



Engineers New Zealand
Transportation Group

Management Committee
C/- Don McKenzie (Group Administrator)
Traffic Design Group
PO Box 13-835
CHRISTCHURCH
don.mckenzie@tdg.co.nz
<http://www.ipenz.org.nz/ipenztg/>

Draft Pedestrian Network Planning and Facilities Design Guide

**Submission to Land Transport New Zealand
December 2004**

Introduction

The IPENZ Transportation Group ("IPENZ TG") is pleased to present this submission on the Draft Pedestrian Network Planning and Facilities Design Guide (The Guide). IPENZ TG Members consist of over 600 transportation and traffic engineering professionals working in central government, local government and the private sector.

Our members represent a segment of considerable expertise in the fields of traffic and transportation and together we make a significant contribution to the planning and ease of walking in our towns and cities. We believe that this influence should always be positive and to the maximum extent possible; hence IPENZ TG's support in principle for The Guide and good integrated design.

IPENZ TG has prepared this submission with specific input from Steve Abley who is a Chartered Traffic and Transportation Engineer and a member of the IPENZ TG. We have also called for comment from our wider membership and this submission is a collation of all our ideas.

We have prepared our submission in the format you requested, separating each of our comments by The Guide's chapter, section or paragraph number. For further clarification of the points raised in this submission please contact us.

General Comments on the Draft NZ Pedestrian Network Planning and Facilities Design Guide

Walking is the forgotten mode of transport as evidenced by a vacuum of New Zealand design information. Consequently we are very encouraging of Land Transport New Zealand's decision to support the need for the better quality and quantity of design information. This new information will assist our members and other professionals to design better walking environments.

We also strongly support the Government's policies for a sustainable land transport system and the objectives of the New Zealand Land Transport Strategy. Specifically we support the overall vision, principles and objectives for New Zealand transport that ...*"By 2010 New Zealand will have an affordable, integrated, safe, responsive, and sustainable transport system"*.

New Zealand's Transport Strategy has five core policy objectives by which it means to achieve its overall vision, these are:

1. *Assisting economic development.*
2. *Assisting safety and personal security.*
3. *Improving access and mobility.*
4. *Protecting and promoting public health.*
5. *Ensuring environmental sustainability.*

We consider that walking will play a vital role in each and every one of the core policy objectives and The Guide will play an important function by which to implement walking in the built environment. The Guide therefore has an important role to play in where the balance lies between road users for the competition for road space, capacity, amenity and safety.

It is this balance issue that we consider The Guide does not comment on in enough detail. The Guide was intended to update the TRAFINZ guide to Pedestrian Crossing Facilities. The Guide extends the scope of the earlier document although the detail that was included in the TRAFINZ guide is generally unchanged, and in some instances reduced.

Our members have a keen interest and responsibility for protecting the safety of road users including pedestrians, cyclists, public transport users, motor vehicle drivers and occupants. We are concerned though that some overseas practice has swung so much towards protecting walkers from other traffic that the quality of the walking environment has deteriorated and consequently walking is unpleasant. We are mindful that the balance between the safety of walking from other traffic and the enjoyment of our streets can at times conflict. We strongly encourage The Guide to promote a quality walking environment where only the most essential impediments to walking are implemented. This should only be where absolutely necessary and because of a significant risk of injury.

It is probably the element of everyday useful, practical and detailed information that that will ultimately prove The Guide's success. If designers can quickly solve a problem, implement a solution and be provided with prescriptive information, albeit it being used with professional judgement, it will be well utilised and referred. Conversely if the information is academic, difficult to find or complicated to conclude then it will be underutilised. We consider The Guide lacks the detail that will ultimately make it an outstanding success because it does not answer the straightforward questions practioners require.

We acknowledge though that The Guide could be amended for the detailed information that we know practioners are often searching and we are supportive of this detail being included in the final document.

Consultation Submission Form

The following section uses the basis of your consultation submission form as a guide to our submission. Where necessary we have expanded upon the information you have requested and proposed our own questions or recommendations to particular issues. Your specific questions are italicised for ease of reference.

General comments on scope, structure, content and presentation.

“Size: the document is getting quite large. Would it be better divided into two publications? 1. on planning and selection of facilities 2 on facilities design.”

The document is very comprehensive and includes the collection of a great deal of information. Subsequently we agree that it has cumulated into a large document but one that is necessary and welcomed by our Members.

The benefit of separating the document into one, two or maybe three volumes is that each volume will probably have a different target audience. Consequently it will be especially pertinent to that target reader and should be well used. We consider the final document will probably be a size that it could be separated into at least two documents, one for planning and the other for design. We also suggest the creation of a third document that would include an expanded Appendix 3. We comment more on the expansion of this appendix later.

We suggest that The Guide should be a ‘living document’. The current focus on walking means that new planning and design techniques are being proposed more often and the opportunity to include these in The Guide post publication should not be ignored. We suggest a ‘ring binder’ format similar to MOTSAM and users could pay a maintenance fee for subscription to an on going upgrade service.

Glossary

The glossary is extensive and welcome in a design area that often uses words with dual meanings e.g. ‘pedestrian’ and ‘walking’. We suggest the inclusion of a number of other words including longitudinal fall, headroom, community street audit, rating, kerb dropper, natural surveillance and crossover.

Section 1: Introduction

1.1.2 The reference that The Guide intends to “...*better accommodate walking trips*” is probably to low an objective. In fact, The Guide’s overall objective should be to support the Land Transport Strategy and in doing so encourage walking as a viable alternative to motorised transport for short trip lengths.

1.1.4 The reference that The Guide “...*does not have force of law*” is relevant although we consider it devalues the previous sentence that refers to The Guide being the accumulation of international best practice. We consider that these sentences should be carefully drafted so although not being enforceable in law, deviation from The Guide’s proven good design should be discouraged.

1.2. The relevance of walking to our communities is only touched on very slightly in this section. There is a paragraph that explains that walking is declining and two paragraphs for why walking is important for a ‘balanced transport system’. Very little attention has been paid to the benefits of walking other than the sentence “...*also healthy, inexpensive and very environmental friendly*”. Because The Guide states it “...*will be a useful tool for...community leaders, local councillors and advocacy groups*” it is worthwhile that more detail is provided on the benefits of walking, especially the growing need to promote walking for a healthy lifestyle.

The figure that defines the structure of The Guide is a particularly good idea although it is not referenced within the text of the introduction.

Section 2: The planning and policy context

This section is critically important so the hierarchy of planning policy is referenced and the 'trickle down' of each of the policy contexts defined. It would be worthwhile that these are shown figuratively.

Section 3 Pedestrian characteristics and preferences

3.1.2 This paragraph should be given significant emphasis. The need to design for less able members of the community rather than the 'average' is very important principally because it removes a barrier to accessibility.

3.3.1 The figures that this paragraph refers are not referenced although this figure is very powerful. This information is particularly useful and can be supplemented with not only width, but also the length of walkers including a pushchair and wheelchair dimension.

3.4.2 The inclusion of a cumulative distribution frequency graph may explain these walk speeds in more detail. The recommendation of a design walking speed as like that proposed in Appendix 3 should be included. Appendix 3 recommends 1.2m/s for adults and 0.8m/s for the elderly. The range of walk speeds for people in a wheelchair or mobility scooter should also be stated.

It is probably worthwhile noting that the majority of New Zealand's walking infrastructure would not satisfy the requirements of a mobility impaired pedestrian. The need to reinforce 'moving the bar higher' should not be underestimated.

3.8.3 No reference is made to why females make 22% more walking trips than males. Readers may infer that it is a physiological difference.

"3.11 Is the treatment of recreational devices appropriate?"

The Guide clearly questions the place of recreational devices and if the footpath is an appropriate place for their use. We consider that footpaths have more than just a movement function; they are a place for people to linger, interact and browse. Recreational devices are not conducive to these other objectives and hence a pedestrian or mobility impaired user should always have priority rather than a recreational device. To this end The Guide should promote the design of environments for walking first, and in doing so enable recreational devices to be used but not at the expense of the fabric of the street environment. It is probably worth emphasising the ability of local authorities to ban the use of recreational devices in certain areas.

Section 4: Community walkability

"How can we better describe the aspects that make communities places where people choose to walk."

The descriptions that The Guide provides for the elements that make an environment readily available are extensive, although the associated linkages to 'how' to make those environments lost. It would be worthwhile that the connections between this chapter and the subsequent chapters are strongly identified. This will enable a practitioner that identifies failings in a particular environment to quickly reference appropriate solutions. The linkage of this chapter to section 7.7 'Walkability' and Chapter 9 'Measuring Walkability' should be strongly reinforced.

Section 5: Approaches to providing for pedestrians

“5.2 Road user hierarchy: Appropriate for New Zealand?”

This section is very appropriate because practitioners struggle when reconciling the needs of walking with other road users in different road environments. Unfortunately the need to reconcile the road hierarchy with the user hierarchy is easier said than done. For example, in peak periods we often give commuter traffic a greater priority than walking on high movement classified roads. The Guide says that the “...*user hierarchy requires an awareness of the impacts and purpose of the wider transport network...*” and although this probably infers the road hierarchy it is not explicit. We favour the concept of a New Zealand user hierarchy although The Guide is probably not the forum for this discussion as it introduces a number of practical problems.

“5.8 Home zones: Appropriate for New Zealand?”

Home Zones are appropriate for New Zealand although we prefer they are designated areas and protected by Traffic Regulations that give priority to walking over other traffic.

5.8.4 We do not believe that the displacement of traffic onto more appropriate roads is a problem. The issue is the appropriateness of those other roads and their place in the road hierarchy, this should be clearly stated. Additionally the requirement of the emergency services to maintain ‘maximum’ response times is becoming a lesser priority to communities in the face of a degrading street environment.

5.9 The ‘living streets’ concept being marketed by the Christchurch City Council appears to have lessened the value of installing the solutions that the ‘living streets’ brand was intended to promote. The Guide says that “*The living streets concepts can be applied to any road*” and it then goes on to say that living streets has a number of overarching aims. We consider that each of these aims is not specific to the ‘living streets’ brand and rather conducive to all roads and streets including motorways e.g. safety and security. We recommend the removal of this specific section (5.9) and amalgamating it into the introduction of Chapter 5 where reference can be made to the Christchurch City Council’s living streets programme.

Section 6 Pedestrian Network components

“6.2 Footpaths - 6.5 Shared use paths”

Again it is probably useful to reference this Chapter to the specific design sections e.g. 6.4.2 to 13.11.3 and 13.11.6

“6.11 Crossing assistance for school children”

No mention has been made to Traffic Note 37 and the introduction of the 40km/hr School Zone.

“6.12 Zebra crossings to 6.16 railway crossings”

6.14 The Guide does not identify that the major difference between mid-block pedestrian signals and signalised intersections is that with mid-block signals the pedestrian phase is always segregated from vehicles whereas with signalised intersections the walking and vehicle phases may be shared.

6.10 The Guide does not mention that practitioners often use traffic calming as pseudo walking facilities. The Guide should actively discourage this practice and especially the use of humps as a walking facility.

6.15 The Guide could add further explanation to some of the points of difference it identifies regarding under or overpasses. The Guide identifies that an overpass requires a greater vertical separation than an underpass although it then does not then identify the consequence is that the overpass will have a longer walking distance from entry to exit than an underpass. It is also probably worthwhile identifying that an overpass may be subject to poor weather and the danger of items being thrown from the overpass onto vehicles.

Section 7 Community walking plans

“Are these a good idea? Is the process appropriate?”

We consider these are a good idea because of the inaction that can follow the preparation of a general walking strategy. Ultimately it is the application of the strategy in practice that proves its success. Community Walking Plans also enable a local authority to define appropriate walking widths for different areas, footpath surfaces and de-icing programmes. A well written Community Walking Plan can also assist the Council’s asset maintenance programme. This section needs to reference chapter 18 so indicators of performance can be measured.

Section 8 Assessing demand for walking

“Are there any other ways of assessing current walking demand that should be included? What experience is there in New Zealand of forecasting future walking demand that could be referred to?”

We are unaware of any other methods being used in New Zealand although we are aware of the Space Syntax and Intelligent Space methodologies for calculating attractiveness that were borne at University College London, UK.

Section 9 Measuring walkability

“Are there other tools for measuring walkability that have been tried in New Zealand? Are there existing checklists being used in New Zealand? LTSA is keen to support more work on this topic.”

We are aware that the Christchurch City Council has recently trailed two walkability indexes with varying success and the Wellington Regional Council has recently commissioned walkability indexes at some railway stations. Both these organisations will be able to provide Land Transport New Zealand with the specific details of their methodologies.

We are concerned that The Guide says that walkability *“...means quantifying pedestrian experiences in a consistent manner.”* We consider that the ultimate test for the walkability of an area is the quality of that area as measured by the people using that environment. Although an index to walkability is valuable, it should not be valued over asking users their opinion and especially the opinion of less able users. In this regard the Living Streets Community Street Audit methodology has not been identified as a measure of walkability albeit without the consistency that a rating system provides.

9.4.1 Our comments regarding the Space Syntax and Intelligent Space methodologies are appropriate regarding modelling walkability. Gabites Porter’s recent work with the Queenstown Lakes District Council and modelling the cost of walking and walk distance level of service is also relevant.

Section 10 Prioritising schemes

We support Land Transport New Zealand to produce a New Zealand rating methodology to aid practitioners when selection between different walking schemes. We would recommend that any rating system also includes the ability that schemes that benefit vulnerable users are biased towards and the ability to subjectively measure walking schemes for other benefits that the rating system may not be able to easily quantify.

Section 11 Implementation

“11.4.4 When should we audit schemes for pedestrian friendliness?”

There is an opportunity at every stage of the design process to assess the friendliness of walking schemes from concept to post implementation. We suggest that for any design to be holistic it should be checked for friendliness to walking and other road users at each stage of its development.

“11.6.6 Gated communities – walking access. Is this appropriate?”

We oppose the segregation of walking links at all times and consequently we consider gated communities that restrict walking accessibility or connectivity to be contrary to the New Zealand’s Land Transport Strategy.

Section 12 Community involvement

12.2 Community involvement is essential to providing accepted solutions and can not be underestimated. We are very encouraging of the techniques that The Guide proposes and we consider the benefits of consultation should be expanded to reinforce the benefits of ‘getting it right first time’.

The design of the pedestrian network

General

“Should specific additional advice be given on design for pedestrians in off-road environments shared with cars such as car parks.”

The design of walking facilities in car parks does have a number of similarities to designing in a street environment although the specific differences are significant and may extend to such elements as stairwells and trolley collection facilities. The issue of designing for these environments probably necessitates its own guidelines because of the different target audience.

“Is there sufficient detail in the design advice? How far should this go?”

We consider The Guide does not provide enough detail so to identify the balance point between walking and other road users. We also consider that these sections, because they are design rather than planning focused, should be a separate document to reflect their different target audiences.

Section 13 Footpaths

“Can we suggest successful ways to prevent cars from obstructing footpaths?”

We know that footpath parking by vehicles is difficult to design against unless ample parking opportunity and carriageway width is provided. Design solutions extend to physical obstructions such as bollards, very high kerbs or fences. Enforcement is often the only solution along with highlighted road marking and notices.

“13.2 The recommended footpath widths are slightly different from some NZ standards. Are widths ok?”

The concept of through route width is correct although the table seems to suggest that local roads have less demand for footpath width when compared to a motorway whereas the converse may be true. Additionally to encourage walking the most appropriate and best quality facilities should be provided that means a minimum 1.8m through route in all environments. It is also worthwhile providing practitioners with examples of how to achieve the techniques described in paragraph 13.2.4 such as how to reallocate roadspace.

“13.6 Is the list of footpath surface types appropriate for New Zealand? What is missing?”

Granite stone pavers have proved unreliable in some wet situations and hand hewn surfaces are often inappropriate because of their irregular profile. The Guide does not mention anti-walking measures such as heavily tactile materials or laying techniques to discourage walking activity in some areas. We suggest this is at least mentioned and some examples included for how to implement these measures.

13.7.1 The Guide does not discuss the appropriateness of the grating that surrounds the tree in the adjacent photograph as being good or bad practice. We consider the grating to be bad practice as it can be a trip hazard for users with stilettos, the young or mobility impaired. We prefer that any tree grating has much smaller perforations than that shown.

“13.8 Is the advice on tree planting adequate with respect to the balance between safety and aesthetics?”

We consider that safety is often over emphasised to the detriment of aesthetics and the over riding principles The Guide is trying to achieve. We consider The Guide currently notes safety and hazards appropriately without clouding the overall purpose of landscaping.

“13.9 Street furniture: is the advice on activities such as Café tables and chairs on footpath adequate? Is there a preferred location for them? Should some colour and visual contrast suggestions be made for street furniture such as barriers?”

Wherever possible street furniture should provide a dual function such as a telegraph pole also functioning as the pole for a traffic signal head. Street furniture needs to be in keeping with the aesthetics of an area and ‘more is less’ technique. A proliferation of street furniture does not aid an environment and pedestrian fences should be avoided other than at the most heavily pedestrian congested environments.

13.9.3 Bullet point two needs to be clarified that the element should be for the entire longitudinal length of the item needing identifying and this may extend to temporary installations such as scaffolding.

“13.10 Are ramp dimensions appropriate?”

We consider the ramp dimensions are appropriate although they should also probably be supplemented with an ‘over distance’ criterion too.

“13.11 Driveway visibility splays. When should these be required?”

Visibility splays should be provided when the generation from the driveway reaches a certain threshold. Other subjective items such as the vertical visibility splay should also be considered.

Section 14 Crossings general

“14.4 The approach sight distance assumes emergency braking. Should a factor of safety be added to allow for the fragility of pedestrians?”

We consider that a ‘fragility of road user’ factor should be included to acknowledge the consequences of a driver impacting with a pedestrian and this factor should probably reduce in slower speed environments. We also suggest that the equation for calculating Stopping Sight Distance is included along with the ability to include for longitudinal gradient.

14.7 We are concerned that although The Guide recommends the use of a different surface to the adjacent carriageway the figures provided with paragraph 14.7.1 are not explicit for this requirement. We are also concerned that although refuges are for the protection of walkers they are often surrounded with mountable kerbs that by definition defeat the ‘refuge’ purpose. We suggest all refuges are constructed with vertical kerb. Additionally we are also concerned that the minimum depth dimension stated on the figure above section 14.8 is only 1.4m whereas the UK minimum is 1.8m. 1.4m may not provide enough depth for a pedestrian and a pushchair with suitable clearance from each kerb face.

“14.7.7 Resting rails. When should these be provided?”

The objective of a resting rail is to provide support for who ever needs it before undertaking the balance of the crossing manoeuvre. They can be supplemented with the addition of another horizontal element approximately 550mm from the base. The Guide could include a sample design.

“14.9 Kerb extensions. Are there specific good practice NZ designs?”

The use of terminology should be consistent. The table uses the term ‘extension length’ although the figure uses ‘extension depth’.

“14.10 Pedestrian platforms”

Generally this section is well written although no mention is made that pedestrian platforms do not give priority to walking. In practice there are a number of inappropriately designed platforms that probably infer a walking priority and these should be discouraged. Note should also be made that vertical profiles on emergency vehicle safe routes will not be appropriate and discouraged on bus or coach routes.

“Are pedestrian platforms appropriate near schools?”

Pedestrian platforms are almost always appropriate for most access roads although clear priority indications should be given to all walkers that they do not have priority ahead of vehicles. This is especially important near schools where there will probably be a higher number of younger walkers using this facility.

“14.10.9 What signs and markings should be used for platforms with zebra crossings?”

We consider that as a minimum the complete zebra crossing should be on the raised platform which will necessitate a platform length of about 5m and at a ramp grade of 1:20 for 75mm the ramp base will be a maximum of 8m length. Consequently 3.5m from the base of the ramp there should be a vehicle hold line. This is as per the TRAFINZ Guide Figure 30. We do not encourage the use of humps as flat top platforms as shown in the TRAFINZ Guide Figure 26 or the use of speed bumps as walking facilities as shown in the TRAFINZ Guide Figure 28.

“14.12.5 The diagrams for zebra crossings are from MOTSAM. What improvements should be made to these? Are there better practice standard drawings available already?”

We encourage the use of vehicle hold lines with the installation of all zebra crossings.

“14.13 Mid-block signals. Should there be more in the different types of signals, Puffins, Toucan etc.”

We encourage the use of improved technology especially the elements at a Toucan crossing although we do not support the introduction of Pelican, Puffin or Toucan crossings. As described in section 6.14 the benefit of mid-block signals as opposed to signalised intersections is the segregated nature of the mid-block crossing phase. Pelicans, Puffins and Toucans compromise this phase for vehicle efficiency and consequently they then suffer the same problems as signalised intersections where the walk crossing manoeuvre becomes intimidating. It is far more beneficial that the technology options included with a Toucan are transferred to all signalised crossing installations so the maximum walking and vehicle benefit can be obtained.

14.14 We consider that The Guide should be explicit when recommending an exclusive walk phase i.e. a crossing length of certain size or where vehicle numbers are excessive even when walking numbers may be low. It is also worth emphasising that even though a pedestrian phase has been included in a signal design it is an on call facility and may only be called once every number of cycles. This is critically important as often signal designers under design for pedestrians because they are cautious of removing vehicle capacity and as a consequence ‘squeeze’ the walking phase from the settling ignoring that the phase may only be called once or twice in a design hour.

We are keen that this section identifies the elements of signal design that discourage walking and each of these elements, such as the inappropriate placement of call button poles for the less able, aligned with a suggested improvement.

14.15 The use of art and active lighting that responds to movement should be encouraged. Active lighting is supplementary to the minimum lighting levels required for personal security.

Section 15 Measures to guide pedestrians

“Are there NZ best practice examples of pedestrian signs?”

We are aware of the recent project undertaken in Lyttelton by the Banks Peninsula District Council.

“When should specific pedestrian signs be installed?”

When a route is clearly not appropriate for all motilities, this will enable the walker to reassess their route choice at an intersection rather than at the obstruction which would require backtracking.

“15.9 Are any “warrants” already in use for installing pedestrian barriers?”

We are unaware of any warrants being used for the installation of pedestrian barriers and we are concerned that the installation of pedestrian barriers is finding favour in New Zealand. We are further concerned that The Guide’s considerations for where barriers should be installed is too open to poor judgement and in the absence of any other information practitioners will ere on the side of caution. This practice has had dire consequences in some overseas countries where the street environment is now proliferated with barrier street furniture.

Section 16 Lighting the pedestrian network

The use of active lighting should be encouraged.

Section 17 Maintaining the pedestrian network

“17.2 Are the maintenance values for changes in vertical level appropriate? Are there examples of checklists and standards used for assessing maintenance needs for asset management of footpaths?”

The British standard for the installation of natural paving has a number of requirements dependant if the installation is new or reinstatement. The vertical requirements are obviously dependant on the material being considered although the vertical difference over a specific length of footpath is also important. We are aware of two inspection systems that are both from the UK, MARCH (1983) and the Department of Transport CHART (1996) protocols.

17.7 We are aware of the code of practice for temporary traffic management and although we consider this document is more highly used by roading contractors we still consider roading contractors and supervisors do not apply it consistently. We consider that building contractors that work adjacent the road or over the footpath refer to it infrequently. The Guide should emphasise that a visually impaired user may only use a limited number of walking routes and variation of their known route is a major impediment to travel.

Section 18 Monitoring

“18.6 Table of indicators. Are there any indicators of walking already being used? Are there any other indicators that should be added?”

We are unaware of any other indicators being used in New Zealand although we only consider the use of indicators to be used once without targets also being set to measure the success of implementing the associated walking strategy and community walking plans. Chapter 18 does not mention targets and this is a deficiency.

Section 19 Making best use of facilities

The use of ‘first line consultation partners’ has not been considered. Advocacy groups, schools, the elderly and mobility impaired groups have a wealth of knowledge about their local area and community. These ‘partners’ can provide useful information to encourage the use of walking facilities.

Appendix 1 Characteristics of pedestrians.

“Is this appendix useful?”

We consider this Appendix very useful although again, the required level of detail is missing. For example in chapter 13 the minimum footpath crossfalls are stated although the detail for the specific user is not. It would be useful that where minimum and maximum details are known for each user i.e. speeds, sizes etc this information is included in this appendix.

Appendix 2 Walking safety and audit issues

It is probably appropriate that the TNZ Safety Audit Guidelines are amended to include for these specific walking issues as a guide to auditors.

Appendix 3: Guidelines for selecting pedestrian crossing facilities

We consider that this appendix is very technical and will be awkward for practitioners to use and understand. To aid its understanding we consider that it should be excluded from the design document and referenced as a technical document with accompanying practical examples. We consider the Appendix is difficult to understand at the moment because it does not provide worked examples.

“The process involves significant calculations and decision tree logic. Would users prefer the calculation and logic processes to be included in a web-based adviser tool that advises on the appropriate facility selection. If so how much of the process should be included within the adviser?”

We consider that a calculation tool should be provided to aid the understanding of this appendix. This could be either web or PC based although it should focus on hiding the majority of the calculations, other than being able to print a full worked problem, and should focus on helping the designer to work through design options.

“Reason for Providing Pedestrian Facilities: LOS, Safety, Specific Provision and Integration: Do these headings capture all the primary reasons for providing crossing facilities?”

Yes although again, the variables for each heading are used interchangeably so ideally suit an automated calculation process. This would reduce the user having to understand four separate calculation methods.

“Facilities suitable for differing traffic environments: are tables 1 and 2 appropriate?”

The use of these tables is highly encouraged, they clearly identify facility types that are either appropriate or inappropriate for certain road environments. It may also be worthwhile including the access (row) and movement (columns) with some description to the typical road hierarchy classifications.

“Section 1: LOS: General comments”

“Is the method for calculating pedestrian delay appropriate?”

“Table 5 - acceptable levels of service: are these values appropriate?”

“Section 2 safety: General comments”

“Quantifying the pedestrian safety problem: is the method appropriate?”

“Expected crash reductions: are the values appropriate?”

“Is the combined procedure for priority facilities appropriate?”

“Section 3 Specific access”

“Section 4 Integration”

“Development of the methodology”

The above questions are not answered in detail because of the complexity of the subsequent calculations. We would prefer that at least one calculation example is provided for each of the calculation sections. It would be preferable that the example is from a real crossing.

Appendix 4 Sign face design details

We would prefer that a recommended ‘X’ height is stated as well as the minimum given.

Appendix 5 References. Were any important references missed?

The references are very thorough and reflective of the significant effort that has gone into producing The Guide.

Specific Comments

The use of good quality photographs in the final document should not be underestimated to providing a document that is user friendly. We suggest the use of local examples wherever possible supplemented with a 'tick' or 'cross' if the photograph represents good or bad practice and a caption included.

It is unknown if the technique of not referencing figures, tables or photographs in the draft document will flow through into the final document. We would prefer that all information is referenced for ease of information retrieval.

The Guide includes a number of different chapters and concepts that often turn up in different sections e.g. 'security' under Chapters 2, 3, 4, 6 etc. We consider The Guide would benefit from the inclusion of an index.

We are concerned that the term 'pedestrian' is used throughout The Guide although the word 'pedestrian' could be amended to 'walking'. Walking is more inclusive to a greater number of users in the community. If the words 'pedestrian' and 'walking' were intended to be used interchangeably then they should have one definition rather than two or simplified definitions for each.

Overall we consider the term 'walking' is a more market friendly word than 'pedestrian' which congers thoughts of slow, old and vulnerable rather than 'walking' which is new, active and enjoyable. These comments extend to the actual name of The Guide that could be changed to maybe "Planning for Walking" and "Facilities that aid Walking". Wherever possible we promote the use of the word 'walking' in preference to 'pedestrian'.

Conclusion

The Draft Pedestrian Network Planning and Facilities Design Guide is an important step in improving the quality of walking environment in our towns and cities. We support the New Zealand Transport Strategy and we consider walking is fundamental to achieving each of the strategy's core policy objectives. IPENZ TG looks forward to a continued involvement in developing the Pedestrian Network Planning and Facilities Design Guide.

Submission of IPENZ Transportation Group made by

Associate Professor Alan Nicholson
Chairman
(alan.nicholson@canterbury.ac.nz)

Don McKenzie
Group Administrator
(don.mckenzie@tdg.co.nz)

Postal Address:

IPENZ Transportation Group
Don McKenzie (Group Administrator)
c/- Traffic Design Group
PO Box 13-835
CHRISTCHURCH