

# Victoria's regional centres – a generation of change

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## Bendigo

Ballarat and Bendigo share similar characteristics, both are about half the size of Geelong, located inland, and more distant from Melbourne. Bendigo had a 2006 population of almost 72,000 persons and is located about 125km northwest of Melbourne. Its initial rapid expansion, both economically and socially, was fuelled by the discovery of gold deposits in the 1850s. This impetus for settlement contrasts with most other towns in regional Victoria, which were located near a supply of water or at transport junctions. The wealth generated from the mining of gold was considerable, resulting in an architectural legacy that is reflected in the number of historic buildings that characterise the inner area. In the twentieth century the manufacturing sector developed as the gold deposits were depleted, but in more recent years the service sector, particularly retail, health, education and tourism, has become more prominent.

An important distinguishing feature of suburban development between the large regional centres and in Melbourne is the different time scales at which this occurs. In Melbourne, it is common for suburbs to become established within a short space of time due to the volume of growth. As such, the development of a suburb can often be ascribed to a particular era. This is not necessarily the case in the large regional centres, where suburbs can develop over many decades and therefore incorporate cycles of growth and decline in the same area. Examples of these suburbs include Belmont in Geelong, Mount Helen in Ballarat, and Kangaroo Flat in Bendigo.

This report refers to the urban area of Bendigo and its suburbs, as opposed to the municipality of Greater Bendigo. In *Towns in Time*, the Collection Districts (CDs) defined in the Census of Population and Housing form the basis for the definition of the Bendigo urban area. It is an amalgamation of contiguous CDs that essentially comprise the built up area, though in this case, it does include Strathfieldsaye. It therefore excludes separate towns such as Maiden Gully. Suburbs are also formed by an amalgamation of CDs. A map showing the suburbs of Bendigo is included in Appendix 1.



*The eastern suburbs of Bendigo grew rapidly during the 1980s and 1990s.*

# 1 Population change

Trends in Bendigo differ from the other regional centres. The volume of growth over the twenty five years was some 16,270 persons, reaching a population of 71,940 in 2006. This volume compares to the figures of 9,720 in Geelong and 9,420 in Ballarat. Due to the higher volume and rate of growth in Bendigo, the difference between its population and that of Ballarat narrowed significantly. In 1981, there was a differential of some 9,940 persons, but this declined to 3,080 by 2006. While Bendigo's population growth did slow in the early 1990s, the rate recorded (0.6%) was still on a par with the Victorian figure. In 2001-06, the population growth rate was 1.3% per annum, which was higher than Geelong and Ballarat, and slightly above the Victorian figure of 1.1% (Figure 1).

TABLE 1: POPULATION CHANGE, BENDIGO, 1981-2006

	Population	Growth [%]*	Growth [number]**
1981	55,665	-	-
1986	58,351	0.9%	2,686
1991	62,608	1.4%	4,257
1996	64,381	0.6%	1,773
2001	67,600	1.0%	3,219
2006	71,935	1.3%	4,335

\* Annual average growth rate, previous five years

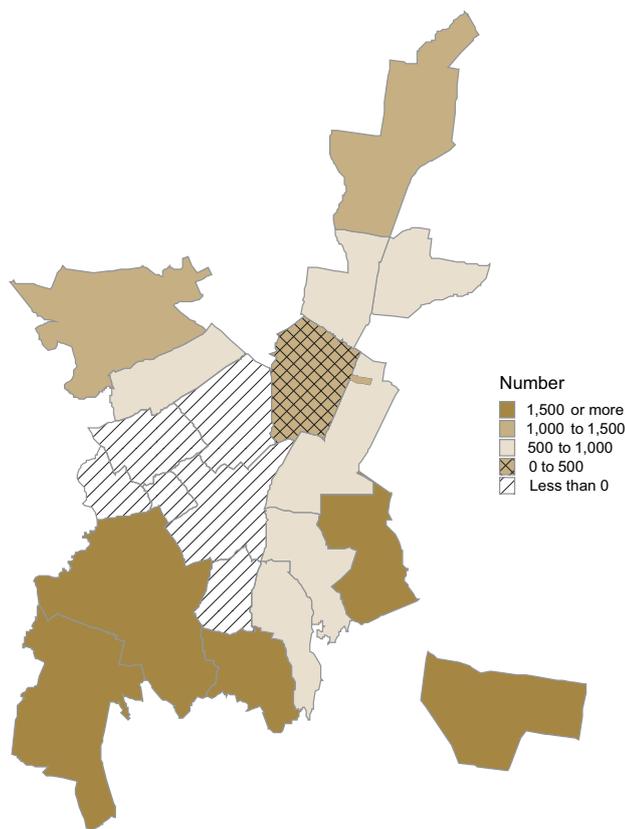
\*\* Absolute growth, previous five years

Source: DPCD, *Towns in Time*, (2008)

Compared to Geelong and Ballarat, stronger population growth in Bendigo resulted in slightly different patterns of change within the town (Figure 1). Population loss over the twenty five years was confined to the central core and surrounding older suburbs, while between 2001 and 2006, just two suburbs recorded a decline – Long Gully (just 9 persons) and Bendigo (suburb – 264 persons). Bendigo (suburb) was the most populous in 1981, but it was overtaken by the rapidly growing southern suburbs of Golden Square and Kangaroo Flat by 2006.

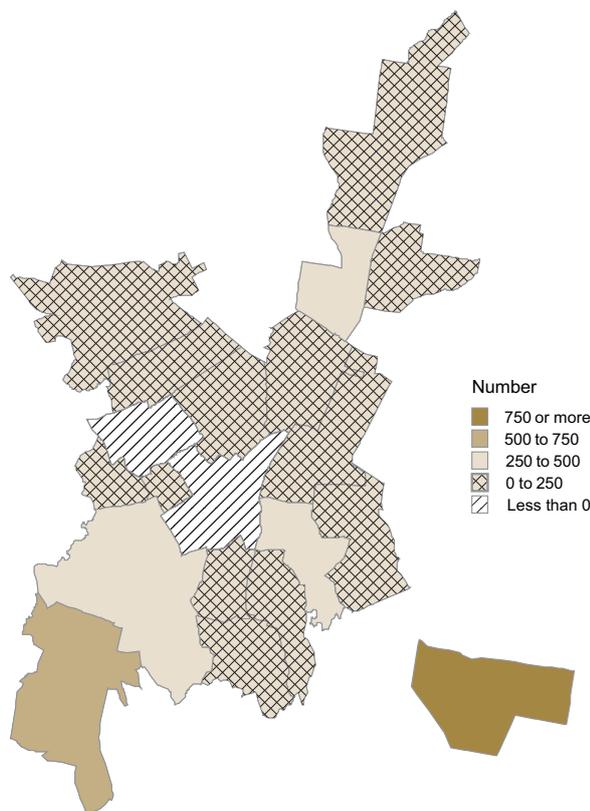
In common with Ballarat's central core, there is little evidence of a population turnaround and residential development – the number of dwellings in Bendigo (suburb) also declined suggesting that conversion to non-residential uses continues. Long Gully is a maturing area that, in common with Ballarat's Wendouree, has a high proportion of social housing and little redevelopment of the housing stock, resulting in stagnant population growth.

FIGURE 1: POPULATION CHANGE, BENDIGO SUBURBS, 1981-2006



Source: DPCD, *Suburbs in Time*, (2008)

FIGURE 2: POPULATION CHANGE, BENDIGO SUBURBS, 2001-2006



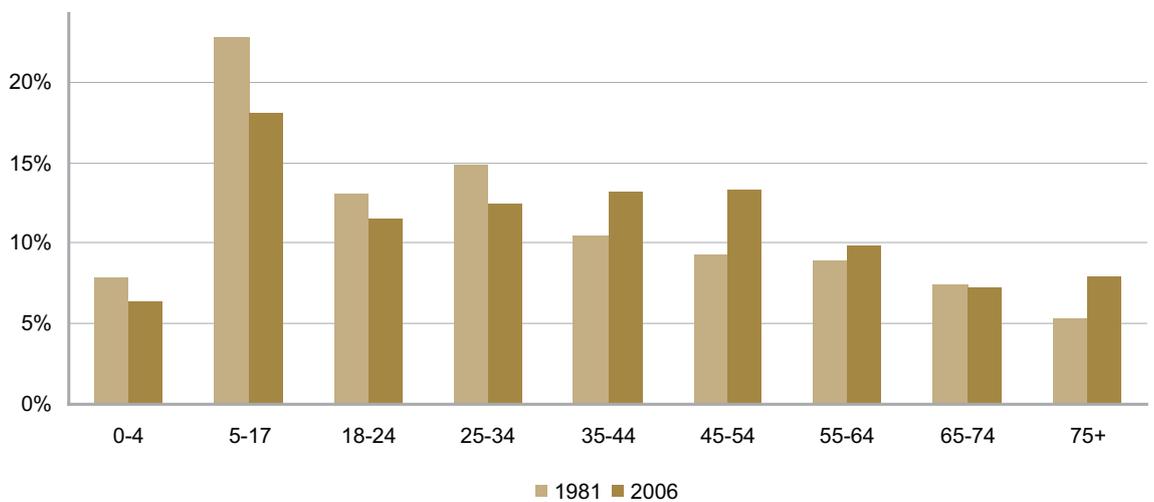
Source: DPCD, *Duburbs in Time*, (2008)

Several suburbs in Bendigo exhibited strong population growth over the period 1981-2006, particularly on the southern fringe and in the satellite suburb of Strathfieldsaye. The largest volume of growth was recorded in Kangaroo Flat (3,250 persons), followed by Strathdale (2,640) and Strathfieldsaye (2,523). Strathfieldsaye continued to grow strongly between 2001 and 2006 as more land was released for residential development. This suburb is not contiguous with the rest of Bendigo – its growth is the result of strategic planning which recognises the constraints to outward expansion imposed by the Greater Bendigo National Park, necessitating a “jump” to a more distant location. The recent population growth in Strathfieldsaye contrasts with Strathdale, on Bendigo’s eastern edge, which developed mainly in the 1980s and recorded the majority of its growth in this time. Between 1981 and 1991, the annual average growth rate was 5.1%, reflecting the movement of family households into the suburb. This declined to just 0.8% between 2001 and 2006, indicating a more mature suburb with slower growth, an older age profile and changing family composition. The growth of Kangaroo Flat has been relatively steady over the period 1981-2006, but has been consistently higher than that of Bendigo as a whole. Between 2001 and 2006, the annual average growth rate was 1.9% compared to 1.3% for the whole urban area. As well as being constrained by the National Park, the available land supply is largely exhausted in both Strathdale and Kangaroo Flat. This indicates that future growth of Bendigo will occur in other places such as Strathfieldsaye.

## 2 Age structure

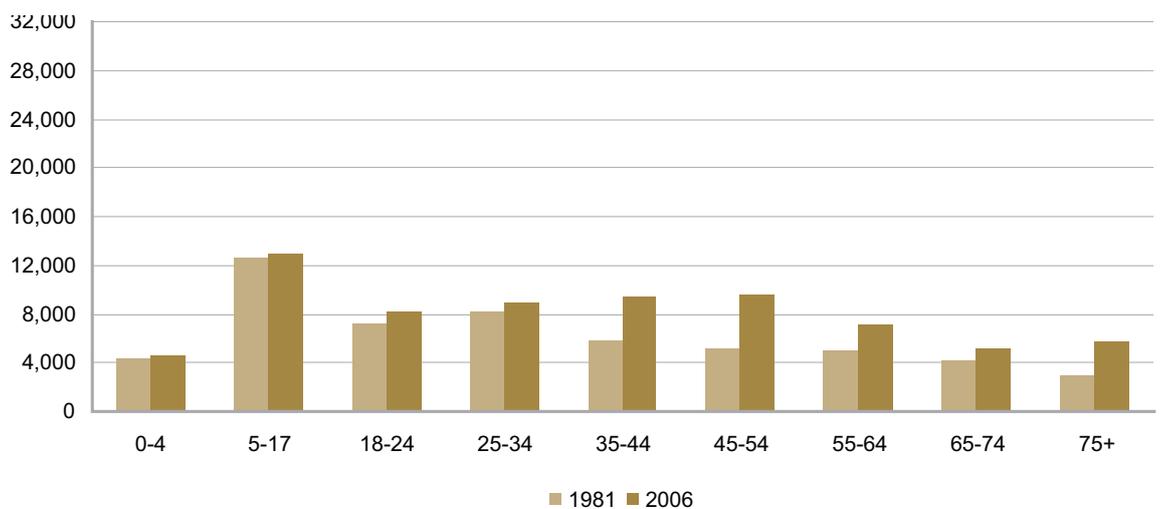
Changes in the age structure are important because a significant amount of service provision is age dependent. Rapid population growth in Bendigo meant that all age cohorts grew between 1981 and 2006, but the ageing trend was more significant with some of the older age groups demonstrating large increases. Persons aged 75 plus comprised 5% of the population in 1981, but this increased to 8% by 2006. In numerical terms, the population doubled from 2,990 to 5,720. At the other end of the scale, while the increase for the 0-4 and 5-17 year cohorts was minimal, Bendigo was the only large regional centre to record an increase in the number of young persons. Nevertheless, the increase in numbers did not translate to an increase in the proportion – the 5-17 years cohort declined from 23% to 18% of the population.

FIGURE 3: AGE STRUCTURE OF BENDIGO, 1981 AND 2006 [PERCENTAGE]



Source: DPCD, *Towns in Time*, (2008)

FIGURE 3: AGE STRUCTURE OF BENDIGO, 1981 AND 2006 [NUMBER]

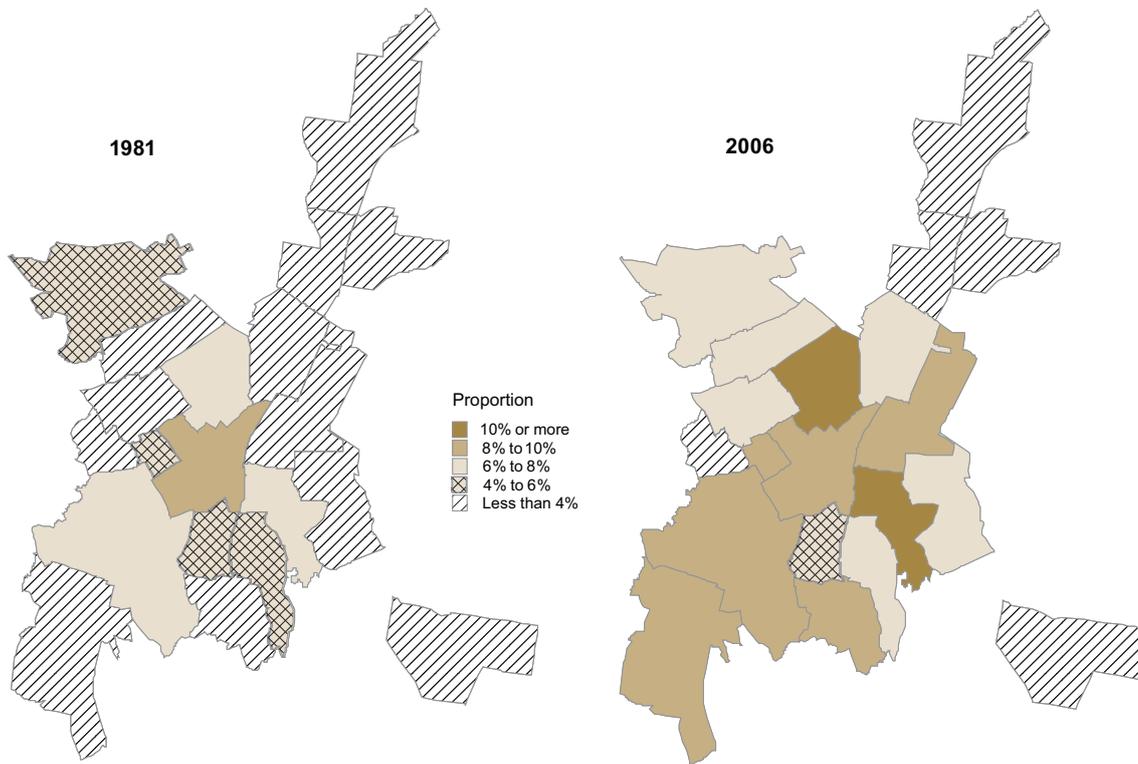


Source: DPCD, *Towns in Time*, (2008)

The trend towards an ageing population varied across the urban area. In 1981, Bendigo (suburb) had the highest proportion of elderly persons (9%) and about half the suburbs had less than 4% of their populations in this age cohort. These tended to be the fringe suburbs, particularly in the east and south, which at the time were only starting to undergo large scale suburban development and contained a large number of family households.

By 2006, the proportion of elderly persons in most suburbs had increased considerably. The highest proportions were now found in Kennington (14%) and North Bendigo (11%). In Kennington the increase was particularly sharp, as the equivalent figure in 1981 was 6%. Kennington has followed the trend of suburbs that were largely developed in the 1970s and 1980s – once home to large numbers of young families, they now have more mature populations and non-family households.

FIGURE 4: PROPORTION OF PERSONS AGED 75 YEARS AND OVER, BENDIGO SUBURBS, 1981 AND 2006



Source: DPCD, *Suburbs in Time*, (2008)

Bucking the ageing trend were Bendigo’s northern suburbs of Huntly, Ascot and Epsom. Along with the outlying suburb of Strathfieldsaye, these areas had very low proportions of elderly persons in both 1981 and 2006, despite recording substantial population growth. Growth in these suburbs has been driven by families establishing their homes in the area, particularly as new land development opportunities have become available in more recent years. Over time, it can be expected that these areas too will age, just as they have in places like Kennington discussed above.

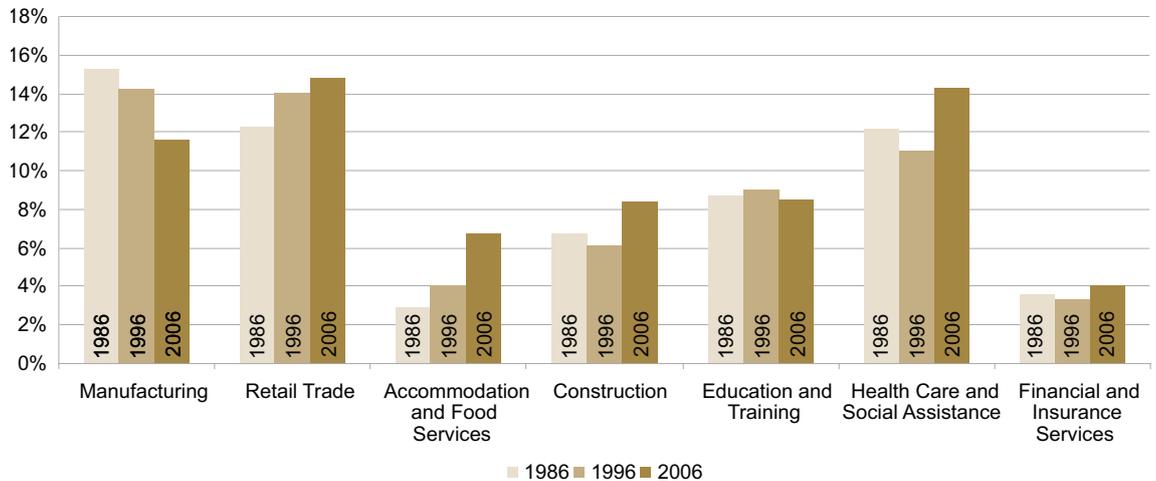
### 3 Labour force

Regional centres are key providers of employment and services, not only for their own residents, but for increasingly wide rural catchments. Overall, the key industries in regional centres are retail, education, health and manufacturing. Industries such as construction, public administration and transport and storage also have important roles, especially compared to small towns.

Figures 5 and 6 show the main features of the resident workforce in Bendigo over the period 1986-2006. The resident workforce is the number of employed persons who live in Bendigo. This means it includes people who may work elsewhere, but excludes people who live outside of Bendigo but who work in the town. The municipality of Greater Bendigo has a labour force self containment rate of 83%, which means that the majority of people live and work in the town.

In line with the strong population growth, Bendigo's workforce grew by 9,150 persons between 1986 and 2006. The volume of growth was almost as high as in Geelong, a town with a much larger workforce. Much of Bendigo's workforce growth occurred in the period 1996-2006 as the economy recovered from the early 1990s recession. Continued population growth in Bendigo has resulted in increased demand for services, and the growth in employment, particularly in health, retail trade and construction is shown clearly in Figures 5 and 6. Employment growth was highest in retail trade and health care and social assistance – together these industries accounted for 40% of workforce growth over the period 1986 to 2006. Growth was also strong in accommodation and food services, which almost trebled in size. This reflects the increasing importance of the tourism and leisure sector and its share of Bendigo's employment increased from 3% in 1986 to 7% in 2006.

FIGURE 5: PROPORTION OF EMPLOYED PERSONS, BY SELECTED INDUSTRY, BENDIGO 1986-2006

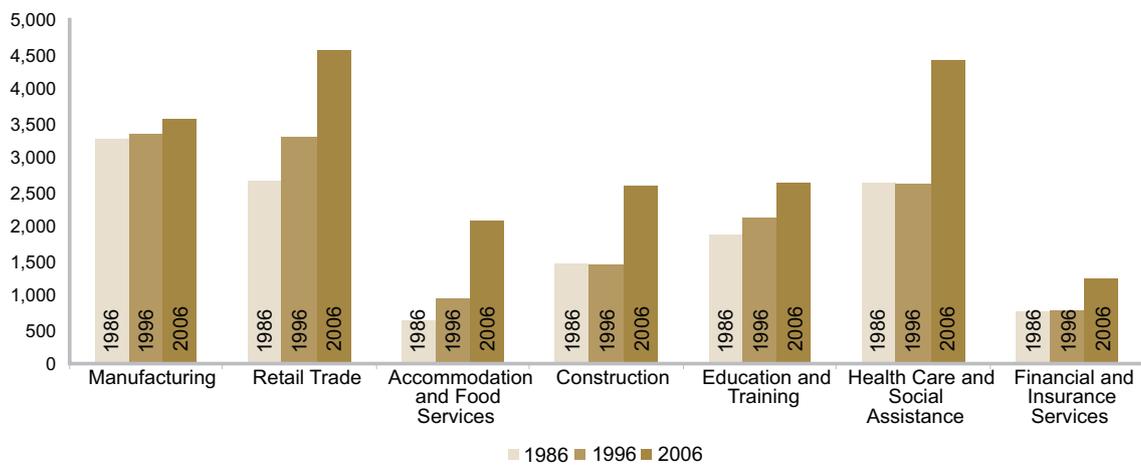


Source: DPCD, *Towns in Time*, (2008)

In common with Geelong and Ballarat, the proportion of persons employed in manufacturing in Bendigo declined over the period 1986-2006, from 15% to 12% of the workforce. However, unlike the other two towns, the number of persons employed in manufacturing increased slightly, from 3,280 to 3,560. This may reflect the more diverse nature of manufacturing in Bendigo – employment is spread across a number of sectors, but it is also a function of strong labour force growth over the twenty years.

Of particular note in Bendigo is the slightly higher proportion of persons employed in financial and insurance services (4%), when compared to the other towns, as well as the Victorian average. Between 1996 and 2006, the number of persons employed in this sector increased by over 60%. This is due to the location of organisations such as the Bendigo Bank and the Bendigo Stock Exchange. The Bendigo Bank has expanded its community sector banking operations considerably in the last decade and is now one of the major banks in Australia. Its new head office building in central Bendigo, completed in December 2008, was one of the largest non-residential construction projects in regional Victoria in the last decade. It reflects the bank's commitment to Bendigo as it is the only Australian bank to have its head office outside a state capital city.

FIGURE 6: NUMBER OF EMPLOYED PERSONS, BY SELECTED INDUSTRY, BENDIGO, 1986-2006



Source: DPCD, *Towns in Time*, (2008)

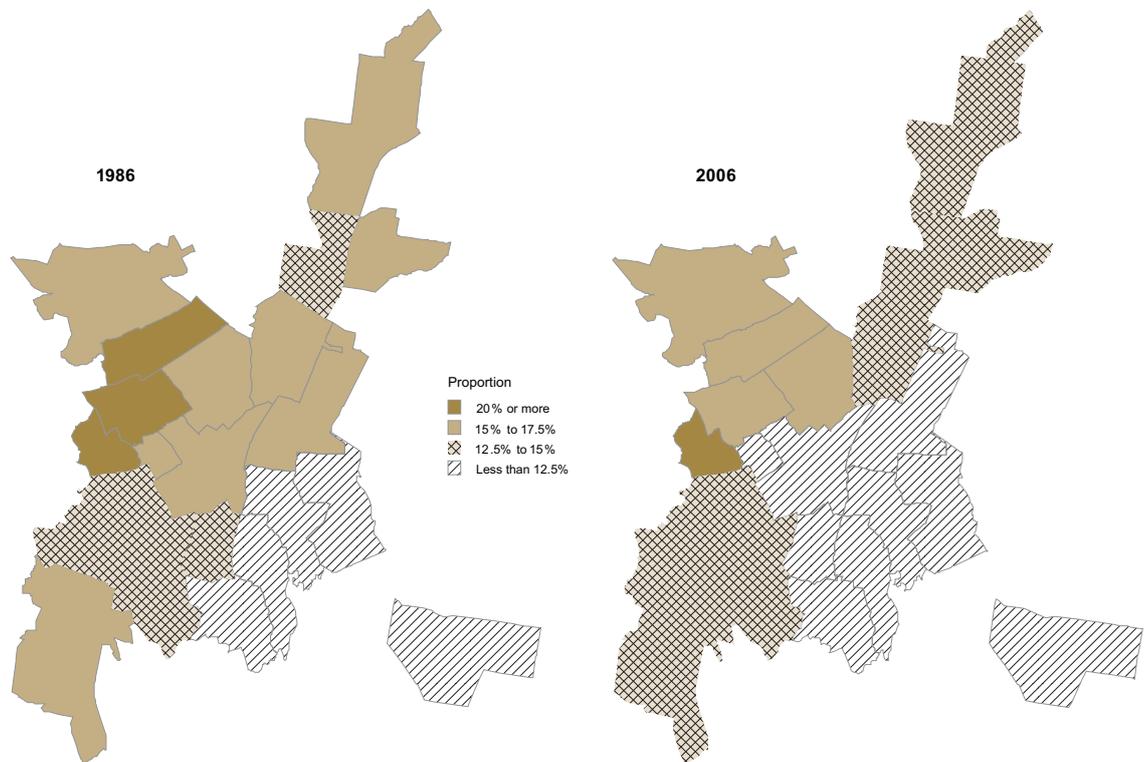
Although coming off a lower base, employment in Accommodation and Food Services showed strong growth, increasing from 3% of the workforce in 1986 to 7% in 2006. However, in numerical terms, the increase was almost threefold, from 630 to 2,070. Bendigo is a major focus for tourism in regional Victoria with a variety of attractions, and the employment growth in the Accommodation and Food Services sector is a reflection of the growth in the domestic tourism market and restaurant sector as well as the changing lifestyles of Bendigo residents.

### 3.1 Labour force – manufacturing

As mentioned above, employment in Bendigo’s manufacturing sector showed a small amount of growth between 1986 and 2006, but its share of overall employment declined. Perhaps because of this, the spatial distribution of manufacturing employees did not change significantly, as shown in Figure 7.

Bendigo’s manufacturing residential workforce was concentrated in the western suburbs, most notably West Bendigo (23%), Long Gully and California Gully (both 22%). By 2006 the pattern was generally the same but overall, the proportions were low. West Bendigo still had the highest concentration of residents employed in manufacturing at 22%. However it should be noted that the population of this suburb is small and therefore changes over time should be treated with caution.

FIGURE 7: PROPORTION OF PERSONS EMPLOYED IN MANUFACTURING, BENDIGO SUBURBS – 1986 AND 2006



Source: DPCD, *Suburbs in Time*, (2008)

## 4 Knowledge economy and educational attainment

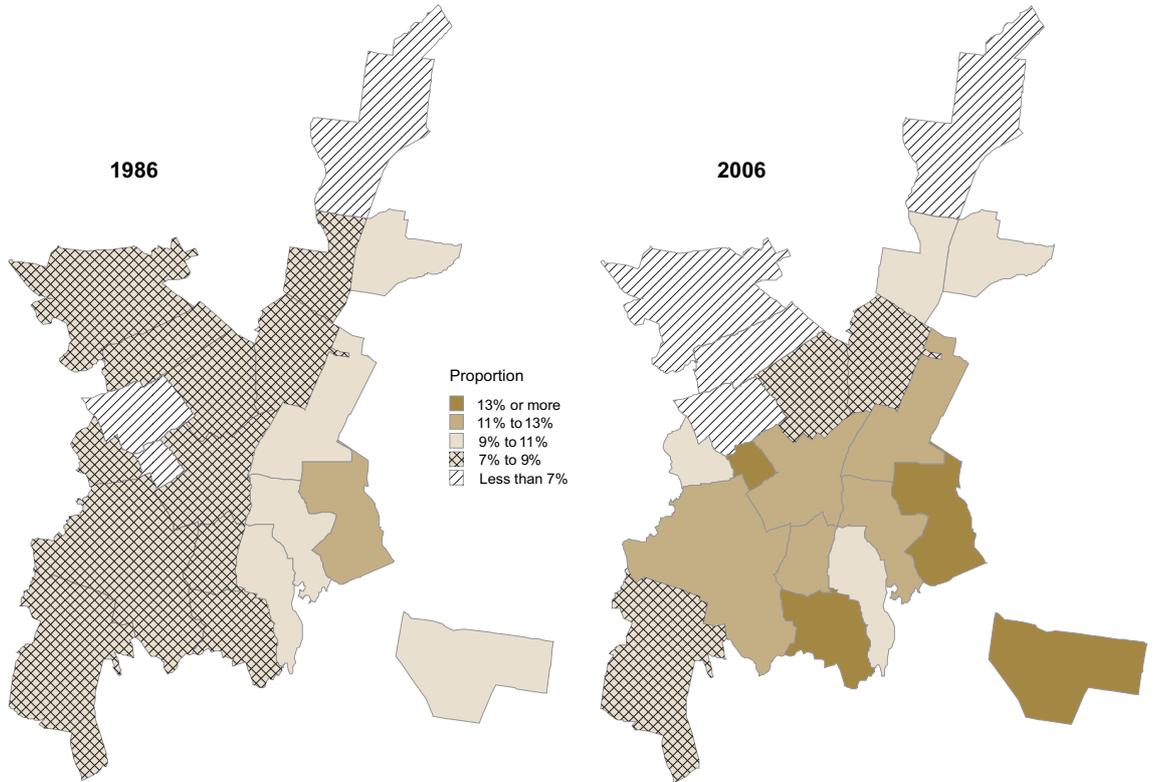
The growth of “knowledge economy” industries (defined here as the ANZSIC categories of Information, Media and Telecommunications; Financial and Insurance Services; and Professional, Scientific and Technical Services) has been characterised by a structural shift in the economy away from manufacturing to a mode of production based on knowledge and information generation. Like employment in manufacturing, employment in “knowledge economy” industries tends to display a distinct spatial pattern. The inner cores of many large modern cities are resident to concentrations of people employed in “knowledge economy” industries, and this has increased markedly in recent decades. The smaller size of Victoria’s regional centres in relation to cities such as Melbourne means that the growth of employment in “knowledge economy” industries has been slower but the distribution of their workers across the suburbs still shows distinct spatial patterns.

In Bendigo, many suburbs recorded increases in the proportion of their residential workforces employed in this sector. Strathdale, in the east, had the highest proportion in both 1986 and 2006 (13% and 16% respectively) but there was a distinctive pattern of high “knowledge economy” employment across the eastern and southern suburbs, as well as the inner core (Figure 8).



*The location of the head office of the Bendigo Bank dominates the skyline in central Bendigo. The town has a higher proportion of Finance and Insurance workers as a result of its location here – the only bank in Australia to have its head office outside a major city.*

FIGURE 8: PROPORTION OF PERSONS EMPLOYED IN “KNOWLEDGE ECONOMY” INDUSTRIES, BENDIGO SUBURBS, 1986 AND 2006



Source: DPCD, *Suburbs in Time*, (2008)

At the other end of the scale, the north western suburbs of Bendigo contained suburbs with low proportions of knowledge economy workers. This area also had higher proportions of workers in the manufacturing sector. Eaglehawk recorded minimal growth in the number these workers between 1986 and 2006 and its proportion as a total of all workers fell from 7.3% to 5.1%.

The close relationship between the growth in “knowledge economy” employment and that of persons with university qualifications is demonstrated by their spatial distribution across the suburbs of Bendigo. In both 1986 and 2006, the highest proportions of persons with university degrees were concentrated in the eastern suburbs, corresponding with high proportions of persons employed in “knowledge economy” industries.