Analysis of footpath regulation and guidelines

and gap analysis for the

Shared Footpaths Working Group

Road Controlling Authorities Forum (NZ) Inc.

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Disclaimer

This paper is designed to be a discussion paper and reflects some of the issues for consideration which the advocacy groups deem important to any policy decision regarding the use of footpaths and shared footpaths. It is expected that as the RCA Forum Shared Footpaths Working Group progresses through this work, the discussion will evolve and new issues will need to be addressed. To this end, the advocacy groups reserve their right to amend their position on any particular issue.

Executive Summary

This discussion paper analyses the policy regimes in New Zealand, Australia, United Kingdom, Canada, Singapore and USA and assesses the regulation, enforcement, education and monitoring regimes regarding footpaths.

Most of the regulatory regimes in other countries do regulation well but little else, with enforcement being largely reactionary. Many of the countries reviewed have regulation which focuses on **what** is being used (bicycles, personal mobility aids or devices and other powered devices) rather than **how** they are being used (including regulating speeds or user priority). Monitoring and evaluation of footpath regulations, as a whole, do not assess the impacts of regulation (or its absence) on the full range of pedestrians using the infrastructure.

While safety is of paramount importance, social inclusion is also an important footpath function, as they enable everyone (including vulnerable users) to participate without facing barriers or discrimination. As our population ages, it is vital that agencies responsible for transport infrastructure, policy, planning and funding recognise the role they have in providing an accessible environment that all people can use.

A potential unintended consequence is that if footpaths are available to cycles and other personal transport devices, albeit with conditions, then cyclists and other personal transport device users may believe they have an inferred right to use those routes over and above the rights of pedestrians, and not make allowance for them. Furthermore, motorists may also infer that cyclists and other personal transport device users should not be permitted on the roadway. Careful consideration of these issues is required in the development of any regulatory changes relating to footpath use in New Zealand.

To achieve inclusive, accessible footpaths, the benefit cost analyses used must not only consider the reduction in accidents that will enhance safety, but also recognise that pedestrian infrastructure is also an enabler for many people, including those who have an impairment and who are vulnerable, to participate in society. Research is necessary to quantify these benefits and planning guidelines issued by New Zealand Transport Agency (NZTA) should reflect the results of the research.

Significant gaps have been identified in the literature reviewed, and highlight the need for a sound policy approach for New Zealand footpaths, in order to ensure that the entire transport system functions for the benefit of all users. To this end, this paper proposes a number of inclusive principles which must be considered when determining the policy response (including the policy 'tools' of regulation, education, incentives, monitoring and enforcement):

- 1. That accessibility for all and safety for all must be central to the decision-making process.
- 2. Any regulatory regime needs to protect the transport choice for those who have the least amount of transport choices/options. Infrastructure must be

designed for all users, including potential users who currently may fear using it due to perceived or real safety concerns;

- 3. That any policy response/regulatory regime must provide an analysis of how the proposed rules meet the **United Nations Convention on the Rights of People with Disabilities**;
- 4. That an evidence base regarding the use of footpaths needs to be progressed in order to develop the level of sophistication which the car-related component of our transport system currently has. Co-development between government agencies with a transport mandate and advocates is the best approach;
- 5. That practical and achievable **enforcement** is required, as is a robust **monitoring programme** in order to understand the impact of any new rules (and therefore any amendments should the regime not be working);
- 6. That there needs to be a hierarchy of footpaths (whereby the footpath on the quiet suburban street with low traffic volumes is still very much the realm of the pedestrian) which is based on the assumption that the footpath is primarily infrastructure which is designed for pedestrians;
- 7. That **co-design** whereby NZTA, local government and advocates determine the policy response is best practice and should be adopted as the preferred method for this work.

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1 Introduction

The Road Controlling Authorities Forum Shared Footpaths Working Group (the Working Group) is tasked with considering regulatory regimes, policy and planning guidance relating to footpaths and shared paths. At the Working Group meeting on 18 August 2016, the advocacy groups (CCS Disability Action, Living Streets Aotearoa, VICTA (Vision Impaired Charitable Trust Aotearoa), Alzheimers New Zealand and the Blind Foundation) agreed to review publicly available information on footpaths in selected countries to identify current gaps in guidelines and policy regimes.

This discussion paper covers these organisations' views on the use of footpaths for presentation to the Working Group. We begin by analysing regulatory regimes relating to footpath use in New Zealand, Australia, United Kingdom, Canada, Singapore and USA. The monitoring, education and enforcement of footpath use within these countries is also discussed.

A gap analysis provides a commentary on some of the key issues which must be addressed when considering any change to footpath use in New Zealand. This section concludes with a set of inclusive principles which the advocacy groups deem vital to any policy decision regarding footpaths in New Zealand.

2 Definitions

It is important to recognise that although many terms are defined in various regulations and guidelines, understanding of these terms may not be particularly clear. With the proliferation of electrically powered personal transport devices, even the definitions of pedestrian and bicycle is not always clear.

The following definitions have been used in this discussion paper, except when referring to alternative definitions from referenced documents.

In New Zealand, the Land Transport Act 1998 (LTA)¹ appears to rely on historic common law interpretations. Simple terms such as 'pedestrian' have been made complex. In the case of 'pedestrian' there is no definition in the LTA, but the following definition is used in New Zealand Transport Agency (NZTA) guidelines:

Any person on foot or who is using a powered wheelchair or mobility scooter or a wheeled means of conveyance propelled by human power, other than a cycle.²

NZTA also define 'mobility devices' under their low powered vehicles guidelines for mobility scooters as follows:

Under traffic law, **mobility devices** are vehicles:

¹ Land Transport Act 1998. Source: www.legislation.govt.nz

² <u>https://www.nzta.govt.nz/assets/resources/pedestrian-planning-guide/docs/pedestrian-planning-guide.pdf</u> page 5

- designed and constructed for people needing help with mobility because of physical or neurological impairment
- powered solely by a motor of up to 1500 watts.

Under existing law, Segways are not mobility devices.³

There have already been concerns raised over conflict on footpaths between able bodied people walking and people using such devices.

2.1 Pedestrian

For the purposes of this paper, we have assumed a narrow definition of pedestrian that refers only to ambulant people walking on paths. This narrower definition does not require a distinction to be made between personal transport devices designed for those with disabilities, sometimes classified as pedestrians, and for able bodied people.

2.2 Personal Transport Device

For the purposes of this paper this is a generic term used for relatively low speed (less than 8 km/hr) transportation devices primarily designed for use by a single person, whether solely human powered or motorised. This would include those designed for fully ambulant persons, disabled persons and the elderly.

2.3 Footpath

A footpath is defined in the New Zealand Pedestrian Planning Design Guide⁴ as "the part of road or other public place built and laid out for pedestrian use". For the purposes of this paper, the design intention of footpaths is considered the determining factor, which is that a footpath is primarily designed for ambulant persons walking along it. In some jurisdictions footpaths may be called footways, sidewalks, pavements or walkways. Walking speeds of up to around 6km/hr would be the normal expectation for footpaths.

2.4 Shared Path

This term is used widely, but for the purposes of this paper shared paths are deemed to be paths that are **primarily** designed to not only provide safe passage for ambulant pedestrians who are walking, but also for various other categories of individuals who may be using personal transport devices. This concept appears to have assumed the other categories will be conventional bicycles.

Shared paths can be either off road or at the road side. On shared paths it would be normal to have a group of users moving at up to 6km/hr with other faster users sharing the path. Within this, there is an expectation that there would be provision for safely passing slower users. In some jurisdictions these are referred to as multi-use paths.

³ https://www.nzta.govt.nz/vehicles/vehicle-types/low-powered-vehicles/mobility-scooters/

⁴ https://www.nzta.govt.nz/resources/pedestrian-planning-guide/

2.5 Segregated or Dedicated Path

Various terms are used for paths designed for specific types of user. Many dedicated paths have been designed specifically for bicycles. For the purposes of this paper they are considered **primarily** designed for classes of road user other than ambulant people who are walking, and allow movement at speeds well in excess of walking pace.

3 Analysis of the Regulatory Regimes

Regulations relating to footpaths in jurisdictions in Australia, the United Kingdom (UK), United States of America (USA) and Canada were found to operate in a similar way to those in New Zealand. They generally prohibit certain categories of personal transport device from being used on footpaths, but are supported by a proliferation of local requirements and bylaws.

This section discusses some of the key aspects of regulatory regimes in these different jurisdictions, including legislation relating to footpath use which was recently adopted in Singapore.

3.1 New Zealand

The regulations in New Zealand aim to control movement on the various classes of path by considering the types of user or the types of personal transport device that can use them. Hence, the definition of a pedestrian has been expanded to include users of electric wheelchairs and scooters which can frequently travel at speeds far in excess of walking pace.

As a proxy for speed control, limits are placed on the power output or capacity of engines for personal transport devices that can be used on various types of path and the roadway. There is also a dispensation for users of wheeled recreational devices on footpaths, provided the wheel diameter is less than 355mm⁵. In effect, this provides dispensation for young children to ride bicycles on footpaths.

In simple terms, the regulations primarily attempt to regulate **what** types of device can be used on different types of path, rather than **how** they should be used, although there is a requirement for safe use of wheeled recreation devices and mobility devices⁶. In the case of a footpath, this means that once a type of personal transport device has been approved for use on it, some users will see it as their right to do so, irrespective of whether the design of a particular path is suitable.

For example, some mobility devices that are 700mm or more in width are legally permitted to use footpaths although there are many kilometres of footpath that are less than 1000mm wide making passing difficult or impossible without backing up or using an adjacent grass berm if available. In effect the regulations become

⁵ Section 11.1, Land Transport (Road User) Rules 2004. Source: www.legislation.govt.nz

⁶ Section 11.1(4) and (5), Land Transport (Road User) Rules 2004. Source: www.legislation.govt.nz

superfluous and users must negotiate how best to handle the situation, hopefully in a courteous and safe way.

Whilst design criteria give guidance on footpath and shared path widths based on usage patterns, there is little data available on usage, except for high pedestrian traffic commercial areas where the use of simple counters are often used. Given the lack of evidence on usage, monitoring and data collection must be a key aspect of, and precede, any regulatory changes to footpath use in New Zealand.

3.2 Australia

Whilst having some excellent design guidelines and codes of practice put out by Austroads and the different states, the regulatory emphasis is placed more on **what** types of device can be used on different types of path rather than **how** they should be used. Western Australia has allowed all bicycles to be ridden on footpaths since April 2016, with their use regulated on both footpaths and shared paths.⁷ In New South Wales, children aged under 12 years and those supervising them may ride on all footpaths, and all cyclists may ride on specifically signposted footpaths.⁸

There are however 'de facto' regulations by way of their definition of a pedestrian being extended to include some personal transport devices. For example, the Australian Road Rules⁹ state that a person using a mobility scooter is classed as a pedestrian if the maximum speed on level ground cannot exceed 10 km/h. As such the rider must:

- observe the same road rules that apply to pedestrians
- not obstruct the path of any driver or other road user
- not travel along a road if there is a footpath or nature strip adjacent to the road, unless it is impracticable to travel on the footpath or nature strip
- if travelling along a road:
 - keep as far to the side of the road as possible
 - travel facing the approaching traffic unless it is not practicable to do so
 - o can use shared paths, off-road bike paths and shopping malls
 - o does not need to have a driver's licence.

There is also a requirement that to be classed as a mobility scooter it must have an unladen weight of less than 110kg and must carry one person only. They do not need to be registered and the rider does not need to wear a helmet or a seatbelt when travelling on a mobility scooter. Persons using other personal transport devices such as skateboards are also deemed to be pedestrians with respect to the road rules.

^{7 &}lt;u>http://www.transport.wa.gov.au/mediaFiles/active-transport/AT_P_CyclingRulesWABooklet.pdf</u>

⁸ http://roadsafety.transport.nsw.gov.au/stayingsafe/bicyclists/cyclingrules.html

⁹ http://www.dpti.sa.gov.au/__data/assets/pdf_file/0003/58530/Motorised_mobility_scooters_web_June2013.pdf

3.3 United Kingdom

Although written in different terms, the UK regulations operate in a similar way to New Zealand's. However, they have found it necessary to respond to an increase in the use of electric wheelchairs and mobility scooters (which are classed as invalid carriages) by placing maximum speed capabilities on these devices. These are known as Class 2 and 3 invalid carriages, with Class 2 being powered wheelchairs and mobility scooters with a maximum speed of 4mph (6.44 km/hr) and Class 3 being with a maximum speed of 8mph (12.9 km/hr).

Class 2 invalid carriages are intended to be used predominantly on footpaths and Class 3 invalid carriages are intended for use on footpath and on roads. They can travel at 8mph on roads but must be fitted with a switch that reduces their top speed to 4mph for use on footpaths. Class 3 invalid carriages are also subject to registration, albeit at zero fees, so that they can be issued with registration plates for identification.

3.4 Canada

There does not appear to be national legislation on the use of footpaths in Canada, but most municipalities have their own regulations. As with the UK and New Zealand, these operate on the principle of prohibiting classes of vehicle from footpaths.

As an example the city of Kelowna, in British Columbia, has *Traffic and Cycle Regulations* that state in Part 9, Cycle Regulations:

No person shall use in-line skates, roller skates, cycles, skateboards, sleighs, skates, skis or other similar means of conveyance on a highway or sidewalk except as otherwise permitted in this Bylaw. Section 9.1.2 Cyclist duties stated that cyclists may not ride on sidewalks unless otherwise directed by a traffic control device, is under the age of 12 years and is operating a non-chain driven 3 or 4 wheeled cycle which is designed for recreational use. Skaters have the same rights as cyclists and can use bicycle lanes.¹⁰

In most jurisdictions power-assisted bicycles are controlled in a similar way to conventional bicycles but they must comply with the requirements of their national Motor Safety Regulations¹¹.

3.5 Singapore

Singapore has recently adopted new regulations governing the use of footpaths. As a result of concerns over conflict between footpath users, Singapore established an Active Mobility Advisory Panel (the Panel) to consider how best to regulate use of footpaths and shared paths.

http://apps.kelowna.ca/CityPage/Docs/PDFs/Bylaws/Traffic%20Bylaw%20No.%208120/Part%2009%20-%20Cycle%20Regulations.pdf

http://apps.kelowna.ca/CityPage/Docs/PDFs/Bylaws/Traffic%20Bylaw%20No.%208120/Part%2009%20-%20Cycle%20Regulations.pdf
http://apps.kelowna.ca/CityPage/Docs/PDFs/Bylaws/Traffic%20Bylaw%20No.%208120/Part%2009%20-%20Cycle%20Regulations.pdf

http://lois-laws.justice.gc.ca/eng/regulations/C.R.C.%2C_c._1038/FullText.html

The Panel's extensive consultation processes resulted in public feedback that it was more important to ensure that cyclists and users of personal transport devices behave in a safe and considerate manner, than to regulate where certain classes (bicycles and personal mobility devices) can or cannot be used. In other words, it was more important to determine how a device was used rather than what the device was.

As a result, the Active Mobility Act was passed into law in February 2017¹². The new regulations place all personal transport devices that can be 'driven' on footpaths and shared paths into four categories¹³: personal mobility aids; personal mobility devices; conventional bicycles and electric bicycles.

The regulations will be supported by: penalties including imprisonment and fines for non-compliance, education designed to foster a culture of safety and 'community' policing' of the regulations by volunteers. In undertaking research on Singapore's Active Mobility Act, no monitoring programme to evaluate the impact of the legislation could be found. Additionally, it should be noted that Singapore has a strong compliance culture and that this culture is likely to be a significant factor in ensuring the success of the legislation.

3.6 USA

In the USA, local authorities (in the form of municipalities or counties) can allow cycling on footpaths, but many do not. There is a wide variety of local regulation. Some local authorities provide guidance on riding on footpaths. For example East Bay, California¹⁴ has the following;

If you do not feel comfortable riding your bicycle in the street on a specific stretch of roadway, try dismounting and walking your bike on the sidewalk until you reach a location where you can ride in the street again. However, if you do bike on the sidewalk for any reason, consider the following:

- Ride in the direction of traffic, not against it (cross the street to the opposite sidewalk if necessary)
- Keep your speed below 10 mph, as close to a walking pace as possible
- Yield to any pedestrians on the sidewalk, and when passing call out and use extreme caution
- Keep your distance from doorways or side paths, and always look for and yield to cars pulling out of driveways and side streets.

Whether the variations are as a result of differences in local infrastructure would be merely conjecture, but it would seem that consistency is something which has been

Source: http://statutes.agc.gov.sg Recommendations on Rules and Code of Conduct for Cycling and the Use of Personal Mobility Devices (in 13 Singapore) https://www.lta.gov.sg/data/apps/news/press/2016/20160317_AMAPPanelReport(final).pdf

https://bikeeastbay.org/SidewalkCycling

lost. In the USA literature surveyed, what little monitoring of the situation and enforcement there is focuses on controlling anti-social behaviour and reckless use of personal transport devices.

4 Gap analysis and discussion

4.1 Education

There is currently a lack of information in road safety education material on how to ensure the safety of vulnerable transport users. Although NZTA have devoted significant resources to educating young people through its Education Portal¹⁵, the prime function of this portal is to ensure young children are educated to keep themselves safe as they grow up and begin to move around independently.

However, obligations to other transport system users, particularly the elderly, disabled and vulnerable appear to be poorly covered at this level. Additionally, New Zealand Road Safety Policy for Schools¹⁶ makes no reference to people who have an impairment, who other pedestrians and path users must be aware of and respect when using pedestrian infrastructure.

As children grow older, most will be exposed to further training as they aspire to gaining their vehicle driver's license, but again there is little emphasis on the interaction between drivers and pedestrians or users of personal mobility devices or on disability awareness generally.

4.2 Monitoring use and enforcement

The monitoring and enforcement of users of footpaths is primarily reactive and in response to complaints and accident investigations. Unless a technically illegal action causes harm, or is likely to cause harm, offenders are not apprehended and are even less often prosecuted. There are occasional cases reported of conflict between pedestrians and others in the New Zealand media, but there is no objective monitoring of such conflict, thus making it difficult to know the scope and scale of non-compliance.

4.3 Monitoring of pedestrian injury

Of the literature surveyed, most jurisdictions have significant data relating to fatal crashes involving motor vehicles which are reported by country through the World Health Organization¹⁷. However, most crashes currently recorded on footpaths that do not involve motor vehicles are relatively minor, with very few fatalities.

¹⁵ <u>https://education.nzta.govt.nz/resources/policy-and-practices/road-safety-education-policy</u> <u>https://education.nzta.govt.nz/resources/policy-and-practices/road-safety-education-policy</u>

Interp://education.nzta.govt.nz/__data/assets/word_doc/0004/60853/NZ-Road-Safety-Education-Policy-example

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 https://education.nzta.govt.nz/__data/assets/word_doc/0004/60853/NZ-Road-Safety-Education-Policy-example

^{17 &}lt;u>http://www.who.int/gho/road_safety/mortality/en/</u>

Although some data is available on injuries sustained on footpaths and other paths, extensive internet searches have not revealed any international data relating to how the numbers of such crashes relate to footpath user numbers, particularly for basic footpaths along suburban streets.

Research considering bicycle accidents in Japan¹⁸ was found but was produced in 2009. Since then, the number and types of personal transport devices have increased significantly and no information appears to be available on how many accidents involve their use. However, due to the huge advances in battery technology¹⁹, a significant increase in such devices can be expected and that the value of any historical evidence, if it were available, would be very limited.

In New Zealand, ACC has extensive records of all accidents that involved claims through the ACC Scheme and allows public access to consolidated annual data. A targeted search using their statistics tool²⁰ gave the following results for two scenarios for the 2015/16 financial year.

The causes selected were: Collision/Knocked Over by Object, Driving Related, Falls, Folding/Collapse, Loss of Hold, Other or Unclear Cause, Pushed or Pulled, Recoil/Ejection, Skid, Struck by Person/Animal, Twisting Movement, Unknown Scenes selected were Road or Street.

From these two scenarios it is clear that although the highest number of claims do not involve motor vehicles some 80% of costs associated with accidents for the causes selected do involve motor vehicles.

	Account Types	Number of New Claims	Number of Active Claims	Total Cost
Search 1: ²¹	All except Motor	64,284	82,538	\$103,226,236

¹⁸ <u>http://www.itf-oecd.org/sites/default/files/docs/p08_yoshida.pdf</u>

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¹⁹ <u>https://www.brookings.edu/blog/techtank/2015/09/15/five-emerging-battery-technologies-for-electric-vehicles/</u> <u>https://www.brookings.edu/blog/techtank/2015/09/15/five-emerging-battery-technologies-for-electric-vehicles/</u>

²⁰ <u>http://www.acc.co.nz/about-acc/statistics/injury-statistics-tool/#</u> <u>http://www.acc.co.nz/about-acc/statistics/injury-statistics-tool/#</u>

http://www.acc.co.nz/about-acc/statistics/injury-statistics-

tool/?claimtype=all&account4=4&account5=5&account99=99&age_group=all&gender=all&injury_site=all&cause68896026=688

 96026&cause68896016=68896016&cause68896011=68896011&cause68896028=68896028

 96026&cause68896016=68896003=68896003&cause68896027=68896028

 96026&cause68896015=68896003=68896003&cause68896027=68896027&cause68896015=68896015&cause6889601

 0=68896010&cause68896041=68896041&cause68896999=68896999&diagnosis=all&sport=all&scene448032003=448032003

 & tregion=all
 http://www.acc.co.nz/about-acc/statistics/injury-statistics-tool/?claimtype=all&account4=4&account5=5&account99=99&age_group=all&gender=all&injury_site=all&cause68896026=688

 96026&cause68896016=68896016&cause68896011=68896011&cause68896028=68896028
 statistics=all&cause68896028=68896008

 96026&cause68896016=68896003=68896003&cause68896027=68896027&cause68896015=68896015&cause6889601
 statistics=all&cause68896015

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 statistics=all&cause68896015

 96026&cause68896041=68896041&cause68896099=68896097
 statistics=all&cause68896015

 96026&cause68896041=68896041&cause68896027
 statistics=all&cause68896015

 96026&cause68896041=68896041&cause68896099=68896999&diagnosis=all&sport=all&scene448032003=448032003

[&]amp;region=all

	Vehicles			
Search 2: 22	All	92,428	129,889	\$509,786,152

Data is not currently collected to determine whether the injuries not involving a motor vehicle occur on the roadway or the footpath, or, whether they involve a bicycle or other personal transport device. Hence, more detailed data gathering that includes the actual location along with subsequent research would be necessary to disaggregate the data relating to safety on footpaths, and this would also need to consider actual usage patterns over the huge variety of footpaths that exist. In order to demonstrate the need for additional resources to ensure footpaths can be used safely by all users, the current NZTA benefit cost analysis requires a level of evidence that currently does not exist.

Understanding how an inclusive transport system (with a particular focus on the pedestrian network) can create an economic benefit has been the focus of recent collaborative research between CCS Disability Action, the University of Waikato and TDG²³. This work quantifies the benefits and costs of creating an inclusive transport system, and discusses preliminary evidence generation using people with visible mobility aids (including wheelchairs, walking frames, service dogs and white canes) as a proxy indicator for the degree of accessibility of pedestrian infrastructure^{24,25}.

This is an emerging research area and is likely to continue to grow in sophistication as it addresses methodological gaps in evidence generation. One such challenge is that it is difficult to identify people who have an impairment, but do not use a mobility aid.

The UN Road Safety Collaboration²⁶ notes that 270,000 pedestrians are killed each year on the world's roads. However, the focus of the associated guidance

3=448032003®ion=all

²³ This work was funded by the Ministry of Social Development's Think Differently Fund.

 http://www.itf-oecd.org/economic-benefits-improved-accessibility-transport-systems-roundtable-0
 http://www.itf-oecd.org/economic-benefits-improved-accessibility-transport-systems-roundtable-0

²² <u>http://www.acc.co.nz/about-acc/statistics/injury-statistics-</u>

 $[\]label{eq:tool/?claimtype=all&account3=3&account4=4&account5=5&account9=99&age_group=all&gender=all&injury_site=all&cause6\\ 8896026=68896026&cause68896016=68896016&cause68896011=68896011&cause68896028=68896028&cause68896008=6\\ 8896008&cause68896098=68896998&cause68896003=68896003&cause68896027=68896027&cause68896015=68896015&c\\ ause68896010=68896010&cause68896041=68896041&cause68896999=68896999&diagnosis=all&sport=all&scene44803200\\ 3=448032003®ion=all & http://www.acc.co.nz/about-acc/statistics/injury-statistics-tool/?claimtype=all&account3=3&account4=4&account5=5&account99=99&age_group=all&gender=all&injury_site=all&cause6\\ 8896026=68896026&cause68896016=68896016&cause68896011=68896011&cause68896028=68896028&cause68896008=6\\ 8896026=68896026&cause68896016=68896016&cause68896011=68896011&cause68896028=68896028&cause68896008=6\\ 8896008&cause68896010=68896016=68896016&cause68896003=68896003&cause68896027=68896027&cause68896015=68896015&c\\ ause68896010=68896010&cause68896041=68896014&cause68896099=68896999&diagnosis=all&sport=all&scene44803200\\ ause68896010=68896010&cause68896041=68896014&cause68896099=68896999&diagnosis=all&sport=all&scene44803200\\ ause68896010=68896010&cause68896041=68896041&cause68896999=68896999&diagnosis=all&sport=all&scene44803200\\ ause68896010=68896010&cause68896041=68896044&cause68896999=68896999&diagnosis=all&sport=all&scene44803200\\ ause68896010=68896010&cause68896041=68896044&cause68896999=68896999&diagnosis=all&sport=all&scene44803200\\ ause68896010=68896010&cause68896041=68896044&cause68896999=68896999&diagnosis=all&sport=all&scene44803200\\ ause68896010=68896010&cause68896041=68896044&cause68896999=68896999&diagnosis=all&sport=all&scene44803200\\ ause68896010=68896010&cause68896041=68896044&cause68896999=68896999&diagnosis=all&sport=all&scene44803200\\ ause68896010=68896010&cause68896041=68896044&cause68896999=68896999&diagnosis=all&sport=all&scene44803200\\ ause68896010=68896010&cause68896041=68896044&cause68896999&diagnosis=all&sport=all&scene44803200\\ ause68896010=68896010&cause6$

²⁵ <u>http://conf.hardingconsultants.co.nz/workspace/uploads/burdett-bridget-measuring-a-53224498e36e2.pdf</u> <u>http://conf.hardingconsultants.co.nz/workspace/uploads/burdett-bridget-measuring-a-53224498e36e2.pdf</u>

²⁶ http://www.who.int/roadsafety/projects/manuals/pedestrian/en/

documents is the reduction of the injury toll, and not the enablement of all pedestrians (including those with disabilities) to use pedestrian facilities on an equitable basis. For example, the manual on Data Systems²⁷ states "the ultimate result of effective road safety management is the reduction of social costs (such as medical costs, property damage) associated with road traffic deaths and injuries". Hence, at the highest level, there is no recognition of the benefits of enabling vulnerable pedestrians to use roading infrastructure, including the footpaths, which in economic terms can be substantial²⁸.

4.4 Education and Enforcement

Of the literature surveyed, many road rules that apply to pedestrians are flouted in most jurisdictions and the consequences can be serious injury. However, the injuries are generally caused by motor vehicle/pedestrian conflict. Some research on this topic was undertaken in Canada²⁹, which examined the potential association between violations made by pedestrians and motorists at signalised intersections, and collisions between pedestrians and motor vehicles.

Both motorists and pedestrians were frequently observed committing road-rule violations at signalised intersections. The research suggested that the findings could be applied to targeted prevention campaigns designed to reduce the number of pedestrian injuries at signalised intersections. While the research focused on very high pedestrian traffic sites, it did not discuss footpath user (pedestrian and non-pedestrian) conflict.

Another educational factor is that of identifying the needs of particular user groups. There is a significant amount of information for the training/education of children as they grow up and become more independent, and also for specific groups of vulnerable people. However, this is targeted at the vulnerable people, who are trained to cope with their environment. The focus is not on educating others, including both transport professionals and other users, to become more accepting of vulnerable people's rights to reasonable safe access to our roading infrastructure.

Enforcement is also targeted towards the avoidance of injuries and fatalities. Rules and regulations affecting footpaths are generally not enforced, particularly when pedestrian traffic is low and footpaths are considered safer by cyclists and other users than the carriageways.

²⁷ http://apps.who.int/iris/bitstream/10665/44256/1/9789241598965_eng.pdf?ua=1

²⁸ (n.d.) Valuing access to work.

²⁹ PLOS (Public Library of Science) Conference Paper: Pedestrian Injury and Human Behaviour: Observing Road-Rule Violations at High-Incident Intersections by Jonathan Cinnamon et al Published: June 2011. Source: http://dx.doi.org/10.1371/journal.pone.0021063

4.5 Obligations under the UN Convention on the Rights of Disabled Persons Underpinning these proposed principles are the rights of disabled people, as enshrined in the UN Convention on the Rights of Persons with Disabilities (UNCRPD). This convention was signed by New Zealand in 2007 and ratified in 2008.³⁰ As such it should be recognised that this places significant obligations on government agencies to show how they are protecting the rights of disabled people. In the context of transport, this means that reasonable accommodation must be made for all disabled transport users.

Articles 8, 9, 19, 20 and 31 are of particular relevance to policy decisions relating to footpath use. Article 9 (Accessibility) of the United Nations Convention on the Rights of People with Disabilities (the Convention) states that:

(a) Buildings, **roads, transportation** and other indoor and outdoor facilities, including

Additionally, Article 20 (Personal Mobility) of the Convention includes obligations for State Parties to ensure personal mobility with the greatest possible independence. This includes measures to facilitate personal mobility, to access quality mobility aids, devices and assistive technologies.

4.6 Availability for All

To move forward in a meaningful way, it is essential to recognise all road users have a right to move around safely, and ensuring safety for one group should not be at the expense of another. For many footpath users – particularly vulnerable pedestrians – the assessment of risk is an important factor in the decision making process. This results in 'the trip not taken'. For example, at this stage, there is no comprehensive data on the potential benefits to society of making footpaths more usable by disabled people, as current cost-benefit analyses are based on the reduction in accident risk to existing users.

Developing an evidence base and undertaking research which quantifies the movements of all pedestrians will greatly assist in creating a pedestrian network which is available to all users. Such research will require careful consideration of research assumptions and data collection to ensure that all users, and potential users, are accounted for.

^{30 &}lt;u>http://www.un.org/disabilities/documents/convention/convoptprot-e.pdf</u> <u>http://www.un.org/disabilities/documents/convention/convoptprot-e.pdf</u>

4.7 Inferred Rights

Any regulation that allows certain types of vehicle on a footpath or shared path will be seen by some as giving them the right to use that vehicle along any footpath or shared path. As the variety, usage and condition of footpaths and shared paths are variable, the suitability for any particular footpath or shared path by particular vehicle types will vary. It is therefore necessary to reinforce the obligations of faster users and of all users to other users. When an incident involves a pedestrian and a vehicle, it should always be considered the fault of the vehicle user, or that user's supervisor if a minor.

There is also a danger that if bicycles and other mobility devices can be used on footpaths, albeit with conditions, then the cyclists and other personal transport device users may believe they have an inferred right to use those routes over and above the rights of pedestrians, and not make allowance for them. One such example is cyclists not being prepared to dismount when there is significant pedestrian traffic. Furthermore, motorists may also infer that cyclists and other personal transport device users should not be on the roadway.

4.8 Respect for Sensory Impaired

A major reason why many people who have an impairment avoid using footpaths, is the fear that other people may not recognise their situation and act inappropriately towards them. Unfortunately being identified with a disability, especially for many elderly people, is seen as a stigma and hence not being aware of persons approaching (from behind or in front) can be misinterpreted as them just being difficult.

Furthermore, if the situation arises on a footpath when a bicycle approaches, the technical illegality may be perceived by some pedestrians as a reason to demand the riders use the roadway, regardless of any safety concerns the rider may have. In some circumstances walking pace may be the only safe maximum speed for any user.

Those who are blind, or have low vision, may not be aware of the designation of a footpath as a shared path, the allocation of path space or be able to maintain a straight line of travel on wider pathways. Faster footpath users may not be aware of this, nor ensure they give the priority to the pedestrian. This may lead to conflict and the person who has a vision impairment subsequently choosing not to travel on a particular path.

4.9 Petition of Jo Clendon on Law Change to Allow Cycling on Footpaths

The petition is an example of the recent calls for rules to be changed to allow a variety of different transport devices to be used on footpaths. This petition clearly presents the case for allowing certain cyclists the right to use footpaths based on reducing the chance of severe injuries, and avoiding the social costs of those injuries. It is the same approach that is often used to justify alternative off road paths, whether shared or dedicated for all cyclists.

The petition includes little consideration of the potential loss of service that adoption may cause to disadvantaged and vulnerable pedestrians. Any benefit cost analysis must recognise both the avoided costs of accident and the value of societal benefits, including enabling disabled persons to participate more fully in their community.

Clendon stated cycling on footpaths by under 14's and over 65's would not put pedestrian safety at risk and she offered evidence linked to Australian research as well as healthy community data, statistics on the numbers of children cycling, extensive information on children's attitude towards cycling, injury statistics and footpath widths. The petition provided little information on how it would impact on pedestrians who rely on footpaths as their main method of transport³¹.

Clendon noted that "there is currently little quantitative guidance available in New Zealand or Australia regarding the determination of shared path widths...observations of user interactions on New Zealand paths should be undertaken to determine the values of user widths, clearance requirements, user speed distributions and delayed passing thresholds appropriate to New Zealand conditions³²."

Unfortunately many vulnerable people, in particular people who have a sensory impairment, are invisible in any analysis based on accidents as when a route is perceived dangerous, it is not used at all by this group, and there is no means of evaluating the loss of potential benefits to this group.

She also notes, p 55, "that given our aging population and their use of mobility scooters, and that we wish to promote active transport in all its forms, it is essential that our footpaths are fit for purpose. I propose that if a footpath is not wide enough for a child cyclist to find a safe opportunity to pass a pedestrian, then the footpath is not fit for purpose for even its current legal users. (This includes adjacent berm/verge/nature strip which can be utilised when passing pedestrians.)

The impact of this short observation is enormous as the variety of footpaths currently in service is huge, especially as many date back many decades since construction, and furthermore different local authorities had different requirements. There are also varying levels of roadside trees and other features that affect sight lines. Considering the variety of footpaths currently in existence, it would seem allowing even some cyclists on **some** footpaths would degrade their usability by traditional footpath users.

4.10 Data and Statistics

It is an accepted fact that New Zealand has an ageing population and that in this age group the incidence of disability is significantly higher than for younger people. Despite this, there is very little information available on where older people live, the

 ³¹ Jo Clendon's petion to allow cycling of footpaths, pages 55-56.
 ³² Fowler, Lloyd, and Munro, 2010, p59

types of journey they would like to make, the value of these journeys to them and society as a whole. This lack of evidence is also the case for vulnerable pedestrians, including those with disabilities. Access to data is key to managing and prioritising all infrastructure improvements and making sound policy decisions. At this stage, data relating to the benefits of accessible paths in dollar terms is not available for use in standard benefit cost analysis as used by NZTA.

Monitoring the presence (or otherwise) of vulnerable people on footpaths, shared paths and public spaces is one way of determining whether they are being used by this group. If correlated with the incidence of various disabilities in an area, then gaps in appropriate service levels to fulfil their needs could be determined. As noted earlier, the research would need to be expanded to capture all pedestrians during the study period to ensure those with impairments that are not obvious to the researcher (for example, people with cognitive impairments or sensory impairments) are not missed.

Lack of data is recognised as a gap in New Zealand's Ministry of Transport's recently published Transport Domain Plan³³ which includes two recommendations, of which R2.13 is considered a high priority action:

R2.13 Gather additional information about pedestrian and active mode person travel.

R10.7 Improve data collection about injuries suffered on the pedestrian network.

Comprehensive information on pedestrian injuries and deaths from collisions - not only with motor vehicles, but also with bicycles and other personal mobility devices is available in two Ministry of Health data sets: mortality data and publicly funded hospital discharge data. Evidence-based decision-making on footpath use needs to be fully informed by these data. However, it should be noted that injuries encountered whilst using footpaths is considered by advocacy groups to be under reported, and therefore a mechanism will need to be developed to capture this.

4.11 Minimum Standards

Many footpaths date back several decades and fall far short of standards now in place for new infrastructure. There are also footpaths that have been narrowed to create more lanes within the carriageway. Whilst the ideal would be to bring all such infrastructure up to modern standards, the cost would be prohibitive. However, upgrading of legacy infrastructure could be encouraged by amendment to the NZTA subsidy regime, in particular allowing enhancements to footpath infrastructure to be

³³ www.transport.govt.nz/transport-domain-plan.pdf

considered as essential capital work when data shows a clear change in usage patterns. Reallocating road space should also be an option.

5 Inclusive Principles

The advocacy groups recognise that the entire transport system should function for the benefit of all users. In order to ensure this, there are a number of principles of decision-making which must be considered when determining the policy response (including the policy 'tools' of regulation, education, incentives and monitoring or enforcement):

- That accessibility for all and safety for all must be central to the decision-making process.
- Any regulatory regime needs to protect the transport choice for those who have the least amount of transport choices/options. Infrastructure must be designed for all users, including potential users who currently may fear using it due to perceived or real safety concerns;
- That any policy response/regulatory regime must provide an analysis of how the proposed rules meet the **United Nations Convention on the Rights for Disabled People**;
- That an **evidence base regarding the use of footpaths** needs to be progressed in order to develop the level of sophistication which the car-related transport system currently has. Again, co-design between government agencies with a transport mandate and advocates is the best approach;
- That practical and achievable **enforcement** is required, as is a robust **monitoring programme** to understand the impact of any new rules (and therefore any amendments should the regime not be working);
- That there needs to be a **hierarchy of footpaths** (whereby the footpath on the quiet suburban street with low traffic volumes is still very much the realm of the pedestrian) which is based on the assumption that the footpath is primarily infrastructure which is designed for pedestrians;
- That **co-design** whereby NZTA, local government and advocates determine the policy response is best practice and should be adopted as the preferred method for this work.

6 Conclusions

CCS Disability Action, Living Streets Aotearoa, VICTA, Alzheimers New Zealand and the Blind Foundation support the right of all people to have good lives within the context of an inclusive society. As our population ages, the incidence of disability is rising and it is vital that central government, local authorities and their partners recognise the role they have in providing a welcoming and accessible environment that all people can enjoy without barriers.

It is important that inclusive principles are accepted by everyone so that no one group becomes disadvantaged by measures designed to improve the situation for

others. Safety is of course of paramount importance, but it is also important to enable everyone, including vulnerable persons, to participate in society without facing barriers or discrimination.

In order to ensure that footpaths remain the realm of the pedestrian, the benefit cost analyses used must not only consider the reduction in accidents that will enhance safety, but also recognise that infrastructure is also an enabler for many people, including those who have impairments and those who are vulnerable to participate in society. Research is necessary to quantify these benefits and planning guidelines issued by NZTA should reflect the results of the research.

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About Us

CCS Disability Action is one of the largest disability services providers in New Zealand. We have been advocating for people with disabilities since 1935. Today, our organisation has a strong disabled leadership and human rights focus.

CCS Disability Action has a National Office and regional management structure, and provides services nationally from sixteen incorporated societies to about 5,000 people of all ages and with a range of impairments.

We also administer the Mobility Parking Scheme which has over 119,000 users.

Living Streets Aotearoa is the New Zealand organisation for people on foot, promoting walking-friendly communities. We are a nationwide organisation with local branches and affiliates throughout New Zealand.

We want more people walking and enjoying public spaces be they young or old, fast or slow, whether walking, sitting, commuting, shopping, between appointments, or out on the streets for exercise, for leisure or for pleasure.

The Blind Foundation is New Zealand's main provider of practical and emotional support for the 12,100 Kiwis who are blind or have low vision, enabling them to face their future with confidence.

With a vision of 'Life without limits – Kahore e Mutunga Ki te Ora', Blind Foundation staff around the country aim to enable people who are blind or have low vision to be self-reliant and live the life they choose.

We equip people with the skills needed to participate fully in society. This includes support in living independently, getting around, using technology, continuing to read and communicate, being socially active and staying in or looking for work.

The Blind Foundation's vital work helping people with sight loss is only possible thanks to the generous support of the public.

VICTA (Visual Impairment Charitable Trust Aotearoa NZ) is an energetic new charity established in 2013 to address the unmet needs of the growing number of New Zealanders with uncorrectable vision loss. VICTA's objects are to:

- facilitate the independence, integration and well-being of people disabled by visual impairment in New Zealand, and, in particular, of people disabled by visual impairment who are ineligible for assistance from the Royal New Zealand Foundation of the Blind;
- facilitate the provision of services for the support and assistance of people who are disabled by visual impairment;
- facilitate community awareness and understanding of the needs of people who are disabled by visual impairment;

- assist state, civic and other agencies to recognise and effectively eliminate barriers to the full participation of people who are disabled by visual impairment in New Zealand society;
- facilitate research into all aspects of visual impairment in New Zealand, including, but not limited to, research into the causes, treatment, rehabilitation and social impact of the disability;

Alzheimers New Zealand represents people affected by dementia at a national level by raising awareness of dementia, providing information and resources for people affected by dementia, advocating for high quality services for people affected by dementia, and promoting research about prevention, treatment, cure and care of people affected by dementia.

We support a federation of 16 local Alzheimers NZ organisations throughout New Zealand, each of which is a member of Alzheimers NZ.