

21 December 2011

Diggers Rest 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 Diggers Rest Precinct Structure Plan (see attached assessment table and annotated plan):

Diggers Rest

Connectivity –

Network of bicycle routes - bicycle routes (on-road lanes and/or off-road paths) are provided along connector and arterial streets and local access streets are configured to limit speeds and volumes. This provides connectivity to most destinations, including school, parks and Local Town Centres and all residences will be within 400m of a marked bicycle route.

Connections to destinations - The southern Local Town Centre is isolated due to short sections of missing path along Vineyard Road and Houdini Drive.

Permeability –

Access into Town Centres - There is choice of bicycle routes to schools and parks but poor permeability in the Local Town Centres due to the lack of separated bike paths into the Centre. There are no marked bike lanes or paths through these centres which will have to rely on advisory bike lanes on busy connector streets carrying buses.

Crossing of barriers - The Calder Freeway to the east is a potential significant barrier for permeability to Sunbury and its destinations. A path is proposed along the western edge but there is only one crossing point indicated over 3km of length. A future crossing point is needed in the NE corner of the area where the shared path meets the Calder Fwy.

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. They also serve to connect to the wider off-road path network alongside parks and green corridors. The Diggers Rest plan shows off-road paths along connector street past schools, parks and community facilities. The path on Davis Road at the active open space area seems, though, to be on the wrong side of the road.

Connector streets with buses and bikes - Many of the connector streets have marked on-road bike lanes on potential bus routes. This may lead to conflict between buses and bikes as buses must cross and recross the bike lane to load and unload passengers. Off road bike paths are more appropriate on these routes as bicycles can run behind stops and high frequency bus services will not be hindered in their operation. 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 – Vineyard Road in the east 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 friend 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.

Separated bike paths from pedestrians – where high volumes of bikes riders and pedestrians are expected, especially at peak times such as before and after school, there is the potential for conflict on shared paths. This can be seen on some of the most popular existing shared paths in Melbourne such as the Main Yarra Trail and the Inner Circle Trail where high volumes of bike riders and walkers mean both are disadvantaged. This can discourage walking and cycling; especially by the more vulnerable who may be fearful of venturing onto a busy shared space. Widening of the path only works up to a certain point and then it makes more sense to provide separated bike and pedestrian paths. Experience and modelling has shown that where peak bicycle volumes exceed 200 bikes per hour with more than 100 pedestrians per hour then separate bike and pedestrian paths are appropriate. Separated bike only paths are appropriate between the State Primary School and the Local Town Centre, especially along Plumpton Rd, Vineyard Rd and Houdini Drive.

Undercover bicycle parking at public transport hubs – many local trips can be made by bike but longer trips using a bicycle, especially to distant workplaces and tertiary education, rely upon connections to public transport and leaving in a secure place for the day. The current Parkiteer cages at train stations are an example of secure, undercover bicycle parking that allows people to ride to the station and leave their bike. Similar facilities should be provided where public transport connections for bike riders are expected. This may occur at bus interchanges at the local town centre and at Diggers Rest station to the east.

Regards

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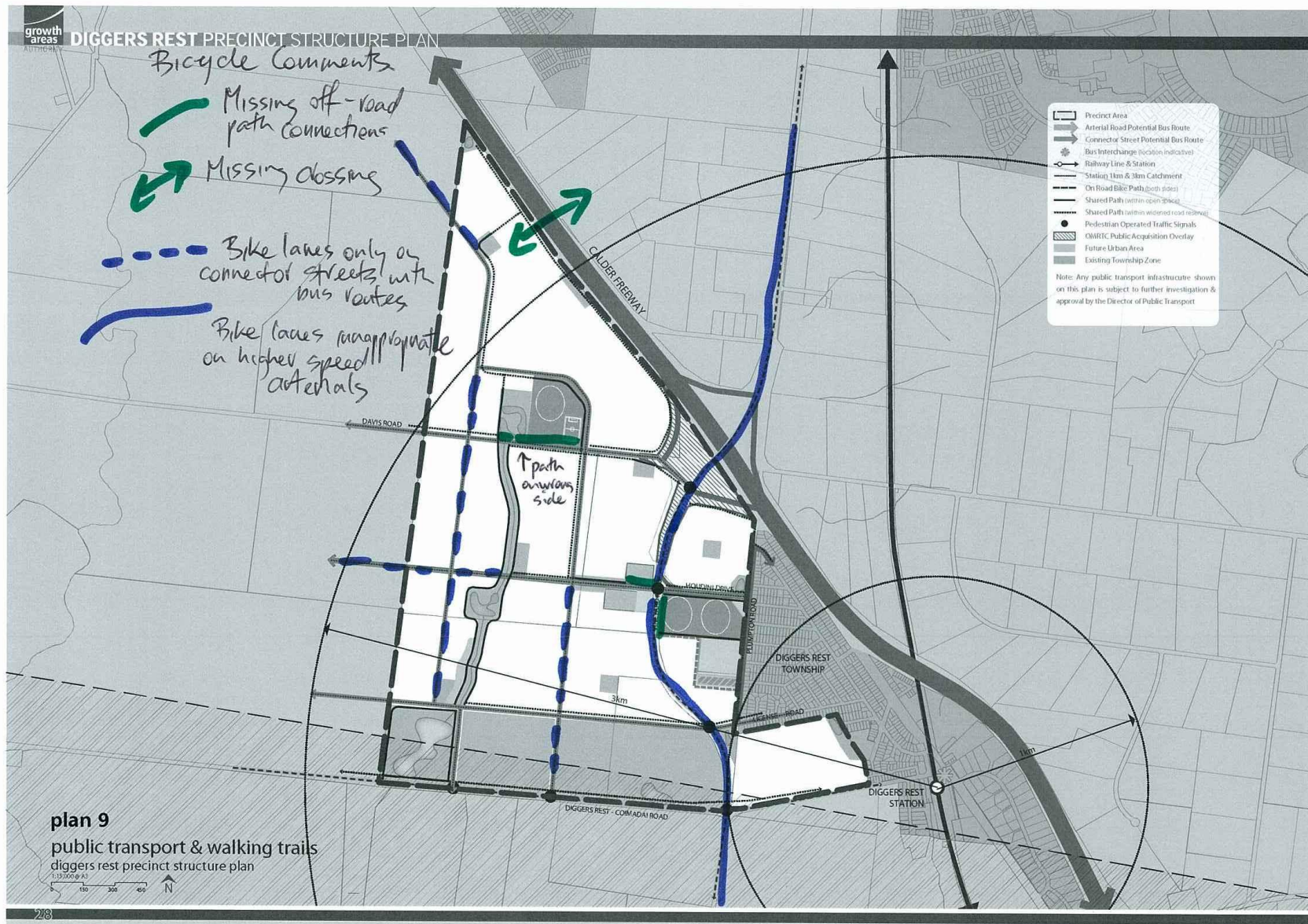


Figure 1: Annotated plan showing bicycle comments

Table 1: Planning Checklist Assessment

Precinct Structure Plan		Diggers Rest Precinct Structure Plan		
		Yes	No	Response
Item 1	Connectivity	Corridor routes		
	Are separated, continuous paths provided alongside all freeways, railway reserves and other green corridors?	1		Railway reserve outside area
	Are bicycle routes provided along major roads (Principal Bicycle Network routes and other major roads)?	1		
	Are paths provided along all Metropolitan Trail Network Paths (MTN)?	1		None in area. Provided along drainage reserve
Item 2	Connectivity	Local destinations		
	Are bicycle routes provided along all connector streets?	1		Mostly on-road bike lanes
	Are bicycle routes provided to parks, shops, schools and community services etc.?	1		
Item 3	Connectivity	Residence connections		
	Are all residents within 400m of a marked bicycle route?	1		
Item 4	Permeability	Choice of routes - activity centres		
	Is there a choice of bicycle routes into and through activity centres to suit a range of trip types and purposes?		1	No off-road path that would connect shared path along road through LTC. Off road path needed on Houdini Drive and Vineyard Rd
	Are there connections to minor and major destinations within the activity centre?	1		Only small LTC. Internal access relies on local access streets
Item 5	Permeability	Choice of route - separate paths		
	Have direct routes for transport cycling been provided that are not shared with other path users on foot?	1		Shared paths have parallel connector streets or roads
Item 6	Permeability	Barriers and crossings		
	Are crossing points at barriers provided at least every 800m?		1	Crossing of Calder in NE corner not provided
Item 7	Permeability	Topography		
	Does the planned bicycle network take account of topography and avoid hills where possible?	1		Follows drainage lines. Relatively flat

Precinct Structure Plan

Diggers Rest Precinct Structure Plan

		Yes	No	Response
Item 8 Quality	Separation and volumes			
	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	Not specified.
	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		
	Are separated paths provided for arterial roads (speeds over 60km/h and volumes above 5000vpd) and on connector streets with schools?	1		Hard to see Plumpton Rd but seems to show shared path
Item 9 Quality	Off-road paths			
	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	Short section of path missing across creek at northern sport fields - see also below. Paths shown from school to drainage reserve. Gap at LTC for SE school can be bypassed to south.
	Are off-road paths provided on the side of the road or barrier that provides the best connections to destinations?		1	Shared path on Davis Rd at north sports fields on southern side of road whereas east and west it is on the northern side. Path on correct side of Calder. Both sides of drainage reserve
Item 10 Quality	Bikes and public transport			
	Have interactions with the on road public transport network (buses and trams) been catered for?		1	Bike lanes on bus routes on connector streets not appropriate
	Is secure parking (undercover locked cage with multiple rails inside) provided at railway stations and major bus interchanges?		1	Only "Cycle parking facilities are to be provided by development proponents in convenient locations at key destinations such as parks and activity centres"