

at decision points or intersections. Primary destinations for the route, plus any intersecting routes, are shown on intersection fingerboards along with distances to these destinations. If advance or reassurance direction signage is required near an intersection on tourism and recreational cycle routes to ensure adequate route wayfinding (due to complicated intersection alignments etc), tourist cycle route markers should be used.

2. Facility direction fingerboards indicating facilities and attractions relevant to the route are used at intersections or access roads adjoining the route. The name of the facility/attraction is shown on the fingerboard along with distances to these destinations. Where distances are less than 1 kilometre these shall be shown in metres. These signs are subject to approval by the route management authority as detailed in Section 3 of this guide.
3. Route Markers are an additional aid to cyclist navigation and are used to supplement direction signing on routes that have significance as through-routes. Markers, when used, are placed at 5km intervals. Markers can also be used on trails as advance direction and reassurance signs to supplement intersection fingerboards.

2.2.4 Information signs

Map boards

Street maps and cycle network maps can be very useful aids to navigation especially when placed at key entry and exit points to a town or built-up area, at the ends or entrances to linear pathways and at mid-points along bikeways/shared paths. Examples of path map boards are shown in Figure 9. Map boards should be easily accessible from the bicycle route. If maps are located on a side path, or rest area they should be indicated with additional signs.

Though it is an established mapping convention to use street maps oriented towards north, care should be taken when presenting this information to the user. Map boards should be located so as to assist orientation, with the user facing up the page and generally in a northerly direction. Alternatively, a north point located on the ground nearby and/or on the map board may assist the viewer to orient the map.

When mounting map boards and other information boards, such as tourist information, care should also be taken
Photo 8: This map board has been located on a separate path loop to allow path users to study the map clear of the main shared path (lower left of photo). Roma Street Parkland, Brisbane.



to provide sufficient space and clearance from the path to ensure adequate space to inspect the map without interfering with the passage of other path users (see Section 3 for clearance recommendations). Map boards should be mounted flush with their support posts and finished so that they do not present sharp edges to users or protrude into the operational space of the adjacent cycleway or pathway.

Information and infrastructure signs

Information signs can be erected to provide technical details of cycle facilities and important network infrastructure. These signs can also be used to heighten awareness of major cycle facilities such as welcome and naming signage at major route gateways and trail heads. Figure 9 shows two examples of principal route signage and one example of information signage for tourist and recreational routes.

Information signs can incorporate maps, photographs and illustrations in addition to explanatory text. These signs should be no larger than 1,500mm x 1,200mm and should conform to the designs shown in Figure 9.

Figure 9: Information signs for providing technical details and important information about bicycle network infrastructure.

Welcome to the Bicentennial Bikeway

Linking Brisbane City to its suburbs along the Brisbane River

Cycle route name plate/welcome sign. Suitable for named principal routes and tourism and recreational routes. Example shown for multiple government funding agencies.

Red Bridge

The Old Logan Road Bridge was closed to traffic following a fire in the early 90's. It was re-opened as a vital cross-river cycle and pedestrian link on 29 November 2007. The renovated bridge was painted red and has become known locally as the Red Bridge. The main deck span is 94m.

Cycle route major facility information sign. Suitable for major cycle network infrastructure. Example shown for multiple government funding agencies.

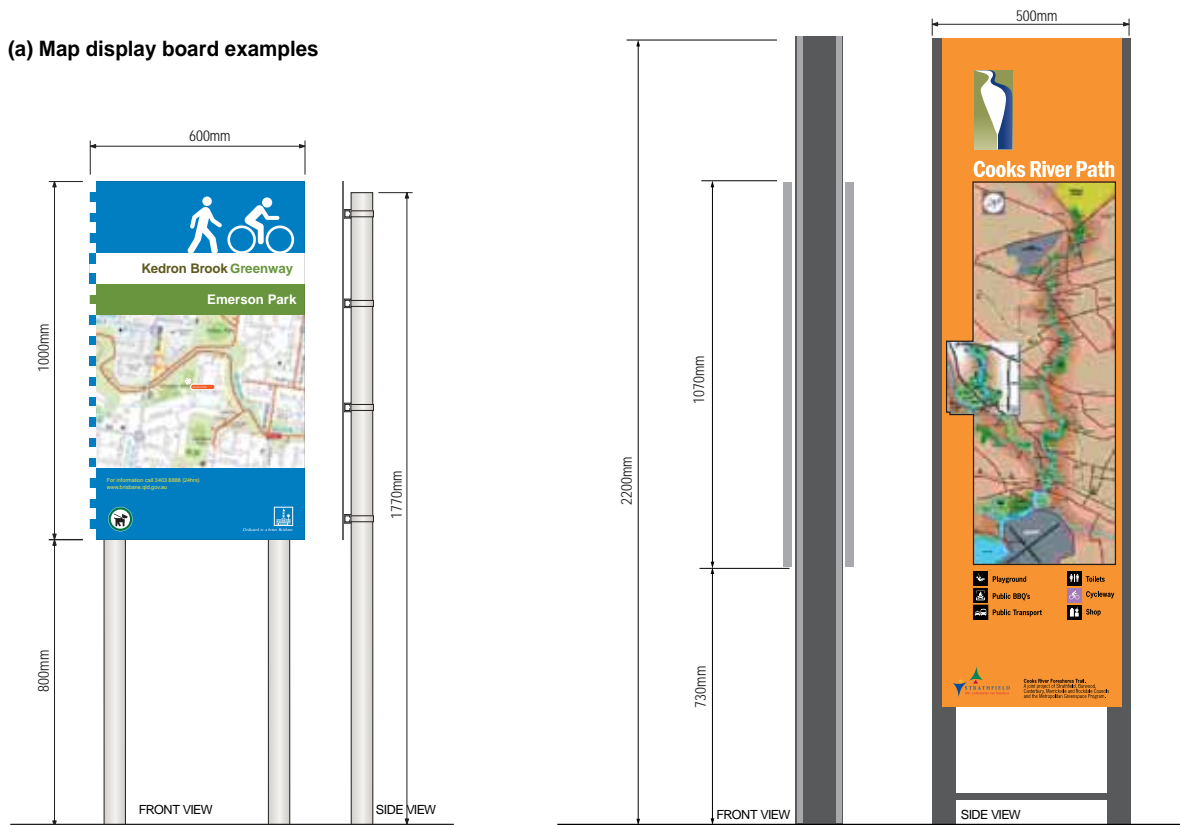
Brisbane Valley Rail Trail

Ipswich Trailhead

The Brisbane Valley Rail Trail is a 148km multi-use trail which follows the old railway corridor from Ipswich in the south to Blackbutt in the north. The trail is managed by Somerset Regional Council with support from the Queensland Department of Infrastructure and Planning and a very active local community.

Tourist and recreational cycle route information and interpretation sign. Suitable for providing information on all aspects of major trails and routes. Example shown for multiple government funding agencies.

(a) Map display board examples



Example 1: (Top left) Brisbane City, Kedron Brook Greenway area map oriented to North.

Example 2: (Top right) Cooks River Path, Sydney. Linear park trail map oriented to direction of travel.

(b) Project construction sign examples

Example 3: (Centre right) Inter-government partnership project.

Example 4: (Bottom right) Single government agency project.

Note: Indicative sign examples only. Refer to funding agency for full sign layout, sizing and design details.

Kedron Brook Bikeway Stage 1

A Smart Travel Initiative of Queensland Transport and Brisbane City Council

Cost: \$1.3m Completion: March 2008



BRISBANE CITY
Dedicated to a better Brisbane



Queensland
Government

www.brisbane.qld.gov.au

www.transport.qld.gov.au



Queensland Government

Toowong Cycle and Pedestrian Overpass

A Smart Travel initiative

July 2008 - January 2009

Cost: \$9.9 million

 3137 8344

 www.transport.qld.gov.au

Figure 10: Cycle network map boards and project sign examples (Source: TRUM 1.36 Figure 5).



Above left - Photo 9: Example of single government agency project sign. Toowong, Brisbane. Above right - Photo 10: Map boards, such as this example at Redcliffe on the Moreton Bay Cycleway encourage usage and increase user confidence.



Facilities signs

Fingerboard type signs indicating the location of facilities close to the route are a major aid to navigation and a service to the users. Typically, these signs indicate services such as toilets, water, rest stops and attractions such as points of local interest and historic sites. Cycle network facilities signs are shown in Figure 19 .

Project signs

Project signs are an effective means of communication between government and cycle network users to provide important information about new/changed infrastructure of cycleway and shared path projects. In addition, project signs identify the funding authorities, funding scheme (if applicable), the projected completion date and logos and website for more information.

This type of sign is usually erected with the announcement of a project and can remain in position after completion to highlight the public investment in the new infrastructure. Figure 10 shows examples of two types of project signage suitable for use on cycle network related projects.

Project signage requirements must meet the following objectives:

- Transfer of critical project information to road users;
- Identification of the funding authority of road works; and,
- Delivery date.

Project signage requirements may also indicate:

- Informing the community of planned infrastructure;
- Identification of the funding scheme (if applicable); and,
- Identification of the involvement of the funding agency in meeting community needs for supplying cycle network infrastructure.

The layout design and placement of project signage should comply with the intention of *TRUM 1.17*. Project signs for cycle network infrastructure projects should be no larger than 3,000mm x 2,400mm and should conform with the latest Queensland Government approved designs. Project signs should be removed after a period of time as indicated in Table 3 of *TRUM 1.17*, Council policy or, in the absence of other guidance, one year after project completion.

2.3 Directional signing a cycle network

A cycle network is usually signed route by route. However, before commencing any route directional signing project, it is essential to plan the layout of the entire network so that all interconnecting cycle routes and the destinations they serve can be identified. A cycle network plan will also identify each route type which will determine the level of signing required.

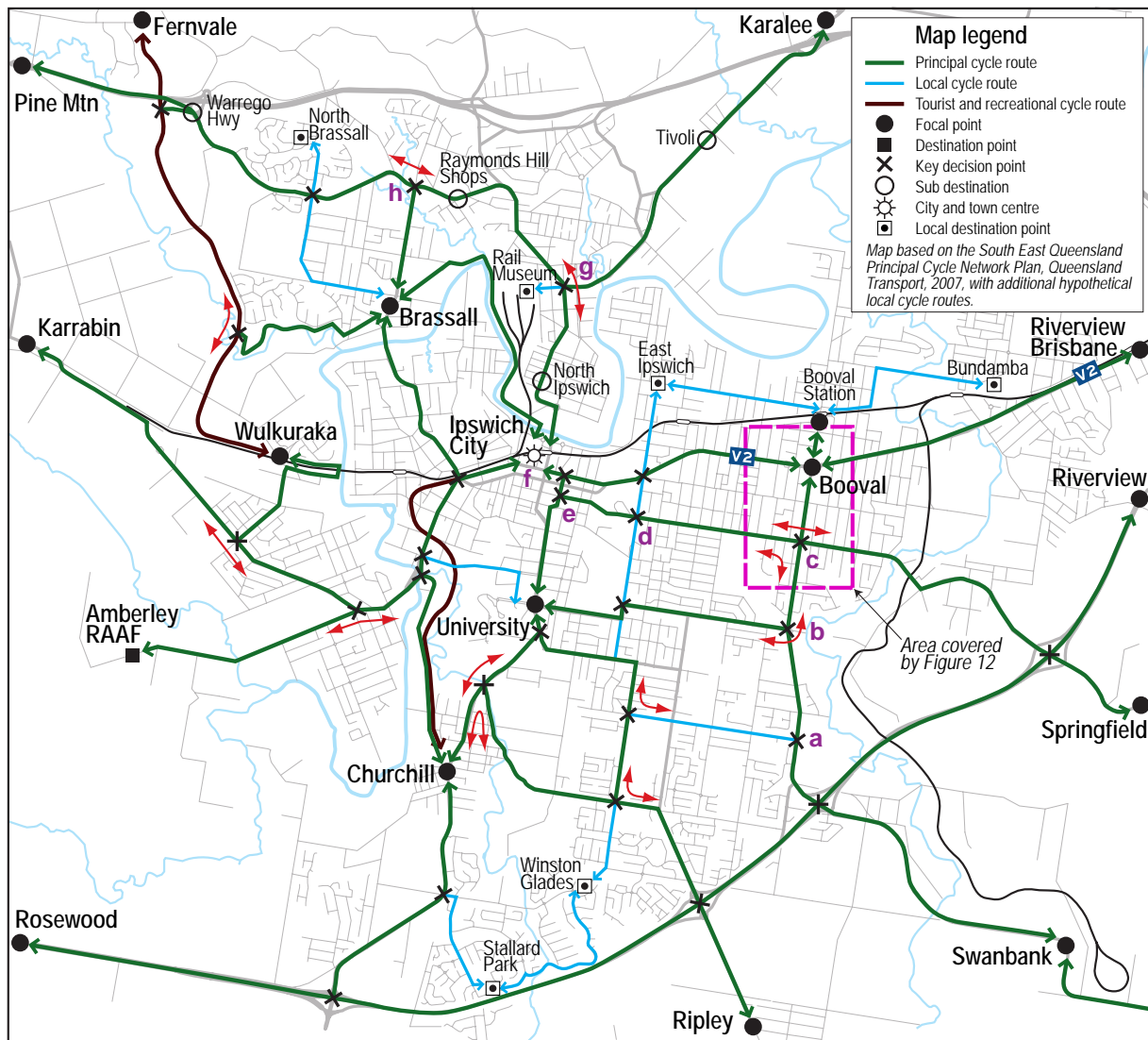
Regional principal cycle network plans have been undertaken in Southeast Queensland and Far North Queensland with others planned. These regional plans and the applicable local and regional council cycle network plans will then be combined to produce a cycle network map showing all planned cycle routes for an area. This map is the basis of the cycle network focal point map which provides the consistent framework for all future route directional signage projects.

When establishing a system of directional signage for a cycle network, Council officers should consult with bicycle network officers in the Main Roads Region Office and adjacent councils to ensure a consistent, logical and region-wide set of destinations are selected for use. This is particularly important where a number of owning or operating authorities are involved.

Signing a network is a five stage process:

1. Prepare the cycle network focal point map which identifies all destination points and key decision points for each route;
2. Assess the current physical condition of the route via a pre-signage and risk assessment survey;
3. Determine the level of signing, the route numbering or branding required for each route to be signed;
4. Prepare a signing schedule specifying all signs, their locations and mounting; and,
5. Install the signs and inspect after installation to correct any errors and omissions.

Figure 11: Example of focal point signing map for Ipswich.



2.3.1 The cycle network focal point map

A cycle network focal point map is a planning document used by the cycle network's manager to establish the destinations which will appear on directional signage for the network. A key aim of a cycle network focal point map is to achieve rigid consistency in the use of named locations so that a coherent system of signage can be developed which will enable direct and unambiguous navigation around the cycle network. Only those locations appearing on the focal point map will be used on cycle network signage.

This map is usually maintained by the government authority responsible for the regional cycle network. This will usually be the centrally located council working in consultation with MR regions and neighbouring LGAs. As bicycle networks are locally- or regionally-based and are more fine-grained and urban-oriented than the main road network, they may use different focal points to MR road-based focal point maps within the same area or region.

Figure 11 shows an example of a focal point map for an urban cycle network based on the city of Ipswich. The map shows principal cycle routes identified in the *South East Queensland Principal Cycle Network Plan*. Hypothetical local routes and tourist/recreational routes have been added to this map in order to show a more complete cycle network example. Table 5 defines the terminology used in focal point cycle network mapping.

The following guidelines apply to focal point mapping methodology for cycle networks:

- Focal points are significant localities commonly recognised within the region where routes join, cross or terminate. Focal points are indicated in the focal point map by a solid disc symbol. Arrow heads on the routes indicate the travel direction. At intersections and parts of the network where routes overlap or cross, small red arrows are provided to indicate the paths for each route.
- Terminal localities are focal points or destination points where routes terminate.
- Accepted practice is to show only one terminal locality on intersection fingerboards. Where routes overlap or branch to access separate terminal localities, it may be necessary to list two terminal localities but this practice should be avoided and limited to significant major destinations
- Sub-destinations are important local centres or intermediate focal points along a route. To keep signage uncluttered and compact, only one of these should be listed with the route's terminal locality until the sub-destination is reached. On all network signage, named localities should be listed with the closest at the top of each list and the most distant at the bottom.

- On local routes where a terminal locality (or community facility) is not immediately apparent, the designer should consult with local stakeholders (local councils, bicycle user groups, regional tourist associations etc) to determine the destination names to be included on local route direction signs.
- City and town centres are always important destinations. Principal routes leading in from the edge of a built-up area to the centre should be regarded as continuous even though they may pass through other important regional centres. The destination wording (City, CBD, Town Centre etc) should be continued right into the town/city centre.

Examples of cycle network focal point mapping practice

The letters a to h, shown in purple on Figure 11 are used in the examples below to illustrate the principles of focal point mapping.

Ipswich City to Swanbank Principal Cycle Route. When travelling towards Ipswich City this route passes through intersections a, b, c and d and e. At all these intersections the focal point for the route is Ipswich City. At intersection b (through to c) the University to Booval route shares the same street. At intersection c the Springfield to Ipswich City route shares the same streets through to their common focal point. The destination signed at intersections c, d and e is Ipswich City (see below for further details on signing the University to Booval route). Travelling in the opposite direction, the direction signs at intersections e and d should list both Springfield and Swanbank. At intersection c, separate fingerboards will list each destination (as well as Booval). At intersection a, a local route provides a useful connection through to the Ripley to University route. The focal point for this route will be University.

Booval to University Principal Cycle Route. At intersection c, this route overlaps the Ipswich City to Swanbank route through to intersection b where it turns westward towards University, its focal point. Fingerboard signage at intersection c could list both Swanbank and University as destinations but it is preferable to only sign Swanbank. University would be signed with an advance direction board on the northern approach to the intersection. For travel in the opposite direction, a similar procedure should be adopted at intersection b.

Table 5: Destination definitions for focal point cycle network mapping

Location type	Symbol*	Definition
Focal points	●	Major cities, towns, regional centres and key localities located at the intersection of principal cycle routes. Where a focal point occurs outside a locality, the road junction (or nearest landmark) may be separately named.
Destination points	■	Cities, towns, city/town centres, regional centres, and major localities which are located at the ends of principal cycle routes but are not at a junction with other principal routes.
City and town centres	⊙	The business centre of cities and towns. This area may be represented by multiple focal points depending on the size of the “CBD” or “City” precinct and the density of the cycle route network.
Terminal locality		For principal routes this may be a focal point or a destination point or a city/town centre where a route starts/finishes. For local routes it may be a facility such as a park, school, library or rail station.
Key decision points	×	Cycle network junctions which are intersections only (not focal points). These points are rarely named on cycle network signage.
Sub-destination	○	An important intermediate locality listed on the sign which will be reached in advance of the route’s next focal point.
Local destinations	▣	Important local trip generators located at the termination of local routes (sporting/recreational and entertainment venues, community facilities, key local attractions and points of interest etc).

* Symbol used in Figure 11 to denote location types.

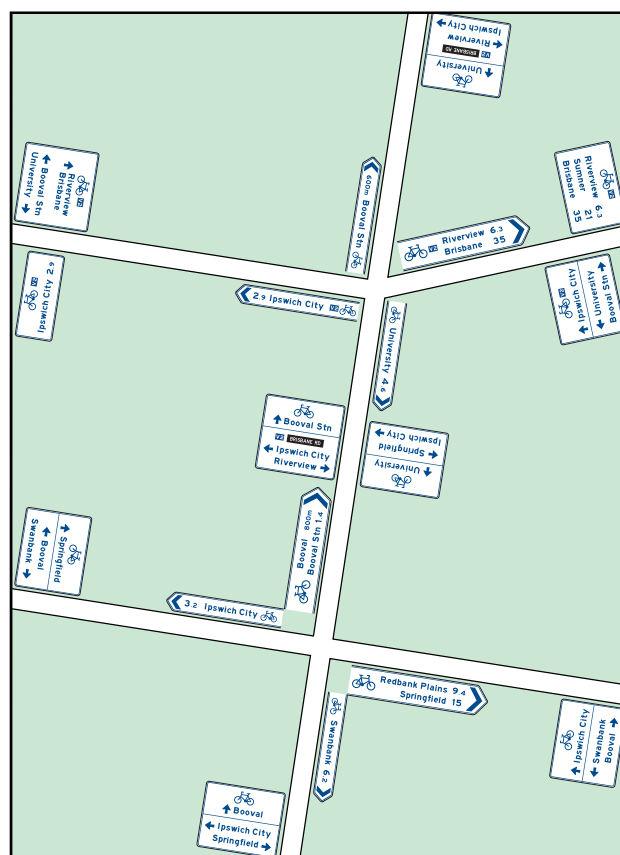


Figure 12: Detail signing for intersection c and the Booval focal point intersection. Detail from Figure 11. Ipswich City to Brisbane route is Level of Signing (LOS) C1. All other principal routes are shown LOS C2.

Ipswich City to Pine Mountain Principal Cycle Route. This route has a number of important sub-destinations. Travelling out of Ipswich City, signage would list North Ipswich, Karalee and Pine Mountain as destinations. Karalee is included because of overlapping routes. At intersection g, one fingerboard would list Tivoli (sub-destination) above Karalee while another fingerboard would list Raymonds Hill Shops (sub-destination) above Pine Mountain. At intersection h, the Pine Mountain fingerboard would list Warrego Hwy as the sub-destination.