



# Food Security Report

## Healthy Food Connect



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# Introduction

Food security can be defined as the state in which all persons obtain a nutritionally adequate, culturally appropriate diet at all times through local non-emergency food sources. Food security broadens the traditional concept of hunger, embracing a systemic view of the causes of hunger and poor nutrition within a community while identifying the changes necessary to prevent their occurrence.<sup>1</sup>

The Victorian Local Governance Association (VLGA) Food Security Scan delivers the necessary understanding of local issues to facilitate a strategic and cost-effective approach to area food security.

The VLGA Food Security Scan tool was validated by five Local Government Areas from 2008 to 2010. The tool is used to monitor food security in several municipalities across Victoria. The Victorian Department of Health recommends all local government areas implementing the *Healthy Together Victoria* initiative complete the Food Security Scan. (*Healthy Together Bendigo* is an obesity prevention initiative, jointly funded by the State Government of Victoria and the Australian Government.)

## Background

### Role of Local Government in the Food System

The *Public Health and Wellbeing Act 2008*<sup>2</sup> mandates that Local Governments must prepare a Municipal Public Health and Wellbeing Plan every four years following Council elections. Under the Act, City of Greater Bendigo has a responsibility to protect, improve and promote public health and wellbeing within the municipality.

City of Greater Bendigo is ideally placed to develop and implement local policies and actions to address health and the broad range of determinants that influence food security. This involves actions in a range of areas, including transport, roads, parks, waste, land use planning, housing and urban planning, recreation and cultural activities, environmental health, health promotion and creating safe public places.

### Greater Bendigo Municipal Public Health and Wellbeing Plan

The City of Greater Bendigo adopted the Municipal Public Health and Wellbeing Plan (Greater Bendigo Municipal Public Health and Wellbeing Plan or GBMPWH 2013 – 2017)<sup>3</sup> on 23 October 2013. As per page 16 of GBPHWP, actions relevant to food security include:

*“Support to improve healthy food supply and access by development and implementation of specific strategies to address identified nutrition issues for subpopulation groups and regional locations, especially vulnerable populations.”*

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<sup>1</sup> Community Food Security Coalition (2002). Adapted from the Community Food Security Coalition (1995). *Community Food Security Empowerment Act* Venice California

<sup>2</sup> Victorian Government. (2008) *Public Health and Wellbeing Act*. Accessed from Victorian Legislation and Parliamentary Documents <http://www.legislation.vic.gov.au/>

<sup>3</sup> City of Greater Bendigo (Strategy Unit) (2013). *Greater Bendigo Public Health and Wellbeing Plan (GBPHWP) 2013-2017*. Accessed from [www.bendigo.vic.gov.au/healthandwellbeing](http://www.bendigo.vic.gov.au/healthandwellbeing)

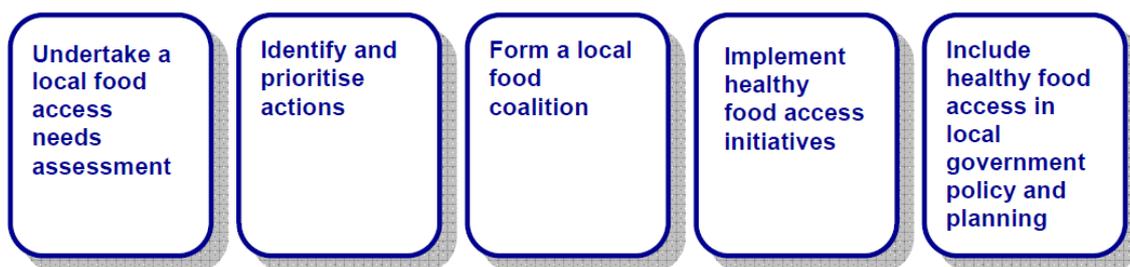
- “Support community initiatives which increase access to healthy food and develop knowledge and skills around healthy eating:
  - Undertake a community wide project to improve healthy eating;
  - Use current evidence to undertake a number of small actions relating to food supply, access, and affordability; and
  - consider the development of a Food Coalition and Food Information Portal”

## Preceding / Concurrent Projects

Food security was identified as a priority through City of Greater Bendigo Strategy Unit’s ‘A Thought for Food – Greater Bendigo Food Security Research Paper’.<sup>4</sup> This 2012 Research Paper (adopted by Council January 2013) includes relevant details on the current global food trends, Australia’s broad policy context, local and regional food priorities and provides future considerations.

In this 2012 Research Paper, *Healthy Food Connect* is identified in future considerations as a possible action to address risk. *Healthy Food Connect* is the multi-faceted model provided by Department of Health to address local food system changes (refer to Figure 1 below).

**Figure 1. Healthy Food Connect model**



Healthy Food Connect aims to: improve access to a healthy food supply, create supportive environments to make healthy food choices the easy choice, influence policy and planning, develop programs to strengthen community action, and have a priority focus on fruit and vegetables.

This document is a summary of the VLGA Food Security Scan component of Healthy Food Connect and completes one recommendation from the 2012 Greater Bendigo Food Security Research Paper.

## Bendigo Food Forum

As part of the Healthy Food Connect Project, the Bendigo Food Forum ‘*Grow Share Cook Source – Greater Bendigo Let’s Connect!*’ was held on 3 June 2013. Over 85 participants attended to discuss food in Greater Bendigo. A variety of people interested in food participated including local farmers, food business owners, university students, restaurateurs, community members and representatives from local food networks. The forum had presentations from Healthy Together Bendigo, Dr Jennifer Alden as a guest speaker and a panel of local food leaders. Results of the Food Forum (Appendix 1) have been considered in this report’s recommendations and thus should be read alongside this document.

<sup>4</sup> City of Greater Bendigo, Strategy Unit (2012). *A Thought for Food – Greater Bendigo Food Security Research Paper*. Retrieved from <http://www.bendigo.vic.gov.au/athoughtforfood>

## Food Insecurity, Obesity and Chronic Disease

The risk of obesity is 20 – 40% higher in individuals who are food insecure.<sup>5</sup> Addressing food insecurity thus supports the Healthy Together Bendigo initiative's primary aim of obesity prevention. Factors associated with eating a poor diet (such as eating too many foods high in fat and sugar and not enough fruit and vegetables) contributes to 15–16% of the burden of chronic disease (double any other lifestyle factor).<sup>6</sup>

## Vulnerable Groups

Individuals and groups with the following characteristics are 'at risk' or vulnerable to food insecurity:

- Low income families (particularly women of child-bearing age, children and adolescents, and single parents with young dependent children)
- People who are unemployed or have limited formal education
- People with a disability, including mental illnesses
- People from non-English speaking backgrounds (including refugee and asylum seekers)
- Frail elderly people (particularly those who are socially isolated and have low incomes)
- People affected by alcohol and/or substance abuse
- Homeless people (particularly youths, women of child-bearing age and the elderly)
- People from Aboriginal and Torres Strait Islander backgrounds<sup>7, 8, 9</sup>

## Method

The VLGA Food Security Scan encompasses the four environments for health: natural, built, economic and socio-cultural. Data was collected between 1 May and 21 June 2013, using a mix of desktop review, interviews with council staff and review of the Municipal Public Health and Wellbeing Plan (MPHWP) community consultation results 2013.

The raw data and references on which this report is based can be found in the full Greater Bendigo Food Security Scan available from [www.bendigo.vic.gov.au/foodsecurityscan](http://www.bendigo.vic.gov.au/foodsecurityscan)

As part of the Food Security Scan, food premises and liquor licenced premises were spatially mapped using Geographical Information System (GIS) mapping.

The six maps depict the density and diversity of food and alcohol outlets across the municipality's townships. Food premise and liquor licenced premises are overlaid on residential areas to provide further context. A buffer of 400m radius has been applied to each food/alcohol premise to represent a reasonable walking distance.

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<sup>5</sup> Burns C, (2004) *A review of the literature describing the link between poverty, food insecurity and obesity with specific reference to Australia*. Victorian Health Promotion Foundation, Melbourne. <http://www.vichealth.vic.gov.au>

<sup>6</sup> Department of Human Services (2005) As cited in 'Prevention Community Model Healthy Food Connect: A support resource (2012)

<sup>7</sup> Wood B, Wattanapenpaiboon N, Ross K, Kouris-Blazos A. (2000) *1995 National Nutrition Survey: All persons 16 years of age and over and all persons 16 years of age and over, by food security*. Monash University, Melbourne.

<sup>8</sup> Department of Human Services (1997) *Healthy Eating, Healthy Victoria: A Lasting Investment*, Victorian Government Department of Human Services, p.31, (<http://www.hna.ffh.vic.gov.au>).

<sup>9</sup> Strategic Inter-Governmental Nutrition Alliance (2000), *Eat Well Australia: An Agenda for Action for Public Health Nutrition*. Melbourne. National Public Health Partnership.

# Findings

The findings from the VLGA Food Security Scan have been summarised below and are presented under the following headings

1. Health and wellbeing dimensions and opportunities
2. Natural environment dimensions and opportunities
3. Built environment dimensions and opportunities
4. Economic environment dimensions and opportunities
5. Socio - cultural environment dimensions and opportunities

## Health and wellbeing dimensions and opportunities

### Prevalence of Food Insecurity

The below statistics are based on positive responses to the following Victorian Population Health Survey (2008)<sup>10</sup> question which measures food insecurity.

“In the past 12 months have you or anyone in your household run out of food and not had enough money to purchase more?”

- 9,466 or 9.4% of the Greater Bendigo population (adults plus dependent children) are considered ‘food insecure’. (This is higher than the Victorian average of 5.6% for adults).
- 10% of 19 to 25 year olds ran out of food more than once a month and another 10% ran out of food less than once a month (and did not have enough money to buy more). This indicates this age group are particularly vulnerable to food insecurity in Greater Bendigo.

### Factors associated with Food Insecurity

A number of Greater Bendigo’s health and demographic characteristics are associated with increased food insecurity.

- 56.1% of adults do not meet fruit and vegetable guidelines
- 56.9% of adults are overweight or obese
- Alcohol use in the Loddon Mallee Region is higher than the state average and the rate of non-drinkers in the region is lower than the state
- The breastfeeding rate is 39.4% which is lower than the state rate of 46.8% (Breastfeeding is a protective factor against obesity<sup>11</sup>)

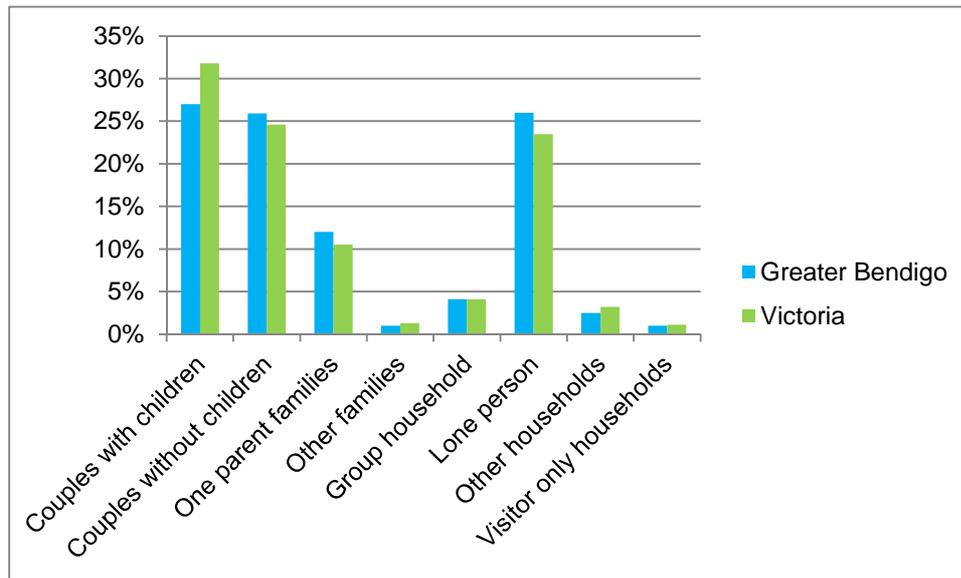
Compared to Victoria, Greater Bendigo has a higher proportion of low income households, earning less than \$400 per week (14.3% Greater Bendigo compared to 12% Victoria). Greater Bendigo has more lone person households and one parent families than the state average as demonstrated in Figure 2 below.

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<sup>10</sup> Victorian Department of Health (2008). *Victorian Population Health Survey 2008*. Accessed from <http://www.health.vic.gov.au/healthstatus/survey/vphs2008.htm>

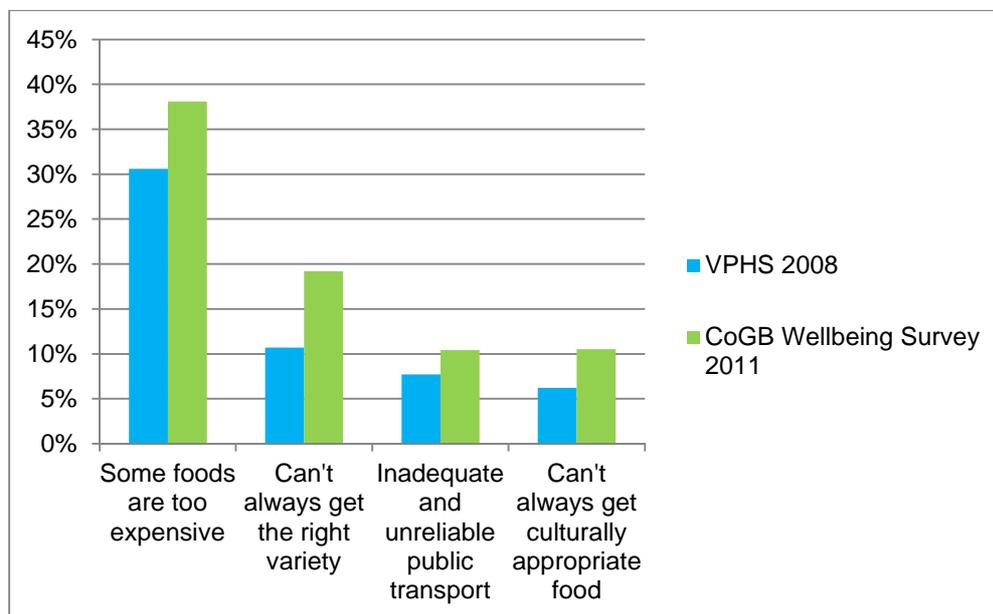
<sup>11</sup> Dewey K (2003). Is Breastfeeding Protective against child obesity? *Journal of Human Lactation* 19(1):9-18

**Figure 2. Household Types, Greater Bendigo and Victoria**



Two large and reliable data sets (2008 Victorian Population Health Survey and 2011 City of Greater Bendigo Health and Wellbeing Survey<sup>12</sup>) indicate that high cost of food is a major risk factor for food insecurity. Other risk factors include inadequate variety available, inadequate and unreliable public transport and lack of access to culturally appropriate food. This has been depicted in Figure 3 below.

**Figure 3. Food Security Risk Factors 2008 to 2011**



<sup>12</sup> City of Greater Bendigo, Strategy Unit (2011). Health and Wellbeing Survey. Accessed from [http://www.google.com.au/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=3&sqi=2&ved=0CDYQFjAC&url=http%3A%2F%2Fwww.bendigo.vic.gov.au%2Ffiles%2Fcc523420-473d-4a12-a8d4-a14f00fb8b6d%2FBendigo\\_Wellbeing\\_Survey\\_-\\_December\\_2012.pdf&ei=GxN4UsjpKlqMiQe044HoCw&usq=AFQjCNGH\\_TUtbIKVcVrYL5R4vpGcfXpVsA](http://www.google.com.au/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=3&sqi=2&ved=0CDYQFjAC&url=http%3A%2F%2Fwww.bendigo.vic.gov.au%2Ffiles%2Fcc523420-473d-4a12-a8d4-a14f00fb8b6d%2FBendigo_Wellbeing_Survey_-_December_2012.pdf&ei=GxN4UsjpKlqMiQe044HoCw&usq=AFQjCNGH_TUtbIKVcVrYL5R4vpGcfXpVsA)

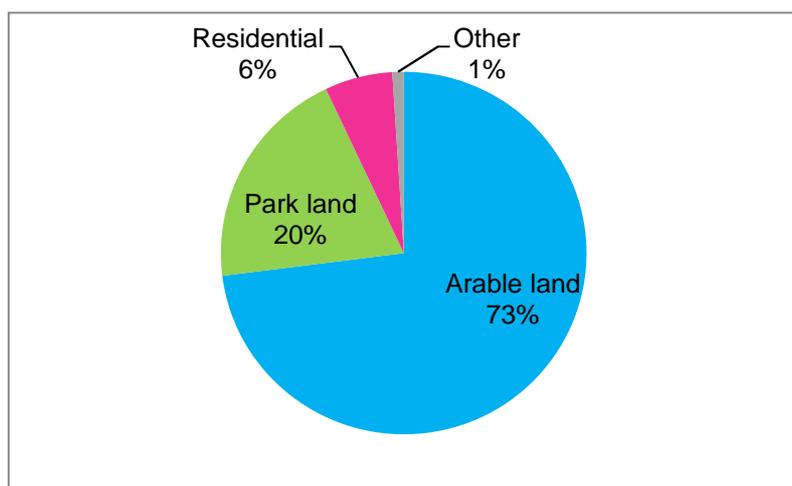
## Natural environment dimensions and opportunities

Greater Bendigo's natural environment offers a level of food security to the community, and provides opportunities to further improve food security.

### Land Use

The City of Greater Bendigo is predominantly arable land (land that can be used for growing crops), see breakdown of land use in Figure 4 below.

Figure 4. Greater Bendigo Land Use



### Food Production

The Loddon region (which encompasses Greater Bendigo) is described as being both diverse in the food it produces and highly productive. Livestock production (beef, pork, lamb and poultry) is strong, as is horticulture. In 2006 just over 2,000 farms (963,000 hectares, approximately 30% is cropped – including vegetables, fruit and nuts) in the region produced \$419 million worth of agricultural product.<sup>13</sup> Other food commercially grown in Greater Bendigo includes, but is not limited to eggs, potatoes, onions, olives, herbs and honey.

### Community Gardens

Community gardens have been demonstrated to increase fruit and vegetable consumption among those who use them,<sup>14</sup> and as part of an integrated system, community gardens can improve the food security of an area and its people.<sup>15</sup>

<sup>13</sup> Victorian Government, Department of Primary Industry, (2010). *Loddon Regional Agricultural Statistics*. Retrieved from <http://www.dpi.vic.gov.au/agriculture/investment-trade/region-overviews/loddon>

<sup>14</sup> Litt JS, Soobader MJ, Turbin MS, Hale JW, Buchenau M, Marshall JA. (2011). *The Influence of Social Involvement, Neighborhood Aesthetics, and Community Garden Participation on Fruit and Vegetable Consumption*. *American Journal of Public Health*, 101 (8), 1466-1473. doi: 10.2105/AJPH.2010.300111

<sup>15</sup> Alaimo K., Packnett E., Miles R.A., and Kruger D.J. (2008). Fruit and Vegetable Intake among Urban Community Gardeners. *Journal of Nutrition Education and Behavior*, 40 (2), 94 – 101.

Greater Bendigo currently has eight operational community gardens:

- Bendigo, Gravel Hill, Bramble Street
- Bendigo, St Andrews Uniting Church, Myers St
- Eaglehawk, Our Shed, Sailors Gully Rd
- Eaglehawk, Our Place, corner of Church and High Street
- Kangaroo Flat, Thomas St
- Long Gully, Energetic St
- Long Gully, St Matthew's Church, Eaglehawk Rd
- Quarry Hill, corner Russell and Harkness St

In addition to the eight community gardens, there are plans for additional community edible planting in the Bendigo Botanic Garden plans. The MPHWP community consultation demonstrated high interest in edible street planting. City of Greater Bendigo does not have a position on this topic.

Children's settings also have vegetable gardens, of varying quality from funded programs to volunteer supported. Mapping results indicate that at least 17/54 schools and 7/38 kindergartens have some form of vegetable garden (and this is likely an underrepresentation).

## Water

The MPHWP community consultation indicated that farmers see that Greater Bendigo's open water channels are an asset worth consideration of protection.

Permanent water saving rules apply across Victoria and commenced in Coliban water region from January 2013. These are a set of five common sense water rules designed to improve water efficiency and prevent water waste. These are in place at all times when water restrictions are not in force.

## Built environment dimensions and opportunities

Greater Bendigo's built environment has a mixed impact on the region's food security and provides opportunities to further improve food security.

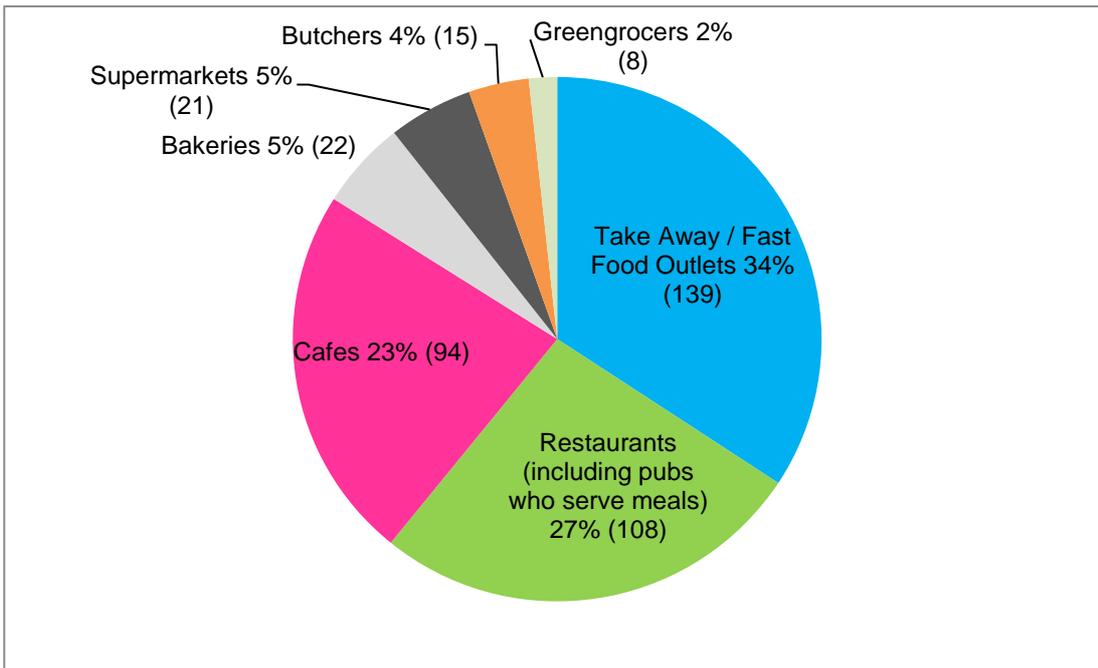
## Food

Eighteen manufacturers operate in Greater Bendigo with the following food products: olives, olive oil and olive preserving, wine, coffee roasting, bread and breadcrumbs, jams and preserves, honey, bottled water and chocolate.

Eight wholesalers/distributors provide a broad range of food including fresh food, ice-cream, grocery products, frozen food, chilled food, fresh meats and seafood and breads.

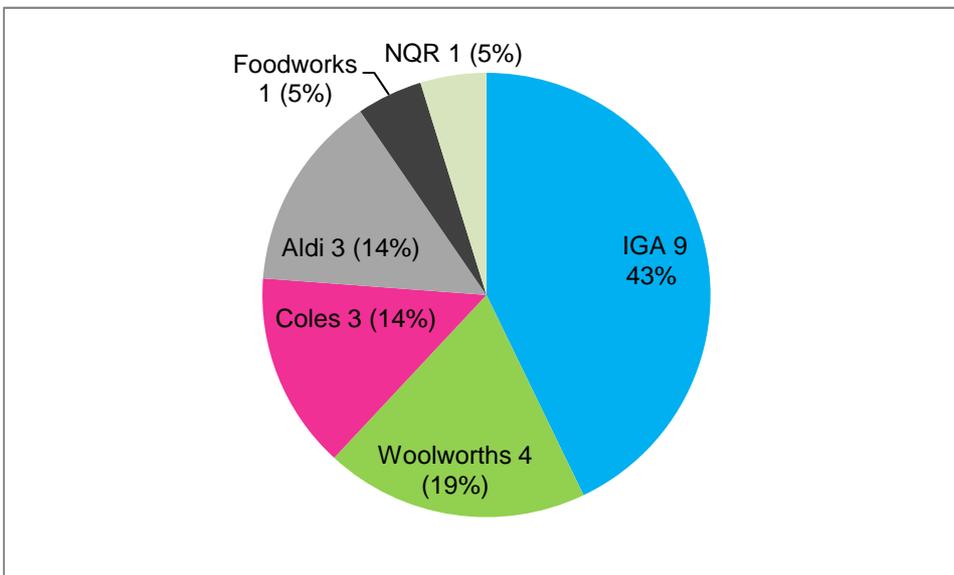
Figure 5 below displays the composition of retail food outlets by store type. From a total of 407 retail food outlets, take away and fast food outlets are the most common with 139 across Greater Bendigo.

**Figure 5. Composition of Retail Food Outlets by Store Type in Greater Bendigo**



There are 21 supermarkets and Greater Bendigo’s supermarket market share is unlike the ‘duopoly’ encountered across Australia. At present IGA supermarkets have the largest presence. This is shown in Figure 6 below.

**Figure 6. Supermarket Share in Greater Bendigo**



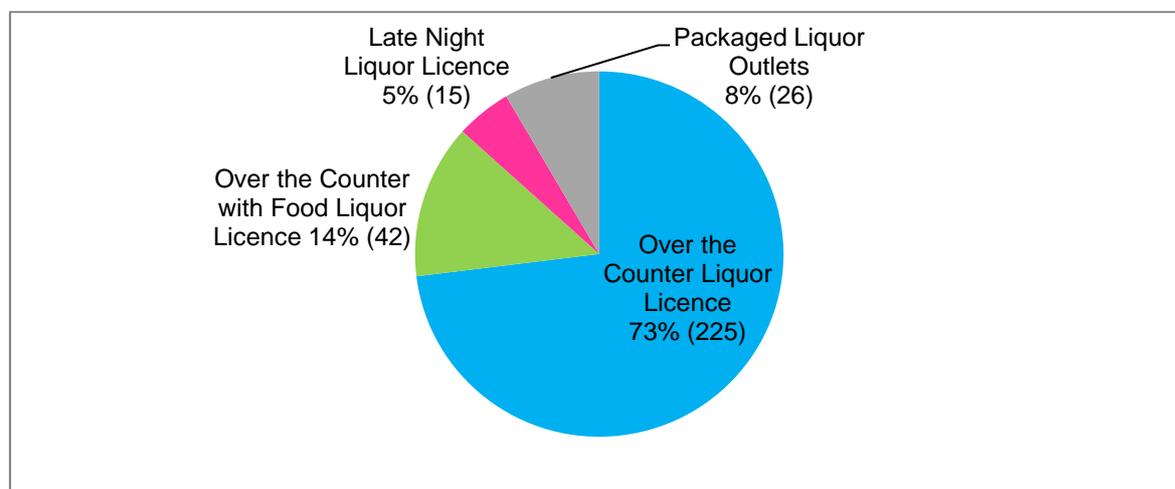
Although Bendigo does experience slightly above average competition in the supermarket sector, competition is generally limited in rural towns, as brought up in MPHWP community consultations. Also refer to Figures 11 – 13 which map food and alcohol access in rural localities.

There is limited home delivery at cost for consumers from various providers. Eighteen out of 51 Greater Bendigo localities can receive deliveries from supermarkets. Locally produced fruit and vegetable boxes are also available from various providers including Peppergreen Farm (Bendigo) and the Food Garden (Castlemaine).

## Alcohol

Liquor density can impact on a region's food security, as the purchase of liquor can take priority over the purchase of food.<sup>16</sup> There are 308 liquor licenced venues and outlets across Greater Bendigo, including 26 packaged liquor outlets and 282 liquor licenced premises. Refer to Figure 6 below.

**Figure 7. Alcohol Access by Liquor Licence Types in Greater Bendigo**



## Transport

There are dedicated on-road bike lanes which connect outlying suburbs with the CBD. These finish upon entering the CBD. Off-road, the Bendigo Creek trail or the 'Linear Corridor' spans from Kangaroo Flat to Epsom, connecting these outlying suburbs with the CBD. The O'Keefe Rail Trail connects Axedale to Bendigo (Lake Weeroona). Three bike lock up stations are available in Bendigo CBD: Bendigo Railway Station, Multi-level car park on Queen Street, and Hargreaves Street. The Hargreaves Street bike cage is not ideal as it is on a slope, posing safety concerns. Bicycle parking and bike cage/enclosures are mapped in Bendigo City Centre on Bendigo Access Map.<sup>17</sup> Bike lock-up facilities are limited in rural localities.

Greater Bendigo bus routes currently follow a social model of transport, aiming to have broad coverage. Long looped routes can decrease time efficiency. Bus routes connect people with the main activity centres across Bendigo, including retail food supplies, dining and meal outlets. The frequency of services may be limited.

Greater Bendigo has higher than state average of dwellings with one car or more ownership (87.5% compared to 85.5% in Victoria), and lower than state average of dwellings with no car ownership (6.8% compared to 8.3% in Victoria).

Although improvements can still be made to transport infrastructure, transport in Greater Bendigo generally contributes positively to the region's food security.

## Economic environment dimensions and opportunities

Greater Bendigo's economic environment has a mixed impact on the region's food security. Income from food production contributes positively to the local economy. However the cost of healthy food is high compared to average levels of income in the region and several emergency food relief providers operate locally.

<sup>16</sup> Browne J, Laurence S, Thorpe S. (2009). *Acting on food insecurity in urban Aboriginal and Torres Strait Islander communities: Policy and practice interventions to improve local access and supply of nutritious food*. Retrieved from <http://www.healthinfont.ecu.edu.au/health-risks/nutrition/other-reviews>

<sup>17</sup> City of Greater Bendigo. Bendigo Access Maps. Available from: <http://www.bendigo.vic.gov.au/maps>

## Income from food production

The Loddon region is described as being both diverse in the food it produces and highly productive. Highlights from gross value of agricultural products across the region from 2009 to 2010 include a variety of foods listed below:

- \$114 million sheep and lamb (slaughtered)
- \$65 million cereals and grains
- \$62 million fruit
- \$28 million milk
- \$15 million eggs
- \$6 million vegetables

## Food Cost

Victorian Healthy Food Basket surveys were completed for 21 supermarkets and 8 green grocers across Greater Bendigo in November 2012. The Victorian Healthy Food Basket is a validated tool used to monitor healthy food cost and accessibility.<sup>18</sup> The 44 items that make up the full Victorian Healthy Food Basket together meet at least 85% of all individual nutrient requirements and at least 95% of all energy requirements for four family types for a fortnight. Cost variability of greengrocers was assessed based on a reduced version of the Victorian Healthy Food Basket, consisting of 10 common fruit and vegetable items.

Findings included:

- The average cost of the healthy food basket for the typical family was \$423.74 per fortnight. In Greater Bendigo 14.3% of households earn less than \$400/week. For these households, a healthy food basket for a typical family would cost 53% of their income.
- The range of the healthy food basket across the 21 supermarkets was \$397.36 to \$513.04. Supermarkets in outer areas such as Heathcote, Elmore, Huntly and Strathfieldsaye were more expensive than supermarkets in Bendigo.
- Healthy food was cheaper at Aldi than other large chain supermarkets (this is consistent with previous data collection in the City of Knox.<sup>19</sup>)
- The total cost of 10 common fruit and vegetables in 8 green grocers across Greater Bendigo ranged from \$16.32 to \$63.50 with outlying towns and organic options being more expensive. Supermarkets were more expensive than green grocers for fruit and vegetables.

## Emergency Food Relief

The Bendigo FoodShare distributes food to approximately 25 emergency relief agencies and schools in the Bendigo region and in towns further afield. The warehouse holds fresh and frozen food, as well as non-perishables. From September 2011 to September 2012 the Bendigo FoodShare distributed enough food for approximately 150,000 meals (104,323 kilograms) to groups such as the Salvation Army, smaller independent resource centres and church groups. Community meals are available across the municipality, with many services operating a weekly service across different times of the day.

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<sup>18</sup> Palermo C, Wilson A.(2007) *Development of a healthy food basket for Victoria*. Australian and New Zealand Journal of Public Health;31(4): 360-363

<sup>19</sup> Outer East Health and Community Support Alliance.(2009) *Outer East Community Food Access Research Project: Food Security Assessment and Plans for a Way Forward*. Available from:  
[http://www.oehcsa.org.au/sites/www.oehcsa.org.au/files/public\\_library/2009/06/284025-upload-00001.pdf](http://www.oehcsa.org.au/sites/www.oehcsa.org.au/files/public_library/2009/06/284025-upload-00001.pdf)

## Socio-cultural environment dimensions and opportunities

The socio-cultural environment of Greater Bendigo is associated with positive food security outcomes.

The population of Greater Bendigo is predominately Australian born (88.3%) with 7% born overseas (with 3.4% Non-English Speaking Background country of origin). People from non-English speaking backgrounds have an increased risk of food insecurity.<sup>20</sup> Compared to the national average, Bendigo has a low proportion of residents from non-English speaking backgrounds.<sup>21</sup>

Within Greater Bendigo many cultures are celebrated, Loddon Campaspe Multicultural Services host community events, particularly through the spring festival of cultures.

Cultural foods are accessible through speciality stores that include two Asian grocers and an Indian grocer within the municipality. Community consultations identified access to cultural food as a challenge, particularly for new and emerging communities, with limited access for Halal meat in Bendigo. An opportunity exists to increase food security in the region by improving access to cultural foods.

Some programs are available for high risk community members e.g. families, young people, older people. Food may be included but is generally not the primary focus of support groups.

Networks and strong volunteerism exists across Greater Bendigo (e.g. canteen managers networks, Bendigo Community Farmers Market, Bendigo Sustainability Group, Country Women's Association are strong in Bendigo and surrounds).

Farmers markets across Greater Bendigo provide social connection through food.

## Maps

Figures 8 to 13 spatially map subsets of the food supply across Greater Bendigo.

Figures 8 and 9 compare availability of 'fresh' or 'healthy' food (represented by supermarkets and greengrocers) with availability of 'unhealthy food' (represented by take away and fast food outlets) in urban Bendigo. A 400m buffer area has been used on all maps as the measure for a reasonable walking distance.<sup>22</sup>

Figure 10 shows access to alcohol, including both packaged liquor outlets and open liquor licenced venues in Urban Bendigo. There are 308 Liquor Licenced premises, including 282 venues with liquor licences and 26 packaged liquor outlets across Greater Bendigo.

Similarly Figures 11 and 12 compare availability of 'fresh' or 'healthy' food (represented by supermarkets and greengrocer) with availability of 'unhealthy food' (represented by take away and fast food outlets) in rural localities. Figure 13 shows access to alcohol, including both packaged liquor outlets and open liquor licenced venues in rural Bendigo. Overall findings include:

- **For every one fresh food outlet (supermarket or greengrocer) there are 4.8 take away or fast food outlets in Greater Bendigo.**
- **Per 10,000 people in Greater Bendigo there are 2.9 fresh food outlets (supermarkets and greengrocers), 13.8 take away / fast food outlets and 30.6 liquor licenced outlets / premises.**
- **'Food deserts' exist in residential areas where there is limited access to daily food needs. (Particularly refer to Figure 11 which shows many rural localities do not have access to a supermarket or green grocer).**

<sup>20</sup> VicHealth (2005). *Healthy Eating – Food Security Investment Plan 2005-2010*. Victorian Health Promotion Foundation, Australia. <http://www.vichealth.vic.gov.au>

<sup>21</sup> Australian Bureau of Statistics (2012). *Australian Demographic Statistics*, Jun 2012. Canberra: ABS. (ABS Cat. No. 3101.0)

<sup>22</sup> Johns Hopkins Centre for a Livable City et al. (2012) *Baltimore City Food Environment Map Methodology*. Retrieved from [www.jhsph.edu/sebin/k/o/baltimorecityfoodenvironment.pdf](http://www.jhsph.edu/sebin/k/o/baltimorecityfoodenvironment.pdf)

Figure 8. Fruit and Vegetable Access map – Urban Bendigo

The shaded green area is a 400m buffer around supermarkets / green grocers, representing walking distance

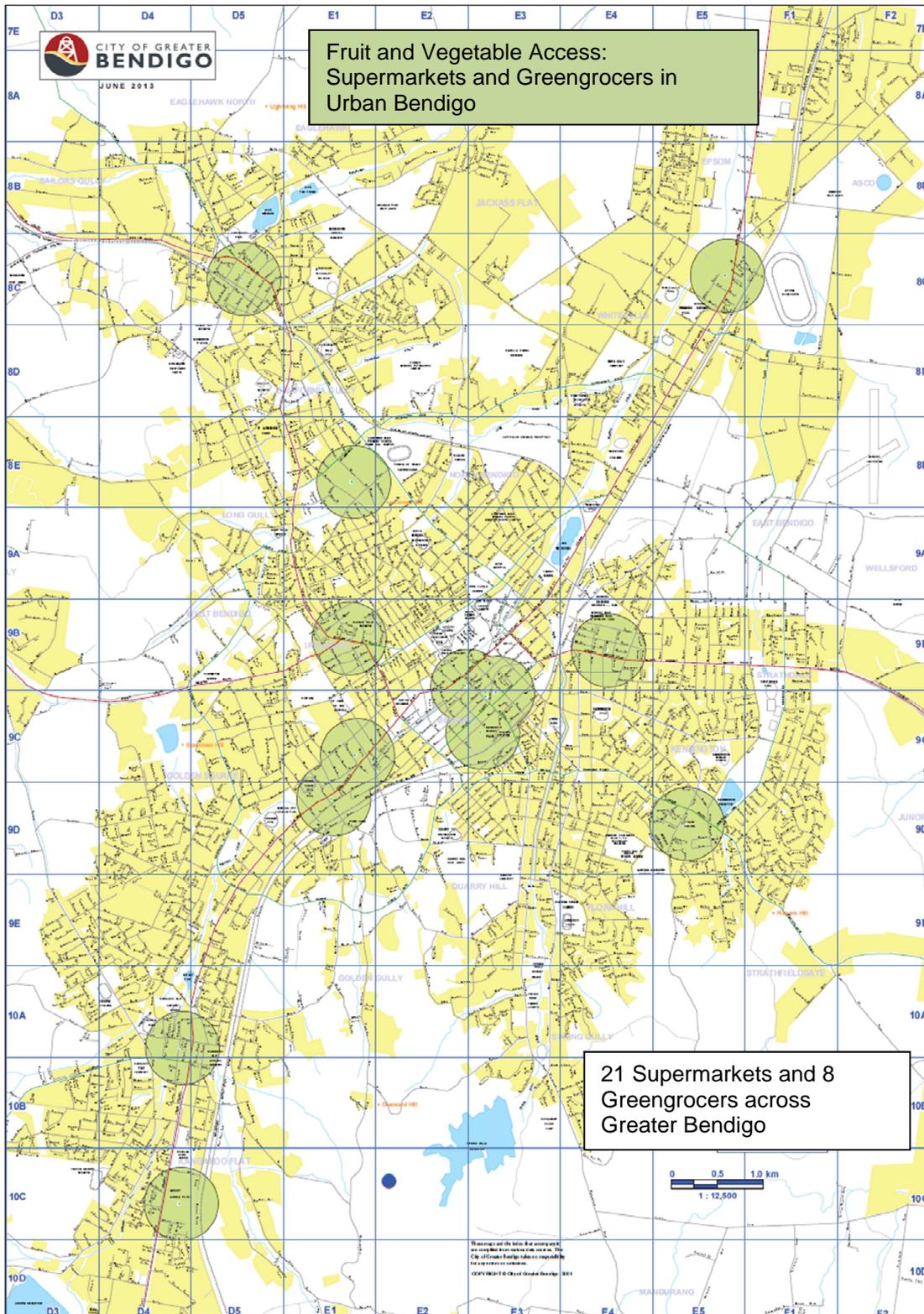


Figure 9. Take Away / Fast Food Access map – Urban Bendigo

The shaded red area is a 400m buffer around take away / fast food outlets representing walking distance

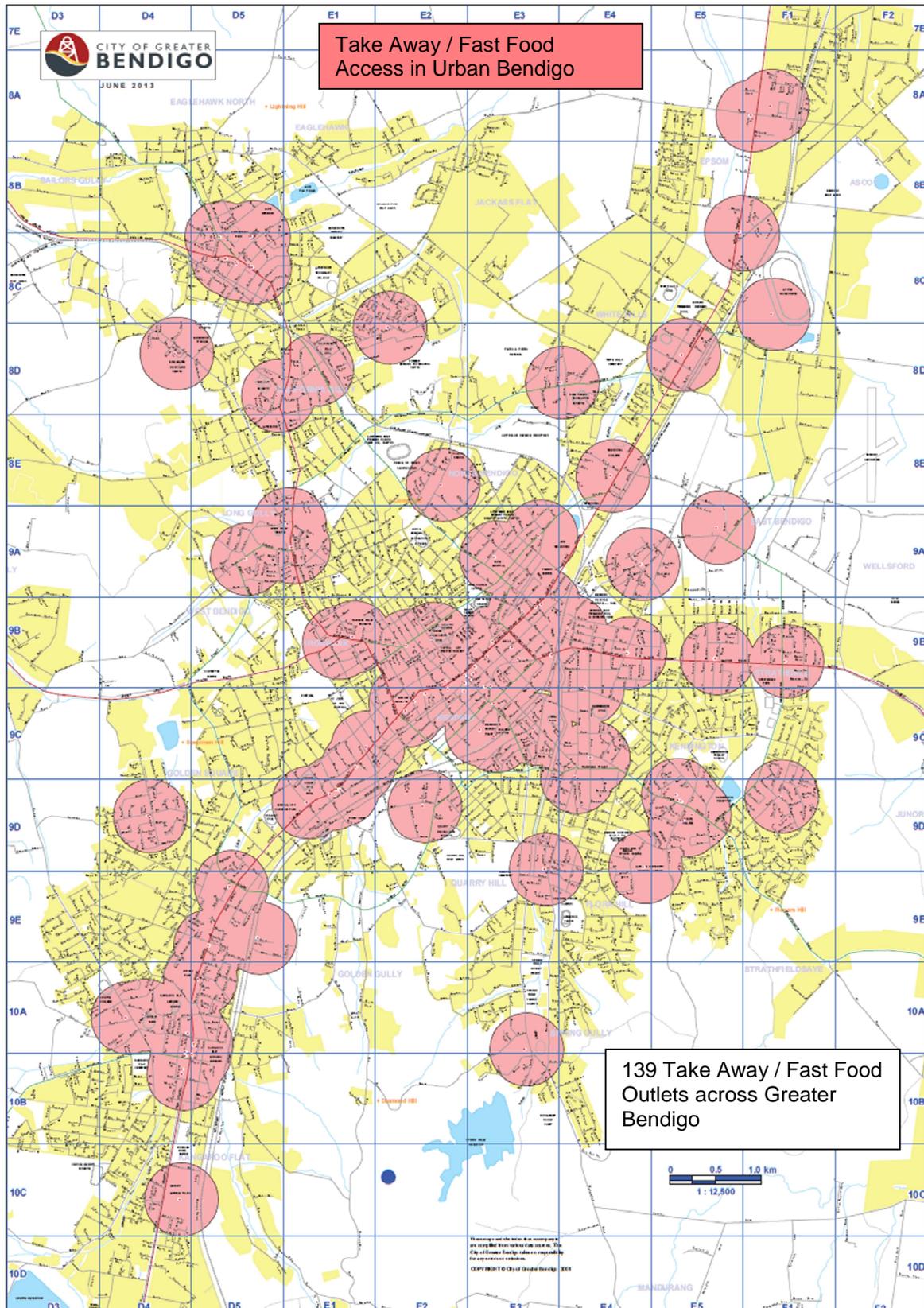


Figure 10. Alcohol Access map – Urban Bendigo

The shaded blue area is a 400m buffer around liquor licenced premises / outlets representing walking distance

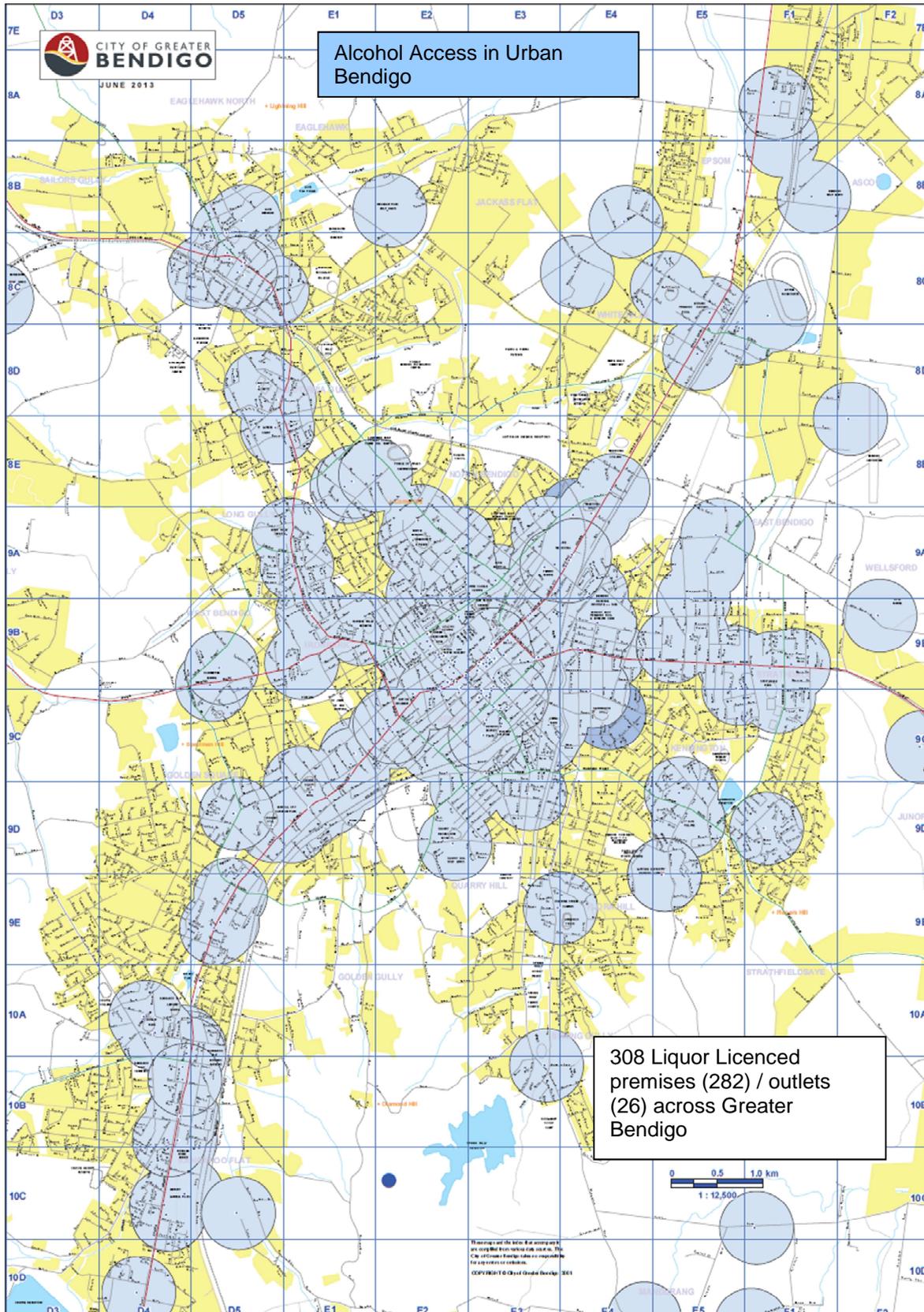


Figure 11. Fruit and Vegetable Access map – Rural Localities

The shaded green area is a 400m buffer around supermarkets / green grocers, representing walking distance

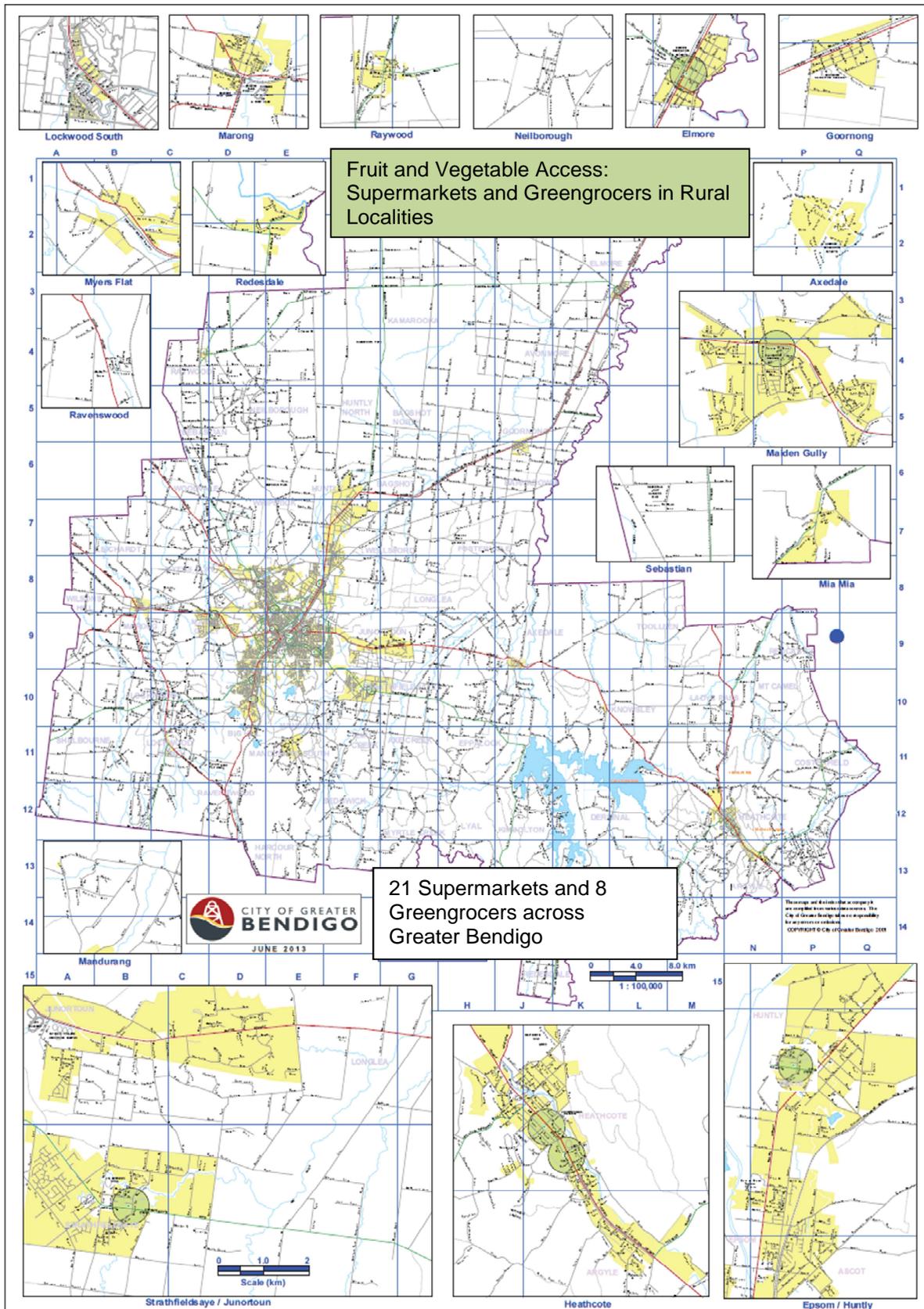


Figure 12. Take Away / Fast Food Access map - Rural Localities

The shaded red area is a 400m buffer around take away / fast food outlets representing walking distance

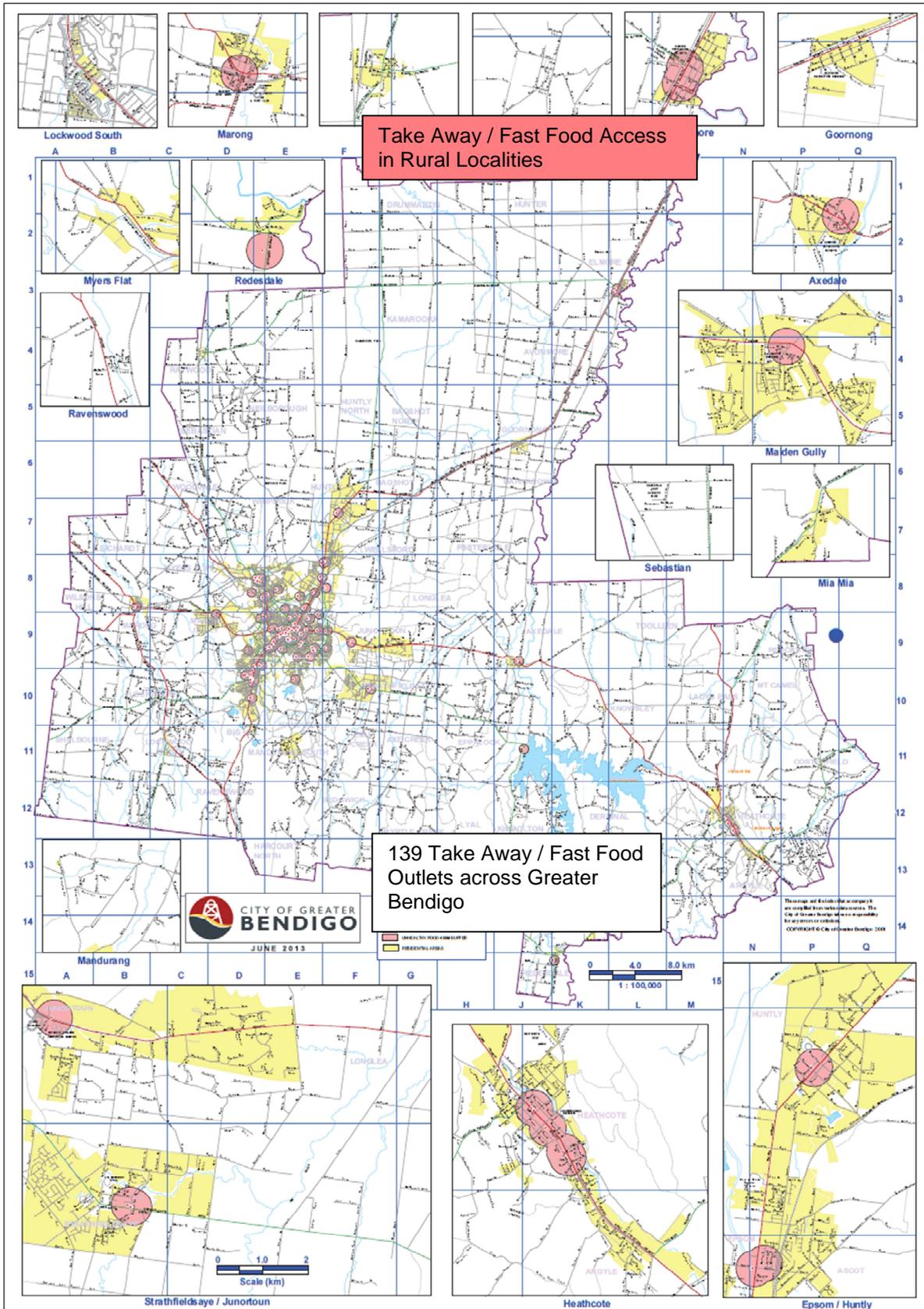
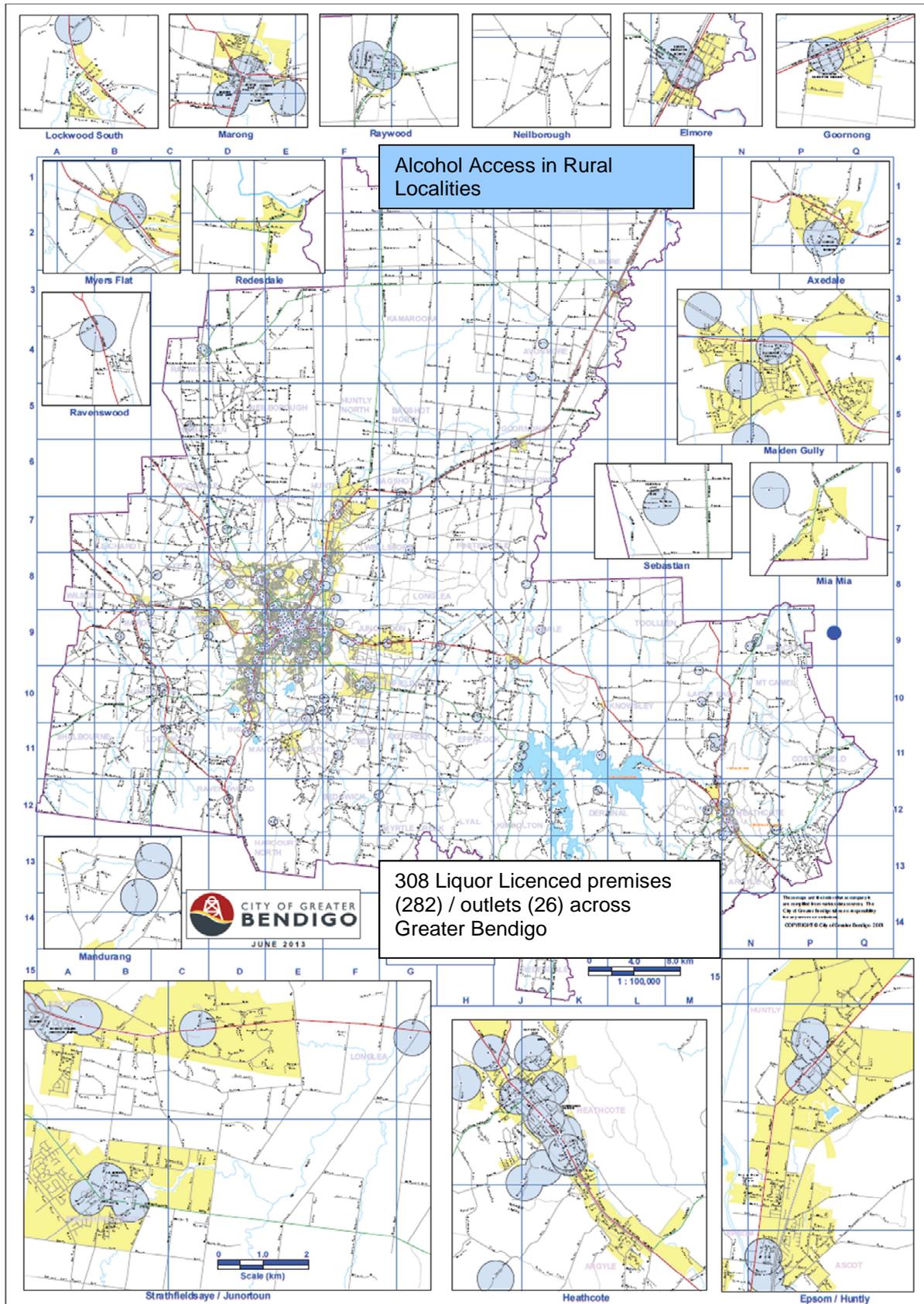


Figure 13. Alcohol Access map – Rural Localities

The shaded blue area is a 400m buffer around liquor licenced premises / outlets representing walking distance



# Recommendations

## Short term (Nov 2013 – Dec 2014)

1. Continue implementation of Department of Health's Healthy Food Connect Model by forming a food coalition from a broad base of sectors (as recommended in GBPHWP 2013-2017)
  - a. Review models (Coalition membership recommends 1/3 government, 2/3 non-government)
  - b. Identify key projects
  - c. Seek Governance Group and Executive Management Team (EMT) input and feedback
  - d. Provide recommendations for action, so as not to over script activities for coalition
2. Investigate feasibility of a regional food distribution centre
3. Further strengthen the already high level of community food interest through the development of a Food Information Portal for example a website page (as recommended in GBPHWP 2013-2017)

## Medium to long term (Nov 2013 – Nov 2018)

4. Develop City of Greater Bendigo position and guidelines on nature strip edible planting
5. Contribute to creating a supportive environment for local food producers (for example through the development of a young farmers network)
6. Develop and implement a City of Greater Bendigo Food Policy
7. Develop and implement a City of Greater Bendigo Healthy Catering and Procurement Policy
8. Continue to consider Food Sensitive Planning and Urban Design (FSPUD) principles when developing Council plans and policies
9. Improve access to healthy food by supporting the community to access produce from local suppliers
10. Investigate incentives for local food businesses to reformulate menus and/or dishes to promote healthy options
11. Improve access to healthy food at food outlets through healthy living strategies such as *Green Light, Eat Right*
12. Create a supportive environment for breastfeeding by implementing the healthy living strategy *Breastfeeding Friendly Communities* via Workplaces Achievement Program engagement
13. Investigate opportunities to improve transport options to access fresh food supplies, prioritising rural areas and disadvantaged communities
14. Investigate opportunities to rescue and distribute excess produce from local growers (prioritising areas with limited healthy food access)
15. Continue to monitor healthy food cost through the Victorian Healthy Food Basket surveys to contribute to state wide Monash University research

# Future considerations

The below table reiterates the long-term considerations discussed in the Research Paper 2012.

**Figure 14. Future considerations (as per Research Paper 2012, pg.67)**

Item	Risk or consequence of inaction	Significance / timeframe	Possible action to address risk	Outcome
1.	Increasing rates of household and individual food insecurity adversely impacting health and wellbeing outcomes	High for affected individuals and households (immediate)	Include in the Municipal Public Health Plan exploring the Healthy Food Connect model to undertake detailed assessment (now complete), establish local food coalition and create supportive program and policy environment to address local barriers to food security.	<ul style="list-style-type: none"> <li>Strengthened household food security environment</li> </ul>
2.	Climate change resulting in increased extreme weather events, water scarcity, pest infestations leading to increased food prices due to decreasing food production	Medium (over 10-15 years and in case of returned drought High)	<p>Consider strategies that strengthen the local food economy and community neighbourhoods and households increasing the amount of food produced locally/regionally.</p> <ul style="list-style-type: none"> <li>Reviewing the Food Sensitive Planning and Urban Design (FSPUD) principles and practices</li> <li>Explore through Creating a Climate Resilient Southern Mallee project regional strategies to strengthen the food system</li> <li>Waste Strategy - consider composting and reducing food waste</li> <li>Economic Development Strategy - consider strategies which increase diversity of local/regional growers, processors, retailers; strengthen connections in food chain including explore feasibility of Regional Food Hub</li> <li>Community engagement and development to build capacity and workforce</li> <li>Explore establishing a Local Food Coalition (Healthy Food Connect)</li> </ul>	<ul style="list-style-type: none"> <li>Stronger local food economy</li> <li>Improved links along the regional food chain</li> <li>Local and regional responses / strategies built around potential climate change impacts</li> </ul>
3.	Peak Oil resulting in increasing petrol prices impacting food production and how community members currently access food.	Medium to High (over 5-10years)	<ul style="list-style-type: none"> <li>Review FSPUD principles and practices</li> <li>Review sustainable transport initiatives to improve access to major activity centres and hence affordable healthy food</li> <li>Review strategic planning objectives to create increased opportunities for food growing in neighbourhoods and decentralised food retailing</li> <li>Explore feasibility of Regional Food Hub to minimise food miles and increase connection between producers and communities</li> </ul>	<ul style="list-style-type: none"> <li>Increasingly decentralised food retailing</li> <li>Increased urban food production</li> <li>Strengthened regional food connection between growers and retailers and community</li> </ul>

Item	Risk or consequence of inaction	Significance / timeframe	Possible action to address risk	Outcome
4.	Community behaviour and understanding around eating local healthy affordable food	High (immediate)	<ul style="list-style-type: none"> <li>Through the Healthy Together Bendigo initiative explore building community skills knowledge and confidence around buying, cooking and eating healthy affordable seasonal foods</li> <li>Explore strengthening community value in local and regional food through community campaigns and modelling food behaviour ( catering policy for council and council funded events, services and venues)</li> <li>Explore the use of the councils community grants scheme to strengthen community action</li> </ul>	<ul style="list-style-type: none"> <li>Greatest awareness and understanding of the value in eating regional and local healthy affordable foods</li> <li>Increased fruit and vegetable consumption</li> </ul>
5.	Protect land used for agricultural purposes	High (immediate)	<ul style="list-style-type: none"> <li>Submit review of Municipal Strategic Statement to protect intensive animal agriculture sector and minimise future tensions to expand surrounding land use for urban expansion</li> <li>* Review land use strategies to protect arable farm land</li> </ul>	<ul style="list-style-type: none"> <li>Secured land use objectives protecting long term production and use</li> </ul>

# Glossary

**EMT:** Executive Management Team

**Food Security:** can be defined as the state in which all persons obtain a nutritionally adequate, culturally appropriate diet at all times through local non-emergency food sources.

**FSPUD:** Food Sensitive Planning and Urban Design

**GBPHWP 2013-2017:** Greater Bendigo Public Health and Wellbeing Plan 2013-2017

**HFC:** Healthy Food Connect is the model provided by Department of Health that aims to improve access to a healthy food supply, create supportive environments to make healthy food choices the easy choice, influence policy and planning, develop programs to strengthen community action, and have a priority focus on fruit and vegetables.

**MPHWP:** Municipal Public Health and Wellbeing Plan

**VLGA:** Victorian Local Government Association

**VPHS:** Victorian Population Health Survey 2008

# Appendix

## Food Forum Results

### Introduction

*Grow Share Cook Source – Greater Bendigo Let's Connect!* was held on 3 June 2013 and over 85 participants attended to discuss food in Greater Bendigo. A variety of people interested in food participated including local farmers, food business owners, university students, restaurateurs, community members and representatives from local food networks.

The forum had presentations from Healthy Together Bendigo, Dr Jennifer Alden as a guest speaker and a panel of local food leaders. To guide participant discussion a process called open space was utilised.

### What is Open Space?

Open space is a facilitated activity, where table topics are nominated by participants. Once table topics have been finalised, participants can move to the table that they are most interested in and let the discussion begin. At *Grow Share Cook Source – Greater Bendigo Let's Connect!* a total of 26 table topics were identified and discussed over three 20 minute rotations.

The open space topics discussed included:

1. Volunteering private land use
2. Building the soil and composting
3. Food for fun
4. How to garden without funding
5. Urban agriculture facilitator in council
6. Young people and primary production
7. Food safety / food regulation
8. Collaborative supply
9. Edible food waste
10. Food education
11. Food in the public realm
12. Food scaping
13. Food as a communication tool
14. Sharing of the surplus
15. Community kitchens
16. Community gardens
17. Urban bee keeping
18. Centralised website
19. Inspiring behaviour change
20. Involve rural community
21. How to access funding in schools / community groups
22. Maintaining affordability
23. Creating employment around food
24. Producer to consumer
25. Building skills and knowledge
26. Community participation

Upon the activity's conclusion, 29 giant post-it notes full of ideas and valuable information were collected. The following grids have been developed to present your ideas that were noted during the open space. There are 26 grids below, one for each table topic. The themes included:

- Training
- Information and document
- Project ideas
- Website content suggestion
- Local farmers ideas
- Mentoring ideas
- Special interest group ideas

Below is a sample of how the results are presented.

# Table topic	
Theme	Discussion point
<i>This column has one or more of the themed ideas that were identified whilst collating the table topics.</i>	This column has the exact discussion point that was written onto the giant post it paper on the day of the event.

## Results – ‘Summary of Ideas’

1. Volunteering private land use	
Theme	Discussion point
<i>Training</i>	Seed saving
<i>Training</i>	Worm farms
<i>Project ideas</i>	Sharing neighbours gardens
<i>Website content suggestion</i>	Local producers
<i>Website content suggestion</i>	Fruit trees
<i>Website content suggestion</i>	Seed bank
<i>Website content suggestion</i>	Willing Workers On Organic Farms (WWOOFERS) opportunities in Greater Bendigo

2. Building the soil and composting	
Theme	Discussion point
<i>Training</i>	Compost making and children’s composting and home compost
<i>Website content suggestion</i>	Compost
<i>Mentoring ideas</i>	Compost mates
<i>Composting</i>	Hubs for composting
<i>Composting</i>	Build composting skills

3. Food for fun	
Theme	Discussion point
<i>Training</i>	Cooking meals together
<i>Project ideas</i>	Themed dinner parties

#### 4. How to garden without funding

Theme	Discussion point
<i>Project ideas</i>	Garden supporters
<i>Project ideas</i>	Community mulching
<i>Project ideas</i>	Cheap nursery
<i>Website content suggestion</i>	Community gardens FAQ
<i>Website content suggestion</i>	Volunteer opportunities
<i>Website content suggestion</i>	Funding opportunities
<i>Special interest group ideas</i>	Community gardens / Community Kitchens

#### 5. Urban agriculture facilitator in council

Theme	Discussion point
<i>Media project</i>	Engage community members and identify topic champions e.g. compost

#### 6. Young people and primary production

Theme	Discussion point
<i>Training</i>	Local food system career expo
<i>Information and documents</i>	Accessibility to farms
<i>Website content suggestion</i>	Celebrate and educate young people on 'hoof to hook'
<i>Local farmers ideas</i>	Providing production as a legitimate career / profession
<i>Mentoring ideas</i>	Education – production as a legitimate career
<i>Special interest group ideas</i>	Coordinate and link existing assets for wider benefit
<i>Special interest group ideas</i>	'Young Farmers' network

#### 7. Food safety / food regulation

Theme	Discussion point
<i>Training</i>	Information sessions for groups with common interest
<i>Website content suggestion</i>	Food safety and 'dofood safely' links
<i>Composting</i>	Waste regulations – 'used by' needs to be freed up

8. Collaborative Supply	
Theme	Discussion point
<i>Project ideas</i>	Street harvest project
<i>Project ideas</i>	Goat fair can expand for other topics (which would need to include extra funding)
<i>Website content suggestion</i>	Young growers
<i>Website content suggestion</i>	Foodbank
<i>Mentoring ideas</i>	Share produce for help with maintenance of domestic green house
<i>Special interest group ideas</i>	Paddock to plate collaboration
<i>Special interest group ideas</i>	Sharers fruit box
<i>Composting</i>	Donation to Foodbank – they accept all food

9. Edible food waste	
Theme	Discussion point
<i>Training</i>	Why do we buy too much

10. Food education	
Theme	Discussion point
<i>Training</i>	Time management
<i>Training</i>	Small children gardening
<i>Project ideas</i>	After school cooking classes
<i>Special interest group ideas</i>	Community gardens / Community Kitchens
<i>Special interest group ideas</i>	Community garden in schools

11. Food in the public realm	
Theme	Discussion point
<i>Project ideas</i>	Establish fruit / nut street trees

12. Food scaping	
Theme	Discussion point
<i>Information and documents</i>	Public food growth policy
<i>Information and documents</i>	Map food availability
<i>Information and documents</i>	Identify existing public food
<i>Project ideas</i>	Food Access Officer
<i>Project ideas</i>	Food garden agriculturalist
<i>Project ideas</i>	Trial 'food scape' (maybe use DHS land?)
<i>Special interest group ideas</i>	Comm unity programs for people to get involved e.g. – work for the dole

13. Food as a communication tool	
Theme	Discussion point
<i>Project ideas</i>	Make a day to cook with family
<i>Project ideas</i>	Change 'pie night' at sports clubs to 'cook favourite recipe night' or 'cook grandma's recipe night'
<i>Website content suggestion</i>	Men's recipes
<i>Website content suggestion</i>	Mamabake / community kitchens
<i>Composting</i>	'Zero Waste Challenge'

14. Sharing the surplus	
Theme	Discussion point
<i>Media project</i>	Communicate surplus food in articles
<i>Website content suggestion</i>	Surplus food options
<i>Composting</i>	

15. Community kitchens	
Theme	Discussion point
<i>Information and documents</i>	Identify Community kitchens spaces
<i>Information and documents</i>	Map of community kitchens
<i>Information and documents</i>	Community kitchens FAQ
<i>Project ideas</i>	Pop up community kitchens
<i>Project ideas</i>	Foodbank attendees cooking lessons
<i>Project ideas</i>	Foster groups that are often under skilled e.g. footy club
<i>Website content suggestion</i>	Community kitchens FAQ
<i>Website content suggestion</i>	Community kitchen spaces
<i>Mentoring ideas</i>	Foodbank attendees obtaining skills in cooking / sharing

16. Community gardens	
Theme	Discussion point
<i>Website content suggestion</i>	Community gardens in Bendigo
<i>Website content suggestion</i>	Funding opportunities

17. Urban bee keeping	
Theme	Discussion point
<i>Training</i>	Need for training in Bendigo – (existing course in Castlemaine / Albury)
<i>Website content suggestion</i>	Community Sharing e.g.- honey extractor

18. Centralised website – see also theme ‘website content suggestions’	
Theme	Discussion point
<i>Website content suggestion</i>	Centralised website – Grow, Share, Cook, Source food directory
<i>Website content suggestion</i>	Physical noticeboard at the Market Place/ Bendigo Community Farmers Market

19. Inspiring behaviour change	
Theme	Discussion point
<i>Training</i>	Bulk purchasing
<i>Project ideas</i>	Alternative fundraisers
<i>Website content suggestion</i>	Women who live healthy on panels
<i>Mentoring ideas</i>	Changing the social norm e.g. not a chocolate drive but a fruit drive
<i>Special interest group ideas</i>	‘Stuff Sharers’, ‘Food Sharers’ and ‘Bendigo Community Food Network’ networks on Facebook
<i>Special interest group ideas</i>	Parents Jury Bendigo

20. Involve rural community	
Theme	Discussion point
<i>Project ideas</i>	Community harvest
<i>Project ideas</i>	Farm tours for community
<i>Local farmers ideas</i>	Small rural allotments 100 acres producing very small scale need a connection point to learn, trade, build business skills, understand the market / need
<i>Special interest group ideas</i>	Connect experienced people with people who have passion / ideas
<i>Special interest group ideas</i>	Small farmers

21. How to access funding in schools and community groups	
Theme	Discussion point
<i>Website content suggestion</i>	Funding opportunities

22. Maintaining affordability	
Theme	Discussion point
<i>Training</i>	Farm tours
<i>Project ideas</i>	Reduce red tape reduction for bin diving and food sellers e.g. B&B gift baskets
<i>Project ideas</i>	Allocate central space for people to come together and buy / sell fresh produce – food market
<i>Project ideas</i>	Food swaps
<i>Website content suggestion</i>	Food share / swaps

### 23. Creating employment around food

Theme	Discussion point
<i>Media project</i>	Positive media on local farmers
<i>Information and documents</i>	Buy local policy or food policy

### 24. Producer to consumer

Theme	Discussion point
<i>Local farmers ideas</i>	Producers to consumers
<i>Local farmers ideas</i>	Learn how to direct sell
<i>Local farmers ideas</i>	One stop shop for producers / consumers

### 25. Building skills and knowledge

Theme	Discussion point
<i>Training</i>	Celebrity workshops
<i>Training</i>	Community kitchen / community garden stall at the farmers market
<i>Training</i>	Waste management
<i>Training</i>	Seedling demonstration
<i>Website content suggestion</i>	Food availability

### 26. Community participation

Theme	Discussion point
<i>Training</i>	Identify community hubs
<i>Information and documents</i>	Mapping of what initiatives are present and dissemination
<i>Information and documents</i>	Advertising
<i>Project ideas</i>	Barrier from paddock to plate - processing
<i>Project ideas</i>	Tours of community gardens
<i>Website content suggestion</i>	Mapping of what initiatives are present

Participants were asked to complete evaluation forms upon the conclusion of the forum. A total of 52 forms were submitted. 38 participants reported that the main outcome of the forum was networking opportunities. Below is a snippet of results from one of the evaluation form questions.

10. Overall, were you satisfied with today's Food Forum?

**Yes**  
 why or why not?

Great network and sharing of knowledge. It was very well organised. Was only able to stay for part - but great turn out of people.

So inspiring, I want to start my own veggie garden. Good ideas - lots of them!

You asked us what we would like to know you didn't presume. Far better outcome.

Great way to share ideas. Had a chance to learn, express ideas & hear other people's ideas.

Energy of participants - wealth of information. Sharing - eagerness to see something concrete emerge from ideas.

Interesting diversity of topics and people.

Great the knowledge we were tapping into local energy.



[www.bendigo.vic.gov.au/healthytogether](http://www.bendigo.vic.gov.au/healthytogether)

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