-regional links, particularly around water supply. Opportunities to build on, improve and link existing assets could further improve environmental outcomes.</p>	<ul style="list-style-type: none"> Protect water catchments and areas of high habitat value shown on Map 12 through appropriate land use, development and, if appropriate, infrastructure improvements Focus development in existing settlements Facilitate nature-based tourism that can sustainably capitalise on the region's environmental assets Pursue opportunities to enhance environmental assets through improved infrastructure, land management and vegetation corridors Locate rural residential development to minimise impact on environmental assets and exposure to natural hazards
8. Long-term agricultural productivity should be supported	<ul style="list-style-type: none"> Promote the growth of the agricultural sector as a regionally important economic activity Support change and transition to maintain the viability and productivity of agricultural land Encourage investment in agriculture by providing certainty regarding future land use within rural areas 	<p>Agriculture remains a key economic driver across the region. However, this use is coming under pressure, particularly in the Melbourne peri-urban region and Ballarat hinterland. Given changing climatic and economic conditions, there is a need to support ongoing investment in farming by pursuing a flexible approach to rural land use. This will be assisted by providing certainty around the encroachment of incompatible uses and discouraging permanent loss of agricultural land to housing. Key agricultural assets should be developed to encourage economic growth and protect food security.</p>	<ul style="list-style-type: none"> Protect regionally significant agricultural assets such as those identified on Map 12 and encourage ongoing investment and infrastructure to support their growth Allow for a flexible approach to rural production activities in rural areas Recognise primary production as a priority in farming areas and avoid the permanent loss of productive agricultural land Locate rural residential development to minimise conflict with agricultural activities

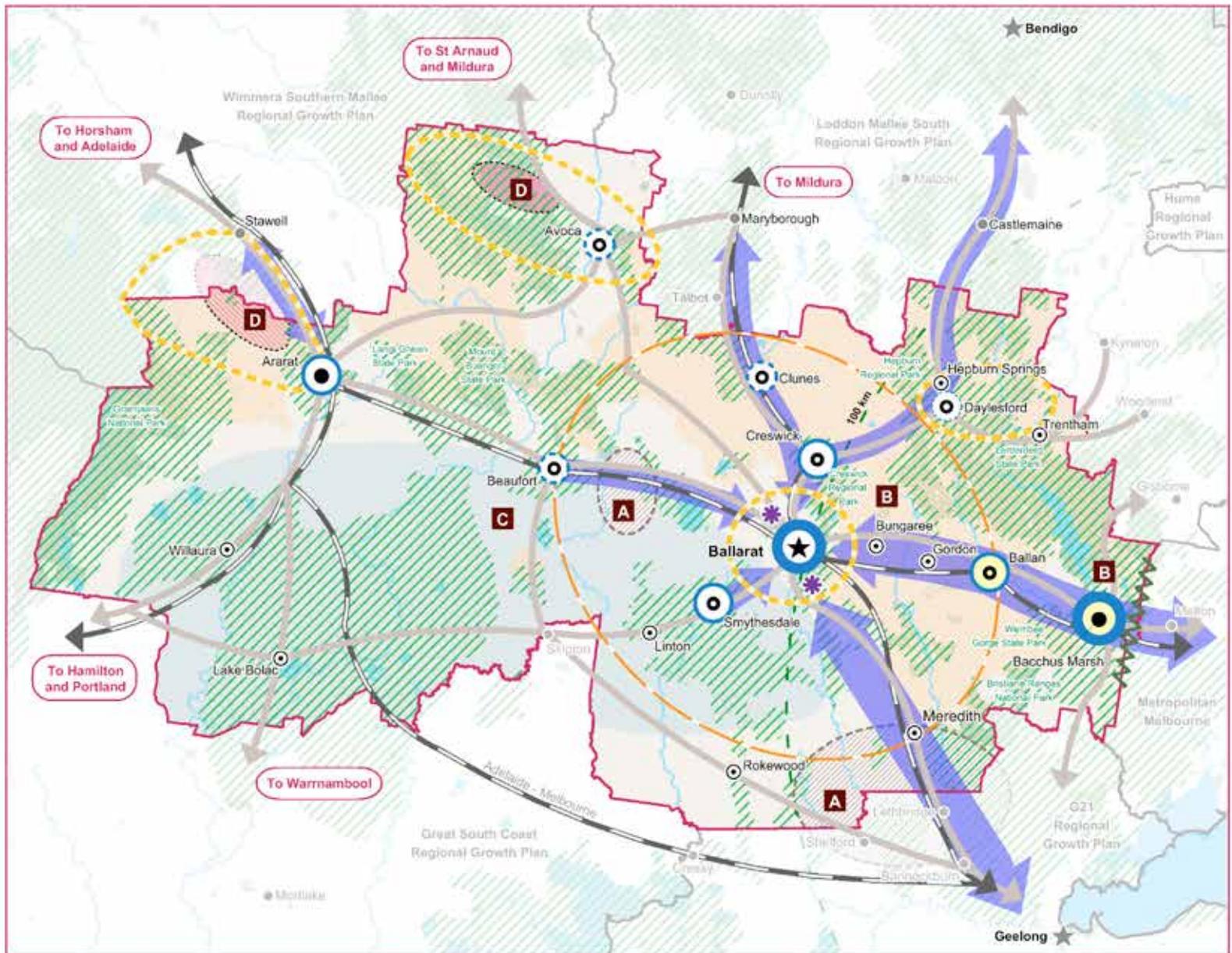
Principle	Overall key directions	Rationale	How (see Map 12 for more direction)
<p>9. The importance of cultural heritage and landscapes as economic and community assets should be recognised</p>	<ul style="list-style-type: none"> Identify and protect the region’s significant heritage and landscape assets Recognise the economic development and liveability benefits associated with the region’s cultural heritage and landscapes 	<p>The Central Highlands’ identity and liveability is closely linked to its cultural heritage, built environment and rural and natural landscapes. Goldfields heritage has specifically been recognised as a key opportunity for this region. The protection of these assets will enhance visitor experiences and encourage new residents to move to the region to experience high quality built and natural environments. These assets will be increasingly important in supporting the regional economy.</p>	<ul style="list-style-type: none"> Promote development and heritage protection that enhances the region’s goldfield heritage experiences Protect significant landscapes, including those identified on Map 12 Support tourism opportunities around cultural heritage, the built and natural environment Maintain a clear distinction between the rural character of the region and the Melbourne metropolitan area Focus development in and around existing settlements to avoid ribbon development along transport corridors



Enfield State Forest, Golden Plains Shire

PART D | REGIONAL GROWTH PLAN

Map 12: Central Highlands regional growth plan



SETTLEMENT NETWORK



Ballarat - Regional city

Reinforce the role of Ballarat as the main centre for regional growth, services and employment. Focus major growth to the west. Support the development of major regional facilities and encourage development of the Central Business District as a vibrant alternative to Melbourne.

Regional centre

Support the development of Ararat and Bacchus Marsh as the key service centre for each end of the region. Encourage further population growth in Ararat and support anticipated population growth in Bacchus Marsh by providing adequate land and infrastructure in appropriate locations.

Town

Continue to provide local and some sub-regional services. Support ongoing growth, particularly closer to the Melbourne and Ballarat hinterland where towns will provide a key opportunity to target growth pressure. Constrain the outward growth of Daylesford due to environmental assets and natural hazards.

Small town

Plan for ongoing sustainable growth and change. Ensure these communities can access services either within the town or within easy commuting distance.

Settlement break

Maintain a clear distinction between the Melbourne metropolitan area and the rural character of the Central Highlands.

MELBOURNE AND BALLARAT HINTERLANDS



Melbourne and Ballarat hinterlands

Manage growth pressure by directing it to well serviced settlements with good access to Melbourne or Ballarat, particularly Bacchus Marsh, Ballan, Creswick, Clunes, Beaufort and Smythesdale. Ensure appropriate provision of infrastructure in towns experiencing rapid population increases. Consolidate rural residential development to strategically planned locations to manage rural productivity, protect environmental assets, minimise exposure to natural hazards and support established settlements.

Plan Melbourne (Chapter 5 – State of Cities) identifies Bacchus Marsh and Ballan as peri-urban towns with potential to attract housing and population growth out of Melbourne.

CONNECTIVITY



Key relationship

Enhance the connectivity of the region's key centres to each other and key external centres where there are strong housing, employment and service relationships. Capitalise upon these links and relationships to stimulate growth and development in designated centres along these corridors. Support commuting to Ballarat along the Melbourne corridor.

Key transport link (road and rail)

Support ongoing improvements to the road and rail networks to improve access and connectivity. Ensure transport provision facilitates growth in the key locations identified in this plan. Provide access for freight to markets, particularly to ports and markets to the south.

ECONOMIC DEVELOPMENT



Employment

Ensure employment land is supplied in the regional city, regional centres and towns to encourage local employment and reduce the need for long-distance commuting. Grow key regional employment assets including the Ballarat Technology Park, Central Business District and Ballarat West Employment Zone. Recognise the need for new employment opportunities in peri-urban settlements to promote sustainable growth.

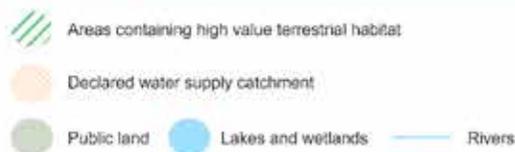
Agricultural asset

Support productive use of and investment in key regional agricultural assets to ensure the rural economy continues to grow and diversify. Protect these assets from incompatible uses.

Key tourism precinct

Support the development of the region's tourism sector and build on these iconic tourism precincts as regional drawcards.

ENVIRONMENT



Areas containing high value terrestrial habitat

Protect the region's environmental assets and recognise their role in supporting a range of environmental, economic and social benefits.

Declared water supply catchment

Ensure development is located to minimise impacts on water catchments. Support infrastructure improvements to help enhance these assets.



View from Mount Buninyong

PART E | DELIVERING REGIONAL GROWTH

17. Implementation

17.1 Planning schemes

The Central Highlands Regional Growth Plan will have status as part of the Victoria Planning Provisions and planning schemes. This will give the plan's strategic directions status in each local government area's planning scheme.

The Central Highlands region councils will work in partnership with the State Government to facilitate the required planning scheme amendment process and content as an immediate priority.

An Advisory Committee has been appointed to conduct a review of the State Planning Policy Framework in order to deliver regional growth plans and other major planning policies such as the new metropolitan planning strategy, *Plan Melbourne*.

The plan will guide and inform future strategic planning across the Central Highlands region, including future reviews of each council's Municipal Strategic Statement. The plan will help provide justification for future planning scheme amendments that are consistent with the plan.

The Central Highlands Regional Growth Plan will provide councils, government agencies and infrastructure providers in the region with a clearer regional land use context to inform and influence future decision making and investment, strategic planning, planning scheme amendments and local decisions.

This plan establishes a context for growth and settlement planning to inform and assist in the development of frameworks for town and city growth plans and infrastructure investment. More detailed planning will continue in partnership between local and state planning authorities. Careful monitoring of urban projects, land development and population change will be established during the life of the plan to assist in its delivery.

17.2 Links to Regional Strategic Plan implementation

The plan is closely aligned with the strategic framework established by the Central Highlands Regional Strategic Plan 2010. Implementation of this plan will also be considered in relation to other ongoing work to implement the strategic directions of the Central Highlands Regional Strategic Plan 2010. This will strengthen the capacity for achieving shared objectives and targeting efforts to secure endorsement and funding for the highest priorities in the region.

Further, opportunities for implementation of key directions and actions expressed in this plan will be explored with councils, state and federal governments, and the Regional Development Australia Grampians Committee. The Regional Development Australia Committee is a key stakeholder in overseeing the ongoing development and implementation of the Central Highlands Regional Strategic Plan 2010. It is appropriate to facilitate and ensure alignment between the regional growth plan and the regional strategic plan in order to promote outcomes that are consistent with common directions expressed in each plan.

Possible regional governance arrangements that can be harnessed to promote integrated planning and delivery in relation to agreed actions regarding future land use include partnering/integrating with an existing cross-government group that has alignment with the focus of the regional growth plan or establishing a new cross-government stakeholder group that has links to an existing regional planning governance structure.

17.3 A plan for implementation of actions

Implementation of this plan is critical to achieve its strategic directions for growth and change. An implementation plan will ensure that the region is able to respond to key regional challenges and strategic directions of the plan relating to infrastructure provision, key asset protection and management of future growth.

An implementation plan is critical to realising the future directions of this regional growth plan and ensuring it has a role in guiding land use and development as well as influencing the future delivery of other services and facilities. An implementation plan will be developed to accompany the final version of this plan. The plan has identified a number of further pieces of work or investigations that are required to improve land use planning policy and outcomes in the region. Opportunities to progress these studies will be identified as part of the implementation plan.

Short-term implementation priorities include:

- amending planning schemes to incorporate key elements of the plan
- identifying and agreeing on urgent detailed work and investigations to support the plan.

17.4 Review and performance

This plan will inform any subsequent review of the Central Highlands Regional Strategic Plan 2010.

The plan is intended to be a living and adaptable plan, able to respond to new data and information as it arises, including information from state or regional strategies and programs. The plan is to be reviewed on a four- to five-year cycle. Any review process will involve broad community and stakeholder engagement.

Implementation of this plan will be integrated with the overall implementation of the Central Highlands Regional Strategic Plan

2010 and included in the performance monitoring framework already established or being established in future, for the implementation of the Central Highlands Regional Strategic Plan 2010. This framework includes an assessment of performance and project progress and sets out performance measures for the key directions of the Central Highlands Regional Strategic Plan 2010.

17.5 Implementation summary

The key implementation actions, priorities, partners and responsibilities are summarised below:

Action	Priority	Timing	Lead responsibility	Key partners
1. Planning scheme implementation of regional growth plan	High	2013–2014	Department of Transport, Planning and Local Infrastructure	Central Highlands region councils
2. Implementation Plan	High	2014–2015	Central Highlands region lead governance entity	Central Highlands Regional Growth Plan project partners
3. Central Highlands region Municipal Strategic Statement reviews	Medium	To coincide with Municipal Strategic Statement review cycles	Central Highlands region councils	Department of Transport, Planning and Local Infrastructure
4. Review	Medium	2016–2018	Central Highlands region lead governance entity	Central Highlands Regional Growth Plan project partners

GLOSSARY

Aboriginal cultural heritage: means Aboriginal places, Aboriginal objects and Aboriginal human remains. They tell the story of Aboriginal use and occupation of the land. An Aboriginal place can be an area of land or water, a natural feature, formation or landscape, an archaeological site, as well as a building or structure. Aboriginal cultural heritage also includes intangible places where there may be no physical evidence of past cultural activities. These include places of spiritual or ceremonial significance, places where traditional plant or mineral resources occur, or trade and travel routes.

Bioenergy: energy generated from organic matter, such as agricultural waste.

Carbon farming: a method of allowing farmers and land managers to earn carbon credits by storing carbon or reducing greenhouse gas emissions on the land.

Carbon offset: credits for reductions in greenhouse gas emissions made at another location, such as wind farms, which create renewable energy and reduce the need for fossil fuel-powered energy.

Central Business District (CBD): the area comprising the core commercial, civic and community functions of a town.

Cultural heritage: captures both Aboriginal cultural heritage and historic heritage.

Declared Water Supply Catchments: catchment areas as proclaimed under the *Soil Conservation and Land Utilization Act 1958* in conjunction with the *Land Conservation Act 1970* and subsequently incorporated into the *Catchment and Land Protection Act 1994*.

Domestic wastewater management plan: a document seeking to reduce the potential health and environmental impacts of on-site wastewater disposal.

Earth resources: these comprise minerals, petroleum, gas extractive and geothermal industries.

Ecologically Sustainable Development: using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased.

Environmental asset: a tangible bio-physical element of the environment, such as terrestrial habitat, waterways, significant landscapes and soils.

Environmental value: the attributes of an environmental asset that make it valuable or important based on environmental, social or economic values.

Extractive Industry Interest Area (EIIA): identified areas around major centres in Victoria where it is possible that a quarry could be placed within defined constraints.

Freight and logistics precincts: places where large volumes of freight are received, stored and despatched. These precincts may support port, airport or rail and road intermodal terminals and may include manufacturing activity, warehouses and distribution centres within the broader precinct of complementary freight and freight-related activities.

Green break: an area of parkland, rural or uncultivated land on which building is restricted or prohibited.

Greenfield land: non-urban land designated for future urban development.

Higher order services: services that are only provided in a limited number of locations and have a large catchment area, such as a university or department store.

Historic heritage: refers to the fabric of our past that we value today and includes archaeological sites, buildings and precincts, structures, gardens, trees, cemeteries, cultural landscapes, shipwrecks and significant objects and artefacts.

Housing diversity: the provision of a range of different housing types to suit different ages, lifestyles and incomes.

ICT: information and communications technology.

Industry or agricultural clusters: geographic concentration of businesses and activities that relate to each other or work together.

Infill development: the development of additional dwellings in established urban areas.

Intensive agriculture: land used to intensively produce agricultural products through ventures such as poultry farms, piggeries, feedlots, aquaculture, hydroponics, greenhouses and glasshouses. This includes 'intensive animal husbandry' and intensive 'crop raising' as defined in planning schemes.

Mixed use development: a development that integrates two or more uses, such as housing and retail.

National Broadband Network (NBN): high-speed internet network being provided across Australia.

Natural hazard: a naturally occurring source of potential harm or a situation with the potential to cause loss, for example bushfire or flood.

Natural resources: naturally occurring commodities such as oil, gas, sand and stone, minerals, fisheries, timber or places of solar or geothermal energy potential.

Nature-based tourism: any activity that relies on experiences directly related to natural attractions including ecotourism, adventure tourism, wildlife tourism and extractive tourism, for example, fishing or gold panning.

Overlays: planning scheme provisions generally related to a particular issue, such as heritage or flood.

Peri-urban hinterland: the area around a large settlement into which cities expand or which cities influence.

Planning scheme: policies and provisions for the use, development and protection of land prepared by councils or the Minister for Planning.

Primary production: growing, harvesting or extraction of primary (raw) products. Major industries in this sector include agriculture, fishing, aquaculture, forestry and all mining and quarrying industries.

Regional catchment strategy: a document setting out the management of natural resources, such as rivers, wetlands, terrestrial habitat and agricultural land.

Regional cities: the 10 largest cities outside metropolitan Melbourne (Ballarat, Bendigo, Geelong, Horsham, Latrobe, Mildura, Shepparton, Warrnambool, Wangaratta and Wodonga). The relevant municipalities are represented by the Regional Cities Victoria group and together they

advocate a whole-of-government approach to delivering services and infrastructure.

Registered Aboriginal Party: represents Aboriginal people in the management and protection of Aboriginal cultural heritage.

Retained environmental networks: areas of public land generated as part of a large-scale development to provide permanent protection for native vegetation. These areas can become public recreation and conservation-based reserves, and can be used to enhance the values of existing native vegetation.

Sensitive uses: land uses that have high amenity expectations such as housing, schools or hospitals.

Social infrastructure: includes community facilities, services, and networks that help communities meet their social needs and maximise their potential wellbeing such as, sports and recreation facilities, schools and hospitals.

Terrestrial habitats: combinations of biological and physical features of the landscape (including native vegetation, fallen timber and litter, soil, rocks, etc) that enable populations of each native plant or animal species (or group of species) to live and reproduce. Features can be considered at the site scale, for example, the food sources used by individuals, and the landscape scale, for example, the linkages used for movement between areas, or the refuges used to cope with disturbance events.

Town centre: the area comprising the core commercial, civic and community functions of a town.

Transport corridor: a linear tract of land that contains lines of transportation such as highways or railway lines.

Urban consolidation: the process of increasing or maintaining the density of housing in established areas.

Water sensitive urban design: a planning and engineering design approach that integrates the urban water cycle (including stormwater, groundwater and wastewater management and water supply) into the design of urban areas to minimise environmental degradation and improve aesthetic and recreational appeal.



