

21 December 2011

Toolern Park PSP

Submission for the GAA draft Precinct Structure Plans open for public comment

Bicycle Network Victoria support the provision of cycling networks in new suburban developments and welcomes the opportunity to make a submission to the draft Precinct Structure Plan process.

Bicycle Network Victoria is currently working on a three year project funded by VicHealth investigating how to overcome the low cycling rates in outer suburbs.

A key aspect of this, and a focus of the project, is the lack of consistent and appropriate planning and provision for cyclists of all ages and abilities. This has led to poor provision for potential cyclists who do not have the basic infrastructure to use their bikes for the many transport and recreational journeys/trips that can easily be done by bike. People are dependent on the car rather than having it as one of the travel options available to them. Travel and activity data from existing suburbs show that most trips to schools, friends and shops are within 1-6km – an easy distance to cycle. Trips to work and tertiary education tend to be much longer and rely upon good connections to public transport and places to leave a bicycle securely for the day.

Key deficiencies we have observed in existing suburbs are:

- Schools are not well connected to the wider path network with children expected to ride on busy connector streets with motor vehicles;
- train stations and other public transport hubs not connected to the cycle network;
- arterial roads above 60k/h with on-road bike lanes that only suit a small percentage of the population;
- lack of bicycle paths along rail reserves which would provide connections to stations for many people;
- widely spaced crossings of major barriers such as freeways and railways that mean long detours for bicycle trips; and
- a general deficiency of cycling infrastructure leading to a piecemeal, unconnected series of lane and paths that are not used (a bit like an incomplete water supply network made of a series of unconnected pipes that is expected to provide people with drinking water).

The project has developed a draft Planning Checklist for Cycling that aims to prevent these deficiencies and allow a quick assessment of whether the basic requirements for cycling have been met in development proposals. The Checklist covers the three basic criteria of:

- **Connectivity** (is it physically possible to ride to key destinations?);

- **Permeability** (encompassing directness and choice of routes –is cycling an attractive choice); and
- **Quality/Appropriateness** (does the cycling facility suit the people using it and the trip purpose?).

At **Precinct Structure Plan** level the checklist seeks to establish a finer grained network that allows access to local destinations as well as connections to surrounding areas. At PSP level there is an increased focus on the permeability and appropriateness of the bicycle network routes. Connector streets are usually shown at this level and many key destinations such as schools, community centres and Local Town Centres will be located on these streets.

Using the Planning Checklist for Cycling as an evaluation tool, Bicycle Network Victoria offers the following suggestions for the draft Toolern Park Precinct Structure Plan (see attached assessment table and annotated plan):

Toolern Park

Connectivity -

Network of bicycle routes – the plan is for a relatively smaller area surrounded by the Toolern Precinct Structure Plan so the emphasis is assessing the connectivity to destinations outside the plan area, especially schools and town centres. Bicycle routes (on-road lanes and/or off-road paths including “Copenhagen style” separated bike lanes) are provided along connector and arterial streets and local access streets are configured to limit speeds and volumes. This provides connectivity to local destinations as well as links to schools, parks and Local Town Centres outside the area. All residences will be within 400m of a marked bicycle route.

Connections to destinations – the lack of crossing points of Toolern Creek in the west mean there is poor connectivity to destinations to the NW and SW. Copenhagen style lanes on connector streets will provide good connections to activity areas to the east.

Permeability -

Access into Town Centres - there are no schools or town centres in the area.

Crossing of barriers – As stated above, Toolern Creek to the west is a potentially significant barrier for access to destinations to the west and crossing points for bikes are needs in the NW and SW. Providing a path on the western side of the creek ensures connectivity to destinations on both sides of the creek. Given the difficulty crossing the deep banks of the creek and the paucity of crossing opportunities a path on the western side of the creek is justified. This path is shown on the Toolern PSP.

Quality/Appropriateness

Connector streets with schools, parks, community facilities – most schools, parks and community facilities will be located on connector streets. These streets are likely to carry significant motor vehicle traffic volumes at moderate speeds (50-80km/h). On-road bike lanes on these roads are unlikely to be used by school children, family groups or novice riders and separated off-road paths, with clear and unhindered crossing of minor streets, are more appropriate. Off-road paths on these streets also serve to connect to the wider off road path network alongside parks and green corridors. The Toolern Park and Toolern PSP show “Copenhagen style” separated bike lanes which fit these criteria as long as intersections are correctly designed.

Connector streets with buses and bikes – The provision of Copenhagen style bike lanes on connector streets will help minimise potential conflict between buses and bikes that may occur with traditional on-road bike lanes. The off-road bike paths planned are more appropriate on these routes as bicycles can run behind stops and high frequency bus services will not be hindered in their operation especially loading and unloading passengers. Off-road bike paths also mean a narrower paved road width which is easier for pedestrians and potential bus passengers to cross.

Bike lanes on high speed roads –the higher speed East-West arterial road proposes on-road bike lanes alongside motor vehicles travelling above 70-80km/h. Austroads Guides to Road Design (2009, 2011) recommend separated bike paths for these traffic regimes and these are much more likely to be used by less confident and novice bike riders such as children and family groups who do the majority of riding in the community via short trips to school, shops and friends, and for recreation. Separated, bike only paths are more appropriate for these roads but care needs to be taken to design intersections and cross overs (driveways etc.) to provide clear and unhindered passage for bike riders. A bike path that stops and gives way at minor intersections does not properly provide or encourage bike riding.

Regards

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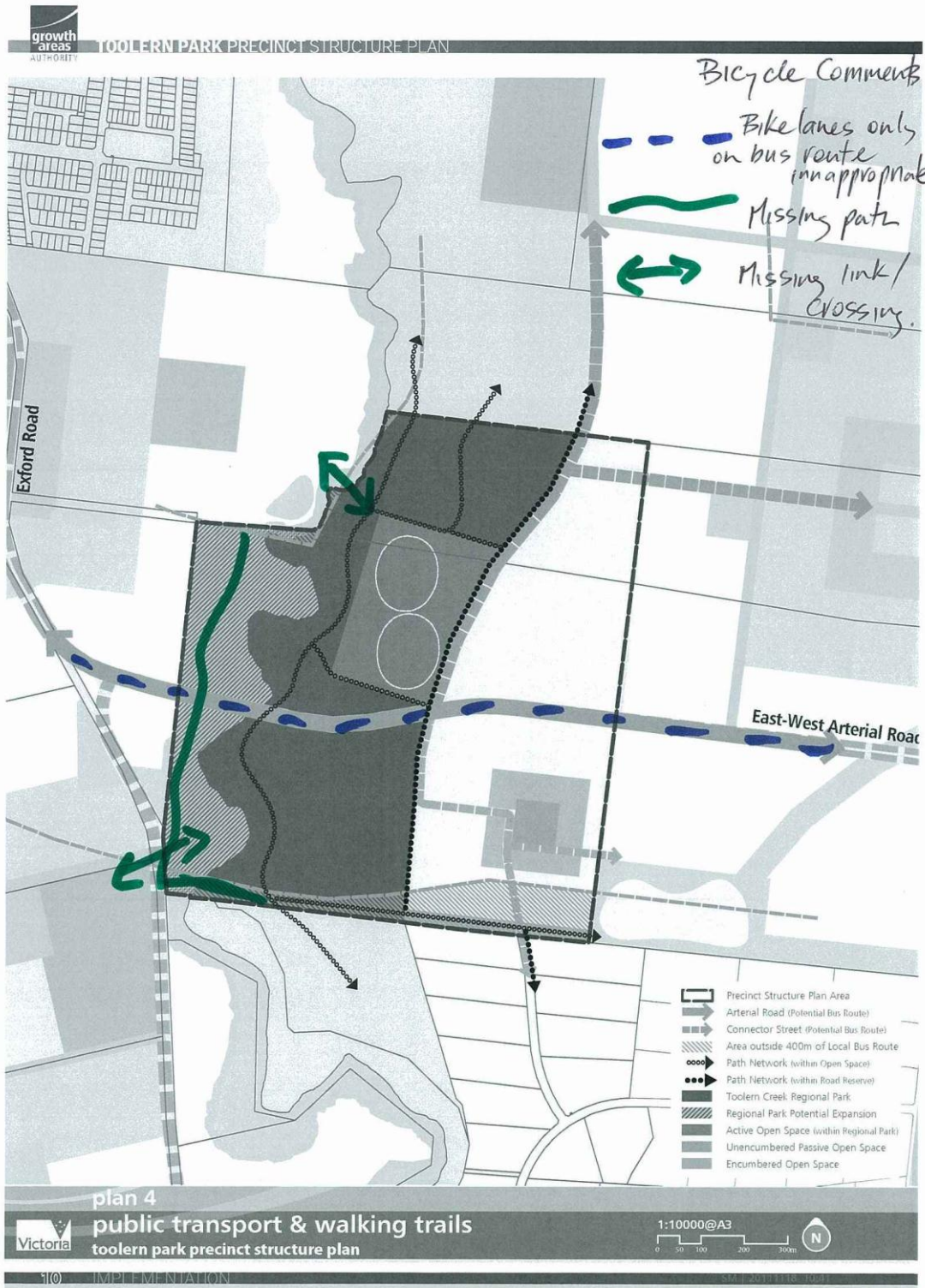


Figure 1. – Annotated plan with bicycle comments

Table 1 – Planning Checklist Assessment

Precinct Structure Plan		Toolern Park Precinct Structure Plan		
		Yes	No	Response
Item 1	Corridor routes			
Connectivity				
	Are separated, continuous paths provided alongside all freeways, railway reserves and other green corridors?	1		
	Are bicycle routes provided along major roads (Principal Bicycle Network routes and other major roads)?		1	Not shown for west end of southern road and for small section of NS arterial Rd in SW
	Are paths provided along all Metropolitan Trail Network Paths (MTN)?	1		Toolern Ck included but does not show path on western side as in Toolern PSP
Item 2	Local destinations			
Connectivity				
	Are bicycle routes provided along all connector streets?	1		Cross sections show Copenhagen style bike lanes two way
	Are bicycle routes provided to parks, shops, schools and community services etc.?	1		No schools. SE park relies upon local access roads for connections
Item 3	Residence connections			
Connectivity				
	Are all residents within 400m of a marked bicycle route?	1		Via lanes and paths
Item 4	Choice of routes - activity centres			
Permeability				
	Is there a choice of bicycle routes into and through activity centres to suit a range of trip types and purposes?			N/A no activity centres
	Are there connections to minor and major destinations within the activity centre?			N/A no activity centres
Item 5	Choice of route - separate paths			
Permeability				
	Have direct routes for transport cycling been provided that are not shared with other path users on foot?	1		Toolern Creek has parallel road with path
Item 6	Barriers and crossings			
Permeability				
	Are crossing points at barriers provided at least every 800m?		1	Crossing of creek in NW and SW corner needed

Precinct Structure Plan

Toolern Park Precinct Structure Plan

		Yes	No	Response
Item 7	Topography			
Permeability				
	Does the planned bicycle network take account of topography and avoid hills where possible?		1	Deep gorge on Toolern Creek is significant barrier. Need paths on both sides and crossing points.
Item 8	Separation and volumes			
Quality				
	Are separated cycling and walking facilities provided on off road paths where cycling numbers are expected to exceed 200 bikes per hour and pedestrian numbers 100 per hour in peak periods?	1		Unlikely to get these numbers here as no activity centres or schools
	Are local streets configured to allow shared use by bikes and motor vehicles (speeds <40km/h and volumes of <3-5000vpd)?	1		
	Are marked bicycle lanes or off-road paths provided for connector or arterial roads up to 60km/h and volumes < 5000vpd?	1		Copenhagen style bike lanes
	Are separated paths provided for arterial roads (speeds over 60km/h and volumes above 5000vpd) and on connector streets with schools?		1	Bike lanes only on arterial roads (Cross Section 3). Separated cycle lanes on 2nd arterial interim (SC 4&5)
Item 9	Off-road paths			
Quality				
	Are all off road paths at least 2.5m wide with 1m clearance each side?		1	Not specified
	Are all schools and sporting grounds connected directly to the off road path network via a cycling facility that provides separation from motor vehicle traffic (usually off-road path)?		1	NE connector road will have off-road Copenhagen style lanes to connect to school to east. Off road path to school to north. No connection to school to SW over creek
	Are off-road paths provided on the side of the road or barrier that provides the best connections to destinations?	1		For this precinct yes.
Item 10	Bikes and public transport			
Quality				
	Have interactions with the on road public transport network (buses and trams) been catered for?	1		Copenhagen style two-way off road bike lanes appropriate on bus routes. Needs detailed consideration at intersections.
	Is secure parking (undercover locked cage with multiple rails inside) provided at railway stations and major bus interchanges?			Only "Bicycle parking facilities in convenient locations at key destinations such as parks and activity centres."