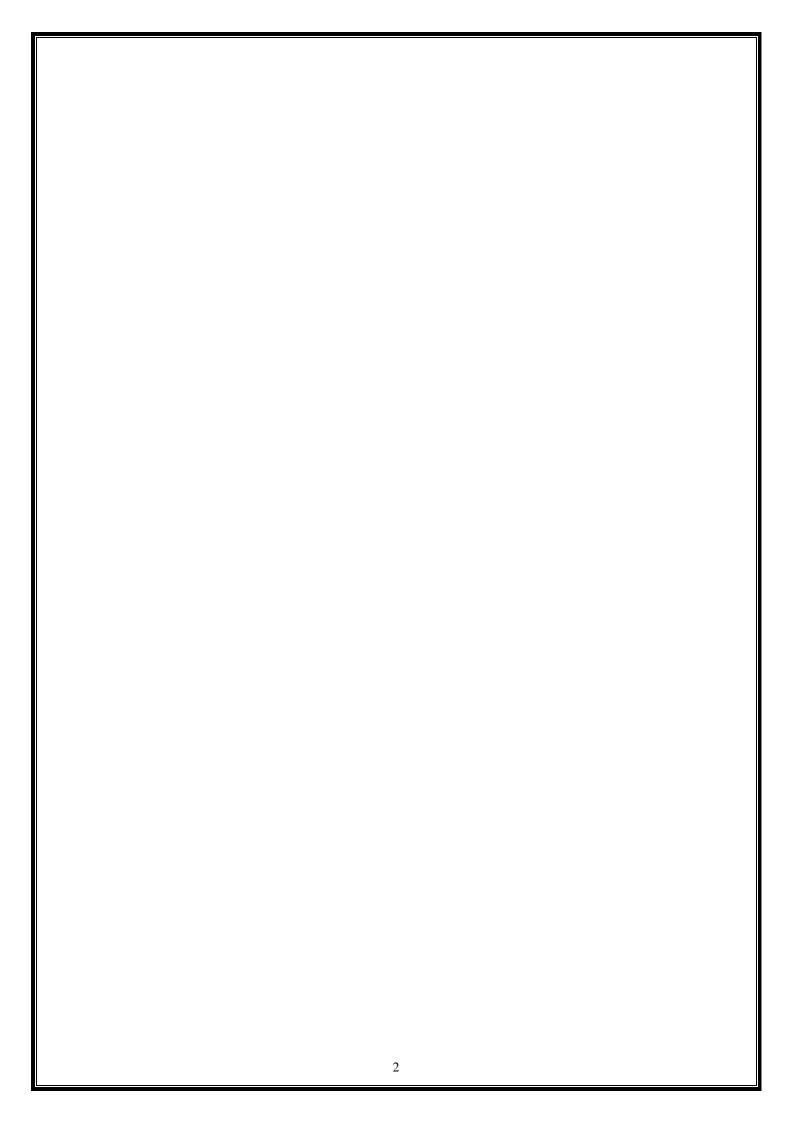
Clarence Bicycle Strategy & Action Plan 2013-2017







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Executive Summary

The Clarence Bicycle Strategy and Action Plan 2013 (Plan) recognises that the planning and development of a connected network of bicycle lanes and cycleways helps Council to achieve goals and objectives identified in a number of Council strategies and plans. These include the Strategic Plan; transport plans; open space and recreation plans; positive ageing, youth and disability access plans; and health and well being plans. It is also consistent with a number of State Government strategies on transport, health and wellbeing.

The 2013 Clarence Bicycle Action Plan lists bicycle projects, missing links and upgrades required to develop an integrated bicycle network for Clarence. The Hobart Regional Arterial Bicycle Network Plan has been referenced to identify major cycling routes on roads and pathways. In addition, local routes and connectors have been included in the Action Plan and a series of maps provide an overview of the desired cycling network. Projects identified in the Action Plan will be implemented and funded through Council's capital works program which is subject to future consideration by Council as part of its Annual Operating Plan.

The Strategy provides an overview of current trends in cycling and data on counts carried out on several cycling routes in Clarence. It recognises the need to provide equitable access to transport for non-drivers (especially youth and elderly) and provide for children to ride to school and for residents and visitors to access activity centres and other destinations by bicycle and other wheeled devices such as mobility scooters.

The Bicycle Network Framework recognises the different needs and requirements of bike riders. It acknowledges that people ride for recreation or transport and the level of skill, speed and strength can vary greatly between high speed sport cyclists on roadways and a child riding along a multi-use path to school. As a result there are a range of different infrastructure requirements to meet the needs of this broad community cross-section.

Key issues have been identified and a number of recommendations made to ensure bicycle infrastructure is included in planning and design of new developments, road upgrades and maintenance. Also identified are signage and bicycle parking, encouragement activities such as Ride to Work Day, liaising with other councils in the Hobart region and addressing cycling blackspots.

A review of previous bicycle plans indicates that Council has made considerable progress, particularly in the pathway network, in completing the majority of projects identified in the 1995 Bicycle Plan and 2008 Bicycle Action Plan. Outstanding projects have been incorporated into the 2013 Bicycle Action Plan.







Introduction

Cycling is a sustainable form of transport that can be enjoyed by all age groups and fitness levels. It provides a variety of benefits including a healthier, more active population, reduced pollution and traffic congestion, reduced parking demand, more vibrant and socially interactive communities, as well as being an economical form of transport.

In order to make cycling safe and convenient, an integrated network of bicycle facilities is essential. The aim of the Bicycle Strategy and Action Plan is to acknowledge the development of the Clarence Bike Network to date and to determine the priorities for the next 5 years.

The Clarence City Council Municipal Bicycle Plan (June 1995) was reviewed in 2006 and a 5 year Action Plan was developed. It is timely to update the strategy and review the progress of the Action Plan in order to identify projects and priorities for the next 5 years, taking into account new residential and retail developments and other land use changes and an increase in the number of people taking up cycling for recreation and commuting.

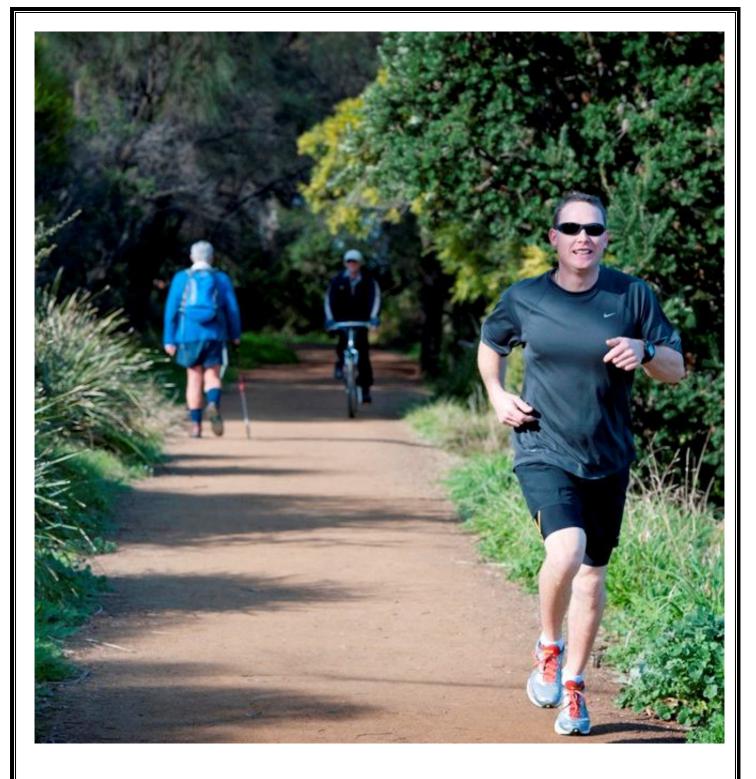
The Action Plan aims to create a network of connected bike routes that enables children to ride bicycles to school, elderly to use mobility scooters to do their shopping, commuters to cycle to work and residents to ride bike rides for recreation and health.

The Strategy and Action Plan has been developed with input from the Clarence Bicycle Advisory Committee which provides advice and recommendations to Council on the prioritisation and development of the bicycle network.

Mountain biking has not been considered in the plan. The Clarence Tracks and Trails Strategy incorporates the needs of mountain bikers, who use different equipment (such as single and dual suspension bikes with knobby tyres) and have different infrastructure requirements such as bush tracks, fire trails and mountain bike parks. These are best catered for through the development of a tracks and trails network.

Community consultation on the draft plan was undertaken in July 2013 and 8 submissions were received. Feedback identified a safe route Rokeby to Lauderdale as a priority (3 respondents), promotion of shared path etiquette (2 respondents), paths to be wide enough for pedestrians and bike riders to pass (1 respondent) and improvements to specific tracks at Seven Mile Beach and Geilston Bay. These have been incorporated into the document.





How does the Plan support Council and Government strategies?

Strategic Objectives

The Clarence Bicycle Strategy and Action Plan 2013 (Plan) directly supports a number of Council and State Government strategies and objectives in the areas of transport, recreation and health. These are outlined below.

Strategic Plan 2010-2015

Clarence City Council's Strategic Plan 2010-2015 identifies a number of objectives and strategies that are relevant to the Bicycle Action Plan. These have been identified:

GOAL AREA: Social Inclusion

Goal: To support local communities to build on existing capacity and progress their health and well-being

Strategies:

Community Safety and Well-being

 Provide essential infrastructure to support, sustain and enhance community safety and social wellbeing

Public Spaces and Amenity

 Develop plans to improve the amenity of public spaces, including implementation of Tracks and Trails Plan and Cycle Plan

Access and Social Inclusion

- Implement social plans that address the needs of specific groups within the community eg., Positive Ageing Plan, Disability Action Plan and Youth Plan
- Facilitate the provision of needed public facilities

GOAL AREA: Environment

Goal: To sustainably manage and enhance the natural and built environments of the City

Strategies

City Planning

Develop a whole of City Transport Plan which incorporates Council's agreed transport priorities

Relevant Council Strategies for the Action Plan

Clarence City Council Municipal Bicycle Plan (1995) and Bicycle Map & Action Plan (2007)

Key routes identified in the 1995 plan include: Clarence Foreshore Trail from Howrah to Geilston Bay, East Derwent Highway, Derwent Avenue, Esplanade, Riawena Road, Bastick Street, Cambridge Road, Bligh Street, Clarence Street and Howrah Road to Tranmere Road. The Rokeby to Howrah Cycleway is identified as an important commuter route.

Hobart Regional Arterial Bicycle Network Plan (2009)

A regional bicycle plan identifying an arterial bicycle network across the Greater Hobart area including Hobart's eastern shore and endorsed by Clarence City Council.

Clarence Transport Strategy (2003)

The Transport Plan recognises the need to develop alternative modes of transport to reduce dependency on motor vehicles. Specific projects identified include:

- Improving access to Rosny central business district from other suburbs in Clarence, other Council
 areas and the State road network, and
- Improving safety for all users on South Arm Highway from Howrah to Cremorne

Roads and Transport Asset Management Plan (2012)

The plan identifies the service levels for the road and transport network and associated financial implications. It includes the operation, maintenance, renewal and upgrade of cycleways, the construction of DDA facilities and expansion of rural footpaths. The plan recognises that demand for cycle lanes is likely to increase as a result of rising fuel costs and identifies the need to develop dedicated cycle routes.

Kennedy Drive Access Policy (2005)

The policy recognises that consideration should be given to pedestrians and cyclists in the form of adequate footpath and cyclist infrastructure when assessing development applications.

Kangaroo Bay Urban Design Strategy and Concept Plan (Feb 2008) Including Rosny Park CBD/Kangaroo Bay Traffic Management Study

The Master Plan includes the upgrading and landscaping of Kangaroo Bay Drive, new traffic access arrangements, the establishment of an urban plaza near the old ferry terminal, and a foreshore promenade around Kangaroo Bay linking to the Bellerive Boardwalk and a multi-user pathway alongside Kangaroo Bay Drive. The Traffic Management Study makes recommendations that include reopening the Rosny Bus Mall to private motor vehicles and full signalisation of the Rosny Hill Road/Bligh Street/Kangaroo Bay Drive intersection.

Clarence Tracks and Trails Strategy (2012) and Tracks and Trails Action Plan (2008)

This strategy provides a framework for developing a network of tracks and trails for existing and future needs of residents for walking, cycling and horse riding. Key aims of the strategy include the development of multi-use tracks providing access for people with disabilities where possible, such as the Clarence Foreshore Trail between Geilston Bay and Howrah.

Clarence Planning Scheme

Through subdivision controls and appropriate zoning the scheme aims to:

- Enhance the quality of life and strengthening community spirit through recreational activities (as well as social, cultural and heritage activities);
- Enhance traffic management in residential areas through policies and guidelines;
- Facilitate the provision of community facilities and delivery of physical infrastructure services, and
- Provide and maintain roads, bridges, cycleways etc to ensure the effective and safe movement of people and vehicles.

Clarence Disability Access Plan (2007)

The plan aims to address barriers to access and includes ensuring Council services, facilities, footpaths, parks and other assets are accessible to people with disabilities and mobility issues.

Clarence Positive Ageing Plan (2012-2016)

Provides strategic direction to meet the needs of residents. A key theme is staying connected which includes the provision of infrastructure for older people to be able to move about safely and easily as a pedestrian or on a bicycle. The strategy recognises that demand for flexible and affordable multiple transport options will continue to increase and Council should continue to provide for footpaths, kerb ramps, pedestrian refuges and roads, that allow ease of mobility and visibility. Collaboration with Council's Bicycle Committee on future planning strategies is identified as an action item.

Clarence Youth Plan (2008-2012)

Research carried out to support the development of the Youth Plan shows that the majority of young people like bicycle and walking tracks and easy access to services. Being connected and able to get to places in safety were identified under the key themes of Being Active and Engaged and Health and Wellbeing.

Clarence Health and Wellbeing Plan (draft)

The plan identifies a range of strategies and actions that can be taken to strengthen and improve the physical, mental, and social wellbeing of the community which includes implementing the Bicycle Plan

Relevant External Strategies for the Action Plan

The Australian National Cycling Strategy 2011-2016

The Strategy has been developed as a coordinating framework identifying responsibilities of all levels of government, community and industry stakeholders to encourage more people to get on their bicycles and start riding for a better life. The strategy recognises that increasing the number of people who ride a bike for transport and recreation has a host of benefits to individuals and society. The vision for the Strategy is to double the number of people cycling in Australia by 2016.

Walking and Cycling for Active Transport - Tasmanian State Government

The Tasmanian Walking and Cycling for Active Transport Strategy is a key component of the Tasmanian Urban Passenger Framework which aims to promote walking and cycling as viable and desirable forms of transport through improved infrastructure, land use planning and behavioural change. The Strategy is intended to guide development of walking and cycling as transport options in urban areas over the long-term by creating a more supportive transport system for pedestrians and cyclists. It aims to "create a safe, accessible and well connected transport system that encourages more people to walk and cycle as part of their everyday journeys."

Principal Urban Cycling Network Maps have been developed by DIER in consultation with local government representatives, cycling advocacy groups and other community based organisations which identify the highest priority transport oriented cycling routes in the Hobart area. The routes identified in Clarence are Clarence Foreshore Trail, Clarence Street and Tranmere Road, Tasman Highway and Kangaroo Bay Rivulet, and Rosny Hill Road.

Creating Healthy Connections - Bicycle Tasmania

Bicycle Tasmania's Creating Healthy Connections campaign is aimed at the development of improved facilities or bicycle riding in Tasmania. The plan identifies priorities in Tasmania's principal urban bicycle networks.

Healthy By Design – Heart Foundation

The guidelines provide design considerations for walking and cycling routes, streets, local destinations, open spaces, public transport and strategies for fostering community spirit.

Tasmania's Plan for Physical Activity 2011-2021

This long-term plan, prepared by the Premiers Physical Activity Council, aims to increase physical activity in Tasmania. One of the four main goals to achieve the vision is to create built and natural environments that enable and encourage physical activity. It recognised the importance of the built environment to provide opportunities for incidental activity – footpaths and cycling paths that are safe, pleasant and well-connected.

Southern Integrated Transport Plan 2010

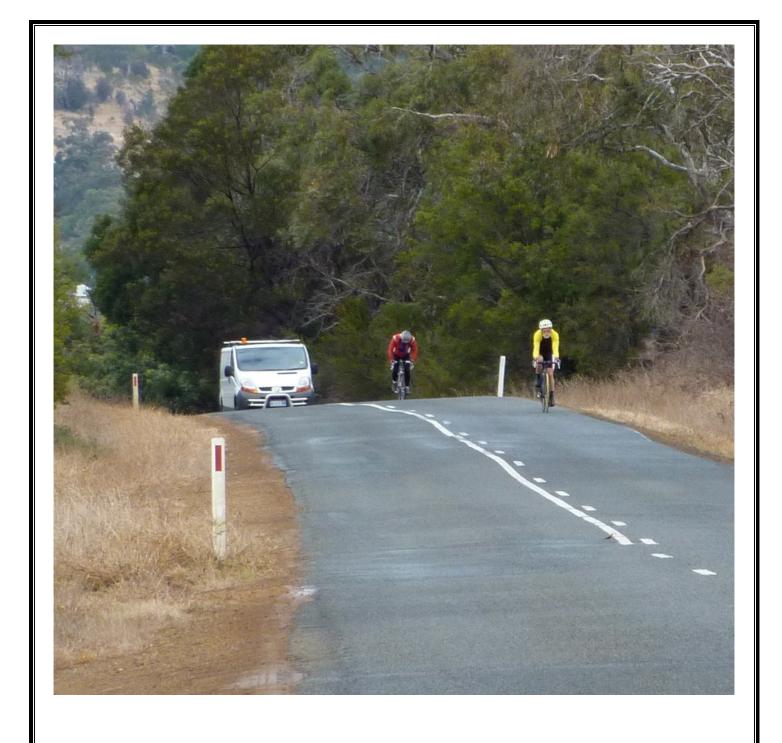
The Southern Integrated Transport Plan is a collaborative initiative of the Tasmanian Government, Southern Tasmanian Councils Authority and twelve member councils. The Plan focuses on the key challenges facing the region including how to better integrate transport and land use planning; facilitate a greater, more integrated use of available transport modes including public transport, walking, cycling and cars, maximise the use of existing infrastructure; and achieve a safer transport system.

H30 Hobart Capital City Plan 2011-2040

The plan covers the Greater Hobart Area and includes planning for transport and infrastructure. It identifies that there is expected to be a greater demand for a convenient, affordable and reliable public transport system and a greater emphasis upon pedestrian and cycling amenity. It includes cycling in the vision for a sustainable city.

Hobart Bike Map 2012

The map identifies cycling routes in Clarence and surrounding areas.



Why do we need a bicycle plan?

Bicycle riding in Clarence

The Clarence municipality has a diverse range of landscapes ranging from coastal areas and rural vistas to hills and bushland. Combined with small historic towns, vineyards and cafes Clarence offers an excellent range of good cycling experiences. Considering that a large proportion of the population lives within easy commuting distance to Rosny and Hobart CBDs riding for transport is also a viable option. The challenge is to enable people of all ages and abilities to enjoy those experiences in comfort and safety.

The bicycle plan recognises the popularity of bicycle riding and the barriers and deficiencies in the infrastructure currently provided. The bicycle network is disjointed with large missing sections, many roadways are intimidating to cycle on and no viable alternatives are available. A lack of sealed shoulders, bicycle lanes and multi-user pathways make it difficult and stressful to ride between destinations. The plan aims to address these issues for a number of reasons.

1. Lots of people want to ride bicycles

Current trends in cycling participation

A cycling participation survey carried out for the Australian Bicycle Council in 2011 found that:

- over half of Tasmanian Households have access to a bicycle
- 19% of the Tasmanian population rides a bicycle at least once a week. If applied to the population of Clarence that equates to approximately 10,000 residents cycling each week.
- 40% of the Tasmanian population ride at least once a year.
- About 23% of males and 15% of females ride in a typical week
- More than half of all children aged under 10 ride each week, decreasing to 8% of adults aged over 40 years.
- Tasmania cycling participation is similar to the Australian average but has a significantly higher rate of recreational riders (78%) than the national average.
- About 30,000 Tasmanians cycle for transport at least once a week, which includes riding to work, education, shopping or visiting friends or family.

The Exercise, Recreation and Sport Survey (ERASS) found that cycling is the 4th most popular sport or recreational activity in Tasmania. Whilst some activities recorded a drop in participation, cycling increased by 2.2 per cent between 2009 and 2010.

Table 3: Top 10 physical activities in Tasmania, 2009 and 2010. Rank	Activity	2010 Participation rate (%)	2009 Participation rate (%)
1	Walking (other than bush)	38.4	41.4
2	Aerobics/ Fitness	17.7	16.5
3	Swimming	11.5	11.6
4	Cycling	11.1	8.9
5	Walking (Bush)	9.0	7.7
6	Running	8.0	7.8
7	Golf	6.0	6.6
8	Australian rules football	4.4	5.3
9	Fishing	4.1	3.9
10	Tennis	4.1	3.8

Super Tuesday counts



A manual count of bicycle riders has been carried out each March since 2010 with 12 sites across the municipality covered from 7am to 9am on a Tuesday morning peak. A summary of the 2012 counts show that:

- The busiest route is the Tasman Bridge 104 (average 51 riders per hour) with the downstream side slightly more popular but both sides are well used.
- A total of 43 riders were counted at the intersection of Clarence Street/Cambridge Road and the Clarence Foreshore Trail (average 22 per hour). A breakdown shows 23 riders travelled between Clarence Street and Clarence Foreshore Trail (both directions). 15 riders came from Cambridge Road in Bellerive Village with 12 going onto the Clarence Foreshore Trail past the yacht club.
- Clarence Street is the preferred route from Howrah over the foreshore Trail. 25 riders were
 counted on Clarence Street at Wentworth Street (average 13 per hour). Clarence Foreshore Trail
 at High Street 15 riders (average 8 per hour). Even with improvements to the trail at Second
 Bluff and Alexandra Esplanade commuters still prefer Clarence Street.
- Bligh Street carries as many cycle commuters as the Clarence Foreshore Trail in Bellerive 16 riders on Bligh St (average 8 per hour) even though there is no cycling infrastructure provided.
- The Esplanade in Lindisfarne had 20 riders going south and 6 going north.
- East Derwent Highway in Lindisfarne 11 riders were counted with 8 going over Gordons Hill Road.
- East Derwent Highway at Geilston Bay had the majority of riders (6 riders) going up Clinton Road. They would likely be heading to the Sugarloaf path or Sugarloaf Road. 4 riders used the East Derwent Highway.

A permanent counter was installed on the Tasman Bridge by DIER in 2011. Unsurprisingly the highest usage was recorded in the spring and summer months of October to February. Weekday use is higher than weekend use, indicating that transport cycling is the main motivator with over 250 riders recorded daily on weekdays, dropping to around 150 riders per day in the winter months. On weekdays the busiest periods on the bridge are between 6am and 9am and 3pm and 7pm. On weekends usage is more evenly spread between 8am and 4pm.

Despite the poor quality infrastructure on the bridge including narrow pathways, blind spots, exposure to wind and gantries, bike riders are using the bridge to get to work, helping to alleviate some of the congestion on the roadway.

2. A lack of infrastructure can make bicycle riding difficult

Issues identified in Tracks and Trails survey

In 2011 a survey was carried out as part of the Tracks and Trails Strategy. 282 people completed the survey with many participants providing additional comments. These included the need for improvements to the cycling network such as:

- A bicycle path between Lauderdale and Rokeby
- Improvements on the Clarence Foreshore Trail between Geilston Bay and Howrah including completing missing sections. The track at First Bluff Bellerive was singled out as a section that needed widening and surface improvement.
- A link from Tasman Bridge to Rosny Park and Cambridge.
- Improvements to the Howrah Rokeby cycleway and a direct connection past Buckingham Drive
- The Tasman Bridge was identified as narrow and difficult to use.
- Improved cycleway access needed around Rosny CBD

Other identified issues included the need for bike lanes on major roads, bike parking at shopping areas, more sealed shoulders of appropriate width on main roads and bike lanes on Clarence Street.

3. Equitable access to transport is needed for non-car drivers

Elderly

Clarence has an ageing population with projections from a 2006 population study indicating that it will the fourth oldest Tasmanian Council by 2021 (*Tasmanian Local Government Council Demographic Profile*, Felmingham and Jackson, University of Tasmania 2006). 24.5% of the population is expected to be aged over 65 years by 2021. Elderly residents are able to maintain independence by undertaking local trips using mobility scooters, electric-assisted bicycles and trikes to do their shopping and run local errands provided they have access to multi-user pathways that are of adequate width and surface quality (ie cycleway standard).



Children and teenagers

Children and teenagers are too young to drive and have limited transport options if no adult is available to drive them where they want to go. Bicycles offer independence to move around the municipality to visit friends, attend sporting activities and explore their neighbourhoods. Being connected and able to get to places in safety were identified under the key themes of Being Active and Engaged and Health and Well-being in the Clarence Youth Plan (2006-2012).



Riding to school

Traffic congestion and road conditions around schools are the biggest barriers preventing children from riding to school. Safe routes to schools in the form of defined quality routes separated from traffic such as multi-use pathways and safe road crossings are needed to improve the safety and amenity of school students getting to school under their own steam.

"Children are designed to be active. Physically active children are healthier, happier and more socially connected than children that have more sedentary lifestyles. In recent decades, changes in Australian lifestyles have led to children getting less exercise in their normal day. In the 1970's, 80% of Australian school children rode or walked to school. Today only 20% of school children get to school by bike or foot." From www.ride2school.com.au.

As part of the 1995 Clarence Bicycle Strategy a survey was sent to schools in the municipality. The survey found that most schools had a policy which permitted students to ride to school. However a survey of school principals to identify their perception of why students don't ride found that the principals felt it was too dangerous (7), followed by not permitted by parents (6) and public transport is adequate (6).

A summary of the findings showed:

- 62.5% of schools permitted students to ride to school, 25% permitted some students to ride while 12.5% banned students from cycling to school.
- 45.2% of students reported owning a bicycle
- 11% of students surveyed who owned a bicycle rode to school. This is only 4.9% of total students.
- Nearly all schools surveyed had bicycle racks (87.5%) with a quarter of schools providing a lockup compound (25%).
- Half the schools surveyed offered a bicycle or road safety course (50%)

There is no recent data for riding to school trends in Clarence.



Who is the bicycle plan catering for?

Clarence Bicycle Network Plan Framework

Types of riders

When developing cycling infrastructure, one size does not fit all. Depending on the speed and distance travelled, whether the purpose of the journey is for transport or recreation and the degree of separation required from motor vehicles, the needs and infrastructure requirements vary.

The matrix below was developed by Bicycle Network Victoria and divides cyclists into two main categories – level of intensity (speed and strength) and ride purpose (transport and recreation). Regular riders will often move between the categories depending on whether they are riding to work during the week (high intensity transport) or cycling with their children on a bike path on the weekend (low intensity recreation). Since the type of infrastructure required for higher intensity and moderate intensity cycling is often quite different and sometimes incompatible, this strategy has focused on identifying infrastructure suitable for both types of cycling. The characteristics of both groups are outlined below.



Higher Intensity cyclists

Cyclists training for fitness (often in groups), commuting to work or cycle touring usually prefer to travel at higher speeds and generally seek fast, direct routes on roads. They can travel relatively long distances and are fairly comfortable mixing with other traffic as they have the stamina and skills to do so. Improving arterial roads by sealing shoulders or installing bicycle lanes increases the safety and level of comfort for this group.

Moderate intensity bike riders

People cycling for leisure or gentle exercise, as well as children riding to school or residents undertaking local shopping trips usually travel at lower speeds and ride shorter distances. They are generally uncomfortable riding on busy roads and usually seek traffic-free experiences on multi user paths, or when traffic volumes are low, cycling on quiet local streets or rural roads.

An integrated cycling network needs to accommodate the various types of riders by providing appropriate infrastructure for their needs. This requires a well-connected network of multi-user pathways linking to major destinations such as shopping centres and schools for moderate intensity riders. Higher intensity riders require a network of on-road routes supported by bicycle lanes or sealed shoulders to provide a degree of separation from motor vehicle traffic on main roads.

In some instances a well-constructed and wide cycleway with good sightlines and minimal road crossings can cater for both higher and moderate intensity bicycle riders, but higher intensity cyclists do not mix well on multi-user pathways that have high pedestrian use, poor sightlines and constrained operating space.

Mission statement / strategic aim

The Clarence Bicycle Network Plan identifies an interconnected network of cycling routes that caters for the needs of both higher and moderate intensity bike riders of all ages, and provides mobility options for the young and elderly, that offer transport links between residential areas and activity centres as well as opportunities for recreation and exercise which benefits the health and well-being of Clarence residents and visitors.





How much progress has been made so far?

Clarence City Council has made considerable progress in commencing or completing the majority of projects identified in the 1995 Bicycle Plan and the 2007 Action Plan. Much of the progress has been made in the past 5 years.

In recent years there has been a strong focus on constructing missing sections of the Clarence Foreshore Trail. 4.5km of trail has been built since 2008 with the assistance from State Government grants. Moderate intensity bicycle riders are well-catered for by the trail and its popularity has increased as gaps have been addressed. Other multi-user pathways have been constructed or upgraded in Lauderdale, Risdon Vale, Acton Park, Seven Mile Beach and South Arm and preliminary planning work has been carried out for new pathways in Rokeby and Montagu Bay alongside the Tasman Highway.

Higher intensity commuter and recreational cyclists have been less well catered for in the 17 years since the 1995 Bicycle Plan was developed. The 1995 plan identified that

"there appears to be little or no provision for commuting cyclists. In order to provide for commuting cyclists though it is imperative for those technical people undertaking traffic and road designs, to understand that commuting cyclists needs and requirements are vastly different to those of recreational cyclists.

Commuting cyclists require fast, direct, smooth, low gradient routes with minimal disruptions to their journeys. They generally desire to arrive at their destination(s) quickly, along a route requiring the least physical energy, with as few interruptions to their progress as possible. And perhaps most importantly commuting cyclists always prefer to ride on roads integrated with the traffic, primarily because roads generally offer the most suitable routes".

Council has made some effort to develop on-road routes including bicycle lanes on Kennedy Drive in Cambridge, sealed shoulders on Acton Road in Acton and a bike lane on Riawena Road at a conflict point by the Tasman Bridge. Construction commenced in 2012/13 on stage 1 of a commuter pathway linking the Tasman Bridge to Rosny Park that bypasses busy slip lanes on the Tasman Highway and planning work is underway for a bike lane on a section of Cambridge Road in Cambridge. However there are still considerable gaps that need to be addressed.

A review of the projects completed and outstanding from the 1995 and 2007 bicycle plans are tabled below in order to assist in the preparation of a new 5-year Bicycle Action Plan.

Review of Previous & Current Bicycle Plans

1995 Bicycle Plan

The plan included a community survey which identified level of bicycle usage, issues raised by residents regarding cycling in Clarence, and reasons why residents don't ride. A schools survey was also carried out. Bicycle crash history was examined and an audit was carried out on the foreshore trail and most arterial road routes.

Actions identified in the 1995 Bicycle Plan which have been completed are:

Completed Actions	Status
Shared Paths	
Risdon Vale to Risdon Brook Dam	Pathway constructed in 2007.
Lauderdale cycleway – rough, corrugated and overgrown	Pathway upgraded.
Clarence Foreshore Trail - Howrah to Clarence High	Pathway upgraded in concrete.
Clarence High School detour	Coastal track constructed 2010.
Clarence Foreshore Trail – Alexandra Esplanade	Pathway constructed in 2012.
Clarence Foreshore Trail – Bellerive Beach	Section of path upgraded at Beach Street end in 2011. Master Plan developed for Bellerive Beach Park includes upgraded pathway.
Clarence Foreshore Trail – Victoria Esplanade	Pathway constructed in 2007.

Clarence Foreshore Trail – Ferry Wharf to Bellerive Yacht Club	Boardwalk constructed. Bridge over yacht club slipway installed in 2010 which eliminated conflict point in Bellerive
	Village where path users detoured around slipway.
Clarence Foreshore Trail – Bellerive Yacht Club to	Pathway constructed as part of Kangaroo Bay
Rosny College	Redevelopment in 2011. Awaiting stage two to extend path to Rosny College.
Clarence Foreshore Trail –Lindisfarne	Pathway near yacht club upgraded to hotmix and road
	shoulder sealed in 2011 to prevent gravel being scattered
	onto track. Construction of missing foreshore trail commenced in 2012.
Clarence Foreshore Trail –Geilston Bay foreshore	Narrow gravel walking track constructed which can be used by fat-tyred bikes constructed along foreshore in 2011.
Clarence Foreshore Trail – Musgrove Road	Concrete cycleway and bridge over Geilston Creek
	constructed 2011.
Clarence Foreshore Trail –signage	Signage installed at some locations in 2009.
Clarence Foreshore Trail – logo	Foreshore track officially named Clarence Foreshore Trail in 2005.
On Road & Commuter Routes	
Tasman Bridge access	Shared path at Topham Street installed in 2008.
Lack of linkage to Intercity Cycleway on other side	Ramps installed on western shore by DIER. Downstream
of river.	side ramp completed in 2010.
Supporting Infrastructure & activities	
Rider education courses	Cycling South continues to offer Learn to Ride and
	Intermediate Cycling Skills courses for adults.
Co-ordinated approach for bicycles in the Greater	Cycling South was established in 2001 by the member
Hobart Region	councils of Hobart, Kingborough, Clarence, Glenorchy and
	Brighton and employs a part-time Executive Officer to co-
	ordinate regional planning.

A summary of outstanding actions identified in the 1995 bicycle plan are listed below:

Outstanding Actions	Status
Shared Paths	
South Arm Road to Rokeby including section in front of Howrah Garden Centre.	DIER is developing plans for upgrading the section of South Arm Highway between Oceana Drive and Rokeby which will include a multi-user path.
Safe crossing or underpass across Rokeby Road	DIER's plans for upgrading South Arm Highway includes a signalised intersection at Pass Road/Tollard Drive which will include a pedestrian crossing.
Clarence Foreshore Trail – Howrah to Tranmere	Some sections have been constructed in gravel.
Clarence Foreshore Trail – Ferry Wharf & carpark	Design has been prepared for carpark which includes missing section of pathway behind ferry wharf.
Clarence Foreshore Trail – Rosny Point realignment and regrading	Funds allocated in preliminary 2013/2014 Capital Works Program.
Clarence Foreshore Trail – Lenna St to Simmons Park	Stage 1 from Lenna Street to Ronnie Street constructed in 2010. Construction of stage 2 from Ronnie St to Simmons Park commenced in 2012 and is expected to be complete by mid-2013.
Clarence Foreshore Trail – Anzac Park & Natone Street to foreshore along Talune St	Funds allocated in preliminary 2013/2014 Capital Works Program.
Lauderdale to Howrah	Foreshore route investigation is underway in 2012.
Sugarloaf Path – Extension and upgrade	
Kerb ramps	

On Road & Commuter Routes	
Clarence Street	A Safety Assessment for Clarence Street was carried out in 2011 by Sinclair Knight Mertz which makes recommendations for improving Clarence Street for bicycle traffic. Consultation will be carried out in 2013

South Arm Highway (especially section between	Clarence Tracks and Trails committee is progressing a
Lauderdale and Rokeby)	foreshore path option. Sealed shoulders on the road will need
	to be done as part of a DIER road upgrade.
Tasman Highway	Designs have been prepared for a pathway connecting the Tasman Bridge to the Rose Bay High School overpass which will eliminate crossing of Lindisfarne slip lane and provide
Fact Damient Highway	improved link to Rosny Park.
East Derwent Highway	
Riawena Road	A green bike lane was installed in 2009 at the intersection with Leprena Street which had a crash history of cars failing to give way to cyclists. A pathway alongside the Tasman Highway will be constructed in 2013 and provide an alternative off-road route to Rosny Park from the bridge.
Cambridge Road	A bicycle lane has been designed on a section of Cambridge Road in Cambridge.
Bligh Street	The bus mall was reopened to cars in 2012 which will reduce the amenity for cyclists using this route.
Rosny Hill Road	
Supporting Infrastructure & Activities	
Bicycle parking rails at shops, community centres and schools	Parking rails were installed in 2012 as part of the Lindisfarne Village redevelopment
Kerbside parking restrictions during peak times	
Widening kerbside lanes	
Shoulder sealing.	Shoulder sealing was carried out on a section of Acton Road in 2012.

2007 Bicycle Action Plan

A Bicycle Action Plan was prepared in 2007 at the request of the Clarence Bicycle Advisory Committee. The Action Plan included a map of the municipality which highlighted Principal On-road Bicycle Routes, Acknowledged On-Road Bicycle Routes and Multi-user Pathways. From the identified routes a list of key projects were selected as priorities to progress the development of a bicycle network.

On-road bicycle routes identified in the plan:

Principal Bicycle Route

- Tasman Highway
- South Arm Highway
- East Derwent Highway
- Esplanade & Topham Street, Lindisfarne
- Riawena Road, Montagu Bay
- Bastick Street, Rosny
- Clarence Street, Bellerive

Acknowledged Bicycle Route

- Gordons Hill Road, Lindisfarne
- Queen Street, Bellerive
- Derwent Street, Bellerive
- Cambridge Road, Mornington
- Kennedy Drive, Cambridge
- Bligh Street, Warrane
- Rosny Hill Road, Rosny
- Howrah Road, Howrah
- Tranmere Road, Tranmere
- Pass Rd, Rokeby
- Tollard Drive, Rokeby
- Acton Road, Acton Park
- Estate Drive, Acton
- Seven Mile Beach Road, Seven Mile Beach
- Pittwater Road, Seven Mile Beach
- Grass Tree Hill Road, Risdon Vale



Clarence Bicycle Strategy Action Plan

including the Clarence Bike Map





- Richmond Road
- Malcolms Hut Road
- Back Tea Tree Road
- Manatta Road, Lauderdale
- Cremorne Avenue, Cremorne
- Clifton Beach Road, Clifton Beach

Shared Paths identified in the plan

- Clarence Foreshore Trail Lindisfarne, Bellerive, Tranmere, Droughty Point, Rokeby to Lauderdale,.
- Howrah-Rokeby Cycleway South Arm Highway path Lauderdale, Sandford
- Cremorne Avenue, Cremorne
- Bicheno Street, Clifton Beach
- Blessington foreshore, South Arm

The key projects identified in the 2007 Bicycle Action Plan which have been completed are:			
Completed Key Projects	Status		
Planning Investigate opportunities for developing a mountain bike facility	Clarence Mountain Bike Park constructed 2010.		
Monitor levels of cycling through a counts program	Counts carried out in 2010, 2011 and 2012 as part of the Cycling South regional counts program.		
Shared Paths Clarence Foreshore Trail - 'Bluff to beach' path - Bellerive Yacht club missing link - Alexandra Esplanade - Geilston Bay	Constructed 2009. Constructed June 2010. Constructed March 2012. Constructed December 2011.		
Tasman Bridge entry/exit (north side) and improved facilities on the Tasman Bridge (removal of fire hydrants, installation of ramp on western shore)	DIER installed a ramp and removed hydrants in Nov 2010.		
Blessington Foreshore, South Arm	Gravel path upgraded in 2012.		
Acton Road, Acton Park	Gravel path constructed in 2012 between Roches Beach Road and Lauderdale Primary School.		
Estate Drive, Acton Park	Gravel path constructed between Seven Mile Beach Road and Acton Road in 2012.		
Tollard Drive, Rokeby	A multi-user pathway was constructed on a section of Tollard Drive in 2011 on Droughty Point as part of a subdivision.		
Standardise construction/signage of Council's existing and future shared path network including the Clarence Foreshore Trail. Works to be in accordance with Council drawing 5476.	Implemented.		
On Road & Commuter Routes			
Clarence Street bike lane investigation	Clarence Street safety assessment carried out in 2011 and design prepared in 2012.		
Riawena Road, Montagu Bay	A green bike lane was installed in 2009 at the intersection with Leprena Street which had a crash history of cars failing to give way to cyclists.		
South Arm Highway	Concrete cycleway upgraded between Oceana Drive and Clarence Street and sealed shoulders provided for a short distance south of Oceana Drive as part of DIER road upgrade.		
Esplanade & Topham Street	DIER installed signage directing cyclists from the East Derwent Highway to the Tasman Bridge via Esplanade in 2012. Clarence City Council constructed a pathway connecting Topham Street to the Tasman Bridge pathway in		

	2008.
Bastick Street	Ramps and paths connecting Bastick Street to the Clarence Foreshore Trail at Rosny College were installed in 2009.
Acton Road	Sealed shoulders were installed between Cilwen Road and Estate Drive in 2012.
Kennedy Drive	Bicycle lanes installed between airport roundabout and Cambridge Road in 2011.

There are several outstanding actions which are underway.

Incomplete Key Projects	Status
Shared Paths	
Clarence Foreshore Trail	
Tranmere (Cohuna Street to Arlunya Street)	A Reserve Activity Plan was prepared in 2011 which includes a multi-use pathway.
Lindisfarne (Ronnie Street to Simmons Park)	Construction commenced in 2012 and will be completed in 2013.
Clarence High School detour	Detour not addressed since pathway constructed along coast at Second Bluff.
Rokeby to Lauderdale	Legal issues around land ownership and negotiation with 5 residents underway in 2012.
Howrah-Rokeby Cycleway – Howrah Gardens Missing link.	Missing link is included in DIER plans for South Arm Highway upgrade.
On Road & Commuter Routes Tasman Bridge entry/exit (South side) including commuter access routes through Bellerive, Lindisfarne & Cambridge entry.	Design prepared for link from Tasman Bridge at Riawena Rd to Rose Bay High overpass.
Bligh Street	DIER installed a pathway connecting the end of Bligh Street to the Mornington roundabout in 2010. Bicycle stand up lanes and storage boxes required as part of Kangaroo Bay Drive/Rosny Hill Road intersection design.
South Arm Highway	DIER installed sealed shoulders in Sandford in 2012. Further shoulder sealing will be carried out in 2013.

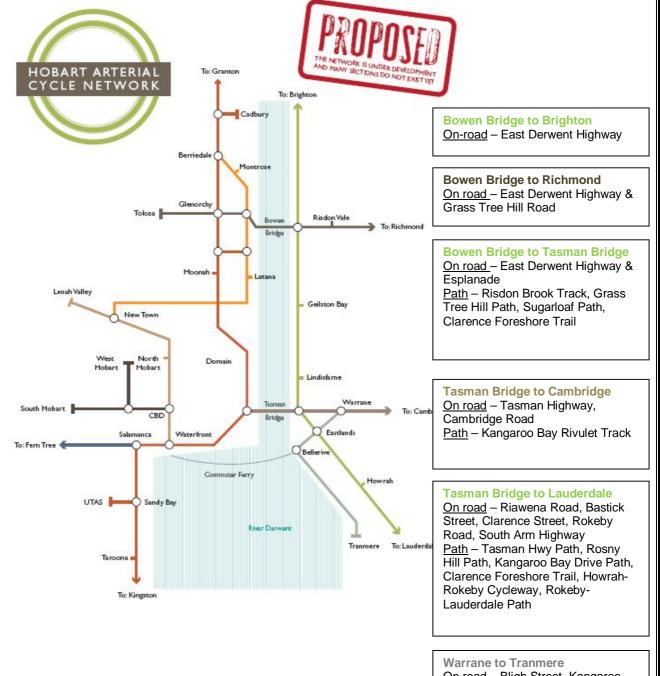
All the Key Projects identified in the 2007 Bicycle Action Plan have commenced or been completed.

2009 Hobart Regional Arterial Bicycle Network Plan

The plan was developed in 2009 by Cycling South and a working group comprising of representatives from the five Greater Hobart Councils (Hobart, Clarence, Kingborough, Glenorchy and Brighton) and the Department of Infrastructure, Energy & Resources (DIER). It incorporates information from the local bicycle plans of each council and identifies an arterial network of main trunk routes for cycling. The plan was endorsed by Clarence City Council in November 2009.

Arterial cycling routes in Clarence identified in the plan have been divided into on-road for high intensity cyclists and paths for moderate intensity cyclists (see Bicycle Network Plan Framework).

In addition to the routes shown on the network diagram (below), Pass Road, Acton Road and Seven Mile Beach Road are also in the 2009 Hobart Regional Arterial Bicycle Network Plan and will be included in the Clarence Bicycle Strategy and Action Plan 2013.



On road – Bligh Street, Kangaroo Bay Drive, Clarence Street, Howrah Road, Tranmere Road Path –Kangaroo Bay Rivulet Track, Clarence Foreshore Trail



Key Issues and Recommendations

In order to develop a connected bicycle network in Clarence there are a number of issues and recommendations outlined below that need to be addressed:

1. Bicycle facilities on all new arterial and collector roads

Apply Austroads Guidelines to all new and upgraded cycling projects

In Australia Austroads publishes the design guidelines for the planning, design and construction of cycling facilities. These include:

- The Guide to Road Design-Part 6a Pedestrian & Cyclist Paths
- ➢ Guide to Road Design
- Guide to Traffic Management
- Guide to Road Safety

When determining path width or bicycle facility design these guides should be referenced to ensure good quality, adequate and safe infrastructure is constructed, including bicycle facilities designed as part of subdivision applications.

All concrete multi-use pathways must have saw cut joints (rather than trowelled joints) as they provide a smoother and more comfortable finish.

Develop guidelines for developers

All new subdivisions should be required to provide cycling infrastructure on collector roads. Road networks within subdivisions need to offer direct cycling links to the arterial cycling network utilising public open space corridors and accessways at the end of cul-de-sacs. Subdivision design needs to incorporate future connections to adjoining land likely to be subdivided (and not 'land lock' the development).

New developments need to accommodate access to schools for walking and cycling by paying particular attention to footpath widths, road crossing treatments (such as wombat crossings) and the attractiveness and directness of routes. The Austroads Guides outline various options for providing for cycling in residential areas including multi-use pathways along one side of the road, bi-directional cycleways or indented parking bays and bicycle lanes to reduce the visual width of the roadway and help to traffic calm the road.

Recommendations

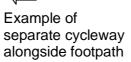
• Review/prepare guidelines for developers which outline preferred treatments with reference to clause 15 in the Local Highways Standard requirements by law.





Example of 3.0m multi-use path along collector road in a new subdivision





Example of bicycle lane adjacent to indented parking



2. Bicycle facilities in road upgrades and reconstructions

Retrofitting bicycle infrastructure on existing roads can be difficult. Road upgrades and reconstructions such as road widening, shoulder sealing, resealing or kerb and channel reconstruction provide an opportunity to incorporate bicycle facilities into the design at minimal additional costs. For example a reseal provides an opportunity to incorporate bicycle lanes into the linemarking budget for the project.

Recommendation

- Ensure mechanisms are in place so that designers are aware of the need to accommodate bicycle traffic in all road designs.
- Liaise with project manager of Kangaroo Bay Urban Design Strategy and Concept Plan to ensure when detailed design is carried out that a cycleway connection between Cambridge Road and the Clarence Foreshore Trail is provided through the carpark and include a permanent counter.
- Liaise with DIER on proposed upgrades of the South Arm Highway to include provision for both moderate and higher intensity cyclists.

3. Maintenance Program

The Clarence Roads and Transport Asset Management Plan (2012) identifies the following Levels of Service for maintenance:

Footpaths & Cycleways

- An annual inspection and repair of footpaths, if required.
- Weeds and trees inspected annually and works carried out as required.
- Audit of footpaths conducted every 3 years.

Sealed roads

- Potholes, edge breaks, cracks repaired within 14 days of being reported
- Sealed urban roads swept at least once every 6 weeks

Recommendation

- On roadways replace drainage grates that run parallel to the kerb (where a bicycle wheel can slip into it).
- Replace metal drain covers with concrete or treat with a non-slip surface when located on roadways in locations where cyclists are likely to be riding.

4. Bicycle Parking

Short term bicycle parking

Short term parking is required outside major shopping centres, community facilities such as swimming pools and libraries and local shops such as newsagents, corner stores, post offices and bakeries. As bicycles are usually only stored for a short period of time a simple 'hoop' parking rail which supports the bicycle and allows for the frame to be locked to the rail are the most appropriate. Hoops can also be attached to existing street sign poles. Other 'wheel slot' style parking rails are not suitable as they don't allow the bike frame to be locked and may damage the wheel rim of bike when supporting the full weight of the bicycle. The parking rail needs to be located in a visible location, preferably with foot traffic nearby and as close to the entry point of the building as practical in order to be attractive to use from a convenience and security perspective.



Recommendation

Provide a small annual budget allocation to install a number of bicycle parking hoops across the
municipality at appropriate locations identified by the Clarence Bicycle Advisory Committee or
requested by the public and based on the guidelines outlined 'The Bicycle Parking Handbook' 2004,
printed by Bicycle Victoria.

Long term bicycle parking

Employees who ride to work or integrate their journey to work with public transport or drive part of the way require a higher level of security for storing their bicycles for longer periods of time such as all day. Occupants of residential apartments also require a secure location to store bicycles.

Bicycle cages or lockers which require a security key or passcard to access provide the highest level of security. Parking rails within the premises provide a lower level of security but may be adequate if contained within the site.

New large office and retail developments are well-placed to provide bicycle parking for employees along with other infrastructure such as a shower, shelving, and lockers or a storeroom for staff to store clothing, bicycle accessories etc. These facilities also help employers to meet health and well-being obligations to staff.



Recommendation

- In conjunction with State Government, provide secure bicycle parking cages for public transport
 users at major transport hubs such as ferry terminals or bus interchanges to reduce demand for car
 parking at these locations.
- Ensure that new large office, retail or high density residential developments within Clarence provide bicycle parking for residents and end-of-trip facilities for employees in accord with the Planning Scheme.

5. Signage & Promotion

Cycle network directional signage assists bicycle riders to choose appropriate cycling routes that are comfortable and convenient to use, such as cycleways, shared paths or on-road bike lanes. It is an important element in providing connectivity across the network and encourages use of the cycle facilities. The Department of Infrastructure, Energy and Resources (DIER) published the *Cycleway Directional Signage Resource Manual* in 2012 to assist local government to 'sign' cycling routes. Clarence also has a signage guide for tracks and trails that outlines the style and design of signs on multi-user pathways.

Recommendation

 Allocate an annual signage budget to install signage on existing cycling routes and new routes as they are developed.



- Develop a signed cycling route between the airport and Tasman Bridge for touring cyclists.
- Continue to promote bike rides through publications such as *Popular Tracks in Clarence* and the *Greater Hobart Trails website.*

6. Plan and liaise with other Councils in the Hobart region

Cycling South was formed in 2001 from the Southern Regional Councils Bicycle Committee and is made up of aldermen and officers from Clarence, Hobart, Glenorchy, Kingborough and Brighton Councils. A part-time Executive Officer is employed to coordinate regional bicycle network planning, funding applications, data collection and Bike Week activities.



Recommendation

Continue to support Cycling South and its activities including:

- Data collection through the annual Hobart Regional bicycle counts program.
- Regional funding applications.
- Coordination and promotion of cycling encouragement events such as Bike Week and Ride to Work Day.

7. Input from the community

Clarence Bicycle Advisory Committee (CBAC)

The Clarence Bicycle Advisory Committee (CBAC) consists of residents with an interest in bicycle riding, a Bicycle Tasmania representative, Cycling South Executive Officer and Council staff, along with two aldermanic representatives. CBAC's role is to provide input and feedback on bicycle network development and prioritisation, identify issues and make recommendations for consideration by Council.

Recommendation

 Continue to facilitate bi-monthly meetings of CBAC in order to identify new opportunities to enhance the Plan's progress; identify maintenance issues that may need addressing; and recommend to Council any reprioritisation of projects or programs in the budget review processes.

8. Encouragement Activities

National Ride to Work Day

Usually held in October each year, National Ride to Work Day is an event to encourage and support first time riders wishing to try commuting to work by bicycle. Community breakfasts are hosted by councils around Australia. Hobart City Council hosts a breakfast on the Hobart waterfront for CBD workers, including residents of Clarence. Clarence City Council has provided an eastern shore breakfast for Rosny Park employees.

Recommendation

- Continue to participate in Ride to Work Day such as providing an eastern shore community breakfast
- Provide encouragement and incentives for Clarence Council staff to consider riding to work to reduce parking demand at the Council chambers.

National Ride to School Day

Traffic congestion is evident around schools during pick up and drop off times and the road network is noticeable less congested during school holiday periods. National Ride to School Day is held in March each year and schools can nominate to participate.

Recommendation

- Consider carrying out a survey of schools to determine which schools have policies supporting active
 transport, if they offer bicycle education as part of their curriculum, how many students cycle to
 school and whether they have infrastructure such as bicycle storage sheds or rails and identify
 barriers to cycling to school.
- Encourage schools to join the Ride to Schools Program (<u>www.ride2school.com.au</u>) which provides
 guidance for schools to identify Safe Routes to School for students walking or riding. The program
 also helps schools to identify deficiencies in the main access routes to schools (such as lack of safe
 road crossings or inadequate footpaths) which Council may be able to address. An example is the
 pathway alongside Acton Road which was constructed in 2011 to provide safe access to Lauderdale
 Primary School.

Bike Week

Bike Week is held in March each year and is coordinated by the Tasmanian Bicycle Council in conjunction with Cycling South. The purpose of Bike Week is to provide organised rides to encourage new riders to get on their bicycles in a supported group setting.

Recommendation

 Continue to support the Tour De Femme women's ride, the Century, Half Century and Family Rides organised by Bicycle Tasmania by assisting with promotion, refreshments and venues.



Use of bicycles by Council staff

Clarence City Council has three bicycles (including one with an electric-assisted motor) as part of the vehicle fleet for use by Council staff to carry out their duties. They are primarily used by rangers.

Recommendation

- Inform new staff of the location and procedure for using bikes as part of the induction process.
- Encourage staff to use bikes during their lunch break for health and fitness.

Crash data and cyclist blackspots

Bike crashes where death or serious injury has occurred is recorded in road crash data. Fortunately numbers of cyclists represented in crash statistics is low. However most minor bicycle crashes go unreported so crash data is not a reliable source for determining routes that are unsafe or unpleasant to ride.

Bicycle Crashes in Tasmania

	Fatalities	Serious
		injuries
2012	1	6
2011	1	6
2010	1	9
2009	2	11
2008	0	8

Anecdotally through feedback from cyclists and members of the Clarence Bicycle Advisory Committee there are a number of sites in Clarence that are particularly difficult for cycling. These include South Arm Highway between Rokeby and Lauderdale which has poor sightlines, unsealed shoulders and high speed limits (80kph), Tasman Highway which has high speed slip lanes and a lack of shoulders in the vicinity of the Tasman Bridge, Mornington roundabout which is difficult to negotiate and the Tasman Bridge which is narrow and wind exposed.

Bicycle Tasmania carried out a Tasman Bridge crash survey in 2008 with 90 respondents reporting they had a crash while cycling over the bridge. The survey found that:

- 28% required a visit to the doctor or hospital emergency department with a quarter of those requiring a stay in hospital.
- The wind, combined with the narrowness of the path along with other obstructions such as fire
 hydrants and gantrys, were factors in many of the crashes. Many cyclists reported that their
 handlebars caught on railings and other obstructions such as electrical boxes.
- 28% of crashes involved a collision with another cyclist or pedestrian and occurred primarily at blind spots.
- Slightly more crashes occurred on the southern side of the bridge.
- 72% of crashes did not involve anyone else.
- 9% weren't injured in the crash and 63% suffered minor injuries and were treated at home.
- 24% required time off work to recover from injuries.

Since the modification to fire hydrants which eliminated the majority of protrusions on the walkway the main crash type is head-on collisions, usually between two cyclists. The cause appears to be a combination of poor sight lines on the curved sections of bridge, inadequate width in the pathway to pass and cyclists travelling too fast downhill to stop in time when encountering someone coming the other way.

Recommendation

- Liaise with DIER to identify treatments for the Tasman Bridge to address the issues such as identifying the blackspot locations through warning signage or linemarking to encourage reduced speed through these sections.
- Audit existing bicycle infrastructure to ensure it is compliant with current Austroads Guidelines and implement a program to upgrade infrastructure where it is below standard or non-conforming (such as inappropriate bollards and barriers on multi-user pathways).

9. Path etiquette and managing conflict

Cycling paths are shared with other users such as people walking, dogs, prams, wheelchairs, scooters and skateboards. Good path design combined with courteous and predictable behaviour by path users minimises any potential conflict on the path.

Recommendation

- Ensure paths are constructed to an adequate width as outlined in the Austroads Guidelines.
- Develop a communication plan for promoting path etiquette which may include the use of signage and stencils and public awareness campaigns.