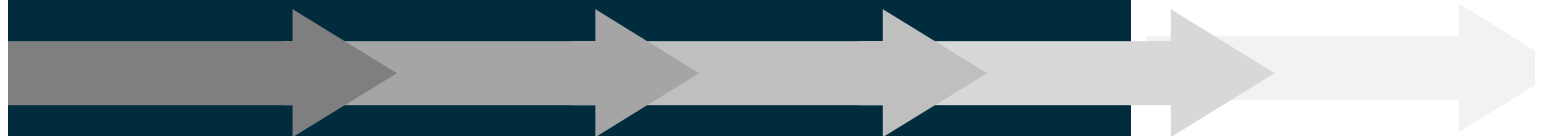


Gannawarra
Shire Council

October 2010

GANNA 0503



Gannawarra Future Scan



**GANNAWARRA
SHIRE COUNCIL**

This report was prepared by McKINNA *et al* in 2010. The consultants acknowledge the assistance of community members, the Gannawarra Shire Council executive, Councillors and various regional authorities for their assistance in providing input into the plan.

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Table of contents

| | |
|--|----|
| Part A: Background | 1 |
| Section 1 Introduction | 2 |
| Section 2 Methodology | 3 |
| PART B: The Demographic Pictures | 4 |
| Section 3 Demographics | 5 |
| Section 4 Stakeholder Research | 15 |
| Section 5 Climate Change | 23 |
| Section 6 Water | 26 |
| Section 7 The Economy | 28 |
| PART C: Scenarios | 32 |
| Section 8 Demographic scenario | 33 |
| Section 9 The 'No intervention' scenario | 35 |
| Section 10 The 'Intervention' scenario | 36 |
| PART D: Bibliography | 38 |
| Bibliography | 39 |

Part

Background



Section 1 | Introduction

This report aims to paint a picture of the future climatic, economic, demographic and social environment facing the Gannawarra Shire if the status quo is maintained. Demographic and other potential scenarios are put forward about what may occur with or without intervention strategies. It is important to note that these scenarios are by no means foregone conclusions; they are put forward to inform decision makers within the shire about looming threats and opportunities.

This research has been conducted to provide context and inform the development of a 15 year Gannawarra community vision and strategy plan entitled 'Gannawarra 2025'.

The document has purposely been written in a concise, bullet point style so that the facts are clearly presented and easily absorbed.

Section 2 | Methodology

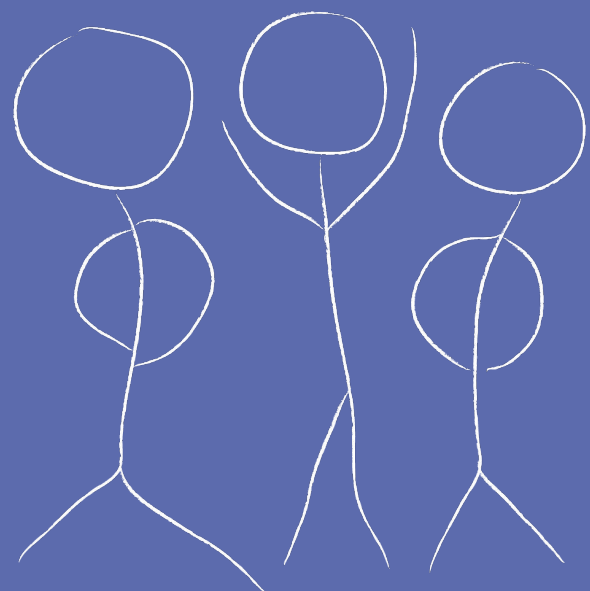
The findings in this report are drawn from the following:

- Desk-based research and analysis
- A process of statistical demographic modeling
- Interviews with key stakeholders in the region
- Interviews with employees from within the Shire of Gannawarra
- Eight community focus groups that were conducted in a number of shire townships and included representatives drawn from a cross-section of the community.

Part



The Demographic Picture



Section 3 | Demographics

3.1 Gannawarra's population

The population of Gannawarra is forecast to continue on a steady decline and to age significantly.

It is predicted that the population will shrink from 11,567 in 2010 to 10,831 in 2025.

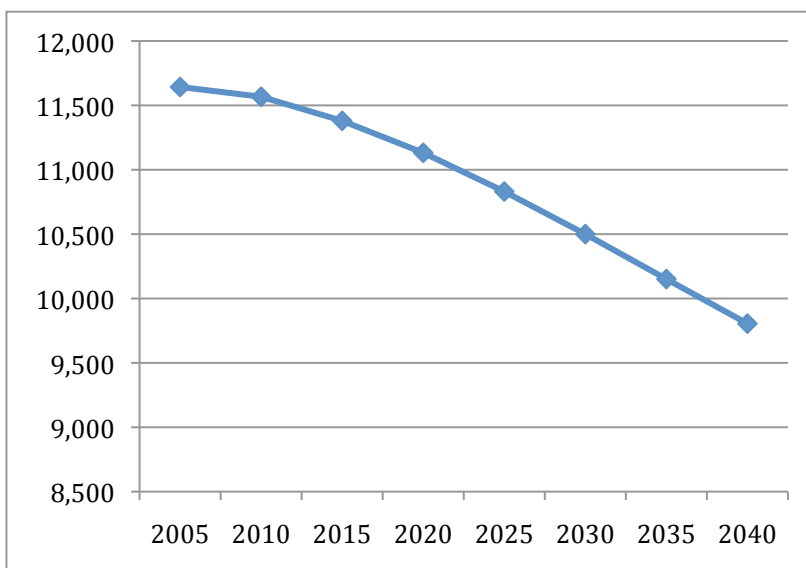


Figure 1 Gannawarra's population, 2005- 2040 .Source: 2006 ABS Census/ McKINNA et al, 2010

- The population has been steadily declining over the last 20 years.
- A decline threatens the critical mass thresholds for:
 - Schools
 - Health services
 - Retail services
 - Police & community services
 - Entertainment
 - Rate returns

The projected population by demographic group and gender, 2005- 2040 indicates a steady decline in working age residents.

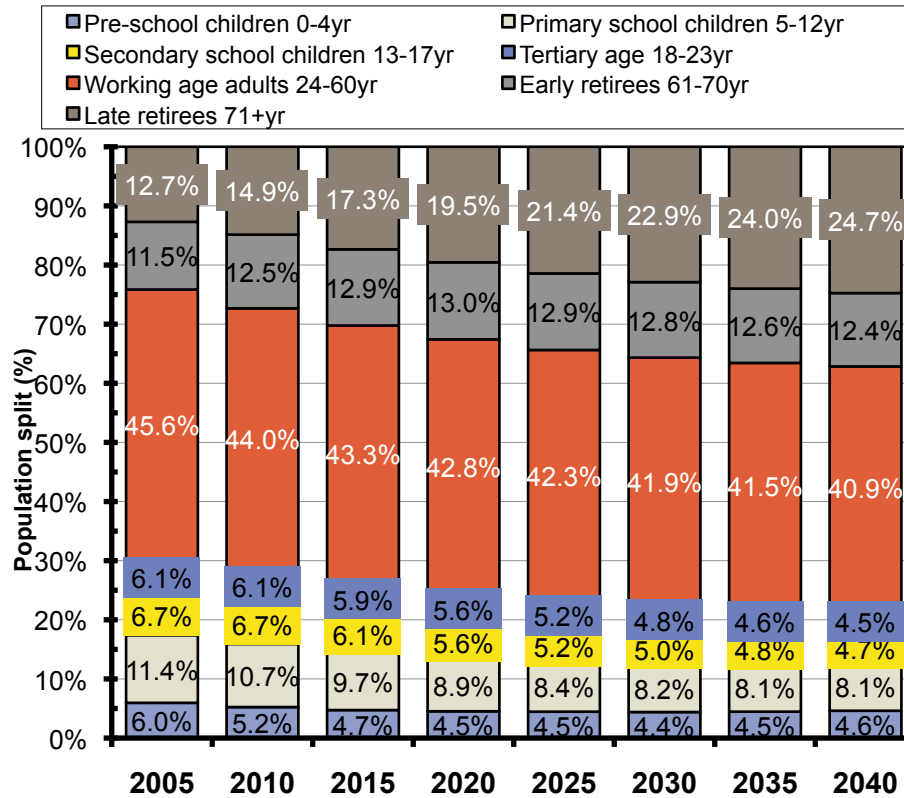


Figure 2 Gannawarra LGA population projected split by demographic group- total, 2005- 2040. Source: 2006 ABS Census/ McKINNA et al. 2010

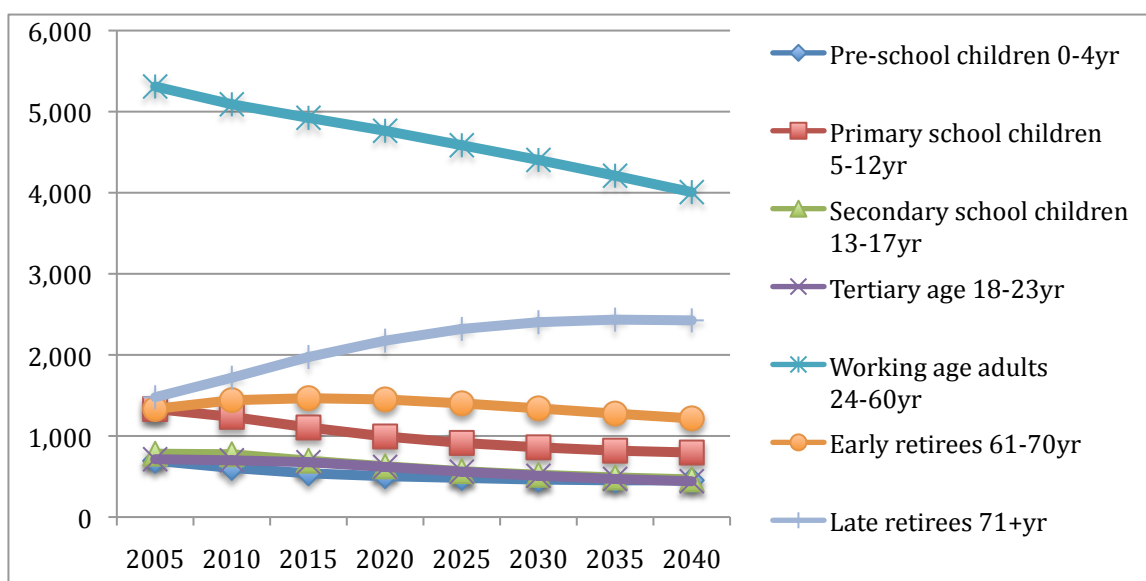


Figure 3 Population projections by age. Source: 2006 ABS Census/ McKINNA et al, 2010

- The workforce will decline from 5,091 in 2010 down to 4,586 in 2025. It will be as low as 4,000 by 2040.
- There will be a corresponding rise in late retirees out until 2031. They will grow from 1,718 in 2010 to 2,320 in 2025. With proposed investment in retirement facilities, this increase may become even more amplified.
- Lower birth rates will reduce the number of school age children.
 - *Based on DPCD projections, it is estimated that the population aged 0- 8 years in Gannawarra will decrease by 17.6% from 1,253 in 2006 to 1,032 by 2026.*
 - *In contrast, again based on DPCD projections, the population aged 0- 8 years in Victoria is expected to increase by 23.5% from 572,384 in 2006 to 707,123 by 2026.*

A serious gender imbalance is currently evident

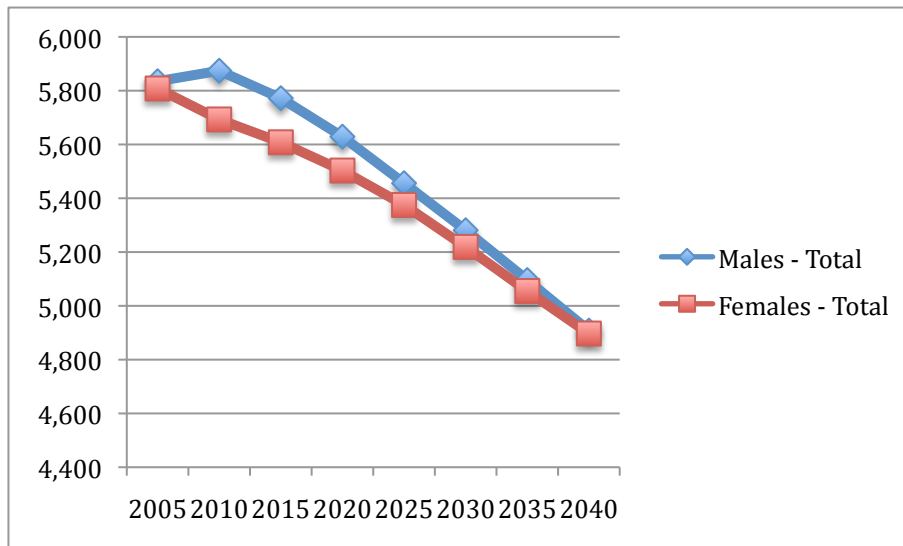


Figure 4 Gannawarra LGA population projections by gender. Source: 2006 ABS Census/ McKINNA et al, 2010

- The gender imbalance has occurred as increasingly females, particularly in their 20s and 30s, are leaving the area to pursue further studies or employment in cities or larger regional centres, while men are more likely to remain in the area to work on farms or in other jobs.
- Over time this gender gap narrows, primarily because, on average, females outlive males by 5+ years.
- The above trend is consistent with global gender trends in all developed countries. Increasingly women are becoming more highly qualified than men and taking on administrative and management roles where as men now make up the larger portion of manual workers. Although women do not enjoy equal representation at CEO or board level, it has been reported that women are now dominating middle management positions (*The Atlantic*, July/ August 2010). For example, women hold an estimated 50% of middle management jobs in the USA.

Implications:

- The concern for Gannawarra is that these female residents are leaving the shire during their child-bearing years, further exacerbating the decline in infant numbers.
- There will be potential labour shortages in professional roles that are increasingly filled by females. For Gannawarra this will impact:
 - *health care*
 - *office administration*
 - *tourism*
- Recent studies indicate that gender imbalance in communities can lead to increased levels of crime and anti-social behaviour by men.

3.2 Workforce

The decline in employment in the agricultural sector is likely to continue as more water leaves the area and the remaining farms become bigger and more labour efficient.

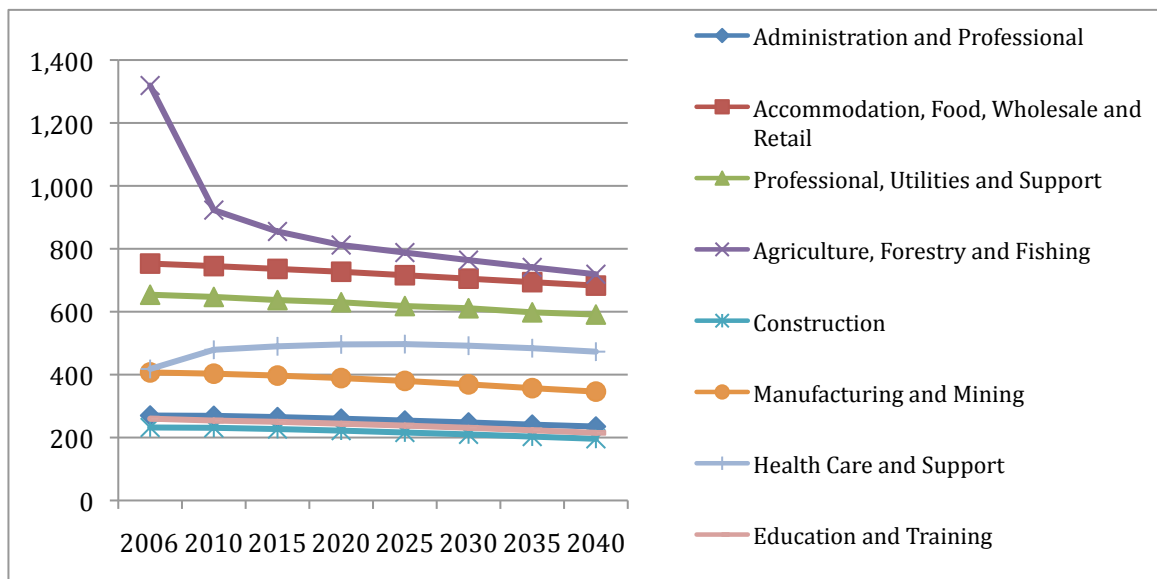


Figure 5 Composition of workforce by industry, 2006- 2040. Source: McKINNA et al, 2010

Implications:

- The decline in agricultural jobs is related to the sale of water from the region and the rationalisation of family farms mainly due to aggregation (e.g. farmers buying their neighbours property to create larger farms.) This trend is likely to continue and will put a significant drain on the local economy and spending power of residents.
- The dramatic decline in agricultural jobs skews the data showing relative stability of employment in other sectors. Construction is the most resilient employment sector, but in reality this is likely to remain relatively flat, although NVIRP projects will provide some employment opportunities.

3.3 Ethnic composition

According to the 2006 ABS Census, Victoria is far more multicultural than Gannawarra

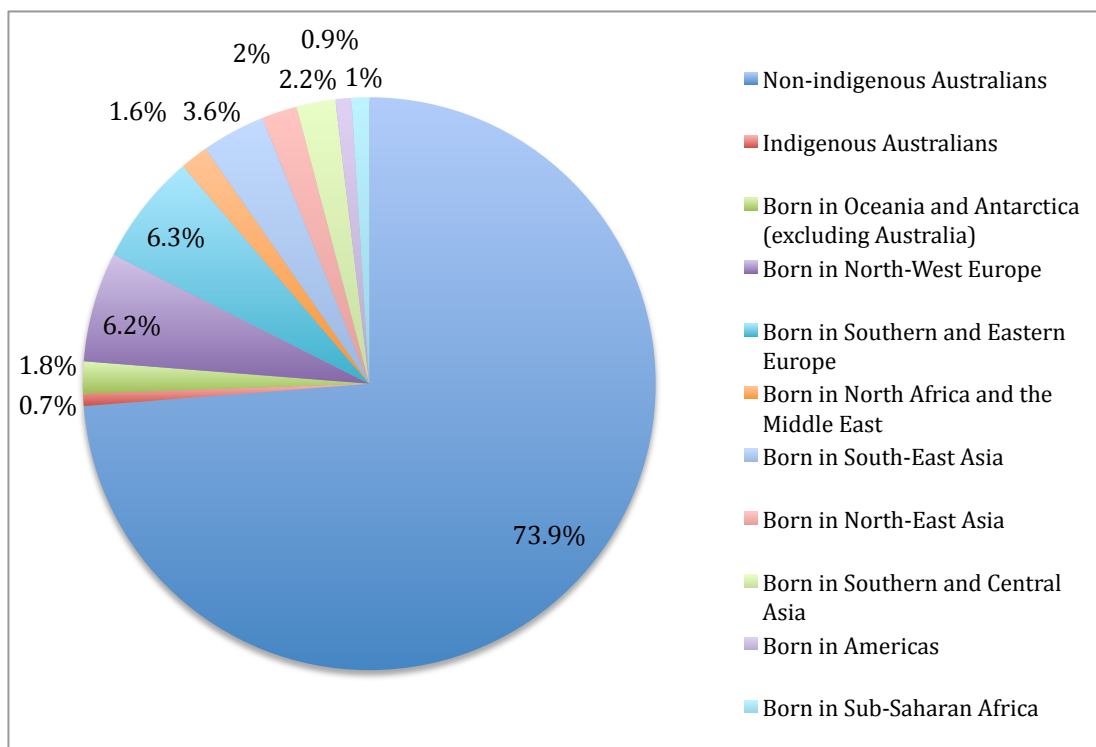


Figure 6 Ethnic composition of Victoria. Source: ABS Census 2006

- Over a quarter of Victorians (25.4%) were born overseas. In contrast, only 5% of Gannawarra residents were born overseas.
- The indigenous population represents 0.7% of Victoria's total population, yet Gannawarra's total indigenous population represents 1.5% of the population, which is double the proportion of Victoria as a whole.
- Most of those Gannawarra residents born overseas are of North-West Europe origin (2.5% of total population). Gannawarra is grossly under-represented with Asian residents relative to Victoria as a whole.
- By way of a regional comparison, Mildura has 52 cultures represented in its community and 20% of residents in Mildura are overseas born.
- The number of migrants in Victoria looks set to increase, however it is unlikely that Gannawarra will follow suit, further exaggerating Gannawarra's disadvantage in ethnic diversity.

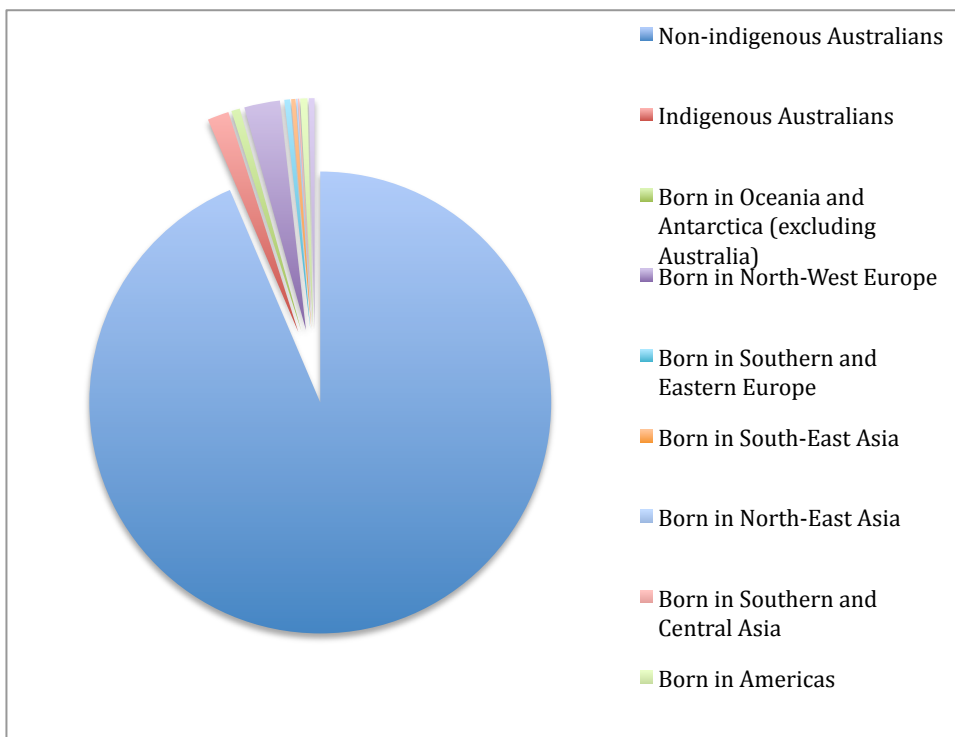


Figure 7 Ethnic composition of Gannawarra, according to the 2006 ABS Census

Implications:

- Gannawarra does not enjoy the richness of lifestyle that ethnic communities bring.
- Academics suggest that cultural diversity makes communities more tolerant.
- Gannawarra has a proportionally higher aboriginal population suggesting an opportunity to preserve indigenous cultural heritage lost to other parts of the state and to add an indigenous element to tourism products.
- Young people in Gannawarra are disadvantaged if they have to move away to work or study as they have little experience of foreign cultures within their school life. A student moving to Melbourne or even overseas to go to university or work will have no understanding of how to engage with other cultures.

3.4 Education levels in Gannawarra

Gannawarra's education levels are far lower than the regional Victorian average

| Level of schooling | Gannawarra | Regional Victoria |
|-----------------------|------------|-------------------|
| Year 12 or equivalent | 21.31% | 31.53% |
| Year 11 or equivalent | 18.23% | 17.28% |
| Year 10 or equivalent | 24.34% | 20.94% |
| Year 9 or equivalent | 12.83% | 10.31% |
| Year 8 or below | 12.74% | 10.06% |
| Did not go to school | 0.34% | 0.48% |
| Not stated | 10.21% | 9.39% |
| Total | 100% | 100% |

*Table 1 2006 educations levels, Gannawarra and Regional Victoria.
Source: Urban Enterprise, 2010, Shire of Gannawarra Economic Development Strategy: Existing Situation Report.*

| Post-secondary education | Gannawarra | Regional Victoria |
|---|------------|-------------------|
| Postgraduate degree | 0.19% | 2.37% |
| Graduate diploma and Graduate certificate | 0.77% | 3.13% |
| Bachelor degree | 3.85% | 16.40% |
| Advanced diploma and diploma | 3.68% | 12.97% |
| Certificate | 14.63% | 38.78% |
| Level of education inadequately described | 0.85% | 2.60% |
| Level of education not stated | 9.59% | 23.74% |
| Not applicable | 66.43% | 2.37% |

Table 2 Post-secondary qualifications (in contrast to Regional Victoria), 2006. Source: Urban Enterprise, 2010, Shire of Gannawarra Economic Development Strategy: Existing Situation Report.

- Only 21% of the Gannawarra population has completed Year 12 or equivalent compared with a completion rate of 34% for regional Victoria.
- Only 4.8% of Gannawarra residents have a bachelor degree or higher qualification compared with 21.9 % for regional Victoria.
- Overwhelmingly, Gannawarra's workforce occupies blue collar jobs with relatively low skill/training levels.

Implications

- Organisations seeking a highly skilled workforce (e.g. government offices) are unlikely to choose to locate in Gannawarra.
- In an era where technology is increasingly sophisticated and pervasive, a lack of IT skills will make many workers unemployable as a number of roles will become obsolete, including on-farm jobs. A relevant example of this is the increased

automation of irrigation equipment, which was once extremely labour intensive.

- There is a direct correlation between education levels, economic prosperity and quality of life.

3.5 Socio-economic index for areas

SEIFA 2006 analysis (index of socio-economic disadvantage)

- The SEIFA is a relative measure of socio-economic advantage. The mean SEIFA index, against which all areas are compared is 1,000. Areas scoring below 1,000 are considered to be of relative socio-economic disadvantage, in contrast, areas scoring above 1,000 are considered to have relative socio-economic advantage.
- As the table demonstrates below, Gannawarra and its neighbouring LGAs are areas of considerable socio-economic disadvantage. All of these areas rank below 1,000 and within the bottom 30% of LGAs in Victoria. Campaspe rates marginally better than Gannawarra and Buloke.

| Local Government Area | 2006 SEIFA Score | Ranking in Victoria (out of 80) |
|-----------------------|------------------|---------------------------------|
| Gannawarra | 971 | 23 |
| Loddon | 942 | 2 |
| Swan Hill | 958 | 10 |
| Campaspe | 975 | 24 |
| Buloke | 971 | 21 |

Table 3 SEIFA scores, Gannawarra and surrounding areas. Source: Urban Enterprise, 2010, Shire of Gannawarra Economic Development Strategy: Existing Situation Report.

Section 4 | Stakeholder Research

Eight focus groups were held in townships across the shire with a mix of stakeholders. The key themes/emotions uncovered in focus groups are summarised below. Indicative quotes have been included (*in italics*) to indicate the emotional nuances of the views expressed.

4.1 Community mood

“Some people have just had enough”

*“The mood here is expressed by the way the towns look
i.e. ‘tired’ – we need a freshen up”*

“The locusts could be the last straw.”

- Overall, the community mood is quite deflated with the words chosen to express the outlook including:
“despairing,” “bleak times,” “weakened resilience,” “at breaking point.”
- Most participants in the groups believe population growth is needed but they do not want to lose the small town values. Murrabit community members were particularly positive about residential growth.
- A sense of ‘pitching in’ and helping and a strong volunteer culture were noted as cultural strengths of the region. The Murrabit market story was quoted as an example of this.
- All focus group participants agreed that the Gannawarra population is a monoculture but most were unclear about what could be done to rectify this and encourage greater diversity.
- Teenager engagement in all towns was noted as a challenge. The strength of sporting club was seen as one of the best antidotes for this.
- Community members made it clear that they are *“consulted out”*.

“No more butchers paper and sticky notes, we want action!”

4.2 Education

“Our young people have become our biggest export”

“If we can’t keep our young people here, we should at least make it a place that they want to come back to”

“If my kids stay in Melbourne, I’ll move there too.”

- Education is of wide reaching concern across all cohorts in the community.
- Bridging the gap between high school and work was considered to be a particular challenge. The lack of a TAFE or other tertiary institution was viewed as a potential gap to retaining young people in the area after high school. Strategies to keep young people here after high school was noted across all cohorts as a real need (30% of students want to stay here). More programs such as VCAL jobs pathways were called for.
- Many in the community accept that young people need to leave in order to experience the wider world. They believe more could be done to encourage the return of young professionals when they reach the age of starting a family.
- The ability to re-invest in education infrastructure is also of widespread concern to residents, given the declining student numbers. In particular, declines in primary school students was seen as a looming challenge for sustaining schools in smaller communities such as Lalbert and Lake Charm.
- The majority believed that a P12 school would be a positive for Kerang both in terms of the construction jobs as well as for its education outcomes. (**Note:** *Following this research, the P12 proposal was subsequently cancelled and is likely to be replaced by a rebuilding project for Kerang Technical High School.*)
- The uniqueness of Kerang’s technical high school was noted but not really widely appreciated for the unique asset that it is for the community, particularly in light of the regional skills shortages.

- The need for a wider education strategy for the shire was flagged by the consultants and a number of education professionals participating in the groups endorsed this view.

4.3 Health

“Reduced income equals reduced health”

- Of key concern was the lack of the critical mass in the population base across the shire needed to have the standard of health services desired (e.g. bulk billing, respite care, allied health services, etc.). Health professionals describe a “grabbing of funding” to sustain current programs.
- While the volunteer culture was considered a strength of the region, this support service was usually taken on by older members of the community. Families with special needs children need professional support (especially respite care) and a range of professional allied health services, in addition to the efforts of kind volunteers.
- The point was made in the discussions that it was difficult to attract professionals to work in Gannawarra, as their wives look at education and health when choosing to relocate to a town and the lack of health infrastructure in the shire made this an unattractive area for people accustomed to city health infrastructure to relocate to.
- The toll that the drought had taken on community’s mental and physical health was of concern to healthcare professionals as well as general participants. It was noted that families with reduced incomes were letting healthcare problems fester due to lack of funds. It was suggested that this will come to be a greater burden on the shire over time.

4.4 Our townships

- A common lifestyle issue noted by residents was that trading hours were poor in the townships, for restaurants and shops.
- Transport issues within the shire were a key discussion point for youth and elderly citizens. The taxi services do not have the momentum to sustain a large fleet, meaning access to cabs can be difficult. Taxi's are particularly important to older citizens whereas as younger citizens would be happy with an improved bus service.
- The most common infrastructure concern was around bridge and road maintenance. Residents understand the financial challenges of the shire but are concerned for their safety and the impact that poor roads and bridges may have on attracting new industry to the area.
- The community plans were seen as a very positive initiative and although applying for funding was now more complex, it was acknowledged that this was a fairer and more orderly system.
- Much reference was made to the role that the Long Paddock Café played in transforming Koondrook. The café offers much social richness as well as economic value to the Koondrook community. Residents from other communities felt there was a strong need to encourage good hospitality operators to set up in their parts of the shire for the social value as much as the economic value. All groups included much discussion about the lack of a "food culture" in the area.
- Participants did not have any sense of a 'Gannawarra Community' or identity. The alliances with community are all at a township level and there is no clear expression of what Gannawarra is or stands for. Many residents from smaller townships still felt that Gannawarra is too Kerang-centric.

4.5 Industry

“Without water a 500 acre farm is just no longer viable”

“If the farmers don’t have money, no one does.”

- The impact of the loss of water from the area was understood at all levels of the community, even among high school students.
- There was widespread despair noted about the demise of irrigation sectors. Concerns also surrounded what to do with the farms that had sold off water and were now no longer viable as they did not have the scale for dry land farming.
- Likewise a number of participants noted the forthcoming loss of the milling sector and expressed fears about the future forest management.
- On a more positive side, some participants felt strongly that the community can reinvent itself if *“we think outside the square”* and *“support the entrepreneurs”* and have a more proactive approach to developing new industries. The development of the industry park at Cohuna was cited as the type of proactive approach that was needed.
- The impact of proposed broadband was felt by many to offer great hope for the region in terms of attracting remote workers to live here because of cheap housing and great weather. Connectivity is currently a concern for outlying areas such as Lalbert, where mobile phone infrastructure is still a gap.
- All agree that greater economic diversity is needed as a buffer to the dry years, which will inevitably face agriculture again.
- The potential for Kerang as a “Melbourne to Mildura” transit hub was mentioned. Drawing passing tourism, business and transit traffic into the town was felt to offer opportunity for retailers. The potential for truck transit facilities was also noted.

- Some participants were wary about development of retirement facilities as an industry sector. Although such facilities may improve health services, they could become a burden on shire resources.
- Most discussion groups raised the issue that more could be made of developing tourism as a key local industry. Activities mentioned were water sports, paddle steamer links to Echuca, trails, fishing, Koondrook heritage buildings, aboriginal history and culture. The information office being located in the library at Kerang was thought to be a blocker to tourist engagement.
- It was felt that economic development needs more resources and help for small businesses/industries – not just supporting the large operators. Economic development was thought to be under-resourced at the shire.

“We don’t want to become simply a retirement oasis, we need new ideas.”

“Water gone, but broadband arrives!”

4.6 Youth issues

Although only one youth focus group was held, some strong messages came through from the year 10 and 11 students. The group was from Kerang Technical High School but included students who live outside Kerang township.

“Sure, you can fulfil your dreams here.”

“People don’t go to uni because it costs too much.”

“The cost of living in Melbourne freaks me out.”

- Youth in the Kerang area say one of their greatest needs is a 'hang out', particularly after 6pm. A late night cinema, a multi-purpose sports venue with night games or late opening hours on the pool until 9pm were ideas proffered.
- Youth acknowledge that there are drug problems, but felt these were evident in most communities.
- As already mentioned, transport is a great need for youth, including more bus services to Swan Hill.
- Cost is the biggest blocker to most students who are planning to go to university. They indicate that it is a worry for their parents also.
- Students didn't think that they could qualify for scholarships to help with study costs.
- There was not a strong sense of what the career opportunities within local industry might be among youth. There was no strong link to local industry or indeed an understanding of key businesses here, other than farming.
- Not all of the shire's youth relate to the farming culture. Although they understand the importance of the agriculture to the local economy, culturally, they believe life in Gannawarra has much more to offer and resent being associated with farming, just because they come from the country.
- The fact that the region has been host to world-class water skiing events gives a great sense of pride/identity to young people. There is much positive feeling about the potential of water sports.
- Noteworthy is the fact that an underlying fear of Melbourne and city life appeared throughout general discussions with this group. The prospect of having to go to Melbourne to study is daunting for many.
- Younger residents expressed concerns about not knowing how to relate to other cultures should they have to go to the city for any reason.

- The students in Kerang were very positive about the P12 proposal for the school. They felt strongly that the school was tired and run down and that the P12 would be a great opportunity.
- Interestingly, they also felt that the township of Kerang was tired and run down including the halls and streetscape, and like the school, needed freshening up.

“That P12 thing would’ve been great - we would’ve got a new school!”

Section 5 | Climate Change

5.1 Gannawarra and Climate Change

It is important to note that even the best scientists in the world do not agree on climate change. However, risk management strategies need to factor in worst-case scenarios, so climate change must be addressed in the community vision.

Climate change will put increased pressure on shire resources. Yet, at the same time, it will create opportunities. This section of the report aims to explore both negative and positive aspects of climate change.

5.2 High level impact of Climate Change

The 2 key categories of impact are:

1. Direct effects from global warming
2. Impacts from climate change abatement policies:
 - The inevitability of a carbon tax*
 - Carbon abatement policies*

5.3 Effects of Climate Change

| | 2030 | 2070 |
|-----------------------------------|---------------|-----------------------|
| Temperature | ↑ 0.6- 1.2°C | ↑ 1.4- 3°C |
| Rainfall | ↓ 4% | ↓ 6% (low emissions) |
| Evaporation | ↑ 3% | ↑ 4% (low emissions) |
| Runoff from major catchments | ↓ 5- 45% | ↓ 5-50% |
| Days over 35 each year in Mildura | 38 (↑ 6 days) | 45- 59 (↑13- 27 days) |
| Rise in sea level | ↑ 3-17 cm | ↑ 7- 52cm |

Table 4 Summary of the main climatic forecasts for 2030 and 2070 on the 1990 baseline. Source: Source: Victorian Government, 2008, Climate Change in Victoria: 2008 Summary.

The implications of climate change for Gannawarra are:

- Reduced, more variable and unseasonal rainfall.
- More frequent extreme weather events.
- More frequent and longer heat waves - 10 more days over 35c.
- More frequent and damaging wind and thunderstorms.
- More flash-flooding
- More frequent and longer droughts.
 - *The past ten years has seen unprecedented drought, with below-average rainfalls being recorded in northern Victoria.*
 - *Drought months are predicted to increase by 20% on average across most parts of Australia by 2030.*
 - *Drying of land leads to increased soil degradation, soil erosion (in extreme cases) and falling water tables.*
- More frequent and more devastating bush and grass fires.
- Shifting micro-climates
- Heat stress on livestock, increasing likelihood of death, less productivity, lower quality milk/meat/produce.
- Temperature-sensitive crop failures
- New pests and disease risk
- Increased incidence of weeds, pests and diseases, potentially affecting crops/livestock.
- Changed lifecycles of diseases and pests already in Victoria.
- Insurance costs will rise because of increased risk probabilities.
- There is an increased risk to residential and council property from fire, flash flooding, fallen trees, etc.
- With a significant increase in aged residents, there will be more demand for health services and emergency capacity in response to extreme weather events.

The implications of a “Carbon Remission Policy” on Gannawarra:

- A carbon tax and policy to reduce the carbon footprint is inevitable. It is a matter of what form this takes.
- Even if agriculture is exempt, the introduction of a carbon tax will be felt in Gannawarra.
- A carbon tax will increase the cost of energy which will flow on to all industries.
- Cost of energy will increase due to introduction of carbon taxes and carbon reduction policies.
- Residents will become more reliant on air conditioning which will add to cost.
- Dairy and meat processors will be faced with increased cost due to carbon tax. With limited ability to pass these on to the market, a high proportion of these costs will be absorbed through reduced grower returns undermining profitability.
- Transport costs will increase, adding to freight costs.

5.4 Opportunities for Gannawarra

Gannawarra is well placed to take advantage of carbon tax and remission policies:

- Solar energy
- Carbon sequestration
- Carbon credits
- Vegetation offsets
- Salt remediation
- Eco-tourism
- Funding for the restoration of the wetlands

Section 6| Water

6.1 Water and the Gannawarra Shire

Water will be the defining issue for the Gannawarra Shire over the next 15 years

- Irrigated agriculture has been the backbone of the Gannawarra economy and is likely to remain so. However, the Murray-Darling Basin Plan will fundamentally change how irrigation works in Victoria.
- Anecdotally, 30% to 40% of water is thought to have already left the Gannawarra district over the last 10 years. It is difficult to confirm this figure, however, data from the Torrumbarry system only shows that irrigation water use and water shares have been declining. Since 1997, water rights have declined from 400,000ML to less than 300,000ML. In the same period, water use has declined from 600,000 ML to 200,000ML. Again, in the Torrumbarry irrigation system alone, 74,000ML of water right/high reliability water share has been permanently traded out of the system.
- Dry land agriculture returns only 5% of the value of irrigated land per hectare, indicating that for every hectare without water, 95% of its economic value has been lost to the region.
- The level of Commonwealth environmental water purchase is expected to continue for 5 years.
- Changes in legislation such as the potential removal of the 4% limit on water trade out of the district; plus the removal of restrictions of the 10% limit of water held by non-water users could cause further economic loss.

6.2 Murray-Darling Basin Plan (MDBP)

The impact of the MDBP is yet to be fully understood

- The plan is vague and the final outcome remains uncertain.
- Public consultation has been volatile and not helpful to either irrigator or environmentalist.
- With the current political situation in Australia, significant compromise to the plan is almost certain. Even if the plan is implemented, it will not take place until 2019. It is hoped that perhaps the worst has already happened:
 - *A large amount of water has already left the region*
 - *Most of the NVIRP infrastructure has been upgraded.*
 - *Dairy on the backbone channels is likely to stay.*
- MDB plan is not entirely bad news for Gannawarra shire. Irrigators who have survived the last 10 years are stronger and have developed better water management practices:
 - *Wetlands and bird species will benefit.*
 - *Assist in reinforcing and enhancing Gannawarra's reputation as a water-skiing destination and eco-tourism destination.*
 - *Gannawarra will be able to lay claim to being "Victoria's Wetlands."*

6.3 Dry land farming

Converting some dry land areas will be challenging.

- Much of the soil type in the area isn't suited to dry land farming.
- Rainfall is too unreliable and increasingly falling at the wrong time of the year.
- Block sizes are too small and the land aggregation required to produce economic efficiency is difficult and costly.
- Reduced spending power of farmers (ex-farmers) will significantly impact on town economies.
- The Kilter model could be the ideal solution to best practice land management.

Section 7 | The Economy

7.1 Gannawarra's economy

Achieving economic diversity will be a challenge

| Industry | 2006 | 2010 | 2015 | 2020 | 2025 | 2030 | 2035 | 2040 |
|---|-------|------|------|------|------|------|------|------|
| Administration | 270 | 269 | 265 | 260 | 254 | 248 | 241 | 235 |
| Accommodation, Food, Wholesale and Retail | 753 | 745 | 736 | 727 | 716 | 705 | 694 | 683 |
| Professional, Utilities and Support | 654 | 647 | 637 | 630 | 618 | 611 | 598 | 591 |
| Agriculture, Forestry and Fishing | 1,319 | 923 | 855 | 812 | 788 | 764 | 741 | 719 |
| Construction | 232 | 231 | 227 | 222 | 216 | 210 | 203 | 196 |
| Manufacturing and Mining | 407 | 403 | 397 | 389 | 380 | 369 | 357 | 346 |
| Health Care and Support | 418 | 479 | 490 | 496 | 497 | 492 | 484 | 473 |
| Education and Training | 260 | 254 | 250 | 244 | 238 | 231 | 223 | 215 |

Table 5 Breakdown of the Gannawarra economy- number of people employed by industry, 2006- 2040. Source: McKINNA et al, 2010

Analysis of available jobs data indicates that:

- Agriculture and timber account for 23% of the GDP (30% of jobs and 54% of businesses).
- The agriculture sector has shown a steady decline.
- The future of the timber sector is short term.
- Public sector employers are collectively the second biggest employer, accounting for 15% of workforce. This sector is growing.
- Retail trade is the third biggest economic generator accounting for 11% of total jobs and 8.6% of businesses.
- Manufacturing accounts for 8% of jobs.
- Tourism accounts for less than 2% of jobs.

In 2006, the Gannawarra economy had a GVP of \$226 million, compared with \$248 million in 2001. Agriculture accounts for more than half of the economy.

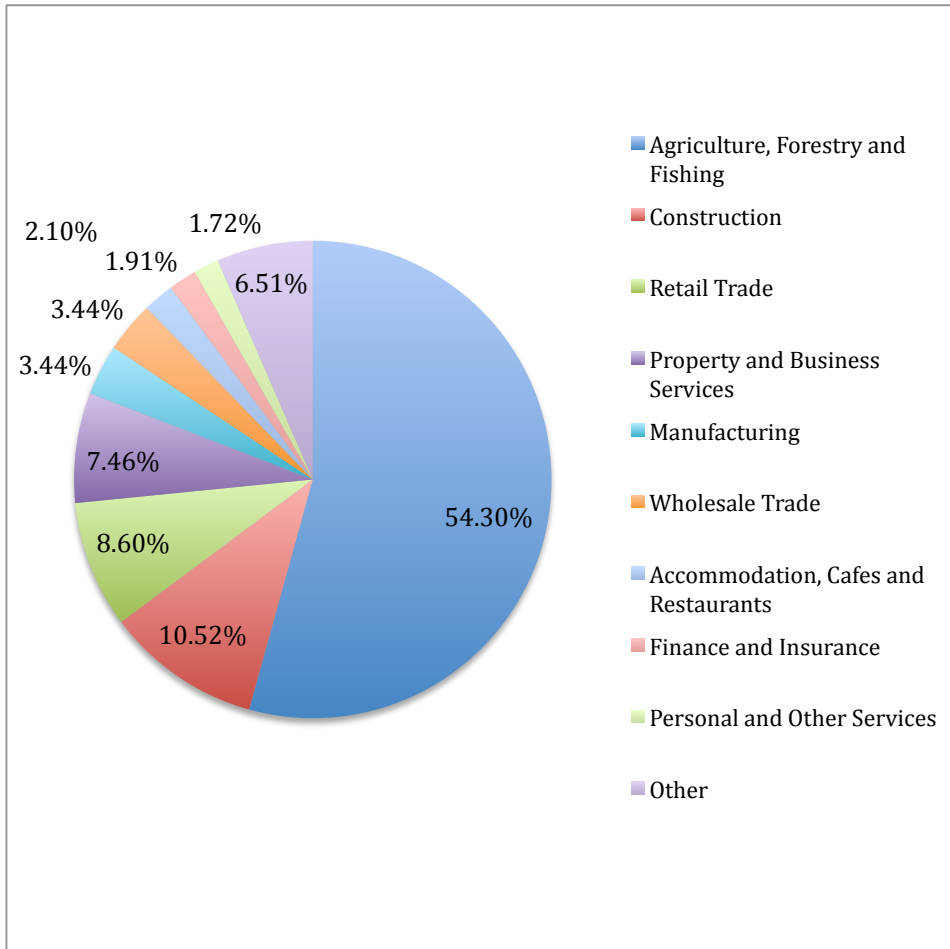


Figure 8 Industries by percentage of total businesses in Gannawarra, 2006.
 Source: Urban Enterprise, 2010, Shire of Gannawarra Economic Development Strategy: Existing Situation Report.

Within agriculture, dairy accounts for approximately 50%.

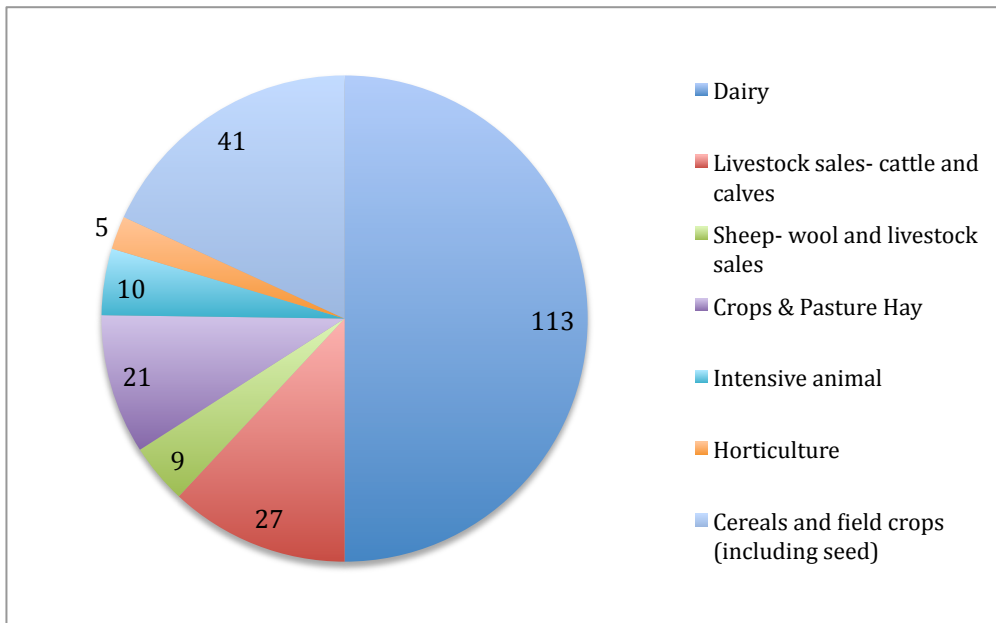


Figure 9 Value of agricultural products produced in 2006 (\$m). Source: RMCG, 2009, NVIRP TRAMS Update: Final Report.

Implications:

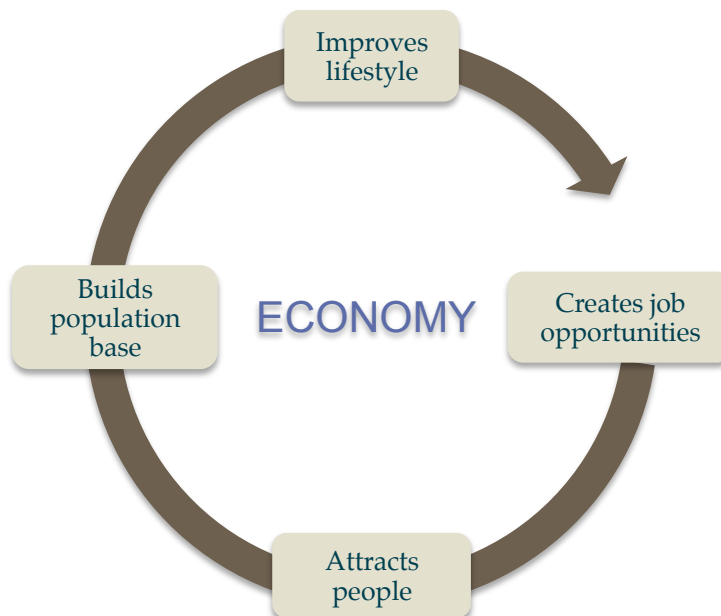
- Although data is not available, the economy has declined even further since 2006.
- In particular, the dairy industry has decreased significantly, due to farmers selling water and exiting dairy.
- The shrinking of the economy, in particular the agricultural sector, will have major negative flow-on effects for businesses within the shire, particularly those that are heavily linked to the agricultural sector.
- New enterprises will be essential to replace agriculture in order to stop the shrinking of the economy.

7.2 Economic outlook:

A number of emerging factors will have ramifications on the economic outlook:

- As mentioned, outcomes from the Murray Darling Basin plan will have significant economic impact.

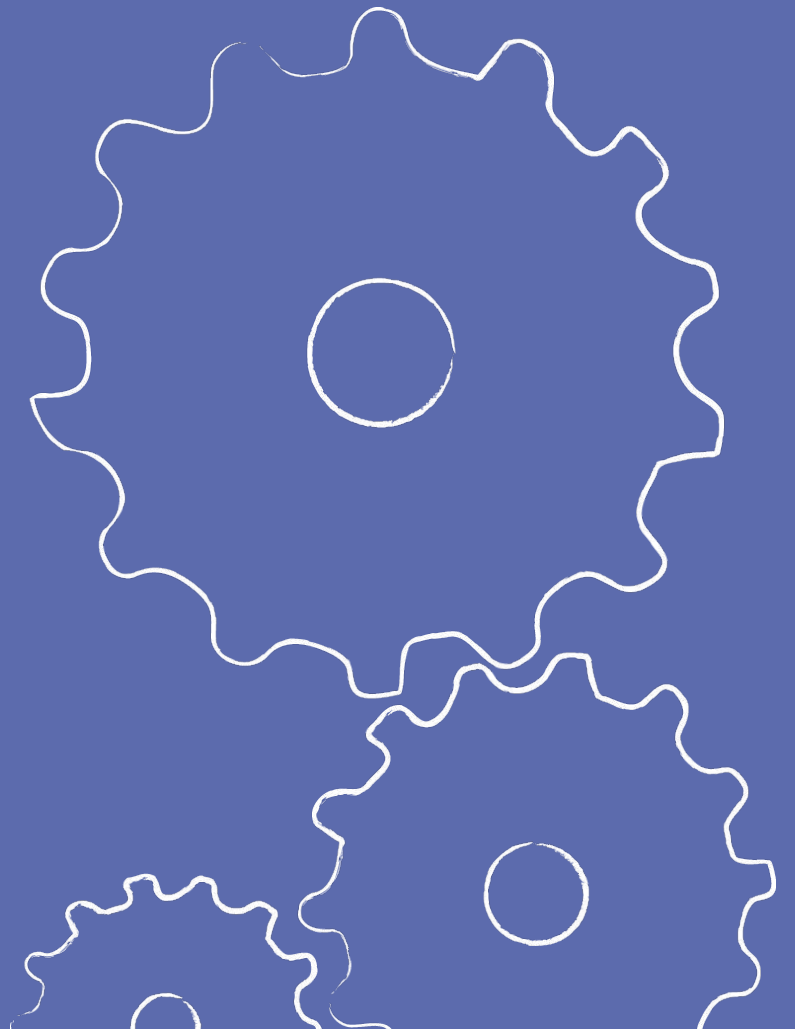
- The outlook for agricultural exports depends on market recovery in global markets. Australia's general economic health will be dependant on that of China and Asia. Crop failures in other parts of the world may present extremely profitable years.
- The outlook for the dairy sector is becoming more optimistic as global dairy demand rises forcing up milk prices. Profitability will still depend on operating at world's best practice.
- The advent of broad band will open up many opportunities:
 - *Small businesses can trade electronically with more ease.*
 - *Remote education will be possible.*
 - *Medical diagnosis will save time and money.*
 - *Young professionals born in the area may be tempted to return home to raise their families, as remote working conditions will be improved.*
- The economic health of the region will be part of is a virtuous circle where population growth and economic growth are mutually dependent.





Part

Scenarios



Section 8 | Demographic scenario

It is important to reiterate that the scenarios following are not a forgone conclusion. They have been modeled using demographic projections based on birth, death and migration trends. The purpose of the modeling is to flag potential issues that may occur if the current population patterns are not intercepted with appropriate strategies.

If there is no intervention and the population trends continue in line with recent trends, in 2025, this is likely to be the demographic picture for the Shire of Gannawarra:

- The Gannawarra Shire will experience steady decline in population. This will put pressure on the local economy.
- The shrinking of the working age residents and increased late retirees on pensions and welfare will reduce average disposable income.
- The reduced spending power will impact on local businesses.
- The growth in the late retirees will increase demand for health services.
- The shire rate revenue and ability to raise revenue from rate increases will diminish.
- A slow decline in the population of school-aged children will require rationalisation of the primary schools.
- Secondary school sector will also struggle to sustain its quality and depth and breadth of education programs.
- Although agriculture will continue to be the main employment sector, this will also decline.
- There will be a major shift into services and support occupations.
- There will also be gender imbalance with males outnumbering females, which could lead to increased violence.

- There could be a shortage of females to fill roles in growing sectors such as health care, administration and tourism.

Section 9 | The 'No intervention' scenario

Without intervention strategies, the likely outlook for Gannawarra in 2025 is not positive:

- Gannawarra will be a relatively small shire with a population of 10,831 people.
- Not only has the population declined, but the economy has shrunk from its peak in the late 90s.
- 40% of irrigation water has been traded out of the region and many of what were highly productive dairy farms are now lying idle with weeds and pest and disease issues.
- NVIRP activity will create a significant number of jobs over the early years, but these are likely to be transient workers.
- Businesses serving farmers and the community in general have closed down because of the reduced spending power and increasing competition from big chains in Bendigo, Swan Hill, Echuca and Melbourne. Sporting and community clubs have closed down because of lack of members.
- At least one primary school has closed and one other is struggling for its survival.
- The quality of education of the technical high school has declined because of insufficient resources to offer specialty courses and inability to attract quality teachers.
- The shire is struggling to service the increasing demand of an ageing and climate change affected community and a reduced rate revenue base.
- One of Victoria's best wetlands remains relatively unexploited because of lack of tourism infrastructure.
- The football teams can no longer field a team and drop out of the competition which damages the community spirit.

Section 10 | The 'Intervention' scenario

With sound strategic planning, the intervention scenario for 2025 appears much brighter.

- Gannawarra will be a growing shire with a gradually increasing population due to the appealing lifestyle and jobs. Broadband will attract remote workers and those workers transitioning to retirement. Improved lifestyle and amenities will encourage young professionals born in the area to return to raise their families.
- Migrants will feel welcomed to settle here and will highly value the healthy air and mild weather. Encouraging migrants to move to Gannawarra will keep the housing sector buoyant and foster tolerance and diversity, to the benefit of the community.
- New industries such as solar, tourism, healthcare and perhaps first stage value-added food processing make us less dependent on dairy. New industries will be attracted by planning assistance and a pro-development shire.
- Marginal land is being re-vegetated at a profit.
- 40% of irrigation water has been traded out of the region but with new farming practices that prioritize land use will help farmers retain economic value.
- Dairy farms are now larger, more profitable and more sophisticated, employing modern practices such as bio-digesters for effluent harvesting and “cut and carry” feed systems.
- Many of the businesses serving the community have adapted to survive competition from larger towns nearby by offering convenience and personalised service.
- Sporting and community clubs are thriving and are the glue that holds smaller towns together and makes them a great place to live.

- A P12 school or alternatively a revitalized Kerang school precinct is part of our new education strategy and means we have retained the critical mass needed to offer specialist programs of study.
- The technical high school is known for its state leadership in key specializations, e.g. specialist welding, solar energy technology, electronic engineering, hospitality and tourism. It tailors study programs to smooth the career paths for young people into emerging local industries e.g. solar, tourism.
- A TAFE or satellite-campus of a larger tertiary institution is offering programs that are relevant to our local industries and service needs and attracts older students back to study.
- Broadband connection opens the region up to remote workers, on-line study options, remote medical diagnostic services, global trading, business process outsourcing and a myriad of other opportunities.
- The shire has lobbied hard for funding post MDB plan and is using this to reinvigorate tourism infrastructure.
- Victoria's best wetlands become the icon of the region. Enhanced by new infrastructure they give local communities a huge sense of pride and identity. Some areas are earmarked for water sports and others for nature pursuits.
- An active hospitality sector arises out of the growing tourism industry and creates jobs and a career path for young workers as well as improving the quality of life for residents.
- The street-scapes are vibrant places where residents want to eat, meet and celebrate regular events.

Part



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