

SPATIAL PLANNING AS A TOOL FOR IMPROVING ACCESS TO HEALTHY FOOD FOR THE RESIDENTS OF CLARENCE



Clarence City Council &
Heart Foundation (Tasmanian Division)

December 2015



ACKNOWLEDGEMENTS

The Project Team would like to thank the residents, community groups and organisations who facilitated and participated in the community consultation phase.

This includes:

- Risdon Vale Neighbourhood Centre
- Warrane Mornington Neighbourhood Centre
- Risdon Vale Primary School
- South Arm Peninsula Residents Association
- South Arm Community Market

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EXECUTIVE SUMMARY

The built environment in our towns and suburbs impacts our health and wellbeing. This may include how residents access healthy food across the municipality in which they live.

In partnership, Clarence City Council and the Heart Foundation have undertaken a project to better understand how the built environment in neighbourhoods and towns impacts on how residents access healthy food across the municipality. The project has drawn on evidence and resources from other jurisdictions as well as specialists in the field. This project, which is unique to Tasmania, spatially mapped a variety of community attributes and consulted with the community to gauge how these attributes impact on their access to healthy food.

The Project Team involved participants from across Council groups and the Heart Foundation, who also provided a facilitation role for the project. The Team used a participatory decision making process throughout the project to collectively make key decisions. The critical factor for delivery of the project was in-house asset data and geospatial mapping expertise within Council. Existing frameworks developed for local government's analysis of the built environment and peer reviewed literature informed the asset selection.

A series of municipality-wide and localised maps for 3 locations (Risdon Vale, South Arm/Opossum Bay and Warrane/Mornington) were developed. The team used a variety of locations and existing community activities to engage with the community to gain their feedback about the maps and about how the built environment impacts their access to healthy food.

This report summarises the process undertaken through the project, shares the tools and expert knowledge and collates the feedback. All of this has informed a set of recommendations for Clarence City Council.

Key Findings

1. Access to shops that sell healthy food can be challenging for local residents
2. Local amenity, walkability and physical access to the shops all impact on the ability to access healthy food.
3. Residents frequently travel out of their neighbourhood or town to do their shopping as healthy food is limited or unaffordable where they live
4. Residents use a variety of strategies to access healthy food and local businesses. Community support (including shared transport solutions) and home delivery are often extremely helpful.
5. Ensuring that communities have reasonable access to healthy food options has implications for spatial planning, development of assets and asset renewal. Considerations include; how to actively improve planning in relation to food access; and ongoing assessment of how spatial planning and assets decisions may impact a community's ability to access healthy food sources

Recommendations

The project has several recommendations (see page 43) which are largely focussed on sharing what has been learned to stakeholders within Council as well as externally. In summary the report recommends that:

1. In the future, Council through its various Health and Wellbeing Working Groups will explore actions to respond to the findings. Internally relevant Council groups will be informed about issues relating to community assets and amenity.
2. Where it has relevance, new knowledge and key findings will be shared with external stakeholders such as the Local Government Association of Tasmania and State Government.
3. Council should consider a community's capacity to access healthy food sources and options when conducting spatial planning exercises such as structure planning.
4. The impact on access to healthy food is also highly relevant to the management of assets such as infrastructure design, usage and allocation and should be part of the considerations for asset management.

INTRODUCTION

Spatial planning can be a useful tool for ensuring collaboration across a variety of sectors when reviewing and creating policies and plans. Ultimately, while previous poor planning and asset treatment/allocation can suppress community health and wellbeing, well considered spatial planning can positively impact the built environment and support community health and wellbeing. Factors such as transport, land use, local government, community, health, housing and the natural environment all contribute to influencing outcomes for residents and play a significant role in physical, mental, social and environmental wellbeing.¹

POLICY CONTEXT

This project is a partnership between Clarence City Council and Heart Foundation Tasmania. From a Council perspective, the **Community Health and Wellbeing Plan 2013-2018** provides an important policy framework for the project. The Plan cites several activities and objectives relevant to improving access to healthy food for local residents. These are outlined below:

- Identify and assess patches of land for local food production in high-medium density housing areas
- Identify and enhance community hubs and villages
- Increase the use of tracks and trails for recreation and transport purposes
- Support locally driven development of community gardens and food patches
- Promote expansion of Move Well Eat Well
- Promote school based initiatives for growing, nutrition education and social marketing
- Support initiatives to promote food access, affordability, availability and awareness of healthy food as recommended by TFARC (Tasmanian Food Access Research Coalition)
- Encourage and support social enterprises
- Provide support and advice for community markets (including farmers markets)

Healthy Food Access Tasmania¹ is a project being delivered by the Heart Foundation which aims to improve access to fruit and vegetables (preferably locally grown) in communities across Tasmania. The project will be delivered over several phases with a number of key activities including:

- Price and availability mapping of healthy food (UTAS is our partner collecting the data)
- Scoping of policy, program and community activity context to identify opportunities, challenges and prospects for partnerships
- Supporting community level mapping/scanning of determinants of healthy food access within local governments and communities

¹ Healthy Food Access Tasmania is funded by Primary Health Tasmania under the Primary Health Networks Program – an Australian Government initiative

- Funding local initiatives

Other strategic considerations

The Heart Foundation Tasmania is working to create a healthier food supply and achieving health equity for Tasmanians. In recent times the Heart Foundation, through its involvement with the Premier's Physical Activity Council led the development of the *Draft State Policy for Healthy Spaces and Places* which has been submitted to the State Government for consideration.

The *Food for All Tasmanians* Strategy proposes that the Tasmania Planning Commission incorporate food security within the existing planning framework using the Heart Foundation Food Sensitive Planning and Urban Design or Healthy by Design frameworks.

Broad commitments by the current State Government prior to their election have included:

- To become the healthiest population in Australia by 2025 with a whole-of-government, and whole-of-community approach
- To use a health-in-all policies approach

The State Food and Nutrition policy was to be reviewed in late 2014. This policy had a key focus area of '*ensuring all Tasmanians have access to healthy and safe food in order to meet nutritional needs*' by increasing awareness of factors that influence food security and reducing barriers that are social, cultural, economic, geographic or physical. An initial review was initiated by Public Health within Department of Health and Human Services but has not progressed beyond initial consultations for 4 of the policy objectives. There has been no progress of note in recent months.

In November 2015 the new legislation for the single Tasmanian Planning Scheme was introduced and passed through the Tasmanian parliament. Very positively, one of the 6 objectives of the scheme addresses health and wellbeing. The Legislative Council agreed on an amendment to Schedule 1 Part 2 - Objectives of the Act which now states at clause (f):

'to promote the health and wellbeing of all Tasmanians and visitors to Tasmania by ensuring a pleasant, efficient and safe environment for working, living and recreation; and'

This amendment made to Part 2 of Schedule 1 Objectives of the Act will provide the necessary focus on health and wellbeing to enable the promotion of health as central to changes in the built environment.

Organisational alignment

An assessment of the policy context for Council and the Heart Foundation reveals a strong synergy across policy objectives and the likelihood that any key findings will also be useful for informing policy development at a State level. Developing novel approaches to informing and planning to address complex social issues allows both organisations to provide leadership to others in Tasmania and demonstrate how they may address health and wellbeing concerns.

FOOD ACCESS PROFILE FOR CLARENCE CITY COUNCIL AREA

Why does access to healthy food matter?

Limited or poor access to healthy food has both health and social outcomes for people who are struggling with this issue. There are many health conditions and diseases associated with or caused by a poor diet resulting from poor economic or physical access to healthy food. The diseases include heart disease², diabetes³, some cancers⁴, and other health conditions such as overweight⁵ and obesity⁶. Poor access to healthy food can cause poor physical development in children and impact their learning and attendance at school⁷. For adults who have poor access to healthy food it is often very stressful and causes them to be anxious and ashamed⁸. This often also means they avoid social occasions in their communities and with family so can become socially isolated⁹.

How are the residents of Clarence doing?

Currently only 49% of adults living in Clarence eat the recommended 2 piece of fruit per day and 8.3% eat the recommended 5 serves of vegetables. This compares with 42% and 9.8% state averages. Clarence residents are also eating slightly less fruit and vegetables in 2013 when compared with 2009¹⁰.

For adults living in Clarence 18.5 % are obese (state average 23%)⁹ and 16 % report that their health is poor or fair (versus 19% state average)¹¹.

While we don't have results for children at the local government level we do know that rates of overweight and obesity are increasing across Tasmania. The teenage years are when significant changes are observed and up to 30% of young people become overweight or obese¹².

Food Security - How easy is it to access healthy food across the Clarence City Council Area?

Often we hear about people being food insecure across Tasmania. *People who are food insecure do not have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active healthy life.* Across Tasmania about 5-10% of the adult population are affected by food insecurity, but in lower income households the rates are much higher.

Food Access for Clarence Residents

Across Clarence, residents ability to get to healthy food sources is impacted by where shops are located and what transport they may have available to them. Recent research conducted by the University of Tasmania showed that there is a good variety of shops across the council area. In total there are 24 shops where fresh food such as fruit and vegetables can be purchased, that is a mix of major supermarkets (4 in total: 2 in Warrane/Rosny Park, Howrah & Lindisfarne), minor supermarkets (5 in total: Risdon Vale, Rokeby, Bellerive, Lauderdale, Lindisfarne and Richmond), general stores (12 in total: Clarendon Vale, Rokeby, 3 in Howrah, Richmond, Opossum Bay, South Arm, Lauderdale, Cambridge & Seven Mile Beach) and fruit and vegetable shops (3 in total). As a general observation of Tasmania, there are fewer shops located in areas where the average household income is very low when compared with other areas. For residents in these areas this means getting to the shops to purchase healthy food can be difficult. Often households living on a low income do not have access to a car and rely on public transport.

Clarence has a weekly growers market in Richmond as well as a farmers market that runs in summer in Bellerive. These are another source of locally grown fruit and vegetables however the reach is limited by transport access and seasonal infrequency.

Which residents in Clarence may have difficulty accessing healthy food?

In the local government area of Clarence there are 19842 households and 51878 residents¹³. The people and households who are likely to find it hard to access healthy food are likely to be:

- Households with a low income including residents on Centrelink payments (27% of the local population are Concession Card Holders; 5% are unemployed)¹³ who often have a reduced ability to buy sufficient healthy food as there are many other costs such as housing, transport and utilities which drain the household budget.
- Single parents and their children, particularly if they rely on Centrelink payments (888 single parent households¹³ & 14% of children are estimated to be living in poverty across the local government area¹⁴.)
- People with a disability or chronic disease (16 % of adults report their health as fair or poor and 2528 residents are receiving the disability support payment)¹³ because they may have difficulty carrying shopping¹⁵ and their medical expenses reduce the household food budget⁷.
- Households without a car (7% of households.)¹³
- People experiencing housing stress, that is, people who have a low income and who pay more than 30% of their household income on rent or mortgage (28% of local households.)¹³
- People living in areas which rely on general stores or do not have any shops at all within walking distance limiting their physical access to healthy food¹⁶.
- People who have inadequate access to public transport¹³.
- While supermarkets in the area provide home delivery across the entire municipality, acceptance of this manner of purchasing healthy food varies across the demographics. Recent Tasmanian research¹⁷ suggests that it is not common place in low income households in Tasmania, despite online purchases for other goods being usual. Low income Tasmanians appear to prefer visiting the shops to buy their groceries. Building a more detailed understanding of this locally may be of interest in the future.¹⁸

PROJECT AIM AND SCOPE

The project aimed to build a detailed picture using spatial mapping of the Clarence City Council's:

- community areas and built environment
- attributes which contribute towards improving access to healthy food

These will deliver against and inform future action for Council's **Community Health and Wellbeing Plan** objectives and actions.

The project is a partnership between the Clarence City Council and the Heart Foundation in Tasmania (through its Healthy Food Access Tasmania project).

Objectives and Key Strategies (See Appendix for project work plan)

1. Map built environment attributes assessed to contribute towards accessing healthy food for local residents using spatial mapping tools.
 - a. Conduct research into best practice (attributes, measures and methodologies) for assessing access to healthy food
 - i. Desktop review of current practice
 - ii. Consult with known experts to identify emerging practice
 - b. Develop and finalise a list of built environment attributes to map
 - i. Review data/attributes already available through council assets management and external providers
 - ii. Workshop and consult with the project working group the attributes for inclusions using existing council data and 'expert' best practice measures to inform decisions
 - c. Select locations for piloting spatial mapping methodology
 - i. Consider a variety of 'lenses' for selecting locations such as SEIFA, transport routes, capability to 'ground truth'; the entire municipality versus select locations etc.
 - d. Conduct piloting of mapping & review results.
 - e. Develop a recommended protocol
 - f. Analyse findings and develop recommendations relevant to addressing Health & Wellbeing Plan objectives
2. Develop final report for use by key stakeholders and community
 - a. Identify potential stakeholders
3. Disseminate report to council and community stakeholders

- a. Develop an engagement plan to share learnings internally and with external stakeholders
- b. Consider conducting workshops (including Food Sensitive Planning and Urban Design framework) to share findings and identify priority future actions and collaborators.
- c. Share report and critical findings with relevant State Government departments

Governance

The project had a working group to support the project's development, implementation and evaluation. The group was made up of representatives from Clarence City Council and the Heart Foundation. The Heart Foundation provided secretariat to the group. The project leadership was shared between Suzanne Schulz from Clarence City Council and Leah Galvin from the Heart Foundation.

Working Group membership

Co-Leaders – Leah Galvin, Heart Foundation Tasmanian Division (Healthy Food Access Tasmania Project Manager) and Suzanne Schulz, Clarence City Council (Community Planning and Development Officer)

Julie Andersson – Community Planning and Development Officer (CCC)

Karen Butler – GIS Officer (CCC)

Dan Ford – Strategic Planner (CCC)

Pauline Kay – Environmental Health Officer (CCC)

Rob Nolan – Senior Policy Adviser – Planning (HF)

Fred Pribac – Climate Change Officer (CCC)

John Toohey – Manager Health and Community Development (CCC)

Role of project team

The team met on 10 occasions during the life of the project. An agenda and notes of each meeting were recorded to map progress against the project plan. The team enjoyed a collegial environment enhanced by the democratic evidence-based decision making processes. The key tasks of the working group were to:

- Undertake collaborative evidence-based decision making about project methodology, suitable GIS tools for mapping, built environment criteria and attributes for inclusion in mapping
- Provide research and knowledge sharing to inform project decision making
- Undertake project planning, implementation, community engagement and data collection
- Develop maps for community engagement – this was critical to delivery of the project and a significant milestone to identify that council had both capacity and information systems that would support the project aspirations
- Provide expertise, including:

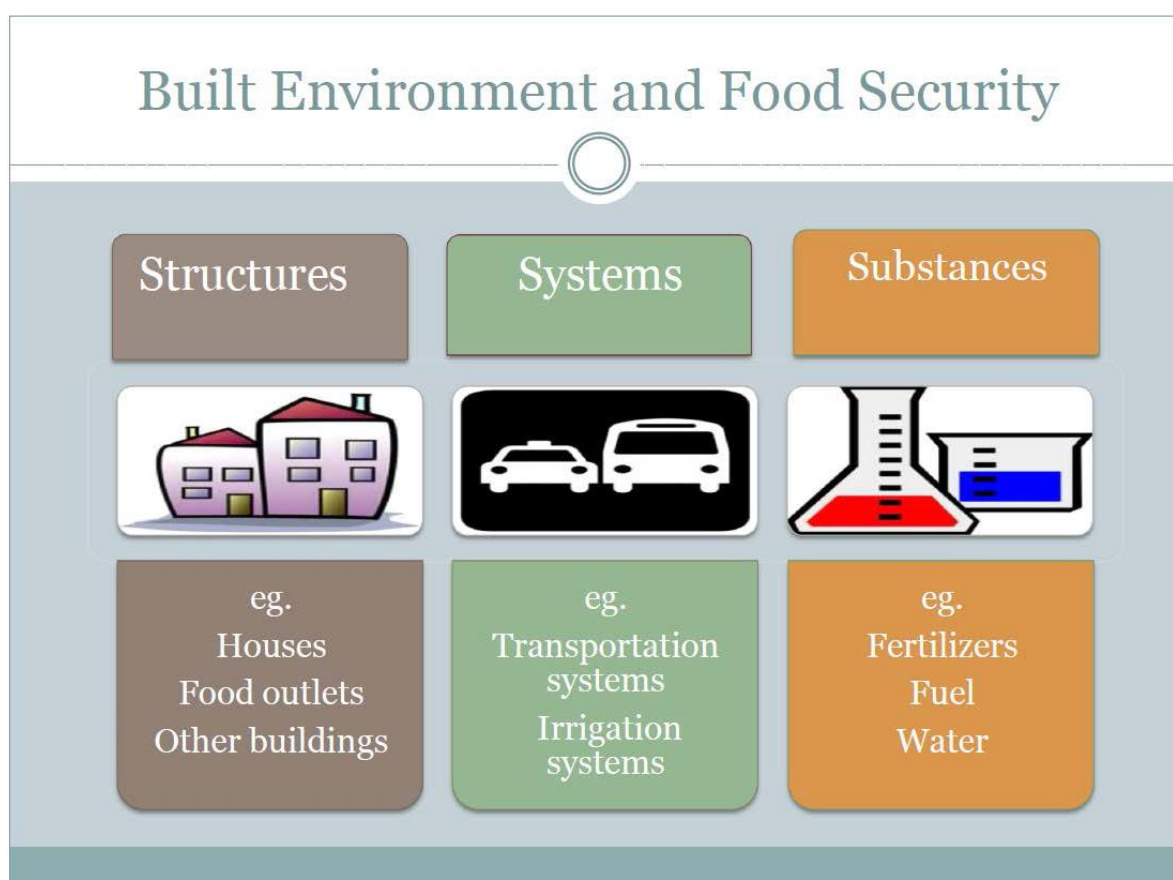
- Developing maps using geographic information system (GIS) in order to capture, store, manipulate, analyse, manage, and present a range of spatial or geographical data;
- An understanding of Planning considerations;
- Community Engagement and Consultation;
- Knowledge of local food outlets through the Environmental Health group;
- Conducting research, and;
- Providing project management.

SPATIAL MAPPING- an Overview of the Evidence

A brief summary of the key findings from a desktop search and key opinion leader consultation to inform the project mapping is outlined below. This was shared with the working group in a workshop to inform decisions about the first *layer* of mapping of the whole council area.

Background

Built environment is defined as: *'man-made structures, systems and substances as they relate to transport connectivity, buildings and the reciprocal influence of climate and the determinants of food security'*¹⁹



In Local Government Food Security Scanning²⁰, the definition of the built environment is more localised: *'the basic services that are needed to keep a society running'*, otherwise known as infrastructure. Infrastructure is seen as essential to health and includes services delivered physically (roads, communications, water mains, sewerage and so on) and utilities. The built environment includes broad features of urban layout, cityscapes (building heights, shapes and density) and streetscapes (width, plantings, housing density and the diversity of building uses). Provision of transport facilities for road, public transport, pedestrian and cycling are a key component of infrastructure.

Desktop review

A quick desktop scan of three^{21 22 23} major reviews revealed significant information about how spatial mapping has been used to measure food environments and their impact on food access. Each of these studies summarises the international and Australian experience of spatial mapping. There are a variety of spatial measures and methodologies to consider. They broadly fall into two categories

1. A density approach which quantifies the availability of food outlets using a buffer method, kernel density estimation²⁴ or spatial clustering²⁵.
2. Proximity approach which assess the distance to food outlets by measuring distances and travel times between two locations.

Many studies combine elements of both approaches to be able to compare spatial accessibility between neighbourhoods and also look at the impact of travel modes on access and ultimately food choice.

The most recent peer review³ suggests that the recommended way to measure access to healthy food is to look at:

- Proximity
- Diversity of retail outlets (shop types which sell fruit and vegetables for Clarence have been categorised by the Healthy Food Access Basket Survey; fast food options have not)
- What is available (healthy food options such as fruit and vegetables)
- Whether it is affordable (we have the cost of the basket as a % of various Centrelink incomes)

The first two relate strongly to spatial mapping and additional data is available through the recent Healthy Food Access Basket Survey which can be incorporated into the spatial information. In deciding the measures and methodology it was critical to consider who will ultimately use the findings and who would we like to share it with. Considering the ease of understanding for diverse stakeholders seemed to be of high importance.

Buffer

This terminology is used most commonly in literature. The buffer method commonly used in GIS (which defines a zone around a given location) considers a distance around a retail outlet to assess accessibility that is either circular (the most commonly used) or network (based on a mode of transport). This varies according to the modes of transport as follows:

- Walkable distance – Commonly used measures are based on the time people may be prepared to walk to access shops or transport. Variations include 400m, 500m, and 800m
- Car travel - 2.5 - 3km

Proximity

- Uses distance to assess proximity. Typical measures are:
- Euclidean (a straight line between measure points), a city block distance or network distance (transport routes, road, bus routes)

An Australian Case Study²⁶

Dr Cate Burns and Vicki Ingles at Deakin University measured access to healthy and fast food in a peri-urban area of Melbourne. It allowed them to draw some conclusion about differences according to locations across a municipality (Casey Council).

Travel time can be calculated by GIS according to the mode of transport and the route. Travel time is a frequently used measure. Their study looked at travel time between homes and retail according to the means of transport (car, bus and foot); type of road (speed limit); topography (barriers such as rivers and railways lines), and; other characteristics of the bus network (i.e. frequency of bus services). Comparisons were also made between neighbourhoods using based on SEIFA (Socio-Economic Index for Advantage) ratings.

Expert feedback for determining measures

Dr Lukar Thornton – Deakin University

The distance for positive influence on dietary habits because of easy access to healthy food is 400-500m for walkers (those without a car), with a 3 km network buffer for car drivers²⁷.

Unhealthy store classification categories have been developed which can be considered for inclusion; this is recommended to truly assess access to healthy food.²⁸

We should not assume that people shop at the closest shop to their home, we need to consider how they go about their daily lives and what opportunities they may be exposed to purchase food. (This is considered a people-based versus place-based approach²⁹. These issues could be explored more in the areas which appear to have poor physical access to food.)

Dr Matthew I Burke -Australian Research Council Future Fellow and Senior Research Fellow, Urban Research Program, Griffith University

(Advice provided to Gillian Mangan, Health Director, Heart Foundation Tasmania)

In assessing 'walkability', the *Ped Shed* is widely used as a planning tool to measure both accessibility and walkability. *Ped shed is short for pedestrian shed, the basic building block of walkable neighbourhoods. A ped shed is the area encompassed by the walking distance from a town or neighbourhood centre. Ped sheds are often defined as the area covered by a 5-minute walk (about 0.25 miles, 1,320 feet, or 400 meters). They may be drawn as perfect circles, but in practice ped sheds have irregular shapes because they cover the actual distance walked, not the linear (aerial) distance. A synonym for ped shed is walkable catchment.*³⁰

It is used to examine access to neighbourhood centres and other relevant destinations, as well as access to public transport. It is particularly useful for calculating the proportion of households within a certain Euclidian ('crow-flies') radius that are unable to reach a central destination, and for highlighting disconnected street and path networks in neighbourhoods that prevent access to services.

In the academic sphere, ped sheds are commonly used, although more refined walkability analyses within these network buffers are often used (see the paper by Mavoa et al.). Network distance buffers used in transport planning practice are often:

- 400m (¼ mile or ~5 mins walk) for lower order transit, such as a local bus stop

- 800m (½ mile or ~10 mins walk) for higher order transit, such as a train or busway station

In both academia and in professional practice, 400-500m and 800m network distance buffers are commonly applied as 'rules-of-thumb' for these analyses. But it is common for more than one buffer to be used, to see what may happen at the low and high end (i.e. how many people are within 400-500m walk? And how many within 400 - 800m?)

There is little empirical evidence to support or refute the use of these exact metrics. Attempts to determine where the ¼ mile / ½ mile metrics first came from (they date back almost 100 years now) have failed to unearth supportive empirical support. But a litany of studies have shown that people within these buffers are more likely to use and walk to public transport. The committee was fully agreed there is no good reason to abandon use of these metrics.

Tasmanian cities tend not to have line-haul public transport services such as suburban railways, light rail transit, or bus rapid transit/busways. Most public transport services are modest bus services operating in mixed traffic.

There is a global movement in bus planning from providing a multitude of inefficient low-frequency bus services covering almost all parts of the suburbs, towards a smaller number of more frequent and direct services that interchange, but that have less coverage across the city. This shift is more efficient for bus operators, with higher patronage routes and less bus kilometres. But it also requires households to have to walk further to access suburban bus stops, and can have social equity implications. Finding the balance between efficiency and coverage is consuming many of our public transport network designers at present.

Analysis of household travel survey data from Australian cities relating to people walking to public transport services has revealed observed distances. According to Brisbane data, the median trip distances people were walking to bus stops was 440m, and to train stations was 890m. (Note: Median is a much better indicator than the mean in this instance). Brisbane is a city where outer suburban buses mostly operate on a 'high coverage, low frequency' model (see the paper by Burke & Brown 2007). In addition, the 85th percentile trip distance was 1.07km for bus stops and 1.57km for train stations (that is, 85% of persons walked this distance or less to reach this destination type). Some people are walking very long distances to reach transport opportunities. Note that this may not reflect what people would have preferred, or what is ideal, but is observed data of what people did.

In summary, the use of 400-500m and 800m metrics is by its nature inexact. However they are good rules-of-thumb. The 800m radius may be considered at the high end as a metric of access for local bus services. Analysis using both 400-500m and 800m buffers may provide decision-makers better information regarding the impacts of different service models on coverage.

State Policy in Development

During the project it emerged that there was some work being undertaken within the Department of State Growth relating to public transport provision and transport access. Project Team members met with the relevant staff to gather information about the current agenda. A short summary is offered below.

1. State Public Transport Service Standard Review

Lead Peter Kruup – Principal Transport Economist

Passenger Transport Policy | Department of State Growth

- examines the levels of service for the whole of the state
- considers routes, frequency, distance to walk to stop (for example looks at likely impact of increasing distances between stops, walking distance to access the bus stop and the resultant increase in the frequency of buses)
- The review is underway with recommendations to be released in 2016

2. Transport Access Strategy

Sarah Portenaar Principle Policy Analyst (previously Janine Pearson)

Passenger Transport Policy | Department of State Growth

- Strategy is to achieve better coordination and integration of transport provision to access work, training and essential services (including shops)
- Development is ongoing and will be released for consultation in 2016

SPATIAL MAPS

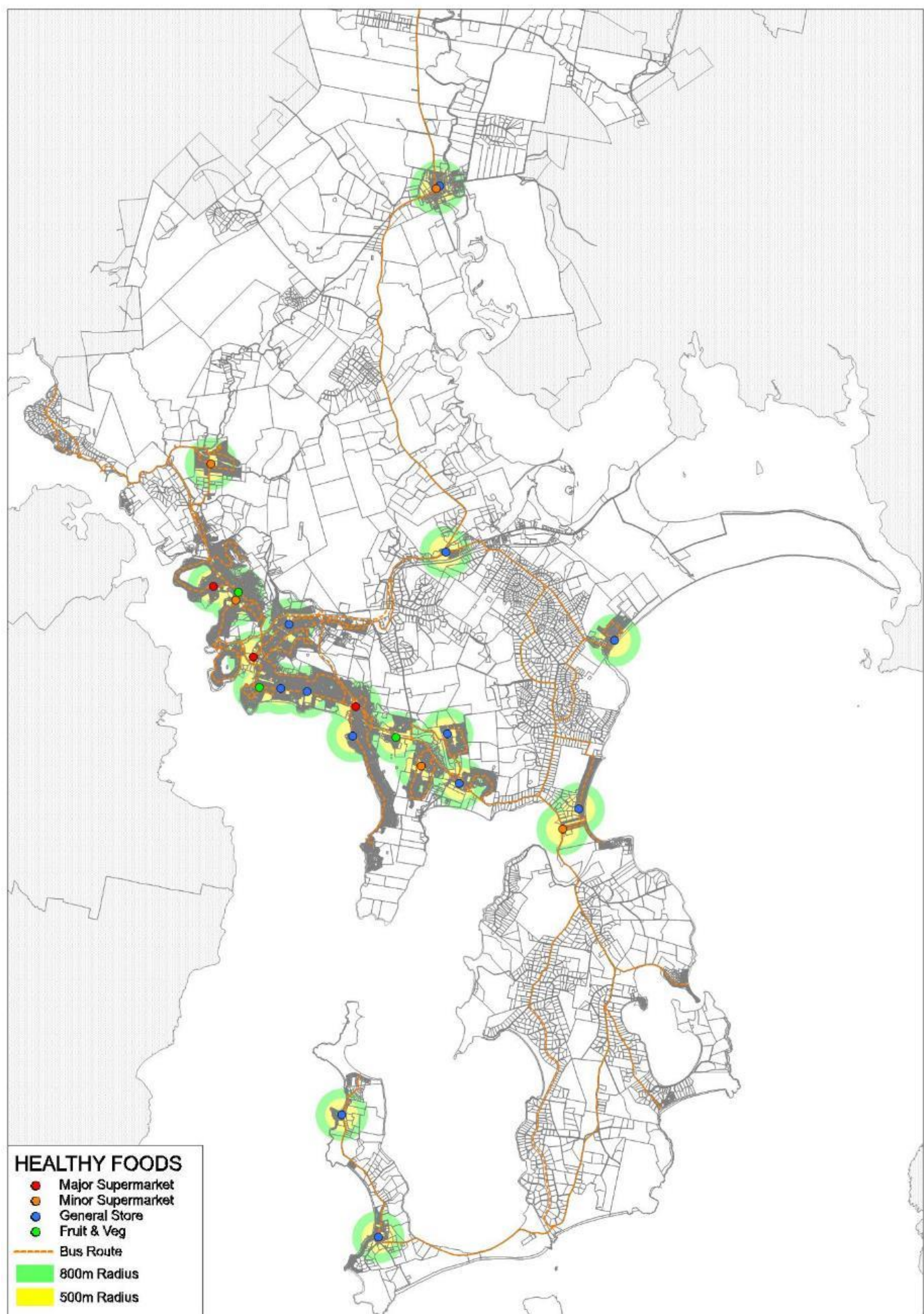
The first series of maps developed were for the whole municipality of the Clarence City Council. This series included the location of shops, public transport routes and other community assets that impact on access to healthy food. Maps were produced to demonstrate walkability (500m and 800m) to the shops and another the driving distance (3 km) to shops. This first series of maps was used by the working group to identify locations across the municipality where access to affordable healthy food may be poor. Factors impacting access included transport limitations, store availability, and store type (some types are more costly than others - see Appendix for variation). The table in Appendix shows the variation in the cost of healthy food in the Clarence municipality.

To assist in decision making for the more detailed mapping, discussions were held in the working group. This resulted in a matrix being developed and provided to members who then chose which locations they assessed as worthwhile for additional mapping (see Appendix). From that, three locations were chosen:

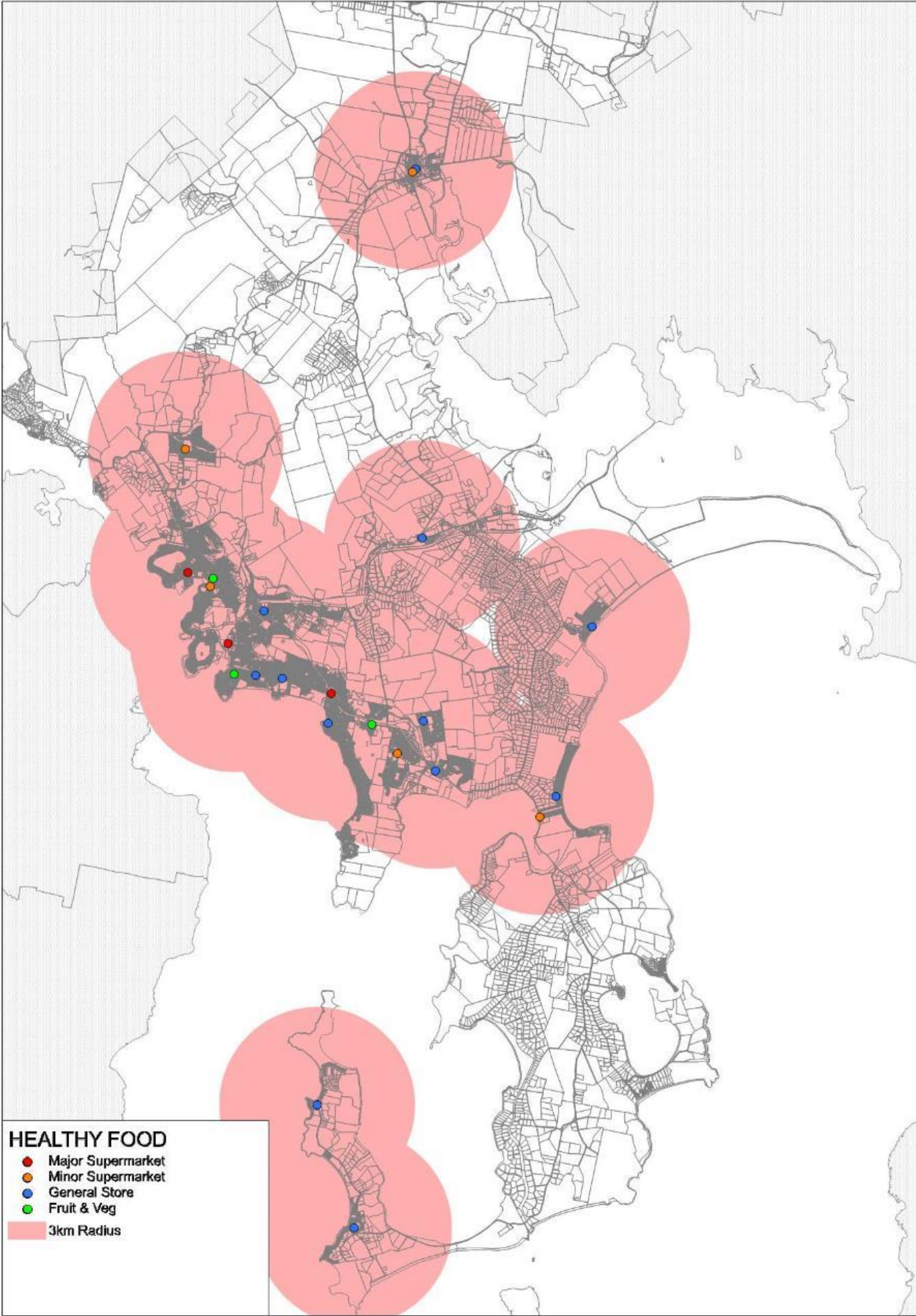
- Risdon Vale
- Warrane/ Mornington
- South Arm/Opossum Bay

The working group then used the Victorian Local Governance Association Food Security Scanning tool used as a guide (see Appendix) to develop a list of built environment attributes they considered suitable to map for each location. GIS and EH Officers were able to provide information about the availability of data for mapping. Detailed maps for each of the locations were prepared for community engagement.

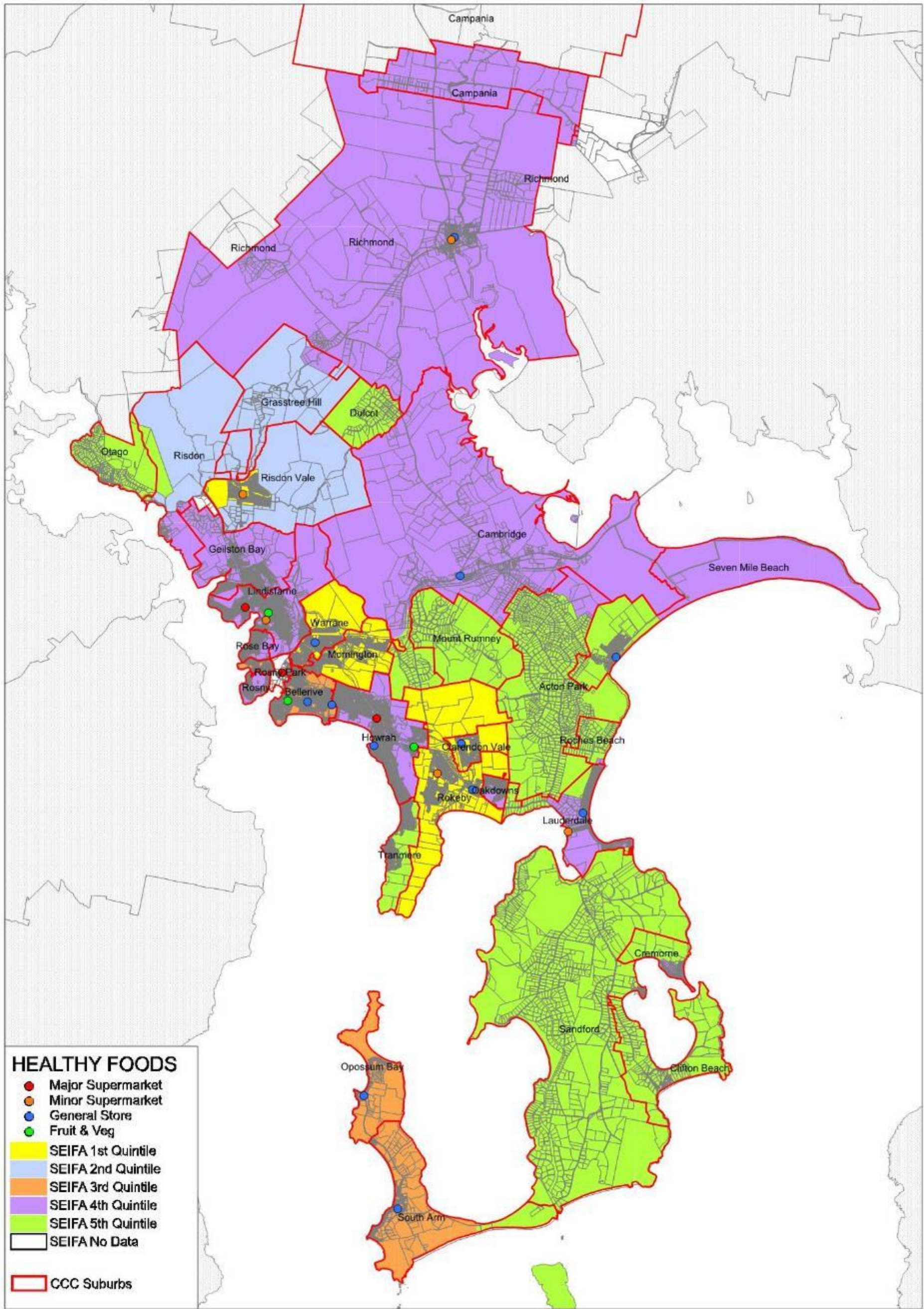
MAP 1 – HEALTHY FOOD OUTLETS CLARENCE INCLUDING WALKABILITY RADIUS



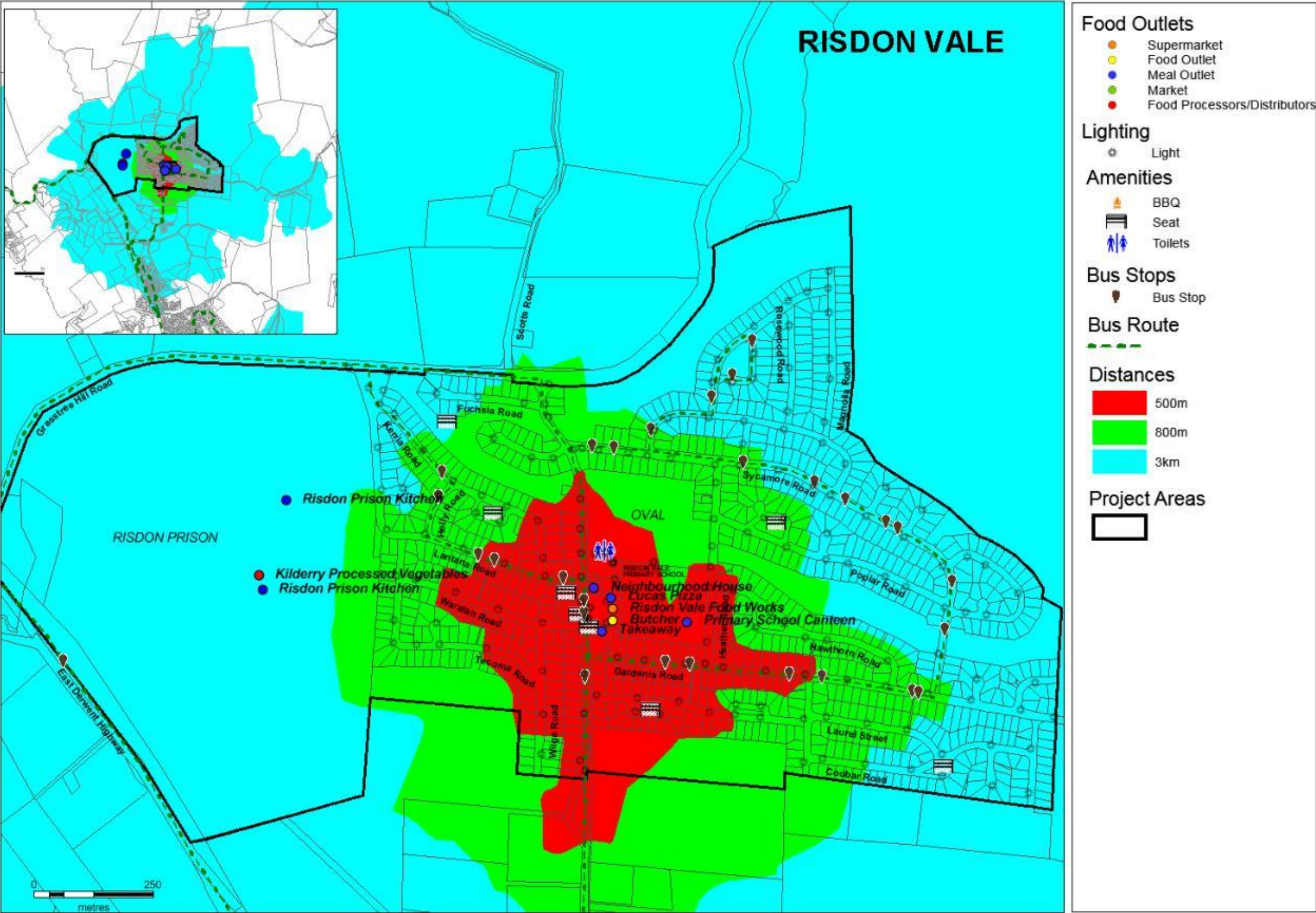
MAP 2 – HEALTHY FOOD OUTLETS CLARENCE INCLUDING 3KM DRIVING RADIUS



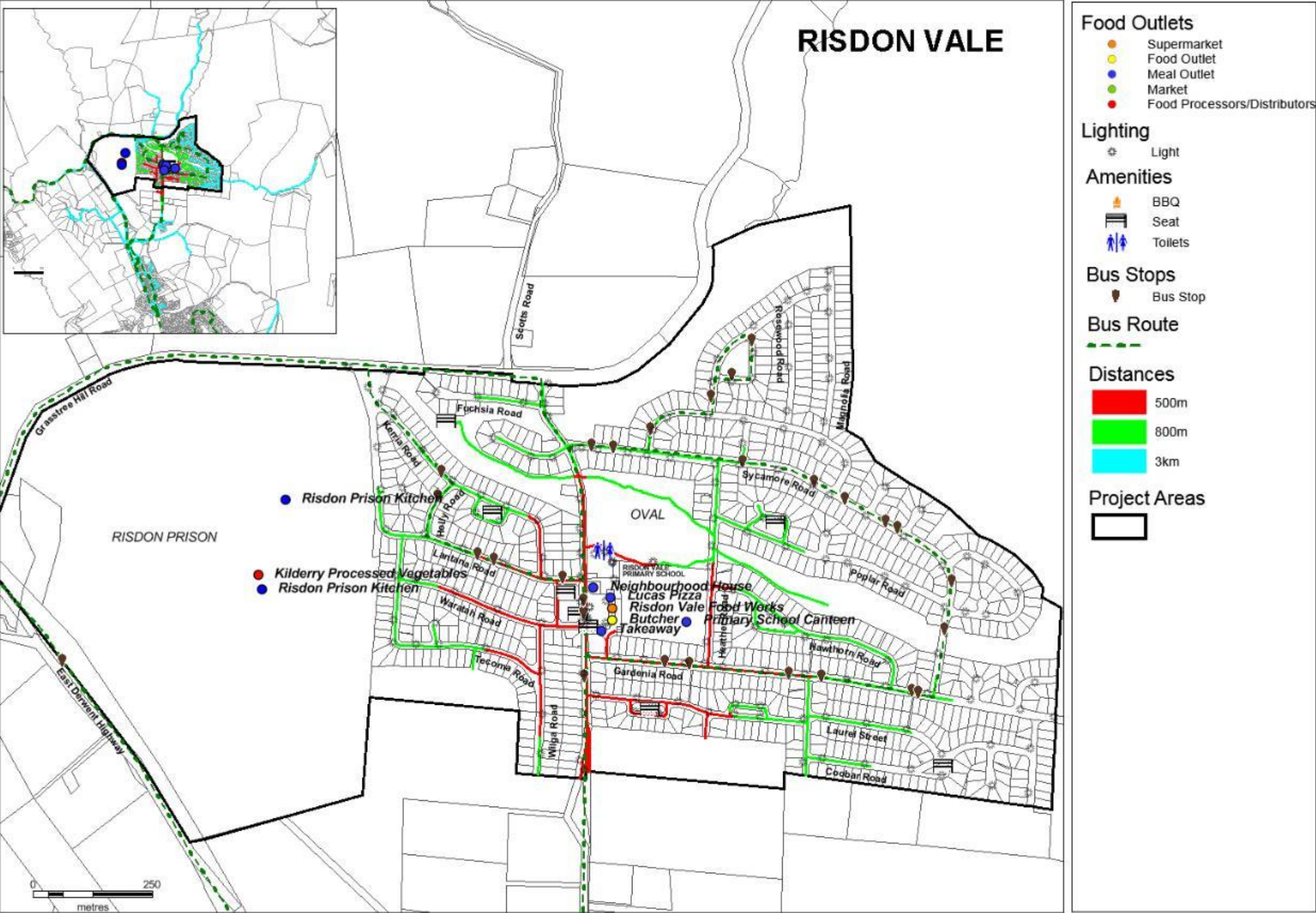
MAP 3 – HEALTHY FOOD OUTLETS CLARENCE WITH SUBURB BOUNDARIES AND SOCIOECONOMIC INDEX FOR ADVANTAGE BY QUINTILE



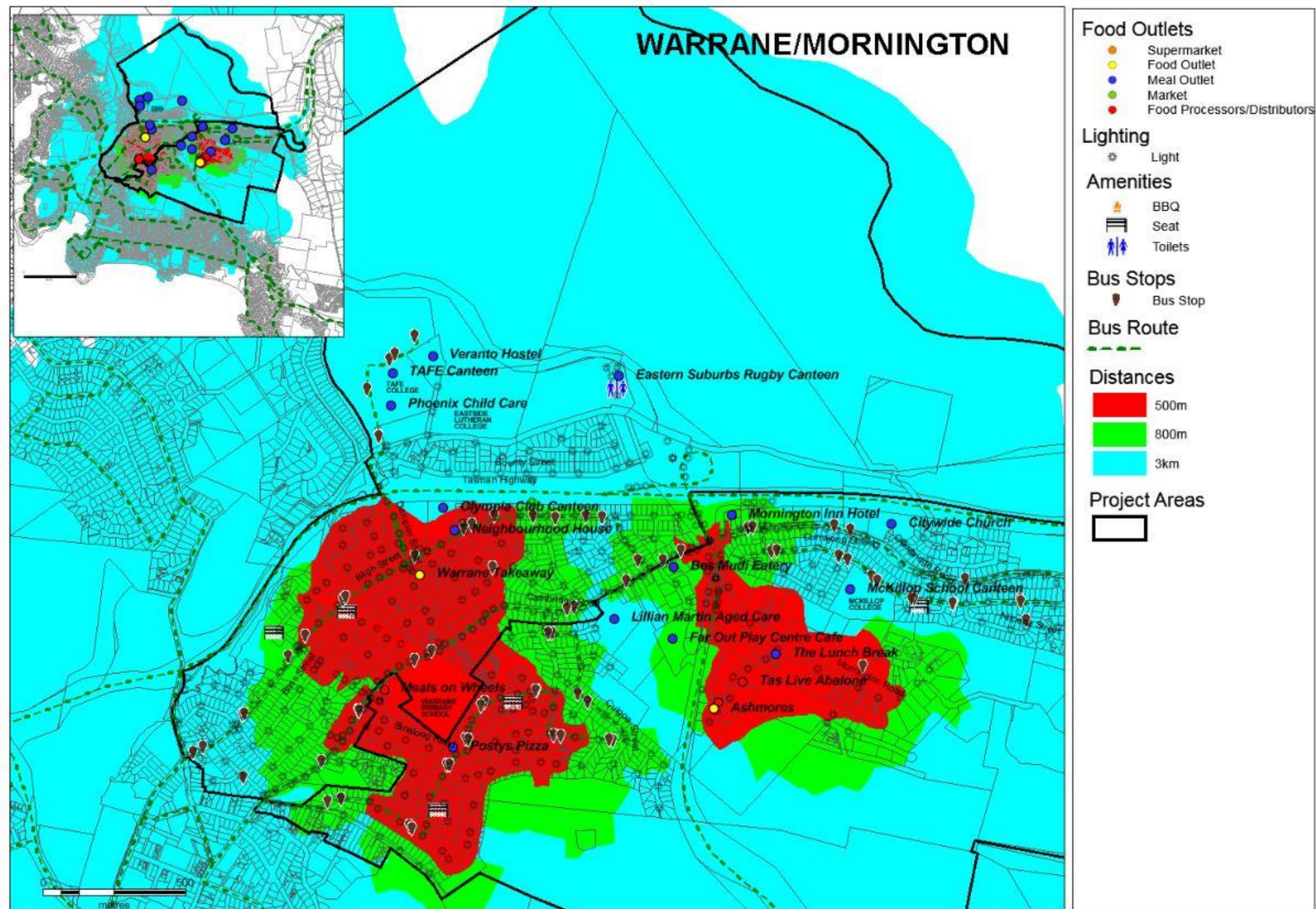
MAP 4 – HEALTHY FOOD OUTLETS RISDON VALE WITH SUBURB BOUNDARY AND WALKABILITY AREAS



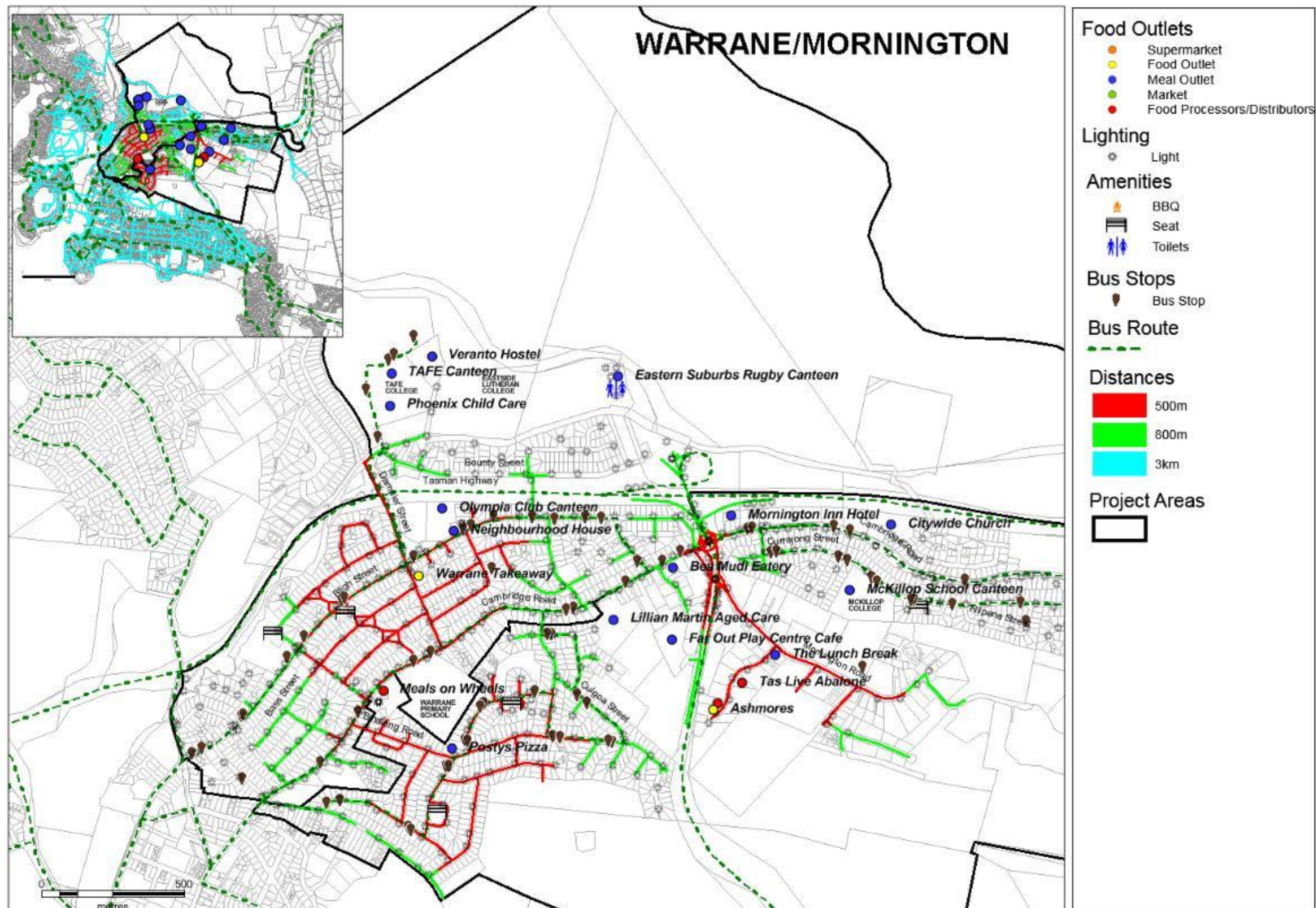
MAP 5 – HEALTHY FOOD OUTLETS RISDON VALE WITH SUBURB BOUNDARY AND WALKABILITY LINES



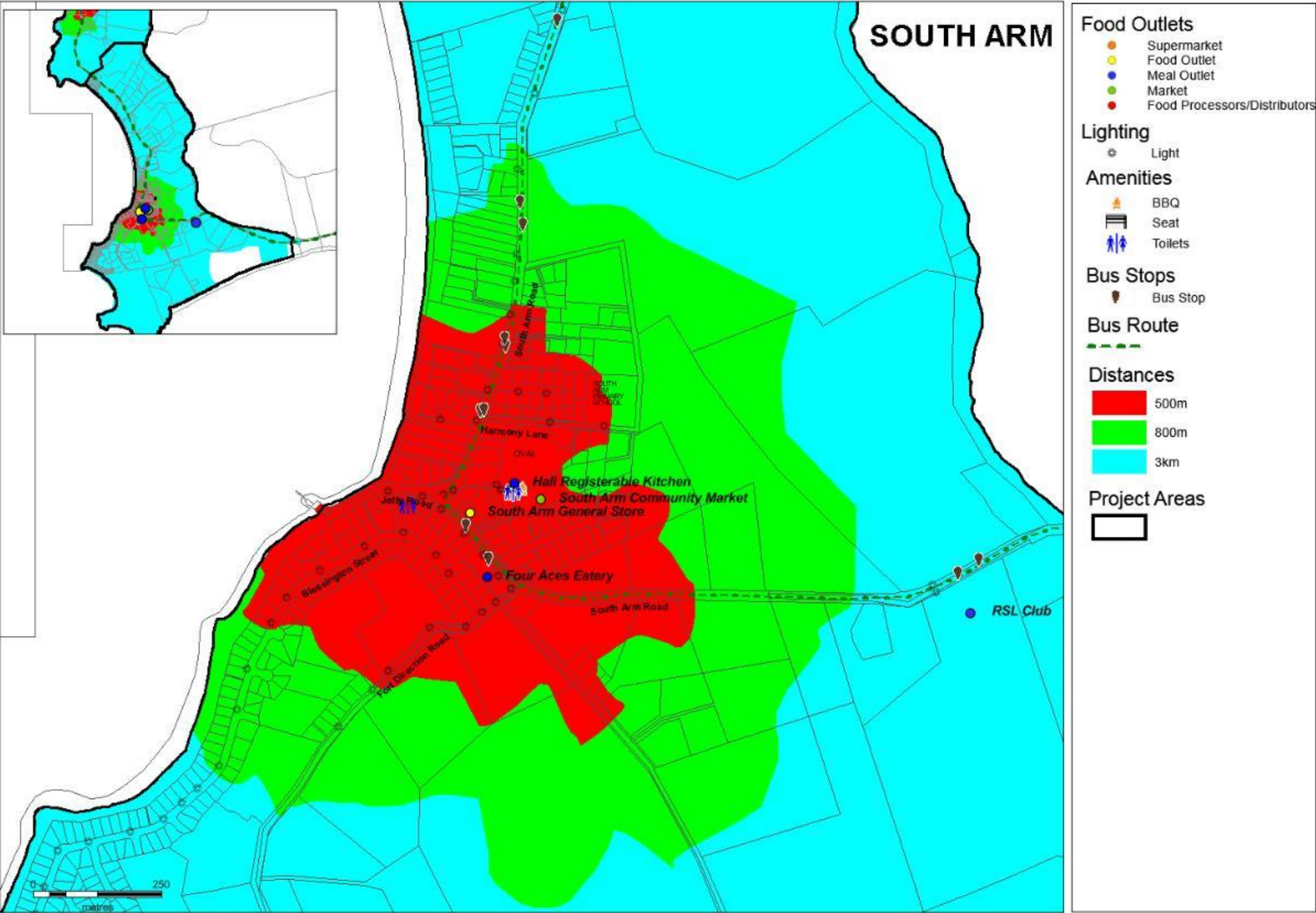
MAP 6 – HEALTHY FOOD OUTLETS WARRANE / MORNINGTON WITH SUBURB BOUNDARY AND WALKABILITY AREAS



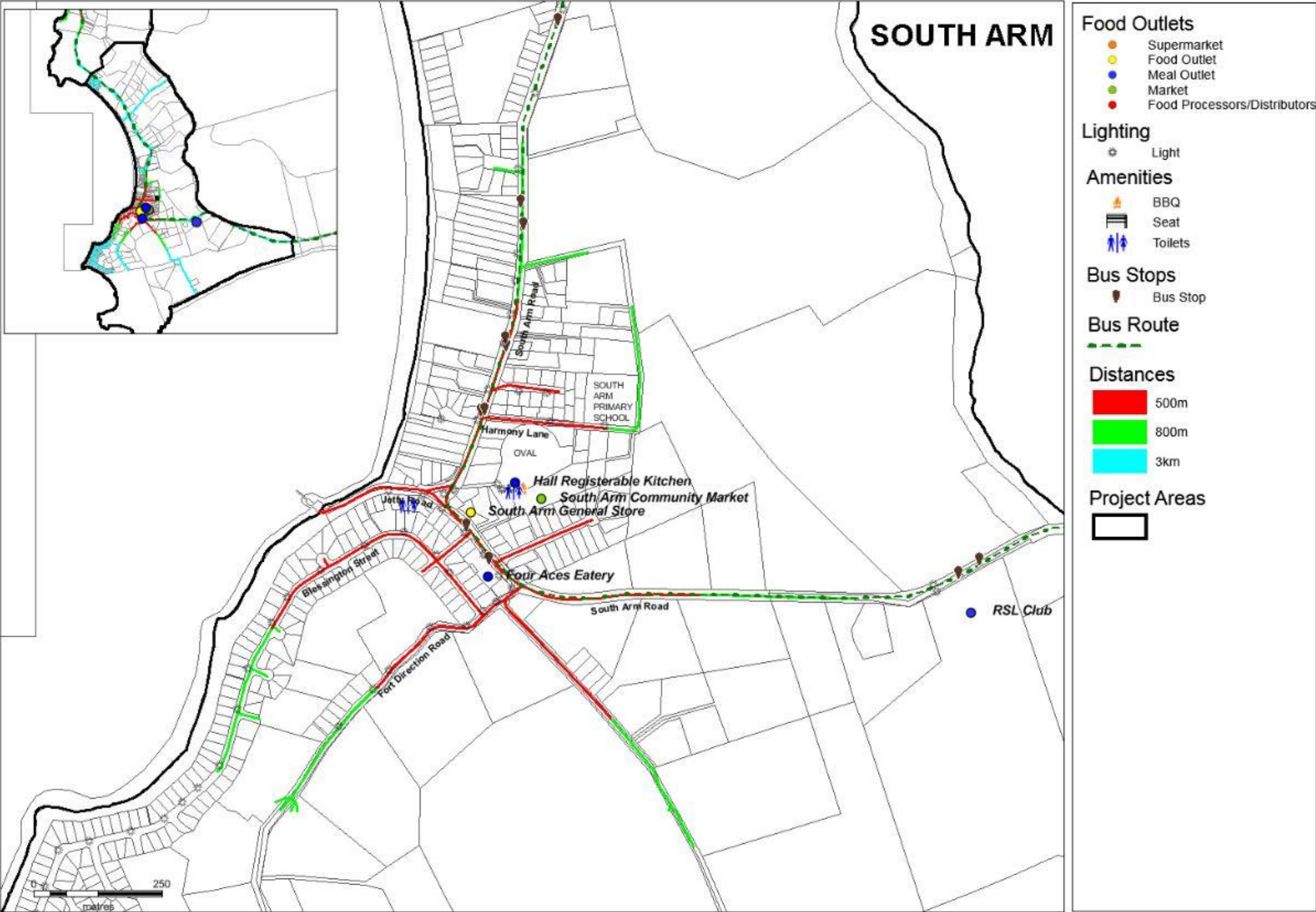
MAP 7 – HEALTHY FOOD OUTLETS WARRANE / MORNINGTON WITH SUBURB BOUNDARY AND WALKABILITY LINES



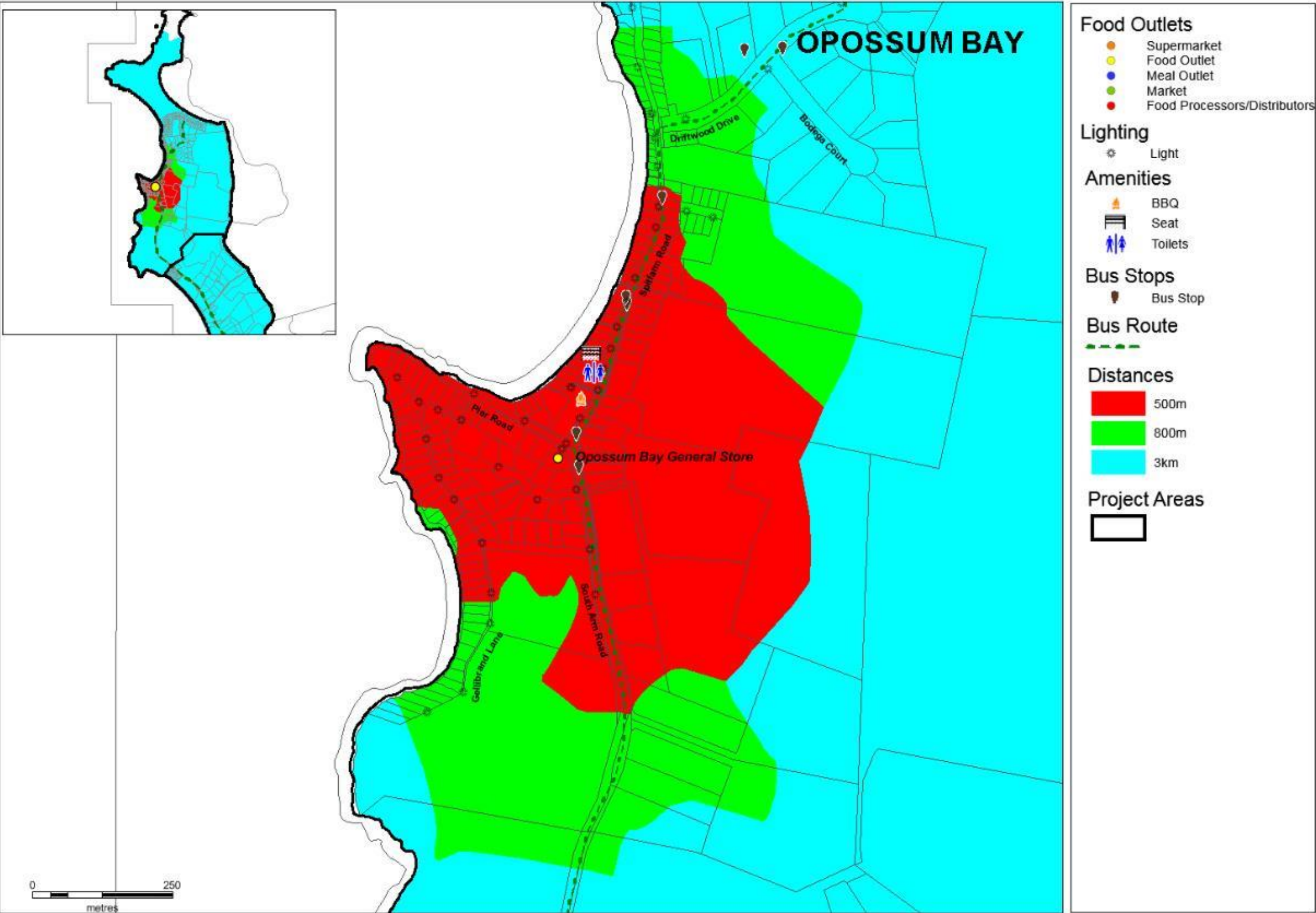
MAP 8– HEALTHY FOOD OUTLETS SOUTH ARM WITH SUBURB BOUNDARY AND WALKABILITY AREAS



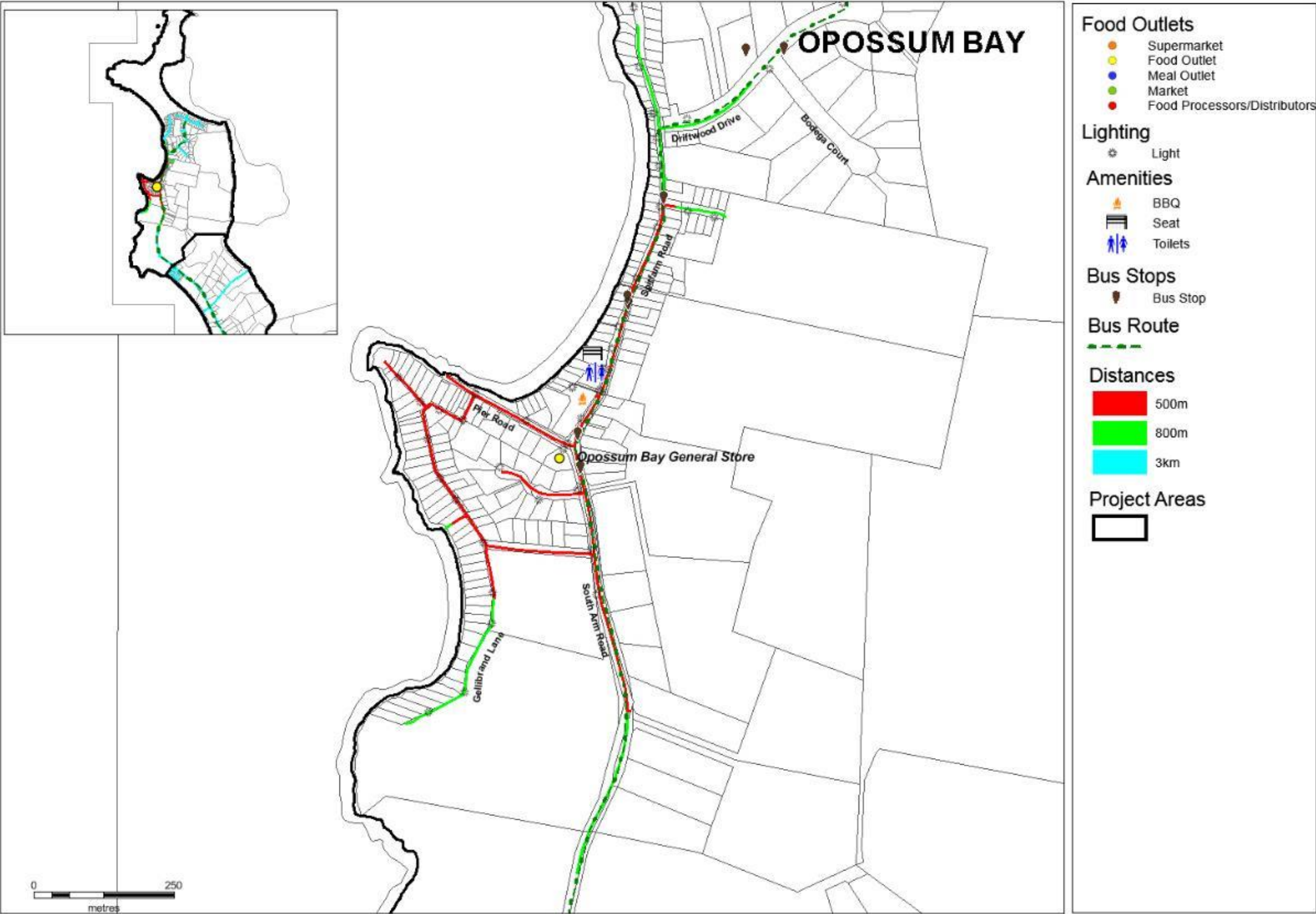
MAP 9 – HEALTHY FOOD OUTLETS SOUTHARM WITH SUBURB BOUNDARY AND WALKABILITY LINES



MAP 10 – HEALTHY FOOD OUTLETS OPOSSUM BAY WITH SUBURB BOUNDARY AND WALKABILITY AREAS



MAP 11 – HEALTHY FOOD OUTLETS OPOSSUM BAY WITH SUBURB BOUNDARY AND WALKABILITY LINES



COMMUNITY ENGAGEMENT – Taking the Maps to the People

A list of opportunities for community engagement was developed with local knowledge provided by Community Development and other council staff who live across the municipality. The strategy was to link in with existing groups and community activities rather than run new sessions in order to increase participation and reduce the burden for the community.

The working group team attended community activities during the engagement phase and posed 3 questions for residents to consider while reviewing the maps.

1. What helps people get to where healthy food is available?
2. What makes it hard to get to where healthy food is available?
3. Are there other things you want to tell us that aren't shown?

Spatial Mapping Project Consultations – Notes and Summaries

Risdon Vale

Where people Shop and how

- Glenorchy and Woollies A1 - car
- Lindisfarne – car
- Local Food works is expensive so is avoided by many
- Local IGA Shop provides a pick-up service and home delivery for local residents
- Eastlands once / fortnight by car - Some meat / vegetable bought locally (lives 700 m from shops)
- Local butcher and bread and milk bought locally
- Don't go to the local shop for fruit and vegetables – too expensive
- Bread milk, bits and pieces bought if needed but otherwise local shop is too expensive
- Home delivery by the big supermarkets
- Wouldn't do a complete shop in Risdon Vale
- Grows vegetables at home. Goes with family.
- Bus is also good for getting to supermarket.
- Takeaway sells drinks that are questionable – there have been school notices about it.
- Groceries are delivered after purchasing on line
- Quality of fresh food in Risdon Vale is not that good and sometimes products are out of date
- Get a taxi to Eastlands or Glenorchy
- Bananas and apples (apples mentioned by a few people) are purchased from local store

Topography

- Matipo St – Hill is too steep
- Tecoma St – very steep
- Linden Rd – steep

- Gardenia Rd – Hills
- Lantana Rd – 5 min walk to shops
- Uphill with groceries is hard
- Supermarket car park is quiet steep is you are not able to park closely

Amenity

- Paths not wide enough to walk side by side
- Need to weave in and out of bins on bin day
- People cut through Duke Park
- Avoid Oval / park at night
- Not enough lights around suburb to walk at night – too dark
- Laneways have been blocked off so it is harder to get around and access shops
- Doesn't walk because worried about safety (Older Male)
- Public transport isn't a great option for older people because of walking, waiting for the bus, carrying shopping etc.
- Access to Community Garden is good
- Coobar Rd – Footpath cracked / missing
- Don't feel it is safe to walk around because of road safety issues – cars, trail bikes.
- Safer without the laneways open
- Subdivision is dark
- Risdon Vale is small and easy to get around
- No lighting on Sugarloaf Rd
- Road is dangerous – Grasstree Hill Rd toward roundabout.
- One mother said she will be sending her child (9yo) to shop on bike by themselves soon.
- People were positive about walking around the streets in Risdon Vale

Facilities

- Toilets dirty – wouldn't use them
- Toilets could be improved – vandalised
- Won't use toilets – goes to family homes around the suburb if toilets are required
- Seats located in parks adds to amenity of area

Other notes

- Keria Rd park is good
- Need to check frequency of bus service
- White map is easier to look at
- Road names on the maps would be useful
- A fresh fruit / veg shop would be good
- 50 kids at the breakfast club program
- Linden Rd has no internet so can't do shopping online
- Suggested by community member to do more advertising that internet access available at Neighbourhood House

South Arm/ Opossum Bay

Where people Shop and how

- Shop at Lauderdale / Eastlands/Shoreline/Hill Street Howrah Garden Centre by car.
- Local shop is too dear.
- People use footpath on Blessington St or walk on the road
- One lady is trying to get fruit and veg delivered using Backyard Bounty (Hobart)
- Use local store for bread / milk or missing ingredients
- People are growing their own vegetables
- “No healthy Food” locally
- Someone will get most things from the local store as needed but use Hill St / Shoreline for a big shop
- One lady uses bus for shopping – only two buses a day on weekdays. Carry’s shopping from the bus stop.
- Some buy vegies from the local store if needed – esp. potatoes
- Eatery is good – sells jam and pizza
- Potatoes from the market
- Uses Community Bus – second Tuesday shopping bus is a great social shopping trip
- Goes once a week to Shoreline / Hill St
- Don’t go to Opossum Bay shop
- Use local shop for emergencies, treats, petrol
- Shop online - delivery from Woolworths, Coles and Hill Street & Backyard Bounty – observed 6 days per week.
- Opossum Bay store for paper / bread / milk, something you need
- Use local store for emergencies
- Goes by car to the shops – too far to walk
- Animals can be a problem for growing your own (rats / mice / native animals)
- RSL Club is a good place to get a healthy meal and is not too expensive and has become the community social hub
- Market once a month has a lot of fresh fruit and vegetables
- Well rounded meals available at RSL
- Lots of fish and chips sold at South Arm Store
- Excess vegies sold at Community Market for fund raising
- Food Connections” also available – meals made by chef at Senior Citizens Centre and frozen – available from South Arm for \$4.00.
- Some community members regularly pick up friends/neighbours and take them to RSL
- Bus service is inadequate and infrequent – not used for fresh food shopping as there is too long a wait to catch the bus home.- Bus is infrequent and takes forever so isn’t a legitimate option
- Coffee shop only open Wed-Sun
- Soup and Sandwich lunch available at South Arm hall on a monthly basis – run by CWA or similar

Topography

Walking from Blessington St to shop is ok, as it is downhill. 'Uphill walk on way home is too much now with a bad knee'

Amenity

- No lighting along Calverton Place – need to carry a torch
- There is a concrete path on one side of the gravel road but not everyone uses it. They walk on the road instead.
- No paths on Calverton Pl
- South Arm Hwy is very dark from Bisdee to the shops and one light doesn't work
- Light doesn't work reliably
- no lights on Calverton Pl – need to walk on the road so it can be hazardous
- Bus service is poor – no bus on Sundays / public holidays. Only one bus on Saturday
- Harmony Lane has no lighting
- Box thorn on footpath on Blessington St so affects walking on the path
- Roads need re-surfacing
- Walking around Opossum Bay is not ideal as roads are narrow and there are no paths
- Lighting is quite good
- Toilets are handy to the shops.
- Café is not attractive
- Bike and ride to shop on bike path from Half Moon Bay. Path is good but no lighting. Sometimes echidnas, possums and bandicoots on path. Drive car to shop if dark
- Path on Blessington St - Lots of people, including children, use path along Blessington St, especially as it is now a formalised bitumen path. Difficulty with residents and visitors parking over footpath, which makes people (including people with prams and young children) have to walk on the road itself to get past.
- Garbage bins on footpaths cause a problem for pedestrians.
- Community bus only picks up people from four spots on the Peninsula. In South Arm, it is from Aces Eatery. Elderly people who live along Blessington St can't walk that far to Aces Eatery, so don't use the service. Community bus can't go along Blessington Street as it is quite narrow and an "obstacle course".
- Spitfarm Road is also very narrow with a large amount of traffic.
- Community garden available adjacent to community centre and is available for everyone.
- Problem at South Arm – BBQ isn't sheltered from wind – very exposed South Arm is sheltered
- Community in process of requesting solar lighting from RSL back to South Arm Township along South Arm Road. Families are using bike path to get to RSL.

Other notes

- Some tracks marked along Fort Rd on the maps are not public – just private driveways
- A good walking path goes along South Arm Highway but stops at the Neck. It would be great if this continued for people to walk along – it's not safe to walk further
- Becoming a cyclists destination
- Roadside sales would be good – people would like to buy locally grown fruit / veg
- Honesty boxes sometimes have been stolen

- Check café name for map
- On map – people walk through the community area from Harmony Lane to the shops rather than use the path highlighted (see map)
- The monthly market could be a good spot to get fruit / veg but currently there are only potatoes for sale
- Fort Direction open days – has this stopped happening?
- These maps are a good idea

Summary -People on the South Arm Peninsula usually use their car for shopping and pick up when they are out and about in town. One lady used Metro and some use the Community Bus. Online shopping seems to have good take-up. Most use the local stores for bits and pieces. Lighting and walking paths seem to be the main issue in relation to amenity. A lot of people talked about growing their own fruit and vegetables and people seemed very keen to buy locally grown fruit / veg if they could.

Warrane / Mornington

Where people shop and how

- Most people drive to the shops like Eastlands and shop once a week
- People give each other a lift if they don't have a car
- Use taxis to travel home after shopping because it's too hard on the bus
- Big shops are too far to walk
- Hard to carry shopping back from the bigger more affordable shops, need to be really fit
- Don't use local shops as they are expensive and the variety is very limited. (issue is not physical access but price and availability)
- Most people don't go to the local shops for food but they do use the post office and newsagency at the location
- Only use local Dampier St Shops for a tin of food if really necessary purchase rather than planned.
- Feedback suggested that one of the locations on the map (takeaway) has closed -Posty's Pizza – TBC
- don't use online shopping or home delivery

Topography

- None raised

Amenity

- Walking along the streets on rubbish day is difficult as you can't get past the bins on some streets
- Some trees over the footpath on Cambridge Rd make it difficult to walk on the path – you need to walk out onto Cambridge Rd (which is dangerous with heavy traffic)
- Seat in Bus Shelter near the Neighbourhood Centre is damaged
- Paths are too narrow to walk side by side in some locations
- People park with their cars partially up on the nature strip
- There is a toilet at the Caltex Service Station which is handy for along the walking route.

Other notes

The feedback about the maps in this location was that residents found it challenging to interpret them. Several suggestions were made – include major street names and some key community locations. Including destinations such as the schools would assist people help people to orient themselves.

Residents when viewing the maps for example they couldn't find their house and were consequently less engaged versus other locations that were consulted.

KEY THEMES FROM THE CONSULTATION

Where and how do you shop?

When local shops do not provide affordable access to healthy food a variety of strategies are used to access it. Predominantly, people travel to other locations or take advantage of what is available along the route of their daily travel.

A variety of coping strategies are used by residents, including:

- shopping for and transporting friends and neighbours,
- community-provided transport,
- home delivery, and
- a customer collection and drop off service.

Residents tend to use the local shops, but only for the basics when they are caught short. This might suggest an improved offering may be supported if it were available (this requires additional research.)

Public transport is not seen as a very good option due mostly to the infrequency of services or the difficulty in carrying shopping

Home delivery in some areas is very popular, though not all households have internet access so this solution is not available to them.

Community meals and locations where community could share a meal (such as the RSL at South Arm) were valued as they have the dual purpose of being a place for a healthy meal as well as connection with community.

Topography

In some locations the steepness is seen as a significant barrier to walking and cycling to the shops, walking into shops and carrying shopping.

Amenity

The narrowness or blocked access (cars or rubbish bins) on footpaths paths was a strong theme. Barriers such as rubbish bins and parked cars were frequently mentioned as reducing easy safe access. Toilets along travel routes were generally mentioned as a positive amenity asset although in one locations they were said to be unclean and consequently not an asset used by community.

Public assets which bring community together around food, such as BBQs and gardens were seen as important assets to support access to healthy food and build connections.

Feedback about the Maps

Maps don't pick up common routes that might be short cuts within the community, for example that people travel across sporting fields and other community spaces rather than stay on the street.

Maps do not provide complete information for taking decisions. When combined with community consultation and site visits they give rich and useful data.

Maps can be too complex in some locations which could prevent residents from engaging in a more detailed conversation (this was found in Warrane / Mornington particularly.)

Labelling main streets and other well-known community destinations such as schools could assist with orientation when residents are viewing and commenting on the maps.

General

Joining consultation onto existing community activities is effective and reduces burden on community to participate.

The community members who engaged in the process appeared glad to have a chat and provide feedback. This was most fruitful in a relaxed setting where people are not rushed and not concentrating on another activity.

Community members and business provide a variety of ways to support community to access healthy food. Examples include the pickup and drop off service at the Risdon Vale Supermarket and community members driving others to the shops or community meals. In general this was mentioned in reference to older community members needing a hand.

REFLECTIONS FROM THE TEAM

Just prior to the conclusion of the project the Team held a meeting to discuss the project and what we had learned from it. Below are notes summarising the discussions.

What made the project work?

- Diversity of expertise met project requirements and combined to value add to project activities
- Essential to have GIS expertise
- Essential to have Environmental Health Officer and register of food businesses to support mapping
- Having the data available and using it in new ways was enlightening
- Using a visual element for analysis made it easier for the team to make sense of the data
- Being able to pull together from a variety of sources to create a fuller picture
- The internal commitment of working together in council
- The project was a timely application/action to fall from the Health and Wellbeing Plan – core business; provided an authoritative framework
- The prior foundational work set the scene
- Going out into the community in a ‘new’ way
- Felt transforming for participants
- The uniqueness and variety of the settlements across the council area made it interesting
- Collegial environment
- The great local intelligence from the council workforce added value and understanding

What are the things that made it challenging?

- Making time for the meetings. It can feel peripheral to core duties
- Needing to outsource one of the GIS functions (3 hours; spider maps; do not have the program in-house)
- Choosing the sites for detailed mapping took longer than anticipated though the process was very democratic and based on good information
- The detail introduced new complexity to how we see places
- As it was an exploratory process meant it we couldn’t be sure the project would create value in return for the resources put in

- The issue of how to represent and assess topography in highly sloped streets remains unresolved and need future investigation

What would we do differently?

- There was a suggestion that engagement with community could have occurred throughout the entire project not just prior to the community engagement
- Better resolve the issue relating to how to represent and assess topography in sloping locations

What did individual team members learn?

- Projects such as this unlock existing resources such merging/collating data from a variety of department sources
- Allows departments to work constructively together
- Commitment from the organisation is strong to work in new ways and together
- Walkability across the sites was an important common theme. Spatial mapping based on walkable radii is a simplistic model of walkability. The real walkability within a particular catchment is enhanced (or hindered) by the quality of the built environment. Recognising this is essential to understanding a particular community, future planning and asset renewal.
- Having the eyes of community on the maps added local knowledge about neighbourhood characteristics e.g. shortcuts, common routes
- Access to food is complex and contextual
- Where you live matters to how easy it is to access food.
- Process highlights immediate barriers that make it challenging for residents to access food
- Adds new richness about understanding community issues
- Has good potential to influence projects and planning decisions by ensuring we look at all of the dimensions of food access
- Could inform future projects such as working with economic development to increase the local availability of healthy food (could consider a variety of models such as social and for profit enterprises)
- Helps to build a picture of community strengths, for example the coping strategies to support neighbours to have access to food, how local business support residents
- Conclusions and approach could be used to inform future structure planning exercises and planning scheme reviews.
- Need something hear about infrastructure planning and asset renewal having to assist or at least not compromised accessibly to healthy food choices

How is the project useful to Council?

- The report can be shared with Council's elected members to outline activities within the area and the importance of considering the health impacts of the built environment
- The report can be used by the Council Health and Wellbeing Working Group to inform their future food security discussions and decisions
- Information may be used to inform future planning and commercial decisions about shop locations
- The report identifies areas that could be prioritised for future action to improve access to healthy food
- Inform planning and asset expenditure decisions by Council to improve access to healthy food that is already available (walkability, lighting, seating, toilets etc.)
- Helps make a case for auditing of walkable routes around public transport and shopping precincts

RECOMMENDATIONS

The following recommendations are made as a result of the project activities. Essentially, sharing what has been learned during the project to inform internal and external activity/decision making is critical to maximise the value of the project.

Short/Medium term

1. Dissemination - The report and findings should be shared internally and externally. The purpose is to both share knowledge and inform future decision making

Internal

- Share the findings from the consultation with Council's elected members to increase their understanding of issues around access to healthy food for local residents and demonstrate cross – department action against the objectives of the Council Health and Wellbeing Strategy
- Advocate for the issues raised by local residents through the consultation about walkability, local amenity (for example toilets and lighting) and access to shops and transport to be addressed by relevant departments. Departments may include Asset Management, Planning & others.
- Share the report and debrief with the Clarence Council Health and Wellbeing Advisory Group and relevant working groups (Health Promotion; Liveability / Environment, and; Information/ Communications) to inform their future decision making and actions.
- When undertaking infrastructure planning and asset renewal, consider the consequences that work may have on access to healthy food choices.
- Explore working with community to investigate barriers (skills, internet access, and acceptability) to online purchasing of groceries and possible solutions such as training, nominated drop off points etc.

External

- Share the report and findings with groups who were involved in the community consultation process to close the information loop
- Share the findings about inadequate transport provision as well as access and walkability challenges relating to local topography with the Department of State Growth who are developing the Transport Access Strategy and conducting a Transport Standards Review (audit of bus routes, locations and distanced between stops). Use the findings to inform future development and advocacy around transport provision for local residents.
- Host the report on the Clarence City Council and Healthy Food Access Tasmania (Heart Foundation) web sites
- Brief Local Government Association of Tasmania about the process, methodology and findings of the project. Discuss dissemination strategies to the broader Tasmanian local government community, such as highlighting the project in their upcoming quarterly magazine to ensure other councils across Tasmania have access to the report.

Medium/ Long term

2. Work with Clarence City Council Economic Development to partner with local businesses and explore new options that make healthier food available in areas where physical access is currently poor.
3. Explore undertaking the mapping and consultation process in other suburbs and towns across the Municipality in the future.
4. Incorporate access to healthy food choice considerations into future structure planning
5. Incorporate access to healthy food choice considerations into the maintenance and management of Council infrastructure and assets.

Appendix A – Community Invitation



INVITATION TO PARTICIPATE IN A COMMUNITY CONVERSATION ABOUT ACCESS TO HEALTHY FOOD

Clarence City Council and the Heart Foundation are undertaking a pilot project to better understand factors in your neighbourhood that influence how you access healthy food. We have created some maps which we would like you to view and provide us with some feedback.

We would like to speak with residents and organisations in

- **South Arm/Opossum Bay**
- **Warrane Mornington**
- **and Risdon Vale**

How can community members contribute to the project?

The project team would like to meet with community groups and local residents to show them the maps and pose several questions about how the layout of their neighbourhood impacts on how they can access healthy food. The maps include attributes like the location of shops, pathways and public transport routes and are a starting point for us to make an assessment about how easy it is to access food.

At each of the sessions we'll look at the maps to work out

1. What helps people get to where healthy food is available?
2. What makes it hard to get to where healthy food is available?
3. Are there other things you want to tell us that aren't shown?

When will the discussions take place?

Community groups and members will be invited to attend discussion sessions in their communities in June 2015. To register your interest in hosting a discussion session please contact Suzanne Schulz, Community Planning and Development Officer, Clarence City Council on sschulz@ccc.tas.gov.au or 62458664 or Leah Galvin at the Heart Foundation on 62202210 or Leah.Galvin@heartfoundation.org.au

Appendix B – Guide for selecting attributes for inclusion on the maps

VLGA Scanning Tool- Built environment dimensions and opportunities	
1	Are there any local food factories/processors/distributors?
1.1	Wholesale
1.2	Retail
1.3	Distributors
1.4	Other
2	Are there any local supermarket food outlets?
3	Are there any other local retail food outlets?
3.1	Butcher/Fish shop
3.2	Fruit and vegetable shop
3.3	Bakery shop
3.4	Delicatessen shop
3.5	Convenience shop
4	Are there any local retail food markets?
4.1	City markets
4.2	Farmers markets
4.3	Community markets
5	Are there any local retail dining and meal outlets?
5.1	Restaurant, Cafe, Hotel
5.2	Canteen, Club
5.3	Kiosk, Mobile food operator
5.4	Petrol station meals
5.5	Take-away food shop
	Counter Meal
	Childcare
	Aged Care
	Registered Kitchen
	Community halls or other buildings with kitchens for groups to prepare food together
6	Are there any local liquor outlets?
6.1	Supermarkets
6.2	Liquor shops
6.3	Hotels
6.4	Clubs etc
6.5	Other outlets
7	Are daily basic food needs (milk, bread, fruit) within reasonable distance for all residents?
7.1	Walkable distance (with/without public transport)
7.2	Car drivable distance
7.3	The furthest distance (km) of any home to the nearest basic food needs
7.4	The furthest distance (km) of any home to the nearest supermarket
8	What amenities are provided for bicycle transport?
8.1	Dedicated tracks to food outlets and recreation
8.2	Bicycle lock up at food outlets and recreation venues
9	Does public transport connect households to retail food supplies, dining and meal outlets?
9.1	Public transport distance to regular food outlets
9.2	Daily span of hours and frequency per day (during week)
9.3	Daily span of hours and frequency per day (weekends-public holidays)
9.4	Are any homes more than 400-500 km from public transport
10	Are there essential (maintained) amenities on walking routes and in public spaces?

10.1	Smooth walking
10.2	Regular seating
10.3	Shelter and shade
10.4	Free drinking water
10.5	Public toilets
10.6	Barbecues
10.7	Open and well lit
11	How many households have cars?
11.1	Dwellings that have one or more cars
11.2	Dwellings that do not have a car
12	Are Baby Change Room facilities readily available?
12.1	Location in MCHC
12.2	Other location
13	Is there any community transport connecting households to food supplies, dining and meal outlets?
13.1	Community transport distance to food outlets
13.2	Frequency per week
13.3	Target group
14	Are there minimum standards for food storage and preparation in community housing
14.1	Public housing
14.2	Registered accommodation
15	Other information relevant to food security and the built environment
16	Are there any local food policies or strategies (local-regional) and the built environment?
17	Are there known reports, data, information (local-regional) which includes local food and the built environment (past 20 years)?
18	Is built environment water security and food security considered in detail as part of disaster planning for the local population?

Appendix C – Project work plan

Objective	Strategy and key tasks	Who	Due for completion	Output
Develop & implement project engagement plan	Develop plan <ol style="list-style-type: none"> 1. Identify key internal and external stakeholders 2. Identify key methods and times for engaging and communicating with stakeholders 3. Develop engagement tools for example project plain language outline 4. Consider dissemination strategies such as conducting workshops (including Food Sensitive Planning and Urban Design framework) to share findings and identify priority future actions and collaborators. 5. Consider targets for report and critical findings with relevant State Government departments for example transport, economic development, primary industries etc 	Leah, Suzanne & Julie	September 2014	Communications and Engagement Plan developed and implementation underway Finalised 22.9.2014. Stakeholder matrix to be completed by Suzanne and Leah.
Use spatial mapping tools to map built environment attributes that contribute to local residents accessing healthy food.	Conduct research into best practice (attributes, measures and methodologies) for assessing access to healthy food <ol style="list-style-type: none"> 1. Desktop review 2. Consult with known experts (local and international) 3. Develop recommendation in briefing paper for working group 	Leah, Rob	Mid September 2014	Briefing paper for working group Draft background paper shared with project working group 22.9.2014 Updates about State Govt. activity that is aligned shared with group.

Objective	Strategy and key tasks	Who	Due for completion	Output
				<p>Current actions (22.9.2014)- Leah to request bus routes from SG.</p> <p>EHO review categories for unhealthy food</p> <p>GIS review VLGA built environment attribute availability</p>
	<p>Develop and finalise a list of built environment attributes to map for reference group review</p> <ol style="list-style-type: none"> 1. Review data/attributes already available through council lists 2. Workshop and consult with working group the attributes for inclusion using existing council data and 'expert' best practice measures 	<p>Leah & Suzanne; Planners</p> <p>GIS</p> <p>Working Group</p>	Mid October 2014	Built environment attributes list finalised
	<p>Select locations for piloting spatial mapping methodology</p> <ol style="list-style-type: none"> 1. Develop a first draft of filters for selecting locations such as SEIFA, transport routes, capability to 'ground truth' (determine who would be likely partners to assist with this); consider the entire municipality versus select locations etc. 2. Workshop with the reference group finalising the check list of filters for selecting locations. 3. Choose locations 	<p>Leah, Rob, Strategic Planner & Suzanne</p> <p>Working Group</p>	End of November 2014	<p>Check List drafted</p> <p>Check list finalised and locations chosen</p>

Objective	Strategy and key tasks	Who	Due for completion	Output
	Conduct spatial mapping 1. Conduct piloting of mapping & review results. 2. Conduct mapping in other locations		End of February End of April	Spatial Mapping completed
	Interpret and analyse spatial mapping findings 1. Conduct workshop with working group 2. Consult with external stakeholders 3. Develop recommendations relevant to addressing Health & Wellbeing Plan objectives in a workshop 4. Draft recommendations for a project report	Working Group Leah & Suzanne	Mid June 2015	Recommendations developed for council
	Develop recommended protocol for conducting spatial mapping projects 1. Outline approach and tools 2. Develop a short guide	Leah, Rob & Suzanne	End of June 2015	Protocol Outline developed
Disseminate findings and protocol for project	1. Develop final report for use by key stakeholders and community 2. Working group review 3. Disseminate to stakeholders identified in the Communications and Engagement plan.	Leah and Suzanne Working Group		Findings shared with critical stakeholders

Appendix D – Definition of shop categories

Table 2 Definition of shop categories

Type of Shop	Example	Operational Definition
Major Supermarket	Woolworths, Coles, Supa IGA	Engaged in the sale of a full and large range of groceries (fresh foods, canned and packaged foods, dry goods) of non-specialised (conventional) food lines
Minor supermarket (grocer)	IGA Everyday, local supermarket	Mainly engaged in the sale of a mid-sized range of groceries (fresh food, canned and packaged foods, dry good) of non-specialised (conventional food lines).
Local, general, convenience and Corner shop (may include a fuel pump)	IGA express, Coles Express - usually with fuel pump	Mainly engaged in the sale of a limited line of groceries that generally includes milk, bread and canned and packaged foods and may sell limited fresh lines such as meat, vegetables and fruit. This shop may also provide a limited range of fast food lines such as burgers or fish and chips
Fruit and vegetable shops	Young's vegie shed, Chung's, local fruit and vegetable shop	Mainly engaged in the sale of fresh fruit and vegetables. Includes wholesale shops with direct to public sales. Is open regularly

Adapted from Turrell et al., 2003

Appendix E – Healthy Food Basket contents

Food items in HFAB	Product size	Pack type	Quantity to meet the nutritional requirements of family members for a fortnight			
			2 + 2 family	1 + 2 family	Male adult	Older female
Breads & Cereals						
White Bread	650-700g	loave	1.4	0.7	0.8	0.2
Wholemeal bread	650-700g	loave	5.8	3.6	2.3	1.3
Crumpets (rounds)	500g or less	pack	3.1	2.2	0.9	0.9
Wheat biscuits	700g-1.3kg	pack	1.4	0.9	0.5	0.2
Instant oats	500g-1kg	pack	1.5	1.2	0.4	0.4
Pasta	500g	pack	1.7	1.1	0.6	0.4
White rice	1kg	pack	1.4	0.9	0.6	0.3
Instant noodles	1x85g pack or up-to 10X85g packs	pack	9.0	6.0	3.0	2.0
Premium Biscuits	250g	pack	1.3	0.8	0.5	0.2
Fruit						
Apples	2kg or less	kg	5.8	4.3	1.4	1.8
Oranges	2kg or less	kg	5.7	4.6	1.1	1.4
Bananas	1kg	kg	4.1	2.8	1.3	0.9
Tinned Fruit Salad, natural juice	450g-1kg	can	9.0	4.9	3.7	1.8
Sultanas	200g -1kg	pack	0.84	1.0	0.4	0.2
Orange Juice 100% no added sugar	1-1.5L	L	2.5	1.5	0.8	0.5
Vegetables and Legumes						
Tomatoes	1-2kg	kg	4.7	2.8	1.9	1.1
Potatoes	1-2kg	kg	2.6	1.7	1.0	0.7
Pumpkin	1.5kg or less	kg	2.7	1.7	1.0	0.7
Cabbage	half	half	3.7	2.8	0.9	0.9
Lettuce	whole	whole	2.8	1.8	1.1	0.8
Carrots	2kg or less	kg	3.1	2.2	0.9	0.8
Onions	1kg	kg	1.2	0.85	0.4	0.3
Frozen peas	1kg	bags	1.0	0.7	0.3	0.3
Tinned tomatoes	1kg or less	can	8.0	6.0	2.0	2.0
Tinned beetroot	400-450g	can	0.8	0.4	0.4	0.2
Tinned corn kernels	400-450g	can	2.1	1.6	0.6	0.6
Tinned baked beans	420g	can	9.5	5.7	3.8	1.9
Meat & alternatives						
Fresh bacon, shortcut, rindless	2kg or less	kg	0.75	0.5	0.3	0.2
Fresh shoulder ham	2kg or less	kg	0.54	0.3	0.2	0.12
Beef mince, regular	2kg or less	kg	1.1	0.7	0.3	0.34
Lamb chops, forequarter	2kg or less	kg	0.8	0.4	0.4	0.2
Chicken breast fillets, skin off	2kg or less	kg	1.3	1	0.3	0.3
Sausages, thin (beef)	2kg or less	kg	0.9	0.5	0.4	0.3
Tinned tuna (unsaturated oil)	400-500g	can	2.8	2.1	0.7	0.7
Tinned salmon, pink (water)	200-250g	can	2.9	2.1	0.7	0.7
Large eggs (min. 50g)	600-800g	dozen carton	1.6	1.2	0.4	0.4
Dairy						
Fresh Full cream milk	1-2L	bottle/carton	2	1.5	0.5	0.5
Fresh reduced fat milk	1-2L	bottle/carton	13.8	10.4	3.4	3
Reduced fat flavoured yoghurt	1kg	tub	8.4	6.8	1.6	2
Full fat long life milk	1L	carton	0.6	0.4	0.14	1.1
Block cheese	500g	block	2.1	1.2	0.9	0.5
Non-core foods						
Polyunsaturated margarine	1kg or less	pack	1.4	0.8	0.5	1.1
White sugar	1kg	pack	0.1	0.07	0.03	0.03
Canola Oil	700ml-1L	bottle	0.6	0.5	0.2	0.2

Appendix F – Cost of Healthy Food Access Basket, Local Government Data – Hobart

Area (Average Cost)	Major Supermarket				Minor Supermarket				General and Convenience shops			
	2 children + 2 adults family	1 adult + 2 children family	Male Adult	Elderly Female	2+2 family	1+2 family	Male Adult	Elderly Female	2+2 family	1+2 family	Male Adult	Elderly Female
Tasmania (Average cost)	\$352.01	\$242.34	\$109.24	\$85.98	\$440.25	\$302.42	\$138.04	\$106.60	\$479.67	\$329.33	\$151.24	\$116.05
Hobart Region (Average cost)	\$345.12	\$237.47	\$106.70	\$84.54	\$415.81	\$285.54	\$130.25	\$100.49	\$469.58	\$324.86	\$146.40	\$133.86
Clarence	\$350.83	\$241.82	\$108.18	\$86.43	\$412.43	\$283.03	\$128.76	\$99.86	\$464.95	\$319.75	\$145.77	\$112.23

Appendix G – Built environment mapping decision matrix

SUBURB	POPULATION	SEIFA	QUINTILE	STORE TYPES	PUBLIC TRANSPORT	OTHER COMMENTS
BELLERIVE	4365	1005	3RD	GENERAL STORE AND 2 FRUIT VEG SHOPS	METRO WELL SERVICED http://www.metrotas.com.au/timetables/hobart/bellerive-bluff-rosny-point-rosny-park-hobart-city/	
CLARENDONVALE ROKEBY	1344/3160	684/825	1RST	2 GENERAL STORES AND A MINOR SUPERMARKET	METRO- FREQUENT BUS SERVICE ? FEW STOPS http://www.metrotas.com.au/timetables/hobart/clarendon-vale-rokeby/	Older people car pool and use taxis for shopping
OTAGO	558	1088	5TH	NIL	METRO SERVICE TO GLENORCHY http://www.metrotas.com.au/timetables/hobart/brighton-gagebrook-hobart-city-via-otago-bay/	
MORNINGTON WARRANE	2191/2411	898/785	1RST	GENERAL STORE	METRO - FREQUENT BUS SERVICE http://www.metrotas.com.au/timetables/hobart/warrane-mornington/	
OPOSSUM BAY SOUTH ARM	330/835	991/995	3RD	2 GENERAL STORES	? NOT WELL SERVICED http://www.metrotas.com.au/timetables/hobart/opossum-bay/	Community Bus takes older people to Eastlands on Tuesday
RICHMOND	1604	1028	4TH	MINOR SUPERMARKET AND GENERAL STORE	8 SERVICES PER DAY TASSIE LINK http://www.tassielink.com.au/timetables/richmond-campania-colebrook	May travel to Sorrell; reports of poor quality fruit and veg in local shops

SUBURB	POPULATION	SEIFA	QUINTILE	STORE TYPES	PUBLIC TRANSPORT	OTHER COMMENTS
RISDON VALE	2674	814	1RST	MINOR SUPERMARKET	METRO CAN TRAVEL TO EASTERN SHORE OR GLENORCHY http://www.metrotas.com.au/timetables/hobart/risdon-vale/	May be faster for residents to travel to Glenorchy for shopping via PT
SANDFORD	1893	1069	5TH	NIL	? NOT WELL SERVICED http://www.metrotas.com.au/timetables/hobart/opossum-bay/	Residents often gravitate to South Arm for community activities
SEVEN MILE	1118	1062	5TH	GENERAL STORE	METRO GOOD FREQUENCY OF SERVICES http://www.metrotas.com.au/timetables/hobart/seven-mile-beach-acton-park/	Has an active Land Care Group
TRANMERE	1445	1108	5TH	NIL	METRO GOOD FREQUENCY OF SERVICES http://www.metrotas.com.au/timetables/hobart/camelot-park/	

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²⁴ Kernel Density calculates the density of features in a neighbourhood around those features. Features would include housing.

<http://webhelp.esri.com/arcgisdesktop/9.3/index.cfm?TopicName=How%20Kernel%20Density%20works>

²⁵ Spatial clustering is the process of grouping similar objects based on their distance, connectivity, or relative density in space. (Using Clustering Methods in Geospatial Information Systems, University of Calgary, 2010)

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