

# **Audit of Status and Quality of Bicycle Infrastructure Planning in Tasmanian Councils**

**Holbrook, R, Pharo, EJ and Rooney, M**

Occasional Paper, Urban Resilience Research Group

School of Land and Food, University of Tasmania

June 2014

## **1. Introduction**

Bicycle transport is becoming more important in government policy as a means of efficient transport, particularly as a means of increasing the catchment area for other transit systems (Krizek & Stonebraker, 2010). Active transport also plays a big role in tackling several complex socio-environmental problems, including high carbon emissions and an increasingly obese population. All levels of Australian government have active transport strategies and policies (Department of Infrastructure and Transport [DIT], 2013), but the gap between policy and practice is large and the progress on the ground in terms of shifting from our current private car-dominated culture is slow (Bicycle Network, 2014). In this project, we sought to investigate the status of planning for active transport by bicycle within Tasmania's 29 councils. Local government was targeted because while state government owns and manages only the high-speed arterial roads, it is local government who own and manage most of the roads that bicycle riders are using (Rietveld & Daniel, 2004).

In Tasmania, approximately 64,000 people cycle for both recreational and transport purposes in a typical week, with 170,000 people riding at least once a year (Australian Bicycle Council [ABC], 2013). In recent years there has been a national focus on increasing the participation in active transport modes such as cycling, with

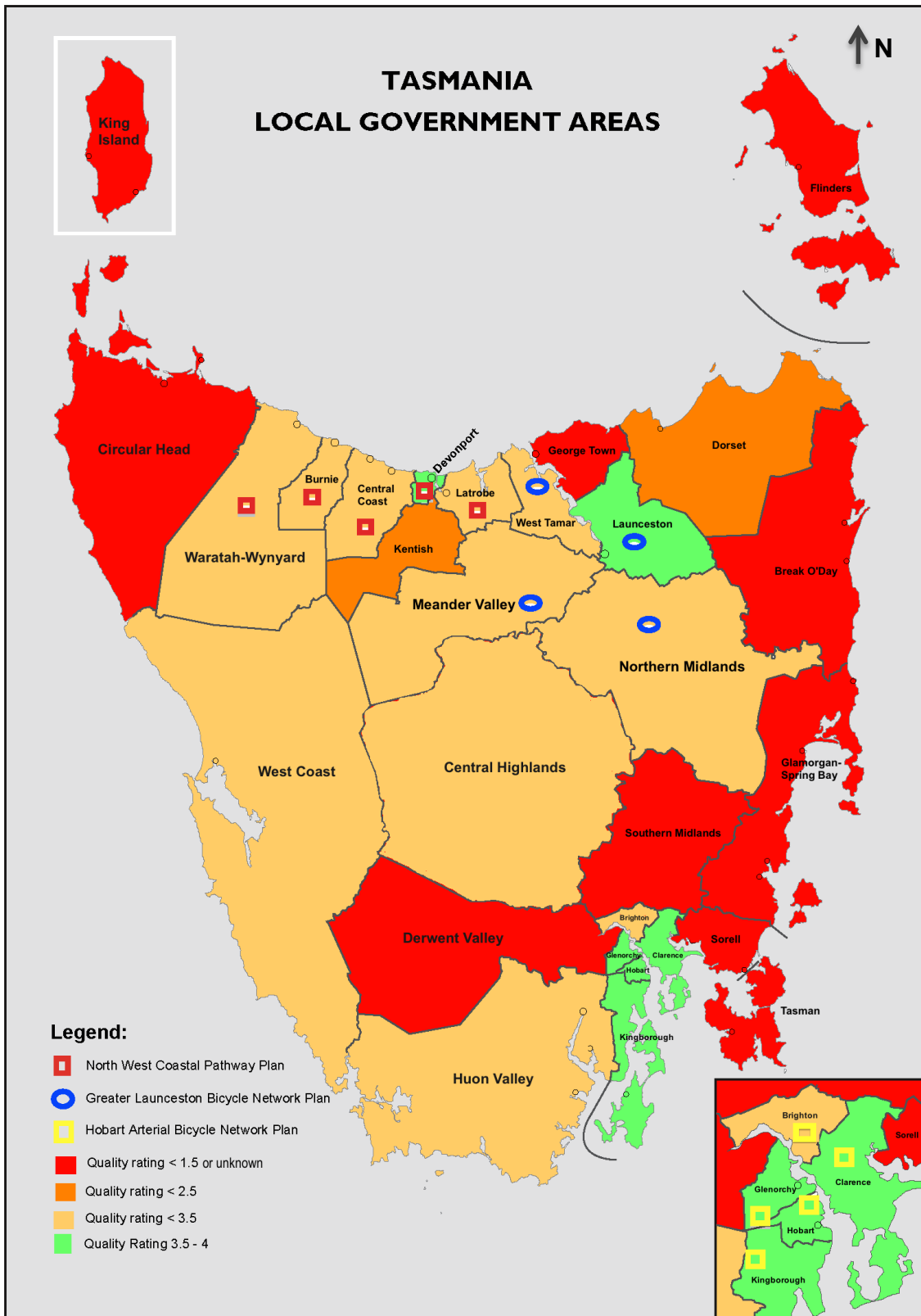
all state and territory governments and many local governments now with policies and programs in place to achieve this (DIT, 2013). *The National Cycling Strategy 2011-16* for example has set the ambitious target of doubling the rate of cycling participation between 2011 and 2016 (ABC, 2010).

The data on the number of regular bicycle riders in Australia is weak. Some local governments collect these data, but they are generally not publicly available. There has also been no overarching analysis of these data for Australia (Rissel & Garrard, 2006). The best publicly available data are not manual counts of riders on the road but a survey asking people to state their riding frequency that is delivered by the Australian Bicycle Council which is part of the Federal Government. Australian Bicycle Council (2010) data show that the level of participation in Tasmania is somewhat lower than the Australian average (3.6% weekly and 3% annually) and has significantly declined by approximately 5% in the past two years. The decline has been attributed to a reduction in participation rates among males in regional Tasmania and has occurred despite the number of households in the state with a working bicycle and the number of bicycles owned remaining relatively stable (ABC, 2013, pp. 52-58)

It is the responsibility for both state and local government to plan and manage the transport system, including the provision of cycling infrastructure. The state government has acknowledged that despite the current initiatives in place to support cycling, more action is required (Department of Infrastructure, Energy and Resources [DIER], 2010). The main role of the state government is to provide funding for local government projects. Therefore local government policy, planning and funding for active transport was the main focus of attention in this paper. The disjuncture between the state managing the health budget and the local governments managing active transport provision creates an unhelpful disconnect around preventative health (Corburn, 2009). However, it remains an important whole of government issue, even if not particularly successfully tackled in practice. There are great incentives for government to pursue active transport policies with widely recognised benefits such as increasing capacity and reducing congestion in the overall transport network, reducing environmental impacts, improved public health

and reduced healthcare costs, as well as improving community well-being and social cohesion (DIT, 2013).

One problem that has been identified in Tasmania is that existing infrastructure for cyclists is of a variable standard with many inconsistencies and gaps, even between suburbs in the same council area. It is thought that a coordinated and consistent approach which cuts across council boundaries and different spheres will help encourage more cyclists to participate (Pucher, Dill & Handy, 2010; DIER, 2010). There are several bodies that are able to facilitate the development of an integrated cycling network. For example, Cycling South is funded by the five greater Hobart councils to integrate bicycle planning across the capital city. Similarly, the Cradle Coast Authority (2010) prepared a master *North West Coastal Pathway Plan* (NWCPP), with the assistance of five local councils, for a shared cycle and pedestrian pathway along the coast between Latrobe and Wynyard in the state's north. In the Launceston region, four local councils collaborated to develop the *Greater Launceston Bicycle Network Plan 2011*. Significantly these three plans alone involved 14 (48%) of the total 29 councils in the state.



**Figure 1.** Tasmania local government areas, key regional bicycle plans and quality rating (see Table 2). Not to scale.

In undertaking this project, we aimed to explore the challenges and opportunities facing Tasmanian councils in seeking to develop 'best practice' bicycle infrastructure strategies. We also sought to discover the status of bicycle infrastructure planning in each of Tasmania's 29 local councils. Specifically, we sought to answer the following three questions:

- Which Tasmanian councils have each of three ingredients that make up a good bicycle strategy: an articulated vision around active transport, a plan for putting that vision into practice and funding to enact the plan?
- Has the approach to bicycle planning changed in recent years?
- What can council employees tell us about the opportunities and challenges with respect to active transport planning?

## **2. Methods**

Questionnaires were presented to each of the 29 councils and an analysis of existing strategies and plans was undertaken to fulfil the objectives of the study. Interviews were conducted with three separate councils (large southern, large northern, small semi-rural). Ethics approval (number H13943) was sought from the Human Research Ethics Committee (Tasmania) Network, owing to the interview component of the paper, and was ultimately approved. As part of the approval process an indicative interview schedule, phone and email preamble, information sheet and consent form for interview participants were all developed (Appendix 1) and submitted to the ethics committee. A preliminary search of each of the councils' websites was undertaken using the Google search function 'site:' with key terms of '\*cycl\*' and 'bike'. All documents deemed to be relevant were saved for future analysis. Any references to a formal bicycle strategy or associated action plan were noted against the corresponding council in a Google Docs spread sheet.

A bulk blind carbon copy email was then sent to each of the 29 local councils. This email explained that we were seeking information about the councils' active transport infrastructure planning, with a specific focus on bicycle infrastructure planning as part of a third year university research project. Reasons why and how the council might

participate in the project were provided along with four questions that we sought to have answered.

The questions were:

1. Is there a staff member who does recreational/commuter planning for active travel?
2. Does the council either have, or plan to have, a bicycle strategy? Is that plan publicly available?
3. Is there a current works plan to implement the strategy?
4. Is there a dedicated, recurring budget for bicycle infrastructure?

Councils who did not respond initially to the bulk email were phoned after at least ten business days. The most appropriate person to answer questions on bicycle infrastructure was sought, who was then asked the questions over the phone. At the request of the relevant council staff, some were re-emailed the questions to respond in writing. In some instances, such as smaller remote councils, it was deemed appropriate for the receptionist to provide general answers to the questions. If a relevant staff member at a council had subsequently been identified they were emailed directly rather than phoned.

All data collected was collated in a Google Docs spread sheet. The main variables were council website, address, email, relevant staff and committees, relevant documents, annual reoccurring bike budget, independent review of strategy or plan, email response to questions, answers to questions and any other notes (Appendix 2). Plans were analysed using guidelines from Bicycle Network (2014) who suggest that an effective strategy needs a detailed program to allow traffic engineers to realise the plans. Important factors include a prioritized and costed list of projects with associated concept design or brief on what is involved for that project. It is also recommended that a concept design include a description of the current conditions including road width, traffic conditions, parking and the importance of the cycling route in the network, indications of possible treatments, sketch of recommended treatment and photos to show current conditions. This Tasmanian survey is the first stage of a larger, multi-state project that will be conducted in the second half of 2014.

### **3. Results**

#### **3.1 History of bike planning**

Some councils have had a history of bicycle planning dating several decades. Outdated plans include *Clarence's Municipal Bicycle Plan 1995*, Devonport's *Bicycle Planning Seminar Notes 1995*, Launceston *Bike Plan Study 1981*, Launceston *Northern Suburbs Bikeway Options Project 1996*, *Launceston Bike Plan 2005*, *Glenorchy City Council Bicycle Strategy Research Report 1995*, the *Strategy Plan for Cycling in the Municipal Area of the City of Hobart 1980*, *Hobart City Bike Plan 1997* and the *West Tamar Bike Plan 1997* (Appendix 2). All but one of the councils (88%) that had previously developed a bicycle strategy or plan has released one in the last decade.

Although we were only able to gain access to a few of these documents, they all shared the characteristic of being comprehensive in both content and detail. For instance, they all included analysis of both State and Federal policy frameworks, considered wider leisure and demographic trends across Tasmania, examined accident records and designed and conducted surveys (HMT Planning, 1997; Peters & James Douglass and Associates, 1995). Another key feature of all of these plans was the inclusion of an action plan as part of the strategy. Only one bicycle strategy released in the last decade is of a similar comprehensive nature to these more historic documents and only three include the action plan as part of the strategy.

**Table 1.** Status of bicycle strategy and plan, organised by population density. Population density data are from the 2011 Australian census (Australian Bureau of Statistics, 2013). Population density is persons/km<sup>2</sup>. 'Main plan' means that bicycle planning is included in main council plans.

Council	Pop'n density	Relevant Position	Bicycle Strategy	Action Plan	Bicycle Budget
Hobart City	649	Engineer	Yes	Yes	\$55,000
Glenorchy City	376	Recreation Coordinator, Engineer	Yes	No	No
Devonport City	230	Infrastructure Coordinator	Yes	Yes	\$22,000
Clarence City	142	Recreational Planning Officer	Yes	Yes	Needs based funding
Brighton	92	Strategic Planning Officer	No	No	No
Kingborough	49	Councillor, Engineer	Yes	Yes	\$30,000
Launceston City	47	Engineer, Recreation Officer	Yes	Yes	\$75,000
Burnie City	33	Director of Works, Coordinator for Parks	No	Yes	No
West Tamar	33	Recreational Officer	Yes	Yes	No
Central Coast	24	Community Services	No	Yes	No
Sorell	23	No	No	No	No
Latrobe	18	Engineer, Economic Development Officer	Main plan	Main plan	Unknown
George Town	10	Community Services	No	No	No
Kentish	6	Economic Development Officer	Main plan	Main plan	Unknown
Meander Valley	6	Community Development Officer	Main plan	Main plan	No
Waratah-Wynyard	4	Community Development Officer	No	Yes	No
Tasman	4	No	No	No	No
Northern Midlands	3	Community Development Officer	Main plan	Main plan	No
Huon Valley	3	Recreational Planning Officer	Part of wider plan	No	No
Circular Head	2	Recreational planning officer	Part of wider plan	No	No
Dorset	2	No	Part of wider plan	Unknown	Unknown
Break O'Day	2	No	No	No	No
Glamorgan/Spring Bay	2	No	No	No	No
Derwent Valley	2	Unknown	Unknown	Unknown	Unknown
Southern Midlands	2	No	No	No	No
King Island	2	No	No	No	No
West Coast	0.5	Executive Assistant	No	Part of wider plan	Unknown
Flinders	0.4	No	No	No	No
Cent. Highlands	0.3	Unknown	Unknown	Unknown	Unknown



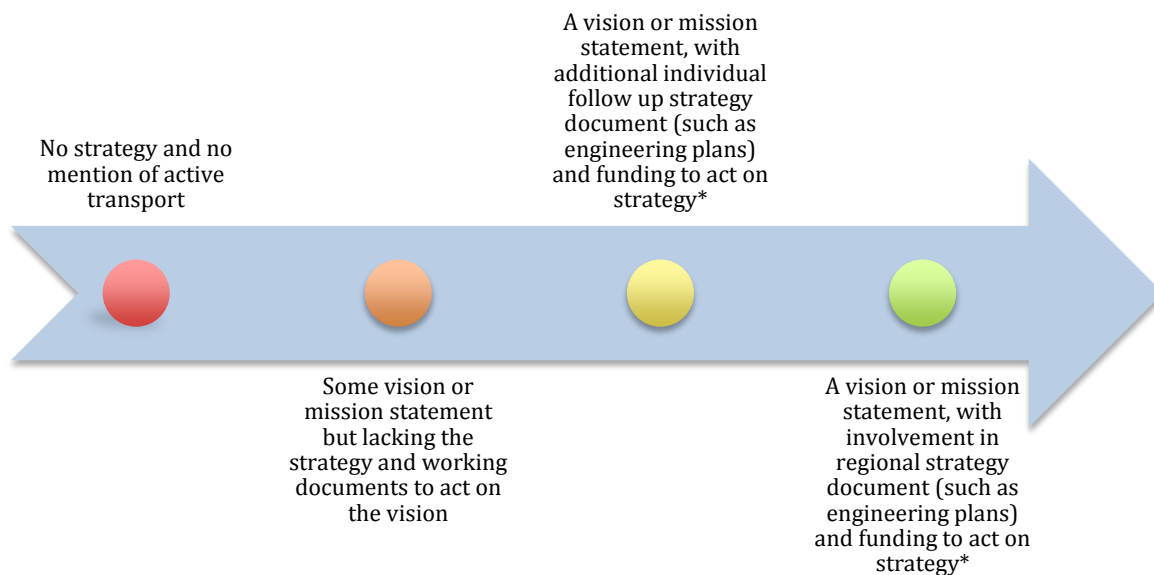
### 3.2 Current bicycle strategies and plans

In total, 14 councils provided answers to our four questions via email. A further nine councils provided answers via phone. Despite numerous attempts, we were unable to get in contact with the remaining six councils (Table 1). Overall, 13 councils (45%) had developed some form of strategy incorporating the use of bicycles in the sense of active transport. Of this 13, only six (20%) had developed a strategy explicitly for bicycles, and only four (14%) had developed their strategy independently of other councils. Fourteen councils (48%) have developed some form of action plan, although the actual form and content of the plan varied from a simple map through to comprehensive planning documents. As with strategies, only six councils (21%) have developed their own plans. Four councils, (14%) despite having no formal bicycle strategy or plan, have the consideration of bicycle infrastructure as integral to their main council plans under different strategies. Of this four, two councils had it as part their vision for reinvigorating towns for youth and encouraging tourism, another had it as part of their health and major works plans, and one as part of their structure plan.

Four councils that responded (17%) failed to mention their involvement in wider regional plans. One council (4%) noted that they were in the process of developing a plan but did not mention the existence of a bicycle plan released three years prior. Another council incorrectly stated that they did not have a strategy, when in-fact the council had commissioned and adopted one two years earlier. There were three councils (10%) noted that they were currently developing or updating a bicycle strategy to be released in the near future. A further three councils explained that they had started developing a bicycle strategy, however two of these noted it was not currently a priority of the council indicating its release may be some time away. One council also revealed that they were about to start a new strategic plan for walkways and trails, with a possible focus on cycle ways. A staff member at another council indicated that they would like to develop a bicycle strategy but that it was unlikely in the short-term due to other priorities at the council. Overall this indicates that 20 councils (69%) consider the development of some form of strategy involving bicycles as beneficial.

### 3.3 Collaborative nature of planning

Councils in Tasmania have developed three key regional bicycle strategies. These are the NWCPP (Cradle Coast Authority, 2010), the *Hobart Regional Arterial Bicycle Network Plan* (HRABNP) (Cycling South, 2009) and the *Greater Launceston Bicycle Network Plan* (GLBNP, 2011). As discussed later in 3.4, the sophistication of this regional planning ranges from a simple map outlining existing and possible cycling routes to detailed planning documents. Significantly these three plans alone involve 14 (48%) of the total 29 councils in the state. Two councils (7%) also highlighted the problem where the majority of cyclists in their municipality used roads managed by DIER, and as such they were in no position to adequately plan for those routes. However this did not stop one of the councils developing their own strategy and action plan. That council emphasised the importance of working closely together with DIER to ensure that projects identified in the action plan are implemented, noting that projects had already been completed as a result of this approach. During an interview another council also stressed the significance of “having the backing from [DIER] in what we are doing, particularly on roads that are not our responsibility”



**Figure 2.** The continuum of council planning for active transport from no planning through to comprehensive planning. This is represented as a continuum because an individual council might plot part way between two different levels of planning activity. \* At least four councils have their strategy embedded in the main council planning documents, rather than as a separate strategy.

### 3.4 Quality of bicycle planning

There was a significant range of planning sophistication at local councils, from general mission or vision statements or simple maps identifying possible routes, through to comprehensive planning documents, that met and in some cases exceeded all of the criteria outlined by Bicycle Network (2014) to be a successful strategy. Figure 2 indicates this continuum of bicycle planning. Following analysis of all relevant documents it was determined that 10 councils (34%) had no form of bicycle planning. Despite our best efforts we were unable to determine the quality of planning at two councils (7%) owing to a lack of data. One council (3%) was deemed to have a quality rating of one and a half (Table 2) owing to the fact that it simply had a general commitment to cycling in only one limited plan. One other council (3%) was given a quality rating of two for having general commitments to improve the level physical activity, including bicycle use, of residents in their municipality. This council can be considered in the middle of the planning continuum as they show some level of commitment to increasing bicycle participation, but lack sufficient detailed planning documents to easily enable the council to act on the vision.

A quality rating of two and a half was assigned to four councils (14%). This was given to three of these councils for having non-specific bicycle plans with a sufficient level of detail to satisfy the Bicycle Network (2014) criteria. The other council to be given a quality rating of two and a half had a general commitment to increasing bicycle use in council plans, in addition to participation in some wider but undetailed regional strategy that was simply a map of proposed and existing routes.

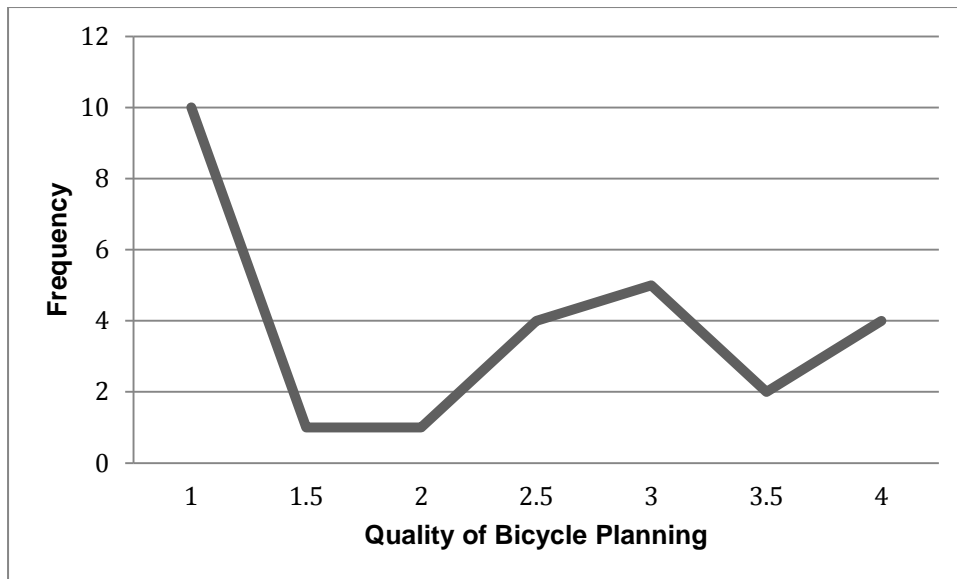
**Table 2.** Current bicycle strategy and action plan sorted by quality of bicycle planning. Quality of bicycle planning was ranked from 1 = no planning (red), 2 = bicycles mentioned in council plans and some vision for residents around active transport (orange), 3 = explicit involvement in detailed bicycle strategy and plans, or inclusion in main council strategy (yellow), 4 = additional development of own detailed strategies and plan to implement them (green). Colours were applied in accordance with the Figure 1 continuum.

Council	Current Bicycle Strategy	Current Action Plan	Quality of bicycle planning*
Clarence City	Municipal Bicycle Strategy 2013	Bicycle Action Plan 2013, Hobart Regional Arterial Bicycle Network Plan 2009	4
Devonport City	Cycling Network Strategy 2010	Cycling Network Strategy Action Plan 2010, North West Coastal Pathway Plan 2010	4
Kingborough	Kingborough Council Bicycle	Kingborough Bicycle Action Plan 2013, Hobart Regional	4

Council	Current Bicycle Strategy	Current Action Plan	Quality of bicycle planning*
	Plan 2006	Arterial Bicycle Network Plan 2009	
Launceston City	Launceston Cycling Infrastructure Strategy 2009, Launceston Bike Strategy (Draft) 2013	Launceston Bike Plan 2004, Greater Launceston Bicycle Network Plan 2011	4
Glenorchy City	Glenorchy Council Bicycle Strategy (Draft) 2008	Hobart Regional Arterial Bicycle Network Plan 2009	3.5
Hobart City	Sustainable Transport Strategy 2009	Principle Bicycle Network Plan 2007, Hobart Regional Arterial Bicycle Network Plan 2009	3.5
Burnie City	No	North West Coastal Pathway Plan 2010	3
Central Coast	No	North West Coastal Pathway Plan 2010	3
Latrobe	Included in main council plans	North West Coastal Pathway Plan 2010, included in main council plans	3
Northern Midlands	Northern Midlands Council Trails and Bikeways Strategy 2011, also included in main council plans	Greater Launceston Bicycle Network Plan 2011, included in main council plans	3
Waratah-Wynyard	No	North West Coastal Pathway Plan 2010	3
Huon Valley	Huon Valley Township Walking Track Strategy 2007	No	2.5
Meander Valley	Included in main council plans	Greater Launceston Bicycle Network Plan 2011, also included in main council plans	2.5
West Coast	No	West Coast Sport and Recreation Plan 2010	2.5
West Tamar	West Tamar Trails Strategy 2005	Greater Launceston Bicycle Network Plan 2011	2.5
Brighton	Recreational Plan	Hobart Regional Arterial Bicycle Network Plan 2009	2.5
Kentish	Included in main council plans	Included in main council plans	2
Dorset	Bridport Future Planning & Development Strategy 2006	Unknown	1.5
Break O'Day	No	No	1
Circular Head	No	No	1
Flinders	No	No	1
George Town	No	No	1

Council	Current Bicycle Strategy	Current Action Plan	Quality of bicycle planning*
Glamorgan / Spring Bay	No	No	1
King Island	No	No	1
Sorell	No	No	1
Southern Midlands	No	No	1
Tasman	No	No	1
Central Highlands	Unknown	Unknown	Unknown
Derwent Valley	Unknown	Unknown	Unknown

A total of 11 councils (38%) were given a quality rating equal to or greater than three. It is at this end of the planning continuum that there is the greatest variety of approaches and progress between councils. A quality rating of three was given to five councils (17%). Four of these councils got this rating for their involvement in the NWCPP (Cradle Coast Authority, 2011) which aims to develop a 110km shared walking and cycling pathway along the state's North West coast. This plan is incredibly detailed and includes route descriptions, identification of relevant issues, treatments, detailed maps, engineering drawings, in-depth costings, priorities, a discussion about cycling user data and the potential benefits of the plan. These factors exceed those recommended by Bicycle Network (2014) and places the four councils involved at the upper continuum of bicycle planning. A quality rating of three was given to the other council for a combination of general commitments to "continue to improve... bikeways within the council area (ongoing)" (Latrobe Council, 2012), and the development of their own strategy, albeit limited in detail and participation in wider regional plans.



**Figure 2.** The frequency and quality of bicycle planning at Tasmanian councils.

Two councils (7%) were assigned a quality rating of three and a half. Both of these councils had developed some form of their own dedicated bicycle strategy and were additionally involved in wider regional plans. One of these councils had also developed their own plan, but it was simply a map outlining existing and proposed routes, delineating between on-road single and shared parking lanes, and off-road routes. That council explained that their strategy and plan are carried out by specific projects, for which detailed engineering work is done to provide the requisite detail as suggested by Bicycle Network (2014).

The remaining four councils (14%) were given a quality rating of four, placing them at the upper end of the planning continuum. All of these councils had a developed their own recent detailed strategies and had a plan to implement them in accordance with Bicycle Network (2014) recommendations. However even within this quality score of four there was still a continuum of planning, with at least one council strategy far exceeding the level of detail recommended by Bicycle Network. That same council was the only council in Tasmania that we could find to have their strategy independently reviewed (GHD, 2013). All four councils were all additionally involved in relevant regional bicycle network plans that aimed to develop bicycle network across municipal boundaries. All of these councils also had consistent annual funding of bicycle infrastructure, with three of the councils having a dedicated reoccurring annual bicycle budget. Another common characteristic of these councils

was a history of bicycle planning, in one instance dating as far back as 1981 (School of Environmental Design).

Ultimately, five councils (17%) had all of the key ingredients that make up a good bicycle strategy: an articulated vision around active transport, a plan for putting that vision into practice and funding to enact the plan. The largest council by both population density and council staff received a rating of 3.5 because of a lack of detail connecting their strategies with on the ground plans. It is possible that these documents exist but we were unable to access them through public material or through contact with council staff.

### 3.5 Staff responsible for bicycle planning

It was often difficult to find the appropriate person to speak to, because unlike some of the large Australian mainland councils, not even the largest Tasmanian councils have an 'Active Transport' or 'Sustainable Transport' officer. Until recently, Hobart City Council had a Sustainable Transport Officer, but that position was discontinued in 2013 and the officer was reabsorbed back into the general engineering section. In many instances there were also discrepancies between who was formally recognised as involved in the development of bicycle strategies and plans on those documents, and the role that was identified as being relevant to the position of active transport planning in response to question one of the questionnaire. Furthermore six councils (21%) identified the role as being shared between two or more staff members.

By far the most common response (28%) when asked if the council had a role that considered recreational or commuter active transport was no. Despite our best efforts the role was unknown at 7% of councils. At 21% of councils a Recreational Planning Officer fulfilled the role, with 17% utilizing a Community Services/Development Officer. At 14% of councils a Traffic/Transport Engineer Officer was used, and at 7% of councils the role was attributed to the Director of Works and Services. In one instance two councils (7%) employed the same Tourism and Economic Development Officer to undertake the role. The positions of Manager of Environment and Sustainability, Strategic Planning Officer, Executive Assistant,

Infrastructure and Urban Design Coordinator, Coordinator for Parks and Reserves and a Councillor where all used by one council (3%) to fulfil the role.

### 3.6 Funding of bicycle infrastructure

Of all the councils contacted only four (14%) indicated that they had a dedicated reoccurring budget for bicycle infrastructure. All of these councils were keen to emphasise that funding was also secured from sources other than the dedicated budget such as capital works programs, open space budgets and grants from both State and Federal Governments. One council was even able provide a figure of \$20,000 specifically allocated for cycling improvements in the next financial year from their capital works program, and a further \$50,000 of funding each year for the following four years after that. Another council also stressed that “the actual spend on bicycle and bicycle related infrastructure by [the council] over the past 5 years is vastly in excess of that figure” and that “focussing on the dollars allocated does not mean squat in terms of real infrastructure development” (personal communication, April 22, 2014).

The vast majority of councils explained that all budgets were project specific and funding was secured annually through a bidding process, resulting in no certainty for funding regardless of council commitments. One of these councils explained that despite not having a dedicated annual bicycle budget, there had been consistent annual needs based funding afforded to bicycle infrastructure. Three councils also indicated that bicycle infrastructure was considered as part of any upgrade to existing road or park upgrades and assessments of development, with two citing recent examples of this occurring. One council explained that despite there being \$5,000 allocated in the past three years to consider the design of safe cycling routes, so far that money had been used for the purchase and instillation of bicycle racks and not strategic planning.



## 4. Discussion

The aims of this study were to investigate the current status of bicycle infrastructure planning in Tasmania's 29 local councils, discover which councils have developed 'best practice' bicycle strategies and answer if this practice has changed in recent years. It also sought to understand some of the challenges and opportunities for these councils with respect to active transport planning. The results achieved from this study highlighted differing qualities and approaches between current plans, and also between historic and current bicycle planning documents. The results also indicated similar opportunities and problems for local councils. This supports the earlier findings of DIER (2010) that local councils in Tasmania have developed various initiatives to support cycling, including local bicycle plans and broader mobility plans.

### 4.1 Bicycle planning: then and now

In recent years, the approach taken by councils when developing bicycle-planning documents seems to have significantly changed from its beginnings in the early 1980's through to the late 1990's. Historically these documents would typically encapsulate both a strategy for bicycle use and a detailed plan to implement it. This approach can be contrast with recent bicycle strategies in Tasmania, where as little as 15% of these documents included an action plan as part of the strategy.

Perhaps reflective of a broader Australian shift in planning (Searle & Bunker, 2010), key Australian cycling bodies such as Bicycle Network (2014) currently suggest a separated strategy and plan approach to bicycle planning. One possible advantage of such an approach is it allows councils to more easily amend the plan to reflect current funding levels and/or priorities. It also permits the release of the broader strategy to the general public without creating confusion stemming from differing versions (Parnell & Pope, 2008). However in at least 20% of strategies, despite identifying the need to create a plan to implement the strategy, one was never formally developed or released. This highlights the real risk of this newer approach, that despite best intentions, the critical element required by traffic engineers to implement the strategy may never be developed (Parnell & Pope, 2008).

Another distinguishing characteristic of these historic bicycle-planning documents is their comprehensive nature. For example, it was not uncommon for these documents to consider in great detail the broader policy framework, key planning elements and their implications for bicycle planning. Research and consultation findings were also commonly articulated in the document. All of this was additional to discussions about specific routes, associated treatments and related problems. Examples of such documents are the *West Tamar Bike Plan* (HMT Planning, 1997) and the Hobart City Council (1997) *Bike Plan*. Although some recent bicycle strategies will discuss the majority of the above factors, it is typically done in much more general terms (Parnell & Pope, 2008). In the last decade only one Tasmanian council bicycle strategy can be regarded as similarly comprehensive to its historic predecessors. That council was in the relatively unique position as one of the five of councils (17%) with a succession of bicycle strategies, able to build on earlier works and priorities.

Today it is believed that a collaborative planning approach is now the accepted paradigm in planning (Morrison, 2006). This is supported by the statistic revealed in this report that 48% of councils in Tasmania are involved in some form of wider regional bicycle strategy. Morrison (2006) suggests that citizens and institutions are demanding regional institutional integration to address the complex socio-environmental problems issues involved in pursuing rural sustainability. Indeed both State and Federal Government have called for a coordinated and consistent approach which cuts across council boundaries and different spheres of Government to encourage increased participation in cycling (DIT, 2013; DIER, 2010). This is very important for bicycles given that riders in the larger urban centres need to access bicycle routes that connect attractors in different municipalities (Pucher et al., 2010). Ultimately it is the responsibility for both state and local government to plan and manage the transport system, including the provision of cycling infrastructure (DIER, 2010).

#### 4.2 Opportunities for councils planning for active transport

In keeping with wider international trends the opportunity for encouraging both individual and wider community health, particularly as a preventative health measure, was widely recognised by Tasmanian councils (World Health Organisation, 2002; Pucher et al., 2010). Studies have found that those who cycle for transport

(commuter) purposes have less likelihood to being overweight or obese, and a 30-40% decreased risk of diabetes (PPAC, 2011). These changes have significant implications for the state's health budget (DIER, 2010). Tasmanians are encouraged to make participation in 20 minutes of physical activity on most days of the week part of their lifestyles (PPAC, 2011). Planning documents such as bicycle strategies that incorporate exercise into active travel is one highly effective way of achieving this (DIT, 2013). Research shows that these active transport strategies are also often low cost, with typical cost benefit analysis for an active transport project showing that public health accounts for most of the economic benefits, with a net benefit of about 144 cents per km (DIT, 2013).

As many as 11 councils saw opportunities to create new tourism experiences. While not necessarily developed as part of active transport, shared pathways are now recognised nationally and internationally not only as vital infrastructure for local communities, but as having significant tourism potential (Beeton, 2003). The fact that a 2010 Tasmanian Visitor Survey found that 22,600 visitors engaged in a cycling experience (ride a bicycle or mountain bike) whilst in Tasmania, spending approximately \$51m (Tourism Tasmania), suggests that this opportunity is a tangible one.

Seven councils also saw an opportunity to address wider environmental concerns relating to travel, such as noise and air pollution by facilitating active transport. In Tasmania road transport contributes a staggering 92% of greenhouse gas emissions with personal cars being the largest contributors (Department of Climate Change, 2008). The majority of vehicle trips in Tasmania are less than 3km, meaning that they can easily be substituted by active transport modes (DIER, 2010). It is thought that a 10% increase in cycling (equivalent to a 1% modal shift away from cars) would reduce greenhouse gas emissions by as much as 50,000 tones annually (DIER, 2010). Another opportunity identified by councils was increasing social cohesion and community wellbeing. Infrastructure and land uses that support cycling can increase the attractiveness of a place to live, work, shop and socialise in (DIER, 2010).

### 4.3 Challenges facing councils planning for active transport

Adequate community consultation and feedback presented itself as a significant challenge for councils seeking to develop and implement their bicycle planning. During an interview one council staff member explained that “trying to communicate the benefits of what we were doing was fundamental...community consultation can never cover everybody, putting things on the website only does so much...good communication processes are key for community acceptance” (personal communication, 14 May, 2014). Other councils suggested that as a direct result of poor consultation the implementation of their strategy had suffered, and even been reversed in one instance. Varying degrees of success involving community involvement have similarly been recorded in other Australian states (Parnell & Pope, 2008).

Four of the councils that we spoke to were experimenting with facilitating more open forums as part of their consultation approach to try and overcome this problem. The hope is that by allowing relevant stakeholders to better understand differing views and be more willing compromise (personal communication, 11 April, 2014). Overall most of the councils said they had received overwhelming community support in implementing their strategy. The clear exception to this was in relation on-road work, with most councils recognising the need for broad community engagement and input and a staggered deployment. Perhaps unsurprisingly this trend has also been observed in other countries (Rietveld & Daniel, 2004) as well as Australia more generally (Parnell & Pope, 2008).

Obtaining adequate funding was another problem for some councils, particularly smaller regional councils with limited personnel and monetary resources. Although the availability of funding under State and Federal Government initiatives has facilitated the implementation of a vast majority of bicycle infrastructure, a lot of this was on the basis that councils matched funding (DIER, 2010). In keeping with the trend observed in other Australian states, this posed a problem for smaller and more remote or rural councils (Parnell & Pope, 2008). During an interview one council staff member explained that “what goes in the budget is what is going to happen, it does not matter how many strategies you have, or how detailed they might be, if the money is not there it just won’t happen” (personal communication, 17 May, 2014).

Despite this, providing detailed, costed and prioritised bicycle strategies and plans can still help decision-makers to give credence to applications for funding, as they will be able to clearly demonstrate and quantify the potential benefits of cycling (DIT, 2013).

As might be expected, the priorities of council also had an impact on the availability of funding. This impacted on things such as the allocation of time and resources for developing and implementing bicycle plans. At some councils consistency of funding was also cited as a problem, with fears that following the recent change in both State and Federal Government, some existing funding schemes might cease to exist or be significantly altered. For those councils this lack of certainty undermined their ability to adequately plan for bicycle infrastructure. Another key challenge for councils was overcoming the greater uptake issues, such as personal safety, comfort and convenience and a general lack of awareness of available infrastructure (DIT, 2013). This problem is one faced by all bodies seeking to plan for increased bicycle participation (Rose & Marfurt, 2007; Pucher et al., 2010).

#### 4.4 Bicycle planning for active transport or recreation?

Although the results showed that 20 councils (69%) in Tasmania consider the development of some form of strategy involving bicycles as beneficial, the reasons for doing so were varied. Broadly two groups can be categorized from these councils, one that focuses on cycling as a form of active transport and another that aims to increase cycling participation as a means of recreation. There is support at both levels of Government for the adoption of both of these approaches. For instance documents such as the *Tasmanian Physical Activity Plan*, (Premier's Physical Activity Council [PPAC], 2011) the *Trails Tasmania Strategy* (Inspiring Place, 2007a) and *Sport and Recreation Plan* (Inspiring Place, 2007b) all encourage local councils to support the facilitation of cycling as a means of increasing recreation. While the *Tasmanian Walking and Cycling for Active Transport Strategy* (DIER, 2010) seeks to create an accessible and well-connected transport system that encourages more people to cycle as part of their everyday journeys, it notes that this will also benefit those that cycle for recreation and pleasure.

Pucher et al. (2010) found that all available evidence suggests that it is much more than explicitly pro-bicycle policies that facilitates an increase in bicycling, with wider transport and recreational policies making an importance difference. For instance, studies have shown that non-cyclists who are surrounded by other cyclists may be more likely to have contemplated cycling, and thus more responsive to policy interventions. (Gatersleben & Appleton, 2007). Pucher et al. (2010) stressed that the most appropriate package of policies for local conditions was absolutely critical to increasing bicycle participation.

## **5. Conclusion**

The questionnaire and interview process of this study established that the status of bicycle infrastructure planning in each of Tasmania's 29 local councils is on a continuum, from absolutely no planning through to successions of comprehensive documents. Only five councils were had all the elements that make up a good bicycle strategy: an articulated vision around active transport, a plan for putting that vision into practice and funding to enact the plan. Historically bicycle-planning documents in Tasmania were typically incredibly thorough, and encapsulated both a strategy and plan. In contrast with this are the majority of current bicycle-planning documents, which are of variable standard and in most cases consist of a separate strategy and plan. Various staff employed at the councils to (sometimes in part) consider bicycle infrastructure planning identified a range of opportunities and challenges facing them in regards to active transport. These include opportunities such as improved health and wellbeing, tourism, economic and environmental benefits. Challenges included adequate community engagement, securing resources, other council priorities and community awareness.

With the Federal Government aiming to double the participation of cycling nationally between 2011 and 2016 (ABC, 2010), the role of local councils in developing locally appropriate, best practice policies to facilitate an increase in cycling is important now more than ever.

## Acknowledgments

Thanks to the many council staff who provided information for this study. Thank you to the Local Government Association of Tasmania who were a useful first point of contact in providing information.

## References

Australian Bureau of Statistics. (2013). *Population Estimates by Local Government Area, 2003 to 2013*. Canberra, Australia: ABS.

Australian Bicycle Council. (2010). *The Australian National Cycling Strategy 2011-2016*. Austroads Publication AP-C85-10, Austroads, Sydney, NSW.

<<https://www.onlinepublications.austroads.com.au/downloads/AP-C85-10>>

Accessed 31 March 2014.

Australian Bicycle Council. (2013). *Results of the 2013 National Cycling Participation Survey*. Austroads Publication AP-C91-13, Austroads, Sydney, NSW.

<<https://www.onlinepublications.austroads.com.au/downloads/AP-C91-13>>

Accessed 19 May 2014.

Austroads. (2009). *Guide to Road Design, Part 6A: Pedestrian and Cyclist Paths*.

Austroads Publication AGRD06A-09, Austroads, Sydney NSW.

<<https://www.onlinepublications.austroads.com.au/items/AGRD06A-09>> Accessed 2 May 2014.

Bicycle Network. (2014). *Measure & Understand: Bicycle Strategies*.

<<https://www.bicyclenetwork.com.au/general/bike-futures/10209>> Accessed 6 March 2014.

Beeton, S. (2003). An economic analysis of rail trails in Victoria, Australia. *Research Monograph (Bendigo, VIC: La Trobe University, School of Sport, Tourism and Hospitality Management)*.

Corburn, J. (2009). *Toward the healthy city: people, places, and the politics of urban planning*. MIT Press.

Cradle Coast Authority. (2010). *North West Coastal Pathway Plan*.

<[http://www.cradlecoast.com/\\_literature\\_105476/North\\_West\\_Coastal\\_Pathway\\_Plan](http://www.cradlecoast.com/_literature_105476/North_West_Coastal_Pathway_Plan)> Accessed 19 March 2014.

Cycling South. (2009). *Hobart Regional Arterial Bicycle Network Plan*.

<[http://www.cyclingsouth.org/index.php/component/k2/item/download/5\\_12998a166aa58b141fce7bbfd91ff9f1](http://www.cyclingsouth.org/index.php/component/k2/item/download/5_12998a166aa58b141fce7bbfd91ff9f1)> Accessed 19 March 2014.

Department of Climate Change. (2008). *Australia's National Greenhouse Accounts*.

<[http://www.egovernment.tas.gov.au/\\_\\_data/assets/pdf\\_file/0019/57133/inventory2006.pdf](http://www.egovernment.tas.gov.au/__data/assets/pdf_file/0019/57133/inventory2006.pdf)> Accessed 1 June 2014.

Department of Infrastructure and Transport. (2013). *Walking, Riding and Access to Public Transport; Supporting Active Travel in Australian Communities*.  
<[https://infrastructure.gov.au/infrastructure/pab/urbanpolicy/active\\_travel/files/infra1874\\_mcu\\_active\\_travel\\_report\\_final.pdf](https://infrastructure.gov.au/infrastructure/pab/urbanpolicy/active_travel/files/infra1874_mcu_active_travel_report_final.pdf)> Accessed 8 May 2014.

Department of Infrastructure, Energy and Resources. (2010). *Tasmanian Walking and Cycling for Active Transport Strategy*.  
<[http://www.dier.tas.gov.au/\\_\\_data/assets/pdf\\_file/0006/48327/Walking\\_and\\_cycling\\_strategy\\_-\\_final.pdf](http://www.dier.tas.gov.au/__data/assets/pdf_file/0006/48327/Walking_and_cycling_strategy_-_final.pdf)> Accessed 4 April 2014.

Devonport City Council. (2010a). *Cycling Network Strategy 2010-2013*.  
<[http://www.devonport.tas.gov.au/upload/documents/yourcity/cycling\\_network\\_strategy.pdf](http://www.devonport.tas.gov.au/upload/documents/yourcity/cycling_network_strategy.pdf)> Accessed 19 March 2014.

Devonport City Council. (2010b). *Devonport City Cycling Network Strategy Action Plan*.

GHD. (2013). *Launceston Bike Network Review*. Prepared for Launceston City Council. Hobart, Australia, GHD. <[http://s3-ap-southeast-2.amazonaws.com/ehq-production-australia/c1b3d5a95ccc26a097631ece7c608a611582527e/documents/attachments/000/003/956/original/Launceston\\_Bike\\_Network\\_Review\\_Rev3.pdf?1393347888](http://s3-ap-southeast-2.amazonaws.com/ehq-production-australia/c1b3d5a95ccc26a097631ece7c608a611582527e/documents/attachments/000/003/956/original/Launceston_Bike_Network_Review_Rev3.pdf?1393347888)> Accessed 31 March 2014.

Gatersleben, B., Appleton, K.M (2007). Contemplating cycling to work: Attitudes and perceptions in different stages of change. *Transport Research Part A* 41, 302–312.

HMT Planning. (1997). *West Tamar Bike Plan*. Prepared for West Tamar Council.

Hobart City Council. (1997). *Bike Plan*.  
<[http://www.hobartcity.com.au/Publications/Strategies\\_and\\_Plans/Bike\\_Plan](http://www.hobartcity.com.au/Publications/Strategies_and_Plans/Bike_Plan)> Accessed 16 March 2014.

Hobart City Council. (2009). *Hobart Arterial Bicycle Network Plan*.

Inspiring Place. (2007a). *Trails Tasmania Strategy*. Prepared for Tasmanian Government. Hobart, Australia.  
<[http://www.development.tas.gov.au/\\_\\_data/assets/pdf\\_file/0006/39696/Trails\\_Tasmania\\_Strategy.pdf](http://www.development.tas.gov.au/__data/assets/pdf_file/0006/39696/Trails_Tasmania_Strategy.pdf)> Accessed 16 May 2014.



Inspiring Place. (2007b). *Sport and Recreation Plan*. Prepared for Tasmanian Government. Hobart, Australia.  
<[http://www.development.tas.gov.au/\\_\\_data/assets/pdf\\_file/0006/39696/Trails\\_Tasmania\\_Strategy.pdf](http://www.development.tas.gov.au/__data/assets/pdf_file/0006/39696/Trails_Tasmania_Strategy.pdf)> Accessed 16 May 2014.

Krizek, K. J., & Stonebraker, E. W. (2010). Bicycling and Transit. *Transportation Research Record: Journal of the Transportation Research Board*, 2144(1), 161-167.

Latrobe Council. (2012). *Strategic Plan 2012-2017*.  
<<http://www.latrobe.tas.gov.au/webdata/resources/files/Strategic%20Plan%202012-17%20FINAL.pdf>> Accessed 27 April 2014.

McClintock, J. (2011). *Northern Midlands Council Trails and Bikeways Strategy - Intra-Town Trail/Bikeway Study*. Prepared for Northern Midlands Council.  
<[http://www.northernmidlands.tas.gov.au/files/Publications/nmtbs\\_intra-town\\_trails\\_bikeways\\_study\\_june\\_2011\\_01.pdf](http://www.northernmidlands.tas.gov.au/files/Publications/nmtbs_intra-town_trails_bikeways_study_june_2011_01.pdf)> Accessed 19 March 2014.

Merom, D., Bauman, A., Vita, P., & Close, G. (2003). An environmental intervention to promote walking and cycling—the impact of a newly constructed Rail Trail in Western Sydney. *Preventive Medicine*, 36(2), 235-242.

Morrison T.H., (2006). Pursuing rural sustainability at the regional level: key lessons from the literature on institutions, integration, and the environment, *Journal of Planning Literature*, 21, 143-152.

Parnell T., & Pope R., (2008). *An evaluation of the Bike Plan program from the Roads and Traffic Authority of NSW- as implemented by local councils in the South West Region of New South Wales*, Center for Inland Health, Charles Sturt University, Report for Roads and Traffic Authority.

Peters, T., & James Douglass and Associates. (1995) *Municipal Bicycle Plan*. Prepared for Clarence City Council.

Premier's Physical Activity Council. (2011) *Tasmania's plan for physical activity 2011–2021*. Prepared for Tasmanian Government, Hobart.

Pucher, J., Dill, J., & Handy, S. (2010). Infrastructure, programs, and policies to increase bicycling: an international review. *Preventive Medicine*, 50, S106-S125.

Rietveld, P., & Daniel, V. (2004). Determinants of bicycle use: do municipal policies matter? *Transportation Research Part A: Policy and Practice*, 38(7), 531-550.

Rissel, C., & Garrard, J. (2006). Cycling for active transport and recreation in Australia: status review and future directions. *World Transport Policy & Practice*, 13(1).

Rose, G., Marfurt, H. (2007). *Travel behaviour change impacts of a major ride to work day event*. *Transport Research Part A*, 41, 351–364.

Searle, G., & Bunker, R. (2010). Metropolitan strategic planning: An Australian paradigm?. *Planning Theory*, 9(3), 163-180.

School of Environmental Design. (1981). *Launceston Bike Plan Study*. Prepared for the Launceston City Council.

Tourism Tasmania. (n.d.) *Web Forecaster Data 09 – 10 season*. Retrieved from <http://www.webreporter.asteroid.com.au>

West Coast Council, & Sport and Recreation Tasmania. (2010). *West Coast Council Sport And Recreation Plan 2010 – 2020*.

<[http://www.westcoast.tas.gov.au/webdata/resources/files/Final\\_West\\_Coast\\_Sport\\_and\\_Recreation\\_Plan.pdf](http://www.westcoast.tas.gov.au/webdata/resources/files/Final_West_Coast_Sport_and_Recreation_Plan.pdf)> Accessed 9 April 2014.

World Health Organisation. (2002). *Physical activity through transport as part of daily activities*. WHO Regional Office for Europe, Copenhagen.

<[http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/00111/87572/E75662.pdf](http://www.euro.who.int/__data/assets/pdf_file/00111/87572/E75662.pdf)> Accessed 3 June 2014.