

PORT PIRIE REGIONAL COUNCIL

BICYCLE STRATEGY FOR THE CITY OF PORT PIRIE 2011- 2015



November 2011 - Prepared by:

Bicycle SA : office@bikesa.asn.au www.bikesa.asn.au

HUB Traffic and Transport : hub@hubtt.com.au www.hubtt.com.au

Enquiries regarding this plan should be directed to Christian Haag p: 08 8168 9999 f: 08 8168 9988 e: christianh@bikesa.asn.au

Table of contents

1	Introduction	2
2	Current cycling conditions	3
2.1.	Cycle planning	3
2.2.	Strategic context and relevant programs	3
2.3.	The data profile	3
2.4.	Community and key stakeholder consultation	4
2.5.	Key stakeholder consultation	4
3	Infrastructure planning	7
3.1.	Tourism route	8
3.1.1	Stage 1 loop path	8
3.1.2	Stage 1 linear path	9
3.1.3	Stage 2 path	10
3.2.	Business district	11
3.3.	Local streets	11
3.4.	DPTI-controlled roads	12
3.4.1	Three Chain Road	12
3.4.2	Main Road	12
3.4.3	Warnertown Road	12
3.5.	Schools	13
3.6.	Safety locations	13
3.6.1	Roundabouts	13
3.6.2	Driveways	14
3.6.3	Florence Street	14
3.7.	Special facilities	14
3.7.1	BMX track and mountain biking trails - Phoenix Park wetlands	15
3.7.2	Magor Road	15
3.7.3	Wandearah Road/ Grey Terrace path	15
3.8.	Council processes	15
4	Community engagement and capacity building	16
4.1.	Tourism	16
4.2.	Active adults	16
4.3.	School children	16
4.4.	Workplaces	17
4.5.	Special facilities	17
4.6.	Health programs	17

4.7.	Online Resources	17
4.8.	Capacity building	17
5	The action plan	19

List of Tables

Table 1: SWOT analysis of existing conditions	6
Table 2: Action Plan	20
Table 3: Instrument of Delegation to the Cycle Friendly Communities Reference Group.....	20

List of Figures

Figure 1: Existing bicycle treatments/ facilities.....	Error! Bookmark not defined.
Figure 2: Indicative infrastructure approach.....	7
Figure 3: Tourism route (overview).....	8
Figure 4: Line-marking comparison	9
Figure 5: Path treatment at roundabouts (from Cycling Aspects of Austroads Guides, Austroads 2011)	13
Figure 6: Poor (left) and good (right) practice bicycle lane transitions at single-lane roundabouts, King George Avenue, Hove	14

Appendix

Cycle Indicators report

1 Introduction

Bicycle SA (the state's peak body for recreational and commuter cycling) has been appointed by Port Pirie Regional Council to prepare a bicycle strategy. The nature of this agreement reflects a new approach to bicycle planning which includes a process to engage deeply with the community and to develop capacity within that community as part of the overall strategy plan.

The intent of this new approach is for Bicycle SA to develop an ongoing partnership with Council and the community and to engender a culture of riding a bike that will see 'more people cycling more often'.

To assist this process Bicycle SA has appointed Hub Traffic and Transport to provide specialist engineering and infrastructure advice and solutions.

As part of the development of this Strategy, we have:

- Reviewed relevant strategic documents, to provide the context for Council's bicycle strategy
- Undertaken broad consultation with the community as well as more detailed work with key stakeholders in government and business
- Reviewed available information to develop an overview of cycling indicators for Port Pirie
- Undertaken site visits of the existing cycle network and locations of interest identified through the previous stages (for example, locations with high cycling crash rates).

This report briefly summarises the results of this background data gathering and analysis (more in-depth reporting of these is provided in the Appendix), and in light of this, identifies a prioritised five-year action plan for cycle projects in Port Pirie.

The structure of this report is as follows:

- Section 1: this introduction
- Section 2: an overview of the key findings from our research
- Section 3: an overview of the approach to developing a new bicycle strategy
- Section 4: an action plan, including recommendations for the next five years.

2 Current cycling conditions

Current cycling conditions were investigated as part of the background to this bicycle strategy. This included:

- A review of cycle-focused strategic planning for the area
- A review of cycle-related programs operating in the area
- A review of available data (Census, crash statistics, etc) and 'site conditions', i.e. reviewing local roads, streets and trails
- Public and key stakeholder consultation.

This information is provided in detail in the Cycle Indicators report, presented as an Appendix to this bicycle strategy. This section provides an overview of the results of this research.

2.1. Cycle planning

Port Pirie Regional Council has no record of either current or previous bicycle planning, apart from technical documentation of bicycle lanes in The Terrace and Wandearah Road (one plan) and Kingston Road. These also refer to other proposed and constructed 'bikeways', and are dated 1982 and 1987 respectively. These are not detailed design plans and presumably relied on the experience and understanding of work crews, possibly under supervision of Council officers, for effective implementation.

Nonetheless, these plans indicate that planning for cycling was occurring at some level. This is also evident in the treatments and facilities that can be seen around Port Pirie, albeit that many bicycle logos are faded and the design of treatments is in most cases inadequate when assessed against current practice and understanding.

This cycle planning seems to have lapsed during the 1990s, with site reviews indicating:

- poor maintenance of installed bicycle treatments
- a lack of reinstatement of on-road treatments following road reseals, in many cases leading to removal of treatments (probably relating in part to a lack of detailed design plans)
- little updating of treatments to current standards
- no cohesive network development.

As the mid-1990s are recognised as the nadir for cycling in South Australia and Australia generally, this is perhaps not surprising.

Some cycle planning and construction of facilities has occurred since:

- Streetscape design related to the upgrade of the Port Pirie Waterfront, including construction of a section of shared use path
- The Southern Flinders Ranges Tourism Master Plan, in 2008
- Construction of the skate park.

2.2. Strategic context and relevant programs

The following strategic documents provide a framework for which the process and objectives of this strategy will be realised;

- State Mountain Bike Plan 2001 - 2005
- Draft South Australian Recreation Trail Strategy 2006 - 2010
- SA Tourism Commission Cycle Tourism Strategy 2005 - 2009
- Southern Flinders Ranges Cycle Tourism Strategy 2004 -2008 and Master Plan, 2007

The following relevant programs are given consideration within this strategy;

- Healthy Communities Initiative - commonwealth funded obesity reduction program to be delivered throughout the Southern Flinders Ranges
- Ten for Them - to ensure that children between 0-4 years of age, living in Port Pirie, have blood lead levels below ten micrograms per decilitre. The program is funded by Nyrstar
- Way2Go Program - DPTI community program to increase cycling, walking and public transport use in children traveling to school - includes Way2Go BikeEd
- OPAL - SA Health behaviour change program to improve eating and activity patterns of children, through families and communities thereby increasing the proportion of 0 to 18 year olds in the healthy weight range
- TravelSmart - is a program that provides funding to communities, organisations and workplaces for small scale projects up to \$5,000 that reduce personal car use and/or increase cycling, walking and use of public transport.
- be active - a South Australian better health message established by the State Government to get more South Australians more active, more often.
- Bike SA education services - a diverse range of cycle proficiency programs services children, adults, indigenous Australians, new arrivals and those with a disability

2.3. The data profile

Various indicators regarding the cycling environment in Port Pirie have been sourced and examined as background research for this bicycle strategy. Briefly, our conclusions from this are:

- Port Pirie does not have a connected cycling network, either on-road or off-road, although individual facilities are highly valued.
- In an absolute sense, Port Pirie's local roads are safe for cycling, with low traffic volumes. However, roundabouts and entrances/exits/driveways are particular hazards. The design of off-road paths has not addressed these hazards.
- The amount of cycling occurring in Port Pirie is greater than in metropolitan Adelaide, but low considering the short trip distances and objectively good cycling conditions.

2.4. Community and key stakeholder consultation

Community and key stakeholder consultation was undertaken as part of developing the bicycle strategy, including a feedback form that asked respondents to nominate their priorities against set responses, indicate routes and problem locations on a map, and provide any further comments.

The feedback form was completed (in whole or in part) by 47 people. While not extensive, this (plus general conversations held during consultation) confirmed several recurrent themes. The detailed results of the community and key stakeholder consultation are provided in the Cycle Indicators report, included as Appendix A to this bicycle strategy. Briefly, the major themes noted were:

- Port Pirie has had a strong cycling culture, as evident in its clubs, but this is not translating into the younger generations in the broader community, for whom cycling is just not seen as ‘cool’. There is a feeling that although youth cycling has diminished it should be encouraged and that ‘stranger danger’, currently a barrier for parents can be better managed.
- There is a need for safe off-road cycling areas for children and novices, and a desire for a BMX facility amongst youths. The skate park is well used and is viewed positively.
- Although car drivers have poor/variable respect for bicycle lanes, there is generally a desire for more bicycle lanes, and particularly sealed shoulders on busier roads.
- While Port Pirie is strongly sports oriented, this relates to organised sports mainly played by children and youths. Adult participation is lower and there are few opportunities to participate in non-competitive sports. Adults (including parents) are likely to describe themselves as ‘too busy’ to participate in cycling.
- There are significant opportunities to link to nearby mountain bike trails in Melrose, ‘rail trail’ experiences in Laura as well as the Mawson Trail.
- Major discouraging factors for cycling are road safety and personal fitness. Road safety concerns are generally viewed as perceived barriers that can be mitigated through education program delivery. Equally, the City’s flat terrain presents a positive for those in the community with fitness concerns.

2.5. Key stakeholder consultation

As well as the broader community, key stakeholders were also consulted with the following summary;

- SA Health
 - The City has poor health indicators, similar to many other rural areas, with these indicators considered to be in a deteriorating state. Chronic sedentary lifestyle diseases viz. cardiovascular disease, obesity and diabetes are all prevalent at rates exceeding the state average. Health data for children (under five years) are of particular concern and relate to physical inactivity and poor nutrition.
 - Considerable potential exists for cycling to mitigate physical inactivity, providing ‘access’ to a bike is seen as ‘simple and easy’
 - Intense interest to partner with a range of interventions that target various at-risk community profiles
 - Strong views that poor infrastructure - poor state of footpaths, lack of signage, crumbling road edges and lack of linkages to key service centres (retail precincts) inhibits participation

- Schools should take the lead on reinforcing healthier behaviours through improved nutrition and increased physical activity programs.
- South Australian Police
 - There is a clear understanding that bike programs have the capacity to increase activity levels of disadvantaged members of the community as well as youth-at-risk
 - Delivery of suitable programs should be shared across the Yorke and Mid North Local Service Area eg Kadina
 - Community events such as the annual Fun Run are seen as providing effective engagement opportunities. Day trips to Melrose for mountain biking excursions would be considered beneficial particularly in the 15-17 year age groups
 - Volunteer support networks are limited and may be difficult to establish
 - For disadvantaged community members, the inherent costs of sporting fees and equipment is a barrier to participation with this reflected by poor participation of students at John Pirie School
 - Bike facilities are effective in engaging youth, with the skate-park and previous BMX track well used. Low helmet usage is a safety concern and requires communications solutions
 - There are high levels of cooperation between key agency representatives in the City.
- Boystown
 - Personalised program development is subject to funding and therefore consistency of delivery is uncertain
 - While there is a national approach to program development, significant interest exists for interventions that encourage attendance, provide accreditation and potential professional development opportunities for clients
 - Families SA is the primary funding entity.
- Nystar
 - The company has been running a workplace health program for some time that is achieving positive results in correcting errant body mass index rates. Access to this program is also available to families
 - While reduced lead level targets in children has not achieved targets, programs designed to increase physical activity are key to achieving the required levels in children
 - The company is open to partnership opportunities with the community to broaden participation, with social clusters (sporting clubs and churches) considered to be a vital/ appropriate mechanism for ‘positive-behaviours’ messaging
 - Concern was expressed on the capacity to generate volunteer engagement within the community
 - Medium to high levels of apathy within various community profiles make engagement and program delivery challenging - knowledge alone does not shift behaviours
 - The challenge is to find a way to link the strong camaraderie that exists in social sport activities (which often exacerbate unhealthy behaviour choices) with better physical activity and health outcomes.
- Port Pirie Cycling Club
 - Acknowledgment that the strength of the club in previous years has now waned - lack of interest from parents to support their children to ride, ‘stranger danger’, perceptions that

- cycling is ‘uncool’, cost for bikes and a lack of organised/structured activities through school or team sports
- The inability to attract volunteers to support the clubs activities has hampered club training and races Investment in key sections of the road network and more frequent cleaning/sweeping will improve safety on training routes
- Cycling SA (the state competitive representation body) support the views of their affiliate club.
- Department of Planning, Transport and Infrastructure
 - DPTI deliver several pertinent programs - Cycle Instead (workplace support for replacing car journeys to work) and Way2GO (a partnership program that encourages more children riding to school).
 - It was acknowledged that the PPRC expressed an interest in applying to a part of the Way2Go program - DPTI funding supports signage, school information sessions (with a focus on teaching staff, school travel plans, infrastructure funding support for DPTI arterial network zones and associated crossing points)
 - TravelSmart grants are also available through the department to encourage reduction in car use
 - It should be noted that such partnerships are of a longer term (3-5 years) basis.
- SA Health (OPAL)
 - An application had been made by Council for Port Pirie to be involved in the OPAL program in 2012, although this has not been pursued
 - Strong synergy for the desired outcomes of this strategic document with the OPAL program theme during this period being Active Travel
 - Acknowledge the need to compliment program development with this strategic plan.
- District Council Mt Remarkable
 - As program leaders for the Southern Flinders Ranges - Commonwealth Healthy Communities Initiative, DCMR has acknowledged the need to compliment program development with this strategic plan.

Figure 1: Existing bicycle treatments/ facilities

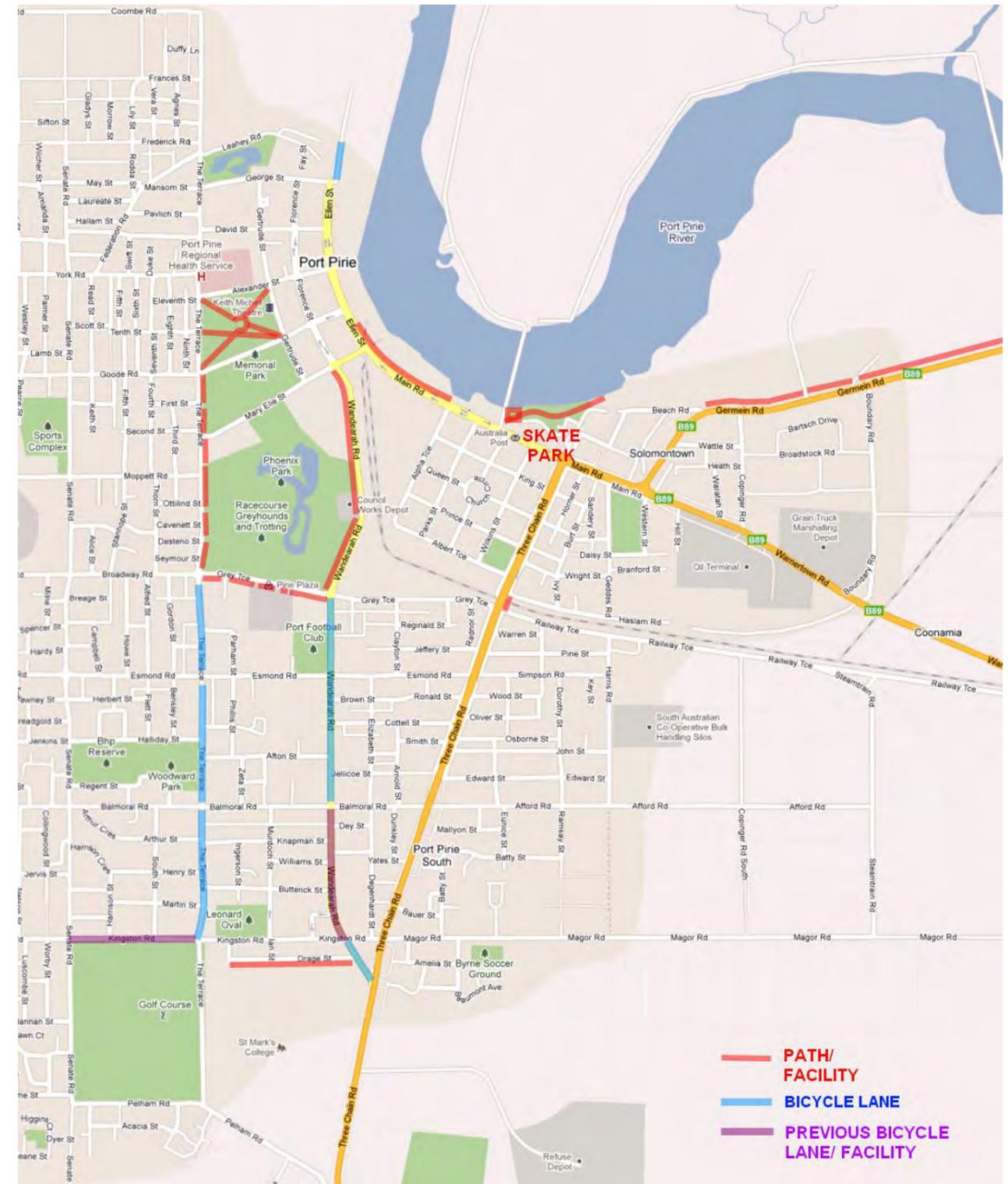


Table 1: SWOT analysis of existing conditions

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> ▪ Port Pirie is relatively contained/physically small and trip distances for any purpose are short. ▪ Port Pirie’s local roads provide generally quiet traffic conditions for cycling. Roads are generally wide, with low traffic volumes in relation to road capacity. ▪ Adjacent routes on the grid street network often give a similar level of service, with a range of route choices. ▪ A generally flat topography for utility trips but with access to other types of cycling environments (longer distance road riding, mountain biking, skate park) in the near vicinity. ▪ While the historic cycling infrastructure is not extensive, the facilities that do exist and the general urban form provide good ‘bones’ for new infrastructure and a usable cycle network. ▪ Traffic signal control in the business district provides a key crossing/linkage opportunity. ▪ A historic cycling culture and acknowledgement of this within the community. This provides a level of community capacity. ▪ The Masters Games and the Pirie Carnival (though the latter was not run in 2011) provide strong focal events promoting cycling. ▪ A strongly engaged major employer, in Nyrstar. 	<ul style="list-style-type: none"> ▪ Continued under-appreciation amongst the community of the disbenefits of car use and actual dangers of cycling, versus the actual benefits of cycling and dangers of not cycling (i.e. inactivity). ▪ A general lack of routes compliant with current guidelines on which to build a cycling network. ▪ A lack of available funding to implement the bicycle strategy. Council must take a responsible fiscal approach to its activities, but there has been a lack of investment in cycle infrastructure over the last twenty years. Building new infrastructure is typically a costly exercise. The cost to create a usable bicycle network could be high, given the lack of existing routes. ▪ ‘Stranger danger’ is an ongoing concern of parents regarding children cycling to school. Infrastructure cannot adequately address such concerns, and would be expensive to build. The goodwill of schools will be required to implement approaches to help overcome parental concern, but schools’ involvement will also be limited by available resources and other priorities. ▪ Poor motorist understanding of bicycle lanes and the road rules associated with these. ▪ Major roads (arterials and sub-arterials) and train lines form barriers to cycling that fragment the potential cycling network. There are few opportunities for additional signalised crossings to assist cyclists to cross major roads. ▪ The use of large roundabouts has not enhanced cyclist safety at intersections and retro-fitting paths, etc, to these suitable for children and novice cyclists is not a trivial exercise. ▪ The lack of maintenance of the previous bike treatments points to an absence of internal capacity for delivering the bicycle strategy process issues. There is no indication that adequate funding will be available for a new position for central responsibility for implementation, and some skill is required to design cycle facilities. ▪ The new development areas have already been planned and are likely to feature cul-de-sac design that undermines creation of useful cycling links. ▪ Utility cycling is associated with lower socio-economic indicators in Port Pirie, which is likely to lead to negative perceptions of cycling within the community.
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> ▪ Road widths are generally large and roads are not subject to capacity constraints. There are numerous opportunities to provide bicycle lanes within the existing road width, and opportunities to design infrastructure to assist with motorist compliance. ▪ Installation of bicycle crossing treatments on arterial roads is the responsibility of the Department of Planning, Transport and Infrastructure (DPTI). Council identification and prioritisation of crossing locations, and preferably develop crossing designs, would enable lobbying of DPTI to provide these facilities. DPTI may part or fully-fund certain treatments on arterial roads. ▪ Port Pirie’s central sporting/recreational area provides the opportunity to develop a significant off-road recreational facility that links points of tourist interest but is also a useful facility for locals. ▪ Similarly, a foreshore path that links the tourist accommodation area to the Nyrstar smelter (smelter tours are the largest single tourist attraction in Port Pirie) ▪ Intersections are the most hazardous locations for cyclists and every effort should be made to provide treatments at intersections. There are numerous opportunities to improve the bicycle crossing environment at intersections, and amend intersection layouts to improve cyclist access. ▪ In some locations, parking is provided off-road and on-street parking peak hour facilities could often be made full-time with little impact on traffic or on-street parking. ▪ A need for bicycle facilities has been identified as part of regional tourism planning and provision of these has the ability to generate measurable economic return. ▪ Facilities such as a BMX park or mountain bike trails present opportunities to achieve other goals (such as youth engagement) while also supporting cycling activity. ▪ Small changes in Council processes can be used to improve conditions for cyclists. ▪ Normal road maintenance provides opportunities to improve cycling conditions at little extra cost. ▪ Shift work at Nyrstar, the city’s largest employer, means that commuter cycling can occur outside major traffic periods. ▪ Potential to extend elements of Nyrstar’s health and wellbeing program into the community. ▪ Potential to ‘package’ messages with programs such as Obesity Prevention And Lifestyle (OPAL) and the Healthy Communities Initiative. 	<ul style="list-style-type: none"> ▪ Unrealistic expectations leading to disappointment and lack of support for ongoing implementation of the bicycle strategy. It is quite possible that further erosion in cycling levels will occur before the effect of the bicycle strategy can begin to be noticed. Education and encouragement programs take time to develop and implement. Even if cycle tourism opportunities were quickly developed, it will take time for marketing and experience to translate this to measurable economic benefit. ▪ Things that negatively affect particular stakeholders (e.g. parking restrictions) can threaten the broad implementation of the bicycle strategy. ▪ Failure to integrate cycle planning in Council’s policies and processes leading to a less than optimal implementation of the bicycle strategy. Work undertaken without due care and respect for cycling can erode the bicycle network (as already evident in regard to road resealing). ▪ Cycle routes on roads under the care and control of DPTI cannot be directly addressed by Council. Instead, Council must engage with DPTI and is limited in its options in the absence of co-operation. ▪ While DPTI will fund (or part-fund) certain facilities, the budget available is limited. ▪ Changes in the political support for cycling leading to fluctuating implementation of the bicycle strategy. ▪ Events outside the control of Council, e.g. economic events.

3 Infrastructure planning

The approach to identifying infrastructure for development has attempted to respond to the SWOT analysis by maximising benefits by building on strengths and opportunities, while minimising costs to reduce threats and weaknesses.

It is emphasised that this is an initial approach designed to produce the maximum gains within a short timeframe. This approach also responds to constraints advised by Council on capacity to fund and deliver significant amounts of infrastructure in the short term.

As the most cost-effective means of delivering on-street infrastructure (i.e. bicycle lanes, advisory treatments) is through the existing works program, on-street routes will not initially be developed on a strategic basis and progress should be reviewed within five years with a view to augmenting this ad hoc approach with targeted works to develop a more useable network.

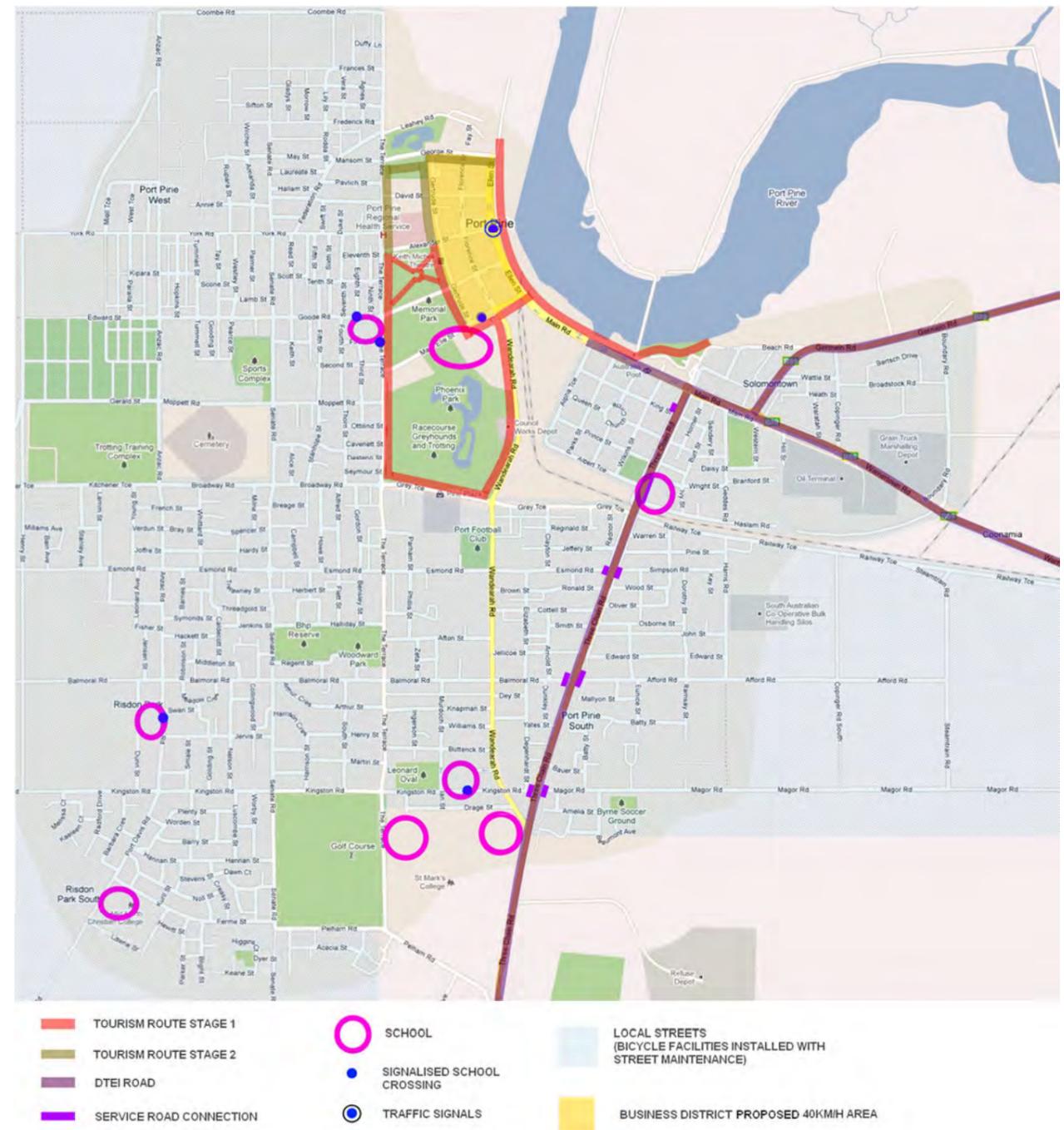
As this approach does not advocate for major funding of facilities within a short timeframe, it will not satisfy everyone. In particular, it does not attempt to address perceptions with dedicated widespread works; and the works proposed are those with the broadest reach, which will not meet everyone’s requirements.

The approach to infrastructure planning is multi-faceted, incorporating the following strands:

1. Tourism/recreational routes
2. The business district
3. Local streets
4. DPTI controlled roads
5. Schools
6. Safety locations
7. Special facilities
8. Council processes

These strands are indicatively illustrated in Figure 2 and further detailed following this figure.

Figure 2: Indicative infrastructure approach



3.1. Tourism route

The focus of off-street path development is the creation of regionally significant recreational route that links the tourist accommodation precinct with major tourism drawcards, making use of the inner city recreational areas to provide a high amenity, pleasant experience.

The tourism route addresses a current issue of assisting tourists to find points of interest (for which interpretive signage already exists) and, by creating a significant tourist facility, aims to encourage exploration of the city, overnight stays and repeat visits. It is of sufficient length and interest that families can spend an entire day on the facility, while other friends and family members visit nearby mountain biking opportunities.

The tourism route also provides an off-road facility suited to small children and novices - who are not well-catered for through on-road bicycle lanes - and for recreational cyclists, for whom an off-road path similarly provides a 'low stress' route separated from traffic.

The tourism route also provides a facility that can be used for local commuting and utility trips. It is provided on one side of the street, for two-way travel, to minimise the number of side street and driveway crossovers (which are locations where off-road cyclists can come into conflict with traffic). The route responds to Port Pirie's particular urban form and is mainly in the form of a shared use path and is based on existing paths, hence requires relatively little path development to create. It is supported by appropriate crossings of streets and well-located bicycle parking.

The tourism route consists of two stages.

- Stage 1 requires the least path development to achieve, hence can be implemented in the shortest timeframe. It comprises a loop path around the central recreational and sports facilities; linked to a linear path from the tourist accommodation precinct in Port Pirie's east, past tourism attractions to the car park at the end of Ellen Street in Port Pirie's north (this car park is a location where recreational cyclists can park and access the path).
- Stage 2 adds functionality by providing access to social services and an additional loop that increases recreational options. This could potentially extend as far north as to the wetlands area north of George Street, in which case it could also provide an alternative access for Nyrstar employees. It also extends the overall length of the tourist route and 'brackets' the business district. Stage 2 is a longer term project and its development would not occur within the timeframe of this bicycle strategy.

The tourism route is shown indicatively in Figure 3 and labelling refers to the discussion following this diagram.

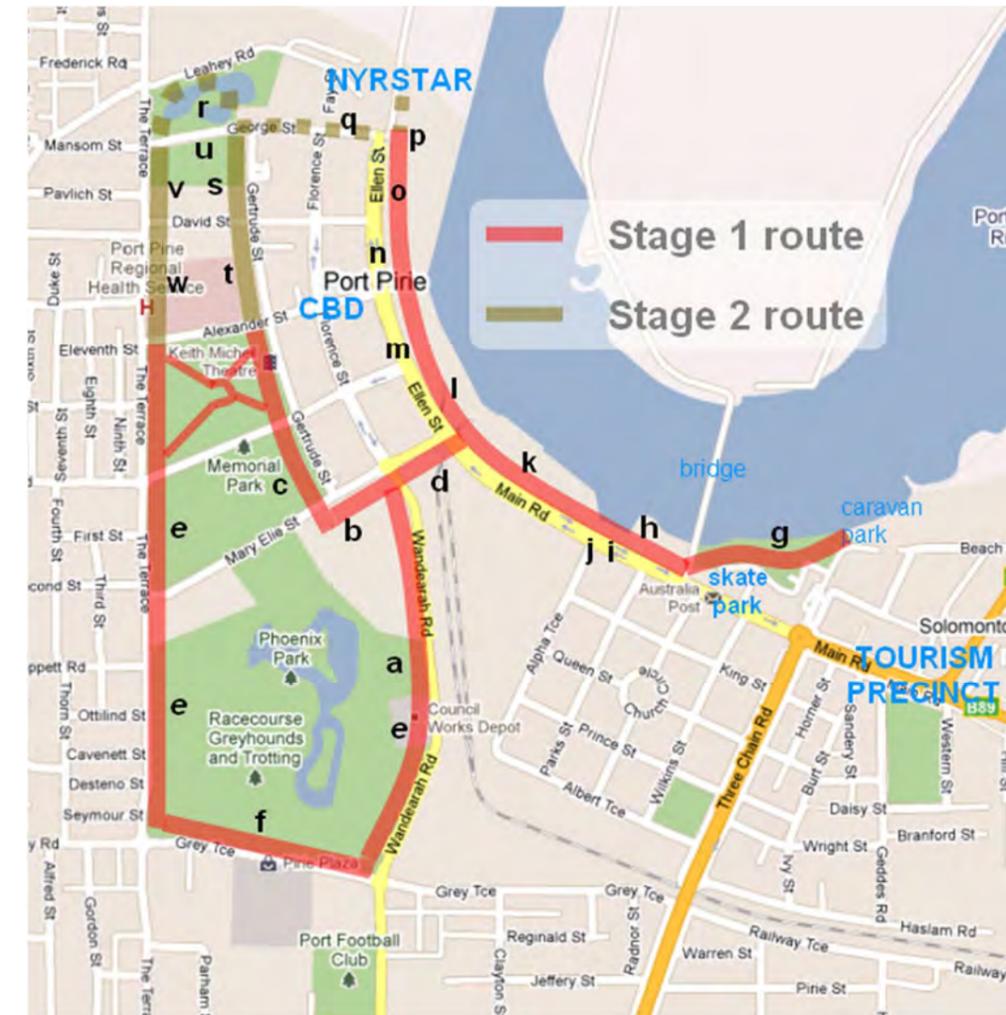


Figure 3: Tourism route (overview)

Considering these sections of the overall route in turn, and using the referencing as per Figure 3:

3.1.1 Stage 1 loop path

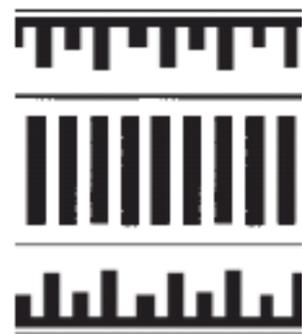
To expedite delivery of the tourism route, it is proposed that the path be initially developed with sealed sections where possible (e.g. delivered at low cost as part of reseal programs) but otherwise as an unsealed path.

- a) Upgrade of the Wandearah Road section is currently occurring, with resealing of Wandearah Road.
- b) Between Wandearah Road and Gertrude Street, the footpath reserve on the south side of Mary Elie Street is about 3.5m (2.5m wide past stobie poles). A small amount of footpath construction is desirable just east of Gertrude Street, where the footpath narrows, and the crossing point opposite Gertrude Street requires the path to pass past a tree, causing a 'squeeze point'. Otherwise, this is otherwise considered sufficient for a shared use path.
- c) The western footpath of Gertrude Street is about 2.9m wide, with no stobie poles along it. This is not generous, particularly as additional clearance is desirable to both the adjacent fence and kerb, but it is considered sufficient for designation as a shared use path in the first instance. Vegetation maintenance is required along the footpath (removal of weeds plus pruning of overhanging branches).

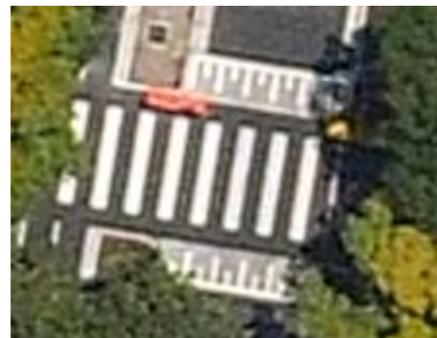
d) Between Wandearah Road and Ellen Street, the footpath reserve on the south side of Mary Elie Street is similar to further west, but is interrupted by a number of driveways and is less appropriate for conversion to a shared use path. As the land uses along this side of the street are serviced by off-street parking, it is proposed that the on-street parallel parking area be used to provide for north-eastbound cycle traffic, with a separator provided between this and traffic; and the footpath be used to provide for south-westbound cycle traffic only, with a clearance area marked to the property boundary to encourage cyclists to ride away from this edge. This area in Mary Elie Street has poor seal condition; line-marking to create the facility should occur with maintenance of this area. The width of the on-street section should be at least 1.8m, to allow clearance to debris that are like to collect at the kerb edge.

e) Zebra crossings should be provided where major driveways/entrances cross the existing shared use paths along The Terrace and Wandearah Road, to clarify right of way by clearly designating this for path users.

While not currently permitted in South Australian practice, zebra crossings in car park areas are a new treatment included in the draft update of the *Code of Technical Requirements for the Legal Use of Traffic Control Devices*, acknowledging current practice. It is proposed that NSW practice be trialled, which accompanies normal zebra line-marking with line-marking as for the ramped section of road humps, to aid conspicuity. This is as shown in Figure 4.



Suggested line-marking



Wombat crossing. Bourke Street, Redfern (source: Nearmap)



Wombat crossing. Victoria Square, Adelaide (source: Nearmap)



Wombat crossing viewed at street level. Campbell Street, Surry Hills (source: Google map)

Figure 4: Line-marking comparison

f) The section on the north side of Grey Terrace is narrow, given the lack of clearance to the adjoining fence and roadway, and relatively high traffic volumes on Grey Terrace. An edgeline should be painted along the line of stobie poles, to direct path users away from the roadway. Tree plantings opposite Short Street cause a local footpath narrowing. If the two smaller trees

are removed, the two larger trees can be tolerated as local squeeze points, with appropriate pruning. However, they are probably inappropriately located with respect to the powerlines and lack of verge and, as they are not part of a larger streetscape effect, should probably be considered for removal. Consideration could also be given to growing ivy or similar, trained up the stobie poles, to provide additional greenery.

3.1.2 Stage 1 linear path

g) The eastern section from the caravan park to the bridge is an excellent facility. Breaks in the service road separator and median in the Main Road, east of Three Chain Road, would provide access to Beach Road, which can be used in the short term to provide access to the path, near Illman Street. An access point here would be blocked by a car parking in the disabled parking space and this space should be marked as an access point instead, with the disabled parking space moved to adjoin this area (this would mean the loss of two parking spaces overall). In the longer term, an additional access point to the path should be provided further east in Beach Road. (There is at least one location where a new kerb ramp and path widening would provide cycle access to an existing path.) A crossing of Main Road between Wilkins and Illman Street is also desirable to provide access via Illman Street, but more difficult to achieve.

h) There are several options to develop a route between the skate park and Alpha Street.

- Making use of the footpath on the water side of the car park. This is relatively wide, at 3.2m, but would be the zone with greatest interaction with pedestrians using the foreshore area, including launching boats.
- Designating a line-marked route through the car park, possibly with some rearrangement of parking to provide space, but no other treatment. This would have the lowest cost and is nominally acceptable for a low-speed area, but parking and unparking manoeuvres present potential issues. Loss of car parking would also be unpopular.
- Making use of the footpath running along Main Road. This has inadequate width adjacent to the car park, due to tree plantings, rubbish bins and (possibly) overhang from parked vehicles. Rubbish bins could easily be relocated. The small trees could be relocated into the car park, essentially on the white line between spaces, without completely compromising the streetscape effect (particularly as similar plantings do not occur in other sections of Main Road)¹. Relocating trees would have a reasonable cost. The footpath narrows past the amateur anglers’ clubrooms, however this is probably acceptable for a short section of path. There may be some conflict between path users and car parking and removal of the three or four parallel car parks fronting the clubrooms would be preferred in the longer term, as path users warrants this.

i) In front of the seafood shops, plantings are larger and relocation potentially less feasible. These plantings have a lesser impact on the path width than at the car parking as front overhang of vehicles is not relevant and could be tolerated. However, care should be taken in maintenance of the trees to minimise vegetation intruding into the path.

j) The Fisherman’s Wharf access, opposite Alpha Street, requires some attention as sight distance is limited due to the proximity of the building line to the path. An initial approach is to mark a holding line for the shared use path, intruding into the access by 0.5 to 1 metre on either side of the driveway, and with a give way sign. The vehicular path should then be line-marked to suit,

¹ Car parking space width includes an allowance for car doors to open, which is not required at the front of spaces, and trees located in this area would not form a hazard for vehicles. This would be even more feasible if wheel stops were provided to limit overhang of vehicles, however the impact of this on vehicles using the car park would need to be assessed.

with an edgeline, and cyclist holding rail at the left side. This treatment clarifies right of way and guides cyclists to stop at a point with good sightlines, directing vehicles away from this point.

- k) Vegetation along the existing concrete path should be trimmed and zebra crossing marking provided over driveways to clarify right of way.
- l) The Ellen Street path is reasonable, although a kerb ramp provided is not as wide as the path; the path should be constructed as a full ramp to road level rather than a providing a kerb ramp. This path ends essentially east of Norman Street.
- m) North of the existing path, the footpath continues at the same width to a small set of shops with verandahs, with only a telephone booth (poorly located for pedestrians using the footpath) and street poles compromising the width, and with two crossings of driveways into off-street parking. There are then two options:
 - In the short term, cyclists could be directed past the Markets area towards the waterfront (this would be have to be on foot on market days). They could then use the (narrow) footpath to Council’s car park, proceed through the car park (which has reserved spaces only, so should not generate many movements throughout the day), to a walkway that leads to a landscaped area and ultimately to the intersection of Alexander and Ellen Streets. This is pleasant, but circuitous, has an on-street section and the narrow footpath section is not suited to shared use, requiring some warning signage.

– A preferred longer term approach would be to change the 60° parking in front of the verandahs to 30° parking and use the width released (approx. 2.6m) to provide a facility adjacent to the kerb, separated from the parking preferably by some form of physical treatment traversable by street sweepers e.g. pavement bars, low median with laid back kerb, or proprietary Riley kerb product². This would be insufficient for a two-way facility but would provide for northbound traffic at street level and for southbound traffic at footpath level, with clearance adjacent to the shop fronts (as sketched indicatively, right).



However, this would result in the loss of about 6 to 8 parking spaces, which would need to be supported by affected shop owners. It might be possible to change management of some off-street parking spaces to off-set the effect of this loss on the shops. Development of this section in the longer term is otherwise assumed to proceed only when sufficient demand exists that the shop owners consider it to be of benefit to them.

An alternative would be to re-configure Ellen Street to have one traffic lane only. This is arguably supportable from a traffic capacity perspective - one lane could be expected to provide a capacity of about 750 vehicles/hour or 9,000 vehicles/day, depending on parking/unparking effects, while the average traffic volume is about 7,000 vehicles/day. However, this would require a wider community benefit to attract community support. Such a benefit might be an increase in on-street parking, from changing parking from 60° to 90°, although this would only be 3 or so spaces in this section. This would release about 2m, again sufficient for northbound cycle travel only.

There is sufficient footpath width for the path to continue at footpath level past the Council chambers to Alexander Street.

- A fully off-footpath facility could be provided if the 60° parking were changed to parallel parking, however this would result in the loss of a further 3 parking spaces.
- n) Between Alexander Street and David Street, similar width issues exist. In the long term, it might be possible to develop a path running between the buildings and rail reserve, through rear parking. Otherwise, change of angle from 60° parking to 30° parking would again provide space for an on-street/footpath option, resulting in a loss of maybe 13 to 15 spaces and change from two lanes to one lane would increase parking by about 6 spaces. If a fully off-footpath option were pursued, with parallel parking, about five additional spaces would be lost.
- o) From about David Street to just east of George Street, access could be allowed through an unsealed car park and its access road. This appears to be used as a long-term weekday car park, with few traffic manoeuvres during the day, and the access road would provide a pleasant cycle route. Traffic volumes north of David Street are likely to be lower than further south as it is towards the edge of commercial activity, and conversion of the kerbside traffic lane to parallel parking could be considered to partially offset a loss of parking between David and Alexander Streets, resulting from development of the shared use path. The feasibility and extent of this would need further investigation.
- p) From near George Street north, the capacity of Ellen Street is again greater than required. The kerbside lane could be converted to a separated facility, with median separator, to opposite Nyrstar’s large bicycle parking shed. It is proposed that a section of this could be allocated for (tourist) visitor parking and would be the end point of the stage 1 linear path.

3.1.3 Stage 2 path

- q) It is desirable to develop a link from The Terrace to Ellen Street via George Street. From Gertrude Street to Ellen Street, George Street is about 8 metres wide, with unsealed footpaths. At present, the path would best be provided on the north side of George Street, as this has no crossings (and hence conflict points) and the fewest stobie poles (and hence squeeze points). However, this area is also ear-marked for industrial development and may not be suitable in the long term. The desirability of a link as part of the stage 2 path should be noted, with a preferred location for this dependent on other development.
- r) There is the possibility of developing paths in the wetlands area north of George Street.
- s) In the block bounded by David Street, George Street, Gertrude Street and The Terrace, slightly over half of the land use is a reserve and could easily accommodate a path at present. For the other (southern) section, plantings in both footpaths of Gertrude Street completely block access along this footpath, as shown in the following photo.



It is desirable to remove plantings in the western footpath, which appear to be shrubs. This would enable use of this for a shared use path. Given the few land uses, use of the roadway and

² See www.tcaustralia.com.au/riley.html. This product has not yet been approved for use in South Australia in general traffic conditions, but should be supportable for this use.

separated from traffic - as is proposed further south - is recommended to achieve adequate path width. Any proposed retention of the plantings should be subject to their suitability, in terms of footpath access.

Longer term, the reserve is likely to be used for an alternative purpose. The options may include a shared use path in the new land use or directing cyclists along David Street to The Terrace rather than using the northern section of Gertrude Street.

- t) From Alexander Street to David Street, Gertrude Street has parallel parking bays marked on the east side of the street, but not the west (which has few land uses, serviced by off-street car parks). The footpath is modest in this section and it is considered desirable to provide the tourist path by using the footpath for northbound path users and the roadway for southbound road users, with a separator between the southbound path and traffic. The Gertrude Street roadway would be wide enough to allow this.

Buses for the Port Pirie Senior Citizens Club currently uses Gertrude Street, near Alexander Street, and needs further examination.

Driveways along Gertrude Street should be marked with zebra line-marking, to clarify priority.

- u) Between Gertrude Street and The Terrace, a trail has been worn through the reserve and represents an obvious desire line, as shown in the aerial at right (source: Google maps). This provides an obvious alignment for the proposed path. However, it should be noted that this may not be appropriate for access after dark, for personal security reasons. This is relevant in terms of its use for commuter/ utility trips, but the roadways would provide alternative routes. Also, there may well be limits to its long-term use (as noted above).



- v) Along The Terrace, from George Street to David Street, there is a large amount of undeveloped space in which a path could be provided. Providing the shared use path set back from the kerb, with a footpath area maintained adjacent to the kerb, would minimise any future conflicts with pedestrians. This would match the shared use path further south, between Mary Elie Street and Grey Terrace, and less formally between Mary Elie Street and Memorial Drive (shown in the photo below). Also, a 25km/h speed limit that applies at the Mid North Education Centre, in David Street, could be moved closer to The Terrace and would then include the crossing point for the shared use path.



- w) From David Street to Alexander Street, the path along The Terrace passes through a large verge on the northern side, but the verge on the southern side has been converted into an off-street car park servicing the Port Pirie Regional Health Service (with indented parallel parking along The Terrace). It appears that there is at least some opportunity to rearrange the off-street car parking area and associated median sections to enable a separated shared path to be provided to Alexander Street, with minimal or no loss of car parking.

Zebra crossings should be marked across access points to the off-street car parking, clarifying priority by giving this to path users.

At Alexander Street, the path would connect to the stage 1 path.

3.2. Business district

As the major destination in the city, this precinct shares high pedestrian, traffic and parking movements with desired cycle access. As noted in the Cycle Indicators report, the most effective means of improving safety is to create low speed environments where cars and bicycles travel at similar speeds. In such environments, both the likelihood of collisions occurring and crash severity reduce. Low speed environments also improve walking conditions, for the same reasons.

In the first instance, it is proposed to create a 40km/h speed zone for the business district, as the appropriate speed limit for this road environment. While 30km/h is the optimum speed limit from a road safety perspective, this is considered to be unachievable in at least the short term. A study of vehicle speeds should be undertaken to confirm the actual speed environment.

Bicycle lanes should also be provided as part of street maintenance (as for other local streets). For 60° angled parking, a 1.3m bicycle lane provided adjacent to a 0.8m safety strip at the rear of parking can be accommodated within the manoeuvre space for the parking - although a 1.5m bicycle lane is desirable, if this can be accommodated. This precinct is also a priority for updating existing bicycle parking racks and installing new bicycle parking rails.

3.3. Local streets

Local streets are generally wide, with parallel parking. As such, some sort of cycle facility can generally be provided. The approach would be a hierarchy of desirability, from formal bicycle lanes to advisory treatments to localised treatments. These are most cost-effectively implemented at the same time as road reseals or when renewing line marking and it is proposed that such maintenance works be used on an opportunistic basis underpinning a widespread roll-out of facilities.

The narrower streets where this is not true would typically have a lower traffic volumes and/or speeds, and hence would have a lesser requirement for bicycle facilities in any case. If traffic speeds are excessive in such streets, road calming treatments could be applied.

While commuter routes to Nyrstar are a clear priority, their development will occur as part of maintenance works as with other local streets. Federation Road is a key route to Nyrstar via Leahey Road.

To improve motorist compliance with bicycle lanes (notably to discourage motorists from driving in these and the parking lane), minor treatments are suggested at starts and ends of parking/ bicycle lane facility, with a repeat at mid-block of long sections of facility. The minor treatment essentially comprises a line-marked protuberance with



safety bars. An example of a line-marked protuberance in Adelaide is shown at right (source: Nearmap).

As starts/ ends of facilities are typically at intersections, minor treatments should be designed so that pedestrians can negotiate these safely i.e. safety bars are not in the path of travel, where they might form a trip hazard.

Although more expensive than paint, thermo-plastic bicycle logos should be considered for all treatments. These are more durable than paint and likely to have a greater longevity. This is relevant given the poor visibility of much line-marking in Port Pirie, and given that bicycle logos are typically located in 'high scrub' locations (intersections, parking areas).

3.4. DPTI-controlled roads

These are the sub-arterials and arterials with the highest volumes of traffic and particularly heavy vehicle traffic.

Roundabouts, particularly large roundabouts, present a significant safety hazard to cyclists and the highest priority for works on DPTI-controlled roads is the addition of a cyclists' pathway at the roundabout at Warnertown Road/Three Chain Road/ Main Road.

After this, the greatest infrastructure needs for DPTI-controlled roads are:

- crossing opportunities: these should desirably be provided every 300-400m and can take the form of pedestrian refuges (allowing bicycles to 'store' in them perpendicular to the flow of traffic), median breaks, breaks in painted medians or short bicycle turning lane treatments (bicycles can 'store' if aligned parallel to the flow of traffic); and
- bicycle lanes and/or sealed shoulders: these should be considered when road reseals or major works are being undertaken.

The following roads also have different opportunities.

3.4.1 Three Chain Road

This has service roads along its length that could be connected to provide quiet alternative routes to Three Chain Road. As these connections occur at cross roads, crossing facilities would need to be provided as part of linking these service roads.

3.4.2 Main Road

Between Mary Elie Street and Alpha Road, there is only one land use on the northern side, being the silos. This does not rely on passing trade (and in any case has off-road access) and does not rely on the parking lane. While the parking lane is used for customers of McDonalds, on the other side of Main Road, this is a matter of convenience - customers could easily make use of the next median break to turn and access the McDonald's off-street car parking.

The parking lane provided on this side of the street should be changed into a bicycle lane for the use of training and commuter cyclists. (This would be parallel to the tourist facility, provided by the existing off-road shared use path).

In this case, a barrier treatment could be added to increase separation between traffic and bicycles and improve compliance with parking restrictions. This would need to allow for drainage, driveway access and cyclist access onto/off the bicycle lane. Lack of car access to this area is likely to increase the build up of debris against the kerb and street sweepers need to be able to access this

area. Hence tactile line-marking would be more desirable than back-to-back kerb, although it offers less physical separation.

3.4.3 Warnertown Road

Between Three Chain Road and Copinger Road, Warnertown Road has service roads on the northern and southern sides (similarly to Three Chain Road). These service roads are generally linked, except at Germein Road.

The northern service road ends near Copinger Road in a cul-de-sac, as shown in Figure 5.



Figure 5: Warnertown Road service road, north side, at east end (source: Google map)

There is a need for access from the end of this service road to Warnertown Road and Copinger Road. Bicycle advisory treatments in the service roads and signage directing cyclists to the service roads are desirable and should be included during any reseals of the service roads. Bicycle turning bays should also be provided to assist cyclists to access crossings of Warnertown Road (which should be provided as a priority for DPTI roads).

A crossing treatment of Germein Road is also required, including trimming vegetation to improve sight lines.

3.5. Schools

Schools are obviously key locations for children’s cycling, but also locations where traffic can be heavy and ill-disciplined during peak periods.

To some extent, children cyclists are catered for in that those under the age of 12 are allowed to cycle on footpaths, and the schools usually have emu crossings on busier streets. However, this does not address issues for older children and accompanying adults, and cycling on footpaths leads to even greater vulnerability to crashes at driveways and side streets than cycling on shared use paths. (This risk has been noted in the Cycle Indicators report).

The greatest needs to address traffic issues are the non-infrastructure approaches of education and encouragement (see Section 4), and improving crossing locations (e.g. where side streets intersect footpaths). The greatest priority for these is spatially related, as the length of footpath increases as the radius around the school expands, and fewer and fewer children will walk or cycle from longer and longer distances. It is suggested that these should be provided within a 300m radius (a 5 min walk, for adults) of the main school entrance.

3.6. Safety locations

From the crash record, a few locations were identified as having particular crash risks. These should be treated with priority.

3.6.1 Roundabouts

As noted, medium to large roundabouts present a particular safety hazard to cyclists, which is evident from the crash record. The priority for treatment is related to size/complexity and exposure risk (traffic volumes; cyclist volumes - or location on routes to significant facilities, as a proxy for this; heavy vehicle volumes; traffic speed). Apart from the roundabout at Warnertown Road/ Three Chain Road/ Main Road, which has been noted as an issue for DPTI-controlled roads, roundabouts that are a priority for treatment are:

- The Terrace/ Grey Terrace.
- The Terrace/Memorial Drive.
- Wandearah Road/Mary Elie Street/ Florence Street.
- Wandearah Road/Grey Terrace.

The appropriate treatment at these roundabouts is a (convenient) off-road path, as shown in Figure 6. The “alternative shared path location where space permits” is the preferred location for off-road paths, rather than a path running close to the edge of the roundabout. In Port Pirie, the actual alignment will respond to site constraints.

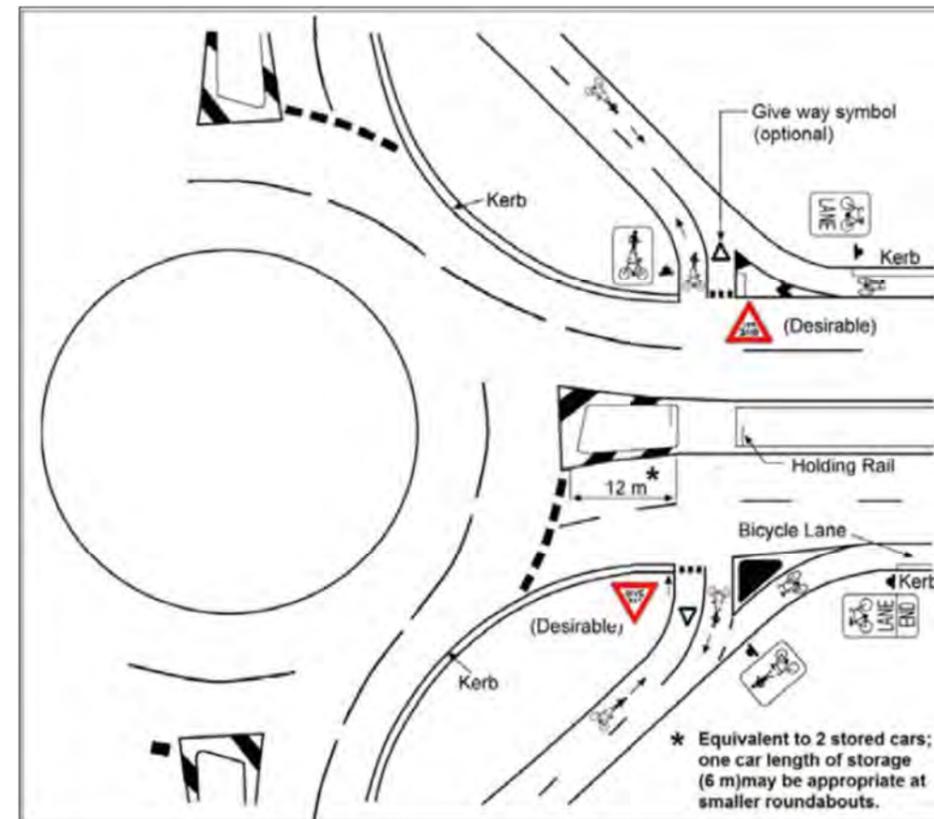
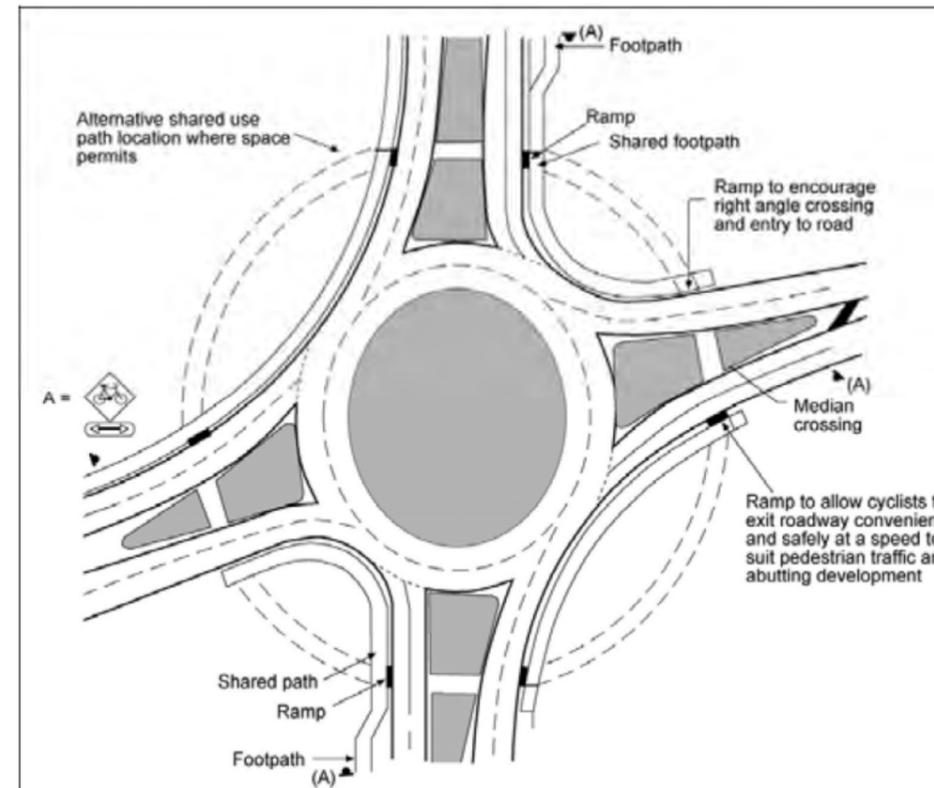


Figure 6: Path treatment at roundabouts
(from Cycling Aspects of Austroads Guides, Austroads 2011)

3.6.2 Driveways

As noted, entrances/exits/driveways pose a particular risk for cyclists, and even moreso on shared paths or footpaths. Contributory reasons for this are:

- The ambiguity of priority - many motorists assume that they have priority when they may not.
- Perceptions of cyclist speed - cyclists frequently find that they are cut off by vehicles that are behind them on the approach to a crossing point (intersection, junction, driveway, entrance, etc), but overtake and turn in front of them. This is in part be due to visibility issues - cyclists are simply unable to yield effectively to vehicles when these vehicles approach at speed from behind, or any other angle with inadequate sight distance, while motorists with right of way have no reason to yield.
However, there is also a perception amongst motorists that as cars (usually) travel faster than bicycles, they do not need to slow down and yield if they are likely to reach the conflict point before bicycles. This can, and does, lead to cyclist crashes and injuries.
- ‘Looked but failed to see’ - studies indicate that people cannot concentrate equally on all parts of a street when driving, and that the brain has searching patterns to assist. However, this means that infrequent or unexpected events, or ‘low priority’ events (those less likely to be dangerous) may simply be overlooked by motorists. Conflicts with pedestrians and cyclists on paths (i.e. off roadways), are vulnerable to this problem.

Changes of priority challenge incorrect assumptions of priority and compensate for incorrect perceptions of relative speed. Designs that highlight potential conflict points or place pedestrians and cyclists more obviously in a motorist’s perception aid safety.

As such, it is recommended that ambiguity is removed at driveways/ entrances/ exits by providing zebra crossing line-marking in favour of path users, with ‘Give Way’ holding lines for vehicles. As noted, the use of zebra crossings in parking areas has recently been acknowledged in South Australia. The detail for zebra crossings recommended is as per Figure 4.

This measure is noted at relevant locations along the tourist route. In other existing facilities, the shared use path on the south side of Grey Terrace is a location for this type of treatment. In this case, the driveway access points narrow at the car park entry; it is recommended that the narrowing be extended to the shared use path crossing. This could occur using line-marking only, in the first instance.

It should be noted that a ‘continuous footpath’ treatment or wombat crossing is preferable at these locations, but would have a (much) higher cost associated with them if provided as a retro-fit. These types of treatments could be specified with upgrade or maintenance works.

3.6.3 Florence Street

The crash record highlights a particular risk in Florence Street, at driveways. From the site visit, there is no particular road design reason associated with this, and cyclist exposure risk does not seem to be a sufficient explanation. It was noted that road line-marking is faded whilst use of angled parking in Florence Street is high. This may lead to vehicles exiting driveways pulling into the roadway to see past parked vehicles colliding with cyclists located close to the rear of parked vehicles. It is therefore recommended that bicycle lanes be provided in Florence Street, with chevroned line-marking of unused road space adjacent to driveways, to better delineate paths of travel for vehicles and cyclists.

As noted, a 1.3m bicycle lane can be provided in the manoeuvre space for 60° parking, so a bicycle lane should be feasible in Florence Street. It is recommended that line-marking of Florence Street be

brought forward to within the timeframe of this bicycle strategy to address this particular hazard location.

The roundabouts located along Florence Street are single-laned and the speed environment moderate. In these conditions, a ‘mixed traffic’ solution is most appropriate i.e. cyclists integrate into the traffic stream. A path should be provided around the outside of the roundabout for inexperienced cyclists, but this does not have to have the same degree of ease in transitioning from on-street to off-street as for larger and multi-lane roundabouts.

Other broad design details are that:

- cyclists should be directly cleanly into the roundabout, i.e. bike lanes at the kerb side do not direct cyclists into kerb extensions, but end at least 20m before the roundabout to give cyclists time to position correctly to proceed through the roundabout. Both practices are shown in Figure 7.



Figure 7: Poor (left) and good (right) practice bicycle lane transitions at single-lane roundabouts, King George Avenue, Hove

- The width of the approach lane should not exceed 3m, as motorists are encouraged to attempt to pass cyclists at greater widths.
- Although not common in South Australia, a large bicycle logo located centrally in the lane at the approach to a roundabout would assist in educating both motorists and cyclists on where to locate correctly to negotiate the roundabout. The roundabouts along Florence Street would be good locations to trial such treatments - with appropriate assessment of the impacts of the treatment.

3.7. Special facilities

The desire for the development of certain special facilities has been raised through community consultation.

3.7.1 BMX track and mountain biking trails - Phoenix Park wetlands

While desirable, the development of these facilities is not included in the action plan for this bicycle strategy. Instead, it is proposed that community collaboration be sought to develop these facilities within the next five years, in the absence of available funding. This is discussed further in section 4.5.

3.7.2 Magor Road

The sealing of this road would provide a link for road cyclists, completing a popular training circuit. However, it would be an expensive proposition, if constructed to normal road standards. If not constructed to these standards, normal traffic would quickly destroy the surface provided. Consideration could be given to an inexpensive partial treatment e.g. bitumen binder being applied to the road edges, however the likelihood of this attracting inappropriate motorised traffic is reasonably high.

3.7.3 Wandearah Road/ Grey Terrace path

A track has been worn from Wandearah Road, around the netball courts, to Grey Terrace. As a shortcut that avoids a roundabout, the use of this track as a path is reasonably appropriate and obviously convenient. It is suggested that Council could facilitate development of a more formal path using a community collaboration approach as proposed for the BMX track and wetlands.

It is noted that an old signal building is located adjacent to the track, on a roadway that is now cut off. The building was used as a radio station but has now fallen into disuse. It is suggested that Council could mediate with the railway authority to secure the use of the building for community purposes, if such a need exists.

3.8. Council processes

Council's internal processes provide an opportunity to improve infrastructure outcomes, both through involvement in infrastructure planning and in disseminating information on infrastructure planning and development as it occurs. Better integration of cycling into the full range of Council's processes would not only assist in ensuring that adequate provision is taken for cyclists across the board, but would provide the most efficient use of available resources while achieving this.

- The role of the forward street maintenance program in delivering new infrastructure has already been noted, in terms of line-marking maintenance and road reseals. A focus on sweeping cycle facilities would be compatible with this, from a maintenance perspective.
- From a policy perspective, it is noted that new residential development areas are proposed. A connected street supports walking and cycling activity, however there is a trend towards disconnected cul-de-sac development. Bicycle parking is also a key issue for cyclists, particularly at work places. These issues are best addressed at the outset, through Council's development plan, rather than through costly retro-fitting.
- Meanwhile, Council's website is a key resource for providing information on cycling routes, tourist facilities and other activities within the community.
- One or more Council staff should also be designated to provide a central point for coordinating the delivery of the bicycle strategy, liaison with DPTI and other organisations, as a reference point for ensuring that planning takes cycle needs into account, and updating the website with new information. A brief annual report on cycle activities might also assist in ensuring that progress is being made.

4 Community engagement and capacity building

As mentioned in the introduction, the development of this bicycle strategy has sought to use a new approach to bicycle planning. This approach uses the bicycle strategy process to develop a framework for community engagement and capacity building in the cycling field. That is, it uses information gathered during the process to help identify ways in which cycling can be best encouraged, and how skills and interest in the community can be harnessed to address identified issues.

This approach is one of developing a partnership with Council and will be ongoing. While it started with the bicycle strategy project, Bike SA is committed to building this partnership for an extended period of time past the formal handover of this bicycle strategy document and its subsequent adoption by Council. This current agreement between Council and Bike SA has an amount of \$25,000 set aside for delivery of agreed education and encouragement programs. The relative success and/or failure of these will determine future funding and resource allocations from each partner.

As with infrastructure planning, the community engagement and capacity building process is responding to several identified themes. Many of these have direct parallels to the strands of the infrastructure planning and the proposed infrastructure response. As such, the infrastructure and non-infrastructure approaches are considered to be mutually supportive.

The high costs of inactivity in the community are of particular and overriding concern and overseas experience has demonstrated the strong potential for cycling to help reduce these community costs. While Port Pirie is a sports-focused community with a (historically) strong cycling culture, much of this focus is in organised sports and at child and youth levels. At adult levels, most of the community does not engage in sufficient physical activity to reduce the burden of sedentary diseases. As with communities throughout Australia, the effects of a sedentary lifestyle are beginning to be felt, in high rates of heart disease, obesity, diabetes, stroke, cancer, mental illness and the like. This naturally also affects quality of life outcomes for the community.

While health outcomes are of critical financial relevance to state and federal levels of government, Council does not directly fund health treatment and does not stand to benefit from direct financial savings of the preventative health outcomes of cycling. However, it benefits indirectly from the greater happiness, productivity and engagement of a healthy community. The Regional Health Service has indicated its concern with and support for activities aimed at addressing Port Pirie's current health issues.

4.1. Tourism

By generating economic activity, cycle-related tourism assists in positioning cycling as a valued activity for the local community.

The Cycle Tourism Masterplan continues to be the appropriate mechanism for all development processes in the area of cycle tourism.

Community events such as the inaugural Bike Art Adelaide being held in 2012 in conjunction with the Tour Down Under provides a model for one way of leveraging off a major sports event, and the organisers of the event may be willing to assist in organising a similar event leveraging off the Masters Games.

4.2. Active adults

Busy lifestyles (both in a perceived and real sense) are an identified barrier to physical activity. Equally, the lack of 'someone to ride with' has also been shown to prevent active engagement. The opportunities presented by structured support programs to encourage adults to be active are well known as evidenced by the relatively high rates of sport in the Port Pirie community.

The provision of structured (yet informal) riding opportunities is a major driver for getting people to ride. Over ten years, Bike SA has developed the 'Rides Program' which provides over 5,000 free organised community rides across the state annually - available to members and non-members. These rides provide an opportunity for experienced and novice riders to enjoy the experience of cycling in a safe and encouraging environment. Rides Leaders are Bike SA volunteers, are accredited through Bike SA and are provided with both public liability and professional indemnity insurance cover to ensure peace of mind. The program is marketed through online services as well as printed copies distributed to members, community facilities (eg. libraries) and interested bike retailers.

The consultation process saw interest from several members of the community to become accredited Rides Leaders.

4.3. School children

The latest studies of children's activity patterns indicate that children are involved in organised sports at higher levels than ever before, yet still have a deficit in the activity levels required for optimal fitness and health. As a result, our young - and increasingly, not so young - adults are forecast to be the first generation since the Second World War whose life expectancy is likely to be shorter than that of their parents. This trend is only increasing: it can be expected that many of today's school children will not outlive their parents and will have shorter lifespans than their grandparents. It is evident that organised physical activity substitutes only poorly and insufficiently for incidental exercise, such as that generated through active travel options.

However, parents have a real and bona fide concern for their children's safety, from traffic around schools (much of which is generated by parents) to 'stranger danger' for those few left taking active travel.

DPTI's Way2Go program is a comprehensive partnership arrangement that has been proven to encourage positive behaviours in children and incidentally in adults. Council has expressed an interest to become involved in the program and subject to acceptance from DPTI, this will leverage the potential outcomes from other cycling related investment.

Consultation with the education sector has shown a willingness to look toward innovative solutions that will impose behavioural barriers for parents driving to school and remove the many perceived and real barriers that inhibit walking and riding to school. More dialogue is required with this sector and ideally, Council's acceptance into the Way2Go program is considered the most appropriate and effective process to work with schools. Some indicative solutions that have been discussed throughout the consultation process are;

- Banning parking/drop offs within a 300m radius of a school entrance
- Differential release of children from school - pedestrians and cyclists first, public transport users and then car collection. This separates walking/cycling from vehicles, distributes the vehicle activity peak, increases the period of 'eyes on streets' thereby assisting stranger danger awareness and rewards desired behaviour.

4.4. Workplaces

Workplaces are a key communication and engagement opportunity, with Bike SA's 'Cycle Friendly Workplace Series' and the National Ride to Work Day event achieving significant results for those first time riders taking to the road. The imbedded support structure of these programs provides encouragement through knowledge.

Nyrstar is providing leadership in the positive impact that workplace based better-health interventions can have. Nyrstar's employee health programs (also available to families) and the "Ten for Them" initiative provide a foundation to leverage knowledge and experience in developing cycling related intervention programs.

Similar program development and delivery opportunities exist with other large employers in the community viz. state agencies (eg SA Health and TAFE), Council and schools. Throughout the consultation period, a common request was for a bike pool or free bike hire program be made available to ensure ease of access to incidental travel. Bike SA will initiate a pilot hire program with the supply a number of hire bikes for use through several nodes within the City.

4.5. Special facilities

The skate park is considered a valuable community asset and its success was reinforced by repeated suggestions for a BMX facility to be rebuilt within the township. Equally, the need for a 'nature based family mountain biking facility' was also frequently mentioned during consultations.

The "wetlands" area adjacent the racecourse is an area identified as ideal for such a user experience. It is our understanding that a revegetation program in the area was halted through lack of resources and the existing status of this parcel of land is unknown.

The area has sufficient space for both a BMX/jumps park and a beginner mountain biking trail to be developed. Further, this development should also incorporate a native revegetation program that will see this asset provide physical activity and educational experiences for both residents and visitors.

Development of the site would realistically be achieved through community partnerships and volunteer investment.

4.6. Health programs

The health sector provides significant opportunity to disseminate key cycling related messaging and there is a strong desire from key agencies to work with Bike SA to develop and incorporate programs designed to modify existing behaviours in targeted community profiles. While community health is the core responsibility of state government, Council will reap significant rewards from improved community-wide baseline health statistics.

Several program options are listed below, however it should be noted that the consideration of both the Healthy Communities Initiative and OPAL program development be taken into account to ensure that leverage benefits (and not conflicts) are achieved. Bike SA is currently providing program advice and service delivery for both the HCI and OPAL programmers and as these initiatives are targeting whole of community outcomes, the program options below have been identified to target chronically disadvantaged members of the community.

Ride for Life

A referral service program for patients in recovery from predominantly cardio-vascular treatment. In addition to the more traditional walking and light aerobic activities, patients can be referred to Bike SA's Rides Program to engage in a suitable low intensity ride option.

Bike On

An eight week pilot mountain biking program targeting disadvantaged and disengaged indigenous youth. The program aims to develop bike handling skills, encourage teamwork, strengthen self-esteem, increase school retention rates and improve overall physical and mental health. Likely delivery will be both within Port Pirie and the mountain biking trails in Melrose. A cultural mentor program sits alongside delivery.

Pirie By Bike

An intensive program targeting chronically inactive adults. Initially, a pilot program will be developed that will incorporate group lectures (up to 30 participants), basic bike skills for groups (with one-on-one training if required), and structured organised rides developed by participants. In challenging existing behavioural norms, a series of incentives and rewards are included throughout the delivery and the post-delivery phase. Participants will be sourced via a third party partner entity viz. church group or sporting club.

Free Pirie Bikes

A modest fleet of bikes will be made available to the community through agreed nodes and available for all day free hire (excluding night riding). Modelled on the Adelaide City Bikes program, established in 2005, free and easy access to a bike removes significant barriers to people gaining some incidental exercise.

4.7. Online resources

Bike SA has and continues to develop a range of free online resources to provide a starting point for non-riders. Bike SA invites local government authorities to partner in some of these online programs to reinforce and promote its commitment to the local community. Such opportunities are an effective and low cost communication mechanism to publicly show support for the creation of cycle friendly communities.

One program currently being piloted is the 'Adelaide By Bike' - a partnership with the Adelaide City Council which incorporates the 'BikeSTART' online assessment tool www.bikestart.com.au

4.8. Capacity building

Train the Trainer - critical to the success of the Cycle Friendly Communities strategy is the delivery and sharing of key knowledge within the community. Bike SA's 'Train the Trainer' program will identify individuals within the community who have an interest in becoming community champions and who wish to take a leadership role in sharing cycle proficiency knowledge.

Community Education Delivery Models - Bike SA's accredited educators will provide key skills that will build both volunteer and commercial education opportunities.

Boystown - a skills development program with clients of Boystown will provide bike maintenance training - the intention of this program is to implant technical skills (which will provide some form of

SACE or equivalent accreditation) that can potentially be applied through the bicycle industry. It is proposed that as part of this skills development, Boystown will provide maintenance services to the free bike hire fleet.

Volunteering - a key element of this strategy is to continue the community engagement process with a view to establishing and building a network of volunteers who will deliver a range of support services - from performing the role of Rides Leaders, assisting at events, building and maintaining recreational mountain bike trails, native revegetation work

5 The action plan

Table 2 presents the proposed action plan.

This has been developed to address the major priorities, but in a fiscally responsible way.

Overall, discretionary funding of approximately \$10,000 a year has been assumed as Council's general funding level for implementing the bicycle strategy.

Assuming that like-for-like funding is obtained from the State Bicycle Fund or other relevant grant revenue sources, works and activities of up to \$20,000 a year are then possible. The State Black Spot Program - Cycle Projects provides access to two-thirds of total costs, but is available for infrastructure projects only. These (and most other state government) grant funding sources are not additive, i.e. a project that attracts State Black Spot Program - Cycle Projects funding will not also attract State Bike Fund funding, and vice versa.

This is still only a very modest funding allocation, especially for infrastructure development (notwithstanding the emphasis in the infrastructure planning approach of a minimal cost approach.)

Crucially, a number of models have therefore been identified to assist with delivery of the required education, encouragement and infrastructure services through greater use of community resources;

- **Cycle Friendly Communities Reference Group (CFCRG)**
The establishment of a community reference group is an appropriate response to ensure oversight of each education and encouragement program and to inject the required sense of ownership into the community so as to get more people cycling.
This strategy proposes that the formation of the CFCRG be considered under Section 41 and/or 42 of the Local Government Act and that the group exist within this framework for a period of 12 months. Subject to progress of the agreed actions, a more informal process, where functions are absorbed within the general community would be appropriate.
Stakeholders of the CFCRG would include Bike SA, SAPOL, SA Health, schools representative, Nyrstar, SFRTA, Council and an appropriate community champion.
A discussion paper on the structure, roles and responsibilities of a Committee of Management is included for consideration (Table 3) - this document addresses broader management issues than simply the recommended CFCRG, which is intended to provide direction on education and encouragement programming only.
- **Community collaboration model for infrastructure development**
Labour is a major component of the costs of infrastructure provision. Where the community is willing to donate labour, infrastructure can be constructed at a reduced cost, with the guidance and technical assistance of Council.
This is most feasible for the BMX track and development of the wetlands site, which have strong community support and where technical standards for construction are not a major issue.
Organisations such as Trees For Life are also able to donate plants for landscaping works.
A more formal community collaboration model used in Denmark, involved the community in more significant path construction as a means to deliver infrastructure that would not otherwise have been funded. In this example, Council guided donated labour to build the path base, with the Council then finishing the path with bitumen. This reduced the overall cost by about 25%.
- **Bike SA community engagement model**
As noted, Bike SA has used the bicycle planning project as the basis for commencing community engagement and capacity building, leveraging off activities such as community consultation to

identify appropriate programs and approaches. Bike SA is committed to an ongoing partnership with the region.

- **Collaboration with existing programs, organisations and social networks**
Partnerships and networks are crucial in leveraging the limited available resources that have been identified with this strategy.
- **Existing funding**
Road reseals and line marking - allocate \$5,000 from each project to cycle facilities and apply for matching funding under the State Bicycle Fund
Bring forward programmed works, where a priority clearly exists eg. the Florence St reseal
A figure of \$25,000 has been allocated for the delivery of education and encouragement programs as determined by this strategy - all program delivery fees and charges, the provision of community hire bikes for the 2011-2012 financial year will be supplied from this funding
Development Plan - delivery by developer (at minimal cost, in the development phase)

It should be noted that a detailed breakdown of the education and encouragement programs is not currently listed within the Action Plan (Table 2).

Some items are listed for indicative purposes only.

The final KPI's and action plans for these programs will only be identified through the Cycle Friendly Communities Reference Group meetings.

Table 2: Action Plan

	Ref	Action	Years	Cost
Network (N)	N1	Adopt the cycle network in Figure 2 as the basis for implementing cycle works. - Include new on-street bicycle facilities in all road reseals as a matter of course, and upgrade shared use paths in conjunction with adjacent road reseals as appropriate (allocate \$5,000 from every reseat program towards these)	Immediate Annually 1	n/a n/a
	N2	Review the on-street network for currency, identifying specific needs (as part of a review of this bicycle strategy)	5	n/a
	N4	Provide well-designed shared use paths at roundabouts	1, 2	\$7,500* each
	N5	Ensure that cycle destinations have convenient, well-designed bicycle parking rails in accordance with rates and standards contained in Austroads Part 14, including weather protection. - Provide bicycle rails for the CBD and retro-fitting to public facilities - Negotiate with property owners regarding location of these.	1, 2, 3, 4, 5 1, 2, 3, 4, 5	\$500/yr
	N8	Negotiate with DPTI to investigate options for improving DPTI roads. - Request that DPTI provides bike lanes and shoulder sealing as part of any road maintenance.	1	n/a
	Tourist routes (T)	T1	Provide zebra line-marking favouring the shared path along Grey Terrace.	1, 2, 3, 4, 5
T2		Provide logos, line-marking on existing infrastructure. Develop the missing elements of the Stage 1 route.	 1, 2, 3, 4,	\$1,000 \$10,000*
T3		Develop branding for the tourist routes. - Provide route signage in accordance with new branding.	5	\$5,000
T4		Continue to support the Southern Flinders Cycle Tourism Masterplan.		

	Ref	Action	Years	Cost
Integrated planning and cultural change (I)	I1	Amend the Development Plan regarding: - Bicycle parking - Cycle network - Road network design guidelines for new sub-divisions	Within 1 year of adoption of this plan Within 6 months of DevPlan amendment	n/a
	I2	Prepare guidelines for development planners about how to satisfy cycle elements of the development plan. - Seek advice from other Councils. - Publish electronically.		
	I3	Provide a central point of responsibility for implementing bicycle strategy elements within Council, with annual reporting on progress.	1	n/a
	I4	Review this bicycle strategy.	end of 5	\$5,000
	I5	Review maintenance procedures to take into account cyclists - Use relevant Austroads guidelines as the design basis for new facilities provided as part of renewal of line marking and road reseals. - Provide cyclist detours and bypasses when works interrupt or sever cycle routes, or cycle facilities on routes.	1-2	n/a
	I6	Continue to support the Masters Games in Port Pirie.	1, 2, 3, 4, 5	n/a
	I7	Prepare a one-page leaflet about bike lanes and advisory treatments and include in letterbox drops to residents as part of consultation on projects.	As required	n/a
	I8	Make development plan guidelines available to developers and architects.	As these are created	n/a
Education	E1	Establish Cycle Friendly Communities Reference Group - terms of reference, stakeholders, key performance indicators	Immediately	n/a
	E2	Delivery of eight Free Pirie Bikes	Feb 2012	n/a
	E3	Finalise SA Health program methodologies and source target participants	Feb 2012	n/a
	E4	Resolve access and land tenure issues with the 'wetlands' zone	Mar 2012	n/a

*Assumes two-thirds funding as a State Black Spot Program . Cycle Project.

INSTRUMENT OF DELEGATION TO THE CYCLE FRIENDLY COMMUNITIES REFERENCE GROUP

A DISCUSSION PAPER TO THE CITY OF PORT PIRIE

The following is a discussion paper on how a partnership with Bicycle SA and the City of Port Pirie might be structured.

It lists a series of strategic outcomes that would be expected of any Cycle Friendly Community and provides a number of structured processes that will assist in achieving these objectives effectively.

The basis of this document has been developed from proven interstate regional community successes.

Introduction

1. Appointment

Local Government Act

There are a number of mechanisms through which this partnership can be established;

- An informal MOU
- Pursuant to the provisions of Sections 41 of the Local Government Act
- Pursuant to the provisions of Sections 43 of the Local Government Act

While the mechanism is not the key - a commitment from all stakeholders is critical. The level to which this commitment can be guaranteed will reflect the chosen mechanism.

2. Objectives

In carrying out its functions under this Instrument of Delegation the Committee shall have regard to the following objectives:

- To develop a cycling strategy that will see the region recognised as a Cycle Friendly Community
- To develop and promote a range of programs and events that will see more people riding more often in the community
- To develop and promote a range of programs and events that will see;
 - a more active community with improved health outcomes
 - improved cycling specific infrastructure - both on-road and off-road lanes and trails
 - improved road safety outcomes
 - increased visitation from cycle tourists
 - a focus on sustainable development

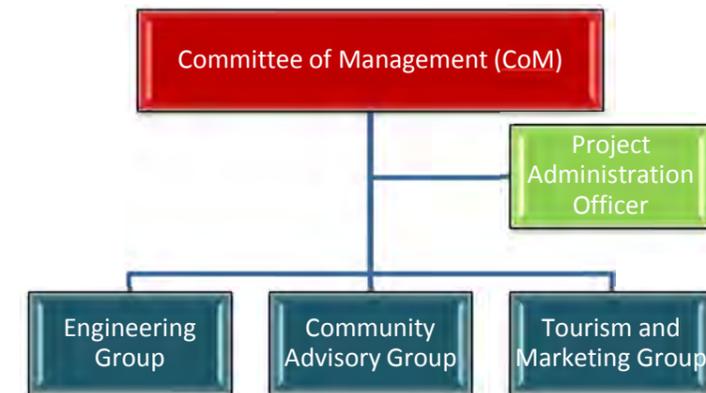
3. Term of Appointment of Committee

This Committee shall continue until amended or revoked in writing by the Council

4. Structure and Membership

The Structure and membership shall be in four parts comprising the Committee of Management with three sub-committees being Community Advisory Group, Engineering Group and Tourism and Marketing Group as outlined below. Voting and non-voting relationships will again be determined by the agreed mechanism.

4.1 Organisational Chart



4.2 The structure and membership of the Committee shall be in four parts.

4.2.1 Committee of Management shall include:

- Two representatives from the Council (CEO, Councillor or Officer or 2 nominees);
- Engineering Group representative;
- Tourism and Marketing Group representative
- Regional Development Board representative
- Community Advisory Group shall have three (3) representatives
- **Non voting members:**
 - Bicycle SA
 - DEH/ForestrySA Representative
 - DTEI and other industry experts as required
 - Regional/Cycle Tourism Officer
 - Project Administration Officer

4.2.2 Tourism and Marketing Group shall include:

- Tourism/Events Representative from the Council
- Community Advisory Group representative
- Tourism industry representative/s
- Local Business Association
- State/Regional Tourism Officer
- **Non voting members:**
 - Bicycle SA
 - DEH/ForestrySA representative
 - Project Administration Officer

4.2.3 Engineering Group shall include:

- Technical Officer/Engineer from the Council
- Community Advisory Group representative
- **Non voting members:**

- Project Administration Officer
- CFA, DTEI, Environment Officers and Land Managers (as required)

• **4.2.4 Community Advisory Group shall include:**

- Community Development Representative from the Council
- Community Representatives - 6 representatives
- School Associations
- **Non voting members:**
 - Bicycle SA
 - Road Safety Representatives
 - SA Health
 - SAPOL
 - Office for Recreation and Sport Field Officer
 - Project Administration Officer

4.3 Each group is to have a representative attend each Committee of Management meeting to provide corporate overview of matters raised and discussed.

5. Appointment of Members

The Council shall appoint the representative from each Council on an annual basis. Other groups shall appoint their representatives as directed by the Committee of Management. The Councils reserve the right to terminate any appointment at their discretion.

Industry appointments shall be made by the Committee.

Additional members with specialist skills or expertise maybe co-opted and shall be entitled to participate fully at meetings but shall not be entitled to vote.

It is expected that persons nominated to committee positions will have skills in recreation, health, tourism, cycling, land management or business or hold municipal responsibilities in these areas. All should be familiar or have a sound knowledge of regional cycling/recreational strategies.

The Chairperson for Committee of Management shall be elected by the Committee on an annual basis or as required.

Groups shall elect their own Chairperson, which shall be ratified by the Committee.

6. Roles and Responsibilities

6.1 The roles and responsibilities of the committee and each group will be as follows:

6.1.1 Committee of Management:

- Development and strategic management of the Cycling Friendly Communities Strategy (CFCS) and its on-going development.
- Development and implementation of policy governing the operation of the CFCS.
- Preparation and implementation of a business plan and/or agreements covering marketing, trail development and maintenance, risk and safety, education programs, event development and allied business development.
- Ensure the status and importance of the CFCS is duly recognised within the development of the region's infrastructure.
- The timely development of budgets for the future development, operation, marketing and maintenance of infrastructure, programs and events.
- Appointment of suitable representatives to attend sub-group meetings.

6.1.2 Technical Group:

- Ensure standardization of the on and off-road lanes and trails so that it is seen as one product in respect to construction, quality, amenity and signage.
- Ensure the quality of the programs, events and infrastructure and facilities are maintained to the service level agreed by Council.
- The development and submission of budgets for maintenance programs and infrastructure improvements to Council.
- Contribute to the development of policy and regulations governing the operation of all cycling infrastructure.
- Oversee the development and implementation of a trails land management plan.
- Implement an inspection program that manages risks and safe use of infrastructure.
- Assist in the collection of data identifying numbers using the lanes and trails.
- Oversee all Crown Land Reserve Management including the issuing of licences to adjoining landowners in accordance with the Land Management Policy.

6.1.3 Marketing Group

- Market the Region through the State and Regional Tourism Organisations, Visitor Information Centres (VIC's) to the service level agreed by the Management Committee.
- Develop the region's strategic marketing objectives and marketing plan.
- Coordination of the development and distribution of event and relevant products and promotional collateral.
- Management and ongoing development of the region's Cycle Tourism website.
- Ensure trail experiences are included with all relevant Visiting Journalists Programs across the region.
- Coordinate attendance at relevant Bicycle / Outdoor / Travel Shows
- To initiate continued business development encouraging increased visitation as determined within the region's Cycle Tourism Strategy.

6.1.4 Community Advisory Group

- Encourage Bicycle User Groups in each centre
- Develop an education framework that will deliver child, adolescent and adult bike education
- Develop a range of programs that will assist at-risk, marginalised and disadvantaged communities
- Represent community and user group interests to the Committee of Management.
- Liaise with Committee of Management on maintenance and management issues.
- Formation and maintenance of 'Trail Patrols'

7. Committee Proceedings and Meetings

Subject to mechanism selected

8. Specific Powers and Responsibilities

Subject to mechanism selected

9. Specific Exclusions

Subject to mechanism selected

10. Revocation