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# ***Community Food Security Needs Assessment***

***Colac Otway Shire***





## November 2013

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## 1. EXECUTIVE SUMMARY

### Introduction

Food security is defined as the *'the state in which all persons obtain nutritionally adequate, culturally acceptable, safe foods regularly through non-emergency sources'*<sup>i</sup>.

Population data for the Colac Otway Shire (COS) shows that eight in every one hundred people in the region ran out of food over a twelve month period and were unable to replace it<sup>ii</sup>. This figure is higher than both the Barwon South West Region and Victorian averages of food insecurity rates<sup>iii</sup>. This data is supported by findings that over half the COS population is not meeting the daily recommended fruit intake levels, and an even greater amount are not meeting the daily recommendations for vegetable consumption<sup>iv</sup>. In addition, over half of the COS population is classified as overweight or obese<sup>v</sup>. Population data also shows that rates of food-related chronic disease, such as heart disease, stroke and diabetes are following an increasing trend in Victoria<sup>vi</sup>. These statistics supported the initiation of health promotion activities around food security and healthy eating, which subsequently resulted in these issues being addressed through the public health and health promotion plans for Colac Area Health (CAH), Otway Health and Community Services (OHCS) and the COS.

In order to plan appropriate public health and health promotion directions for action to address food security and healthy eating within the COS, a greater understanding of the determinants of food security and how they affected our population was required. This led to the development and implementation of a comprehensive needs assessment for the COS.

### Methodology and findings

A partnership between CAH, COS and OHCS was formed in order to develop and implement the needs assessment for the region. The Colac Otway Shire Needs Assessment adopted strong research practice using a range of frameworks and best practice processes including; the United States Department of Agriculture (USDA) Community Food Security Assessment Toolkit; Southern Grampians and Glenelg (SG&G) Community Food Security Needs Assessment and Bellarine Community Health Centre (BCHC) Food Security Needs Assessment on the Bellarine Peninsula.

The COS Needs Assessment was conducted in 2012 – 2013 using a range of food security research methods including; problem definition; retail, food production and

transport mapping, and consultation with both the community and with key stakeholders. The completion of Victorian Healthy Food Basket (VHFB) surveys and an assessment of primary, secondary and grey literature were also used to provide evidence for appropriate food security actions.

Research of existing evidence and data was undertaken, with a variety of population data sources accessed in order to assist in defining the issues and determinants of food insecurity in the COS. The main findings which build on existing data and knowledge around food security were uncovered by investigating primary data on the determinants of food insecurity.

The main findings in relation to the determinants of food insecurity found that the COS has the lowest Socio-Economic Index for Areas (SEIFA) in the Barwon South West region<sup>vii</sup>, with all at risk population subgroups for food insecurity being represented in our catchment<sup>viii</sup>. Other key findings about the COS population include; forty per cent of the population earn an income less than four hundred dollars a week, formal education levels are low, less than half of the population are located near public transport and median income levels are below national averages<sup>ix</sup>.

Mapping of food outlets and public transport was completed within the COS. Food outlet mapping used Google Maps<sup>x</sup> to map food outlets using a list of registered food premises provided by the Environmental Health Department at the COS. Transport mapping was completed using timetables and routes available on the Public Transport Victoria website<sup>xi</sup>. The key findings from the food outlet mapping showed that only eight per cent of food outlets were supermarkets or fresh fruit and vegetable stores, and the majority were food outlets consisting of restaurants, cafes and takeaway stores.

Public transport mapping found that the frequency and travel time of public transport routes did not appear to currently support easy access to fresh produce stores, particularly for areas of food deserts and those outside Colac Central.

Victorian Healthy Food Basket<sup>xii</sup> is a standardised tool developed by Monash University to collect information on the cost, availability and accessibility of a healthy basket of food available at major supermarkets across Victoria. These results are then measured against the Centrelink benefits received by subpopulation groups more at risk of food insecurity; this measured the percentage of income spent on food over a fortnightly period. If the cost of the VHFB totals above thirty per cent of

their benefits, they are considered more vulnerable to food insecurity. This tool categorises items listed in the VHFB into seven food categories, including cereals, vegetables, fruit and unhealthy items.

Five supermarkets were assessed using this tool in the COS in 2012. The main findings show that the average cost of shopping for a healthy food basket at supermarkets within the COS uses over thirty percent of the average government income benefits, with the exception of the two major supermarkets in Colac Central. Families, single parents and single adults are the most vulnerable to food insecurity as concluded in the results of the VHFB surveys.

The VHFB tool was also adapted to measure the availability of items in our smaller community General Stores, which is the main point of food for some populations in our rural setting. The main findings were that North Colac Otway Region has limited or no fruit and vegetables available, with a large range of the unhealthy items available. Both South Colac Otway and Forrest and Surrounds had a greater range of healthy food items available, but large amounts of unhealthy items available, consist with other findings for the COS.

Community consultations were conducted across the COS to investigate the question “*what barriers do you face getting the healthy food you need?*” The main method used to attain this information was a ‘sticky-dot consultation’ placed in 23 locations across the COS. Hard copies and online versions of the question were available. The survey was in multiple-choice format developed around the determinants of food insecurity and included a variety of plain language responses around cost, access and availability. The main findings of the community consultation identified *cost of food*, *availability of healthy food*, and the *perceived lack of time* to cook or prepare healthy food as the biggest barriers for our community in consuming the food they need to live a healthy lifestyle.

Stakeholder consultations were held with a number of health professionals and community leaders who support people who are vulnerable to food insecurity in our area. These consultations were in the form of either written or phone questionnaires adapted from previously developed food security surveys from the USDA, SG&G and BCHC. The surveys sought information on the prevalence of food insecurity within population groups and assessed the main determinants that professionals believe affected the community they worked with. Surveys also included questions around any food security programs currently being implemented by stakeholders in the COS.

A total of 38 written interviews were completed across the COS, with a range of health professionals and community leaders from schools, healthcare, welfare and early year’s settings represented. The main findings were that stakeholders perceived *cost*, *transport* and *skill* as the main determinants affecting food security in our community.

### **Conclusion and Recommendations**

The information collected from the COS Needs Assessment of food security provided a comprehensive report and starting point for solution generation around the determinants and causes of food insecurity in the COS. The main areas of focus that have emerged from the COS Needs Assessment are:

1. *Cost of food*
2. *Access to healthy food*, and
3. *Food skill and knowledge*.

These barriers affect food across the continuum starting at food production and finishing at food utilisation.

In order to improve food security in the COS, an effective and sustainable integrated plan will be developed in collaboration with organisational partners, stakeholders and the broader community.

It is recognized that comprehensive, sustained strategies are more likely to be effective in plan development. It is important that our food security action plan reflects the COS’ capacity to implement long term responses rather than short term, narrowly targeted single level strategies<sup>xiii</sup>.

In consideration to this, the following frameworks will be used in addition to, a literature review of existing evidence on best practice food security interventions, identification of the COS capacity, resources, and partnerships to address the priority areas identified.

- *Ottawa Charter for Health Promotion*
- *VicHealth - 10 Ways Local Government Can Act on Food Security*
- *Department of Health - Integrated Health Promotion Resource Kit*
- *Victorian Local Government Association (VLGA) Municipal Food Scanning Tool*.
- *Heart Foundation - Food Sensitive Planning and Urban Design Toolkit*
- *Environments for Health – Municipal Public Health Planning Framework*

- *Heart Foundation and Queensland Government: Healthy Activity Communities Framework*

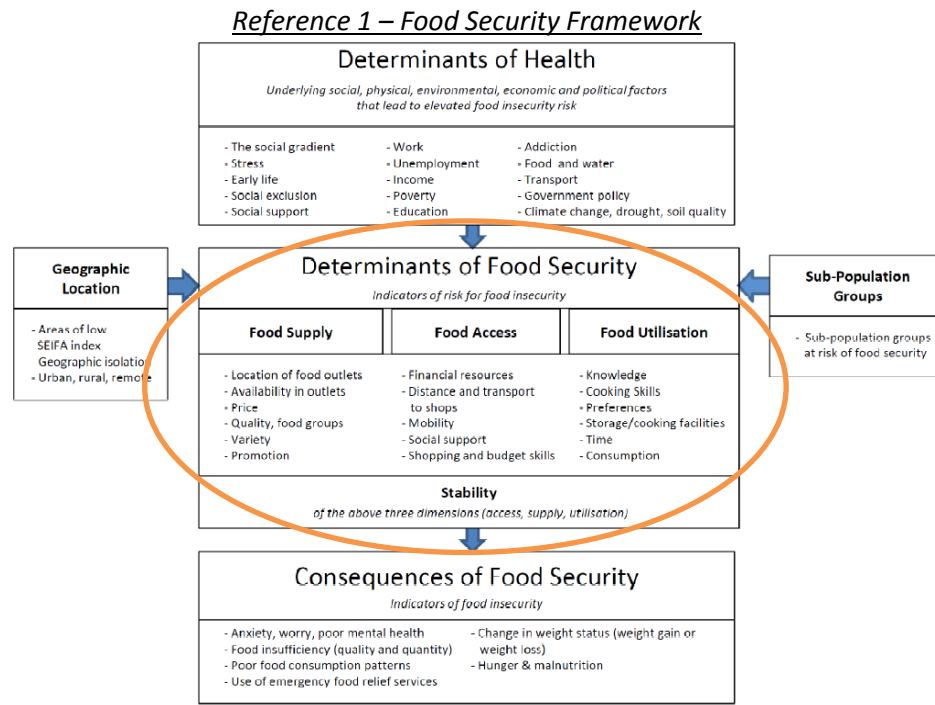
This will provide the basis to develop an integrated food security action plan that is specific, measurable, achievable, realistic, and time-focused (SMART). This will be achieved at the Colac Otway Food Forum in July 2013, as well as the identification of our working group to support action.

WORK IN PROGRESS

## 2. RESEARCH FRAMEWORKS

### 2a. Framework for food security

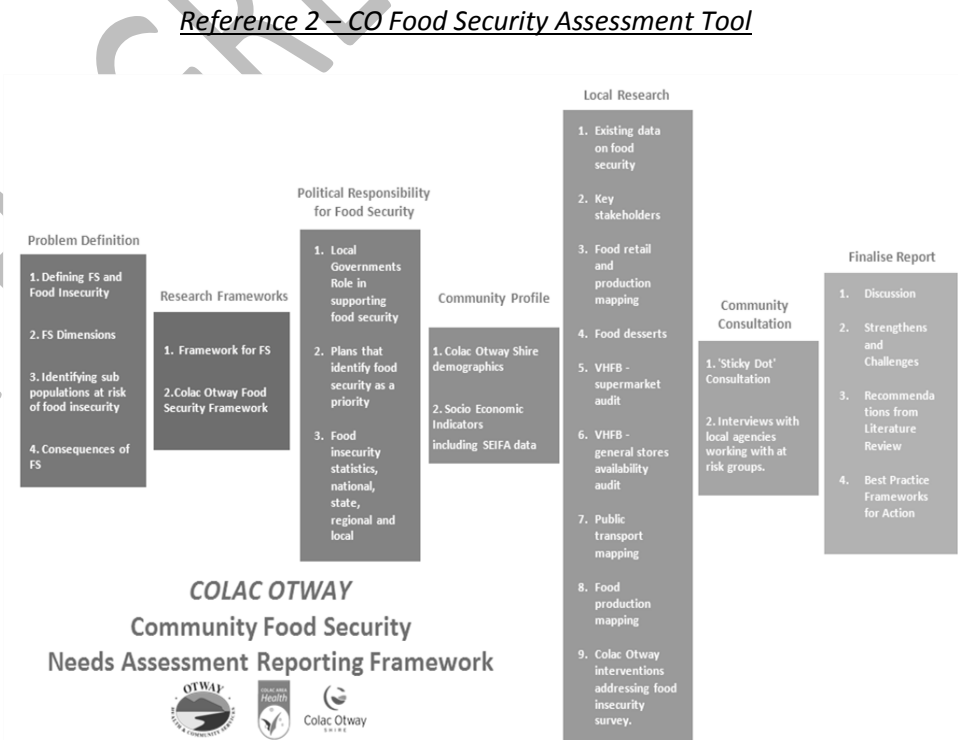
Portland District Health (2011) developed a framework to ensure all elements of food security were considered when collecting data. This framework helped to guide elements of the Colac Otway (CO) Food Security Assessment Tool. The determinants of Food Security listed in the below framework give a clear direction of where research should be focused.



xiv  
 Framework Developed by Health Promotion Department at Portland District Health, 2011

### 2b. Colac Otway food security assessment tool

The Portland District Health framework for food security and the Food and Agriculture Organisation of the United Nations food insecurity framework, along with a literature review of other research methods that have been used in the Barwon South West (BSW) Region, helped the COS to guide the development of an Assessment Tool for our community. The tool below outlines the criteria that will be completed to develop a needs assessment report for the Colac Otway.





## 2c. Health Promotion Model

Reference 3 – Ottawa Charter for Health Promotion WHO (1986)



## 3. PROBLEM DEFINITION

### 3a. Defining food security and insecurity

There are many different ways food security can be defined. The Victorian Health Promotion Foundation (VicHealth) defines the term as 'the state in which all persons obtain nutritionally adequate, culturally acceptable, safe foods regularly through non-emergency sources.'<sup>xv</sup>

Food security exists when food intake is:

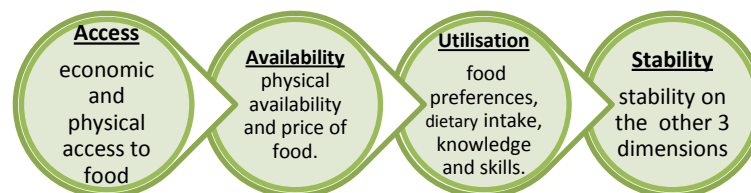
- Sufficient
- Culturally and Socially Acceptable
- Reliable
- Sustainable
- Nutritious
- Safe<sup>xvi</sup>, and
- Affordable.

Food insecurity exists when a person's ability to obtain safe, nutritionally adequate and culturally and acceptable foods from non-emergency sources is limited, compromised or uncertain.<sup>xvii</sup>

### 3b. Food security dimensions

Many factors can contribute to a person's inability to obtain the nutritious and culturally acceptable foods they need to be healthy, The Food and Agriculture Organization of the United Nations<sup>xviii</sup> identified four main dimensions of food insecurity:

Reference 4 – Food Security Dimensions Model



xix



### 3c. Determinants of healthy eating

Reference 5- Health Eating Determinants - A Support Resource Prevention Community Model (2012).

<b>Demand</b>	<b>Supply</b>	<b>Access</b>	<b>Utilisation</b>
The food people want to eat	The food available where people live, work and play	The food people can easily get to and afford to buy	<i>Food storage</i>
Preferences and motivations (family and social norms)	Healthy and unhealthy choices	Transport	<i>Equipment to prepare and cook food.</i>
Knowledge, Skills and Attitudes	Shops, markets, community gardens, home delivery	Income	
Social Marketing and Promotions		Food available in local neighbourhoods	

### 3d. Consequences of food insecurity

“The experience of food insecurity has a high cost to individuals, families and the community as a whole in terms of reduced physical, mental and social health and wellbeing. It also impacts the environment in which we live” (City of Greater Geelong, 2012).

The Southern Grampians and Glenelg Community Food Security Needs Assessment (2011) summarised the consequences of food insecurity and they are:

- Food insecurity can affect weight status
- Food insecurity experiences can affect diet quality and may increase risk of becoming overweight or obese.<sup>xxi</sup>
- Links between food insecurity and diet related diseases such as type 2 diabetes.<sup>xxii</sup>
- Sever consequences of food shortages for long periods of time or those shortages that occur frequently can result in hunger, underweight and malnutrition.

- Negative effects on psychological wellbeing, as people can become stressed, worried or anxious that food has or will run out.”<sup>xxiii</sup>

### 3e. Identification of sub groups at risk of food insecurity

Although everyone can experience food insecurity, certain population groups are known to be more at risk of food insecurity. These population groups are listed below:

- Women
- Youth
- Unemployed and low income households
- Households paying rent
- Single parent households
- Those without a permanent home
- The homeless
- People with long term health conditions
- People with intellectual, physical, mental illness, and/or disability
- The elderly, especially those who are frail, experiencing social isolation, and living on low incomes
- People with drug and alcohol dependence
- Aboriginal and Torres Strait Islanders
- People from Culturally and Linguistically Diverse (CALD) groups, including newly arrived immigrants, refugee and asylum seekers
- People disadvantaged by geographical location, such as those areas indicated by the Socio Economic Indexes for Areas (SEIFA), rural and remote areas.<sup>xxiv, xxv, xxvi</sup>

### 3f. Food Insecurity Statistics

The following statistics show the rates of food insecurity at a national, state regional and local level. The standardised measure for Food Insecurity in Australia is using the question “Have you run out of food in the last 12 months and not been able to replace it?”

*Reference 6: Food Insecure statistics Nationally to Locally.*

LOCATION	FIGURE
Nationally (Australia)	Estimated at 5% <sup>xxvii</sup>
State (Victoria)	5.6% <sup>xxviii</sup>
Regional (G21)	4.3% <sup>xxix</sup>
Local (Colac Otway Shire)	Population Health Survey data: 2.3% Community Indicators Victoria: 8.2% <sup>xxx</sup>

*Reference 7: Proportion of people who ran out of food in the past 12 months and were unable to replace it in Victoria 2005-2008*

	2005	2006	2007	2008
	Per cent			
Males	4.3	4.4	4.8	4.5
Females	4.8	5.4	5.4	6.5
Persons	4.6	4.9	5.1	5.6

## 4. COMMUNITY PROFILE

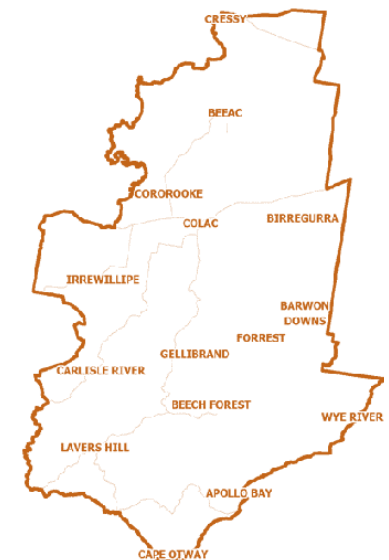
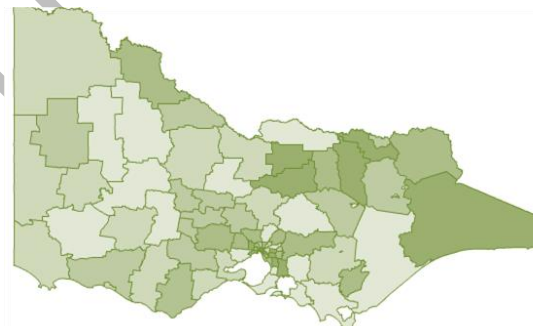
### Method

To build an accurate picture and provide basic understanding of the COS population, demographic data, socio economic characteristics and SEIFA data was gathered to identify the needs of our population.

### 4a. Colac Otway Shire demographics

The Colac Otway Shire is located within two hours west of Melbourne and renowned for its magnificent southern coastline, the Otway rainforests and the northern lakes and craters district<sup>xxxi</sup>. The Colac Otway population sits at 20,578.

*Reference 8 –Colac Otway Maps<sup>xxxii xxxiii</sup>*



Reference 9 – Demographic Characteristics Colac Otway Shire

Characteristic	Statistic Colac Otway (S)
Total Population	20,578
Total Male Population	10,372
Total Female Population	10,206
Male Life Expectancy	78.3
Female Life Expectancy	81.7
Age of Population	
0-14 yrs	18.8%
15-24 yrs	11.9%
25-44yrs	22.8%
45-64 yrs	28.1%
65-84 yrs	15.8%
85+ yrs	2.6%
Percentage of Population Born Overseas	7.9%
Citizenship	18,766^
Aboriginal or Torres Strait Islander Population	0.94%
Percentage speaking a language other than English at home	3.2%
Percentage of humanitarian arrivals as a percentage of new arrivals	25.78%

Source: <sup>xxxiv</sup>, <sup>xxxv</sup>

Findings relative to food security:

- The most represented age group within Colac Otway is those aged 0-14 years.
- The number of people from Aboriginal or Torres Strait Islander descent is slightly above the Victoria average (0.94% compared to 0.74%)
- Although the indicators for CALD groups is lower in Colac Otway compared to other state averages, the percentage of those arriving to Colac Otway on humanitarian visas is over double to Victorian average of 12.3% <sup>xxxvi</sup>

**4b. Socio-economic indicators**

Reference 10: Socio Economic Characteristics – Colac Otway Shire 2012

Characteristic	COS	VIC
Unemployment Rate	5.5%	5.4%
Median Household Income (per week)	\$914	\$1,216
Percentage of Individuals with income less than \$400 (per week)	41.8%	39.9%
Average Household Size	2.4^(persons)	
Mortgage Stress	12.3%	11.4%
Rental Stress	24.1%	25.1%
Percentage of persons that did not complete year 12	63.9%	43.7%
Percentage of persons who completed a higher education qualification	26.2%	45.7%
Percentage of households with broadband internet	60.9%	72.6%
Percentage who help out as a volunteer	26.5%	19.3%
Percentage of population located near public transport	41.2%	74.3%

Source: <sup>xxxvii</sup>, <sup>xxxviii</sup>

Socio Economic Findings

- The median household income for the CO Shire is \$302 lower than the Victorian average.
- 41.8% of individuals are earning less than \$400 per week
- The unemployment rate in COS is slightly above the Victorian average.

- COS has a 20.2% positive variance to the Victorian statistic for the amount of persons who have not complete year 12, indicating more people completing year 12 than the Victorian average
- The percentage of people completing a university qualification is almost half that of the State average.

#### 4c. SEIFA Data

The Index of Relative Socio-Economic Disadvantage has ranked CO with the lowest score in the G21 Region, meaning CO has the highest levels of disadvantage (refer to reference 6). Factors that contribute to this score include: low income, low educational attainment, high unemployment, jobs in relatively unskilled occupations and variables that reflect disadvantage rather than measure specific aspects of disadvantage (e.g., Indigenous and Separated/Divorced)<sup>xxxix</sup>.

**Reference 11 - SEIFA Data G21 Region 2006 and 2011**  
(The lower the SEIFA score the higher level of disadvantage)

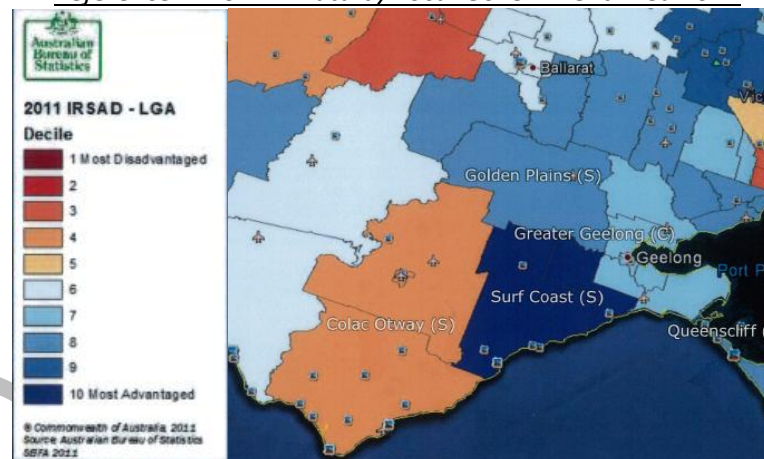
SEIFA index of disadvantage Local Government Areas in the G21 Region	2006 SEIFA index of disadvantage	2011 SEIFA index of disadvantage
Colac-Otway (S)	967.3	946
Greater Geelong (C)	992.9	980
Golden Plains (S)	1025.5	1011
Queenscliff (B)	1048.8	1047
Surf Coast (S)	1065.0	1060

Source: Australian Bureau of Statistics, Socio-Economic Indexes for Areas (SEIFA), 2006.

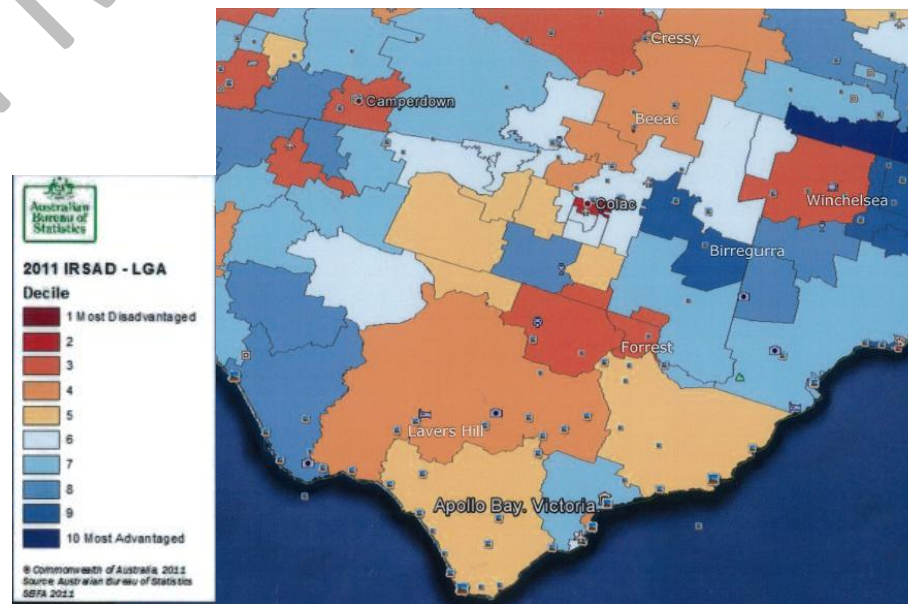
#### SEIFA Findings

- COS is the most disadvantaged LGA in the G21 region.
- Our highest areas of disadvantage are in central Colac and Iye in the east and west areas.
- Forrest and Surrounds followed by Cressy and Beeac are the second most disadvantaged areas in our Shire.

**Reference 12- SEIFA Data by Local Government Area 2011**



**Reference 13 - SEIFA Data by Suburb/Postcode in the Colac Otway Shire 2011**



## 5. LOCAL RESEARCH FOR FOOD SECURITY



### 5a. Existing local data on food security

A food secure community allows residents to have access to healthy nutritious food, limits the risks of chronic conditions such as Type 2 Diabetes, Obesity and Cardiovascular diseases.

The data for the Colac Otway Shire shows that 52.1% of the population did not meet daily fruit and vegetable dietary guidelines, compared to the Victorian Average of 48.2%<sup>x1</sup>

48.7% of persons in the Colac Otway Shire purchased alcohol in the last 7 days, this is the fourth highest rate in Victoria.<sup>xii</sup>

19.8% of the Colac Otway Shire, drink soft drink every day. This is the second highest rate in Victoria, the Victorian average is 12.4%.<sup>xlii</sup>

In the Colac Otway 57.5% of Males and 44.6% of Females are classified as overweight or obese, totalling at over half the population (50.8%) considered Overweight or Obese<sup>xliii</sup>.

### 5b. Key stakeholders

Food security is a broad term that influences many aspects of food, because of this there are multiple stakeholders from an array of professions or community roles. Key partners and stakeholders are invested in the research and consultation phases' or support intervention actions; stakeholders may be involved in all or only selected pieces of work.

In completion and dissemination of this document we will identify additional stakeholders to help us move forward and there may be other stakeholders who find their role has changed from how they initially supported Food Security work, and they potentially have the capacity to do additional or different work.

#### Main Key Partners in FS work

Colac Area Health
Colac Otway Shire
Otway Health and Community Services
G21 Food Security Network

#### Initial Community Stakeholders:

• Colac Neighbourhood House	• CWA Uniting Church Apollo Bay
• Homeless Networker	• Beeac Community Health Centre
• Community Hub Inc	• BSW Homelessness Network
• Neighbourhood Renewal Groups	• Winifred Nance Kindergarten
• Apollo Bay Neighbourhood House	• Wydinia Kindergarten
• Forrest Neighbourhood House	• Maternal and Child Health Colac
• Southern Otway Land care	• Colac Secondary College
• St Vincent De Pauls	• CRS Australia
• Lions Club Colac	• Department of Human Resources (Centrelink and Medicare)



• Carlisle River Primary School	• Gateways Support Service Colac
• Southern Otway Landcare	• Lavers Hill Community House
• Lavers Hill P-12 College	• Apollo Bay General Practice
• Colac Specialist School	• Adult Day Activity Centre Colac
• Steiner By the Sea Playgroup Apollo Bay	

### 5c. Food Retail Mapping

#### Method

The food premises listing for the Colac Otway was provided by local council to identify all registered food manufacturers and retailers in the municipality. This list was then divided into 1 of 10 categories (see Appendix A) and plotted on a map of the Colac Otway Shire. Google Maps was used so the data could be presented in a visual and interactive form. The findings were then summarised and linked to the SEIFA data. These maps are included in the appendix.

#### Findings

##### Colac Otway (reference 12 & 13)

There are 211 registered food premises in the Colac Otway Shire. A partial breakdown of these stores is below:

- 69 Restaurant/Café
- 9 Bakery/Bakehouse
- 9 Supermarkets/general store
- 3 fruit and vegetable stores
- 22 take away food outlets (for the purpose of this report take away includes Pizza, McDonalds and those alike, Fish and Chips, Service Stations etc.)

Of these 211 food premises, 36.97% account for restaurants and cafes and 10.43% for takeaway outlets, whilst only 11.85% of outlets represent food stores where you can regularly purchase fresh produce at a retail price (Fresh fruit and vegetable store or supermarket).

##### Apollo Bay (appendix 14)

Apollo Bay has pockets of disadvantaged ranked in the fourth decile for SEIFA data.

In Apollo Bay the ratio of fresh food stores compared to takeaway is 3:6. There is double the amount of takeaway outlets compared to fresh food stores; meaning you are twice as likely to be exposed to high fat, energy dense foods.

##### Colac Central (appendix 15)

In the central area of Colac we understand that majority of the area is ranked in the first and second deciles for SEIFA data, meaning it has some of the highest levels of disadvantage for the COS.

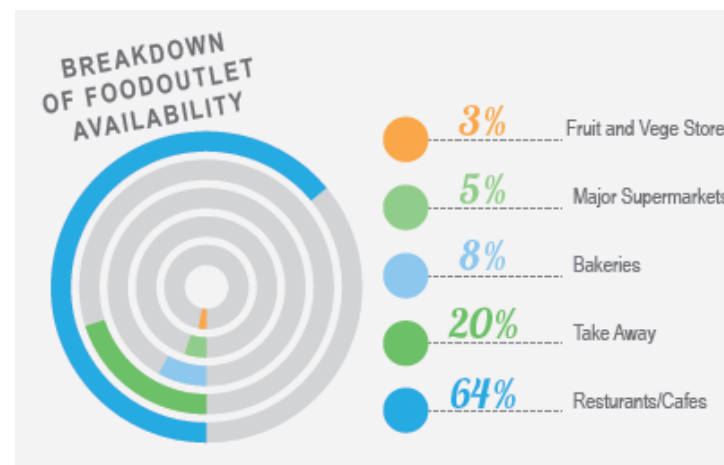
These areas of disadvantage reflect our retail mapping; identifying that access to fresh produce/supermarkets is limited in comparison to takeaway outlets, cafes and restaurants. Therefore faster food options (majority being higher in fat, sugar and are energy dense) are more accessible to these disadvantaged areas, and there is limited access to nutritious food options.

##### Cressy/Beeac (Appendix 16 & 17)

According to the SEIFA index, Beeac and Cressy are ranked in the fourth decile for disadvantage. We know that both of these areas have high levels of relative socio-economic disadvantage and are more likely to be exposed to food insecurity.

Cressy and Beeac have no access to fresh produce outlets or supermarkets; both areas have one restaurant and/or café and a hotel where meals can be purchased.

#### Reference 14 - Food Outlet Availability Colac Otway Shire



## 5d. Food Deserts

### Method

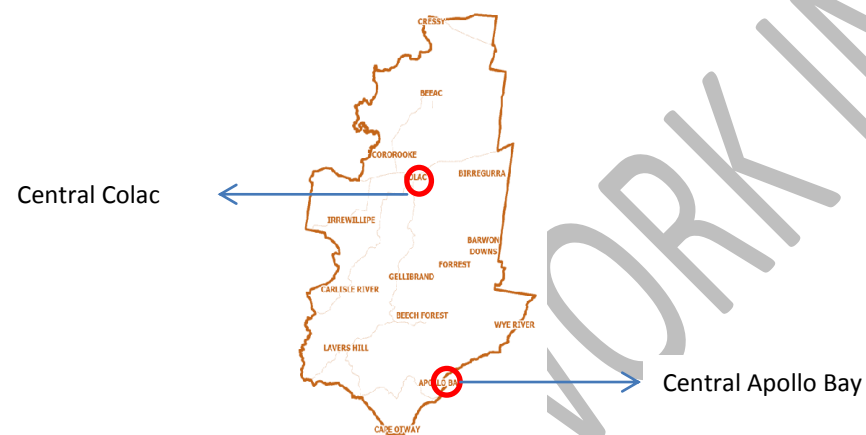
The City of Greater Geelong and Bellarine Community Health Centre have used the following definition to identify food deserts: A food desert identifies areas that are 500 meters void of food outlets/supermarkets included in the Victorian Healthy Food Basket Survey (HFBS).<sup>xiv</sup>

The USDA<sup>xiv</sup> measures food deserts through identifying low-income areas where a significant number of the population is located far from a supermarket, "far" being measured as more than 1.6 kilometres from urban areas and more than 16 kilometres in rural areas.

### Findings

Using either or both of the above measures majority of the Colac Otway Shire is classified as a food desert. Most areas of food desert are also areas of medium to high socio economic disadvantage and food insecure vulnerable population groups. Generally areas outside of Central Colac and Apollo Bay are classified as food deserts; this is identified on the map below.

### Reference 15 - Food Deserts Colac Otway Shire



## 5e. Victorian Healthy Food Basket (VHFB) – Supermarket Survey

### What is the VHFB - Supermarket Survey?

The Victorian Healthy Food Basket (VHFB) is a standardised assessment of the cost of purchasing food items requirement to meet the national nutritional requirements of four different family types receiving government benefits.

“The Victorian Healthy Food Basket is designed to collect information on the cost, availability and accessibility of a healthy basket of foods from a store that has 40 of the 44 items identified in the Victorian Healthy Food Basket”. (Palermo, C., Monash University, 2012) The VHFB records the cost of core foods that constitute a ‘healthy basket’ providing enough food for a 2 week period, if a supermarket has less than 40 of these items they cannot be compared. (See Appendix C for VHFB item list)

The dietary needs of each family type and the cost of the VHFB items is measured against the fortnightly government benefits received for each different family type. If 30% or more of the benefits are spent on the Victorian Healthy Food Basket then that family type is deemed to be more vulnerable to food insecurity.

The four family types include:

1. Typical family – 2 adults and 2 children (44 year old male, 44 year old female, 18 year old female and 8 year old male).
2. Single parent family – 44 year old female, 18 year old female and 8 year old male.
3. Elderly pensioner – 71 year old female.
4. Single adult – Adult male > 31 years.”

### Method

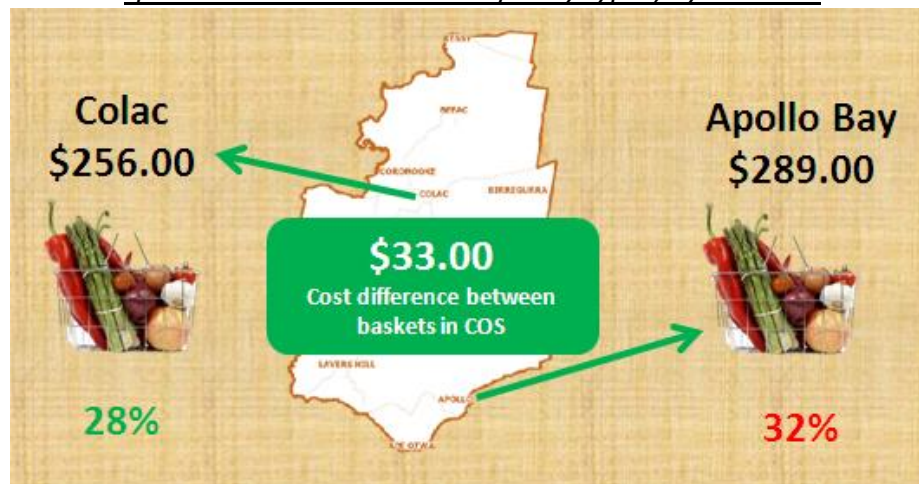
Colac Area Health’s Health Promotion Coordinator completed the VHFB Survey for our municipality in August 2012. In the Colac Otway Shire there are 5 supermarkets that stock the 44 items to make up the VHFB, these supermarkets are:

1. IGA Express, Great Ocean Road Apollo Bay
2. Foodworks, Hardy Street Apollo Bay
3. Reynolds IGA, Murray Street Colac
4. Coles, Murray Street Colac
5. Woolworths, Bromfield Street Colac.



Findings

**Reference 16 - Average Cost and percentage of Government Benefits spent on the VHFB across all family types, by location.**



Shopping for a 'Family of Four'
Shopping in Apollo Bay or smaller supermarkets in Colac Central you are spending 37-40% of your benefits on the VHFB.
On average a 'Typical Family of Four' in Colac is spending more (\$19.04) of their income on the VHFB than a 'Typical Family of Four' in Geelong.
In Colac there is a \$125 price difference the most expensive and cheapest VHFB for a family of 4.
The most expensive basket in Colac is for a 'Typical Family of Four' is \$534.51, whereas the most expensive basket for the same family type in Geelong is \$506.34, a \$28.17 price difference.

Shopping for a 'Single Parent Family'
A 'Single Parent Family' in Colac is spending more (\$9.81) of their income on the VHFB than a 'Single Parent Family' in Geelong.
A 'Single Parent Family' is at higher risk of food insecurity in Colac (30.85%) than a 'Single Parent Family' in Geelong (29.92%), the measure of food insecurity is - if 30% or more of the family types government benefits is spent of the VHFB there is higher risk of food insecurity.
At every supermarket except Woolworths in Colac Central single parent families are spending well over 30% their benefits on the VHFB.
Shopping in Apollo Bay single parent families are paying up to \$80 more than the cheapest basket in Colac Central for the same basket

Shopping for an 'Elderly Woman'
An 'Elderly Woman' in Colac will spend \$3.37 more on the VHFB than an 'Elderly Woman' in Geelong.
The cheapest basket in Colac is \$97.71 for an 'Elderly Woman' and for the same family type in Geelong the cheapest basket is \$91.30, a basket in Colac is \$6.41 more expensive than a basket in Geelong.

Shopping for a 'Single Male'
On average a 'Single Male' in Colac will spend \$3.20 more on the VHFB than a 'Single Male' in Geelong.
At every supermarket except Woolworths in Colac Central single adults are spending well over 30% their benefits on the VHFB.

(See Appendix C and D for table summary and City of Greater Geelong comparison.)

## 5f. Victorian Healthy Food Basket (VHFB) – General Stores

### What is the VHFB - General Stores Survey?

For the purpose of this paper and considering our geographic municipality, a lot of general stores are located in the smaller towns; therefore we are using the VHFB to measure the availability of the 44 items across the smaller general stores. The rationale behind this is to measure the percentage of the 44 items listed in the VHFB to identify the access to fresh produce in smaller communities. The actual cost of the baskets cannot be compared, as this is an inaccurate representation when the 44 items are not present, therefore the availability is the measure not the cost.

### Method

The Colac Otway only has access to six supermarkets (including ALDI, which for comparison purposes cannot be included in the VHFB Survey); however there are many other avenues for our community to access food, one of these being local general stores, so a measure of the access to food from these stores was important.

For the purpose of this document, the VHFB process has been used to assess the **availability** of the 44 items that constitute the VHFB at these local general stores. Obviously the prices are not comparable as these smaller stores do not have the variety of branding, or will not have at least 40 of the 44 items that allow us to compare these stores to the supermarkets.

A list of the general stores/cafes in the Colac Otway was compiled; staff from Colac Area Health and Otway Health and Community Services then visited these stores and completed the survey using either a 'tick' or 'cross' to identify whether an item was or was not available. 15 general stores took part in the audit. For the purpose of this report and maintaining anonymity we have grouped the general stores by region and averaged the availability via the groupings listed below:  
(See Appendix C for VHFB item list)

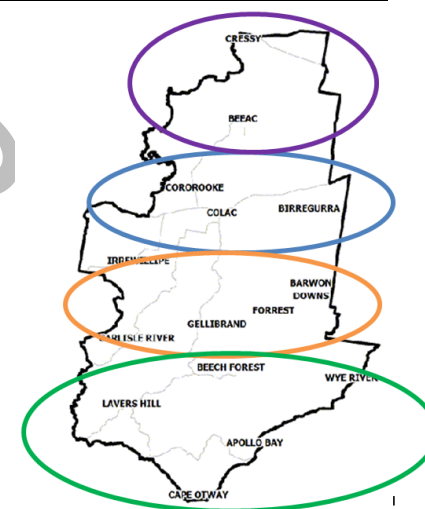
### Reference 17 - Grouped Areas for General Store Availability Survey

**Purple Area:**  
North Colac Otway Region

**Blue Area:**  
Colac and District Region

**Orange Area:**  
Forrest and Surrounds Region

**Green Area:**  
South Colac Otway Region



### Findings

#### **North Colac Otway Region**

- Some of the highest areas of isolation across the whole Colac Otway Shire lie in the north region. The north region also has the lowest percentage of the Victorian Healthy Food Basket items available.
- The north region has 8.35% of both fruit and vegetable available but 30% of the unhealthy items available.

#### **Colac and District Region**

- **FOOD CHAMPION** Cororooke had excellent availability to fruit (99.0%) and vegetables (91.7%).
- This area has the highest availability of unhealthy items (70%) across all four regions.

#### **Forrest and Surrounds Region**

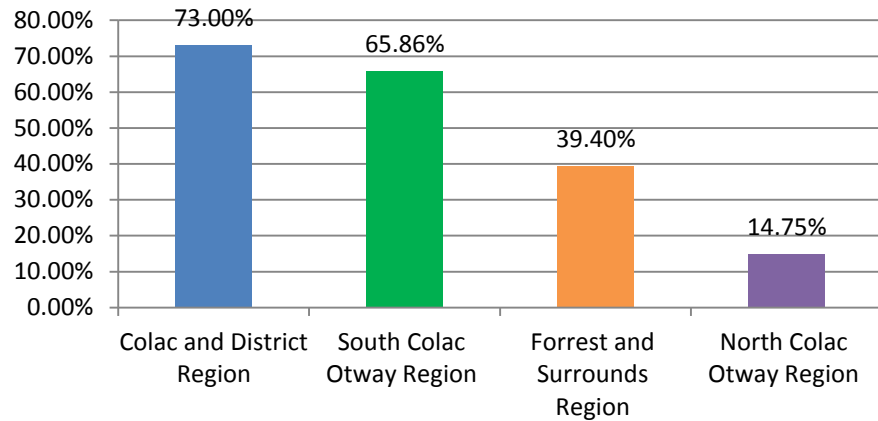
- Unhealthy items dominate the food available in this region (53%) followed by limited availability of fruit (44%) fruit and vegetables (38%).

#### **South Colac Otway Region**

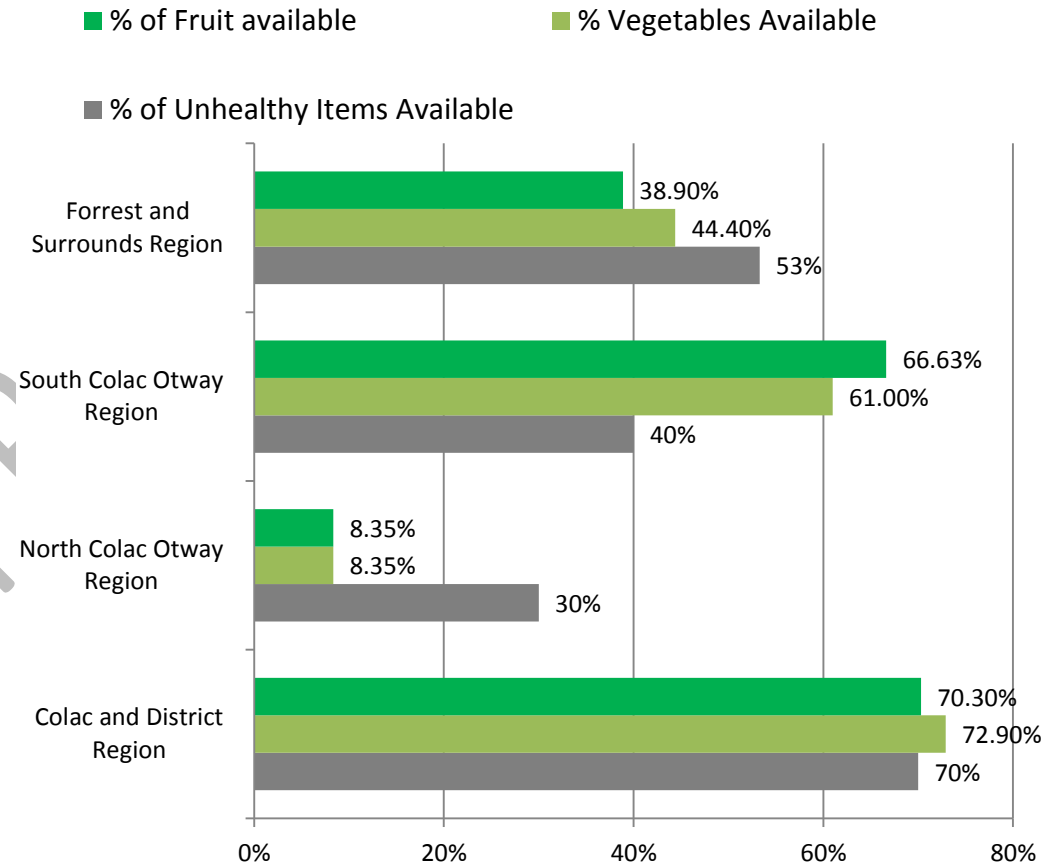
- **FOOD CHAMPION** Ferguson has the lowest percentage of unhealthy items available across the Colac Otway Shire, and has 91.6 % of vegetables and 83.3% of fruit available.

(See Appendix B for individual stores availability)

**Reference 18 - Percentage of Total Victorian Healthy Food Basket Available (General Store Survey)**



**Reference 19 - Percentage of Unhealthy Items, Vegetables and Fruit Available (General Store Survey)**



*Note: See Appendix for Victorian Healthy Food Basket Items List and Categories.*

## 5g. Public transport mapping

### Method

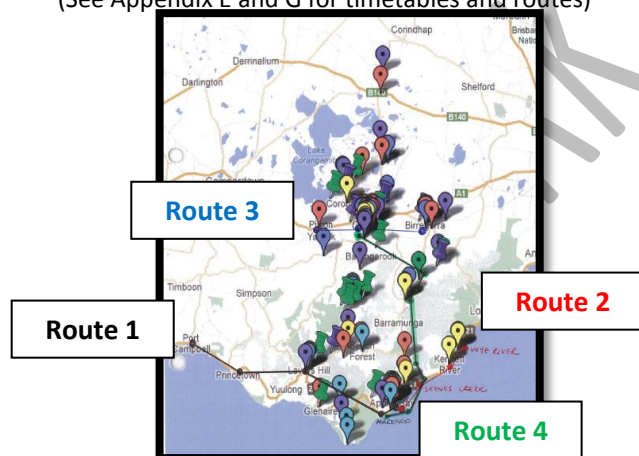
Transport maps were sourced from the Colac Otway Shire, V-line website and Public Transport Victoria. The V-Line routes were then traced over the already existing food retail and production map, and the Public Transport Victoria routes were altered to show fruit and vegetable stores and supermarkets. This showed the access via public transport to fresh food premises in the Colac Otway.

### General Findings:

- No public transport runs on a Sunday.
- There are limited to no public transport options available outside of Colac central, this is of particular concern for those areas classified as food deserts.
- There is only one day that a service runs between Colac and Marengo each week, for people who receive government benefits on a Thursday this service does not complement this.
- The Colac via Fyans street route services the Colac West area (this is an area of high disadvantage) however there is only one stop located on the outskirts of this area. (See Appendix \_\_\_ for bus timetables)
- Overall the bus routes did have stops near fresh produce stores, however majority of these were the larger supermarkets where as fresh fruit and vegetable store stops were scarcer.

### Reference 20 - V-line Bus/Coach Routes (COS and Surrounding Regions)

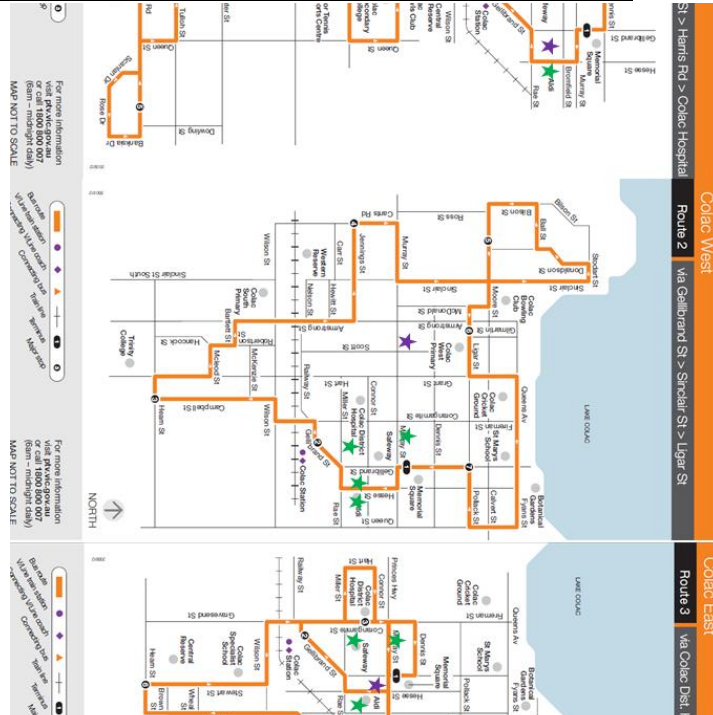
(See Appendix E and G for timetables and routes)



### Specific Findings:

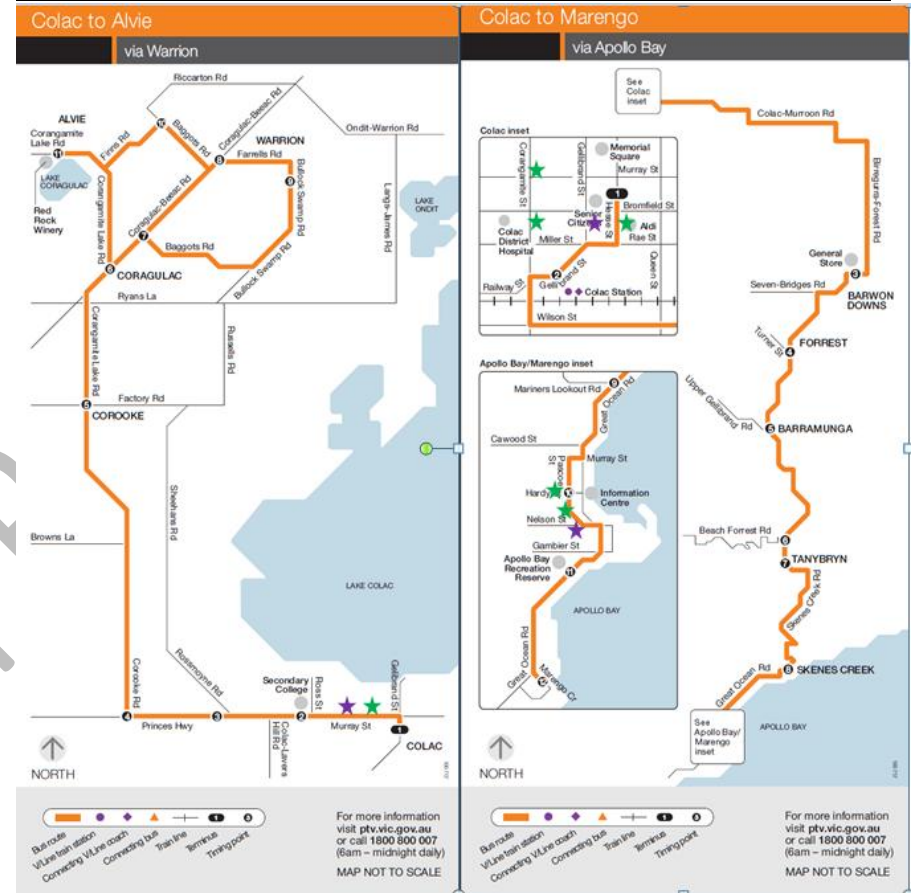
Route	Findings
<b>Route 1: Eliminyt via Hart Street</b>  (See Appendix F and Reference 24 for maps and timetables)	<ul style="list-style-type: none"> <li>• This route operates Monday-Friday three times in the morning and four times in the afternoon.</li> <li>• This route is only available 3 times on a Saturday, with no afternoon service.</li> <li>• This route is a loop and takes 1.5 Hours to complete; meaning community members could be waiting on this service for 1.5hours to return to their home.</li> </ul>
<b>Route 2: Colac via Fyans Street</b>  (See Appendix F and Reference 24 for maps and timetables)	<ul style="list-style-type: none"> <li>• This route operates Monday-Friday three times in the morning and four times in the afternoon.</li> <li>• This route is only available 3 times on a Saturday, with no afternoon service.</li> <li>• This route is a loop and takes 1.5 Hours to complete; meaning community members could be waiting on this service for 1.5hours to return to their home.</li> </ul>
<b>Route 3: Colac via Queen Street</b>  (See Appendix F and Reference 24 for maps and timetables)	<ul style="list-style-type: none"> <li>• This route operates Monday-Friday three times in the morning and four times in the afternoon.</li> <li>• This route is only available 3 times on a Saturday, with no afternoon service.</li> <li>• This route is a loop and takes 1.5 Hours to complete, meaning community members could be waiting on this service for 1.5hours to return to their home.</li> </ul>
<b>Route: Colac to Alvie via Warrion</b>  (See Appendix F and Reference 25 for maps and timetables)	<ul style="list-style-type: none"> <li>• This service only runs once a day in the afternoon.</li> <li>• This route takes one hour and 10 minutes one way.</li> </ul>
<b>Route: Colac to Marengo via Apollo Bay</b>  (See Appendix F and Reference 25 for maps and timetables)	<ul style="list-style-type: none"> <li>• This service only runs once a week on a Wednesday.</li> <li>• This route takes one hour and 40 minutes one way.</li> </ul>

Reference 21 – V-line/ Coach Routes (Colac Central) to fresh produce



Supermarkets   Fruit and Vegetable Stores

Reference 22 – V-line/ Coach Routes (Colac Otway Shire) to Fresh produce



Supermarkets   Fruit and Vegetable Stores



## 5h. Food Production Colac Otway

### Method

A list of producers was sourced from the Colac Otway Shire. All registered producers were on this list, however the list was limited. We feel the list was not the most recent or had missed premises that may have been too small. Through the Otway Rail Trail brochure we identified more producers that had not been identified - these websites lead us to several internet sources that uncovered more small scale producers. Most producers had websites which supported us to gather the information summarised in a table (See Appendix H). This allowed us to develop a quick overview of production in our catchment.

### Findings

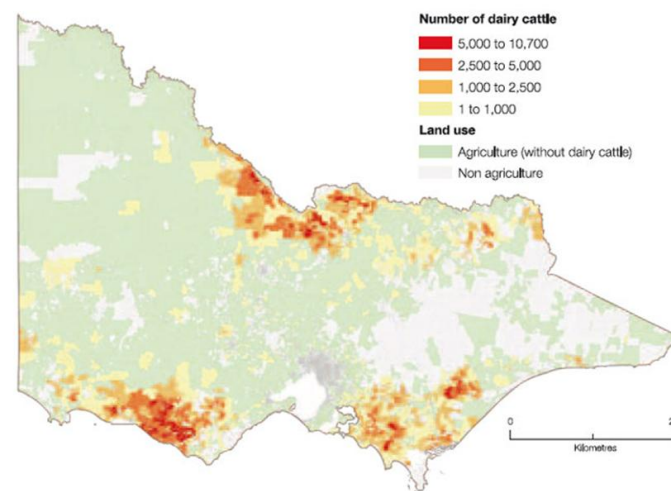
- Dairy is the most produced food in the Colac Otway - home to Bulla dairy foods we have access to some of the best dairy in the country.
- There is small amounts of vegetables, seafood and grain production.
- We have access to a reasonable amount of fruit - especially berries, and meat production.
- We have an abundance of specialty foods produced in the Colac Otway, Shitake Mushrooms, Coffee, Olives in Birregurra and Deans Marsh, Herbs, Jams and Preservatives.

Mapping Food Production in the COS was an area of limitation when conducting this research. Retrieving information about local food products was not easy and there is no one data base the holds this information.

Further research and potential partnership must be invested in this area of local food production in the Colac Otway. Mapping of current producers in the area would be effective in order to be able to understand and better support local food production in the Colac Otway.

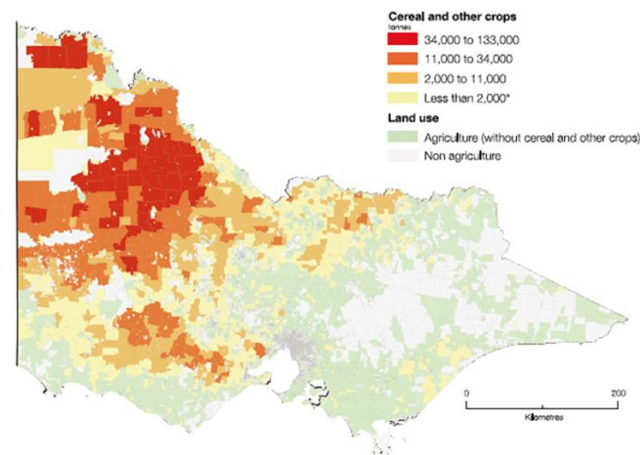
## Reference 23- Dairy Production Map<sup>xlvi</sup>

Figure 1: Victoria's raw milk production regions<sup>1</sup>



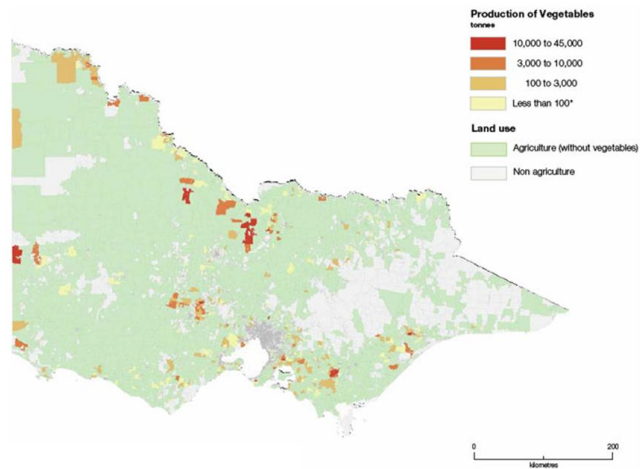
## Reference 24 - Grain Production Map<sup>xlvii</sup>

Figure 1: Grain Production in Victoria



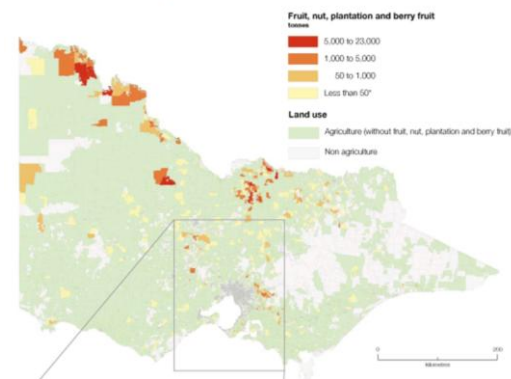
**Reference 25 - Vegetable Production Map** <sup>xlvi</sup>

Figure 1: Location of vegetable production in Victoria



**Reference 29 - Fruit and Nut Production Map** <sup>xlix</sup>

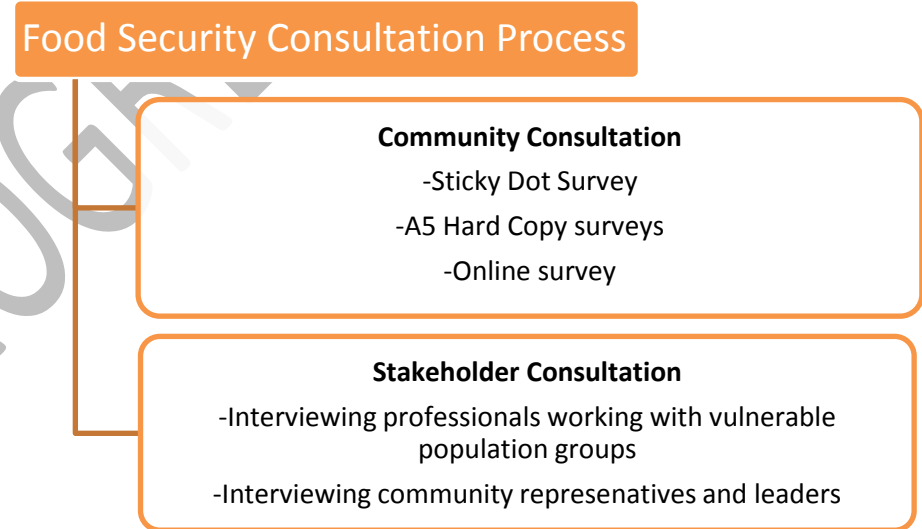
Figure 1: Location of Victoria's fruit production



**6. CONSULTATION PROCESS**

**Method**

After review of multiple other community food security assessments and measurement of our food security team's capacity, a plan for the best data collection for the community was developed. Our community consultation included the following:



**6a. Community Consultation**

**Method**

Health Promotion team members consulted with Bellarine Community Health Centre to seek advice on the best, confidential method to collect information around the determinants of food security. The 'Sticky Dot' consultation was identified as an easy, interactive, confidential and suitable method for data collection from across the municipality.

Sticky dot boards were purchased and developed to collect data (see image below) across the Colac Otway Shire. The following questions were asked:



### Reference 27 - 'Sticky Dot' Consultation Content

#### **Question: What Problems do you face getting the food you need?**

Options for Response:

- Not sure how to cook food
- Colac Otway doesn't have the food I need/want
- I don't have anywhere to cook the food
- Can't get to the shops
- Food costs too much
- Not enough time to buy or cook food.
- 

In addition: Have you run out of food in the last 12 months and not been able to replace it?

These questions were also asked via hard copy surveys and were available online via a survey monkey link located on Colac Area Health's website and via Otway Health's social media avenues.

#### Findings

Responses from 27 locations (see Appendix I and J) either received the sticky dot board or completed the online version of the survey. We had a response rate of 280 across the Shire. The responses identified the following barriers to our community getting the health food they need:

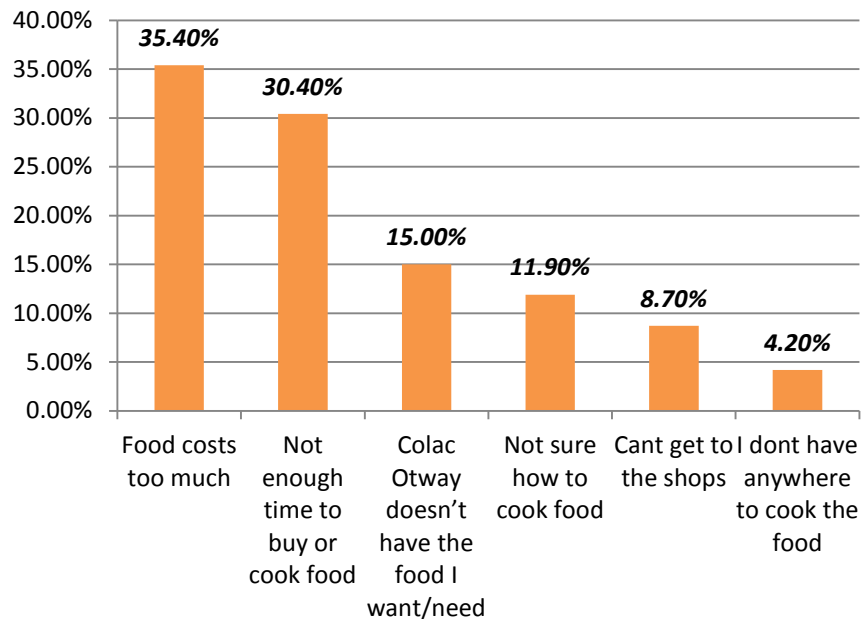
1. Cost; (35.4%) this was the biggest barrier for people in the Colac Otway getting the healthy food they need.
2. Time Poor, (30.4%) this response can also be linked to skills and knowledge as it is perceived they don't have time to cook food.
3. Physical Access, (15.0%) participants identified that the Colac Otway doesn't have access to the food that is needed or wanted. This raises issues about geographical and rural impacts and the transport to be able to get the food they need.
4. 8.2% of those surveyed had ran out of food in the last 12 months and not been able to replace it, this reflected the 2006 Population Health Survey results stating that 8.2% of the Colac Otway had run out of food in the last 12 months and not been able to replace it.

(Findings continued over page)

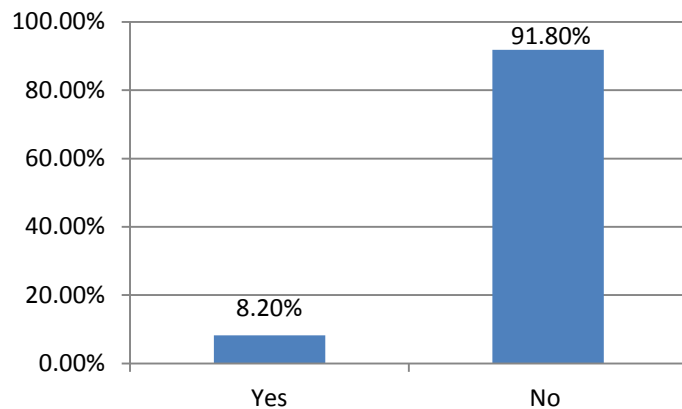
### Reference 28 - 'Sticky Dot' Board



Reference 29 - Sticky Dot Responses: Community Food Barriers



Reference 30 - Percentage of the Population who had ran out of food in the last 12 months and not been able to replace (COS)



### **6b. Interviews with Local Organisations and community representatives working with vulnerable population groups**

Method:

A list of community organisations/groups was sourced from the Colac Otway Shire. This list included:

- Community Centres e.g. St Vincent De Pauls
- Colac Otway Shire representatives
- Colac Area Health representatives
- Otway Health Apollo Bay representatives
- Otway Community College/St Laurence representatives
- Job network agencies
- Regional health agencies e.g. Jigsaw
- Churches
- Neighbourhood Houses
- Schools
- Early years Centres
- Service Clubs
- Community general store owners.

With support from the G21 Food Security Network and specifically Bellarine Community Health (BCH), a survey was created to assess the impacts of the determinants of food security on the population group they worked with. This survey used the same framework as BCH and was adapted to suit Colac Otway Shire's capacity and demographic. A copy of the survey is in Appendix K.

Findings:

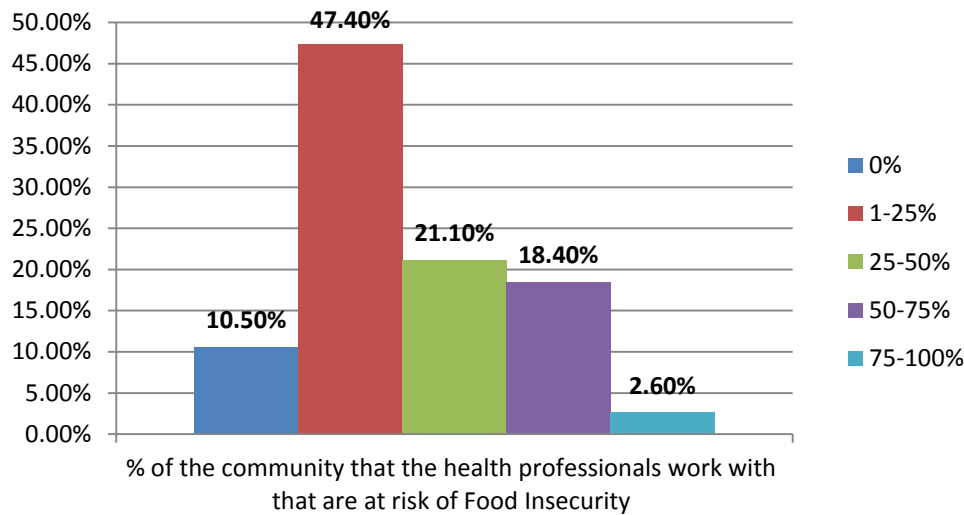
**Colac Otway Shire food insecurity risk:**

Health Professionals and Community Leaders were asked what percentage of the community that they work with do they perceive are at risk of food insecurity?

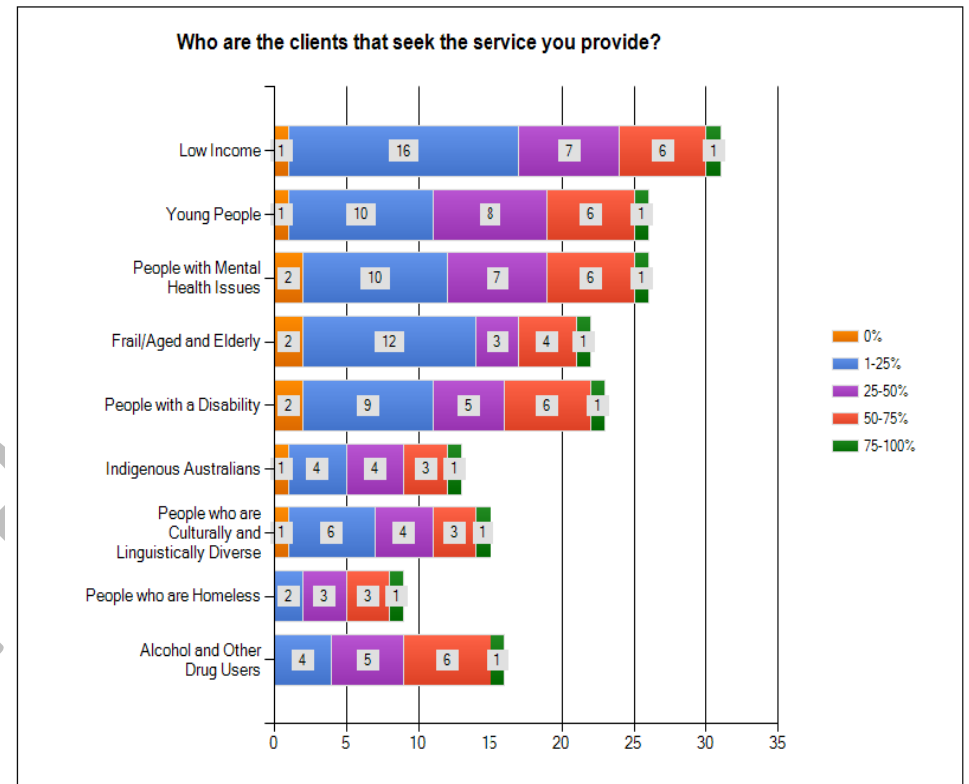
- Just under half of those surveyed (47.4%) felt 1-25% of the population they worked with were at risk of food insecurity.
- 39.5% felt that 25-75% of the population they worked with were at risk of food insecurity.

- Those most vulnerable groups identified by stakeholders as at highest risk of food insecurity in the Colac Otway Shire were:
  1. People on low incomes
  2. Young people / people with mental health issues
  3. People with disabilities
  4. Frail aged and Elderly
  5. Alcohol and other drug users

*Reference 31 - Percentage of the clients that professionals work with that are at risk of food insecurity*



*Reference 32 - Risk of food insecurity by population group*

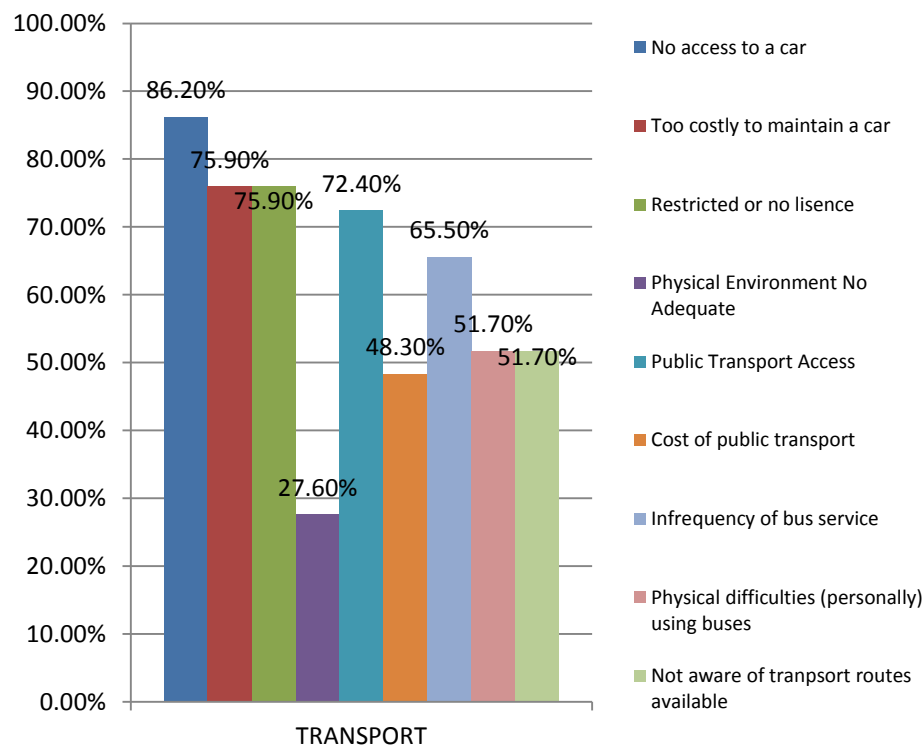


## Identified barrier number 1: TRANSPORT

Top five barriers to transport impacting on food security as identified by stakeholders interviewed

1. No access to a car (25)
2. Restricted or no licence / Too costly to maintain a car (22)
3. Issues with public transport access (21)
4. Infrequency of public transport (19)
5. Physical difficulties accessing transport / Not aware of transport routes (15)

### Reference 33 - Transport barriers identified through community interview process



### Transport Qualitative findings themes:

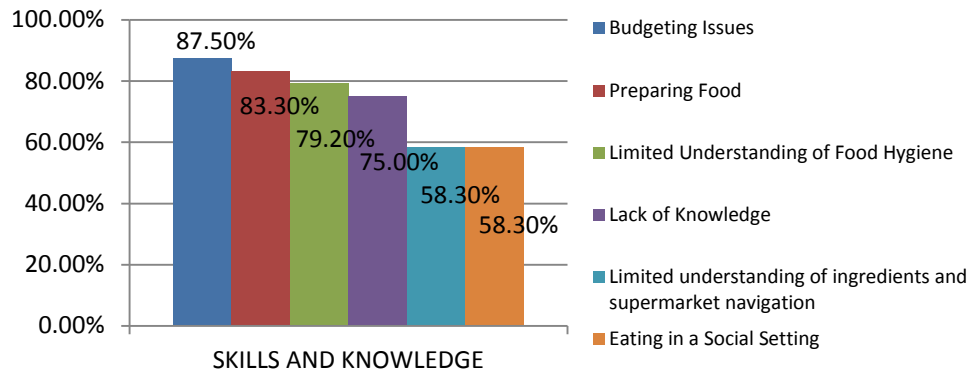
- Physical environment not supportive for easy access to shops
- Community transport options exist but are underutilised by community
- Lack of stops and infrequency of public transport  
*“One stop in town, infrequency of service, and service day doesn't fall on day of pension payment [prohibit access to food]”.*
- *Physical Barriers:*  
*“Can walk to shops but purchases in small lots because of trouble carrying heavy shopping bags home”*
- *Public transport is very limited to non-existent, lack of footpaths in community areas, no transport for people outside Main Township of Apollo Bay.*
- *No access to public transport E.g. Homeless students have no transport, or mum/dad have no car no money to repair car*
- *Distance of more isolated towns to main shopping and fresh food outlets “Distance from Carlisle to Colac, and no public transport or general store”.*
- *Anxiety about catching transport (mental health)*

## Identified barrier number 2: SKILLS AND KNOWLEDGE

Top five barriers to skills and knowledge impacting on food security as identified by stakeholders interviewed

1. Issues of budgeting for nutritious food (21)
2. Limited understanding of food hygiene (20)
3. Lack of knowledge of nutritious food preparation (19)
4. Limited understanding of required ingredients / supermarket navigation (14)
5. Issues eating in a social setting (14)

Reference 34 -Skill and Knowledge barriers identified through community interview process



Skills and Knowledge Qualitative themes:

- Lack of knowledge in choosing nutritious food

*“Think that cheap food is good food-no education on why nutritious and healthy food is important. Heaps of baked beans and sweet biscuits purchased. No budgeting skills in all the people seen. Lack of self-esteem and communication with others. There is a shame people have in not being able to help themselves”.*

- Lack of skills in supermarket navigation and reading ingredients for cooking nutritious foods
- Budgeting was viewed to be more dependent on lack of disposable income rather than ability to budget

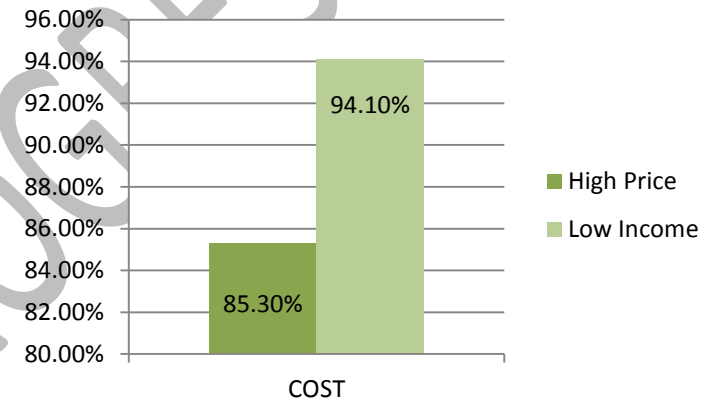
*Budgeting itself is not an issue, rather a lack of financial resources means that food is prioritised last after bills, petrol, etc.*

*‘Budgeting skills [for those on assistance] is also an issue’*

**Identified barrier Number 3: COST**

Both low income (32) and cost (29) were both identified as barriers to people accessing the

Reference 35 - Cost Barriers identified through community interview process



Cost qualitative comment themes:

- ‘A combination of both (low income and high cost of food)...especially high price for fresh fruit and vegetables...’
- The cost of junk food is higher in the region making it easier for people to choose this option.
- As in most locations [in Colac Otway], Apollo Bay has members of the community who lack skills to put together affordable, nutritious meals.
- Lack of awareness of food available to purchase, stigma associated with accessing food provision program.
- Often people who find themselves single or living alone lack motivation to cook healthy meals "for one"

- Young People living with a parent who is disabled/mentally ill and cannot cook, student does all the cooking for the family issues include, lack of motivation, ability, resources to prepare healthy food.
- Geographic isolation.

## 7. LIMITATIONS

### Resources

The bulk of this research was completed by health promotion workers from Otway Health and Community Services and Colac Area Health. Both these staff members have an additional two priority areas to compete with Food Security work. There was support from Local Government which helped identify documents and registered premises which were privy to government. All in all to bulk of the work was completed by staff members to who work 1EFT and 0.8EFT.

### Time

This was a barrier to complete further or more detailed community consultation. The collection of food and public transport mapping, Victorian Health Food Basket Surveys for supermarkets and general stores, food desert identification, food production mapping and collating existing food security data built a clear picture of food in our catchment. However the community consultation was limited to support these findings. Further consultation would of required ethics and governing bodies to approve consultations and the time for this did not permit.

### Limited data bases

Data for food production and premises were limited. There were gaps in these data bases, the food production listing only included about ¼ of the final amount of producers that were found, and the food premises list had gaps also, e.g no butchers were listed/registered.

## 8. DISCUSSION

To summaries the main findings of our needs assessment, there are three main barriers identified by the community, health professionals and the statistical data, limiting the Colac Otway Shire in sourcing the healthy food they need.

### **COST OF FOOD**

- The community identified this as the biggest barrier to consuming the food need to live a healthy lifestyle.
- Community Professionals that were interviewed identified cost as only of the most significant barriers for their clients accessing healthy food, this included low income and high price.
- Market Basket Surveys identified that three out of the four family types are food insecure, meaning they are spending over 30% of their government benefits on the basket, making them at higher risk of being food insecure.
- 8.6% of respondents to the Sticky Dot consultation (held across the Colac Otway Shire) had run out of food in the last 12 months and was unable to replace it.

### **LIMITED TRANSPORT TO FOOD SOURCES**

- Majority of the Colac Otway is considered a food desert. A food dessert is an area 500mt void of supermarkets included in the VHFB survey.
- Only 8.7% of the community identified transport as an issue through the sticky dot consultations; however the statistical data and interviews with professionals stated otherwise.
- Mapping of transport routes across the Colac Otway identified that there is limited access for people using public transport to easily shop at major supermarkets within the shire.
- Community Professionals that were interviewed identified transport as one of the largest barriers for the clients they work with. More specific reasons include, it is too costly to maintain a car and lack of public transport options.

### **FOOD SKILLS AND KNOWLEDGE**

- 19.8% of the Colac Otway Shire drink soft drink on a daily basis, this is the second highest rate in Victoria.<sup>1</sup>
- Results from the Sticky Dot Consultation showed that only 11.9% of those surveyed identified lack of skills as an issue, whereas the community

professional interview saw this a one of the biggest barriers for people accessing the food they need.

- 30.4% of the sticky dot results showed that people do not have enough time to prepare food. This links to skills and knowledge, through understanding quick and healthy alternatives and also seeing preparing healthy food as a priority.

## 9. STRENGTHS and CHALLENGES

STRENGTHS	CHALLENGES
We have access to local food.	54.5% of the Colac Otway Shire population did not eat enough fruit daily and 89.1% did not eat enough vegetables daily.
We have commitment from local council and public health organisations to work in this space. (image to represent partnership or joining together)	A fresh healthy food in the Colac Otway is limited. There is increasing pressure with the abundance of fast food and take away options. <ul style="list-style-type: none"> <li>• 69 Restaurant/Café</li> <li>• 9 Supermarkets/general store</li> <li>• 3 fruit and vegetable stores</li> <li>• 22 take away food outlets (for the purpose of this report take away includes Pizza, McDonalds and those alike, Fish and Chips, Service Stations etc.)</li> </ul>
Smaller towns in the Colac Otway have the potential to provide a reliable food source to their community through general stores and community initiatives.	Colac Otway Shire has a transport network that is not meeting all our community's needs.

STRENGTHS	CHALLENGES
Food Security is identified in local, regional, and state public health plans as a priority area for action.	Families and single parents in the Colac Otway are spending more than 30% of their government benefits on the Victorian Healthy Food Basket; this places these groups at risk of being food insecure.
	A large part of the Colac Otway Shire is considered a food desert. This means, they are 500mt void of access to fresh food.
	Agriculturally productive land is coming under increasing pressure from competing uses, particularly to accommodate growing populations. (National Heart Foundation, 2011)
	Recent data from the Population Health Survey has identified that the Colac Otway is the second most food secure LGA in Victoria. However this is contradictory to the following data: <ul style="list-style-type: none"> <li>• We have the second highest daily soft drink consumption in the state.</li> <li>• Over half our population is considered overweight and obese.</li> <li>• Percentage of persons who purchased alcohol in the last 7 days is the fourth highest in the state.</li> <li>• Over half of our population did not meet the daily fruit and vegetable intake.</li> <li>• We have the highest SEIFA ranking in the G21 Region.</li> </ul>



## 10. POLITICAL CONTEXT AROUND FOOD SECURITY

### 10a. Local Governments role in supporting food security

**“Addressing Food Security is the Core Business of Local Government”** Addressing food security has long been core business of local government through delivering services that can positively impact access to healthy food by the local community, for example; Maternal Child Health Nurses educate parents about healthy eating for preschool aged children; Environmental Health Officers ensure that local food retailers and restaurants use good practices to ensure the food they sell is safe; Community transport helps people get to and from the shops; Meals on wheels gets food into the homes of people who have a limited capacity to perhaps cook or get to the shops; Planners ensure new neighbourhoods are walkable so access to the shops along with other service hubs is enhanced. So what does the current legislation actually say that supports working to address food insecurity in the local government environment.”<sup>li</sup>

<sup>lii</sup>**“Local Government Act enacted in 1998 and amended in 2003** contains a number of objectives, roles and functions that directly support local action to address food insecurity. The provisions relevant to addressing local food insecurity include:

**3C (2) in seeking to achieve its primary objective, a Council must have regard to the following facilitating objectives-**

- (a) To promote the social, economic and environmental viability and sustainability of the municipal district;**
- (c) To improve the overall quality of life of people in the local community;**
- (e) To ensure that services and facilities provided by the Council are accessible and equitable;**

**3D (2) the role of a Council includes-**

- (a) Acting as a representative government by taking into account the diverse needs of the local community in decision making;**
- (d) Advocating the interests of the local community to other communities and governments;**
- (f) Fostering community cohesion and encouraging active participation in civic life.**

<sup>liii</sup>**“Municipal Public Health Plans (MPHP)** makes provision for councils to document their major public health activities in a public health plan, this takes into account the dynamic nature of local government and the fact that public health problems and priorities change over time.

*Under the Act: 29B.*

*1. Every council must in consultation with the Secretary, prepare at three year intervals a municipal public health plan. A municipal public health plan must -*

- (a) identify and assess actual and potential public health dangers affecting the municipal district; and*
- (b) outline program and strategies which the council intends to pursue to -*
  - (i) prevent or minimise those dangers; and*

<sup>liv</sup>**“The Health (General Amendment) Act 1988** clarified and simplified the laws relating to the activities

Functions of councils

1. 29A. The function of every council under this Act is to seek to prevent diseases, prolong life and promote public health through organised programs including the prevention and control of:-
  1. Environmental health dangers
  2. Diseases
  3. Health problems of particularly vulnerable population groups-by;
  4. Isolating the special factors affecting the health of people within the municipal district
  5. Developing and enforcing up-to-date public health standards and intervening if the health of people within the municipal district is affected
  6. Monitoring the activities of and assisting other agencies who has an impact on public health and, if necessary, advocating on behalf of the people within the municipal district for adoption and enforcement by those agencies of appropriate standards; and
  7. Co-ordinating the immunisation of children living or being educated within the municipal district

**10b. Plans and strategies identifying Food Security as a priority issue**

Food security and healthy eating are not just a focus are for the Colac Otway, many other regional and state plans identify the need to work in this space. These plans are:

<p><b>Nationally:</b></p> <ul style="list-style-type: none"> <li>• National Food Plan</li> <li>• National Preventative Health Strategy</li> </ul>
<p><b>State:</b></p> <ul style="list-style-type: none"> <li>• Victorian Public Health and Wellbeing Plan</li> <li>• Victorian Health Promotion (VicHealth)</li> </ul>
<p><b>Regionally:</b></p> <ul style="list-style-type: none"> <li>• G21 Regional Planning</li> <li>• Healthy Together Geelong (partnership is between the City of Greater Geelong, Barwon Health and Bellarine Community Health.)</li> <li>• Geelong City Council Municipal Public Health Plan</li> <li>• Golden Plains Shire Municipal Public Health Plan</li> <li>• Surf Coast Shire Municipal Public Health Plan</li> </ul>
<p><b>Local:</b></p> <ul style="list-style-type: none"> <li>• Colac Otway Shire Municipal Public Health Plan</li> <li>• Colac Area Health Integrated Health Promotion Plan</li> <li>• Otway Health Integrated Health Promotion Plan.</li> </ul>

**11. RECOMMENDATIONS**

Method

A brief literature review was conducted to look at the most effective evidence based approaches to addressing cost, transport and skill.

Search terms used:

Evaluation + “Food-security” + “food- insecurity” + interventions + initiatives + programs + “evidence-based” + “best-practice” “peer-reviewed” + access + availability + affordability + cost + transport + skills + knowledge + “food-use”

Search engines used:

- Google Chrome
- Peer reviewed journal databases

Sources of evaluated interventions and existing literature reviews included:

- The Department of Health.
- VicHealth.
- CO-Ops Collaboration.
- National Heart Foundation.
- NSW Centre for Public Health Nutrition
- Public Health Agency of Canada. ([www.phac-aspc.gc.ca/index-eng.php](http://www.phac-aspc.gc.ca/index-eng.php))

In the tables to follow we will use the following colour key to ensure existing work and evidence based opportunity are covering the 5 areas of the Ottawa Charter for Health Promotion Framework.

<i>Develop personal skills</i>	<i>Reorient health services</i>	<i>Strengthen community action</i>	<i>Create supportive environments</i>	<i>Build health public policy</i>
--------------------------------	---------------------------------	------------------------------------	---------------------------------------	-----------------------------------

Findings

Areas for action are listed below and continued over the page in more detail.

1. Transport/Access, work currently being done in the Colac Otway and Evidence Based Opportunities.
2. Cost, work currently being done in the Colac Otway and Evidence Based Opportunities.
3. Food Skill and Knowledge, work currently being done in the Colac Otway and Evidence Based Opportunities.

4. Develop a Colac Otway Food Security Network.

**Evidence based Recommendations for addressing **TRANSPORT/ACCESS** using Ottawa Charter for Health Promotion Framework**

Develop personal skills	Reorient health services	Strengthen community action	Create supportive environments	Build health public policy
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**Evidence based Recommendations for addressing **COST** using Ottawa Charter for Health Promotion Framework**

Develop personal skills	Reorient health services	Strengthen community action	Create supportive environments	Build health public policy
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WORK TO CONTINUE	EVIDENCE BASED OPPORTUNITY
<ul style="list-style-type: none"> <li>Continue support of Food Share and Secondbite in Colac</li> </ul>	<ul style="list-style-type: none"> <li>Advocate for Foodshare and secondbite to service more of the Colac Otway.</li> </ul>
<ul style="list-style-type: none"> <li>Otway Health and Community Services to continue to support active transport as a priority area.</li> </ul>	<ul style="list-style-type: none"> <li>General Store Support Program <i>Reference: Monash University, East Gippsland and Bass Coast Shires.</i></li> </ul>
	<ul style="list-style-type: none"> <li>Support small scale production locally through eliminating zoning planning and subdivision restrictions and barriers. <i>Reference: National Heart Foundation.</i></li> </ul>
	<ul style="list-style-type: none"> <li>Up skill across local government on the Food Sensitive Planning and Urban Design (FSPUD Training) <i>Reference: National Heart Foundation.</i></li> </ul>

WORK TO CONTINUE	EVIDENCE BASED OPPORTUNITY
<ul style="list-style-type: none"> <li>Community Kitchen in Apollo Bay.</li> </ul>	<ul style="list-style-type: none"> <li>Develop Local Produce Markets in at risk areas. Expand existing or creation of new ones in high risk areas.  <i>Reference: Port Produce (BCHC), National Heart Foundation (FSPUD).</i></li> </ul>
<ul style="list-style-type: none"> <li>Breakfast Programs in Apollo Bay and Colac.</li> </ul>	<ul style="list-style-type: none"> <li>Food Swaps  <i>Reference: Food Skill</i></li> </ul>
<ul style="list-style-type: none"> <li>Street renewal project, fruit and nut tree planting in Colac West.</li> </ul>	<ul style="list-style-type: none"> <li>Advocating for edible space in urban planning  <i>Reference: Nation Heart Foundation (FSPUD)</i></li> </ul>
<ul style="list-style-type: none"> <li>Farmers Market Apollo Bay</li> </ul>	
<ul style="list-style-type: none"> <li>Food Market Birregurra (December to April)</li> </ul>	
<ul style="list-style-type: none"> <li>Community Gardens - Apollo Bay, Lavers' Hill, Colac.</li> </ul>	
<ul style="list-style-type: none"> <li>Café Meals Program (Time for Youth)</li> </ul>	

**Evidence based Recommendations for SKILL/KNOWLEDGE  
using Ottawa Charter for Health Promotion Framework**

Develop personal skills	Reorient health services	Strengthen community action	Create supportive environments	Build health public policy
-------------------------	--------------------------	-----------------------------	--------------------------------	----------------------------

WORK TO CONTINUE	EVIDENCE BASED OPPORTUNITY
<ul style="list-style-type: none"> <li>Community Kitchen Apollo Bay.</li> </ul>	<ul style="list-style-type: none"> <li>Food Cents Program</li> </ul> <p><i>Reference: Department of Health</i></p>
<ul style="list-style-type: none"> <li>Piloting Breakfast and Healthy Economical and Tasty (HEAT) Programs at Colac Secondary College. A comprehensive evaluation process to be completed.</li> </ul>	<ul style="list-style-type: none"> <li>Healthy Fries Program</li> </ul> <p><i>Reference: Be Active Eat Well Program.</i></p>
<ul style="list-style-type: none"> <li>Smiles 4 Miles</li> </ul>	<ul style="list-style-type: none"> <li>Advocate for Neighbourhood Houses to conduct gardening and food production classes each year.</li> </ul>
<ul style="list-style-type: none"> <li>Victorian Health Promotion and Achievements Program.</li> </ul>	<ul style="list-style-type: none"> <li>Fresh NED and Fresh Mate (Secondbite skill initiatives)</li> </ul>
<ul style="list-style-type: none"> <li>Budget Bites Guide</li> </ul>	

**Additional Recommendation:  
Develop a Colac Otway Food Security Network**

<ul style="list-style-type: none"> <li>Support intervention around the three areas of action identified in the Food Security Needs Assessment.</li> </ul>
<ul style="list-style-type: none"> <li>Support and Coordinate local research around food security.</li> </ul>
<ul style="list-style-type: none"> <li>Investigate feasibility of introducing a seed funding grants program for local food security initiatives.</li> </ul>
<ul style="list-style-type: none"> <li>Provide advocacy and leadership on food security issues at a local level.</li> </ul>
<ul style="list-style-type: none"> <li>Advocate to government on food security issues.</li> </ul>

**12. DISSEMINATION OF THE RECOMMENDATIONS**

In July 2013, Over 100 stakeholders, community leaders, health professionals and local government were invited to the **COLAC OTWAY FOOD FORUM**. 40 people attended on the day and the aim was to inform our community of this needs assessment and the key findings, and inform them of what our community is already doing and what the evidence suggests a food secure community should look like. We then worked together to identify our visions for food in the Colac Otway Shire, there were 5 main visions identified by the group:

1. Encourage alternative food supply.
2. Promote and celebrate COS food.
3. Improve transportation options to fresh food.
4. Universal understanding of food available in the COS.
5. Everyone in the COS regardless of socio economic status has access to fresh food.

We also used this opportunity to map the capacity of organisations, communities or individuals to support food security action. The below list outlines the initial capacity mapping

<b>Group/Organisation/Community Representation</b>	<b>Capacity</b>
Colac Area Health, Otway Health and Colac Otway Shire	2 staff members to support plan development, strategic action and lead work in this space, and identify food security as priority in appropriate plans, advocacy role, funding potential and seeking partnership, link to the G21 Regional Alliance, research capacity.
Southern Otway Land care Network	Volunteer support, transport opportunities, food security is a priority in 3 year strategic plan, funding potential, seeking partnership.
Community Leaders	Support mapping of existing intervention and can draw on history to support future work.
Colac Secondary College	Identifies food security and healthy eating as a priority in their health promotion plan, avenue to support youth.
Apollo Bay Community	Existing community garden plots/boxes
National Food Plan	Resources are attached to this plan that COS could utilise.
Lions Service Club	Fruit and Veg from Secondbite can be delivered with Volunteer Support, Sunday market in Colac opportunity to include more local produce.
Community Gardens	Opportunity across the whole COS.
Forrest Neighbourhood House	Dry goods available and skill development opportunities and existing lunches.
Otway Permaculture Group	Food production support.
St Laurence and Colac Specialist School	Interest in working in this space with the community.

This information will feed into a Community Food Action plan which will identify key pieces of work in our community and also look at new opportunities, this planning will be led by a smaller steering committee.

## **13. BEST PRACTICE FRAMEWORKS FOR ACTION**

### **1. Ottawa Charter For Health Promotion**

“The first World Health Organisation (WHO) International Conference on Health Promotion was held in Ottawa, Canada, in 1986. The Ottawa Charter for Health Promotion was developed as a clear statement of action for health promotion, aiming to increase the relevance of the primary care philosophy for industrialised countries.”<sup>iv</sup>

### **2. VicHealth Ten Ways Local Government Can Act On Food Security**

Best Practice Ways that Local Government can Act have been determined by the VicHealth ‘Food For All’ projects. See Appendix \_\_ for an outline of this tool.

### **3. Department of Health - Integrated Health Promotion Resource Kit**

This is a practice guide for service providers and measuring health promotion impacts: A guide to impact evaluation in Integrated Health Promotion. This kit supports agencies and organisations to plan, deliver and evaluate effective integrated health promotion programs.

### **4. Victorian Local Government Scanning Tool**

The Victorian Local Government Scanning Tool (VLGA) is a best practice food scanning tool. The Municipal Food Security Scanning Workbook has been trialled and developed to provide direct assistance and support to councillors who are interested in good governance and planning for Municipal Food Security.

**Reference: Victorian Local Government Association.**

### **5. Food Sensitive Planning And Urban Design – National Heart Foundation Conceptual Framework**

A conceptual framework for achieving a sustainable and healthy food system from the National Heart Foundation. This manual is ideal for use to support Local Governments in planning food secure communities.

### **6. Environments for Health - Municipal Public Health Planning Framework**

This framework supports local governments to develop municipal public health and wellbeing plans, it describes public health plans using the 5 environments for

health to ensure effect work is being completed in, the Built/Physical, Social, Economic and Natural Environments.

#### **7. Heart Foundation and Queensland Government: Healthy Activity Communities Framework**

'Active, healthy communities: A resource package for Local Governments to create supportive environments for physical activity and healthy eating is a suite of tools designed to assist councils to create local environments that support active and healthy lifestyles.'<sup>vi</sup>

### **14.ABBREVIATIONS**

<b>BCHC</b>	Bellarine Community Health Centre
<b>BSW</b>	Barwon South West
<b>CAH</b>	Colac Area Health
<b>CALD</b>	Culturally and Linguistically Diverse
<b>CO</b>	Colac Otway
<b>COS</b>	Colac Otway Shire
<b>FS</b>	Food Security
<b>G21</b>	Geelong Regional Alliance
<b>SEIFA</b>	Socio Economic Indexes for Areas
<b>VHFB</b>	Victorian Healthy Food Basket

### **15.LIST OF REFERENCE POINTS**

<b>Reference No.</b>	<b>Reference Content</b>	<b>Page No.</b>
1	Food Security Framework	7
2	Colac Otway Food Security Assessment Tool	7
3	Ottawa Charter for Health Promotion (WHO 1986)	8
4	Food Security Dimensions Model	8
5	Healthy Eating Determinants – A Support Resource for Prevention Community Model	9
6	Food Insecure Statistics, Nationally, State, Regional and Locally.	10
7	Proportion of People who ran out of food in the past 12 months and were unable to replace it in Victoria (05-08)	10
8	Colac Otway Maps	10
9	Demographic Characteristics COS	11
10	Socio Economic Characteristics COS	11

<b>Reference No.</b>	<b>Reference Content</b>	<b>Page No.</b>
11	SEIFA data G21 region 2006 – 2011	12
12	SEIFA data by Local Government Area 2011`	12
13	SEIFA by suburb/postcode in COS 2011	12
14	Food Outlet Availability COS	14
15	Food Deserts COS	15
16	Average cost and percentage of Government Benefits spent on the VHFB across all family types by location	16
17	Grouped areas for General Store Availability Survey	17
18	Percentage of total VHFB items Available (General Store Survey)	18
19	Percentage of unhealthy items, vegetables and fruit available (General Store Survey)	18
20	Vline Bus/Coach Routes (Colac Otway Shire and Surrounding Regions)	19
21	Public Transport Victoria Bus Route to Fresh Produce (Colac Central)	20
22	Public Transport Victoria Bus Route to Fresh Produce (Colac Otway Shire)	20
23	Dairy Production Mapping	21
24	Grain Production Mapping	21
25	Vegetable Production Mapping	22
26	Fruit and Nut Production Mapping	22
27	'Sticky Dot' Consultation Content	23
28	'Sticky Dot' Board	23
29	'Sticky Dot' Responses: Community Food Barriers	24
30	Percentage of the COS Population who had run out of food in a 12 month period and had not been able to replace it.	24
31	Percentage of clients that professional work with that are at risk of food insecurity.	25
32	Risk of Food Insecurity by Population Group	25
33	Transport Barriers Identified Through Community Interview Process	26
34	Skill and Knowledge Barriers Identified Through Community Interview Process	27
35	Cost Barriers Identified Through Community Interview Process	27



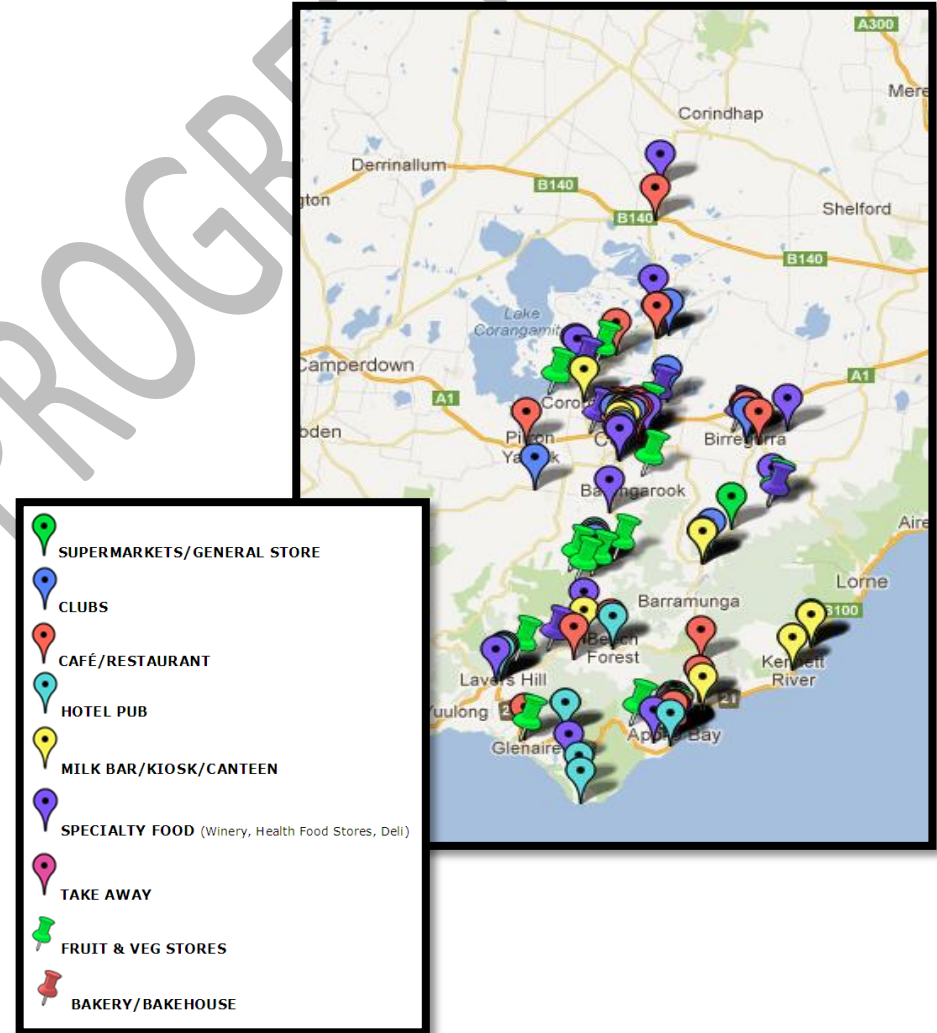
## FURTHER READING

- VLGA Municipal Food Security Toolkit
- VicHealth 10 Ways Local Government Can Act on Food Security
- National Heart Foundation Food Sensitive Planning and Urban Design
- Public Health Agency of Canada Evaluating Outcomes of Community Food Actions: A Guide
- The CO-OPS Collaboration of Community Based Obesity Prevention Site: Local Government and Obesity Prevention Sites, Local Government and Obesity Prevention: An Evidence Resource
- The New York City Council: Foodworks a Vision to Improve NYC's Food System
- USDA Community Food Security Assessment Toolkit
- Southern Grampians and Glenelg Community Food Security Needs Assessment.
- Food Security on the Bellarine Peninsula; Bellarine Community Health Centre
- Merri Community Health Services Food Security in Moreland: A needs assessment.

## 16. APPENDIXES

### Appendix A: Food Retail Mapping

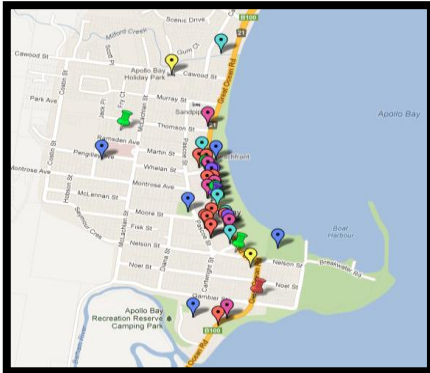
#### COLAC OTWAY Food Retail Mapping



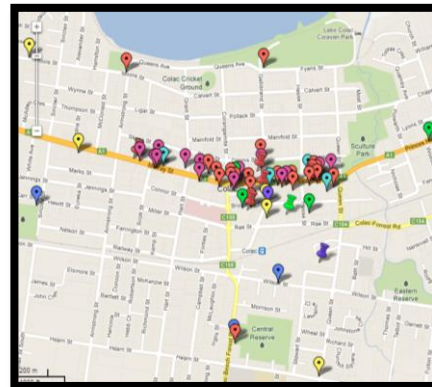


## Appendix B: Victorian Healthy Food Basket Tool

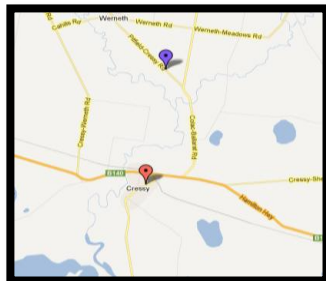
### APOLLO BAY Food Retail Mapping



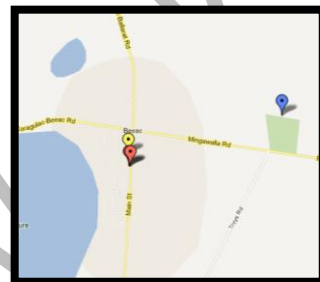
### COLAC CENTRAL Food Retail Mapping



### CRESSY Food Retail Mapping



### BEEAC Food Retail Mapping



Name & address of supermarket:

Collectors name:

Date:

Basket item	Product size	Cost
<b>Cereal group</b>		
White bread	650g	
Wholemeal bread	650g	
Crumpets (rounds)	300g	
Weet-bix	750g	
Instant oats	500g	
Pasta	500g	
White rice	1kg	
Instant noodles	85g	
Premium biscuits	250g	
<b>Fruit</b>		
Apples	1kg	
Oranges	1kg	
Bananas	1kg	
Tinned fruit salad, natural juice	450g	
Sultanas	250g	
Orange juice (100%) NAS	2L	
<b>Vegetables, legumes</b>		
Tomatoes	1kg	
Potatoes	1kg	
Pumpkin	1kg	
Cabbage	half	
Lettuce	whole	
Carrots	1kg	
Onions	1kg	
Frozen peas	1kg	
Tinned tomatoes	400g	
Tinned beetroot	450g	
Tinned corn kernels	440g	
Tinned baked beans	420g	
<b>Meat and alternatives</b>		
Fresh bacon, shortcut, rindless	1kg	
Fresh ham	1kg	
Beef mince, regular	1kg	
Lamb chops, forequarter, fat trim	1kg	
Chicken fillets, skin off	1kg	
Sausages, thin beef	1kg	
Tinned tuna (unsat.oil)	425g	
Tinned salmon, pink (water)	210g	
Large eggs (min 50g, caged)	700g dozen	
<b>Dairy</b>		
Fresh full cream milk	1L	
Fresh reduced fat milk	2L	
Reduced fat flavoured yoghurt	1kg tub	
Full fat long life milk	1L	
Cheese, block	500g	
<b>Non-core foods</b>		
Polyunsaturated margarine	500g	
White sugar	1kg	
Canola oil	500ml	
<b>Unhealthy items comparison</b>		
Mars bar	60g	
Coca-cola	600ml 'buddy'	
Tim Tams - original	250 gm	
Teddy Bear Biscuits	250 gm	
Museli bars, fruit chewy	185gm	
Potato Chips	45g	
Frozen oven baked chips straight Cut	1kg	
Fish fingers	375g	
Ice-cream vanilla	2 L	
Frozen Pizza - family supreme	500g	

**Appendix C: Victorian Healthy Food Basket – General Stores Availability  
Audit Results**

Store:	% of VHFB Available	Actual Item Amount	% of Cereal Group Available	% of Fruit Available	% of Vegetables / Legumes Available	% of Meat/ Alternative available	% of Dairy Available	% of Non-core Available	% of Unhealthy Items Available
GS 1 South Colac Otway Region	81.8%	36/44	88.8%	83.3%	91.6%	55.5%	100.0%	66.6%	10.0%
GS 2 South Colac Otway Region	68.1%	30/44	88.8%	66.6%	66.6%	55.5%	40.0%	100.0%	40.0%
GS 1 Colac and District Region	86.4%	38/44	77.8%	83.3%	58.3%	44.4%	60.0%	100.0%	90.0%
GS 2 Colac and District Region	54.5%	22/44	66.7%	0.0%	58.3%	44.4%	80.0%	100.0%	60.0%
GS 3 Colac and District Region	68.2%	30/44	66.7%	100.0%	83.3%	33.3%	60.0%	66.7%	70.0%
GS 1 Forrest and Surrounds Region	34.1%	15/44	44.4%	33.3%	25.0%	0.0%	80.0%	66.7%	40.0%
GS 2 Forrest and Surrounds Region	22.7%	10/44	11.1%	16.7%	33.3%	11.1%	40.0%	33.3%	60.0%
GS 3 Forrest and Surrounds Region	61.4%	27/44	55.6%	66.7%	75.0%	33.3%	80.0%	66.7%	60.0%
GS 3 South Colac Otway Region	47.7%	21/44	66.7%	50.0%	25.0%	33.3%	80.0%	66.7%	40.0%
GS 1 North Colac Otway Region	15.9%	7/44	11.1%	16.7%	0.0%	11.1%	60.0%	33.3%	30.0%
GS 2 North Colac Otway Region	13.6%	6/44	22.2%	0.0%	16.7%	0.0%	40.0%	0.0%	30.0%
GS 4 Colac and District Region	84.1%	37/44	66.7%	100.0%	91.7%	66.7%	100.0%	100.0%	60.0%

**Appendix D: Victorian Healthy Food Basket Colac Otway 2012**  
(Based on Victorian Healthy Food Basket calculations for quantities of food for different family types)

Family Type	Average Basket Price (% income average)	Cheapest Basket	Most Expensive	Range (Difference between most expensive and cheapest)	Centrelink Payment/ Fortnight*
Typical Family of 4	\$485.51 (35.33%)	\$409.39	\$534.51	\$125.12	\$1,357.18
Single Parent Family	\$326.11 (30.85%)	\$276.59	\$361.83	\$85.24	\$1,057.02
Elderly Woman	\$115.54 (16.61%)	\$97.71	\$129.31	\$31.60	\$695.30
Single Male	\$153.71 (31.37%)	\$133.32	\$173.35	\$40.03	\$489.70

\*NB based on June 2012 Centrelink payments information for non-working adults.

**Appendix E:  
Victorian Healthy Food Basket Geelong and Queenscliff 2012**  
City of Greater Geelong and Borough of Queenscliff Market Basket Survey Results August 2012  
(Based on Victorian Healthy Food Basket calculations for quantities of food for different family types)

Family Type	Average Basket Price (% income)	Cheapest Basket (% income)	Most Expensive Basket (% income)	Range (difference between cheapest and most expensive)	Centrelink Payment/ Fortnight*
Typical Family of Four	\$466.43 (34.37%)	\$383.11 (28.2%)	\$506.34 (37.3%)	\$123.23	\$1357.18
Single Parent Family	\$316.30 (29.92%)	\$262.41 (24.8%)	\$349.03 (33%)	\$86.62	\$1057.02
Elderly Woman	\$111.81 (16.8%)	\$91.30 (13.1%)	\$123.05 (17.7%)	\$31.75	\$695.30
Single Male	\$150.51 (30.74)	\$123.66 (25.3%)	\$163.20 (33.3%)	\$39.54	\$489.70

NB - based on June 2012 Centrelink payment information for non-working adults

## Appendix F: V-line Bus/Coach Routes

- Route 1:** Port Campbell <> Lavers Hill <> Marengo <> Apollo Bay.  
Monday-Wednesday-Friday Once per day.
- Route 2:** Apollo Bay <> Skenes Creek <> Kennett River <> Wye River.  
Monday – Friday 3x per day  
Saturday & Sunday 2x per day.
- Route 3:** Pirron Yallock <> Colac <> Birregurra.  
Monday – Friday 3x per day  
Saturday & Sunday 3x per day
- Route 4:** Colac <> Barwon Downs <> Forrest <> Tanybryn <> Skenes Creek <> Apollo Bay <> Marengo.  
Wednesday Only, 1x per day

## Appendix G: V-line Bus/Coach Timetable

### Route 1 Elliminyt via Hart St

Monday to Friday							
Morning (am) / Afternoon (pm)	am	am	am	pm	pm	pm	pm
Colac Bus Interchange/Gellibrand St (Colac)	8:00	9:30	11:00	12:30	2:00	3:30	5:00
Colac Station (Colac)	8:03	9:33	11:03	12:33	2:03	3:33	5:03
Dowling St/Pound Rd (Colac)	8:05	9:35	11:05	12:35	2:05	3:35	5:05
Howarth St/Spring St (Colac)	8:08	9:38	11:08	12:38	2:08	3:38	5:08
Harris Rd (Colac)	8:15	9:45	11:15	12:45	2:15	3:45	5:15

Saturday							
Morning (am) / Afternoon (pm)	am	am	am				
Colac Bus Interchange/Gellibrand St (Colac)	8:30	10:00	11:30				
Colac Station (Colac)	8:33	10:03	11:33				
Dowling St/Pound Rd (Colac)	8:35	10:05	11:35				
Howarth St/Spring St (Colac)	8:38	10:08	11:38				
Harris Rd (Colac)	8:45	10:15	11:45				

### Route 2 Colac via Fyans St

Monday to Friday							
Morning (am) / Afternoon (pm)	am	am	am	pm	pm	pm	pm
Donaldson St/Moore St (Colac)	8:45	10:15	11:45	1:15	2:45	4:15	5:45
Colac West Primary School/Ligar St (Colac)	8:48	10:18	11:48	1:18	2:48	4:18	5:48
Gellibrand St/Pollack St (Colac)	8:51	10:21	11:51	1:21	2:51	4:21	5:51
Colac Bus Interchange/Gellibrand St (Colac)	8:52	10:22	11:52	1:22	2:52	4:22	5:52

Saturday							
Morning (am) / Afternoon (pm)	am	am	pm				
Donaldson St/Moore St (Colac)	9:15	10:45	12:15				
Colac West Primary School/Ligar St (Colac)	9:18	10:48	12:18				
Gellibrand St/Pollack St (Colac)	9:21	10:51	12:21				
Colac Bus Interchange/Gellibrand St (Colac)	9:22	10:52	12:22				

### Route 3 Colac via Queen St

Monday to Friday							
Morning (am) / Afternoon (pm)	am	am	pm	pm	pm	pm	pm
Rodger Dr/Kettle St (Colac)	9:15	10:45	12:15	1:45	3:15	4:45	6:15
Bluewater Fitness Centre/Hearn St (Colac)	9:17	10:47	12:17	1:47	3:17	4:47	6:17
Hart St/Connor St (Colac)	9:19	10:49	12:19	1:49	3:19	4:49	6:19
Colac Bus Interchange/Gellibrand St (Colac)	9:21	10:51	12:21	1:51	3:21	4:51	6:21

Saturday							
Morning (am) / Afternoon (pm)	am	am	pm				
Rodger Dr/Kettle St (Colac)	9:45	11:15	12:45				
Bluewater Fitness Centre/Hearn St (Colac)	9:47	11:17	12:47				
Hart St/Connor St (Colac)	9:49	11:19	12:49				
Colac Bus Interchange/Gellibrand St (Colac)	9:51	11:21	12:51				

### Route : Alvie via Coragulac

Monday to Friday							
Morning (am) / Afternoon (pm)	pm						
Colac Bus Interchange/Gellibrand St (Colac)	3:25						
Ross St/Princes Hwy (Colac)	3:50						
Rossmoyne Rd/Princes Hwy (Colac West)	3:53						
Cororooke Rd/Princes Hwy (Colac West)	3:55						
Factory Rd/Cororooke Rd (Cororooke)	4:02						
Corangamite Lake Rd/Cororooke Rd (Coragulac)	4:04						
Baggots Rd/Coragulac Rd (Coragulac)	4:08						
Farralls Rd/Cororooke Rd (Warman)	4:13						
Farralls Rd/Bullock Swamp Rd (Warman)	4:17						
Finns Rd/Riccartsons Rd (Warman)	4:30						
Red Rock Reserve Rd/Corangamite Lake Rd (Alvie)	4:35						

### Route : Marengo via Forrest, Skenes Creek & Apollo Bay

Monday to Friday							
Day Restrictions	We						
Morning (am) / Afternoon (pm)	pm						
Karyana Senior Citizens/Hesse St (Colac)	2:00						
Colac Station (Colac)	2:03						
Barwon Downs Store/Birregurra-Forrest Rd (Barwon Downs)	2:30						
Turner St/Birregurra-Forrest Rd (Forrest)	2:35						
Upper Gellibrand Rd/Forrest-Apollo Bay Rd (Eastramanga)	2:43						
Turtons Track/Forrest-Apollo Bay Rd (Tanybryn)	2:55						
Skenes Creek/Great Ocean Rd (Skenes Creek)	3:10						
Pieces Holiday Park/Great Ocean Rd (Apollo Bay)	3:17						
Information Centre/Great Ocean Rd (Apollo Bay)	3:20						
Apollo Bay Recreation Reserve/Great Ocean Rd (Apollo Bay)	3:25						
Marengo Cres (Marengo)	3:40						

#### Service Information

We = Operates on Wednesday only

**Appendix H: V-Line Train Timetable**

**Warrambool to Melbourne via Geelong**

Service No.	Direction	MONDAY - FRIDAY							SATURDAY							SUNDAY									
		TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM					
8220	W	07:18	07:28	07:38	07:48	07:58	08:08	08:18	08:28	08:38	08:48	08:58	09:08	09:18	09:28	09:38	09:48	09:58	10:08	10:18	10:28	10:38	10:48	10:58	
8221	E	10:58	11:08	11:18	11:28	11:38	11:48	11:58	12:08	12:18	12:28	12:38	12:48	12:58	13:08	13:18	13:28	13:38	13:48	13:58	14:08	14:18	14:28	14:38	14:48
8222	W	07:18	07:28	07:38	07:48	07:58	08:08	08:18	08:28	08:38	08:48	08:58	09:08	09:18	09:28	09:38	09:48	09:58	10:08	10:18	10:28	10:38	10:48	10:58	
8223	E	10:58	11:08	11:18	11:28	11:38	11:48	11:58	12:08	12:18	12:28	12:38	12:48	12:58	13:08	13:18	13:28	13:38	13:48	13:58	14:08	14:18	14:28	14:38	14:48

**Melbourne to Warrambool via Geelong**

Service No.	Direction	MONDAY - FRIDAY							SATURDAY							SUNDAY									
		TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM	TRM
8224	W	07:18	07:28	07:38	07:48	07:58	08:08	08:18	08:28	08:38	08:48	08:58	09:08	09:18	09:28	09:38	09:48	09:58	10:08	10:18	10:28	10:38	10:48	10:58	11:08
8225	E	10:58	11:08	11:18	11:28	11:38	11:48	11:58	12:08	12:18	12:28	12:38	12:48	12:58	13:08	13:18	13:28	13:38	13:48	13:58	14:08	14:18	14:28	14:38	14:48

**Appendix I: Colac Otway Producers**

Company	Location	Products	Distribution	Farm Gate Access
Apostle Whey Cheese	Corriemunglee	Cheeses	Aireys Inlet Allansford Anglesea Apollo Bay Ballarat Bellbrae Birregurra Camperdown Colac Dunkeld Ferguson Barongarook Glen Iris Halls Gap Hamilton Kew Lavers Hill Beech Forrest Lorne Port Campbell Port Fairy Rose Bud Simpson Terang Timboon Torquay Warrnambool Winchelsea	Yes
Barwon Lamb	Winchelsea	Lamb Products	Aireys Inlet Apollo Bay Geelong West Golden Plains Market Kennet River Lorne	No

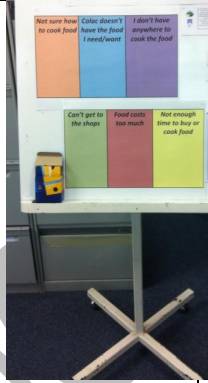
<b>Company</b>	<b>Location</b>	<b>Products</b>	<b>Distribution</b>	<b>Farm Gate Access</b>
			Newton Market Point Lonsdale Market Seddon Smythesdale Market Torquay Wye River	
Kazbah	Unknown	Coffee Roasters	Unknown	Unknown
Otway Forest Shiitake	Wongarra	Shiitake Mushrooms	Unknown	Unknown
Otway Prime Beef and Lamb	Unknown	Beef and Lamb	Deans Marsh Birregurra Torquay Anglesea Aireys Inlet Apollo Bay Torquay Market Golden Plains Market Sunbury Market Fairfield Market Mulgrave Market Newtown Market	No
Old Lorne Road Olives	Deans Marsh	Olives	Unknown	Yes
Beechy Berries	Ferguson	Blueberries	Unknown	Yes
Birregurra Olives	Birregurra	Olives and Olive Oil	Unknown	Unknown
Gentle Annie Berry Garden	Pennyroyal	Raspberries Strawberries Gooseberries, Red and Black Currents, Silvanberries,	Apollo Bay Visitor Information Centre Birregurra Lorne Visitor Information Centre	Yes

<b>Company</b>	<b>Location</b>	<b>Products</b>	<b>Distribution</b>	<b>Farm Gate Access</b>
		Loganberries, Boysenberries Marionberries Thornless Blackberries, Apples, Nashi Pears, Plums, Apricots, Blueberries		
Barongarook Tomato Farm	Barongarook	Tomato		
Bulla	Colac	Milk Yoghurt Ice Cream Frozen Yoghurt Cream Cheese Sour Cream Cream Cottage Cheese	National and international. Distributes to 22 countries worldwide.	
Otway Herbs	Apollo Bay	Herbs		
Shoebridge Berry Farm	Gellibrand	Blueberries		
Pennyroyal Raspberry	Pennyroyal	Raspberries Brambleberries Youngberries Boysenberries Marionberries Strawberries Jostaberries Loganberries Red and Black Currents	Barwon Downs General Store Birregurra General Store Lorne Greens Lorne Visitor Information Centre	Yes

Company	Location	Products	Distribution	Farm Gate Access
Foothill Organics	Yeo	Organic Vegetables	Unknown	Yes
Irrewarra Sourdough	Irrewarra	Breads, Sourdoughs, Granola and Biscuits	Barwon Heads Ocean Grove Queenscliff Highton Geelong West East Geelong Birregurra Colac Ballarat Apollo Bay Lorne Anglesea Aireys Inlet Torquay Portland Foster Tarrington Castlemaine Port Fairy Camperdown Warrnambool Casterton Sale Woodend Mount Gambier Wandin North Sydney and Regional NSW SA TAS WA QLD	No

### Appendix J: Sticky Dot Consultation Board and Content.

**STICKY DOT CONSULTATION CONTENT**



**Question:**  
*What Problems do you face getting the food you need?*

**Options for Response:**

- Not sure how to cook food
- Colac Otway doesn't have the food I need/want
- I don't have anywhere to cook the food
- Can't get to the shops
- Food costs too much
- Not enough time to buy or cook food.

**In addition:**  
Have you ran out of food in the last 12 months and not been able to replace it?

### Appendix K: Sticky Dot Board Locations and Geographical Responses

Apollo Bay	Colac	Lavers Hill
Apollo Bay Childcare	Colac Area Health	Lorne
Apollo Bay Kinder	Colac Library	Lower Gellibrand
Apollo Bay Senior Citizens	Colac Neighbourhood House	Maternal Child Health Colac
Barongarook	Elliminyt	Otway Health & Community Services
Barwon Downs	Forrest	Separation Creek
Beeac	Hordern Vale	Warrnambool
Birregurra	Johanna	Winchelsea
Cobden	Kennett River	Yuulong



## Appendix L: Food Security Interview form for Local Organisations

Participating in this questionnaire is voluntary and you can remain anonymous if you wish. This data will be collated and summarised for the Food Security Needs Assessment Report. Please consent to participating in this survey by signing below:

Signature \_\_\_\_\_ Date: \_\_\_\_\_ Print Name \_\_\_\_\_

Email: \_\_\_\_\_

Organisation and Address \_\_\_\_\_

\_\_\_\_\_ Position \_\_\_\_\_

This survey is one part of a comprehensive needs assessment process. Once we have clearly determined the community's food security needs, we will make suggestions for areas to action. Would you be happy for us to:

- a. Contact you to provide feedback on the needs assessment report & action areas? Yes No  
 b. Would you like to receive a copy of the completed needs assessment? Yes No

### SECTION A: FOR ORGANISATION OR COMMUNITY GROUP ONLY

Food security is defined as whether people have reliable access to adequate, safe, nutritious, culturally and socially acceptable food NOT from emergency sources (VicHealth 2011).

**Question 1:** Who are the clients that seek the service you provide? (Please tick all that apply).

<input type="checkbox"/>	Low Income
<input type="checkbox"/>	Young People
<input type="checkbox"/>	People with Mental Health Issues
<input type="checkbox"/>	Frail/Aged and Elderly
<input type="checkbox"/>	People with a Disability
<input type="checkbox"/>	Indigenous Australians
<input type="checkbox"/>	People who are Culturally and Linguistically Diverse
<input type="checkbox"/>	People who are Homeless
<input type="checkbox"/>	Alcohol and Other Drug Users

**Question 2** –What percentage of the community that you work with do you know or feel may be at risk of being food insecure?

0% (Go to Q3)      1-25%      25-50%      50-75%      75-100%

**Question 3**– Please indicate if any of the following are reasons why your clients do not always have access to food that is safe, nutritious and culturally appropriate and from non-emergency sources. And what is the cause?

REASON	CAUSE	COMMENTS
<input type="checkbox"/> Cost	<input type="checkbox"/> High price of food <input type="checkbox"/> Low income	
<input type="checkbox"/> Quality	<input type="checkbox"/> Unsafe to consume	

<input type="checkbox"/> Transport	<input type="checkbox"/> No access to a car <input type="checkbox"/> Too costly to maintain car <input type="checkbox"/> Restricted or no licence <input type="checkbox"/> Physical environment not adequate e.g.(seating, footpaths, pedestrian crossings) <input type="checkbox"/> Public transport access; <input type="checkbox"/> Cost of public transport <input type="checkbox"/> Infrequency of bus services/physical location restricting <input type="checkbox"/> Physical difficulties (personally) using buses <input type="checkbox"/> Not aware of transport routes available	
<input type="checkbox"/> Cooking Facilities	<input type="checkbox"/> No access to a kitchen <input type="checkbox"/> No access to stove, fridge and utensils	
<input type="checkbox"/> Skills	<input type="checkbox"/> Understanding of required ingredients and supermarket navigation <input type="checkbox"/> Limited understanding of Food Hygiene <input type="checkbox"/> Budgeting <input type="checkbox"/> Preparing food <input type="checkbox"/> Eating in a social setting <input type="checkbox"/> Lack of knowledge	
<input type="checkbox"/> Other	Please specify (e.g. poor health, chronic illness, limited time, lack of awareness of food services in the community).	

**Question 4** – Do you provide any programs which may help address food security? (Please circle) YES NO  
 If no, go to Q7

If yes, please tick the box which best applies to your program and tell us a little about your project:

<input type="checkbox"/>	Emergency food relief vouchers or handouts	Please briefly describe your program:
<input type="checkbox"/>	Delivered Meals	
<input type="checkbox"/>	Free Meals	
<input type="checkbox"/>	Low Cost Meals	
<input type="checkbox"/>	Cooking Classes/Food Handling Programs	
<input type="checkbox"/>	Community Gardens	
<input type="checkbox"/>	Home gardening classes	
<input type="checkbox"/>	Food share, co-op, markets	

**Question 6** – What age group best describes the people who use your food support program? (Please provide as much information as possible i.e. Age, gender, social demographic)

Comments:

**Question 7 – (Please Circle)**

Does your organisation have any information on food security that relates to clients in the COS?      **Yes**      **No**

Can we please access this information?      **Yes**      **No**

Is there anyone else that you could recommend we should speak to about this topic?      **Yes**      **No**

Name: \_\_\_\_\_

Details: \_\_\_\_\_

## Appendix M: Ten Ways Local Government Can Act of Food Security (VicHealth Framework)

- **Allocate Responsibility**

To have food security accepted as a legitimate area for local action and policy, it's important to assign the role of driving the food security agenda within Council and the community to a specific staff member. The actions and strategies that local government can take to implement this recommendation include, place responsibility with a social or health planner, embed the work in existing roles, the workers should be senior and have research and strategic thinking skills and community development or health promotion experience.

- **Building the local picture**

An invaluable resource for local government can be produced by summarising the key food security issues and local evidence into one document. The VLGA has developed a Rapid Assessment Tool, which has been tested in 7 Municipalities, including Geelong as the first trial location in 2009, to facilitate this important process.

- **Policy and plans**

Integrating food security into policy and planning is vital to ensure food security is firmly on the council agenda. Incorporating food security into policy and plans ensures that it is dealt with in a systemically and proactive way. Building the picture should include identifying key policies and plans

- **Setting a good example**

Council can model ways of supporting healthy eating choices and raise the profile of healthy food access strategies through its own activities such as using council publications to promote healthy eating, developing internal catering guidelines, using community grants to promote healthy eating and identifying council buildings that have kitchen suitable for community use.

- **Regulatory and fiscal power**

Local government can consider using its regulatory and fiscal powers to increase the supply of healthy food and decrease the supply of unhealthy food. Registering all council owned kitchen for community use, facilitating the establishment of local markets and using differential rates to encourage healthy eating are several examples.

- **Land use planning**

Land use planning is one of the most challenging areas in which to embed food security thinking. Food for All identified that intensive consultation and awareness-raising to council planners of the link between land use planning and food security is essential.

- **Healthy eating for residents**

This action area shows how local government, ideally in partnership with appropriate agencies, can assist residents in increasing their understanding of how to access and cook healthy meals. Examples include disseminating information about healthy eating through the council workforce, running shopping tours and mapping the low cost healthy food supply.

- **Growing food locally**

Local government can play a significant role in supporting gardening initiatives, & ensuring council & community actions are complementary. An audit of council owned land an identifying land suitable for food growing is particularly helpful.

- **Getting food and residents together**

The councils participating in Food for All supported a number of strategies seeking to address hurdles to getting people to food and food to people. Local government can work in partnership to increase residents' access to fresh foods through providing community transport, supporting breakfast programs and helping coordinate the emergency relief response for example.

- **Advocacy**

The Food for All program demonstrated that many barriers to food security stem from systems that local government cannot directly alter. This area of action highlights the areas where local government can advocate on behalf of its residents to influence food insecurity. Advocacy may relate to affordable housing, transport, cost of living pressures, all of which impact household food budgets.<sup>lvii</sup>

## 17.MEDIA

### 8.2% GO HUNGRY IN OUR BACKYARD

Food security is defined as 'people having access at all times to the types of food they need to lead active and healthy lives not supplied by emergency food sources'. As the type and amount of food needed can differ from person to person, food security exists when there is a consistent supply of accessible nutritious foods which are adequate to physical, cultural and social needs. Data from the 2006 shows that up to 8.2% of Colac Otway residents have been

identified as food insecure, that is, in the past twelve months they said they have run out of food and been unable to afford to buy anymore. This compares 3.8% for the whole of Barwon South West Region and a Victorian average of 6%. Research shows that some people are more vulnerable than others including people on low incomes, single parent households, older people and those located in low socio-economic or rural areas. There are many factors which contribute and determine food insecurity.

For some it may be that the cost, type or quality of food is not appropriate or reasonable while for others it may be that they are not able to access the foods they need due to issues with transport, mobility or illness. Food security can also be compromised if people do not have the knowledge or facilities to shop, cook and prepare foods safely and properly. In order to address the issues, we need to firstly understand them. Although we are aware that there is a high level of food insecurity within the Colac Otway, we need to understand which of these factors are affecting people within the Shire, and how this may differ between locations.

For this reason, over the next 6 months, Otway Health and Colac Area Health's Health Promotion Departments, in partnership with the Colac Otway Shire will be exploring the issue within the Shire. Pictured is the 'Sticky Dot Board'. This board will be rotated around all towns within the Shire.

This allows individuals to anonymously and easily have their say. Please phone me on 5237 8500 should you require further information about this project.

~Jess Dorney  
Health Promotion Officer



### GET READY FOR SPRING TREAT YOURSELF

Our Beauty Room is open for business every Wednesday and Thursday. So if you have neglected yourself this winter and feel a little sprucing is in order before you shed the winter clothes or maybe you just need a little pampering? If you are keen for to get a manicure, pedicure or some waxing done, please contact Reception on 5237 8500 to make a booking.

**Pedicure**  
Call Reception on 5237 8500







### Food Security Survey

Friday, September 07, 2012  
 Colac Area Health's Health Promotion Department are surveying the Colac Otway to identify issues around food security. Please answer our 2 question survey.

- About Us
- News and Events
- Patient Information
- Education
- Publications
- Support Us
- Health Promotion
- Staff Login

Acute Care SERVICES	Community SERVICES	Aged Care SERVICES	YOUTH HEALTH & WELLBEING NEEDS ASSESSMENT
<p>Work with us</p> <p>Volunteer</p> <p>Make a donation</p>		<p>Our vision is to promote the health and wellbeing of our community through quality acute, aged, residential and community services that are accessible, affordable, flexible and integrated.</p>	

# COLAC Herald

FRIDAY, JULY 19, 2013 www.colacherald.com.au



**STARVING:** Lack of money, transport and food skills has forced Colac and district people to go without food. Health and community leaders are working to tackle the issue.

## Families go hungry across Colac region

More than 1500 Colac and district residents are going hungry because they lack money, transport, or food skills. A new study reveals 8.9 per cent of Colac Otway Shire residents ran out of food at some point in the past year, and were unable to replace it. The figure from Community Indicators Victoria represents 1669 people from the shire's total population of 20,345. The statewide figure was six times as high.

Colac Area Health, Otway Health and the Colac Otway Shire Council have combined to ask people about food security concerns and create an action plan to tackle the issue. CAH health promotion co-ordinator Lauren Fitzgerald led the study with Otway Health's Jess Dorney and Colac Otway Shire Council's Greg Fletcher.

Ms Fitzgerald said they studied the shire's community profile, looked at food availability in the shire, including tackling affordability and transport issues.

She said the study showed food cost was the biggest issue among 200 people who responded to a survey at 27 locations.

"This we completed an interview with community leaders and health professionals asking them what they perceived the problems are for our community," Ms Fitzgerald said.

"The main issues on that were lack of transport to fresh produce, limited food skill and knowledge, and the cost of food as well," she said.

0.4 per cent didn't eat enough fruit each day.

She said 34 per cent of food outlets available were take-away shops, restaurants and cafes, while just eight per cent were supermarkets and green grocers.

Colac district families and single parents spend more than 30 per cent of their income on food, according to the basket survey.

Ms Fitzgerald, Ms Dorney and Mr Fletcher led a forum last week, which brought together health professionals, council and community leaders, health professionals and council under the one roof working together to address the issue of food security in our catchment," Ms Dorney said.

"This needs assessment has been over 12 months in the making. It was great to finally share what we had found with our community - we understood that we need to work together to achieve positive food outcomes for the Colac Otway Shire," Ms Fitzgerald said.

"Feedback from the forum will be drafted into an action plan in

As a response to a recent needs assessment, you are cordially invited to participate in the

## Colac Otway Food Forum

This Forum will bring together organisational representatives and community stakeholders. The aim is to workshop how we can collaboratively use the best available evidence to improve the access, use and availability of nutritious, culturally appropriate and affordable food in our communities.

This Forum will be facilitated by health promotion consultant, Anita Thomas.

**GUEST SPEAKER:**

*Amanda Stirrat*, Health and Wellbeing Officer at the City of Greater Geelong and Chair of the G21 Food Security Network.

*Andrew Lucas*, from Backyard Harvest and presenter of Transition Towns and other community connectedness programs

**WHERE**

Colac Bowls Club by the lake (Corner of Moore & Armstrong Street)

**WHEN**

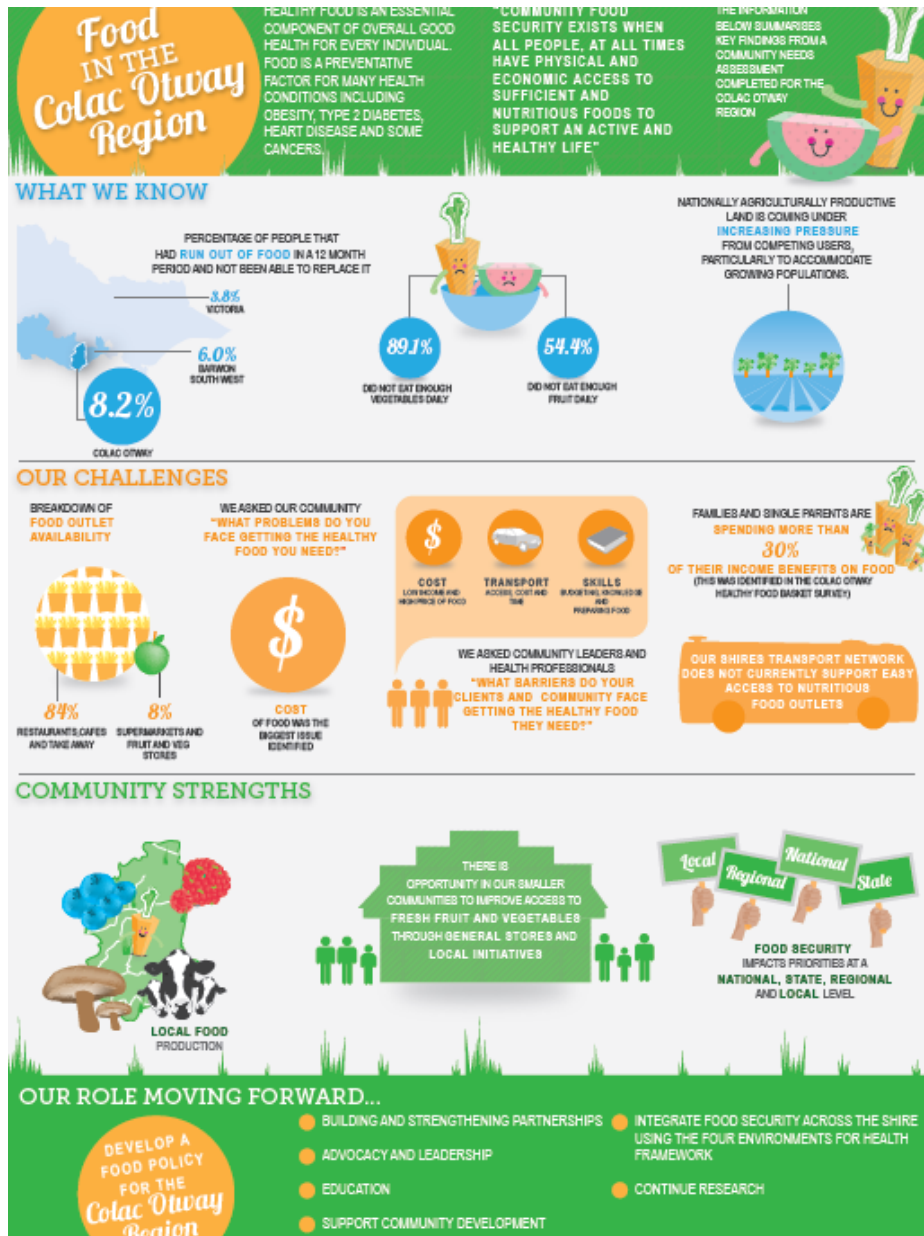
Friday July 12th 2013 from 10am—1pm (with lunch to follow)

**RSVP**

Please RSVP via the following email [healthpromotion@cah.vic.gov.au](mailto:healthpromotion@cah.vic.gov.au) by June 26 2013, and include any dietary requirements.

**A CAR POOLING REGISTER IS BEING SET UP FROM APOLLO BAY. IF YOU ARE ABLE TO PROVIDE, OR WOULD LIKE TO RECEIVE A LIFT, PLEASE INDICATE IN YOUR EMAIL**

Catering by Sorella Foods sourcing local and seasonal produce to produce exceptional food to our region.



Area Health eNews

Locations

Programs and Services

Careers

Site Search

1 2 3 4

Acute Care SERVICES

Community SERVICES

Aged Care SERVICES

Work with us

Volunteer

Our vision is to promote the health and wellbeing of our community through quality acute, aged, residential and community services that are accessible, affordable, flexible and integrated.

**Food Security**  
Monday, July 22, 2013  
More than 1500 Colac and residents are going hungry lack money, transport, or

## 18. LIST OF REFERENCES

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- <sup>ii</sup> Community Indicators Vic Website (2008), retrieved 2012, [http://www.communityindicators.net.au/wellbeing\\_reports/colac\\_otway](http://www.communityindicators.net.au/wellbeing_reports/colac_otway)
- <sup>iii</sup> Community Indicators Vic Website (2008), retrieved 2012, [http://www.communityindicators.net.au/wellbeing\\_reports/colac\\_otway](http://www.communityindicators.net.au/wellbeing_reports/colac_otway)
- <sup>iv</sup> Victorian Government Department of Health, (2012) Colac Otway Shires: Health Status Profile 2011 – Victorian Population Survey 2008.
- <sup>v</sup> Victorian Government Department of Health, (2012) Colac Otway Shires: Health Status Profile 2011 – Victorian Population Survey 2008.



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- <sup>vi</sup> VicHealth 2007, Disease trends, retrieved 2012, [http://www.vichealth.vic.gov.au/~media/ResourceCentre/PublicationsandResources/Knowledge/research\\_DiseaseTrends.ashx](http://www.vichealth.vic.gov.au/~media/ResourceCentre/PublicationsandResources/Knowledge/research_DiseaseTrends.ashx)
- <sup>vii</sup> Australian Bureau of Statistics, Socio-Economic Indexes for Areas (SEIFA), 2006, retrieved 2012
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- <sup>ix</sup> Australian Bureau of Statistics 2011, Census data for Colac Otway South, retrieved 2012, [http://www.censusdata.abs.gov.au/census\\_services/getproduct/census/2011/communityprofile/210151755?opendocument&navpos=230](http://www.censusdata.abs.gov.au/census_services/getproduct/census/2011/communityprofile/210151755?opendocument&navpos=230)
- <sup>x</sup> Google Maps, 2013, <https://maps.google.com.au/maps?hl=en>
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- <sup>xii</sup> Monash University, 2012, Victorian Healthy Food Basket Survey
- <sup>xiii</sup> Local government and Food Security: An evidence review, Montague M 2011, Public Health Unit, retrieved 2012.
- <sup>xiv</sup> Framework Developed by Health Promotion Department at Portland District Health, 2011, cited in the Southern Grampians and Glenelg Community Food Security Needs Assessment, 2011
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