Submission on Cycle Network & Route Planning Guide (Nov 2003)

Introduction

The Cycling Advocates Network (CAN) is pleased to present this submission on the above document. The national committee of the group has prepared this submission, with feedback from CAN members. CAN has based its submission on reviews of the relevant discussion document and background research material, as well as our involvement in the stakeholder group. If you require any clarification of the points raised by us, please feel free to contact us as detailed below.

General Comments

CAN congratulates LTSA and its consultants for the work to date in developing this draft Cycle Network & Route Planning Guide (CNRPG). In particular, the speed with which the draft document was produced is an example to many other government initiatives. While we have many general and specific comments on the content as outlined below, already the document as it is would provide a valuable tool for cycle planning activities in this country.

The CNRPG still appears to have too much of a "cycle facility" orientation, despite the evidence worldwide that a more holistic approach to providing for cyclists on our road networks is more successful, for example, via widespread use of traffic/speed restricted streets and "cycle-ability" of all streets. A recent paper at the NZ Cycling Conference[1] illustrated clearly the problems that a "cycle network" approach can lead to. Although reference is made to the IHT Five-step Hierarchy approach in the CNRPG, this concept needs to be expanded on. Indeed, the document needs to repeatedly reiterate the message that "providing for cyclists" does not equal "providing cycle facilities". A check should be made throughout the document to identify where the term "cycle facilities" should be replaced by the phrase "cycling provision".

The document makes good use of bulleting and brief assessments of advantages/disadvantages to summarise options.

The three-column style, while relatively easy to read, does not currently work well in providing pictures of adequate size to illustrate the points made. Some possibilities are to:

- provide pictures that straddle two columns; although this may make it more difficult to relate pictures with the relevant text.

- widen the columns used; for example by reducing the 4cm inside margin and 1.2cm column spacings.

- extend the pictures beyond the column margins into the column spacing areas

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[1] F. Patterson *et al* 2003, *"From the City to the Outback - Next generation bicycle planning in South Australia"*, NZ Cycling Conference, Oct 2003, North Shore.

There are still many opportunities in some sections to provide additional photos and diagrams to clearly explain the text points; however we accept that this is subject to availability.

Similarly, more case studies or examples from existing cycle strategies and networks around New Zealand could usefully provide further practical guidance and templates to start from.

Glossary of Terms and Abbreviations

The Glossary seems rather light on terms defined; we suggest that the following items could also be listed here (in some cases with alternative names also supplied):

- Cycling policy, Cycling strategy (as defined in 2.15.3)
- Cycle facility (i.e. cycle-specific infrastructure such as cycle lanes, paths, and parking)
- Cycle provision (i.e. any transport network change that improves conditions for cycling)
- Utility cycling, Leisure cycling
- Cycle lane, Cycle path, Cycleway (the latter "catch-all" term should be discouraged)
- Contra-flow lane, Bus-bike lane, Exclusive cycle path, Shared-use path
- Cycle audit, Cycle review
- Cycling officer/champion
- Cycling network plan, Network implementation programme

Some of the items already in the Glossary are very wordy for just basic definitions, and much of the text could be shifted to the relevant sections of the document instead. Indeed, arguably the discussions on cycle network and route planning are much better placed in the Introduction, with only the definitions for "cycle network" and "cycle route" remaining in the Glossary.

This section might lend itself to a slightly different layout format, e.g. using a narrow column (similar to existing ones) for listing each term next to a wider column containing the definitions.

1.   Introduction

It would seem more intuitive if the Introduction (or some kind of Foreword) preceded the Glossary/Abbreviations, to "set the scene" and define its scope and status.

2.   The Planning and Policy Context

Some of these sections may have to be slightly amended now that the *Land Transport Management Bill* has passed into law, e.g. powers and requirements of local and regional authorities. The appearance now of the draft *National Walking & Cycling Strategy* also requires more specific mention now.

2.5 (National Transport Strategies): The list of unitary authorities should also include Nelson and Tasman or refer more generally to the "Nelson/Marlborough" region.

2.11 (Bylaw powers): It may be useful to highlight some other possible cycling-relevant bylaw powers, e.g. providing right-of-way for an off-road path over a road, rules for behaviour along shared-use paths, prohibition of cycling on some roads, allowance for cyclists in

pedestrianised areas, exemptions for cyclists from general motor vehicle turning/access restrictions.

2.14 (Other Governmental Strategies): The potential cycling links to a wide range of Government agencies needs to be identified here, for example, Health, Tourism, Education, Environment to name but a few. Cycle planners need to check whether there are relevant policies and initiatives within these portfolios that can also be tapped into, e.g. promotion of active healthy lifestyles, safe routes to schools, "eco-tourism".

3.   Cyclists' Needs

3.3 (Cycling purpose): Suggest adding at the end *"Leisure cycling includes sports training cyclists, recreational riders, and cycle tourists."*

3.4 (End-of-trip facilities): Need to expand on what is meant by "traditional cycle parking facilities"; presumably unsecured, uncovered facilities usually where the cycle is held by the front wheel. Also suggest amending *"As such, a locker **or some secure storage space** is also needed"*. Finally, some comment and references are appropriate in this section to justify how the cost of these facilities is outweighed by the benefits (e.g. less sick leave, less parking space/cost, etc).

4.   Cycle Network Approaches

4.2 (Basic Principles): The third item of the IHT hierarchy is better described as "intersection and traffic management", as it also encompasses treatment of pinchpoints away from intersections. It also needs to be explicitly pointed out that an absence of the top items in the hierarchy is more likely to deter people from cycling than a mere lack of specific cycle facilities.

4.3 (Urban arterial road cycle networks): A photo to illustrate the arterial road approach would be helpful, e.g.

(Moorhouse Ave, Christchurch, courtesy Chch CC)

Another disadvantage not mentioned is that many less confident cyclists, including potential new cyclists, may be put off by the prospect of cycling on busy arterial routes, even with cycle facilities.

4.4 (Urban off-road path networks): An advantage of these networks is that they provide relatively safe "training grounds" for new cyclists (especially children) to develop their cycle handling skills, before interacting with traffic.

4.5 (Urban back-street networks): A photo to illustrate this concept would be useful; for example, a quiet street with cycle route destination signage.

4.7 (Cycle route network hierarchies): This section may need some more description of how they work, for example via a plan.

5.   Cycle Facility Options

The title of this chapter is somewhat misleading, given that in many cases (i.e. wide kerbside lanes, mixed traffic), no specific cycle facilities will be required. An alternative title like "Options for Cycling *Provision*", would help to get away from the thinking that specific treatments are always required.

5.3 (Mid-block facilities): First bullet should refer to "**kerbside** cycle lanes", to match 5.4 heading. Although the subsequent sections describe each of the listed options in detail, it might be useful to also briefly define them in the Glossary. In light of our previous discussion about reducing the emphasis on specific cycle facilities, it might be worth reordering the following sections, to highlight the common applicability of wide kerbside lanes or mixed use, for example.

5.5 (Cycle lane next to parking): It should be pointed out here that, because of the potential for vehicle doors opening, these lanes must generally be wider than kerbside cycle lanes.

5.6 (Contra-flow cycle lanes): The reference to the "left" side of the road is confusing; presumably this means that, from the cyclist's perspective, they are to the left of oncoming traffic. While this is the ideal (and intuitive) approach, there may be occasional examples where this is not appropriate (particularly where the contra-flow facility is part of a two-way cycle path).

5.7 (Wide kerbside lanes): Need more emphasis here that in many cases wide kerb lanes already exist on a (suitably quiet) street and no further work is required. It should also be pointed out that parking can be placed alongside such a lane, but this should be clearly demarcated (e.g. by edgeline).

5.8 (Sealed shoulder): The description for this needs some care; a "shoulder" is legally quite different to a cycle lane. The accompanying photo is inappropriate, as it shows a shoulder with a cycle logo, which (soon) legally defines it as a cycle lane and would prohibit parking here.

5.11 (Paths - general): It is worth including some discussion here about the practice of banning cyclists from roads because of the presence of an alternative path - this is usually not a reasonably sufficient criterion on its own for such a ban.

5.15 (Cycle path next to road): This section rather confuses the issue, as all three of the path options previously discussed could either be next to a road or away from them (e.g. in parks/reserves). It would seem more appropriate to make some general discussion on this distinction in 5.11.

5.17 (Intersections): The accompanying photo uses the term "standup lane", which in New Zealand would be just a "cycle lane" leading to an ASB. It may also need to be pointed out that good intersection design also encompasses where cycle paths connect to or cross over roads. The paragraph on signalised intersections seems rather brief, and a little bit of expansion on issues with phase times and detection may be useful. Solutions for multi-lane

roundabouts should also include conversion to traffic signals (full-time or part-time), or changing to single-lane roundabouts. More discussion is needed in this section on unsignalised intersections and path-vs-road crossings, particularly with respect to the Level Of Service provided and who has priority, as these are important consideration when planning attractive cycle routes (particularly away from on arterial roads).

5.18 (Structures): More discussion is needed about cycle provision on bridges (road or standalone), and the importance of getting cycling structures right the first time, given the costs involved and difficulty in retrofitting.

A section on pedestrianised areas (street malls, squares, etc) should also be included, discussing the merits of allowing cyclists into traffic-restricted areas.

6.   Assessing Cycle Demand

We suggest that the flowchart at the start of Chapter 6 should also be repeated at the beginning of the document (perhaps as an inside cover), to enable readers to see at a glance the desired process. By including additional links showing how the earlier chapters influence the various stages, the flowchart could serve as a diagrammatic table of contents as well.

Some pictures/graphics to illustrate techniques would greatly enhance this chapter.

6.2 (Cyclists' origins): This (rather brief) section is slightly misleading as, having cycled to some destination, that location then becomes the origin for the return trip or any subsequent trips. Probably this section should be merged with the next section on destinations. Notwithstanding the lists of key locations provided in these sections, it still needs to be recognised that cyclists have destinations all over the place and a basic level of service must be widely catered for in the same way as motorists.

6.4.2 (Cycle crash data): This discussion should include mention of Police reported data (LTSA database), hospital injury data, and incidents reported directly to the RCA, perhaps via a local incident/hazard reporting scheme.

6.4.5 (Consultation with cycle users): Another potential disadvantage, particularly in "cycling-unfriendly" environments is that the existing cyclists may be generally the "hardened" cyclists who are not necessarily able to represent the less confident, new cyclist's needs and desires.

6.4.8 (Cycle Counts): Section 6.4.9 - 6.4.11 would appear to actually be sub-sections of this section; alternatively this preceding section is unnecessary. It seems inconsistent with the rest of this chapter to lump together the advantages/disadvantages for the three count methods, when they each have different merits.

6.4.15 (Other demand prediction methods): A distinction needs to be made between methods and models that predict cycle route flows based on *known* origin/destination demands (rather like traditional traffic models), and methods/models that estimate how many people are *likely* to want to cycle, given some new facilities. The latter area of investigation is less well understood worldwide. Many of the models reviewed by Taylor and Damen do not assess demand at all, they assess quality/LOS of a route; hence they are more applicable to Chapter 8 of this document. We recommend that reference be made instead to recent US

and Australian guidelines[2,3] that provide more practical advice for estimating cycle demand, and more research be done locally in this area.

7.   Identifying Cycle Routes

7.3 (State highways): With reference to Transit NZ's 'Cycle Policy for State Highways', we trust that this document is now available for viewing and feedback too.

7.4 (Arterial roads): Some additional discussion is needed as to the merits or otherwise of prohibiting cyclists from some arterial roads, e.g. limited access "expressways".

7.5 (Local and collector roads): This discussion seems mainly urban-focused and does not seem to include the role of quiet rural roads in longer-distance touring routes.

7.8 (Watercourses): This definition should be expanded to include "shorelines" to lakes, harbours and coasts, as the term "watercourses" is usually associated with only rivers or drains.

7.10 (Other major opportunities): Could also add opportunities via conservation land tracks, and old road formations (esp. after major realignments). The potential for using pedestrian "alleyways" to link local streets together also needs to be highlighted somewhere; these provide essential off-road shortcuts that motorists do not have.

8.   Evaluating Cycle Route Options

8.5 (User assessment): To help planners and designers answer: *"How will cyclists be able to use this?"*, the CNRPG should strongly recommend that they get out on a bike themselves and experience the environment first-hand - there is no better substitute.

9.   The Cycle Network Plan

It is worth highlighting in this Chapter the potential danger of assigning streets as either being on or off the cycling network. It can lead to a division of cycling provision that focuses on a few main cycling routes to the detriment of cyclists using any of the other streets (particularly if motor traffic continues to grow). One solution may be that, while most implementation concentrates on developing those key routes, work is also undertaken to remove major pinchpoints or dangers from other locations. Cycling networks and routes also tend to promote "linear" solutions, whereas area-wide treatments such as traffic management and 30-km/h zones may provide better solutions in some places.

10. Prioritisation

10.2.3 (Crash records): The discussion of crashes continues to only focus on LTSA crash data, with no consideration of the pros/cons of getting locally-collected data as well (an approach which is standard for Transit NZ networks and some RCAs too). It is also generally

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[2] *Guidebook on Methods to Estimate Non-Motorized Travel: Overview of Methods*, U.S. Dept of Transportation, Federal Highway Administration Publication No. FHWA-RD-98-165, July 1999.

[3] *Forecasting Demand for Bicycle Facilities*, by R. Katz, Austroads Report No. AP-R194/01, Sydney, Australia, 2001.

incorrect these days to say *"crashes are analysed according to a set of codes that do not allow for problems that affect cyclists... (such as opening car doors, or left-turning overtaking motor vehicles)"*. While accepting that the accuracy of cycle crash recording is still very dependent on the investigating officer, there are now specific codes that address these.

11. Implementation

11.13.1 (Bicycle coordinators): This is a relatively uncommon designation in New Zealand, where "cycling officer" is probably more in use.

11.13.4 (Consultants): It is worth adding *"Experience in general roading or transport planning and design is not sufficient on its own."*

11.14 (Approval): This seems like a rather redundant section; it doesn't appear to be telling us anything new.

12. Monitoring

12.5 (Cycle use): It seems prudent to indicate here that interested parties should not expect instant cycling increases after just a few years of providing cycle facilities. It is not until coherent network links are completed that many would-be cyclists will consider it safe to make their trips by bicycle (many non-facility policies and promotions will have just as much importance in these decisions too).

12.6 (Cycle crashes): Again, this section should clarify that it includes both LTSA crash data, and locally reported data.

12.8 (Cycle facilities condition): It is also worth suggesting that a user-friendly system for cyclists to report hazards should be implemented, e.g. Freepost reply cards, email or phone "hotlines".

12.11 (Plan review): This section appears to be missing discussion of the wider cycle strategy and network review. A suggested addition is:

"At least every five years, the entire cycle network and surrounding cycle strategy should be reassessed to confirm its currency. Some things to consider include:

- *Have stated strategy targets been met?*

- *Have public expectations changed regarding their desire for encouraging and supporting cycling? (may also be reflected at central/local government level)*

- *Has the cycle network development progressed as planned?*

- *Have there been changes in cyclist desire lines or cycle route usage?*

- *Has there been the desired improvement in cyclist safety?*

- *Have there been significant changes to the district transport infrastructure or major land-use developments that require incorporation in the network plan?*

- *Have there been any changes in established national cycle design and planning practice?*

- *Have there been any changes to the way that cycle projects are evaluated and funded?*

It is important to remember that, in the initial network development phase, there may be little significant change in cyclist use (i.e. until a fair proportion of the network is completed)."

13. Consultation

13.4 (When to consult): It is worth adding that crucial decisions – like the type of facility to be provided – need to be consulted on early in the process to avoid producing a "white elephant" that most cyclists won't actually use (or at least considerable re-work further down the process). It is also worth highlighting the relatively small costs of consulting versus large costs of useless (or needed to be reworked) infrastructure, particularly where decision-makers are concerned about the costs involved. Experience has shown time and time again in various disciplines that the time (and effort and cost) spent planning is repaid hundreds of times over the costs of not doing so.

13.5 (How to consult): The list of options seems to omit common techniques for specific project consultation such as public notices, online (internet) information and submissions, and letter drops of proposals. Although they are arguably covered under "formal submissions", the various methods should be elaborated on.

13.7 (Resources for consultation): CAN heartily endorses the discussion on the role and value of advocates!

Appendices

A1.1: It would be worthwhile repeating the list of potential agencies and sectors here, or at least referring more specifically back to section 2.14.

A1.4: It would be very useful to list here some examples of good targets used by some existing NZ cycling strategies. Some further elaboration on ways to produce suitable targets would be useful, such as the "SMART" (Specific, Measurable, Achievable, Realistic, Time-bound) approach.

In the References there are two FHWA documents that appear to have the exact same title. Possibly the 2000 reference should refer to the Ped-Bike Crash Analysis Tool.

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The Cycling Advocates' Network of NZ (CAN) Inc is this country's national network of cycling advocate groups. It is a voice for all cyclists - recreational, commuter and touring. We work with central government and local authorities, on behalf of cyclists, for a better cycling environment. We have affiliated groups and individual members throughout the country, and links with overseas cycling organisations. In addition, several national/regional/local government authorities, transportation consultancies, and cycle industry businesses are supporting organisations.