

21.02 OVERVIEW OF THE CITY OF GREATER BENDIGO

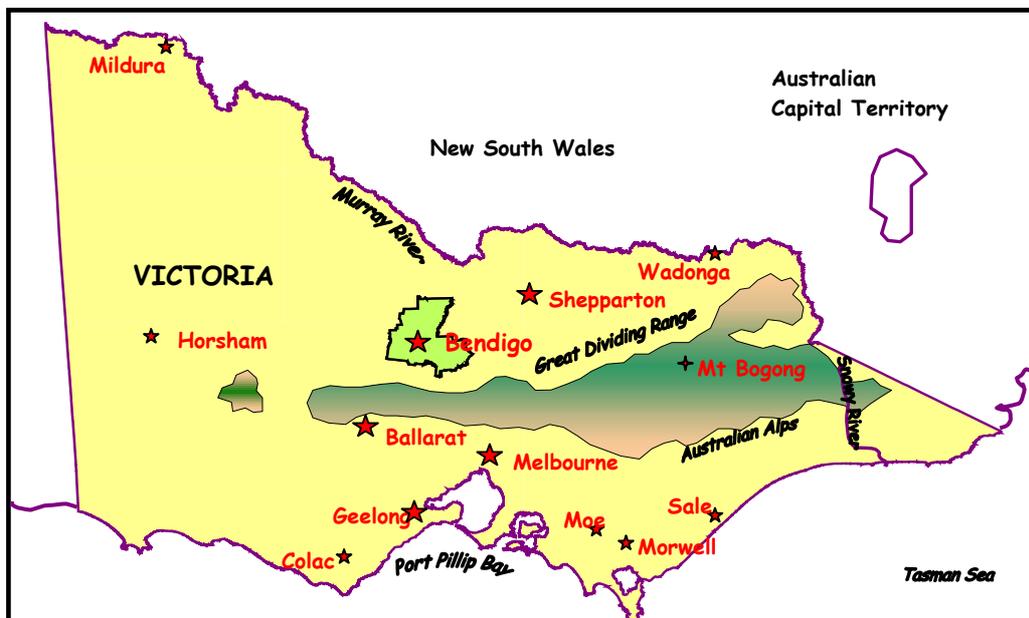
21.02-1 Location

The City of Greater Bendigo covers an area of approximately 2,995 km² and is located in north central Victoria approximately 150 kilometres north west of Melbourne. It is surrounded by the municipalities of Campaspe, Strathbogie, Mitchell, Mount Alexander and Loddon Shires.

The municipality is centred on the Bendigo urban area. Bendigo is Victoria's fourth largest urban centre and the major regional centre for north central Victoria. The regional hinterland surrounding Bendigo contains diverse agricultural activities, natural resources and a number of smaller towns, Heathcote being the largest.

The municipality is strategically located in north central Victoria with excellent access links to Melbourne and other regional cities and towns.

City of Greater Bendigo: Regional Context



Source: COGB Database 2000

21.02-2 Population

The City of Greater Bendigo continues to experience steady population growth, which is characterised in the years after the 1986 Census by a net migration into the Bendigo urban area of about 1,000 persons per annum. This in-migration primarily consists of 30 to 40 year olds and 15 to 19 year olds attracted by educational, employment and other opportunities. The net outward migration was made up mainly with 20 to 29 year olds leaving for careers elsewhere.

The projected rate of population growth within the municipality until 2021 is shown in Table 1. This growth indicates that significant changes in the requirements for accommodation, education, community services, shopping and employment will occur.

Table 1: Population Projection, City of Greater Bendigo, 1996 to 2021

Year	Projection
1996	84, 495
2001	87, 153
2011	92, 280
2021	98, 370

Source: *Victoria in Future, Department of Infrastructure, 2000(DI, 2000)*

Table 2 projects important changes to the population structure through the period to 2021. Under this projection, the structure of the population would include an increase in the proportion of people over middle age (ie. 50+ year olds).

Table 2: Projected Percentage Share of Total Resident Population by Age Group, City of Greater Bendigo, 1996 to 2021.

Year	1996	2001	2011	2021
0-4 years	7.2	6.4	5.3	5.0
5-17 years	20.0	19.1	15.9	14.0
18-24 years	10.7	10.4	9.9	8.2
25-34 years	13.3	12.3	11.3	11.0
35-49 years	21.8	21.5	19.3	17.8
50-59 years	9.3	11.8	14.8	13.8
60-69 years	8.0	8.1	12.0	15.0
70-84 years	8.1	8.7	9.4	12.9
85 years and over	1.6	1.7	2.0	2.2

Source: *(DI, 2000)*

The shift in the population structure also means there will be a lower proportion of young to middle-aged families and an increase in mature families, with implications for retailing patterns, recreational and community service requirements.

Table 3 indicates that along with the changing age structure, a corresponding decrease in the numbers of persons per household will occur, reducing from 2.62 in 1996 to 2.21 by 2021 (DI, 2000). There will be marked implications from these trends in terms of a continuing trend towards medium density housing development in urban Bendigo and other urban centres.

Table 3: Projected Number of Households and Household Size, City of Greater Bendigo, 1996 to 2021.

Year	Number of Households	Household Size
1996	31, 715	2.62
2001	33, 775	2.53
2011	38, 499	2.35
2021	43, 516	2.21

Source: (DI, '96)

21.02-3 Settlement

General

The City of Greater Bendigo centres on the Bendigo urban area, which contains important regional facilities for commerce, industry, education, tourism, communications, health and community services.

In view of its natural advantages, including its strategic location offering proximity to other regions and major transport networks, its natural resources, lifestyle opportunities and climate, Bendigo will continue to grow steadily.

A number of small towns, including Heathcote, Elmore, Goornong, Marong, Redesdale and Axedale are located within the municipality. These towns offer opportunities for a range of activities including tourism, housing, home occupation, service business and extractive industry.

The hinterland of Bendigo and Heathcote contains extensive areas of former farmland which have been fragmented to create hobby farms. These areas offer attractive rural retreat living opportunities and are a major attractor of new residents to the municipality.

Neighbourhood Character

The residential areas of Greater Bendigo represent a diverse and somewhat disconnected collection of neighbourhoods. This disconnected pattern of settlements, combined with a varied topography, has resulted in a wide variety of lot shapes and sizes in some areas. Despite this, there seems today to be a general consistency of position of dwellings on their site.

Another relatively consistent characteristic is the apparent closeness of the 'rural' environment to many suburbs. This is usually manifested in a backdrop of trees visible behind and between dwellings, on the skyline or at the end of the street. It is an important characteristic of Greater Bendigo, one that is emphasised by the generous side setbacks between dwellings in most areas. Without these gaps, these neighbourhoods would have a much more 'urban' feel.

The residents of Greater Bendigo value its neighbourhood character and as a consequence Council is committed to ensuring the neighbourhood character of Greater Bendigo is both protected and enhanced through new residential developments.

Council has undertaken a comprehensive 'Residential Character Study' that assesses the urban areas of Greater Bendigo including the developing town of Strathfieldsaye and the township of Heathcote. The Study sets out the means by which to protect and enhance the valued characteristics of Greater Bendigo.

The recommendations of the Study have been incorporated into this planning scheme through the following mechanisms:

- A number of local policies are included at Clause 22.14-28. These policies provide guidance to Council, planning officers, developers and the community regarding the desired future character of particular areas of the municipality.
- In some areas a Neighbourhood Character Overlay has been introduced. In these areas it is considered that more stringent permit requirements are necessary to ensure the future character of these areas are protected.
- A Significant Landscape Overlay has been introduced in some areas to protect native vegetation, which is considered to be one of the critical elements that form the desired future character of these areas.

21.02-4 Environment

Land and Water

The City of Greater Bendigo contains a diverse range of land types, from the granite hills of Metcalfe to the ridges and valleys in the centre of the municipality to the fertile plains in the north and west.

The municipality is located within the Murray-Darling Basin, the North Central Catchment Region and the catchments of the Loddon and Campaspe Rivers with the exception of a small area in the east which is within the Goulburn Broken Catchment Region. The ongoing implementation of the regional catchment management strategies for the North Central and Goulburn Broken regions needs to be coordinated with the planning scheme.

Lake Eppalock is an important resource which provides an increasing proportion of Bendigo's domestic water supply.

The sustainable use of land and water is important and the protection of these assets and values is linked to the economy, culture and environment aspects of Greater Bendigo and the region.

There is also a need to protect both surface and groundwater from high nutrient loads and from the impacts of dry land salinity and erosion.

The protection of these resources is dependent on land use and land management practices in both urban and rural areas.

Conservation of flora and fauna

The Box Ironbark region is a distinctive natural area of Victoria. Its diverse vegetation covers at least 17 Ecological Vegetation Classes, and also has a distinctive fauna.

More than 200 species of birds, 44 species of mammals, 40 species of reptiles and 12 species of frogs are known from the region. The diversity of invertebrates is significant with over 200 ant species, and 33 families of spiders, while beetles, flies, and bugs are among the most abundant ground dwelling groups.

In the City of Greater Bendigo area, at least 50 flora species have a threatened status. These include Ausfeld's Wattle, Whirrikee Wattle, Whipstick Westringia, Crimson Spider Orchid, Maroon Leek Orchid, Kamarooka Mallee, and Hairy Tails.

Threatened fauna species include the Tuan, Powerful Owl, Barking Owl, Swift Parrot, Regent Honeyeater, Woodland Blind Snake, and Pink-tailed Worm-lizard.

Large areas of forest are essential for flora and fauna and, within these, gully habitats are sites of high faunal richness and abundance. Important habitat resources include large old trees and an undisturbed ground layer.

In the Bendigo region, examples of these forests are found in the Whipstick and Kamarooka State Parks, the One Tree Hill and Eaglehawk Regional Parks, the Maiden Gully, Marong, Wellsford and Mandurang State Forests, Diamond Hill Historic Reserve and various flora and fauna reserves and bushland reserves. Various reserves include Pilchers Bridge, Rocky Rises and Bendigo Creek, as well as privately owned-forested land adjoining and linking these areas and other localities.

Key environmental and recreational areas include Lake Eppalock and the Kamarooka and Whipstick State Parks. Bendigo is surrounded by heavily forested areas that along with areas of native vegetation on roadsides and waterways, provide an important framework of remnant habitat and wildlife corridors. These areas have also become an increasingly important recreation resource.

Open Space

The municipality has a significant amount of large open space reserves, either under Crown or Council ownership. The major reserves include the One Tree Hill Regional Park and a number of State forest areas, including Wellsford, Marong, Mandurang and Longlea.

The bushland trails, such as the O'Keefe and Bendigo Trails provide important linkages between these open spaces, which provide for human access as well as wildlife corridors. There is potential to expand this network over time.

Watercourse reserves, particularly along the Coliban and Campaspe Rivers provide access for fishing and passive recreation. A major water resource is Lake Eppalock which provides for active and passive recreation on the water, the foreshore and the surrounding forests. The lake may have potential for much greater recreational activity in the long term, consistent with its role as an urban water supply.

The Bendigo urban area also contains important open space areas, including the major gardens: Rosalind Park, Canterbury Gardens, Lake Weeroona and White Hills Botanical Gardens. In addition to providing for valuable passive recreation, these areas make an important contribution to the image of the municipality.

There are a number of linear reserves within the urban area and a great potential to increase and improve these reserves using surplus Crown land and former race reserves. In many cases, these reserves can be used to link the major open space reserves, which provide exclusively for pedestrian and cyclists.

The municipality is very well catered with facilities for active recreation. It is important that this reputation be protected in order to continue to serve residents well and to attract major regional and state events.

The Heathcote State Forest provide an area for active recreation pursuits such as horse riding events, car rallies and gold fossicking. Recreation pursuits in the Bendigo State Forest are usually more passive and include bushwalking, orienteering and sightseeing.

Built Heritage

Greater Bendigo has a large number of significant built heritage assets of local, state and national significance. There are buildings, sites and precincts dating from all decades of post-contact settlement since 1850's, following the discovery of gold, throughout the municipality. The total complex of buildings, infrastructure, urban spaces and natural resources represent the most significant asset and resource in central Victoria.

Heritage is an important part of the economy of the municipality due to its role in attracting tourists, renovators and new residents who bring economic development initiatives and assets.

21.02-5 Residential Growth

Urban Housing

Housing trends within the Bendigo urban area will continue towards medium density housing, including the creation of smaller residential lots as infill in established neighbourhoods and within new residential areas where high standards of urban design, amenity and accessibility will be anticipated by residents.

Small towns offer attractive lifestyles stemming from their community spirit, relative peace and quiet, safety and access to rural environments. This lifestyle quality can be used to attract new residents to take up housing infill opportunities, which in turn will make for more efficient use of exiting infrastructure. Promoting these possibilities will help small towns to survive and grow.

Rural Living

Significant areas of the municipality surrounding Bendigo and Heathcote provide a rural lifestyle in the form of non-commercial hobby farming, as well as more general low density residential living. This form of housing tends to be concentrated in the Strathfieldsaye and Heathcote areas, close to the services of Bendigo, and to recreation opportunities, such as Lake Eppalock. Rural living is also found in other areas of the municipality.

Wildfire hazard is also an issue with rural living development, especially in the bushland of Greater Bendigo, where it creates personal and property safety risks and increased infrastructure costs. Ultimately such hazards can threaten the integrity of the bushland network on private and public land.

An opportunity exists to introduce a more comprehensive management approach to this style of development in the future. Key elements should include an understanding of the environmental and economic impacts of this type of development, coupled with recognition that this is an important and legitimate lifestyle choice that has come to characterise the region.

21.02-6 Economic Development

Activity Centres

There is a well-established hierarchy of business centres within the municipality. It is vital that on a regional level these centres maintain a demand-supply balance and continue to fulfil complementary roles. Business centres must meet the needs of their catchments and also optimise the potential for attracting retail expenditure.

Business centres also fulfil a community role and are an outward expression of the amenity and success of the municipality. Therefore ongoing management of the design, visual quality and use of commercial buildings and the way they complement the centre is important.

The Bendigo Central Activities District is the major retail centre within the municipality and within a much larger catchment of north central Victoria.

Industry

It was the discovery and exploitation of rich deep gold deposits in quartz reefs in the late nineteenth century which led to the formation of large companies operating mines which then gave rise to the development of the region's manufacturing industry.

In recent years, the municipality has relied less on the manufacturing industry however economic development through secondary industries remains an important asset and one that the municipality will need to continue to foster.

There are large areas set aside for industrial development, particularly in the Bendigo urban area. However, many of these areas are not available for development by new, large industries because of a combination of factors including the availability of large lots, immediate access to reticulated services, direct access to major transport networks and the proximity of existing housing.

The food manufacturing industry sector is to be encouraged to locate in the East Bendigo Food Manufacturing Precinct, located in Victa Road, Wellsford. This precinct has been specifically identified for the promotion and expansion of the food manufacturing sector due to its isolation, ability to be fully serviced, location in the primary node for industrial development in the municipality and access to suppliers after Victa Road has been realigned and reconstructed.

Council recognises the need for a definitive plan for the use of existing industrial areas, and for new areas particularly addressing the above problems and providing for the overall coordination and marketing of industrial areas. The *Bendigo Industrial Land Strategy 2002* consolidates and promotes industrial development within particular locations of Bendigo. The Strategy provides an overall evaluation of industry trends and development patterns. It identifies East Bendigo as the area for preferred industry investment, marketing and industrial expansion potential for Bendigo.

Tourism

The region's heritage and natural attractions form the basis of the municipality's capacity to attract domestic and international tourists. Major tourist attractions include the historic streetscapes, the Bendigo Pottery at Epsom, the Central Deborah Mine, Bendigo's 'Talking' Trams, the Golden Dragon Museum and Chinese Gardens, Lake Eppalock and the Bendigo Art Gallery. Recently developed tourist facilities which have become important attractions include Discovery Science and Technology Centre, the Campaspe Run and the Visitor Information and Interpretive Centre. Major annual festivals and events include the Bendigo Easter Fair, the Elmore Field Days, the Bendigo Cup, the Eaglehawk Dahlia and Arts Festival, the Golden Grape Festival and the internationally recognised Bendigo Swap Meet for car parts.

The location and infrastructure of Greater Bendigo enhances the municipality's attraction. The municipality is at the boundary of the Goldfields Region, and forms a gateway to the Murray River and its attractions. The transport routes, attractions and facilities in the municipality reinforce this gateway.

Recreation and sporting facilities and activities are pursued at a wide range of venues in the Region including the Queen Elizabeth Oval, Bendigo Racecourse, Aquatic Centre, Lake Eppalock, Lake Weeroona, and various tennis courts, swimming pools and golf courses. The restoration of the Capital Theatre gives Bendigo a major performing arts facility within an outstanding heritage setting. Similar urban design projects will further improve the municipality's tourism attraction.

The municipality's unique natural environment is also an attraction for tourism. The significant forest system provides important added opportunities, and the attractions vary

throughout the seasons. This component has much potential for sensitive and compatible activities.

Agriculture

Greater Bendigo is a part of the Murray-Darling basin, Australia's largest and most productive agricultural area. It is also a fragile catchment where, increasingly, a range of environmental pressures impact on social and economic activities. These affect both urban and non-urban areas through impact on water quality, agricultural productivity and the maintenance of remnant vegetation and habitat values. On a regional level, salinity, soil health, bio-diversity and water resources are seen as priority land management issues.

Much of the municipality is not highly productive agricultural land, although the Campaspe River, the Bendigo Creek and Bullock Creek areas provide an important agricultural resource. Despite these limitations rural Bendigo produces a rural product worth about \$90m, or 1% of Victoria's total, mainly through cropping, grazing and through more intensive rural industry, such as poultry and pigs. The protection of assets including land, water and transport infrastructure is vital in ensuring continued production and development.

Intensive agricultural industries and rural dependent industries are important to the future of Greater Bendigo. The municipality's strategic location on key transport corridors and within a region with strong cropping and grazing as its base, assist in ensuring that the processing and enhancing of these products will remain important. The area has also seen the growth of new and diverse rural based industries. The infrastructure and assets which support these enterprises, including the land and the Bendigo Livestock Exchange, needed to be protected.

Forestry

Forest industries on Crown land, as well as private forestry, including farm-forestry, are an important component of the economy of Greater Bendigo. Timber production on private land, particularly small-scale farm-forestry, can also generate economic and environmental benefits, especially as strategic approaches to revegetation can provide economic benefits to landowners.

The Bendigo and Heathcote State Forests provide employment and support other forest-based industries such as apiculture, eucalyptus oil production, extractive and mining. Overall the box-ironbark forests of the central Victorian Goldfields are a significant Statewide source of durable timbers, honey, gold and extractive materials. On a local basis these forests are the main source of durable fencing timbers and on a regional level supply domestic and commercial firewood.

While the average annual rainfall in the Bendigo area limits the opportunity for establishment of viable plantations of *Pinus radiata*, there may be interest in the future in the establishment of plantations of durable species eucalypts for furniture and structural timbers.

The infrastructure which supports these industries should be managed to allow appropriate ongoing development of forestry in Greater Bendigo.

Mineral and Stone Resource Exploitation

Greater Bendigo straddles an historic goldfield and the wealth created by mining was the foundation of the municipality's development. Although not a major contributor to employment in the City of Greater Bendigo, mining and extractive industry are significant and growing economic industries.

A major gold mine is located at Fosterville, and mining operations have been approved at Eaglehawk, Kangaroo Flat and Costerfield. The Bendigo Mining NL \$35 million underground exploration project has commenced at Kangaroo Flat.

The protection of future extractive resources, particularly potential clay and stone resources is significant to local industry, and local infrastructure. Potential sites need to be managed to protect their use, and to prevent pressures from other land uses, including residential development.

Surplus Public Land

A number of parcels of surplus public land are scattered throughout the municipality including a large parcel of Commonwealth-owned land at Junortoun and land at the Coliban Water Headquarters and Depot at Alder Street, Golden Square. Council needs to be pro-active in identifying future options for such parcels of land in order to ensure that development occurs in a sound manner based on strategic planning principles.

21.02-7 Infrastructure

Transport Network

The municipality is well served by transport links. The Calder Highway and Calder Alternative Highway run through the municipality providing road connections to Melbourne and Mildura. The Calder Highway is being progressively improved. The Northern Highway runs from Melbourne through Heathcote and Elmore to the Murray River at Echuca, connecting with the McIvor Highway to Bendigo. The Loddon Valley Highway runs northward through Loddon Shire to Kerang, connecting with the Murray Valley Highway to Swan Hill and Mildura.

In addition an “inner box” and an “outer box” system of roads provide bypasses to the inner urban area of Bendigo, allowing vehicles to pass through the urban area with greater speed and efficiency, whilst removing unnecessary traffic from the centre of town.

The completion of the outer box network via a new route through the East Bendigo Industrial Precinct connecting the McIvor Highway to the Midland Highway will further enhance the development of this area.

The municipality is also served by a public transport system, which comprises of an urban bus service, train services, road coach services and school bus services.

The Melbourne-Bendigo train is well patronised. Sprinter trains are used at peak times, such as weekday mornings and evenings, to significantly reduce travel times to and from Melbourne.

Improvements to these services will increase the municipality’s ability to attract business and tourists and to improve the accessibility of residents to existing services and facilities.

Bendigo Aerodrome

The Bendigo Aerodrome is an important regional transport node as well as a growing home for local small business and recreational activities. It is recognised that the Aerodrome can provide a greater contribution by providing opportunities for business growth, tourism and recreation.

The Aerodrome will be developed as a modern, safe and efficient transportation facility. It will also include an aviation business park with the capacity to encourage continued growth and to convey a dynamic image of the municipality.

Community Facilities

Bendigo has an excellent range of educational and health services which are well utilised by the municipality’s residents and the wider community in north central Victoria. Services include two public hospitals, a major private hospital, creches, primary and secondary schools, Bendigo Regional Institute of TAFE and Latrobe University. Aged care facilities

include a number of homes for the aged. Education and health services are vital components of the employment base and economy of Greater Bendigo.

Water and Sewerage

The urban centres of Bendigo and Heathcote have town water supplied by Coliban Water. Water will be improved to a good quality standard by the end of 2000.

Other water infrastructure includes the Coliban Main Channel which carries water from reservoirs in the Malmsbury area to Bendigo for urban supply, and Lake Eppalock which supplies an increasing proportion of Bendigo's urban water requirements.

Reticulated sewerage infrastructure, already available in Bendigo and Heathcote, is presently being provided to the outlying low-density residential areas of Strathfieldsaye, Maiden Gully and Epsom-Huntly. Programs have also been developed to provide reticulated sewerage infrastructure to the Marong and Axedale townships by the year 2000. This infrastructure will provide additional infill housing opportunities.