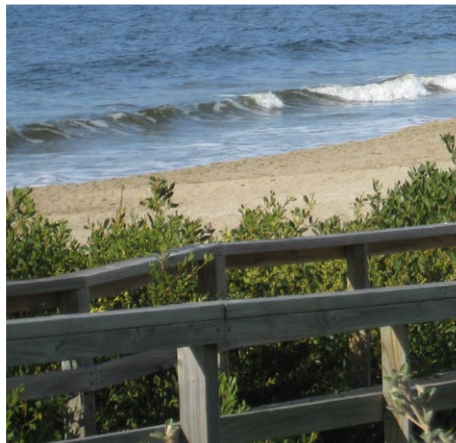
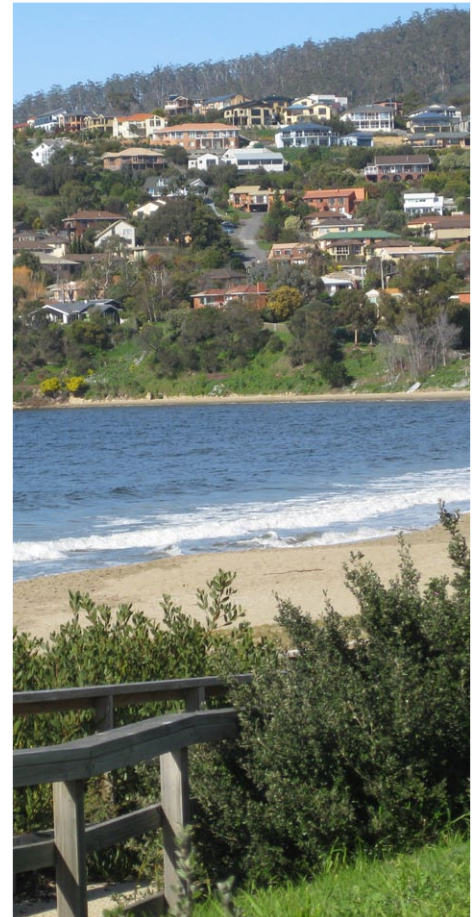


# Kingborough Council



21018152A  
MAY 2010

## KINGBOROUGH INTEGRATED TRANSPORT STRATEGY



sustainablethinking



# Kingborough Integrated Transport Strategy

May 2010

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**Kingborough Council**

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Appendix B Decision making framework

# Forward

Since the completion of the Southern Outlet in 1969 Kingborough has experienced continuous, rapid growth, driven by lifestyle choice and affordable residential land close to the amenities of Hobart. A great deal of new development has occurred and continues to occur within the municipality. It is expected that this trend will continue into the future, putting pressure on existing transport infrastructure. This situation could threaten Kingborough's liveability, which is intrinsically linked to the surrounding environment.

There is a need to better plan for Kingborough's future growth to protect and enhance the amenity for local residents and visitors through better transport and land use integration. Transport and accessibility issues have wide reaching impacts on the environmental, economic and social well-being of the municipality. A sustainable transport approach is required that: manages travel demand; provides efficient, effective and equitable transport options; limits environmental impact; and plans for future communities.

The Kingborough Integrated Transport Strategy (KITS) will provide the necessary framework to guide strategic outcomes that optimise the opportunities for increased accessibility across all relevant modes of transport in Kingborough. It will support the development of essential and interrelated transport projects to meet the needs of the community, and ensure necessary coordination from a transport and land use planning perspective. Integral to the KITS are the broader environmental, social and economic objectives, particularly regarding: climate change, healthy activity, community safety and liveability.

The KITS addresses community issues and strategic objectives through actions that focus on:

- regional planning
- decision making consistent with community values and vision
- behavioural change
- access to local services
- better bus services for urban and non urban areas
- improved walking and cycling infrastructure
- improved bus stop infrastructure
- safe and efficient transport
- parking management.



# 1. The process

The Kingborough Integrated Transport Strategy (KITS) was developed for the municipality of Kingborough in response to the need for a more coordinated and sustainable approach to transport issues. Development of the Strategy was based on the following process:

- Council held meetings with stakeholders and community representatives, regarding the scope of the Integrated Transport Strategy in 2008/2009
- consultants Parsons Brinckerhoff and Pitt & Sherry were commissioned to undertake the Kingborough Integrated Transport Strategy
- the consultants held meetings with stakeholders and community representatives regarding the vision and objectives for the KITS in late 2009
- the Draft KITS was presented to Council and the community in early 2010 for comment
- the Final KITS was developed based on the comments received on the draft
- the Final KITS was presented to Council in early 2010.

Community consultation is a vital part of the integrated transport strategy development process. A summary of key issues raised through the community consultation process have been identified in the relevant sections as an effective check on whether the strategies and actions address the issues raised by the community.



**Figure 1.1 View from Kettering**



## 2. Vision

### 2.1 Vision for Kingborough 2020

The Kingborough Strategic Plan 2010 – 2020 is an expression of the strategic directions for the Kingborough community, developed in accordance with the views of the community. The plan sets out the future directions and desired strategic outcomes for the Kingborough municipal area up to 2020, but does not include the detailed strategies and actions that will be required to achieve these outcomes.

Kingborough Strategic Plan 2010 – 2020	
Vision	<p>Kingborough in 2020 will be a:</p> <p><b><i>thriving, vibrant and connected community</i></b></p> <p>There is energy, passion and creativity in the way our community approaches its social, economic and environmental challenges and opportunities. We are a community which acknowledges respects and celebrates its diversity. We are connected to each other and the rest of the world. Information technology helps each household learn, communicate and engage locally and globally. We participate in the life of our communities but are one community, encouraging all views.</p> <p><b><i>healthy by nature</i></b></p> <p>We have a healthy, active lifestyle sustained and supported by the nature that surrounds us.</p> <p><b><i>and naturally beautiful</i></b></p> <p>Our land, coasts and waterways provide special places for recreation, relaxation and reflection.</p>
Values	<p>Sustainable</p> <p>Honest and accountable</p> <p>Open and inclusive</p> <p>Caring and supportive</p> <p>Strong leaders</p> <p>Resilient and resourceful.</p>
Directions	<ol style="list-style-type: none"> <li>1. Good governance</li> <li>2. Managing and protecting our natural environment</li> <li>3. Wellbeing and inclusiveness</li> <li>4. Planning and managing growth</li> <li>5. Integrated transport systems.</li> </ol>

The Kingborough Integrated Transport Strategy (KITS) forms part of a suite of strategic documents that will guide activities towards the implementation of the Strategic Plan. The KITS supports the future directions for Kingborough, consistent with the vision and values outlined in the Strategic Plan, in particular the future direction for integrated transport systems and underlying strategic objectives.

### 2.2 Vision for Kingborough's transport in 2020

The Vision for Kingborough, as set out in the Kingborough Draft Strategic Plan 2010 – 2020, is supported by the vision for Kingborough's transport system, which is based on safety, equity, accessibility, sustainability and behavioural change.

#### Safety, Equity & Accessibility

From Taroona down to Gordon and including Bruny Island, Kingborough will be easy and safe to get around, for all residents and visitors, through: better integration; infrastructure and services that support well connected communities; walkable neighbourhoods and town centres; strong regional links, especially to Hobart; and a focus on making the main regional centre of Kingston accessible to the whole municipality, including those with mobility restrictions such as young, old and less-abled people.

#### Sustainable Transport

The high quality-of-life available in Kingborough, so intrinsically linked to the health of the community, its economy and the environment, has led to Kingborough becoming one of the fastest growing municipalities in Tasmania. This character will be preserved through more sustainable transport. This will be achieved by reduced reliance on private motor vehicles; convenient walking, cycling and public transport; options and reduced travel distances.

Working towards the vision will mean:

#### Travel Behaviour Change

- future developments in Kingborough will contribute to the improved accessibility and sustainability of Kingborough
- improvements to existing transport infrastructure and services will focus on changing travel behaviour
- car dependency will be replaced with more sustainable transport use by removing barriers and providing incentives for sustainable transport, through: better integration between different modes; higher density and mixed land use centres; parking management, greater priority for sustainable transport modes; and greater communication of sustainable transport options.

Defining key concepts for the vision	
Safety	Reduced transport accidents, safer spaces for vulnerable users and personal safety for active and public transport.
Equity	A fair distribution of services for all people of Kingborough.
Accessibility	Convenient access to people, places, goods and services within an acceptable time and cost.
Sustainable transport	Transport modes and practices that address current needs without compromising the ability for the needs of future generations to be met, based on social, environmental and economic impacts, including cycling, walking, public transport and reduced travel demand.
Travel Behaviour change	Changes to individual everyday routines to adopt more sustainable travel behaviour, for example: reducing car based travel by shopping locally, walking or cycling or catching public transport, car pooling and multi purpose trips.

## 2.3 Strategic objectives

Demonstrating consistency with the community's values and vision, the KITS adopts the strategic objectives for integrated transport systems identified in the Kingborough Strategic Plan 2010 – 2020, as follows:

Kingborough Strategic Plan – integrated transport systems - strategic objectives
<ul style="list-style-type: none"> <li>■ A reduced use/dependence on private motor vehicles through the encouragement of other forms of access and transport.</li> <li>■ An increased use of public transport that is convenient, accessible, safe and clean.</li> <li>■ An attractive and user friendly network of footpaths and trails for both pedestrians and cyclists.</li> <li>■ A community which is demonstrating increased use of park &amp; walk and park &amp; ride and car pooling opportunities.</li> <li>■ Efficient transport facilities servicing Bruny Island.</li> </ul>

## 3. Background

### 3.1 Existing policy framework

Existing policy documents, of particular relevance to the Kingborough Integrated Transport Strategy (KITS), include:

- Draft Southern Integrated Transport Plan, for public consultation, June 2009
- Tasmanian Framework for Action on Climate Change, 2008
- Hobart Regional Arterial Bicycle Network Final Draft, 2009
- Kingborough Planning Scheme, 2000
- Kingborough Bicycle Plan Final Draft, 2006
- Kingston Central Area Master Plan Review, 2009
- Kingborough Access Advisory Committee Action Plan
- Tasmanian State Coastal Policy, 1996.

A common objective within the policies, specifically relevant to the KITS, is a reduced dependence on private vehicles through the encouragement of other forms of access and transport. Many of the relevant documents within the existing policy framework are currently in draft format, reflecting the dynamic policy setting relating to transport and the environment. Furthermore, following an agreement between the State Government, the Southern Tasmanian Councils Authority (STCA), and the 12 southern Tasmanian Councils, a comprehensive regional land use strategy and an infrastructure investment strategy for the region are currently being prepared. This Integrated Transport Strategy will input into the planning of these two important regional strategies.

Consistent with the Kingborough Access Advisory Committee Action Plan this strategy assumes that, where practicable, physical infrastructure and developments in the Kingborough area will be designed and constructed in a way that is accessible to residents and visitors with a disability.

## 3.2 Land use

The Municipality of Kingborough is situated on the south-east coast of Tasmania, just 10 km south of Hobart. The municipality consists of mostly low density, residential land use located within a natural setting along the Derwent Estuary and the D'Entrecasteaux Channel. Towns in Kingborough include Kingston, Blackmans Bay, Margate, Snug, Kettering, Woodbridge and Middleton, as shown in Figure 3.1. Taroona whilst not a town as such, is a built up urban area which in effect operates as a suburb of both Hobart and Kingston. The municipality also includes Bruny Island which lies just off the coast and can be reached by a car ferry from Kettering.

Kingston is the major commercial, retail and administrative centre for the municipality. Local industries include fish processing, aquaculture, tourism, viticulture, boat building, civil engineering as well as the Australian headquarters for Antarctic Research. Kingborough is also a major tourist destination, based on the natural attractions of Bruny Island and the picturesque towns along the D'Entrecasteaux Channel.

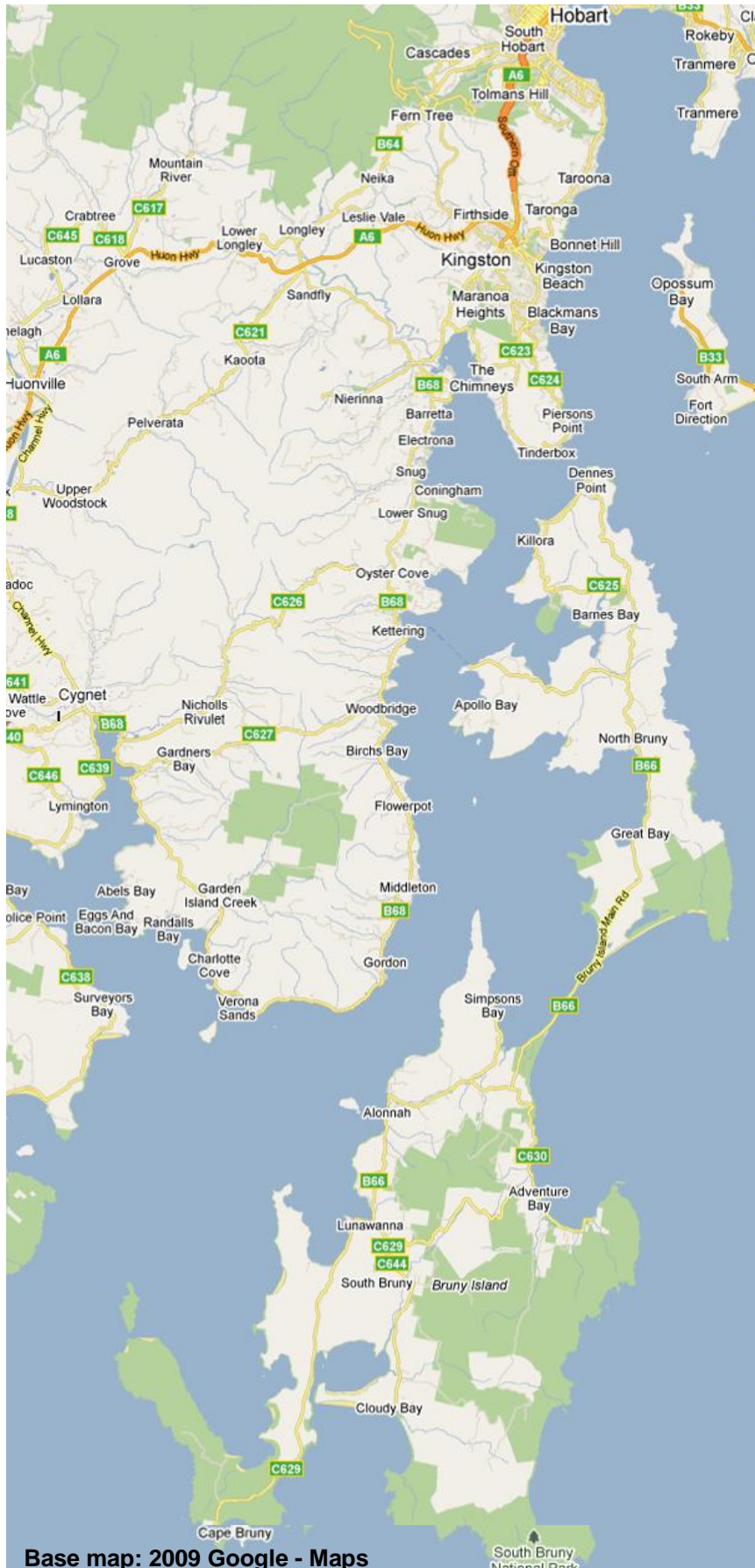
Kingborough's future growth areas will be identified in the revised Planning Scheme which is currently being developed, however it is expected that the most significant growth will occur in the Kingston/Blackmans Bay area around Huntingfield and Spring Farm. Limited growth is also projected in Margate and Snug.

## 3.3 Demographics

The Demographic Change Advisory Council Tasmania identified that Kingborough, with a population of 31,706 in 2006 was the 5th largest of the 29 Local Government Areas (LGAs) in Tasmania. Based on current projections, the population in 2010 is probably closer to 33,500. Kingborough has been one of the fastest growing municipalities in Tasmania for the last ten years. Over the period from 2001 to 2006, Kingborough's population grew by 2,327 persons or 7.9 per cent, compared to State growth of 3.8 per cent. This growth was the result of net migration of 1,341 persons and a difference between births and deaths of 986 persons. Kingborough's population is projected to increase by around 8,500 by 2032, the second highest population change in Tasmania.

Consistent with the rest of Australia, Kingborough's population is ageing, with the proportion over 65 increasing due to longer life expectancies. This trend is exacerbated by the in-migration of older residents relative to the loss of younger working age people (and their children). In 2006 Kingborough's median age was 39 years, which was slightly higher than the State average of 38.8 years (Demographic Change Advisory Council Tasmania).

The population breakdown for the different localities obtained from *A Review of the Kingborough Planning Scheme 2000 - Kingborough Settlement Strategy* (September 2009) is shown in Table 3.1. The table shows that the Kingston and Blackmans Bay urban area constitutes about 55% of the total population. This is illustrated in the map of population density shown in Figure 3.2 based on 2006 ABS data. Overall, the municipality has low population density with local concentrations at Taroona, Kingston/Blackmans Bay, Margate and Snug.

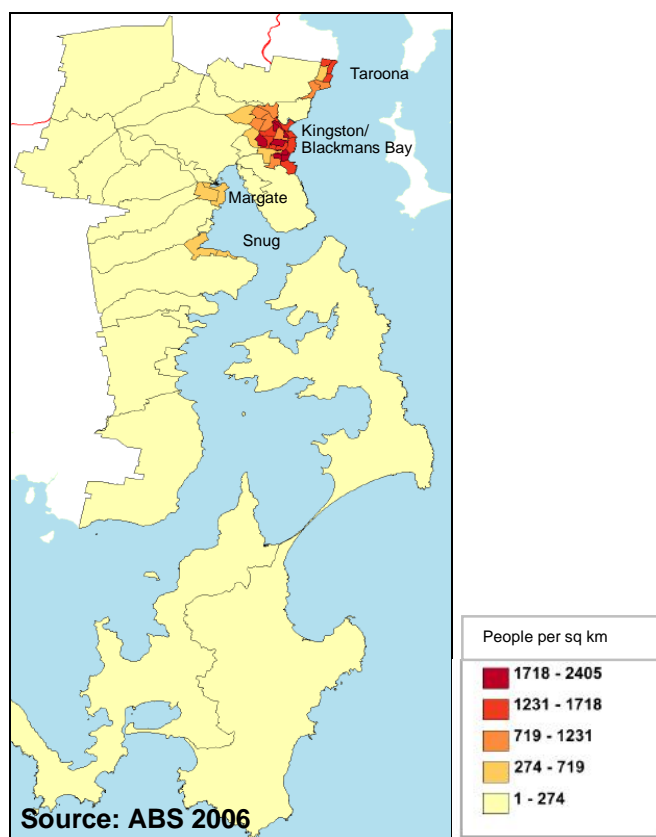


**Figure 3.1**      **Locality map**

**Table 3.1 Population of localities**

LOCALITY	POPULATION
Albion Heights – Ferntree – Huon Road	1,052
Taroona	3,064
Bonnett Hill	477
Kingston Beach and Heights	1,039
Kingston	8,674
Huntingfield	465
Kingston South – Summerleas Road	888
Blackmans Bay	6,510
Howden - Tinderbox	1,171
Margate (and surrounds)	1,908
Sandfly, Allens Rivulet	1,748
Baretta – Electrona	644
Snug – Coningham	1,095
Kettering – Oyster Cove (and surrounds)	1,100
Woodbridge (and surrounds)	656
Middleton – Gordon (and surrounds)	519
Bruny Island (north)	226
Bruny Island (south)	470
<b>TOTAL</b>	<b>31,706</b>

Source: A Review of the Kingborough Planning Scheme 2000 - Kingborough Settlement Strategy (2009)



**Figure 3.2 Kingborough population density by collector district**



An existing benchmark for travel behaviour in Kingborough is provided by 2006 ABS travel to work data shown in the table below. Travel to work in Kingborough is predominantly based around the motor vehicle however bus travel, walking and working from home are relatively popular sustainable travel options which could be expanded. It should be noted that 34 people (0.2%) drove a car and caught a bus, indicating the existing level of park-and-ride, while 47 people (0.3%) were driven in a car and caught a bus, indicating the existing level of kiss-and-ride.

**Table 3.2 Method of travel to work by place of residence (ABS 2006)**

Method of travel to work	Workers (Over 15)	%
Bus	598	4.1
Bus + other modes	87	0.6
Taxi	18	0.1
Car as driver	8,944	61.9
Truck	122	0.8
Car as passenger	1,122	7.8
Motorbike/scooter	63	0.4
Bicycle	99	0.7
Walked only	366	2.5
Worked at home	694	4.8
Did not go to work	1,904	13.2
Not stated	231	1.6
Other	198	1.4
	<b>14,446</b>	<b>100</b>

## 3.4 Transport

The main transport corridors in Kingborough are the:

- Southern Outlet – a dual carriageway linking Hobart and Kingston, which extends to Southport as the Huon Highway
- Channel Highway – the highway follows the coast between Hobart and Huonville providing an alternative route between Kingston and Hobart, and a link to the settlements in the south of Kingborough, as well as Taroona in the north
- Huon Highway – the highway provides an east-west link between Kingston and Huonville.

These roads form part of the state owned road network, as shown in Figure 3.3 (taken from the Tasmanian State Road Hierarchy). The Tasmanian State Road Hierarchy furthermore identifies the Southern Outlet and Huon Highway as the main freight route.



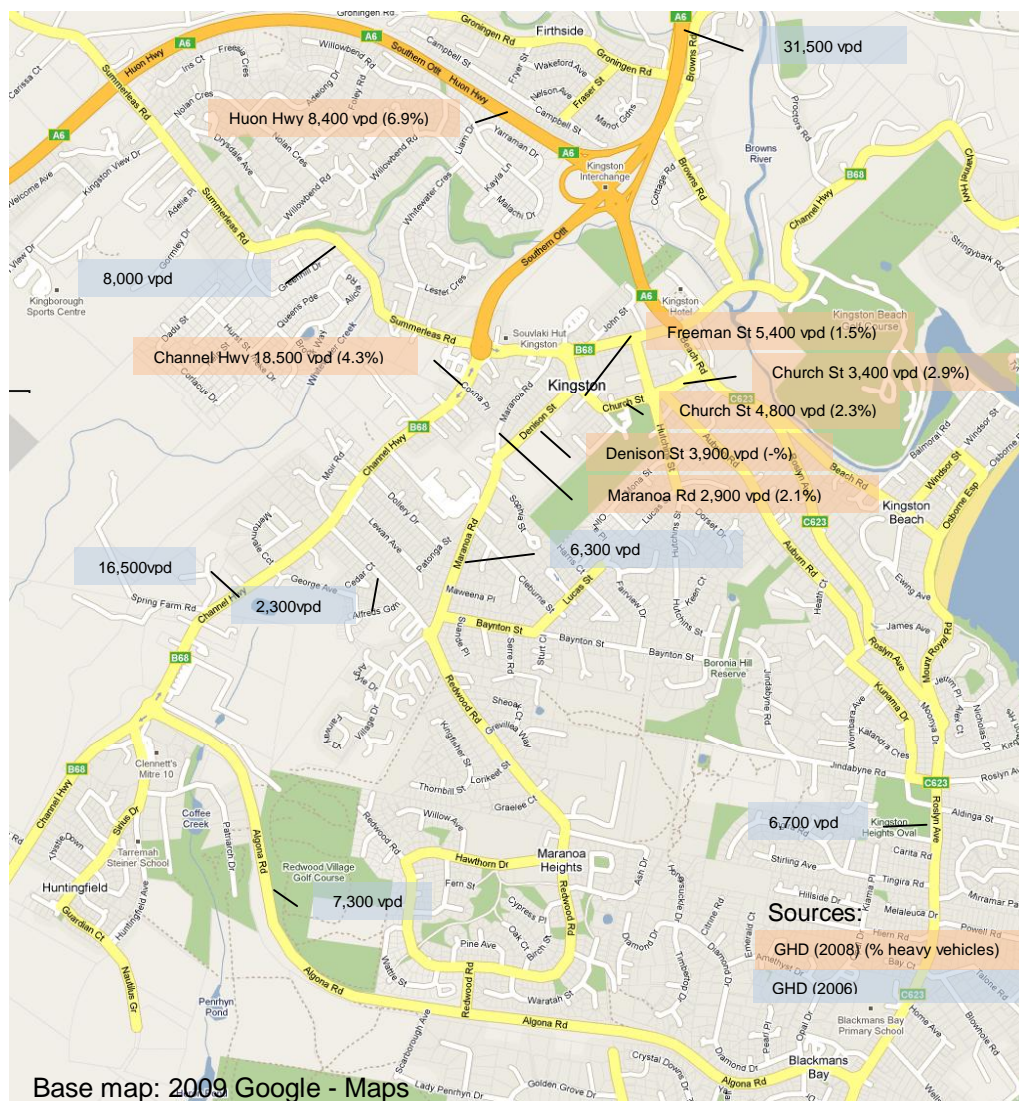
**Figure 3.3 State Road Hierarchy surrounding Kingborough**

Approximate average daily traffic volumes in Kingston are shown in Figure 3.4 (GHD, 2006 and 2008) and show the concentration of traffic on the Southern Outlet and Channel Highway.

A summary of the expected growth rates for the Southern Outlet, Channel Highway and Huon Highway, taken from the *Southern Region Overview Report* (2008) is shown in Table 3.3. The Channel Highway at Algonia Road has relatively low traffic volumes but is experiencing high levels of compound growth (consistent with population growth). The reduced growth rate for traffic volumes on the Southern Outlet after 2011 assumes that that development in the area will slow down by this time and that more of Kingborough's population would be living and working in the area rather than in the Hobart LGA.

The *Southern Region Overview Report* (2008) highlights traffic capacity issues on Kingborough's main road network. Table 3.4 lists the links identified within Kingborough which will reach a level of service (LOS) D within 25 years. The Channel Highway is already below this LOS, but the Kingston Bypass is designed to address this issue. Capacity issues on the Southern Outlet could impact on public transport services between Hobart and Kingston.

The *Southern Region Overview Report* (2008) identified relatively high safety risks on the Channel Highway, between Taroona and Kingston, and between Cygnet and Oyster Cove as well as on the Huon Highway between Huonville and Firthside (near Kingston).



**Figure 3.4 Daily traffic volumes**

**Table 3.3 Greater Hobart traffic forecasts**

Location	Compound traffic growth per annum	Traffic forecasts AADT	
		2005	2031
Southern Outlet South of Olinda Grove	1.50% to 2011; reducing to 1.13% until 2031	32,000	42,500
Channel Highway South of Algonia Road	1.56%	11,800	18,600
Channel Highway at Lower Snug	1.31%	4,000	6,000
Huon Highway at Grove	1.57%	7,000	12,000

Source: *Southern Region Overview Report (2008)*

**Table 3.4 Capacity and existing (2006) AADT**

Road name	descriptor	Estimated 2006 AADT	One-way service flow vph	Highway capacity (two-way) vpd	Years Remaining at LOS D
Channel Hwy Sandfly Rd to Kingston	Interchange Overpass	13,000	1,299	11,800	Already below LOS-D
Southern Outlet Hwy	Channel Highway to Davey St	29,810	2,730	35,500	12
Huon Hwy	Sandfly Rd to Kingston Interchange Overpass	7,240	1,080	9,800	20
Algona MR	Roslyn Ave to Channel Hwy	6,490	1,298	11,800	24

Source: *Southern Region Overview Report (2008)*

### Kingston Bypass

The intersection of the Southern Outlet/Huon Highway and Channel Highway at the Kingston Central Area creates access issues for local and regional traffic. The Kingston and Environs Transport Study (2006) identified the following main traffic issues:

- travel delays on the Channel Highway
- unnecessary through traffic (“rat-runs”) along Maranoa Road and Roslyn Avenue
- access issues from driveways and side roads along the Channel Highway
- access from Summerleas Road to the Channel Highway.

To address these issues DIER is tendering the construction of the Kingston Bypass, which has been approved and is shown in Figure 3.5.

The project consists of:

- a two-lane roadway with provision for a future dual carriageway
- Summerleas Road interchange ramps
- a roundabout at Algona Road to facilitate a future upgrade to an interchange and improved access to Huntingfield
- upgrade of Spring Farm Road for a future connection to Kingston View Drive
- extension of the pedestrian underpass near Kingston High School
- an Algona Road pedestrian underpass
- reinstatement of the shared path and footpath on Summerleas Road
- a new shared path on Spring Farm Road



- on-road cycle lanes at the Algona Road roundabout
- extension of the Whitewater Creek recreation trail.



**Figure 3.5 Kingston Bypass Project**



While the main benefits of the bypass are reduced congestion and improved traffic flow, it is understood that the bypass will also facilitate future developments in the area, including the further expansion of the Catholic secondary school, housing development at Huntingfield, the relocation of Kingston High School and the Kingborough Sports Centre expansion. It will also facilitate the improved use and amenity of the bypassed section of Channel Highway.

### 3.5 Kingston Central Area

The State Government's decision to relocate the Kingston High School potentially releases a large area of land within the Kingston Central Area providing opportunities for changes in land use for commercial, community, residential and open space activities. The Kingston Central Area Master Plan was updated to capitalise on this land release by providing Council with a framework within which future development can be guided and subsequently controlled. The Kingston Central Area Master Plan Review (2009) proposes a new road network, shown in Figure 3.6 below and identifies that traffic modelling results indicate that the revised road system will operate satisfactorily under forecasted traffic conditions up to 2017.

The specific development that is to occur on the school site is yet to be determined. However, the Master Plan provides a framework within which development can occur. The revised Master Plan identifies that the core retail area is to be focussed on the Channel Highway. This will facilitate the upgrade and redevelopment of the Channel Highway by Council, thereby maximising the streetscape amenity and actively discouraging traffic from using the Channel Highway in preference to other routes.



**Figure 3.6 Kingston Central Area preliminary road layout**

#### 3.5.1 Parking

There is a common perception in the community that the parking facilities in Kingborough are inadequate, specifically in Kingston CBD, Kingston Beach, Margate and the future Sports Centre/High School. An estimate of car parking supply is shown in the table



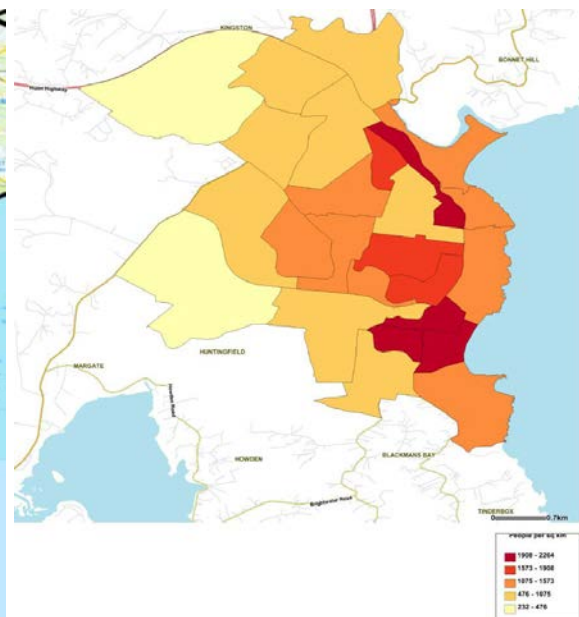
below. Existing parking is free but many areas have time limits, predominantly two hour parking, and council parking inspectors enforce this limit.

**Table 3.5 Estimated existing car parking**

Parking	Total	On street	Off street	Off street includes	Note
<b>Blackmans Bay</b>	170	40	130		
<b>Kingston Beach</b>	350	60	310	130 Foreshore/ 75 Council car park/85 hotel	
<b>Kingston Town</b>	350			Predominantly Woolworths	
<b>Kingston CBD</b>	1,700	450	1,250	700 Channel Court/ 200 Hotel/ 90 Council car park/ 170 Kingston Plaza (Coles)/ 40 medical centre/ 20 health centre	Additional 1,000 spaces will be provided as part of Channel Court Stage 2
<b>Margate</b>	150		150	80 Hotel	

### 3.5.2 Public transport

Buses are the principal form of public transport in Kingborough. Metro Tasmania – a state owned company – is contracted by DIER to operate core bus passenger services in the area. The level of service varies greatly in the municipality, based on differences in population levels between north and south. Taroona, Kingston and Blackmans Bay in the north are included in the Greater Hobart urban bus network and therefore have higher service levels than the remainder of the municipality, which is considered urban fringe. Figure 3.7 shows the urban area map for Kingborough (DIER 2008) which goes as far south as Huntingfield. DIER's Review of the Core Passenger Services (2007) excluded Margate and Snug from the urban area based on distances greater than 5km from the primary urban centre boundary. The Kingston and Blackmans Bay Urban Centre is shown in Figure 3.7.



**Figure 3.7 Kingborough urban area (DIER) and Kingston Blackmans Bay Urban Centre (ABS)**

A 15 minute car ferry service between Bruny Island and Kettering also forms an important part of the public transport network. The service runs approximately hourly between 7am and 7pm, with a limited number of bus connections to Kingston and Hobart.

Metro regards Kingston and Blackmans Bay as the fastest public transport growth area in Tasmania following recent upgrades to services which have led to a significant increase in patronage. Operating between 6am and midnight on weekdays, the Taroona - Kingston - Blackmans Bay service is concentrated on high frequency bus corridors. The Kingston – Hobart corridor runs 14 buses per hour in the peak (including Channel services). However the service is made up of 13 routes, including large one way loops, with highly variable headways sometimes ranging up to 60 minutes. On Saturdays generally four buses per hour run between Kingston and Hobart from approximately 7am to 1:30am but specific routes run approximately hourly. On Sundays buses operate hourly between 7:30am and 8:30pm.

Timetables and maps have recently been improved but there is still scope for further simplification of information to current and potential passengers. Easy to use timetables would help to make the services between Kingston and Hobart more accessible to new users.

The Channel - Margate - Snug - Kettering - Woodbridge - Middleton - Gordon - Cygnet bus service consists of nine routes which operate approximately between 7am and 7pm during weekdays. Service levels for different towns range from one service to approximately 10 services each way per day to Gordon and Margate Central respectively. The majority of routes have variations, some of which operate once a week, only during the school term or school holidays. Weekend services are limited to only two services on Saturday but only go as far south as Snug.

Bus stop accessibility and amenity is an important part of public transport. DIER's urban service standards identify a service level objective that 90% of residences should be within 500m of a bus route. Based on milk maps for Taroona, Kingston, Blackmans Bay, Margate and Snug shown in Appendix A and summarised in the table below, only Taroona has 90% of residences within 500m of bus stops. However Taroona, Blackmans Bay and Kingston have 95 – 100% of residences within 1,000m of bus stops. Margate and Snug although admittedly non-urban, have less than 70% of residences within 500m of bus stops, despite diversions off the main route.

**Table 3.6 Percentage of residences within walking distance of bus stops**

	% within 500m	% within 1,000m
Taroona	92%	100%
Kingston	79%	95%
Blackmans Bay	82%	99%
Margate	47%	59%
Snug	66%	83%

### 3.5.3 Community transport

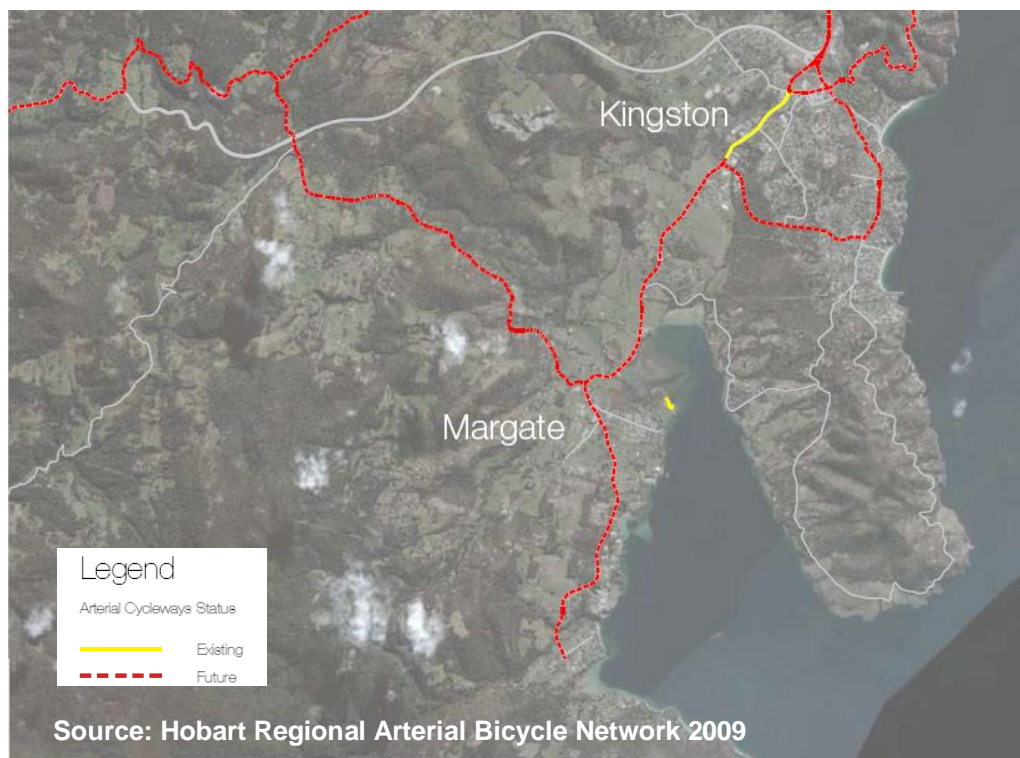
The Home and Community Care (HACC) Program provides community care services to aged people and younger people with disabilities, and their carers. HACC funded community transport, which operates throughout Kingborough (including Bruny Island), is primarily aimed at assisting eligible transport disadvantaged people with travel for shopping and appointments, and may include travel for social activities.

### 3.5.4 Cycling and walking

Walking and cycling networks in Kingborough, include:

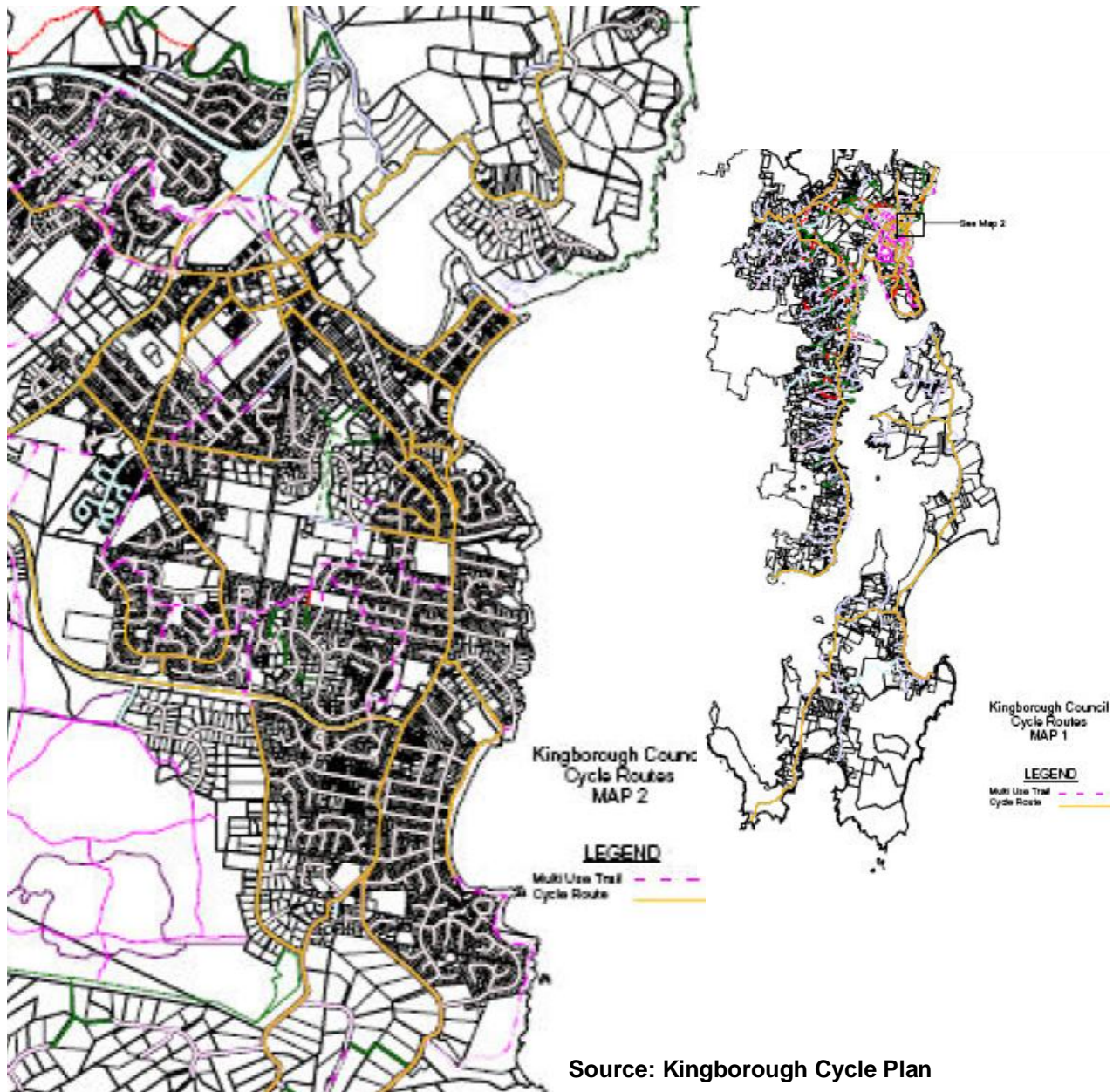
- 32 recreational walking tracks, with details readily available on Council's website, developed as part of the Tracks and Trails Program
- the Hobart Regional Arterial Bicycle Network, shown in Figure 3.8
- the Kingborough cycle route network, shown in Figure 3.9 taken from the *Kingborough Cycle Plan*.

Both cycle network plans identify proposed cycle routes for future funding. A general walking strategy has not been developed for Kingborough.



**Figure 3.8 Hobart Regional Arterial Bicycle Network**





**Figure 3.9 Kingborough cycle route network**

### 3.6 Accessibility

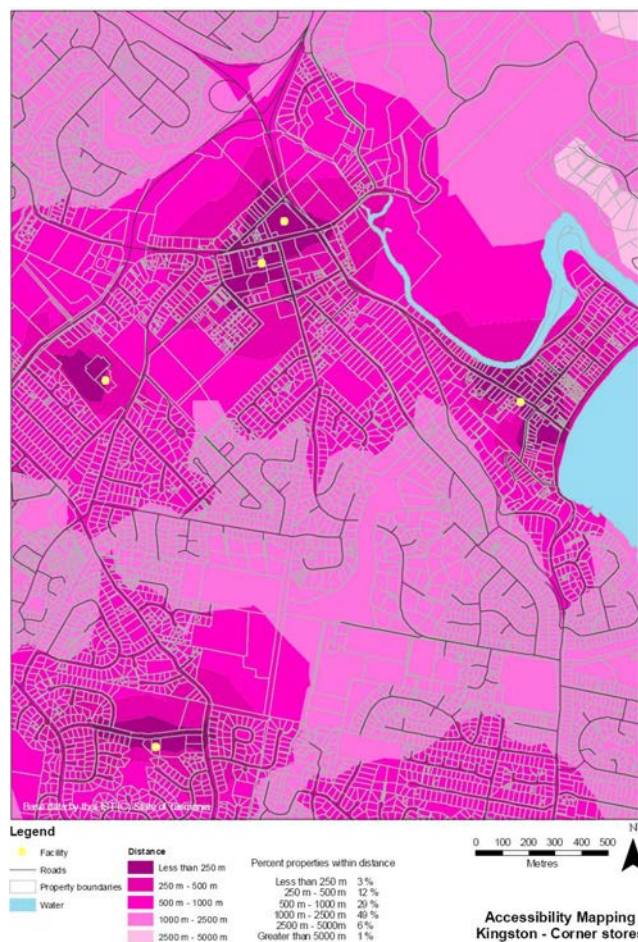
Accessibility is a function of land use and transport integration which can be illustrated through milk maps, as demonstrated in the *Southern Region Background Report* (2007). Milk maps measure accessibility for different areas by identifying the percentage of household travelling within certain travel distance bandwidths to access essential services (originally a litre of milk) Milk maps, shown in Appendix A, were created for Taroona, Kingston, Blackmans Bay, Margate and Snug and show relative accessibility to:

- general food store
- doctor
- pharmacy

- child care centre
- primary schools.

In general, the majority of residences within the five areas examined were over a kilometre from essential services. Without a strong public transport network this creates a strong dependence on private motor vehicles. Snug, Taroona and Margate were missing some local services, meaning longer distances to reach child care, food store, pharmacies and the doctors in adjacent towns. With regard to Kingston and Blackmans Bay, services are concentrated around the edges of the Kingston area and at Blackmans Bay shopping centre. A sample milk map for Kingston is shown in Figure 3.10.

The KITS will support improved accessibility in Kingborough through more proactive provisions in the Planning Scheme for new developments with regard to vehicle circulation and cycle and pedestrian access. It will also support local services close to existing and future residential areas.



**Figure 3.10 Milk map for Kingston – Corner Stores**

### 3.7 Climate change and peak oil

The Copenhagen Accord (2009) recognises climate change as one of the greatest challenges of our time. To stabilise greenhouse gas concentration in the atmosphere at a level that will prevent dangerous interference with the climate system, it was agreed that deep cuts in global emissions are required.

The *Tasmanian Framework for Action on Climate Change*, (2008) addresses the challenge for Tasmania, to reduce greenhouse gas emissions while growing the economy and improving quality of life. The framework identifies the target of reducing Tasmania's greenhouse emissions to at least 60 per cent below 1990 levels by 2050. One of the priority areas for action is improving Tasmania's transport system. New strategies are required to encourage more walking, cycling and public transport. Tasmanian communities are also required to be resilient and adaptive, in response to the challenge of climate change.

Peak oil is also a significant environmental issue which could severely affect our future mobility. Our dependence on finite fossil fuels as an energy source for transport makes us vulnerable to rising prices and the reduced availability of petrol.

The KITS will support Kingborough's resilience to climate change and peak oil. In accordance with the state objective, the KITS identifies local initiatives to encourage cycling, walking, and public transport and supports local living as a means of reducing car dependency and travel distances and thus greenhouse gases. The KITS also recognises the importance of maintaining an efficient and effective road network in Kingborough, which will support sustainable transport, including fuel efficient vehicles for the future. The KITS also supports an adaptive response to climate change by identifying a flexible decision making framework which can respond to new discoveries and innovations with regard to these and other issues.

### 3.8 Challenges

Based on analysis of baseline conditions and consultation, the KITS will need to contribute to the following:

- a vision for the future
- flexibility to respond to evolving issues
- strategic regional policy and planning
- protection of Kingborough's natural setting and liveability, including impacts from climate change
- local living to support the vitality of the area and reduce travel demand and infrastructure requirements
- behavioural change to reduce dependence on private vehicles
- supporting Kingston as the heart of the municipality, including high quality amenities and accessibility
- integrated land use and intermodal transport planning, including provision for sustainable development
- higher urban densities to facilitate walking, cycling and public transport use
- improved accessibility for walking and cycling
- better public transport and community transport
- safeguarding accessibility to Kingston and Hobart, by suitable modes
- maintenance of the road network
- accessibility and mobility for existing low density, dispersed settlements, particularly in the south
- management of regional and local traffic, particularly within Kingston Central Area
- funding for improved infrastructure, information and passenger transport services
- accessibility for elderly and disabled people.



## 4. Principles and actions

### 4.1 Land use and development

The municipality's land use planning objectives are a prime driver for transport policy and the future construction of transport infrastructure. Likewise transport issues must inform the Planning Scheme and development approval process to protect amenity and sustainability.

Kingborough's settlement patterns are characterised by low density and dispersed land uses, along with established subdivisions with poor connectivity. This settlement pattern supports the wide spread use of the private vehicles and reduces the convenience of more sustainable travel options.

A key outcome of integrated land use and transport planning is to reduce private vehicle travel demand. This can be achieved by: locating activities close to residents; supporting higher density, mixed land use; encouraging growth near existing transport infrastructure and services; encouraging people to work from home for example through improved internet connections; and also through parking management.

#### 4.1.1 Issues and recommendations raised by the community:

- integrated transport needs to be examined across the region
- conditions are needed on development permits requiring strategic links between open spaces and subdivisions to be constructed
- higher density development and provision of local services needs to be included in the Planning Scheme
- a parking strategy is needed for Kingston and Kingborough as a whole
- park-and-ride is challenged by the convenience of travel from Kingston and Kingborough to Hobart
- park-and-ride at Margate is a better location than Kingston as it brings scattered communities together in one spot for a bus to then collect them
- park-and-ride needs to be examined on a Hobart wide basis
- park-and-ride in Kingston needs to be relatively close to Kingston Central
- a Travel Plan for the new Kingston High School is needed
- need to ensure local facilities, such as a local shop, are provided near the Kingston High School
- need case by case examination of subdivision applications to ensure appropriate footpaths will be provided
- planning scheme needs to protect green space/farming land surrounding Margate and control urban growth
- parking issues in Margate

- propose a park-and-ride site at the Fork-In-The-Road at Huntingfield, which has the advantage of being located at shops.

#### **4.1.2 Kingborough strategic objectives:**

- a reduced use/dependence on private motor vehicles through the encouragement of other forms of access and transport
- a community which is demonstrating increased use of park-and-walk and park-and-ride and car pooling opportunities.

#### **4.1.3 Principles:**

- sustainable transport and accessibility will be supported through integrated land use and transport planning at the regional and local level
- mixed use activity centres will concentrate key attractors such as employment and retail, as well as greater housing densities and will operate as transport choice hubs
- urban growth will be concentrated in areas where sustainable transport options can be provided most effectively and efficiently i.e. within or directly adjacent to the Kingborough urban area as identified by DIER in relation to bus service planning
- parking will be managed to support sustainable transport
- new developments will be required to contribute to a safe attractive and comfortable pedestrian, cycling and public transport environment, as well as an efficient and effective road network.

#### **4.1.4 Actions:**

The issues and strategic objectives will be addressed through the following actions which focus on regional planning, parking for sustainable development and land use that supports local living.

##### **Support regional planning:**

- provide input into the development of the regional land use strategy and infrastructure investment strategy
- provide input into development of the Greater Hobart Parking Strategy, identified as part of the Draft Southern Integrated Transport Plan
- identify urban growth boundaries for Kingborough, for input into a clear urban growth boundary for the Greater Hobart area
- undertake community visioning and scenario workshop/s with the purpose of future proofing Kingborough's land use and transport network.

##### **Parking management for sustainable development:**

- Adopt a parking strategy for Kingborough, with the following aims and principles:
  - ▶ parking strategy aims:

- improve accessibility, specifically in Kingston Central Area, Kingston Beach, Margate and the new Sports Centre/Kingston High School site
- minimise negative impacts on sensitive land use, such as activity centres and residential areas
- manage parking demand by encouraging sustainable transport
- ▶ parking strategy principles:
  - support shared public parking (park-and-walk) in preference to single user parking, to minimise overall parking requirements
  - restrict parking close to activities and services to short stay parking, to support accessibility
  - relocate staff and other all day parking from highly productive land, to sites with good vehicle and pedestrian access
  - adopt residential parking permit systems adjacent to high parking demand areas
  - establish developer contributions/annual levies to support public parking and sustainable transport, with opportunity for developers to suggest and or deliver appropriate infrastructure
  - introduce parking charges incrementally at sensitive and high demand locations: to help manage parking demand; encourage sustainable transport; and fund parking facilities and improvements to public transport
  - require convenient cycle parking
  - support convenient park-and-ride and kiss-and-ride for residents with poor access to public transport to shorten distances travelled by private vehicles. A summary of desirable features and amenities for park-and-ride sites (which would also include provision for kiss-and-ride) are listed below. A map showing possible park-and-ride locations for further investigation is shown overleaf.

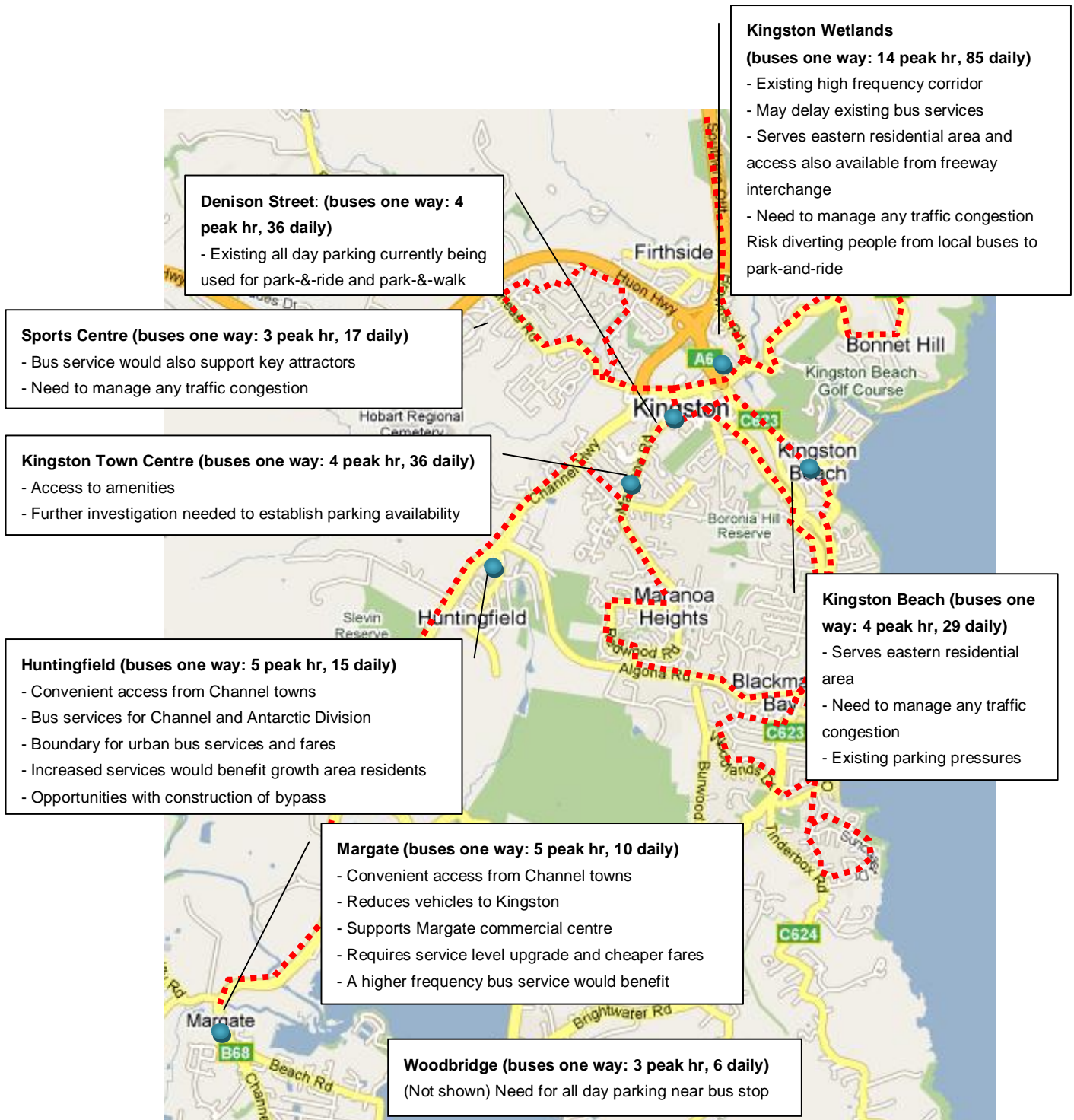
#### Desirable features for park-and-ride site location

- adequate parking spaces ideally with some provision for expansion
- reliable and high frequency bus corridor (either as part of the existing network or stand alone)
- easy access from areas with poor public transport
- maintain central bus stops and direct bus routes, avoiding diversions and double-backs
- reduce traffic congestion through direct access to the arterial road network
- good pedestrian access to bus stops and any nearby activities
- a management strategy, including: signage, monitoring and enforcement, as well as parking management for the surrounding area
- high amenity and security including: lighting, paving, shelter, information and passive surveillance i.e. high visibility from adjacent roads
- minimise impacts on highly productive or sensitive land use.

#### Desirable amenities for park-and-ride facilities

- shelter, seating, security and lighting
- easy access to parking and drop off zone for kiss-and-ride
- timetable information
- convenient and secure bicycle parking to support bike-and-ride
- rubbish bin
- signage to closest toilets, phone, drinking fountains and parent facilities
- community notice board
- landscaping
- branding and marketing including: directional signs from main roads, signage at the site and maps of all sites. Marketing could also include a complementary breakfast

- Develop a parking plan for Kingborough based on the parking strategy aims and principles, to identify:
  - spatial distribution of existing and long term parking demand based on surveys and projected land use
  - short and long term parking supply for visitors, loading, disabled persons, bicycles, motorcycles, staff, commuter and residential parking, including identification of available land for off-street parking, kiss-and-ride, park-and-ride facilities and recommendations for multi-story options
  - parking restrictions and incremental staging for parking charges
  - appropriate incentives for fuel efficient vehicles, for example reduced parking charges for electric vehicles
  - pedestrian, cycle and vehicle access to parking
  - appropriate parking rates for urban and non urban developments, including applicability of maximum parking rates
  - developer contribution scheme
  - parking amenities and security.
- Based on the recommendations from the parking plan and in consultation with Metro and DIER, trial suitable park-and-ride sites, with priority for facilities at Huntingfield.



**Figure 4.1 Potential park-and-ride sites for further investigation**

#### **City of Glenorchy**

Glenorchy City Council has developed a *Commercial Precincts Car Parking Strategy* which considers: incremental introduction of parking charges for long stay parking, parking levies for businesses, cash in lieu of parking and determination of reduced parking requirements based on parking profiles rather than peak generation of individual uses. A parking profile provides a temporal distribution of parking generation, which is useful in assessing developments with peak parking demand outside shopping centre peaks.

### City of Hobart

Hobart City Council's *Sustainable Transport Strategy* makes provision for development of a long term car parking strategy for the Hobart CBD with a goal of managing parking supply to promote and support sustainable transport, including:

- no net increase of available parking
- fee reforms in Council's car parks to discourage commuter use
- parking fee reforms which favour smaller, fuel efficient vehicles.

### Support local living:

- add proactive provisions in the Planning Scheme for new developments with regard to requirements for:
  - cycle and pedestrian access, connectivity, parking, standards and widths
  - vehicle circulation
  - community transport access, turning circles and pavement strengths. This is in addition to the current provisions for public transport
- make the following provisions in the Planning Scheme (consistent with the Planning Scheme Review):
  - Desired Future Character Statements supporting:
    - concentration of main residential growth in the urban centre of Kingston/Blackmans Bay
    - higher density development close to activity centres
    - further commercial development in Kingston and Margate central areas, as well as redevelopment of the Taroona Shopping Centre
    - support basic local services such as a general store/pharmacy and child care close to existing and future residential areas
  - identification of urban growth boundaries in Kingborough to concentrate demand for transport services
- prioritise sustainable transport infrastructure improvements for key activity centres. Key activity centres are proposed in Table 4.1 based upon the location of higher density residential developments, aged care and major attractors, as set out in the Planning Scheme Review's revised Desired Future Character Statements. Infrastructure improvements are proposed to include:
  - lighting
  - bus stop shelter for protection from the sun, rain and wind
  - seating
  - rubbish bins
  - signage, timetables and relevant information for tourists and new users
  - walking and cycling access, including paths and kerb ramps
  - provision for people with mobility restrictions, including appropriate clearances for pedestrians and kerb heights for bus stop accessibility
  - convenient cycle parking/lockers and drinking fountains



- ▶ access to change room facilities/showers/toilets/personal lockers where feasible and appropriate
- require major developments to provide Green Travel Plans to support sustainable transport.

**Table 4.1 Proposed Kingborough Activity Centre hierarchy**

Activity Centre	Activity Centre	Location	Multi-use	Higher Density Residential	Population Growth
Principal	Kingston	Channel Hwy	Retail/Employment/Entertainment	Yes	Yes
Urban	Blackmans Bay	Opal Drive	Retail/Employment	Yes	Yes
Regional	Margate	Beach Rd	Retail/Employment/Aged Care	Yes	Limited
Local	Kettering	Ferry Road	Modal interchange/Tourism	No	No
Local	Snug	Channel Hwy	Retail/Aged Care	No	Limited

#### Travel Plans

The City of Darebin in Melbourne requires major developments to provide a Travel Plan as part of its planning permit process. Travel Plans typically combine measures to support walking, cycling, public transport, car sharing and reduced travel. These are reinforced with promotion and incentives and by the management of parking. The City of Darebin requires targets for mode share and highlights that the Travel Plan provisions are enforceable. Guidance on developing a Travel Plan is provided on the Council website.

**City of Darebin** <http://www.darebin.vic.gov.au>


**Figure 4.2 View from Woodbridge**

## 4.1.5 Summary

	Action	Benefits for Kingborough	Strategic Objective	Priority/timing
<b>1.1</b>	<b>Support regional planning</b>			
1.1a	Input into the regional land use strategy and infrastructure investment strategy	Consistent and coordinated regional planning	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> <li>Bruny Island</li> </ul>	Short
1.1b	Input into the Greater Hobart Parking Strategy	Supports sustainable transport options and coordination of initiatives to maintain accessibility	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> <li>Bruny Island</li> </ul>	Short – Medium
1.1c	Identify urban growth boundaries for Kingborough	Reduces sprawl to support effective and efficient transport systems	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> </ul>	Short
1.1d	undertake community visioning and scenario workshop/s	future proof Kingborough's land use and transport network	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> <li>Bruny Island</li> </ul>	Short
<b>1.2</b>	<b>Parking management for sustainable development</b>			
1.2a	Adopt parking strategy aims and principles for Kingborough	Improves accessibility, minimises negative impacts on sensitive land use and manages parking demand by encouraging sustainable transport	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> <li>Bruny Island</li> </ul>	Short
1.2b	Develop a parking plan for Kingborough	Provides for park-and-ride and car and cycle parking based on parking strategy aims and principles and community needs	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> <li>Bruny Island</li> </ul>	Short - Medium
1.2c	Trial park-and-ride sites, including facilities at Huntingfield	Improves accessibility and supports sustainable transport options	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> <li>Bruny Island</li> </ul>	Short- Medium
<b>1.3</b>	<b>Support local living</b>			
1.3a	Add proactive provisions in the Planning Scheme for new developments with regard to requirements for: cycles and pedestrians, vehicle circulation and community transport	Integrated land use and transport planning will support efficient and effective sustainable transport in future developments	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> <li>Bruny Island</li> </ul>	Short

	Action	Benefits for Kingborough	Strategic Objective	Priority/timing
1.3b	<p>Make provisions in the Planning Schemes and support growth:</p> <ul style="list-style-type: none"> <li>in Kingston/ Blackmans Bay</li> <li>through higher density development close to activity centres</li> <li>in Kingston Margate and Taroona commercial centres</li> <li>with basic services close to residential areas</li> <li>within urban growth boundaries</li> </ul>	Land use patterns will support accessibility and sustainable transport options	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> </ul>	Short - Long
1.3c	Prioritise sustainable transport infrastructure improvements at key activity centres	Facilities to support sustainable transport at major attractors	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> </ul>	Short- Medium
1.3d	Travel Plan requirements for major developments	Developers encouraged to support sustainable transport	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> </ul>	Short- Medium

## 4.2 Walking and cycling

Walking and cycling are the most sustainable forms of transport, being friendly to the environment, affordable and an effective means of physical fitness. Walking and cycling improve opportunities for young people and support economic activity through access to employment and services and through tourism. Walking is also fundamental for accessing public transport and supports an active, aging population.

Kingborough's topography, road environment and subdivision layout creates barriers for cycling and walking in some areas. Our lifestyles are also becoming more sedentary, leading to rising obesity levels, diabetes and heart disease. These barriers need to be actively overcome if high levels of private vehicle travel demand are to be reduced through more active and sustainable transport.

Council recognises that a key component of encouraging more people to walk and cycle is to provide a range of facilities that are safe, direct, convenient and comfortable. Education and promotion will also be needed to induce a significant change in car driving habits. Cycling and walking incorporate different user groups and these need to be targeted effectively, for example commuters through workplaces, and young people (and their parents) through schools, and activity groups.

### 4.2.1 Issues and recommendations raised by community:

- prioritise the design of walking and cycling infrastructure, emphasising direct routes
- Bonnet Hill bike lane is a priority
- poor footpath conditions are a stumbling block for walking school buses for example, at Kingston and Illawarra schools, footpaths are too narrow and narrow road reserve make widening difficult
- support motorised bicycles and scooters as a sustainable transport option given terrain and distance. Changes of rules are needed to allow motorised bicycles above 200 watts to still be considered bicycles. On road bike lanes hinder motorised bike/scooter use
- focus on school children using bicycles to get to school and identify key routes for school cyclists to encourage safe cycling
- bicycle lanes are required on Maranoa Road and Redwood Road
- people with chronic conditions such as Diabetes 1 and musculoskeletal problems can have difficulty walking and/or travelling by bus.



#### 4.2.2 Kingborough strategic objective:

- an attractive and user friendly network of footpaths and trails for both pedestrians and cyclists.

#### 4.2.3 Principles:

- walking and cycling are the preferred modes of transport for local trips in Kingborough, particularly for accessing local activity centres, schools and public transport services
- walking and cycling in Kingborough will be safe, direct, convenient and comfortable
- the needs of pedestrians and cyclists will be considered in all future transport infrastructure and land use development projects.

#### 4.2.4 Actions

The issues and strategic objectives will be addressed through the following actions to provide better infrastructure and encourage cycling and walking.

##### **Better infrastructure for walking and cycling:**

- support a principal cycle network for Kingborough and Kingston (a proposed network is shown in and Figure 4.3 and Figure 4.4 including cycle parking facilities to improve access to key activity centres, Kingston and Blackmans Bay beaches and bus stops
- progress design and implementation of the Greater Hobart arterial cycle network, including Bonnet Hill bike lane
- develop a program of works to address gaps in cycle and walking access for schools and activity centres
- develop a Walking Plan (to improve accessibility, support an active aging society and reduce less sustainable travel behaviour) which will set out funding priorities relating to gaps associated with local activity centres and schools
- continue implementation and regular maintenance of walking and cycling facilities, including continued implementation of the Kingborough Tracks and Trails Program.

##### **Encourage walking and cycling:**

- support walking/cycling promotion events such as Ride-to-Work-Day as well as special promotions for young people and people that would like to be healthier
- support and promote cycle training courses to actively prevent rising accidents levels with increased cycle activity
- look at ways to support an Active School Travel Program
- provide easy to understand maps of the principal walking and cycling network on the Council website, complimenting existing information for the Kingborough's Tracks and Trails program
- support a review of the maximum power output currently allowed for motorised bicycles, from 200 watts to 300 watts, as recommended by Bicycle Victoria.

### Active School Travel Program

Since 2004 Brisbane City Council has been working in partnership with selected schools to reduce traffic congestion and improve safety through its Active School Travel Program. The program support initiatives such as:

- Walking School Bus
- bike skills training
- car pooling
- Park and Stride Challenge.

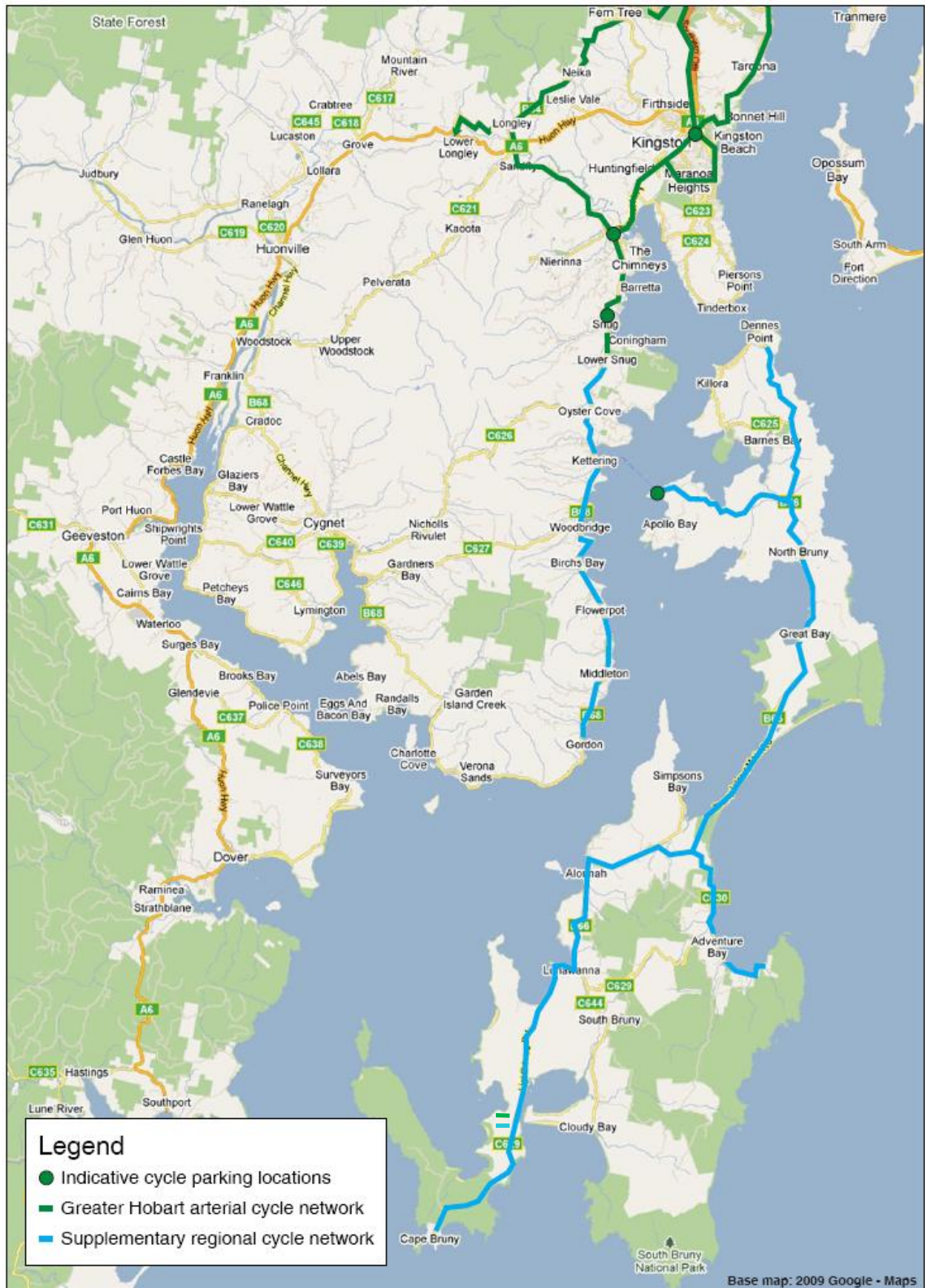
Brisbane City Council reports almost a 25% reduction in sole family car trips for participating schools in 2008.

**Brisbane City Council** <http://www.brisbane.qld.gov.au>



**Figure 4.3 Proposed Kingston principal cycle network**





**Figure 4.4** Kingborough principal regional cycle network

## 4.2.5 Summary

	Action	Benefits for Kingborough	Strategic Objective	Priority/ timing
<b>2.1</b>	<b>Better walking and cycling infrastructure</b>			
2.1a	Implement a principal cycle network for Kingborough and Kingston including cycle parking facilities	Promotes a cycling access network and enables coordination of future works to support cycling	<ul style="list-style-type: none"> <li>reduced car use</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> <li>Bruny Island</li> </ul>	Short - Medium
2.1b	Progress the Greater Hobart arterial cycle network, including Bonnet Hill bike lane	Supports regional connectivity for sustainable transport	<ul style="list-style-type: none"> <li>reduced car use</li> <li>cycle/walk</li> </ul>	Medium - Long
2.1c	Address gaps in cycle and walking access for schools and activity centres	Targeted improvements at major destinations which support access by walking and cycling	<ul style="list-style-type: none"> <li>reduced car use</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> </ul>	Short - Medium
2.1d	Develop a Walking Plan for Kingborough	Prioritises the use of limited resources to address gaps and improves accessibility by walking	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> <li>Bruny Island</li> </ul>	Short - Medium
2.1e	Implementation and maintenance of walking and cycling facilities, including Council's Tracks and Trails Program	Supports sustainable transport and improves safety	<ul style="list-style-type: none"> <li>reduced car use</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> <li>Bruny Island</li> </ul>	Short - Long
<b>2.2</b>	<b>Encourage walking and cycling</b>			
2.2a	Support walking/cycling promotion events	Promotes sustainable travel behaviour	<ul style="list-style-type: none"> <li>reduced car use</li> <li>cycle/walk</li> </ul>	Short - Medium
2.2b	Support and promote cycle training courses	Reducing accidents while increasing cycling	<ul style="list-style-type: none"> <li>cycle/walk</li> </ul>	Short - Medium
2.2c	Support an Active School Travel Program	Supports behavioural change, reduces congestion around schools, increases safety and reduces vehicle kilometres	<ul style="list-style-type: none"> <li>reduced car use</li> <li>cycle/walk</li> </ul>	Short - Medium
2.2d	Provide maps of the principal walking and cycling network on the council website	Informs the community of sustainable transport options	<ul style="list-style-type: none"> <li>reduced car use</li> <li>cycle/walk</li> <li>Bruny Island</li> </ul>	Short - Medium
2.2e	Support a review of the maximum power output currently allowed for motorised bicycles	Supports sustainable transport options	<ul style="list-style-type: none"> <li>reduced car use</li> <li>cycle/walk</li> </ul>	Long



## 4.3 Public transport

Public transport provides social, environmental and economic benefits. It offers mobility for those without access to a private vehicle including elderly, disadvantaged, disabled and young people. By reducing private vehicle travel, public transport can reduce traffic congestion and the need for new road infrastructure, as well as reducing noise and air pollution. Public transport can also improve social cohesion, contribute to physical fitness and support more liveable urban design.

Service upgrades and high frequency connections between Kingston Central and Hobart, have contributed to Kingston and Blackmans Bay being one of the fastest public transport growth areas in Tasmania. There are still many areas of Kingborough, however, that have poor public transport services including growth and non urban areas. Better access to public transport services through improved bus stop facilities, service upgrades and trials for park-and-ride facilities are recommended to improve the convenience of public transport and reduce dependency on private vehicles.

### 4.3.1 Issues and recommendations raised by community:

- get commuters out of their cars and onto public transport
- provide better public transport links to Kingston from surrounding settlements
- Government needs to invest in more bus services and higher service frequencies
- a community transport officer is needed to facilitate transport connection between rural towns and Kingston
- poor bus stop facilities: require better standards, amenities and clear responsibilities for implementation
- need bus stops in shopping centres. Consider having toilets and telephones ideally located close to bus stops
- bus interchanges required at Margate, Kingston and Blackmans Bay to Hobart
- better integration between bikes and buses needed
- bike racks on buses are needed
- bus timetables need to be easier to understand
- need a fast link between Hobart and Kingston
- rapid transit bus lanes/bus corridor needed
- poor patronage levels outside the urban area and high costs of running services
- Margate has had a “good bit of growth” but is seen by Metro as an urban fringe area thus doesn’t get same level of service as urban areas
- the Strategy should consider a Channel ferry to link Kingborough to Hobart e.g. a pedestrian ferry from Bruny Island to Hobart via Taroona. The decision regarding a ferry should not be based on economic viability but rather on public opinion

- recognition that the ferry is a longer term option and that main focus now is improving bus services through dedicated bus lanes
- major issue with the Margate bus service frequency and fares. Margate is no longer a country town and should have urban bus frequencies and fares
- the Kingston and Channel bus service ticketing should be integrated
- proposal for a shopper shuttle service between Kingston Town Shopping Centre and Channel Court to support elderly access
- proposal for interurban mini-bus/taxi-bus service to provide public transport in rural areas
- demand for public transport between Kingston and Huonville, specifically for high school students
- limited opportunity to turn school bus on Huon Highway.

#### **4.3.2 Kingborough strategic objectives**

- an increased use of public transport that is convenient, accessible, safe and clean
- a community which is demonstrating increased use of park & walk and park & ride and car pooling opportunities
- efficient transport facilities servicing Bruny Island.

#### **4.3.3 Principles:**

- travelling by public transport in Kingborough will be safe, as well as direct, convenient and comfortable
- road-based public transport will be given priority over single occupant vehicles in Kingborough where appropriate
- public transport stops will be accessible and will have high quality amenities.

#### **4.3.4 Actions**

The issues and strategic objectives will be addressed through the following actions to improve bus stops and public transport services in urban and non urban areas.

##### **Improve bus stops:**

- in collaboration with DIER and Metro, establish a consistent and clear process for implementing and maintaining bus stops. Furthermore identify with LGAT (Local Government Association of Tasmania) opportunities for this to be taken forward as a state wide protocol for bus stop implementation including:
  - ▶ design standards
  - ▶ advertising opportunities and protocols
  - ▶ demand thresholds to guide provision of amenities such as shelters, lighting and bicycle parking and lockers

- ▶ determination of stop locations
- establish partnerships with local community groups to deliver basic bus stop facilities such as shelter and seating, specifically where demand thresholds are unlikely to be met
- provide high quality bus stops at the key activity centres listed in the table below. These premium bus stops should promote public transport, as well as provide good accessibility and amenity at major destinations. Premium bus stops should include:
  - ▶ distinctive urban design, specifically in Kingston Central
  - ▶ small footprints based on a kerbside stop with no provision for layover
  - ▶ shelter, seating and lighting
  - ▶ timetables and relevant information for tourists and new public transport users
  - ▶ walking and cycling access
  - ▶ cycle parking/lockers
- support improvements to the Central Hobart interchange.

**Table 4.2 Proposed premium bus stop locations**

Locations	Description
Kingston	Principal Activity Centre
Margate	Regional Activity Centre
Blackmans Bay	Local Activity Centre
Kingston High School/sports complex	Local Activity Centre
Kingston Beach	Local Activity Centre
Kettering Ferry Terminal	Local Activity Centre
Snug	Local Activity Centre
Woodbridge	Local Activity Centre

#### Improve urban public transport services:

- support the proposal for a Greater Hobart Councils' passenger transport forum
- plan for bus services to cover the growth areas of Huntingfield and Spring Farm/high school/sports complex
- contribute to the simplification of bus routes/timetables in Kingborough to encourage new users as well as meeting the needs of existing users. Without major changes to bus operations, simplification could include:
  - ▶ timetables for the Kingston-Blackmans Bay could show two-way routes allowing people (particularly unfamiliar users) to travel to and from home on the same route. This would involve buses interlining at the termini - allowing people to travel to Kingston (around the existing loop) in both directions
  - ▶ separating inbound and outbound timetables to make them easier to understand
  - ▶ a summary timetable for services between Kingston Central and Hobart to highlight the high frequency connection

- support improvements to the transit link between Hobart and Kingston, such as public transport priority, including lobbying the State Government to submit an urban passenger transport focused Infrastructure Australia submission
- aim for progressive increases to the frequency of urban bus services.

**Improve non urban public transport services:**

- in collaboration with DIER and Metro improve the Channel bus services including:
  - ▶ aim to progressively increase the frequency and operating hours
  - ▶ provide integrated ticketing
  - ▶ remove variations including those based on school terms to simplify timetables and make services more reliable for every day users
  - ▶ trial improvements to the weekend service including extending the route south to Woodbridge, and introducing Sunday services as well as some additional Saturday services
  - ▶ extend all Kettering bus services to the ferry service and provide an integrated timetable
  - ▶ help subsidise improved public transport services through parking charges
  - ▶ lobby DIER to upgrade Margate to urban bus service standards and fares, based upon: proximity to the ABS urban centre boundary of Kingston and Blackmans Bay, as well as its increased population catchment through park-and-ride facilities
  - ▶ consider additional bus stops where buses terminate, for example Snug or Margate, to improve access to bus stops; however it is recognised that historic subdivision layouts do not support directness and coverage
- improve access to the Bruny Island ferry, including:
  - ▶ trial a booking procedure for the Bruny Island ferry for the peak season
  - ▶ improved facilities at Roberts Point on Bruny Island including parking, toilets and kiosk
  - ▶ improved pedestrian, cycle and vehicular access to the ferry stops
  - ▶ additional ferry services



**Figure 4.5 Bruny Island ferry**



- in partnership with the local community develop a business case for community transport for Bruny Island, dependent on patronage and cost
- seek funding for a Transport Connections Coordinator, based on sustainability and social benefits, including adequate provision for the increasing proportion of elderly. Opportunities may also exist for partnering with other local councils, to:
  - ▶ establish partnerships with local transport operators, government agencies, community service providers
  - ▶ undertake a baseline review of specific community needs and existing resources
  - ▶ identify ways of better using existing private, public and community transport resources to address barriers to accessibility.
- support the involvement of young people in the review of Metro services and development of service plans
- investigate the feasibility of ferry services between Kingborough and Hobart.

#### **Transport Connection in Victoria**

As part of the Victorian Transport Plan, project coordinators in rural, regional and fringe municipalities are being funded to work with their local communities and transport service providers to identify ways of better using existing private, public and community transport resources to address barriers to accessibility. Flexible funding is then used to deliver small-scale localised initiatives including extensions to existing services or the implementation of new trial services. The project follows the success of a three year pilot project. Existing Transport Connection projects identified by the Victorian Department of Planning and Community Development, include:

- a mini-bus is transporting people to their nearby town for appointments, delivering blood products to the nearest hospital and collecting groceries to drop off to house-bound residents on the return trip
- under-utilised school buses and community buses are being used to reconnect socially isolated people to their major regional centre
- volunteer transport and the regional rail network are being used to assist people in regional and rural Victoria to attend medical appointments in Melbourne.

**Department of Planning and Community Development, [www.dpcd.vic.gov.au](http://www.dpcd.vic.gov.au)**

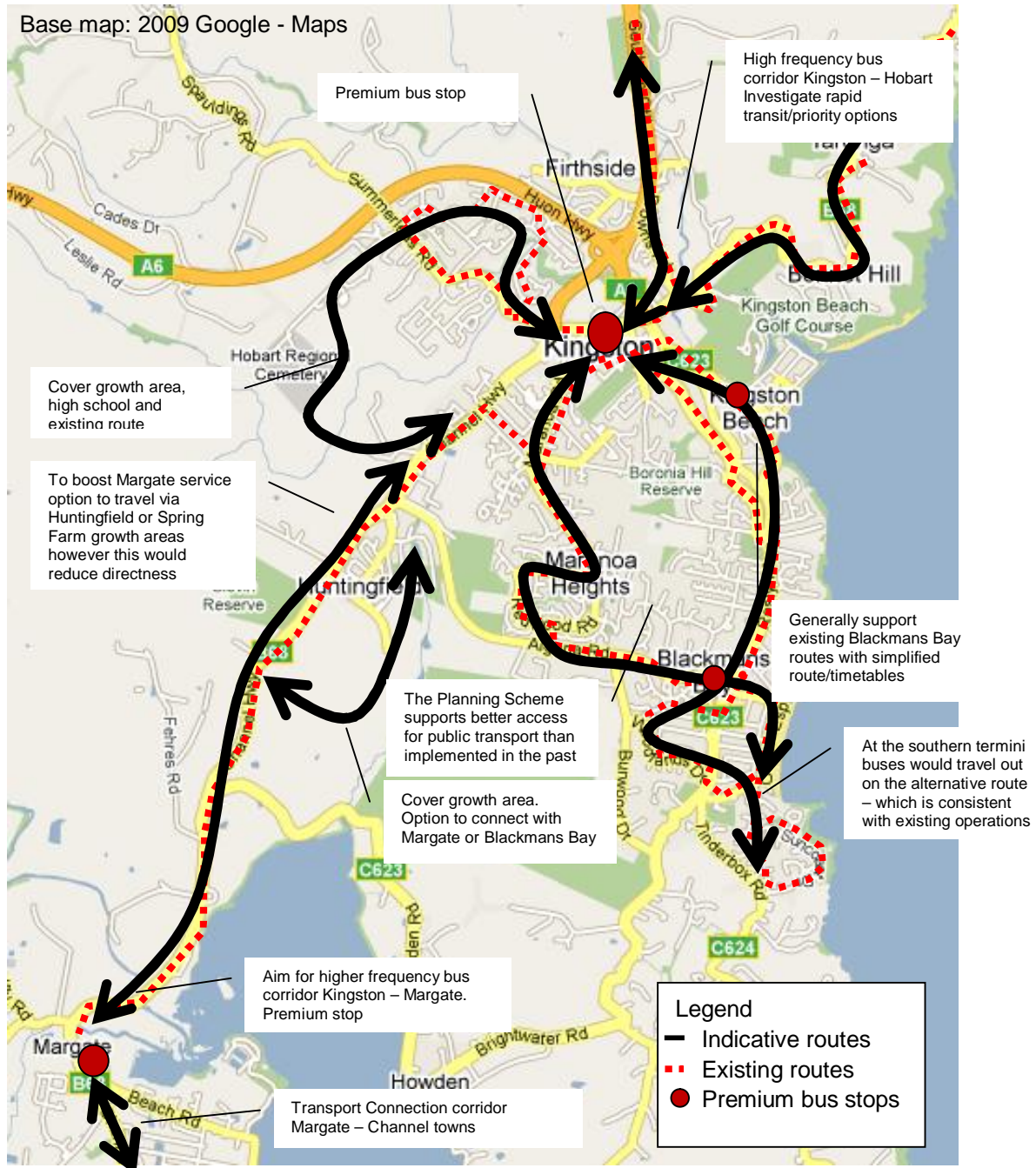
#### **Bike racks on buses**

Metro is investigating bus racks on buses, including any issues with clearances. Some bus routes in Canberra and Christchurch currently operate with bike racks, allowing two bikes to be loaded on to the front of the bus.

**ACT Action [www.action.act.gov.au/bike\\_n\\_ride.html](http://www.action.act.gov.au/bike_n_ride.html),**

**Christchurch Metro, [www.metroinfo.org.nz/bikeRacks\\_Main.html](http://www.metroinfo.org.nz/bikeRacks_Main.html)**

**Product information provided by a North American manufacturer [www.bicycleracks.com](http://www.bicycleracks.com)**



**Figure 4.6 Indicative future bus network**

### 4.3.5 Summary

	Action	Benefits for Kingborough	Strategic Objective	Priority/timing
3.1	<b>Improve bus stops</b>			
3.1a	Develop a process for implementing and maintaining bus stops	Reliable provision of public transport infrastructure to improve accessibility and sustainable transport options	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> </ul>	Short
3.1b	Develop partnerships with the community for bus stop delivery	Reliable provision of public transport infrastructure to improve accessibility and sustainable transport options	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> </ul>	Short – Medium
3.1c	Provide high quality bus stops at key activity centres	Improves accessibility and sustainable transport options at major destinations	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> <li>Bruny Island</li> </ul>	Short – Medium
3.1d	Support improvements to the Central Hobart interchange	Ensures more convenient and attractive access to Hobart by public transport	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>park&amp;walk/ride/pool</li> </ul>	Short – Medium
3.2	<b>Improve urban public transport services</b>			
3.2a	Support a Greater Hobart Councils' passenger transport forum	Ensures a consistent regional approach to passenger transport improvements	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> </ul>	Short
3.2b	Plan for bus services to cover the growth areas	Establishes sustainable travel patterns in new areas through timely provision of transport infrastructure and services	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> </ul>	Short – Medium
3.2c	Simplification of timetables	Improves convenience and attractiveness of public transport	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> </ul>	Short – Medium
3.2d	Support improvements to the transit link between Hobart and Kingston such as public transport priority	Actions needed as HCC is continuing with parking fee reforms to discourage commuter use and condition on the Southern Outlet will worsen as it reaches capacity	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> <li>Bruny Island</li> </ul>	Long
3.2e	Progressive increases to the frequency of urban bus services	More convenient and attractive public transport	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> <li>Bruny Island</li> </ul>	Short – Long
3.3	<b>Improve non urban public transport services</b>			
3.3a	Improve the Channel bus service	More convenient and attractive public transport and improved accessibility through better links to Kingston	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> <li>Bruny Island</li> </ul>	Short – Long

	Action	Benefits for Kingborough	Strategic Objective	Priority/ timing
3.3b	Improve access to the Bruny Island Ferry	Improved local access and reliability	<ul style="list-style-type: none"> <li>▪ Bruny Island</li> </ul>	Medium – Long
3.3c	Develop a business case for community transport for Bruny Island	Equitable provision of sustainable transport options and improved accessibility	<ul style="list-style-type: none"> <li>▪ reduced car use</li> <li>▪ public transport</li> <li>▪ cycle/walk</li> <li>▪ park&amp;walk/ride/pool</li> <li>▪ Bruny Island</li> </ul>	Medium
3.3d	Seek funding for a Transport Connections Coordinator	Equitable provision of sustainable transport options and improved accessibility. Helps to provide for increasing proportion of elderly people	<ul style="list-style-type: none"> <li>▪ reduced car use</li> <li>▪ public transport</li> <li>▪ cycle/walk</li> <li>▪ park&amp;walk/ride/pool</li> <li>▪ Bruny Island</li> </ul>	Short – Long
3.3e	Support regular consultation with young people on Metro services	Equitable provision of sustainable transport options and improved accessibility	<ul style="list-style-type: none"> <li>▪ public transport</li> </ul>	Short – Long
3.3f	Investigate the feasibility of ferry services between Kingborough and Hobart	Investigate options for effective and efficient public transport	<ul style="list-style-type: none"> <li>▪ reduced car use</li> <li>▪ public transport</li> <li>▪ park&amp;walk/ride/pool</li> </ul>	Short



## 4.4 Road network

Kingborough's road network has had a strong impact on its development. The construction of the Southern Outlet was the catalyst for Kingborough's rapid urban development and the main centre of Kingston is focussed at the nexus of Kingborough's road network.

The main roads in Kingborough are the Southern Outlet and Huon Highway (which provide important trunk routes to the north and the west) and the Channel Highway which links the settlements of Kingborough. This is supported by the urban and rural road network, including roads on Bruny Island.

Recently the Kingston bypass has been approved and will be constructed in 2010. This project will address capacity issues identified on the Channel Highway near the Kingston Central Area.

Kingborough's road network is vital for realising the objective of high accessibility. Not only does it support access by private vehicles but also by bus, bicycle and walking and to the ferry. It also provides access for freight movements. Road management, for example, through public transport priority, can support more sustainable transport and thus encourage behavioural change. More viable, sustainable vehicles, like the electric car, will likely be developed in the future and would also need to be accommodated within an integrated transport network.

### 4.4.1 Issues and recommendations raised by community:

- future road network upgrades will focus on:
  - ▶ Kingston Bypass
  - ▶ Summerleas Road/Huon Highway intersection
  - ▶ new intersection onto the Channel Highway for Huntingfield
- Ferry Road needs to be upgraded
- the local road network, especially earlier parts of Blackmans Bay and parts of Kingston, is of a poor standard and is a burden in terms of maintenance
- need network of roads suitable for vulnerable road users
- reduce speed to 40km on suitable roads to encourage cycling and walking to school
- traffic safety concerns at Margate centre
- traffic management at Margate required, for example current unrestricted car movements from the service station cause visibility issues
- road safety concerns raised regarding the future Algona Road roundabout which is the junction for five roads
- concern regarding the number of animals killed on the road between Margate and Woodbridge

- shoulder on Channel Highway south of Kingston doesn't allow emergency vehicles to pass queuing cars. Consideration should be given to widening the highway and/or making provision for a helipad.

#### 4.4.2 Kingborough strategic objectives:

- a reduced use/dependence on private motor vehicles through the encouragement of other forms of access and transport
- efficient transport facilities servicing Bruny Island.

#### 4.4.3 Principles:

- any new road infrastructure should demonstrate consistency with the future vision and objectives for Kingborough
- road space for different users will be managed, with priority given to sustainable modes where appropriate
- aim for safer roads in all aspects of planning, design, implementation, operation and maintenance
- support more sustainable vehicles, which are safe, affordable and environmentally friendly.

#### 4.4.4 Actions

The issues and strategic objectives will be addressed through the following actions to improve decision making and provide a safer and more efficient transport network.

##### Decision making consistent with community values:

- develop a multi-criteria framework for testing transport initiatives, such as road infrastructure projects, to ensure compatibility with the community vision, as well as consistency and transparency in decision making. This process will ensure that walking, cycling, public transport and behavioural change are considered in future transport projects

##### Appraisal of transport initiatives

The *National Guidelines for Transport System Management* (2006) identifies a staged appraisal process for transport initiatives. The guidelines include a number of tools to facilitate a consistent and comprehensive approach, including:

- Objective Impact Table (OIT) – which does not provide a comprehensive assessment of the impacts but rather assesses the strategic fit of the scheme against strategic objectives
- Appraisal Summary Table (AST) – a presentation format which provides a simple summary of the economic, environmental and social impacts (both monetised and non monetised). The summary would be underpinned by reports to justify impact assessments.

Appendix B includes a modified example of the OIT and AST which could be adapted by Kingborough Council as part of a multi-criteria decision making framework.

**Australian Transport Council** <http://www.atcouncil.gov.au>

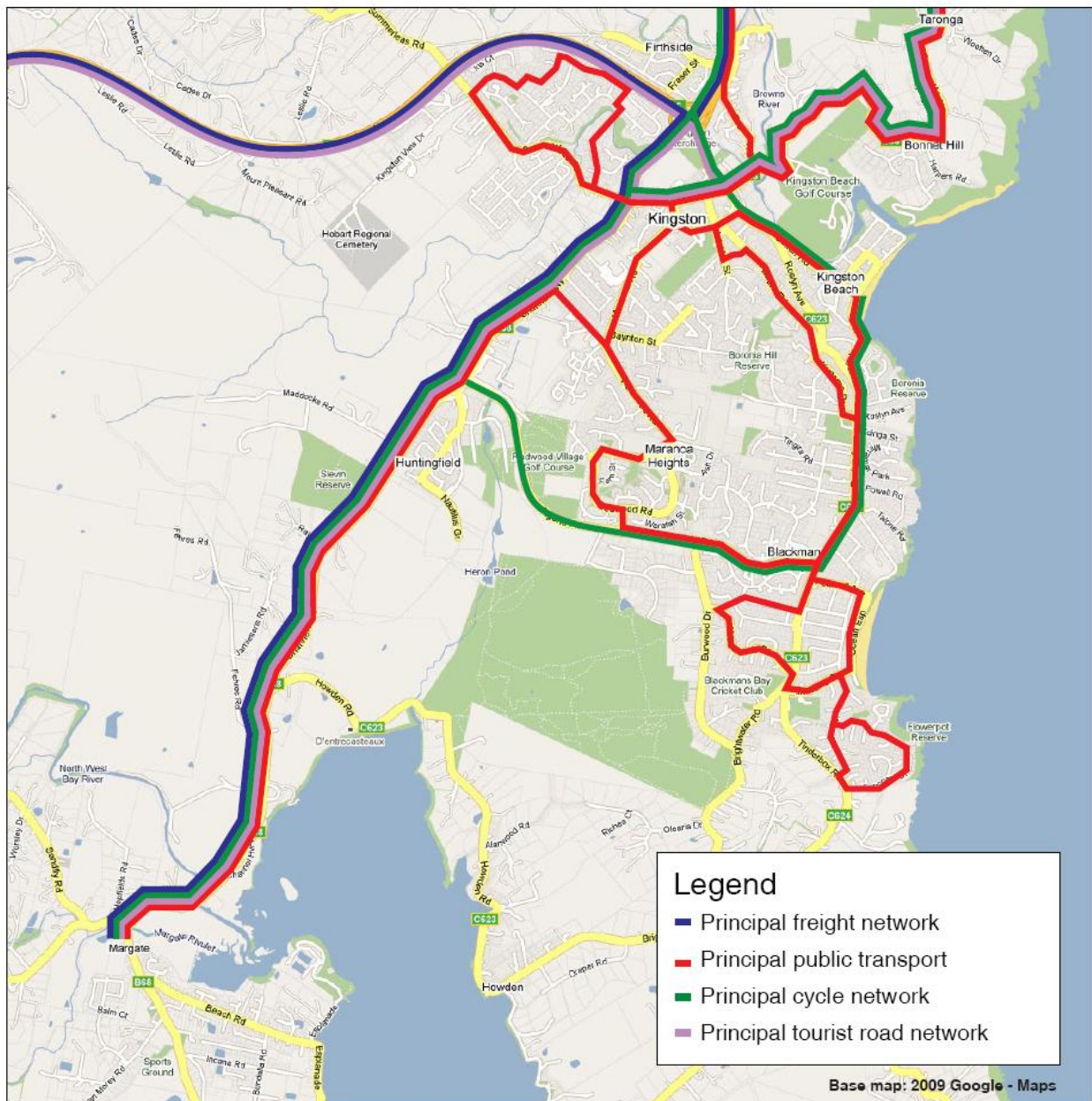
- measure before and after conditions with regard to the Kingston Bypass to inform future road capacity improvement projects.

### Providing for safer and more efficient transport:

- upgrade Ferry Road to support multimodal access
- target future road improvements for Bruny Island, and older areas of Kingston and Blackmans Bay
- ensure connection of Spring Farm Road to Kingston View Drive to support accessibility including direct public transport services
- improve the junction of Summerleas Road and Huon Highway
- support traffic improvements at the Macquarie/Davey St interchange, including provision for public transport priority
- support feasibility investigation of freight consolidation in the Channel region (proposed by the Tasmanian Freight Logistics Council)
- manage road space to support protection of the principal cycling, walking and public transport routes (as shown in figures 4.4 and 4.5)
- support safety improvements on the Channel Highway and Huon Highway
- undertake a risk management workshop for the road network with regard to coastal erosion and climate change
- develop a traffic management strategy for central Margate.



**Figure 4.7 Existing road conditions on Bruny Island**



**Figure 4.8 Indicative local road space management framework**





**Figure 4.9** Indicative Kingborough road space management framework



## 4.4.5 Summary

	Action	Benefits for Kingborough	Strategic Objective	Priority/ timing
<b>4.1</b>	<b>Decision making consistent with community values</b>			
4.1a	Multi-criteria assessment framework to be used for transport initiatives	Ensures consistent decision making and allocation of resources consistent with community values and objectives	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> <li>Bruny Island</li> </ul>	Short
4.1b	Measure before and after conditions with regard to the Kingston Bypass	Informed decision making to support the allocation of resources for future projects	<ul style="list-style-type: none"> <li>reduced car use</li> </ul>	Short – Medium
<b>4.2</b>	<b>Providing safer and more efficient transport:</b>			
4.2a	Improvements to Ferry Road	Supports safety and tourist/local access to Bruny Island	<ul style="list-style-type: none"> <li>public transport</li> <li>cycle/walk</li> <li>Bruny Island</li> </ul>	Medium
4.2b	Road improvements for Bruny Island	Supports safety and tourist/local access in Bruny Island	<ul style="list-style-type: none"> <li>cycle/walk</li> <li>Bruny Island</li> </ul>	Medium – Long
4.2c	Road improvements for older areas of Kingston and Blackmans Bay	Supports safety and local accessibility for all modes of transport	<ul style="list-style-type: none"> <li>public transport</li> <li>cycle/walk</li> </ul>	Medium – Long
4.2d	Ensure connection of Spring Farm Road to Kingston View Drive	Supports accessibility and direct public transport services	<ul style="list-style-type: none"> <li>public transport</li> <li>cycle/walk</li> </ul>	Medium
4.2e	Improve Huon Highway/ Summerleas Rd junction	Supports safety, local access and freight routes	-	Medium
4.2f	Support traffic improvements at the Macquarie / Davey St interchange, including public transport priority	Opportunity for more convenient and attractive public transport and cycling networks	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> </ul>	Medium – Long
4.2g	Support feasibility investigation of freight consolidation in the Channel region	Supports commercial viability, reduces intrusion from freight movements and reduces vehicle kilometres	-	Long
4.2h	Manage road space to support protection of principal cycling, walking and public transport routes	Supports sustainable transport and accessibility	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> <li>Bruny Island</li> </ul>	Short – Long
4.2i	Support safety improvements on Huon and Channel Highways	Supports safety, local access and freight routes	-	Long
4.2j	Risk management workshop for coastal erosion and climate change	Supports sustainable transport and accessibility	<ul style="list-style-type: none"> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> <li>Bruny Island</li> </ul>	Short
4.2k	Traffic management strategy for Margate	Supports safety and local access	<ul style="list-style-type: none"> <li>park&amp;walk/ride/pool</li> </ul>	Short

## 4.5 Promotion and education

Encouraging people to adopt a behavioural change towards more sustainable travel is a key objective of the KITS. Residents and visitors need to be made aware of sustainable travel options available within the municipality, including existing measures such as the high frequency transit connection between Kingston and Hobart, as well as future initiatives. People also need to be made conscious of the consequences associated with their travel choices, which could cover the impacts of private vehicle travel on climate change or the health benefits associated with cycling and walking.

### 4.5.1 Issues and recommendations raised by community:

- genuine commitment to start doing things differently through policy change and implementation
- describe what community transport is available
- behavioural change requires a new approach thus engineers, planners and designers require training and skill development to implement the policy direction
- some of the negative transport issues such as congestion, parking limitations and increasing petrol prices can actually be positive levers for behavioural change.

### 4.5.2 Kingborough strategic objective:

- a reduced use/dependence on private motor vehicles through the encouragement of other forms of access and transport.

### 4.5.3 Principles:

- the integrated transport strategy will be available for reference by Council, State Government, the community, developers and technical professionals
- information on sustainable transport options, for residents and visitors, will be readily available and easy to understand
- behavioural change to reduce private vehicle travel will be strongly encouraged through marketing and education.

### 4.5.4 Actions

The issues and strategic objectives will be addressed through the following actions to support behavioural change.

#### Support behavioural change

- publish a copy of the KITS on Council's website
- set up a sustainable transport web page on Council's website, including:
  - ▶ links to Metro and the Bruny Island Ferry
  - ▶ details of community transport, including available resources and policies

- ▶ links to car pooling organisations such as [www.coolpooltas.com.au](http://www.coolpooltas.com.au) and the University of Tasmania's car pooling program <http://www.utas.edu.au/ams/travelsmart/index.htm>
- ▶ cycle and walking network maps and links to Bicycle User Groups (BUGs).

#### Getting Around Kingborough Sustainably Webpage

A Kingborough Council webpage promoting sustainable transport options would need to be tailored to the community however there are plenty of existing webpages to draw inspiration from.

The Getting Around Townsville webpage provides links and information on:

- concessions and discounts
- aeroplane
- bus
- ferry
- rail
- taxi
- bike
- Queensland Transport
- community Transport.

([http://www.townsville.qld.gov.au/community/cic/newresident/getting\\_around](http://www.townsville.qld.gov.au/community/cic/newresident/getting_around))

Some other examples include:

#### City of Christchurch Getting Around

(<http://www.ccc.govt.nz/cityleisure/gettingaround/index.aspx>)

Transport for London - Getting around (<http://www.tfl.gov.uk/gettingaround>)

- support training for Council staff to help them facilitate behavioural change and innovative solutions
- implement a TravelSmart program for Kingborough and explore the opportunities for coordinating the programs within a regional context
- provide reference material on Green Travel Plan guidelines on the council website and work with schools and workplaces to encourage implementation (as part of the TravelSmart program)
- support promotion and education programs regarding sustainable transport.

#### TravelSmart

Many people would be familiar with the TravelSmart program which aims to inform and motivate people towards changing their travel behaviour through personal choice. It encompasses a broad range of initiatives, which can be implemented by communities and government alike, supported by TravelSmart Australia's pool of information and resources. Some possible initiatives are:

- Travel Plans for employers and schools
- marketing sustainable travel options to people moving into the area
- travel behaviour change programs which targets households through: personalised timetables, maps, information on benefits regarding health, cost and the environment and free tickets
- promoting new services or facilities through personalised marketing including: information, events and free tickets
- carpooling programs e.g. [www.coolpooltas.com.au](http://www.coolpooltas.com.au)

**TravelSmart Australia, [www.travelsmart.gov.au](http://www.travelsmart.gov.au)**

## 4.5.5 Summary

	Action	Benefits for Kingborough	Strategic Objective	Priority/ timing
<b>5.1</b>	<b>Support behaviour change</b>			
5.1a	Publish a copy of the KITS on Council's website	Demonstrates Council's commitment to behavioural change and provides a reference to support consistency	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> <li>Bruny Island</li> </ul>	Short
5.1b	Set up a sustainable transport web page on Council's website	Provides information on available sustainable transport options	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> <li>Bruny Island</li> </ul>	Short
5.1c	Support training for Council staff	Gives staff the tools and training to develop and implement travel behaviour change initiatives to meet community expectations	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> </ul>	Short - Long
5.1d	Implement a TravelSmart program for Kingborough	Use a proven program to support travel behaviour change which is flexible and has supporting resources available	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> <li>Bruny Island</li> </ul>	Short – Medium
5.1e	Provide reference material on Green Travel Plan guidelines and encourage implementation at schools and workplaces	Use a proven program to support travel behaviour change which is flexible and has supporting resources available	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> </ul>	Short
5.1f	Support promotion and education programs regarding sustainable transport	Flexible approach to education and promotion regarding sustainable transport	<ul style="list-style-type: none"> <li>reduced car use</li> <li>public transport</li> <li>cycle/walk</li> <li>park&amp;walk/ride/pool</li> </ul>	Short - Long

## 5. Summary framework

A summary framework for the KITS is shown overleaf, which highlights the strategic objectives, planning principles and a summary of actions.



## Strategic objectives

A reduced use/dependence on private motor vehicles through the encouragement of other forms of access and transport

A community which is demonstrating increased use of park & walk and park & ride and car pooling opportunities

An attractive and user friendly network of footpaths and trails for both pedestrians and cyclists

An increased use of public transport that is convenient, accessible, safe and clean

Efficient transport facilities servicing Bruny Island

Education and marketing principles		Summary of actions
<ul style="list-style-type: none"> <li>The integrated transport strategy will be available for reference by Council, State Government the community, developers and technical professionals.</li> <li>Information on sustainable transport options, for residents and visitors, will be readily available and easy to understand.</li> <li>Behavioural change to reduce private vehicle travel will be strongly encouraged through marketing and education.</li> </ul>		<ul style="list-style-type: none"> <li>Support behaviour change</li> </ul>
Land use and development principles		
<ul style="list-style-type: none"> <li>Sustainable transport and accessibility will be supported through integrated land use and transport planning at the regional and local level.</li> <li>Parking will be managed to support sustainable transport</li> <li>Mixed use activity centres will concentrate key attractors such as employment and retail, as well greater housing densities and will operate as transport choice hubs.</li> <li>Urban growth will be concentrated in areas where sustainable transport options can be provided most effectively and efficiently.</li> <li>New developments will be required to contribute to a safe attractive and comfortable pedestrian, cycling and public transport environment.</li> </ul>		<ul style="list-style-type: none"> <li>Support regional planning</li> <li>Parking management for sustainable development</li> <li>Support local living</li> </ul>
Cycling and walking principles		
<ul style="list-style-type: none"> <li>Walking and cycling are the preferred modes of transport for local trips in Kingborough, particularly for accessing local activity centres and schools.</li> <li>Walking and cycling in Kingborough will be safer, as well as more direct, convenient and comfortable.</li> <li>The needs of pedestrians and cyclists will be considered in all future transport infrastructure and land use development projects.</li> </ul>		<ul style="list-style-type: none"> <li>Better infrastructure for walking and cycling</li> <li>Encourage walking and cycling</li> </ul>
Public transport principles		
<ul style="list-style-type: none"> <li>Travelling by public transport in Kingborough will be safer, as well as direct, convenient and comfortable.</li> <li>Road based public transport will be given priority over single occupant vehicles in Kingborough where appropriate.</li> <li>Public transport stops will be accessible and will have high quality amenities.</li> </ul>		<ul style="list-style-type: none"> <li>Improve bus stops</li> <li>Improve urban and non urban public transport services</li> </ul>
Road network principles		
<ul style="list-style-type: none"> <li>New road infrastructure will need to demonstrate consistency with sustainable transport objective.</li> <li>Road space for different users will be managed, with priority for sustainable modes as appropriate.</li> <li>Aim for safer roads in all aspects of planning, design, implementation, operation and maintenance</li> <li>support more sustainable vehicles, which are safe, affordable and environmentally friendly.</li> </ul>		<ul style="list-style-type: none"> <li>Decision making consistent with community values</li> <li>Providing for safer and more efficient transport</li> </ul>

## 6. Monitoring

Council has an ongoing responsibility to ensure that the KITS meet the community's objectives. However it is important that the monitoring process avoids putting an unreasonable burden on Council's limited resources. Monitoring for the KITS, which is shown overleaf, is proposed to be based on the achievement of the strategic objectives, which is already a requirement for the Kingborough's Strategic Plan. Transport accident rates will also be monitored to ensure a safer road network.

**Table 6.1 Measuring the KITS against the strategic objectives**

Strategic outcomes	Supporting actions	Measures	Relevant regional strategies
A reduced use/dependence on private motor vehicles through the encouragement of other forms of access and transport	<ul style="list-style-type: none"> <li>Regional planning</li> <li>Supporting local living</li> <li>Support behavioural change</li> <li>Decision making which is consistent with community vision and values</li> </ul>	<ul style="list-style-type: none"> <li>traffic counts (relative to population growth)</li> <li>modal split for journey to work Census data</li> <li>journey times for different modes</li> <li>expenditure on different modes</li> <li>introduction of sustainable transport webpage</li> </ul>	The Southern Integrated Transport Plan identifies a strategy for coordination of traffic count data at the metropolitan level between state and local government and outputs from the Greater Hobart Household Travel Survey
An increased use of public transport that is convenient, accessible, safe and clean	<ul style="list-style-type: none"> <li>Improve bus stops</li> <li>Improve urban and non urban public transport services</li> </ul>	<ul style="list-style-type: none"> <li>growth in the number of bus users from: <ul style="list-style-type: none"> <li>journey to work Census data</li> <li>Metro's bus patronage data</li> </ul> </li> <li>Metro's customer complaints/questionnaire surveys</li> <li>implementation of premium bus stops at key sites</li> <li>accident statistics involving public transport</li> </ul>	Hobart CC proposes to work with Metro to begin to develop information set on public transport patronage split by route and time of day.
An attractive and user friendly network of footpaths and trails for both pedestrians and cyclists	<ul style="list-style-type: none"> <li>Better infrastructure for walking and cycling</li> <li>Encouragement of walking and cycling</li> </ul>	<ul style="list-style-type: none"> <li>increased length of on road bike lanes/ walking/cycling off-road tracks</li> <li>project expenditure</li> <li>accident rates</li> <li>growth in the number of cyclists and walking from: <ul style="list-style-type: none"> <li>Journey to work Census data</li> <li>monitoring from TravelSmart program/Travel Plan participants</li> </ul> </li> <li>spot checks cycle parking usage</li> </ul>	<p>Hobart CC in conjunction with the DIER and other Cycling South Councils proposes establishing a network of permanent counters for bicycle movements.</p> <p>Hobart CC has a Sustainable Transport Volunteer program with information collected in 2009 for walking and cycling numbers around the CBD.</p>
A community which is demonstrating increased use of park & walk and park & ride and car pooling opportunities	<ul style="list-style-type: none"> <li>Parking management for sustainable development</li> <li>Better infrastructure for walking and cycling</li> </ul>	<ul style="list-style-type: none"> <li>construction of shared car parks and cycle parking</li> <li>spot check shared car/cycle parking usage</li> <li>positive trends from journey to work Census data</li> </ul>	
Efficient transport facilities servicing Bruny Island	<ul style="list-style-type: none"> <li>Providing for safer and more efficient transport</li> <li>Improve non urban public transport services</li> </ul>	<ul style="list-style-type: none"> <li>number of complaints to Council</li> <li>increase in number of connecting bus services with the ferry</li> <li>monitor accident levels</li> <li>project expenditure</li> </ul>	

## 7. Implementation plan

As part of the development of the KITS it was important to recognise deficiencies and propose solutions. Consequently actions have been identified that respond to the issues, identified through consultation and the baseline review. However it is recognised that Council's capacity to carry out strategic or proactive action will be limited by available resources and efforts must be well targeted to achieve very tangible results.

To support implementation, indicative relative timing (short/medium/long) and costings (based on the number of \$) have been attributed to the actions. The actions have also been categorised based upon:

- regionally significant projects
- locally significant planning projects
- locally significant education/promotion projects
- locally significant implementation projects.

It is envisaged that external support would be sought for the first category, for example through a State submission to Infrastructure Australia. Planning and prioritisation of relevant resources will need to be undertaken for the delivery of the remaining actions.

### 7.1 Regionally significant projects

Ref	Action	Responsible Authority	Supported by	Priority/ timing indication	Cost indication
1.1a	Provide input into the regional land use strategy and infrastructure investment strategy to ensure Kingborough's transport requirements are covered	Council	STCA	Short	\$
3.1a	Develop a process for implementing and maintaining bus stops	DIER	Metro, LGAT Council,	Short	\$
1.1c	Identify urban growth boundaries for Kingborough to inform Greater Hobart	Council	STCA, local councils	Short	\$
3.2a	Implement a Greater Hobart Councils' passenger transport forum	DIER	Local councils	Short	\$
5.1e	Provide reference material for Travel Plans	DIER	Local councils	Short	\$
1.1d	Undertake community visioning and scenario workshop/	Council	DIER	Short	\$
4.2j	Risk management workshop for coastal erosion and climate change	Council	DIER	Short	\$
3.2c	Simplification of bus routes/timetables	DIER	Metro, Council	Short- Medium	\$
1.2c	Trial park-and-ride sites	Council	DIER, Metro	Short- Medium	\$\$
1.1b	Develop the Greater Hobart Parking Strategy	DIER	local councils	Short – Medium	\$
3.1d	Implement improvements to the Central Hobart interchange	Hobart CC	Metro, DIER	Short – Medium	\$\$-\$

Ref	Action	Responsible Authority	Supported by	Priority/ timing indication	Cost indication
4.1b	Measure before and after conditions with regard to the Kingston Bypass	DIER	Council	Short – Medium	\$
5.1d	Implement a TravelSmart program for Kingborough	Council	DIER, local councils	Short – Medium	\$\$
3.3d	Seek funding for a Transport Connections Coordinator	DIER/Council	local councils	Short – Long	\$\$
5.1f	Support promotion and education programs regarding sustainable transport	Council	DIER, local councils	Short – Long	\$
3.2e	Progressively increase the frequency of urban bus services	DIER	Metro, Council	Short - Long	\$\$\$
3.3a	Improve the Channel bus service	DIER	Metro, Council	Short - Long	\$\$\$
3.3b	Improve access to Bruny Island ferry	DIER	Council	Medium	\$\$
4.2e	Improve the junction of Summerleas Road and Huon Highway	DIER	Council	Medium	\$\$-\$
4.2f	Implement traffic improvements at the Macquarie/Davey St interchange, including provision for public transport priority	DIER	Hobart CC	Medium – Long	\$\$\$
2.1b	Progress the Greater Hobart arterial cycle network, including Bonnet Hill bike lane	DIER	Local councils	Medium – Long	\$\$\$
4.2i	Implement safety improvements on the Channel Highway and Huon Highway	DIER	Council	Medium - Long	\$\$\$
3.2d	Implement improvements to the transit link between Hobart and Kingston, such as public transport priority	DIER	Council, Hobart CC, Metro	Long	\$\$\$
2.2e	Review of the maximum power output currently allowed for motorised bicycles	DIER		Long	\$
4.2g	Support feasibility investigation of freight consolidation in the Channel region	Commercial companies	Council	Long	\$\$

## 7.2 Locally significant planning projects

	Action	Responsible Authority	Supported by	Priority/ timing	Cost
1.2a	Adopt parking strategy aims and principles for Kingborough	Council		Short	\$
4.1a	Develop a multi-criteria framework for testing transport initiatives	Council		Short	\$
1.3a	Add proactive provisions in the Planning Scheme for new developments with regard to requirements for: cycles and pedestrians, vehicle circulation and community transport	Council	STCA	Short	\$
3.3f	Investigate the feasibility of ferry services between Kingborough and Hobart	Council	DIER	Short	\$



	Action	Responsible Authority	Supported by	Priority/ timing	Cost
4.2k	Traffic management strategy for central Margate	Council	DIER	Short	\$
1.2b	Develop a parking plan for Kingborough	Council		Short – Medium	\$\$
1.3d	Prepare Travel Plan requirements for major developments in the Planning Scheme	Council		Short – Medium	\$
2.1a	Implement a principal cycle network for Kingborough and Kingston including cycle parking facilities	Council	Cycling South	Short – Medium	\$
3.1b	Develop partnerships with community groups for implementation of bus stop infrastructure	Council	Community groups	Short - Medium	\$
2.1d	Develop a Walking Plan	Council		Short - Medium	\$
3.2b	Prepare a plan for bus services to cover the growth areas	DIER	Metro, Council	Short - Medium	\$
1.3b	Support growth (including provision in the Planning Scheme): <ul style="list-style-type: none"> <li>in Kingston/ Blackmans Bay</li> <li>through higher density development close to activity centres</li> <li>in Kingston Margate and Taroona commercial centres</li> <li>with basic services for residential areas</li> <li>within urban growth boundaries</li> </ul>	Council	STCA	Short - Long	\$
4.2h	Manage road space to support protection of the principal cycling, walking and public transport routes	Council	DIER	Short - Long	\$
3.3e	Support regular consultation with young people on Metro services	Metro	Council	Short - Long	\$

### 7.3 Locally significant promotion/education projects

	Action	Responsible Authority	Supported by	Priority/ timing	Cost
5.1a	Publish a copy of the KITS on Council's website	Council		Short	\$
5.1b	Set up a sustainable transport webpage on Council's website	Council		Short	\$
2.2a	Support walking/cycling promotion events	Cycling South	Council	Short - Medium	\$
2.2b	Support and promote cycle training courses	Cycling South	Council	Short - Medium	\$
2.2d	Provide maps of the principal walking and cycling network on the council website	Council	Cycling South	Short - Medium	\$
5.1c	Support training for Council staff	Council	DIER, local councils	Short - Long	\$

## 7.4 Locally significant implementation projects and programs

	Action	Responsible Authority	Supported by	Priority/ timing	Cost
1.3c	Prioritise sustainable transport infrastructure improvements at key activity centres	Council	DIER	Short- Medium	\$\$
2.1c	Address gaps in cycle and walking access for schools and activity centres	Council	DIER	Short - Medium	\$\$
2.2c	Support an Active School Travel Program	Council	DIER, local councils	Short - Medium	\$\$
3.1c	Provide high quality bus stops at key activity centres	Council	DIER, Metro	Short – Medium	\$\$
2.1e	Continue implementation and maintenance of walking and cycling facilities, which includes Council's Tracks and Trails Program	Council	DIER	Short - Long	\$\$
3.3c	Develop a business case for community transport for Bruny Island,	Council	DIER, community	Medium	\$
4.2a	Implement improvements to Ferry Rd	Council	DIER	Medium	\$\$
4.2d	Implement connection of Spring Farm Road to Kingston View Drive	Council	DIER	Medium	\$\$
4.2b	Implement road improvements for Bruny Island	Council	DIER	Medium – Long	\$\$\$
4.2c	Implement road improvements for older areas of Kingston and Blackmans Bay	Council		Medium - Long	\$\$\$



**Figure 7.1 The Neck on Bruny Island**

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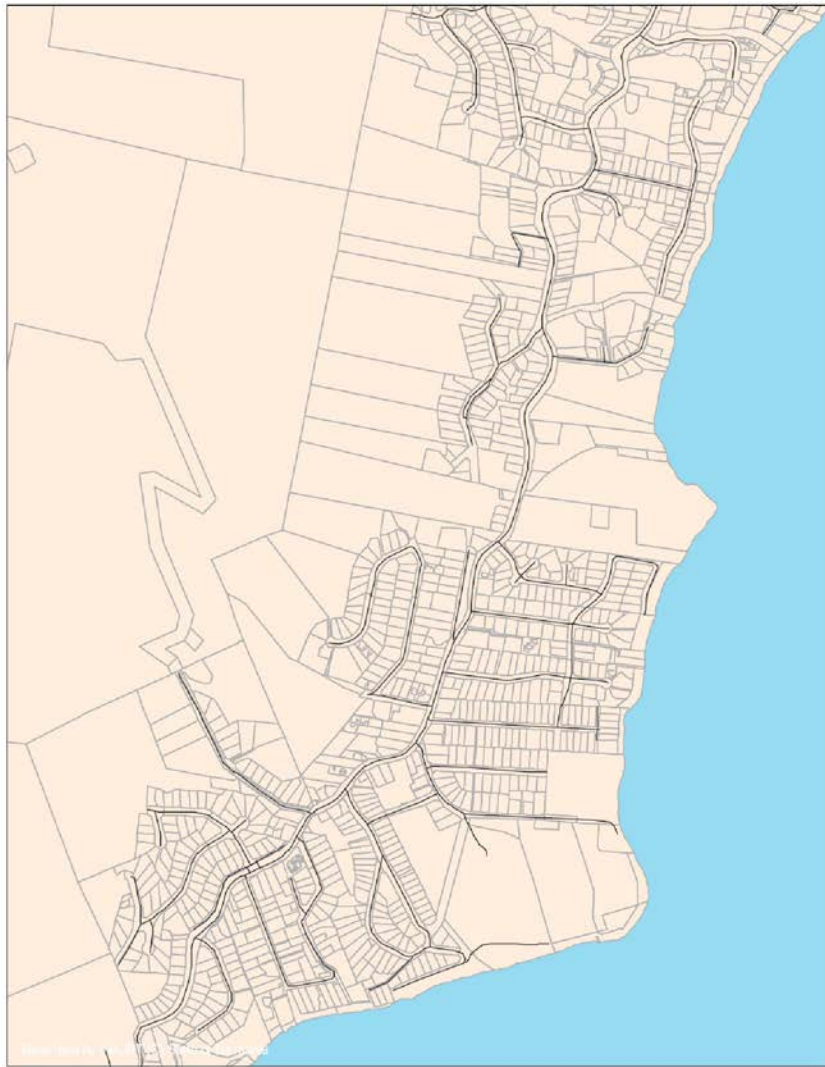


# APPENDIX

# A



MILK MAPS

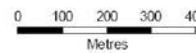


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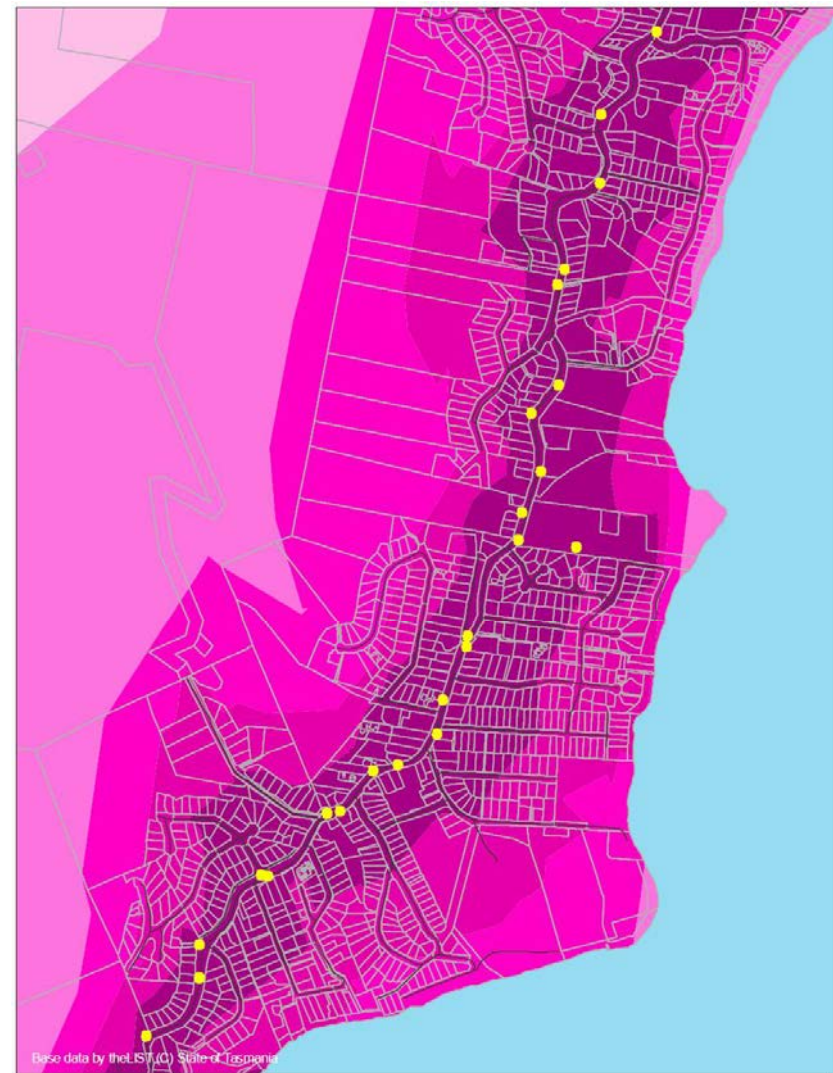
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- Roads
- Property boundaries
- Water

Distance
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500 m - 1000 m
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2500 m - 5000 m
Greater than 5000 m

Percent properties within distance	
Less than 250 m	0%
250 m - 500 m	0%
500 m - 1000 m	0%
1000 m - 2500 m	0%
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Greater than 5000 m	99%



Accessability Mapping  
Taroona - Corner stores

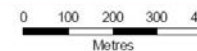


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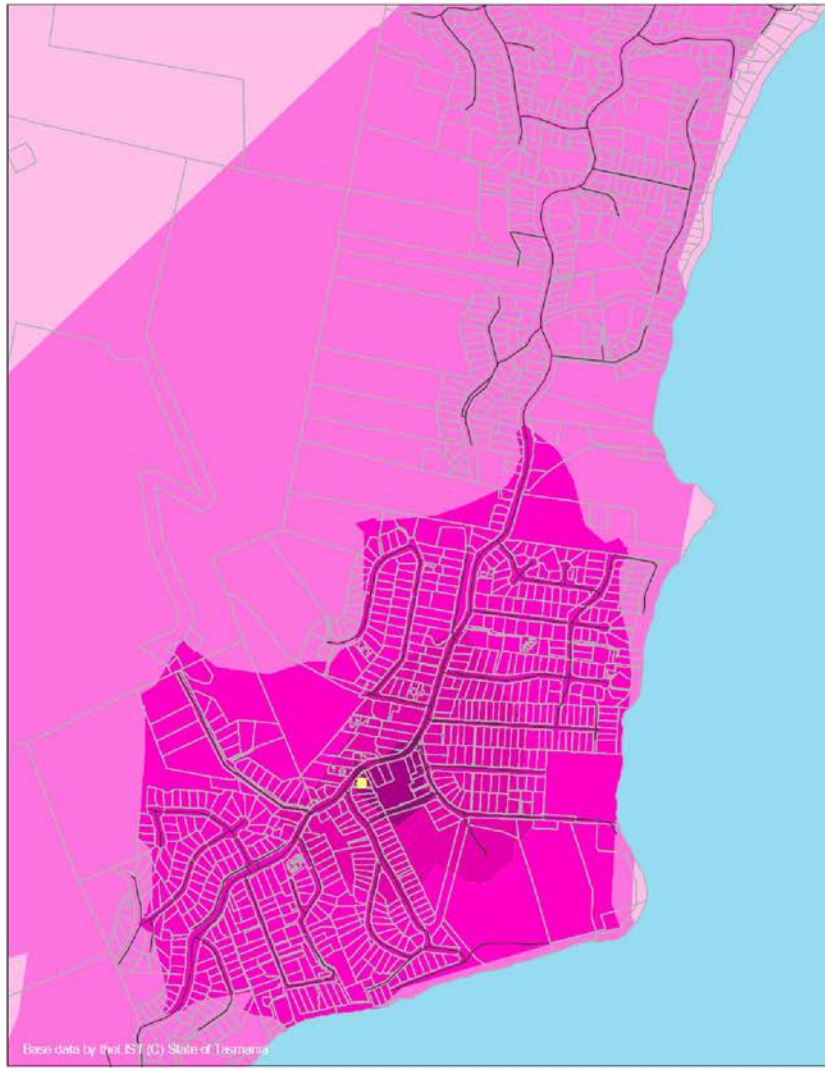
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Greater than 5000 m

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Accessability Mapping  
Taroona - Bus stops



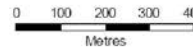


#### Legend

- Facility
- Roads
- Property boundaries
- Water

Distance
Less than 250 m
250 m - 500 m
500 m - 1000 m
1000 m - 2500 m
2500 m - 5000 m
Greater than 5000 m

Percent properties within distance	
Less than 250 m	2 %
250 m - 500 m	14 %
500 m - 1000 m	38 %
1000 m - 2500 m	44 %
2500 m - 5000 m	2 %
Greater than 5000 m	0 %



#### Accessibility Mapping Taroona - Doctors

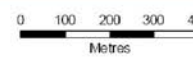


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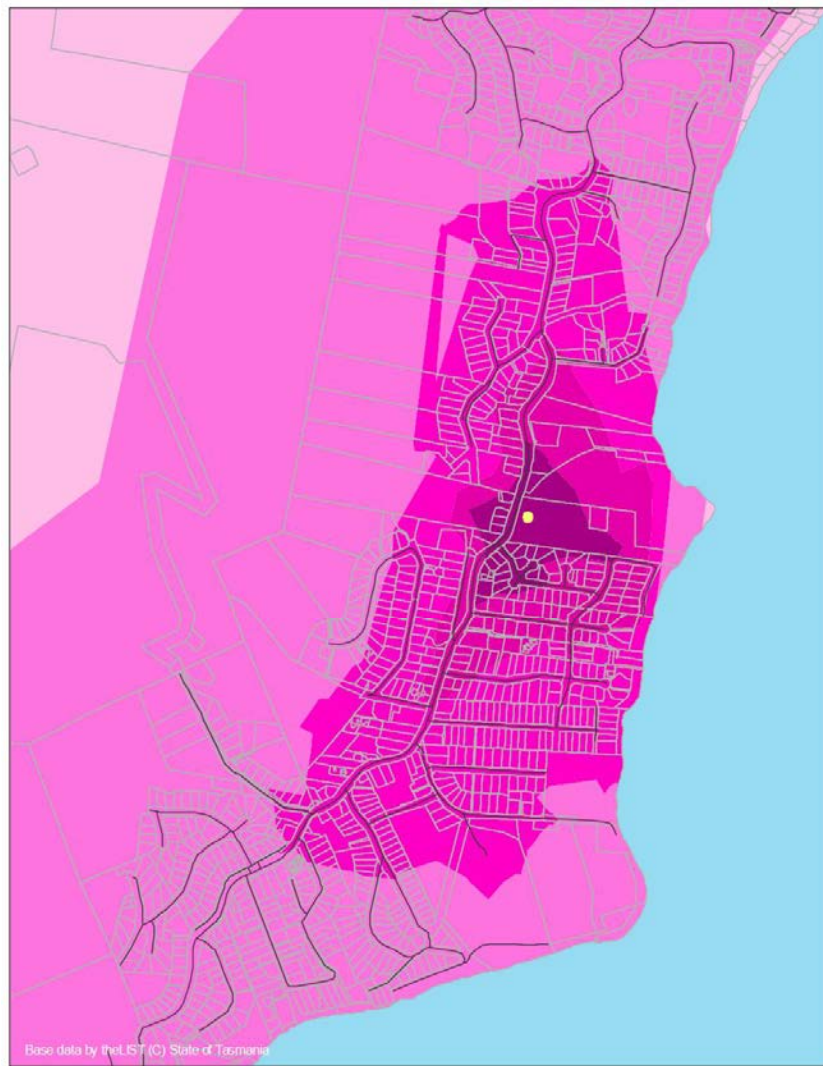
- Facility
- Roads
- Property boundaries
- Water

Distance
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2500 m - 5000 m
Greater than 5000 m

Percent properties within distance	
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Greater than 5000 m	98 %

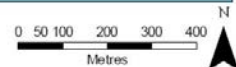


#### Accessibility Mapping Taroona - Pharmacies



#### Legend

<span style="color: yellow;">●</span> Facility	<b>Distance</b>	Percent properties within distance	
<span style="color: black;">—</span> Roads	<span style="background-color: #800080; color: black;"> </span> Less than 250 m	Less than 250 m	3 %
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<span style="background-color: #ADD8E6;"> </span> Water	<span style="background-color: #FF69B4; color: black;"> </span> 500 m - 1000 m	500 m - 1000 m	29 %
	<span style="background-color: #FFB6C1; color: black;"> </span> 1000 m - 2500 m	1000 m - 2500 m	59 %
	<span style="background-color: #FFDAB9; color: black;"> </span> 2500 m - 5000 m	2500 m - 5000 m	0 %
	<span style="background-color: #FFB6C1; color: black;"> </span> Greater than 5000 m	Greater than 5000 m	0 %

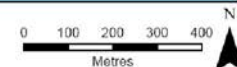


#### Accessibility Mapping Tarooma - Primary Schools



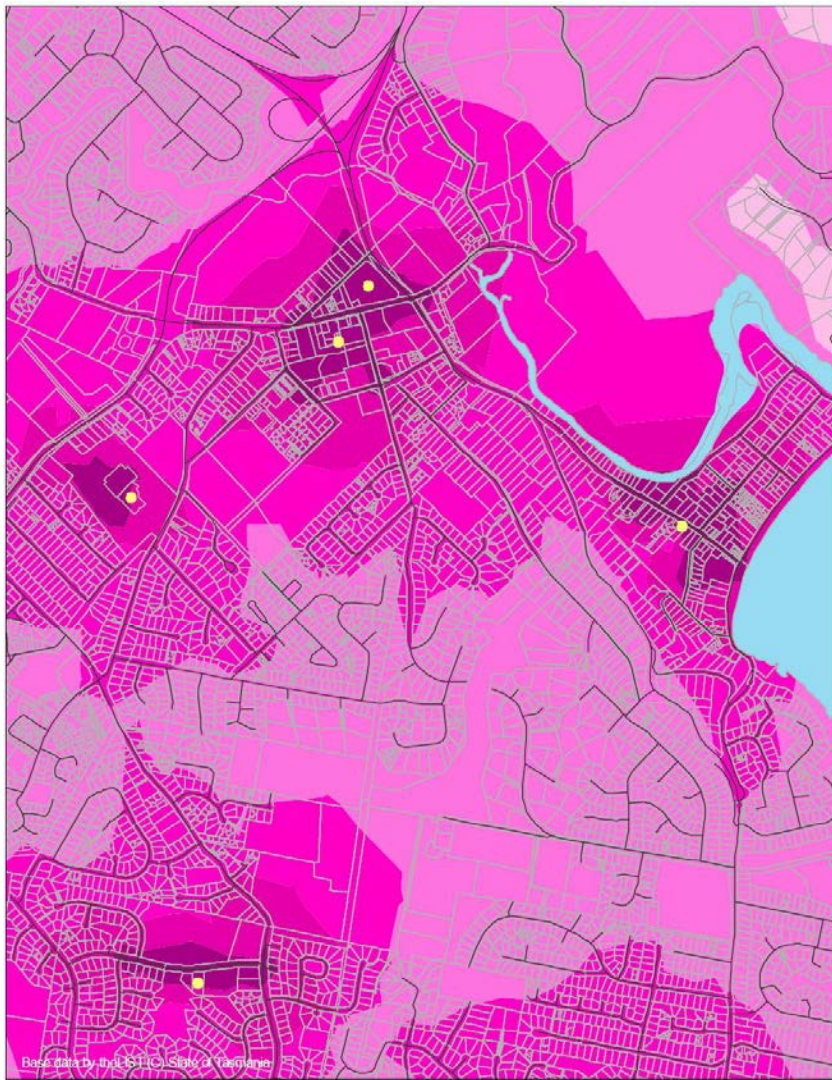
#### Legend

<span style="color: yellow;">●</span> Facility	<b>Distance</b>	Percent properties within distance	
<span style="color: black;">—</span> Roads	<span style="background-color: #800080; color: black;"> </span> Less than 250 m	Less than 250 m	0 %
<span style="border: 1px solid black;"> </span> Property boundaries	<span style="background-color: #FF00FF; color: black;"> </span> 250 m - 500 m	250 m - 500 m	0 %
<span style="background-color: #ADD8E6;"> </span> Water	<span style="background-color: #FF69B4; color: black;"> </span> 500 m - 1000 m	500 m - 1000 m	0 %
	<span style="background-color: #FFB6C1; color: black;"> </span> 1000 m - 2500 m	1000 m - 2500 m	0 %
	<span style="background-color: #FFDAB9; color: black;"> </span> 2500 m - 5000 m	2500 m - 5000 m	1 %
	<span style="background-color: #FFB6C1; color: black;"> </span> Greater than 5000 m	Greater than 5000 m	99 %



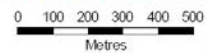
#### Accessibility Mapping Tarooma - Childcare



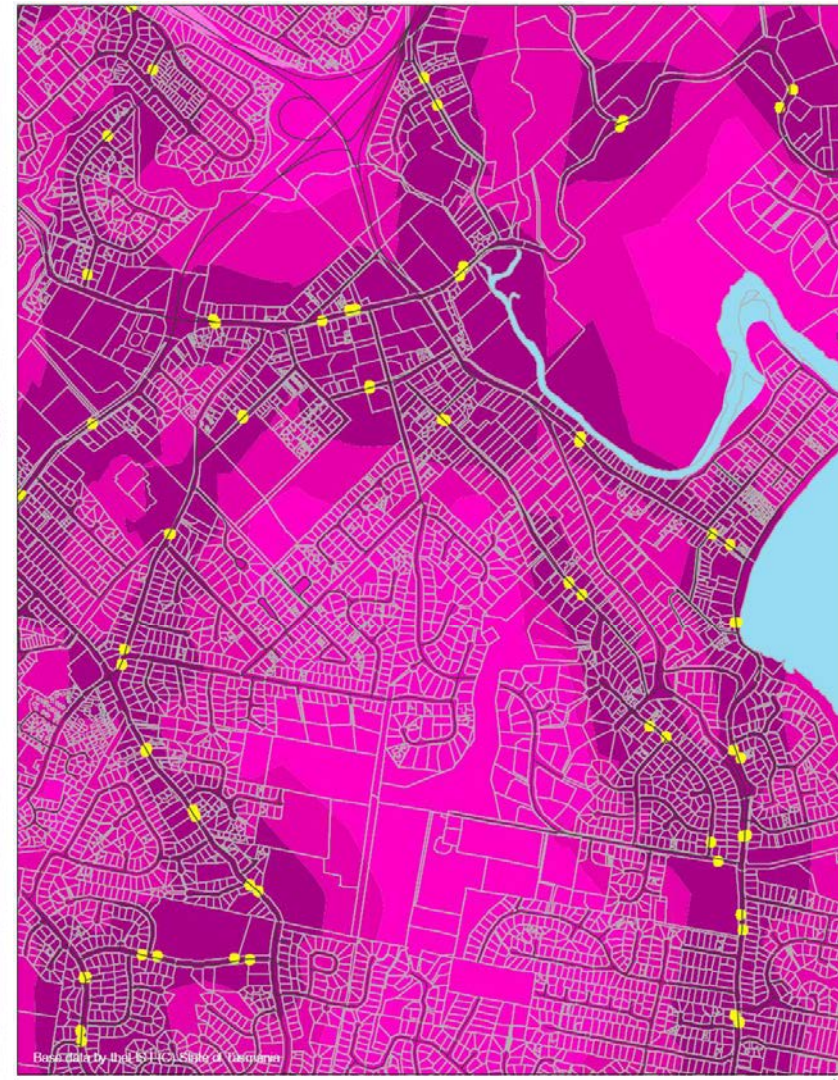


#### Legend

<span style="color: yellow;">●</span> Facility	<b>Distance</b>	
<span style="color: grey;">—</span> Roads	<span style="background-color: #800080; width: 15px; height: 10px; display: inline-block;"></span> Less than 250 m	Percent properties within distance
<span style="border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Property boundaries	<span style="background-color: #FF00FF; width: 15px; height: 10px; display: inline-block;"></span> 250 m - 500 m	Less than 250 m 3 %
<span style="background-color: #ADD8E6; width: 15px; height: 10px; display: inline-block;"></span> Water	<span style="background-color: #FF69B4; width: 15px; height: 10px; display: inline-block;"></span> 500 m - 1000 m	250 m - 500 m 12 %
	<span style="background-color: #FFB6C1; width: 15px; height: 10px; display: inline-block;"></span> 1000 m - 2500 m	500 m - 1000 m 28 %
	<span style="background-color: #FFDAB9; width: 15px; height: 10px; display: inline-block;"></span> 2500 m - 5000 m	1000 m - 2500 m 48 %
		2500 m - 5000 m 6 %
		Greater than 5000 m 1 %

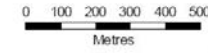


#### Accessibility Mapping Kingston - Corner stores



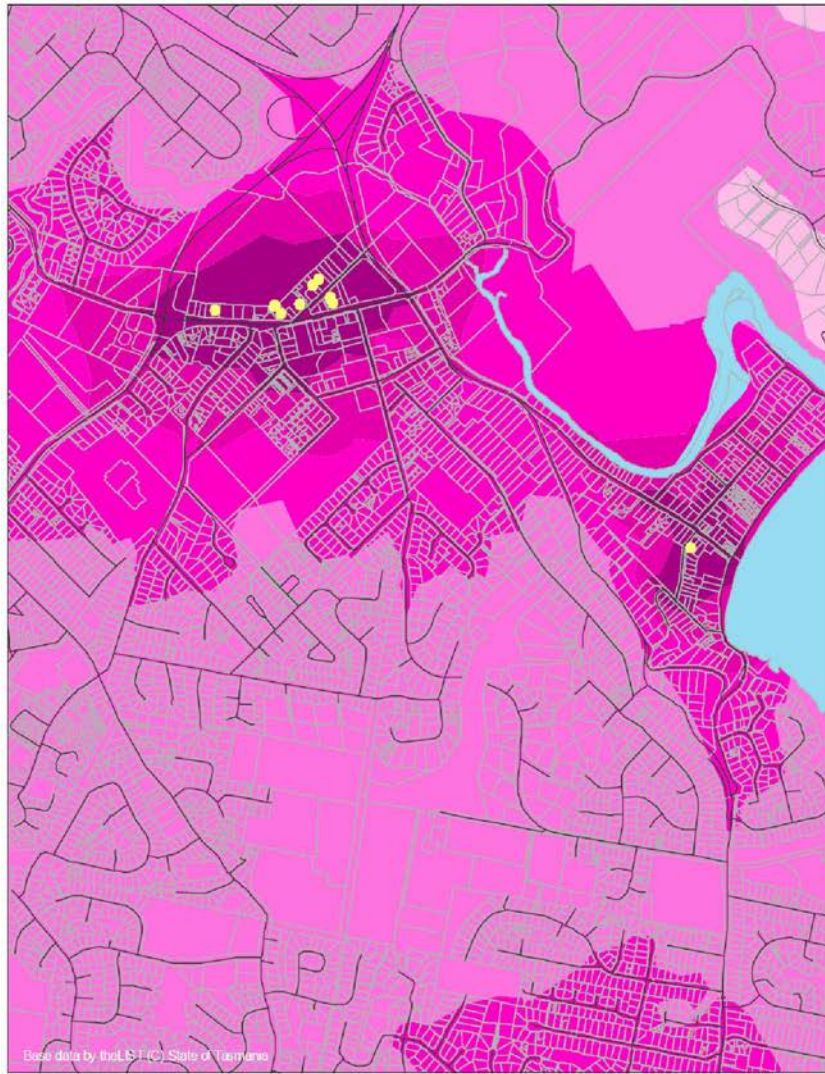
#### Legend

<span style="color: yellow;">●</span> Facility	<b>Distance</b>	
<span style="color: grey;">—</span> Roads	<span style="background-color: #800080; width: 15px; height: 10px; display: inline-block;"></span> Less than 250 m	Percent properties within distance
<span style="border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Property boundaries	<span style="background-color: #FF00FF; width: 15px; height: 10px; display: inline-block;"></span> 250 m - 500 m	Less than 250 m 44 %
<span style="background-color: #ADD8E6; width: 15px; height: 10px; display: inline-block;"></span> Water	<span style="background-color: #FF69B4; width: 15px; height: 10px; display: inline-block;"></span> 500 m - 1000 m	250 m - 500 m 35 %
	<span style="background-color: #FFB6C1; width: 15px; height: 10px; display: inline-block;"></span> 1000 m - 2500 m	500 m - 1000 m 16 %
	<span style="background-color: #FFDAB9; width: 15px; height: 10px; display: inline-block;"></span> 2500 m - 5000 m	1000 m - 2500 m 3 %
		2500 m - 5000 m 2 %
		Greater than 5000 m 0 %

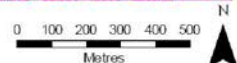


#### Accessibility Mapping Kingston - Bus stops

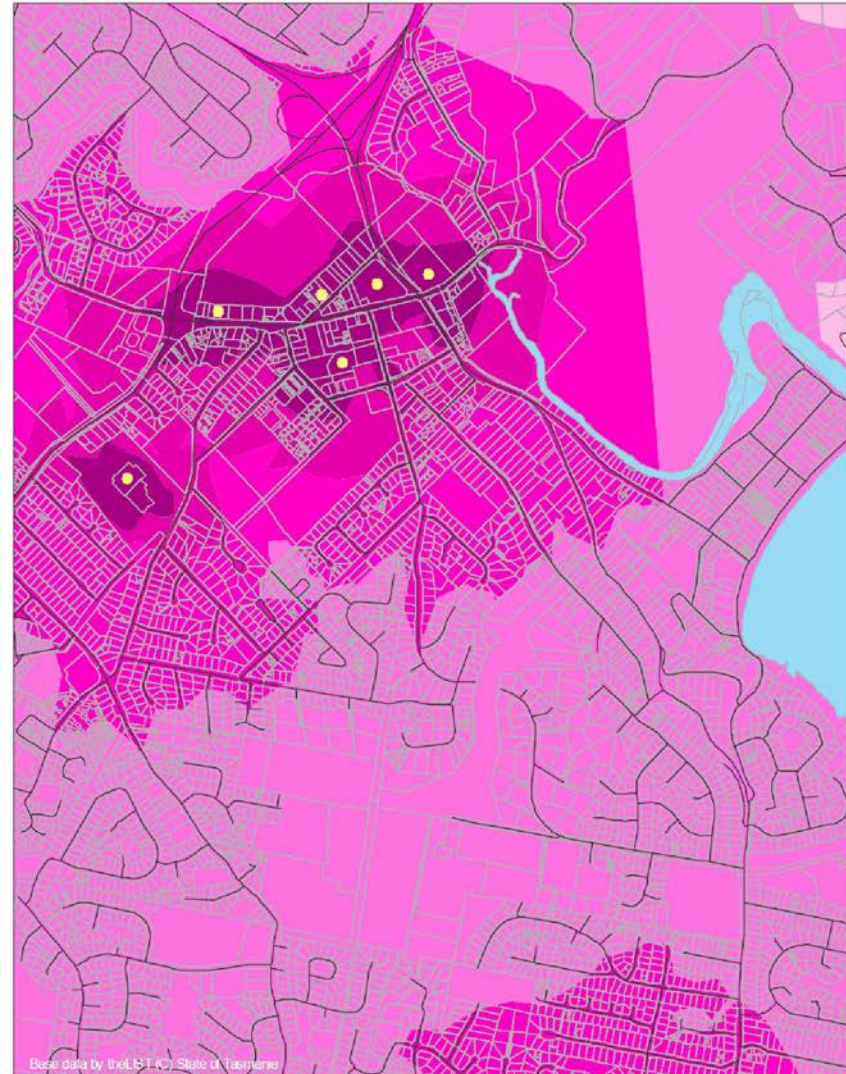




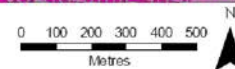
#### Legend



#### Accessibility Mapping Kingston - Doctors

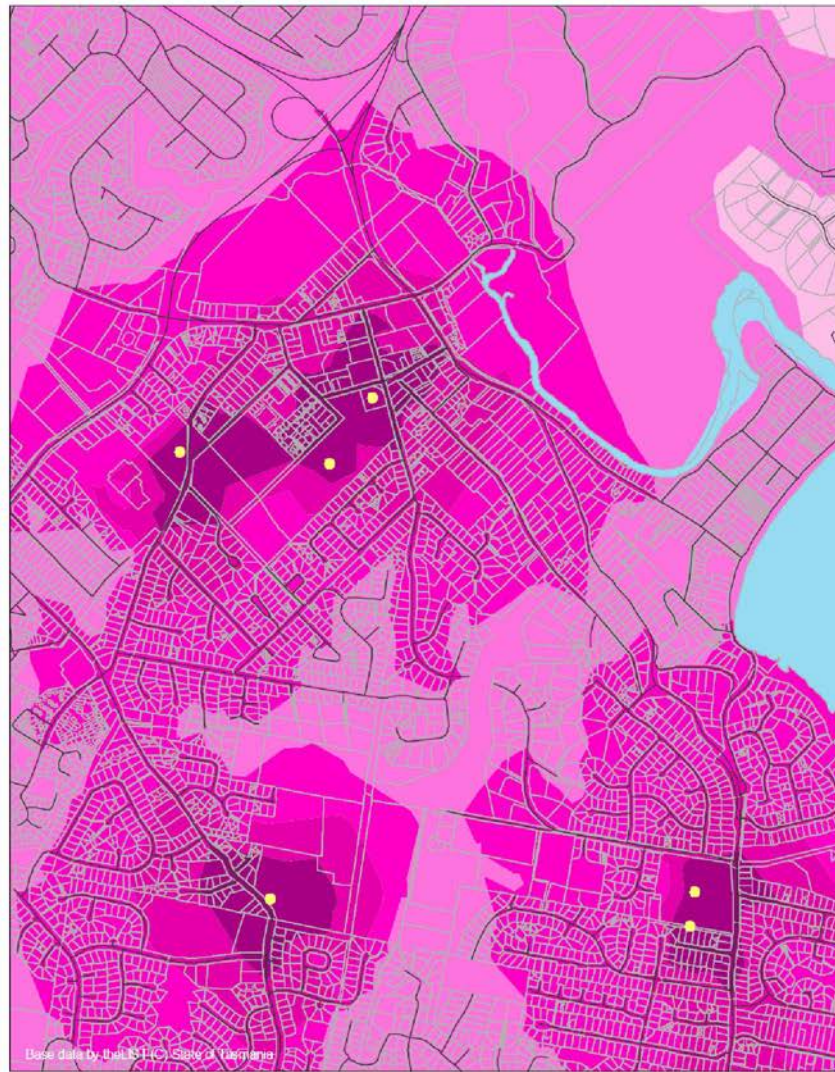


#### Legend



#### Accessibility Mapping Kingston - Pharmacies

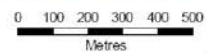




#### Legend

<span style="color: yellow;">●</span> Facility	<b>Distance</b>	
<span style="color: grey;">—</span> Roads	<span style="display: inline-block; width: 15px; height: 10px; background-color: #800080; border: 1px solid black;"></span> Less than 250 m	
<span style="border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Property boundaries	<span style="display: inline-block; width: 15px; height: 10px; background-color: #FF00FF; border: 1px solid black;"></span> 250 m - 500 m	
<span style="color: lightblue;">—</span> Water	<span style="display: inline-block; width: 15px; height: 10px; background-color: #FF69B4; border: 1px solid black;"></span> 500 m - 1000 m	
	<span style="display: inline-block; width: 15px; height: 10px; background-color: #FFB6C1; border: 1px solid black;"></span> 1000 m - 2500 m	
	<span style="display: inline-block; width: 15px; height: 10px; background-color: #FFDAB9; border: 1px solid black;"></span> 2500 m - 5000 m	

Percent properties within distance	
Less than 250 m	3 %
250 m - 500 m	11 %
500 m - 1000 m	36 %
1000 m - 2500 m	42 %
2500 m - 5000 m	8 %
Greater than 5000 m	1 %



#### Accessibility Mapping Kingston - Primary Schools



#### Legend

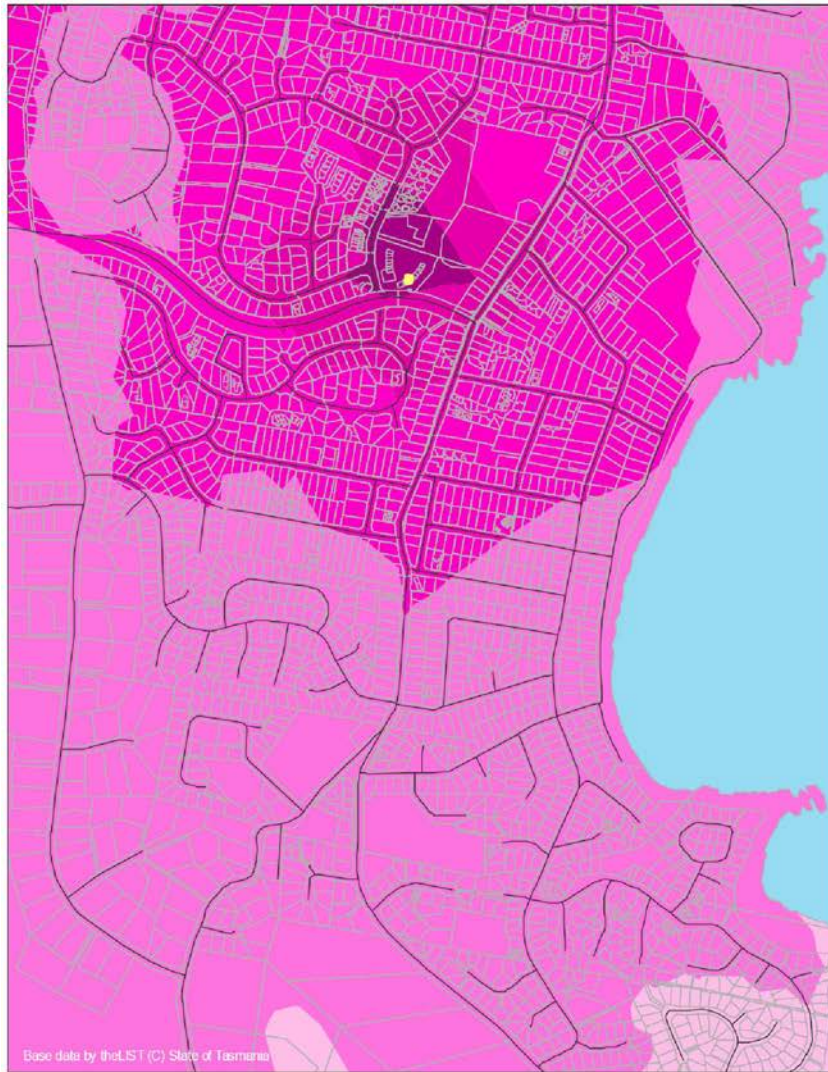
<span style="color: yellow;">●</span> Facility	<b>Distance</b>	
<span style="color: grey;">—</span> Roads	<span style="display: inline-block; width: 15px; height: 10px; background-color: #800080; border: 1px solid black;"></span> Less than 250 m	
<span style="border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Property boundaries	<span style="display: inline-block; width: 15px; height: 10px; background-color: #FF00FF; border: 1px solid black;"></span> 250 m - 500 m	
<span style="color: lightblue;">—</span> Water	<span style="display: inline-block; width: 15px; height: 10px; background-color: #FF69B4; border: 1px solid black;"></span> 500 m - 1000 m	
	<span style="display: inline-block; width: 15px; height: 10px; background-color: #FFB6C1; border: 1px solid black;"></span> 1000 m - 2500 m	
	<span style="display: inline-block; width: 15px; height: 10px; background-color: #FFDAB9; border: 1px solid black;"></span> 2500 m - 5000 m	

Percent properties within distance	
Less than 250 m	4 %
250 m - 500 m	16 %
500 m - 1000 m	32 %
1000 m - 2500 m	36 %
2500 m - 5000 m	11 %
Greater than 5000 m	1 %



#### Accessibility Mapping Kingston - Childcare



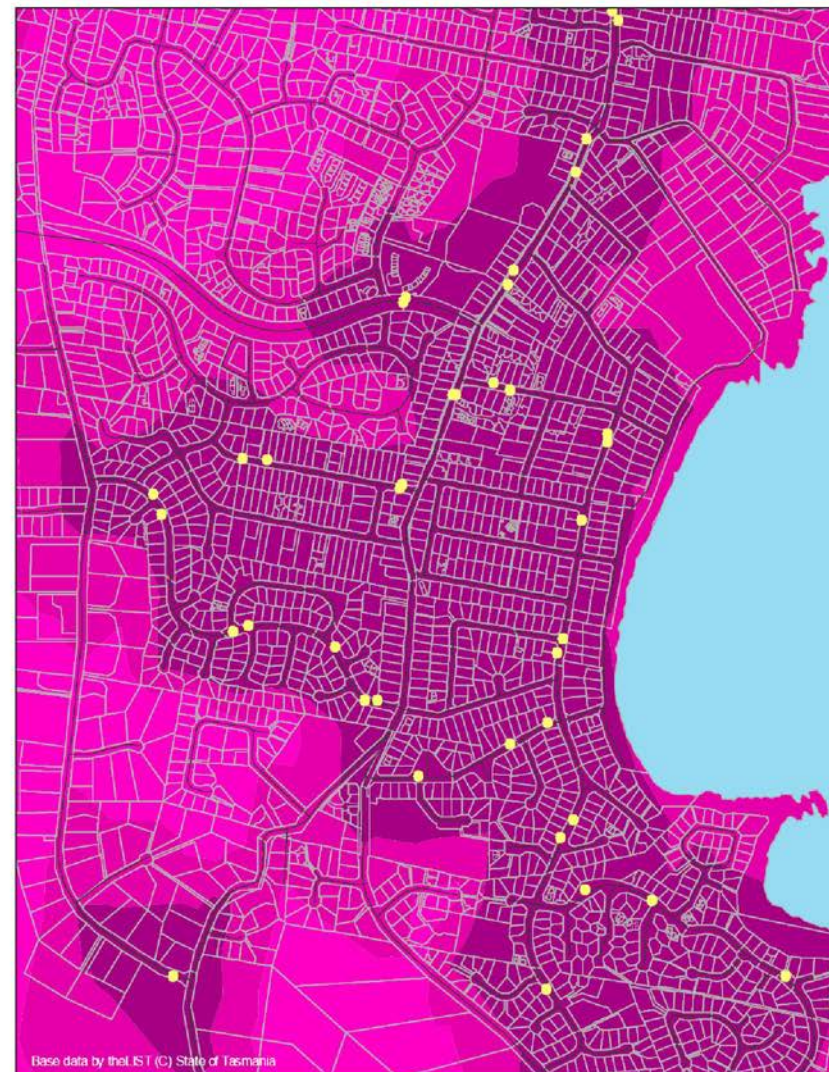


#### Legend

<span style="color: yellow;">●</span> Facility			
<span style="color: black;">—</span> Roads			
<span style="border: 1px solid black;"> </span> Property boundaries			
<span style="color: lightblue;"> </span> Water			
<b>Distance</b>			
<span style="color: darkpurple;"> </span> Less than 250 m	Less than 250 m	1%	
<span style="color: purple;"> </span> 250 m - 500 m	250 m - 500 m	7%	
<span style="color: magenta;"> </span> 500 m - 1000 m	500 m - 1000 m	35%	
<span style="color: pink;"> </span> 1000 m - 2500 m	1000 m - 2500 m	52%	
<span style="color: lightpink;"> </span> 2500 m - 5000 m	2500 m - 5000 m	5%	
<span style="color: verylightpink;"> </span> Greater than 5000 m	Greater than 5000 m	0%	

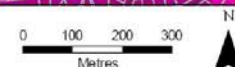


#### Accessibility Mapping Blackmans Bay - Corner stores



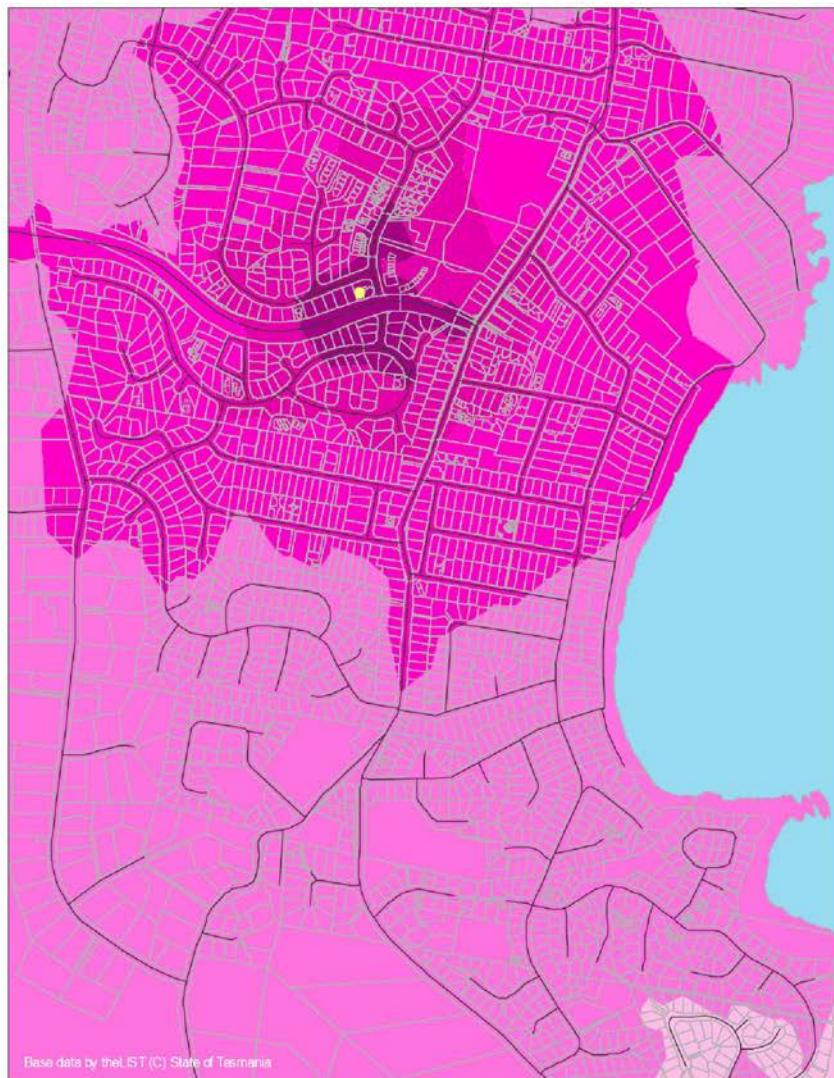
#### Legend

<span style="color: yellow;">●</span> Facility			
<span style="color: black;">—</span> Roads			
<span style="border: 1px solid black;"> </span> Property boundaries			
<span style="color: lightblue;"> </span> Water			
<b>Distance</b>			
<span style="color: darkpurple;"> </span> Less than 250 m	Less than 250 m	58%	
<span style="color: purple;"> </span> 250 m - 500 m	250 m - 500 m	24%	
<span style="color: magenta;"> </span> 500 m - 1000 m	500 m - 1000 m	17%	
<span style="color: pink;"> </span> 1000 m - 2500 m	1000 m - 2500 m	1%	
<span style="color: lightpink;"> </span> 2500 m - 5000 m	2500 m - 5000 m	0%	
<span style="color: verylightpink;"> </span> Greater than 5000 m	Greater than 5000 m	0%	



#### Accessibility Mapping Blackmans Bay - Bus stops

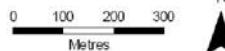




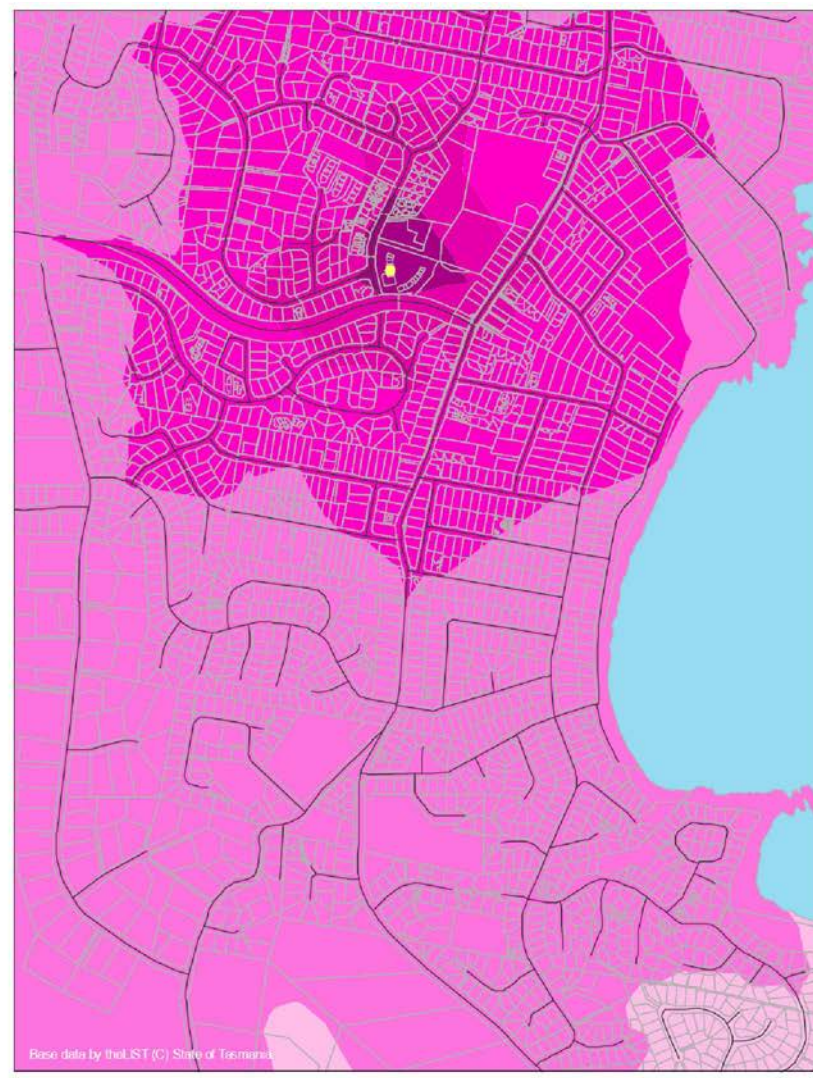
#### Legend

- Facility
- Roads
- Property boundaries
- Water

Distance	Percent properties within distance
Less than 250 m	Less than 250 m 2 %
250 m - 500 m	250 m - 500 m 11 %
500 m - 1000 m	500 m - 1000 m 36 %
1000 m - 2500 m	1000 m - 2500 m 49 %
2500 m - 5000 m	2500 m - 5000 m 3 %
Greater than 5000 m	Greater than 5000 m 0 %



#### Accessibility Mapping Blackmans Bay - Doctors



#### Legend

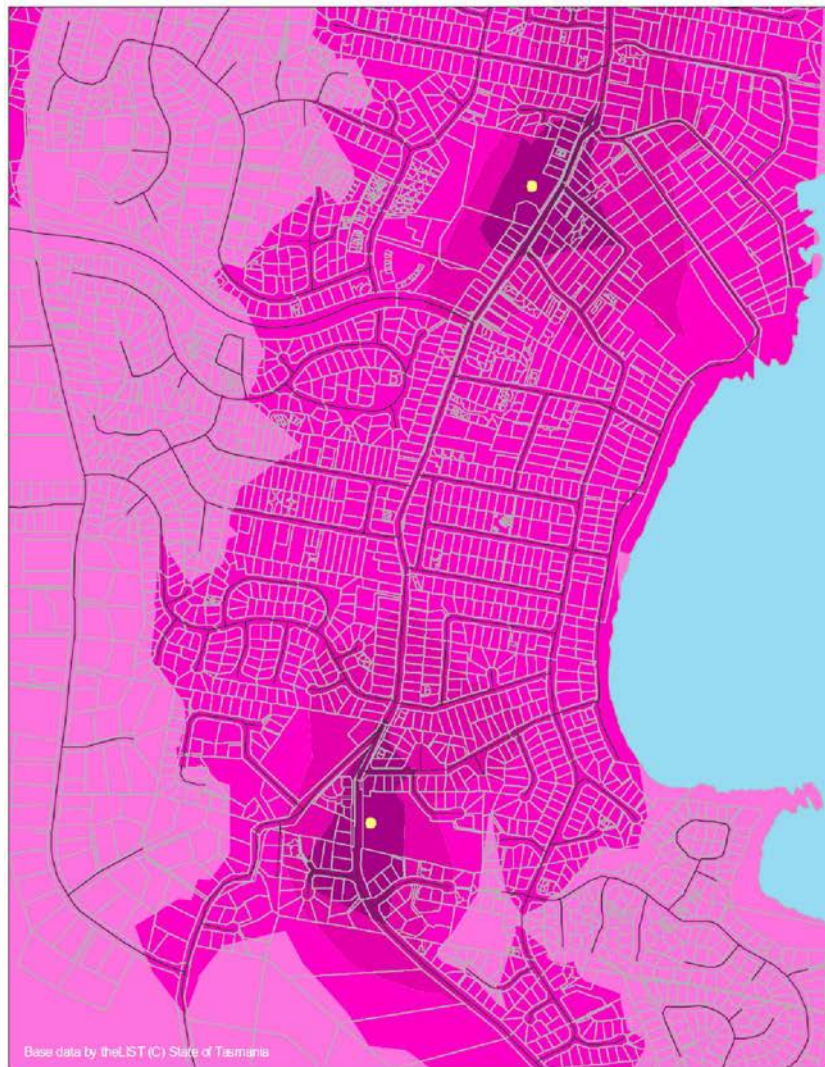
- Facility
- Roads
- Property boundaries
- Water

Distance	Percent properties within distance
Less than 250 m	Less than 250 m 1 %
250 m - 500 m	250 m - 500 m 7 %
500 m - 1000 m	500 m - 1000 m 34 %
1000 m - 2500 m	1000 m - 2500 m 54 %
2500 m - 5000 m	2500 m - 5000 m 5 %
Greater than 5000 m	Greater than 5000 m 0 %



#### Accessibility Mapping Blackmans Bay - Pharmacies





#### Legend

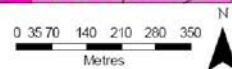
- Facility
- Roads
- Property boundaries
- Water

#### Distance

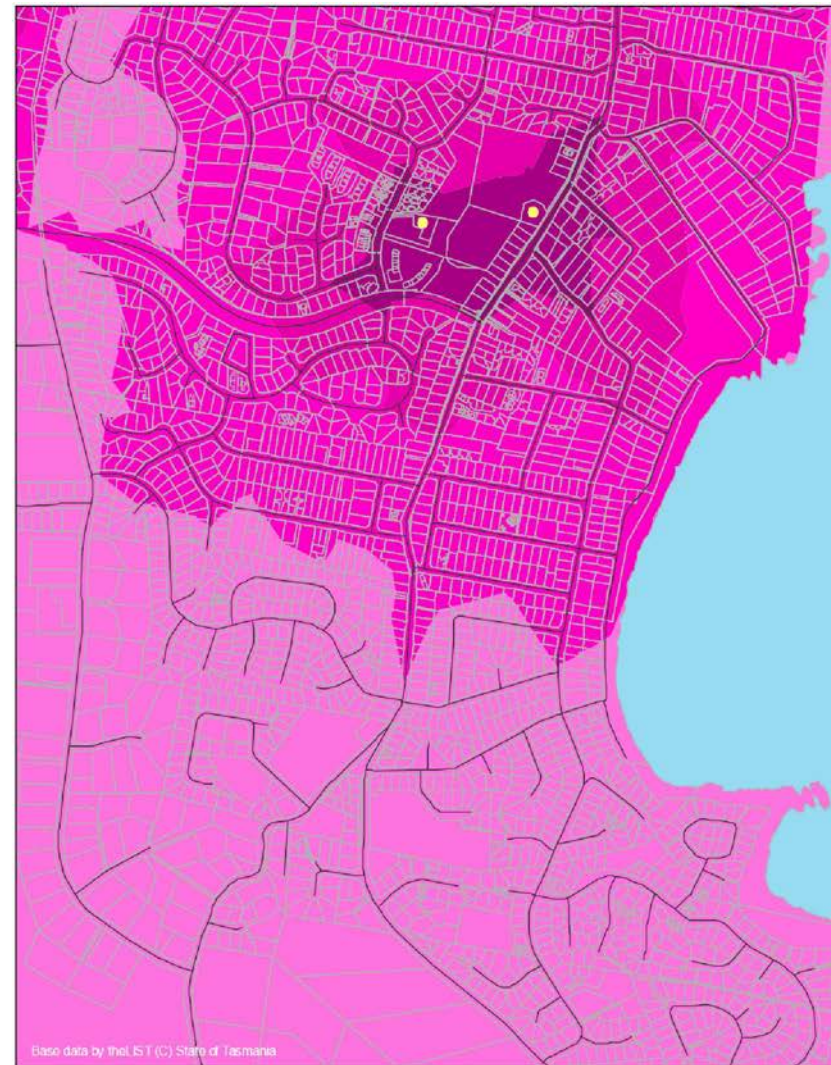
- Less than 250 m
- 250 m - 500 m
- 500 m - 1000 m
- 1000 m - 2500 m
- 2500 m - 5000 m

#### Percent properties within distance

- Less than 250 m 6 %
- 250 m - 500 m 14 %
- 500 m - 1000 m 50 %
- 1000 m - 2500 m 30 %
- 2500 m - 5000 m 0 %
- Greater than 5000 m 0 %



#### Accessibility Mapping Blackmans Bay - Primary Schools



#### Legend

- Facility
- Roads
- Water

#### Distance

- Less than 250 m
- 250 m - 500 m
- 500 m - 1000 m
- 1000 m - 2500 m
- 2500 m - 5000 m

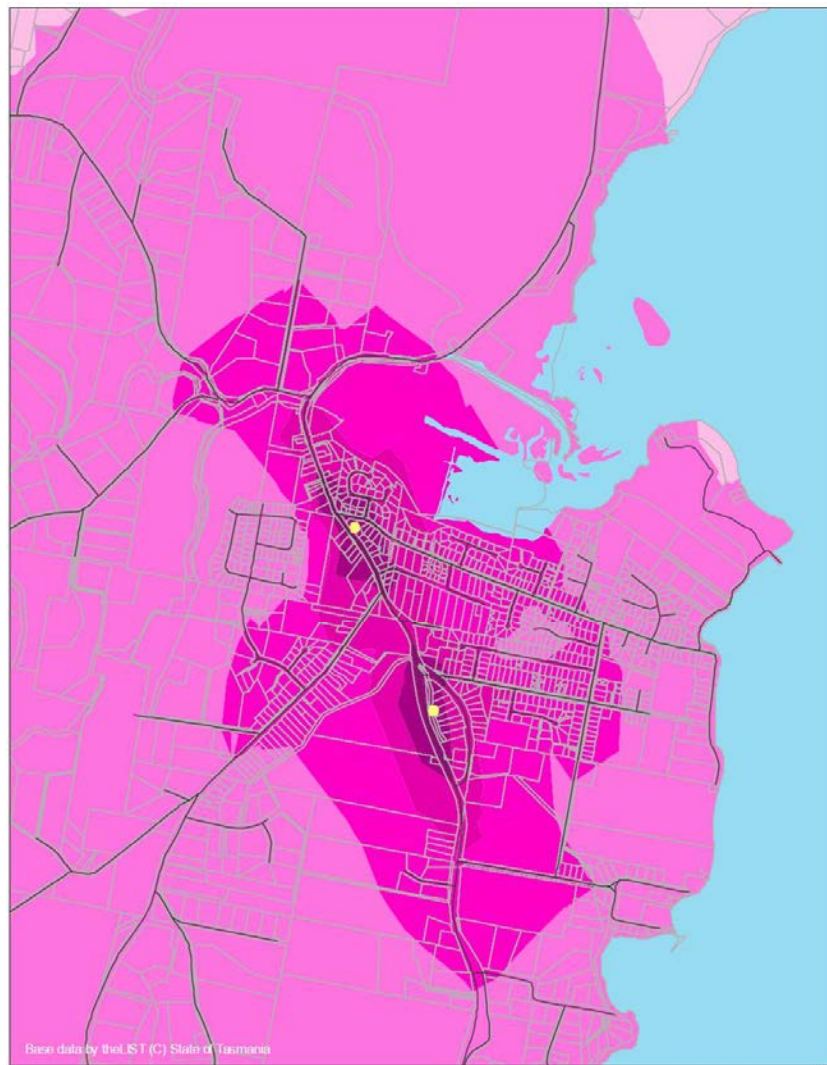
#### Percent properties within distance

- Less than 250 m 4 %
- 250 m - 500 m 14 %
- 500 m - 1000 m 30 %
- 1000 m - 2500 m 41 %
- 2500 m - 5000 m 2 %
- Greater than 5000 m 0 %

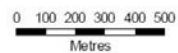
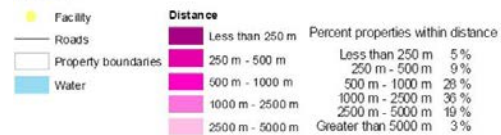


#### Accessibility Mapping Blackmans Bay - Childcare

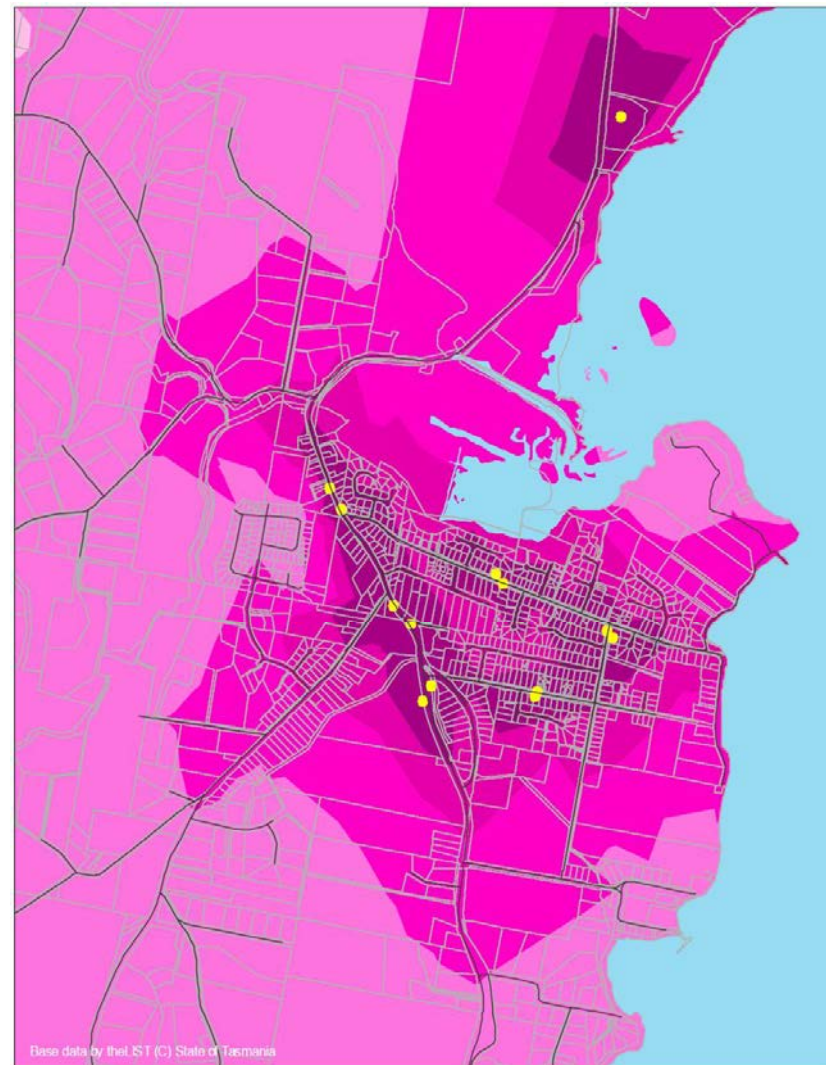




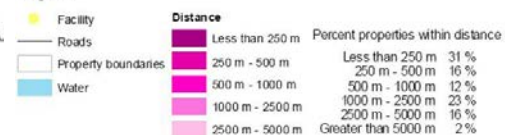
#### Legend



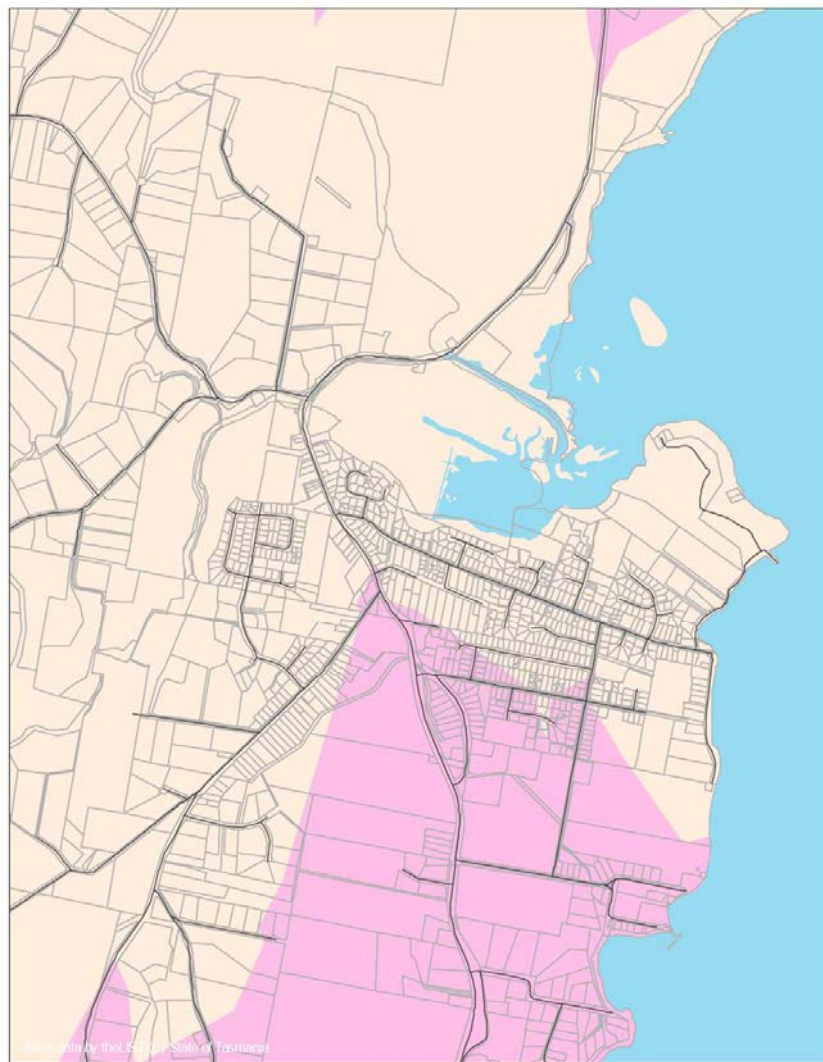
**Accessibility Mapping  
Margate - Corner stores**



#### Legend



**Accessibility Mapping  
Margate - Bus stops**



#### Legend

- Facility
- Roads
- Property boundaries
- Water

Distance	Percent properties within distance
Less than 250 m	Less than 250 m 0%
250 m - 500 m	250 m - 500 m 0%
500 m - 1000 m	500 m - 1000 m 0%
1000 m - 2500 m	1000 m - 2500 m 0%
2500 m - 5000 m	2500 m - 5000 m 22%
Greater than 5000 m	Greater than 5000 m 78%



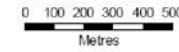
#### Accessibility Mapping Margate - Doctors



#### Legend

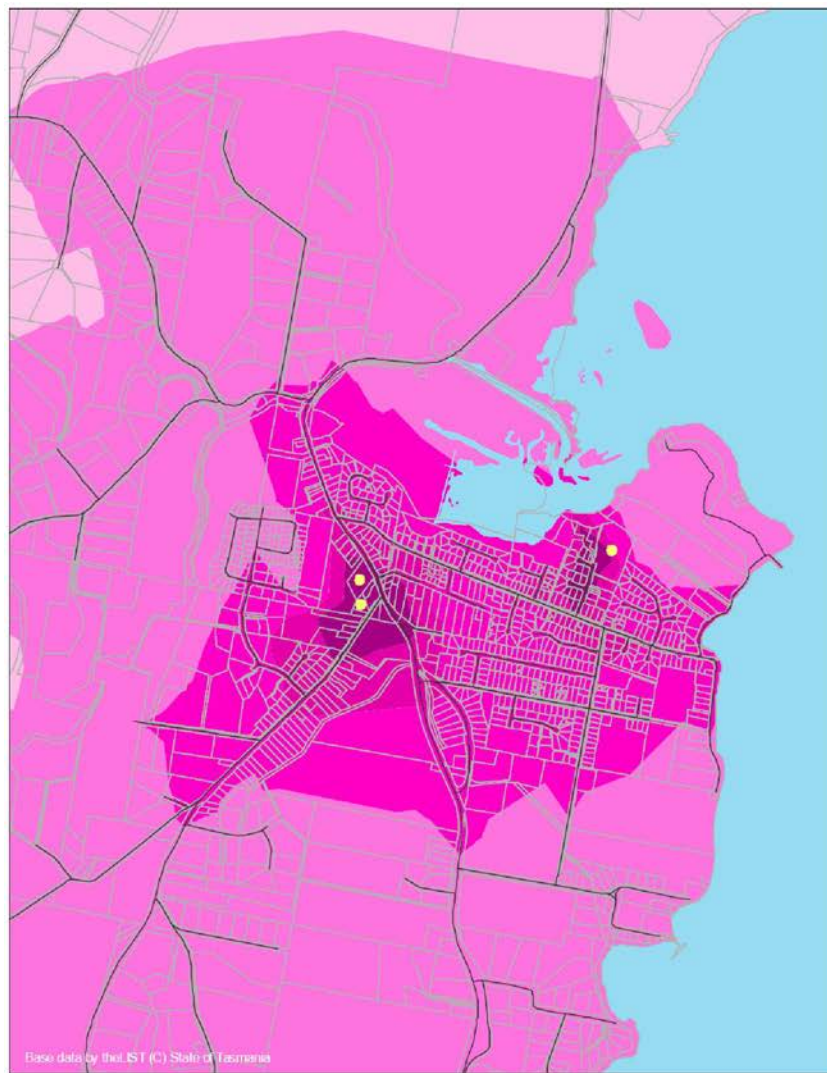
- Facility
- Roads
- Property boundaries
- Water

Distance	Percent properties within distance
Less than 250 m	Less than 250 m 0%
250 m - 500 m	250 m - 500 m 0%
500 m - 1000 m	500 m - 1000 m 0%
1000 m - 2500 m	1000 m - 2500 m 0%
2500 m - 5000 m	2500 m - 5000 m 3%
Greater than 5000 m	Greater than 5000 m 97%



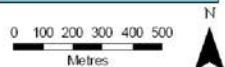
#### Accessibility Mapping Margate - Pharmacies



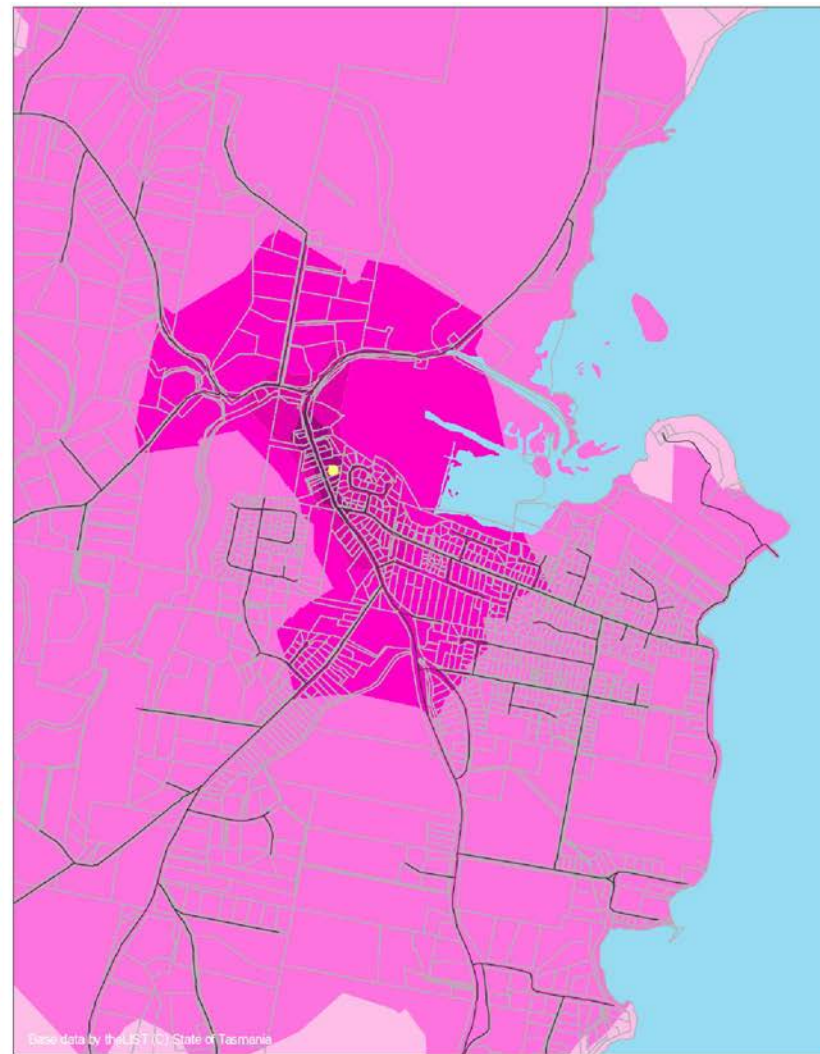


#### Legend

<span style="color: yellow;">●</span> Facility		
<span style="color: black;">—</span> Roads		
<span style="color: black;">—</span> Property boundaries		
<span style="color: lightblue;">—</span> Water		
<b>Distance</b>		
<span style="color: darkpurple;">■</span> Less than 250 m	Percent properties within distance	
<span style="color: purple;">■</span> 250 m - 500 m	Less than 250 m	4 %
<span style="color: magenta;">■</span> 500 m - 1000 m	250 m - 500 m	14 %
<span style="color: pink;">■</span> 1000 m - 2500 m	500 m - 1000 m	35 %
<span style="color: lightpink;">■</span> 2500 m - 5000 m	1000 m - 2500 m	23 %
	2500 m - 5000 m	19 %
	Greater than 5000 m	5 %



#### Accessibility Mapping Margate - Primary Schools



#### Legend

<span style="color: yellow;">●</span> Facility		
<span style="color: black;">—</span> Roads		
<span style="color: black;">—</span> Property boundaries		
<span style="color: lightblue;">—</span> Water		
<b>Distance</b>		
<span style="color: darkpurple;">■</span> Less than 250 m	Percent properties within distance	
<span style="color: purple;">■</span> 250 m - 500 m	Less than 250 m	1 %
<span style="color: magenta;">■</span> 500 m - 1000 m	250 m - 500 m	6 %
<span style="color: pink;">■</span> 1000 m - 2500 m	500 m - 1000 m	18 %
<span style="color: lightpink;">■</span> 2500 m - 5000 m	1000 m - 2500 m	56 %
	2500 m - 5000 m	19 %
	Greater than 5000 m	3 %

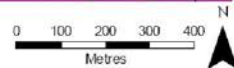


#### Accessibility Mapping Margate - Childcare



#### Legend

Facility	Distance	Percent properties within distance
Roads	Less than 250 m	Less than 250 m 10 %
Property boundaries	250 m - 500 m	250 m - 500 m 31 %
Water	500 m - 1000 m	500 m - 1000 m 32 %
	1000 m - 2500 m	1000 m - 2500 m 16 %
	2500 m - 5000 m	2500 m - 5000 m 9 %
	Greater than 5000 m	Greater than 5000 m 2 %

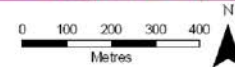


#### Accessibility Mapping Snug - Corner stores



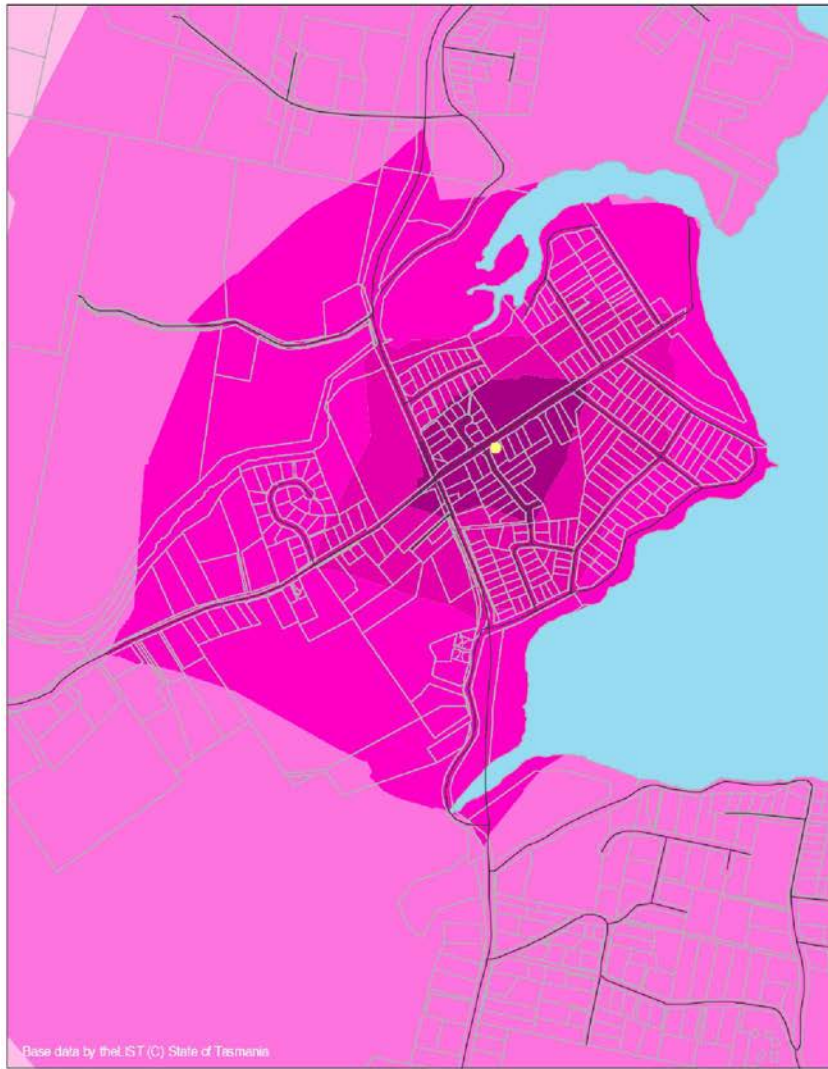
#### Legend

Facility	Distance	Percent properties within distance
Roads	Less than 250 m	Less than 250 m 42 %
Property boundaries	250 m - 500 m	250 m - 500 m 24 %
Water	500 m - 1000 m	500 m - 1000 m 17 %
	1000 m - 2500 m	1000 m - 2500 m 8 %
	2500 m - 5000 m	2500 m - 5000 m 8 %
	Greater than 5000 m	Greater than 5000 m 2 %



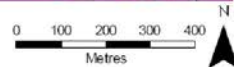
#### Accessibility Mapping Snug - Bus stops





#### Legend

● Facility		
— Roads		
— Property boundaries		
Water		
Distance		
Less than 250 m	Percent properties within distance	
250 m - 500 m	Less than 250 m	9 %
500 m - 1000 m	250 m - 500 m	37 %
1000 m - 2500 m	500 m - 1000 m	26 %
2500 m - 5000 m	1000 m - 2500 m	17 %
Greater than 5000 m	2500 m - 5000 m	9 %
	Greater than 5000 m	2 %

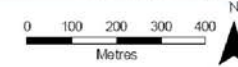


#### Accessibility Mapping Snug - Doctors



#### Legend

● Facility		
— Roads		
— Property boundaries		
Water		
Distance		
Less than 250 m	Percent properties within distance	
250 m - 500 m	Less than 250 m	0 %
500 m - 1000 m	250 m - 500 m	0 %
1000 m - 2500 m	500 m - 1000 m	0 %
2500 m - 5000 m	1000 m - 2500 m	0 %
Greater than 5000 m	2500 m - 5000 m	0 %
	Greater than 5000 m	100 %



#### Accessibility Mapping Snug - Pharmacies



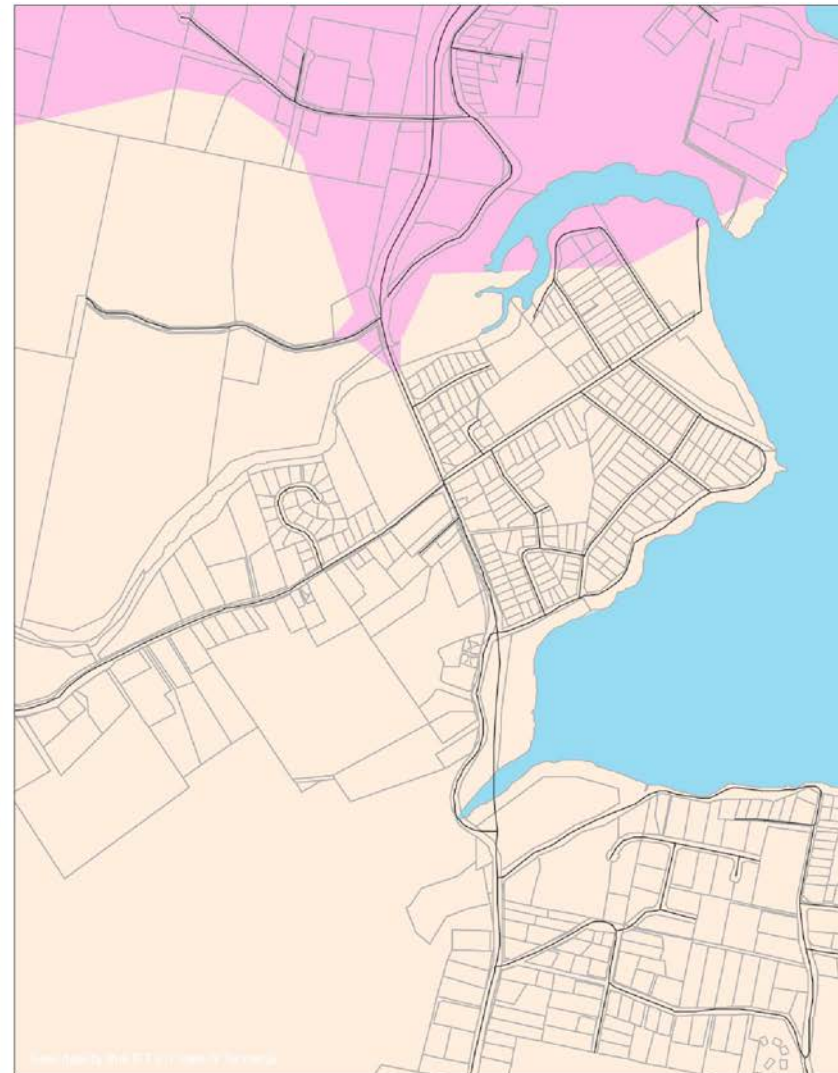


#### Legend

<span style="color: yellow;">●</span> Facility		
<span style="color: black;">—</span> Roads		
<span style="color: black;">—</span> Property boundaries		
<span style="color: blue;">—</span> Water		
<b>Distance</b>		
<span style="color: magenta;">■</span> Less than 250 m	Percent properties within distance	
<span style="color: magenta;">■</span> 250 m - 500 m	Less than 250 m	3 %
<span style="color: magenta;">■</span> 500 m - 1000 m	250 m - 500 m	18 %
<span style="color: magenta;">■</span> 1000 m - 2500 m	500 m - 1000 m	53 %
<span style="color: magenta;">■</span> 2500 m - 5000 m	1000 m - 2500 m	16 %
<span style="color: magenta;">■</span> Greater than 5000 m	2500 m - 5000 m	9 %
	Greater than 5000 m	2 %

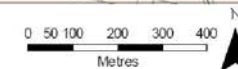


#### Accessibility Mapping Snug - Primary Schools



#### Legend

<span style="color: yellow;">●</span> Facility		
<span style="color: black;">—</span> Roads		
<span style="color: black;">—</span> Property boundaries		
<span style="color: blue;">—</span> Water		
<b>Distance</b>		
<span style="color: magenta;">■</span> Less than 250 m	Percent properties within distance	
<span style="color: magenta;">■</span> 250 m - 500 m	Less than 250 m	0 %
<span style="color: magenta;">■</span> 500 m - 1000 m	250 m - 500 m	0 %
<span style="color: magenta;">■</span> 1000 m - 2500 m	500 m - 1000 m	0 %
<span style="color: magenta;">■</span> 2500 m - 5000 m	1000 m - 2500 m	0 %
<span style="color: magenta;">■</span> Greater than 5000 m	2500 m - 5000 m	18 %
	Greater than 5000 m	84 %



#### Accessibility Mapping Snug - Child care

APPENDIX

# B



DECISION MAKING FRAMEWORK

**Example Objectives Impact Table – assessment of strategic fit**

Strategic objective	Impact	Qualitative description	Quantitative* description	Assessment
A reduced use/dependence on private motor vehicles through the encouragement of other forms of access and transport.				
An increased use of public transport that is convenient, accessible, safe and clean.				
An attractive and user friendly network of footpaths and trails for both pedestrians and cyclists.				
A community which is demonstrating increased use of park & walk and park & ride and car pooling opportunities.				
Efficient transport facilities servicing Bruny Island.				

\* where quantitative data available

Assessment	Description
Major negative	Long term and possibly irreversible negative impacts requiring scheme to be dropped (with documentation to justify) or redesigned
Moderate negative	Negative impact – consider mitigation of impacts
Minor negative	Small negative impact without serious detriment - consider mitigation and (if not possible) offset from other impacts
Neutral	No impact – consider scheme further where other objectives are supported
Minor positive	Little improvement - consider scheme based on cost/capacity to build on improvements/localised impact/support for other objectives
Moderate positive	Positive impact – advance scheme for further analysis
Major positive	Substantial and long term improvements – advance scheme for further analysis

**Example Modified Appraisal Summary Table**

Initiative					
Aim/issue addressed					
Base case					
Other options					
Strategic targets					
	Impacts	Qualitative	Quantitative	Rating	Confidence
	Capital cost				
	Maintenance cost				
	Operating cost				
Economic					
	Journey time				
	Reliability				
	Supporting local businesses/employment				
	Transport infrastructure/travel demand management				
Social					
	General accessibility				
	Social inclusion (mobility impaired, young, old, disadvantaged)				
	Convenient Sustainable transport options				
	Crashes/Accidents				
	Public security				
Environmental					
	Sustainable travel behaviour change/reduced car use				
	Greenhouse				
	Noise				
	Local air quality				
	Biodiversity/Heritage/Water				
Benefit/Cost Analysis Result					

Rating	Score*
Major negative	-3
Moderate negative	-2
Minor negative	-1
Neutral	0
Minor positive	1
Moderate positive	2
Major positive	3

\* Score maybe adjusted by weighting e.g. to reflect the strategic objectives

Confidence	Description
Very low	Best guess
Low	Professional judgement
Medium	Some background information
High	Substantial information but some gaps
Very High	Recent relevant and accurate data





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