ChainLinks

The newsletter of the Cycling Advocates Network (NZ)

Feb – Mar '05



It's that time of year again! Summer cycling, Kiwi-style

ALSO IN THIS ISSUE:

New rules on the road - page 5

A folding bike for under \$500! - page 20

Bicycle crashes and injuries - page 37







Cycling Advocates Network (CAN) PO Box 6491, Wellesley St, Auckland. New Zealand

Tel/Fax: 04-385-2557

Email: secretary@can.org.nz ChainLinks@can.org.nz

(newsletter)

WWW: http://www.can.org.nz

The views expressed in *ChainLinks* are not necessarily those of CAN.

GUEST EDITORIAL

Can't see the end of the road? Then look into the distance...

Patience is a virtue. This is especially true for us cycling advocates. Watching grass grow seems sometimes more promising than waiting for some things to change for us promoters of healthy and sustainable transport.

Cyclists have reason to celebrate, as on 27 February, some new road rules will come into force, bringing important improvements for cyclists. An article by Tim Hughes (Land Transport NZ) in this edition of ChainLinks will explore the changes that are relevant for us. But the process of achieving these changes has been a lengthy one indeed, and many arguably necessary amendments haven't made it into legislation as yet.

CAN's first submission on the proposed Road User Rule was made in September 2001. But many of the issues raised then had been communicated as problems to Government officials for a long time before then. Many a meeting has happened since, e-mails written and phone calls made, and another major formal submission went to Government in March 2003. And out of this process comes the Road User Rule that will come into effect in a few days time. In many areas, we've been listened to and our arguments have been accepted. In other areas, we didn't win, but since our arguments are strong, I'm confident that we will be listened to eventually. We only have to wait for another few years.

It has already been acknowledged by Government agencies that many legitimate cyclists' concerns have not been accommodated in the Road User Rule. So one of the more surprising aspects of the whole process of making legislation is that Government announced in 2003 that the rules (which have yet to come into effect) will be reviewed later this year from a cycling perspective!

Change is incremental, but change is happening. You've got to be an advocate for a long time before you can conclusively detect change. And change in legislation is only a small stepping stone, with the hopefully resulting change in road user behaviour the real reward. But I'm confident that it will happen, and a lot has happened already. And don't forget – patience is a virtue.

Axel Wilke - CAN Executive member

In This Issue

Bike Wise Week: 12-20 February	4
New Rules on the Road	
Cycling News from Around New Zealand	7
Red Means Stop - Right?	
Funding Opportunities for Changing Behaviour	
International News	16
A Folding Bike For Under \$500!	20
An Aversion to Risk	22
Revisiting the CAN Nelson Workshop	24
News from the CAN Executive	
Cycling Design & Planning	30
Wheelbenders, Framescrapers and Cycling Advocates	32
Quotable Quotes	
Bicycle Crashes and Injuries	
New Material in the CAN Library	

MEMBERSHIP RENEWALS BY CHEQUE OR DIRECT CREDIT!

Thank you to those CAN members who have renewed their membership subscriptions already. The renewal form was mailed out together with the ChainLinks issue that you should have received during the holidays. If you have mislaid the renewal form, please copy the back of your ChainLinks, write clearly RENEWAL at the top and send with your cheque.

If you prefer to credit your membership directly to the CAN bank account, the details are as follows:

Bank: BNZ

Branch: North End, Wellington

Account No. 02-0536-0439812-00

Thank you for your continued support!

Liz Mikkelsen, Membership Secretary.

BIKE WISE WEEK: 12-20 FEBRUARY

What can you do?

Even if you are only a couple of people exchanging emails about cycling, or chatting when you meet each other cycling to work, there are still some things you can do to involve other people in this most efficient, enjoyable, and healthy way to get around. There are things you can do yourself and things you can do to encourage others to join CAN and the cycling revolution – here is a list (not exhaustive by any means):

- Cycle yourself as much as possible during Bike Wise Week (and afterwards)
- Write a letter to the editor about Bike Wise Week mention *http://www.bikewise.co.nz*.
- If you have an extra bike, lend it to a friend and be a buddy cycle with your friend, introduce him/her to the shortcuts, how best to negotiate intersections etc.
- Go for a ride with your son/daughter, grandson/granddaughter teach them the ropes
- Write a letter to your Local Council, urge them to provide safe facilities
- Distribute CAN Brochures in public places (a new brochure is on the way and may be with you before Bike Wise Week)
- Organise a group of friends for a cycle ride (maybe a cafe stop ride)
- Encourage your workmates to join the Bike Wise Business Battle
- Talk with other cyclists about setting up a group in your district. If you
 don't have time to do the administration, CAN may be able to help leaving you to get on with the advocacy.

Visit the CAN website for more ideas: http://www.can.org.nz

Liz Mikkelsen, membership secretary.

For more information on Bike Wise Week, or Bike Wise, check out http://www.bikewise.co.nz

Bike Wise Week will be just the busiest part of a busy February of cycling in the **Wellington** region. The local CAN group, Cycle Aware Wellington, is co-ordinating the Wellington Bike to Work Day when there will be a free breakfast for cyclists at Civic Square in Wellington on Wednesday 16 February. There are over 25 events around the region during Bike Wise Week alone, and a heap more in the rest of the month. Visit **http://www.caw.org.nz** or **http://www.gw.govt.nz** for details.

NEW RULES ON THE ROAD

A new Road User Rule comes into effect on February 27 2005, along with a Land Transport Rule on vehicle lighting. **Tim Hughes** of Land Transport NZ explains what the implications of these changes are for cyclists.

Under the new Road User Rule, cycles are still vehicles and cyclists are still drivers, so the changes apply to all cyclists apart from a few that apply only to motor vehicles.

Changes that are of particular relevance to cyclists are as follows:

Cycle Paths

Cyclists are no longer required by the rules to leave the roadway to use a cycle path. Such now would require a separate bylaw and signs. Cycle paths may also be used by pedestrians.

Speed limits

Speed limits used to apply only to drivers of motor vehicles. They now apply to drivers of vehicles and hence to cyclists.

Cycle lanes

Cycle lanes are one type of special vehicle lane. Special vehicle lanes also include bus lanes and transit lanes. Cyclists may use bus lanes or transit lanes unless a sign excludes them.

Drivers must not use a special vehicle lane unless operating a vehicle of a type that is permitted to be used in that lane.

The only exceptions are:

- if a driver needs to cross the lane in order to turn or park clear of the lane
- if the vehicle is too big or the load being carried is too large to be contained within one lane
- if the lane that the driver is entitled to use is obstructed.

If any of these reasons apply, the driver must use the lane safely, for as short a time as possible, giving way to, and not impeding, vehicles that are entitled to use that lane.

In addition, a person must not stop, stand, or park a vehicle in any special vehicle lane, unless that vehicle is entitled to use that lane *and* stopping is permitted by signs or markings.

Cycle limit lines

Limit lines are the white lines that indicate where motorists should stop at an intersection. The rule allows cyclists to wait safely at a cycle limit line (marked in front of a limit line) so they can be seen easily by other motorists and can get a head start when the traffic lights turn green.

Riding abreast

Cyclists may still ride up to two abreast, and must still return to single file while overtaking another vehicle, which now includes a parked vehicle.

In a controlled race situation, an exemption is given to the law that cyclists must ride no more than two abreast.

Cycle lights

Cyclists riding at night must use one or two substantially white or amber headlamps. If there is one headlamp it may be steady or flashing [previously it had to be steady – editor]. If two headlamps are used, only one may be flashing. Cyclists may now use reflective clothing instead of pedal reflectors. A rear reflector and rear red steady or flashing light are still required.

Cycle Helmets

Current regulations do not require a person in a trailer being towed by a bicycle to wear a helmet. The new rule requires a helmet to be worn.

Parking on footpaths or cycle paths

You may park a cycle, mobility device or wheeled recreational device on a footpath or cycle path unless there is a sign that says otherwise – however, you must ensure that it is not in the way of other users of the footpath or cycle path.

Opening Car Doors

In addition to the existing requirement to not cause a hazard when opening or closing a door, a person may not cause a hazard by leaving a door of a motor vehicle open.

A summary of all the new provisions and clarifications are available at: http://www.landtransport.govt.nz/rules/about/road-user-2004.html and http://www.landtransport.govt.nz/rules/q-and-a/vehicle-lighting-2004.html.

Motorist/Cyclist Safety Tips Leaflet

ACC, in conjunction with Bike Wise and CAN, have produced a double-sided glossy DLE leaflet with safety tips for motorists on one side and cyclists on the other. The leaflet has been produced in time to be used in Bike Wise Week and is a very useful resource.

Copies of the leaflet can be ordered in bulk from ACC. Look for their contact details in the blue pages of your phone book. If you're having trouble getting hold of them, get in touch with CAN.

CYCLING NEWS FROM AROUND NEW ZEALAND

December:

- Land Transport New Zealand is formed as a result of a merger between Transfund NZ and Land Transport Safety Authority.
- Palmerston North City Council plans to seal a 600m stretch of Manawatu riverbank near the existing Victoria Esplanade to form a 3.5m-wide shared cycle/pedestrian path.
- A free pedal-powered minicab service is launched in Auckland's CBD district.
- After a long incubation, the Government signs off on new Land Transport Rules that will (among other things) finally enshrine the status of cycle lanes in legislation, coming into effect 27 February 2005.
- A free-phone line for reporting bicycle crashes is established by the Nelson City and Tasman District councils.
- The Waikato river walkway/cycleways in Hamilton win a Civic Trust award for their contribution to the city's environment.
- Plenty of Wellington cyclists enjoyed the 20-km Bike the Bays ride around the Miramar peninsula.

January:

- Everyone cycles to the beach and takes a holiday...
- Tasman District Council are to install cycle and pedestrian facilities in late summer, including cycle lanes and an underpass, this year as part of a \$550,000 upgrade of Salisbury Road in Richmond.
- Ashburton District Council plan to begin work this year on a cycleway strategy.

Nelson trials cycle crash hotline service

Nelson cyclists, road controlling authorities and injury prevention workers have come together to put in place New Zealand's first phone line for cycle crash reporting.

0800 CYCLE CRASH is a joint project, supported by Nelson City and Tasman District Councils, Transit NZ, ACC and LTSA. The information will be used to highlight trends and blackspots, guide future education and enforcement programmes, and improve design and maintenance of cycle paths and roads.

Transport and road safety coordinator for the Nelson City Council, Margaret Parfitt, said cycle crashes featured highly in the Nelson region's crash data, but there was a concern that the reported cases were only the tip of the iceberg. "A formal Christchurch study showed only 20% of cycle

crashes are reported to police and the Land Transport Safety Authority," she said.

The information gathered by the phone line will be used to highlight trends and black spots, guide future education and enforcement programmes, and improve the design and maintenance of cycle paths and roads.

Mrs Parfitt said the phone line was not a "dob in a driver" line. Nor did it replace the need to call the police if prosecution was likely. "Obviously, if anyone was hurt in a crash we would still encourage them to call for an ambulance and think about calling our crash line later on."

She said that while crashes were currently under-reported, it was important to remember that the health benefits of cycling outweighed the risks by as much as 20 to one.

[Nelson Mail, 9 December 2004]

杨杨杨

Jafacabs ready to run

Auckland Mayor Dick Hubbard joined celebrities to bolt down Queen Street and launch the new free pedicab service, known as Jafacabs (just another friendly Auckland cab).

Hubbard said the corporate-sponsored service, offering free rides around the central business district to Victoria Park and the university, was designed to add vibrancy to the city.

"It's also a way of showing we can laugh at the Jafa concept," he said. The five cabs are mainly pedal-powered, although they come with a small battery powered motor to help out on hills and for quicker acceleration at traffic lights. Jafacabs, hailed from the footpath, are running until Easter.

[NZPA, 9 December 2004]

do do do

Auckland programme offers kids cycle safety tips...

Riding around on bikes instead of being in class may be every child's dream, but some Auckland pupils are learning while they ride through taking part in an Auckland City cycle safety education programme that aims to improve children's road safety skills.

The council is funding the programme in six primary and intermediate schools located in areas where there are high numbers of road accidents involving children. And, says the course convenor, Kris Bartley of Bigfoot Adventures, the kids love it. "It's creating a greater awareness of the road rules because a large number haven't been taught them," he says.

The programme covers both theory and practice. First, children learn about safety helmets, bike maintenance and correct seat height. Then,

once outdoors and on a bike, they learn how to negotiate traffic, what to do at stop and give-way signs and other road rules.

Auckland City's road safety coordinator, Claire Dixon, says the programme, tailored for children aged eight to 12 years, has had fantastic feedback so far, with schools indicating they would like to see it run again next year.

The programme has been run in Avondale and Mt Roskill intermediate schools and Avondale Primary School, and will next year run in Wesley and Blockhouse Bay intermediates and Owairaka Primary School.

[City Scene, Auckland City Council, 5 December 2004]

... while 'Bike West' is launched in Waitakere City

Waitakere City Council's Road Safety team, Safe Waitakere, LTSA, Bike West and Road Sense have jointly launched BIKE WEST for Waitakere City Schools. Teachers (preferably Year 6) are trained and provided with resources. The BIKE WEST training programme includes buying and fitting safety helmets, bike safety check, riding skills-bike control and road rules.

'It's really important for 10-year-olds to have cycling skills before they ride on the road," said Waitakere's first fulltime BIKE WEST Co-ordinator, Fenella Murdoch. "Knowledge of road conditions and rules is equally important."

BIKE WEST has been developed to meet a shortfall for cycle safety programmes available in the schools, says Waitakere City's Senior Road Safety Co-ordinator Kitch Cuthbert. 'We are focusing on Year 6 because studies show they are the most at risk of severe cycle injuries. One of the best things about this programme is the fun the children have when they try out the cycles on the road, after they have been thoroughly tutored in the classroom,' says Ms Cuthbert.

[Scoop, 21 January 2005]

Toddlers prove no bar for cycle tour couple

An energetic English couple, cycling the country with two toddlers in tow, are keen to speak to other intrepid families as part of their research into family adventures.

Television writer Kirstie Wickes, 36, and management consultant Stuart Wickes, 40, have taken nearly a year off work to pedal through New Zealand, Samoa, the United States and Canada, with four-year-old Matthew and two-year-old Cameron literally in tow.

The youngsters sit back in their waterproof trailers, play with their toddler laptops, listen to music on their walkmans - or just have a snooze. "They're

loving it," said Wickes, now nine weeks into the family's rain-plagued journey.

The couple, both keen cycle tourers before they had children, admit the decision to take the children with them was something of a gamble. "It has been excellent," Wickes said. "The children are having a ball and we're having a great time."

They hope their efforts will inspire others to attempt more than they thought possible with children. They have set up an interactive website, "in search of families in search of adventure" posting newsletters from their travels, and inviting others to contribute tales of their adventures. It was part of a research project which they hoped to eventually turn into a book.

Certainly, the Wickes' trip is no holiday. The weight of the children and the family's luggage, including laptops, tents and toys, comes to about 90kg per bike.

With the boys reluctant to spend more than 2-3 hours travelling each day, they cannot cover more than 50km a day. They kicked off on Stewart Island in November and hope to make it to north of Kaitaia by May, when they will fly to Samoa for two months before heading to North America.

The highlight so far had been four days on remote gravel roads from Te Anau to Walter Peak, said Wickes. "It was a really beautiful ride ... completely in the wilderness." And the worst aspect? "Being eaten a lot by sandflies."

[The Press, 15 January 2005]

栖栖 栖栖

New book on bike trail

The history and spectacular beauty of the Otago Central Rail Trail is now accessible without a bicycle. The Otago Central Rail Trail Trust has released a book detailing the past, present and future of what has become, in less than five years, one of the region's premier tourist attractions.

'From Steam Trains to Pedal Power – The Story of the Central Otago Rail Trail' had been published to meet demand from growing numbers of domestic and international visitors to the rail trail, trust executive officer Owen Graham said.

The 72-page full-colour book tells the story of the 150km rail trail and includes a history of the towns and points of interest along the way. The Otago Central Rail Trail now attracts an estimated 100,000 visitors a year and will celebrate its fifth anniversary on 20 February.

'From Steam Trains to Pedal Power - The Story of the Central Otago Rail Trail' retails for \$24.95 and is available from Otago Central Rail Trail visitor centres and Otago book stores.

[Otago Daily Times, 2 January 2005]

Number plates 'must be visible'

People transporting bicycles on racks at the back of vehicles must show their number plate, police say.

Senior Sergeant Dave Ryan, of Oamaru, said it had been a common problem during the holiday period. In some cases, three or four bikes had been obscuring the rear registration plate.

Both front and rear plates needed to be visible at all times. The penalty for not doing so is a \$200 fine. If bikes stuck out 1m behind a vehicle, a reflectorised flag is required, indicating a rear overhang. A \$370 penalty would be imposed for breaching that requirement.

Most of the motorists stopped said that because they had bought a cycle rack, they did not consider they would be committing an offence. "That's totally wrong. It's the use it's put to that causes it to be an offence," Snr Sgt Ryan said.

[Otago Daily Times, 6 January 2005]

杨杨杨杨

Cyclists unsafe in Nelson CBD says study

Cyclists feel unsafe in Nelson's central business district, and are forced to ride in the middle of the road to avoid being hit by reversing vehicles and opening car doors, a study of cyclist and pedestrian safety has revealed.

Nelson was chosen to be part of a Land Transport Safety Authority pilot project along with Rotorua, Manukau and Dunedin – areas with a high rate of cycle and pedestrian accidents.

The \$80,000 study showed 40% of cyclists felt unsafe in central Nelson during the day, and 60% felt unsafe at night. The main concern was cars reversing out of angle parks and not seeing cyclists. Open car doors were also a problem, so hugging the left-hand side of the road was "not an option" for cyclists. Cyclists had started to bike in the middle of the road to ensure they would be seen, the study said.

Bicycle Nelson Bays spokesman Chris Allison said many cyclists simply avoided the central city because they felt unsafe, but there were no easy answers for improving their safety. A painted cyclist turning area was due to be installed at the lower end of Trafalgar St when the Visitor Info Centre was up and running, which could help at intersections, he said. This would allow cyclists to sit in front of traffic so they were clearly visible.

Council infrastructure divisional manager Fraser Galloway said the next phase of the project was for council staff to investigate options for improving safety for cyclists and pedestrians.

Commerce Commission looks again at supermarket bikes

Cycle industry heavyweights have slammed the Commerce Commission for not stopping supermarkets selling potentially dangerous cheap bikes.

Despite many complaints about "bikes in a box" and investigation by the commission's fair trading branch, the cheap bikes, which some in the cycle industry consider are potential death traps, remain on sale.

Investigations into cheap 'bikes in a box' that required assembling, and that were on sale at Foodtown, Countdown and Woolworths supermarkets were re-opened by the commission after more information was received.

Commission spokeswoman Jackie Maitland said the varying complaints were still being assessed and if any bikes were in breach of the product safety standard appropriate enforcement action would be considered.

Richard Umbers, managing director of Foodtown and Woolworths owner Progressive Enterprises, said independent tests initially indicated the bikes were roadworthy. Mr Umbers, who said his stores had been issued with correct labelling to comply with product safety standards, said hundreds of bikes had been sold, there were no complaints from customers and he was not aware of any accidents.

According to Avanti brand owner Sheppard Industries national sales manager Tony Smith some cheap supermarket bikes took about 19m to stop in the wet because brakes did not grip properly on cheap steel wheel rims. Mr Smith said there were also concerns about buyers' ability to assemble the bikes correctly.

Neil Lyster, director of major importer and wholesaler Cycles Etc, said all bicycles sold in a partially assembled form must carry a specifically-worded informative safety label on the outer carton and/or on internal packaging to minimise risks to consumers of incorrect assembly.

They also had to carry a warning that in the interests of safety it was recommended that partially assembled bikes should be assembled by a skilled bicycle mechanic. He said the supermarket bicycles did not carry the required safety labelling, nor did they give the name and address of the manufacturer, importer or supplier, which was also a safety standard requirement.

Mr Lyster said a name and address was required as a point of contact should any safety issues arise or there was a need for a product recall. "Everyone in the cycle business has to comply with these safety standards but bikes on sale in supermarkets have not. Why, and why is nothing done about it?" Mr Lyster said.

[National Business Review, 10 December 2004]

Parents 'inflicting car dependency'

North Shore parents are under fire for inflicting car dependency on their children. Surveys of children at 17 primary schools have shown an "unhealthy addiction to cars", says the North Shore City Council.

The council found almost three- quarters of about 6500 children surveyed lived within 1km of school, yet more than half were driven there and back each day. One school, not named by the council, has 90 per cent of its pupils living within a kilometre of its gates but 63 per cent are driven there. The youngsters are not to blame for being in thrall to the car, says city transport operations manager Tom Morton, whose staff are helping parents there and at other schools to adopt non-motorised means of travel.

"Our analysis clearly shows it is parental attitudes and habits, not travel distances, which are preventing children from walking and cycling to school," he said. "The children are telling us over and over again in our surveys that they would prefer to cycle and walk to school, yet their parents are taking that choice away from them."

Mr Morton said this was odd, as most parents would probably have walked or cycled to school in their day, a healthier and more social way to travel. Yet they were denying their children the same experience. He acknowledged safety was a critical parental concern, but said the council was combating this by helping to establish "walking buses".

[New Zealand Herald, 2 December 2004]

Bubble Campaign

Greater Wellington Regional Council, assisted by Wellington City Council, is running a "Don't Burst their Bubble" awareness campaign during February. The aim of the campaign is to reduce cycling casualties by increasing drivers' awareness of the need to give cyclists a safe amount of space on the roads. There'll be posters and billboards up around the region over the month, as well as radio and print advertising.

NZ CYCLING CONFERENCE 2005

October 14-15 2005, Little Theatre, Hutt City

Theme: "Changing Lanes, Cycling into the Mainstream"

Revised Deadline for Abstracts: 30 April 2005

For further information, contact Stephen Knight (*stephen@bikenz.org.nz*)
Or visit *http://www.can.org.nz/conference05/*

RED MEANS STOP - RIGHT?

We all know that when traffic signals turn red at an intersection, approaching drivers have to stop. It's also assumed by careful motorists that at the same time cross-traffic has been given the green signal, so stopping on time and on the line is critical to avoid collisions.

So why, when everybody knows this, do so many crashes occur at signalised intersections? A surprising 32 percent of these are caused by drivers colliding with opposing traffic, while 30 percent are due to drivers running the red light. A further 14 percent involve pedestrians, while 8 percent involve cyclists.

In order to examine the safety and efficiency of traffic signals, Transfund New Zealand (now part of Land Transport New Zealand) funded the development of a signal audit methodology. A representative number of signal installations across nine territorial local authorities (TLAs) were then audited. The audits, which included state highway signals administered by TLAs on behalf of Transit New Zealand, were completed in April 2004.

The specially trained auditors found a wide range of elements that compromised the safety and/or efficiency of traffic signals and may have contributed to the above crash patterns.

Their findings have been reviewed and summarised in a publication, just released, titled Stops & Goes of Traffic Signals. The booklet was prepared on behalf of Transfund by Axel Wilke, a traffic engineer with Christchurch City Council.

Targeted at engineers who design, construct, install, manage and maintain traffic signals, the booklet examines the key factors required for safe and efficient operation of signalised intersections. These include not only technical requirements of the signals themselves, such as phasing and operational issues, but also intersection and lane layout, placement of signal posts, road marking, conspicuity of signals and other factors influencing the environment at intersections.

All these factors are dealt with in logical sequence and recommended treatments are provided for most commonly encountered situations. The booklet is well illustrated with photographs of good and bad signal installations observed during the audit studies.

• **'Stops & Goes of Traffic Signals'** is available free of charge from Land Transport New Zealand. It may be downloaded in PDF format from http://www.landtransport.govt.nz/pubs/traffic-signals.pdf or contact Ian Appleton on 04-9164271, email ian.appleton@landtransport.govt.nz

14

FUNDING OPPORTUNITIES FOR CHANGING BEHAVIOUR

by Stephen Knight, BikeNZ

The area of travel behaviour change (TBhC as it has come to be known) has received a boost with Land Transport NZ offering funding opportunities for those wanting to initiate change in workplaces, at schools, and at the household/community level. Applications can be made immediately.

At the time of writing, LTNZ intended posting application and guideline documents on *http://www.transfund.govt.nz* – click on 'Transfund'; click on 'Manuals and Procedures' in left hand column; then go to 'Evaluation Procedures for Alternatives to Roading' at the top. (Transfund is now part of LTNZ, hence the confusing website address). Failing that, contact Stephen Knight at BikeNZ (Stephen@bikenz.org.nz; PO Box 2710 Wellington; or phone (04) 916 1873), and copies of the documents can be sent out.

The documents posted include the *Travel Behaviour Change Guidance Handbook* which should be read in conjunction with the *Interim Travel Behaviour Change (Interim TBhC Procedures)*. The funding process is aimed at local government, consultants and 'others' – suggesting any group can apply. Note, however, it would appear that working within an existing local government programme would be an advantage.

The LTNZ approach sees TBhC programmes as encouraging *voluntary* change in travel behaviour by providing incentives for people to use sustainable modes of travel and reduce the overall requirement for travel. Such programmes generally employ education, planning, and/or marketing-based techniques.

TBhC is a component of Travel Demand Management (TDM), which is a generic term for strategies used to reduce demand for road-based travel and improve energy efficiency in the transport sector.

Cycling Skills & Maintenance Courses

"Cycling in the City", an adult cycling skills course is being run in Wellington this summer. The course will give cyclists practical tips and strategies that will help keep them and their bikes going through most traffic and road conditions. Emphasis is on avoiding common and serious hazards for cyclists. "Bike Maintenance for All" sets out to demystify the mechanics of the bicycle, with various types of bikes to work on. See <code>http://www.caw.org.nz</code> or ring 04-938 5885 for more details.

INTERNATIONAL NEWS

Research proves safety in numbers

Recent Australian research supports what most bicycle advocates have been saying for years: the more people there are cycling, the safer it becomes. Conversely, the less people cycling, the higher the casualty rate per cyclist on the road becomes.

Dorre Robinson, a well-known researcher on cycling safety, has used available evidence to show that this finding applies in Australia.

The 'safety in numbers' thesis is particularly useful in addressing one of the popular excuses for not providing for cycling - "we mustn't put in bike facilities as this will encourage people to participate in a dangerous activity".

The evidence suggests that increasing cycling reduces the casualty rate among cyclists. This effect can be so strong that not only does the rate of casualties fall, but the absolute number of cyclist casualties can be reduced as well - even with significant numbers of extra cyclists!

Robinson's paper is on the Bicycle Federation of Australia website: http://www.bfa.asn.au/bfanew/pdf/publications/safety_in_numbers.pdf

[Australian Cyclist, Nov-Dec 2004]

#

Greenhouse Office leads the way

The Australian Greenhouse Office (AGO) has established what is arguably the best organised corporate bicycle fleet in the country. The fleet comprises two hybrid bikes, one mountain bike and one electric-assisted bike. Staff members are encouraged to use the bikes instead of cars to travel to meetings within Canberra's parliamentary triangle and beyond.

The bikes are provided with a service contract from a local retailer that includes some maintenance and skills instruction. They're equipped with pretty much everything you could want on a commuter bike, including panniers, lights, locks, spares etc. The booking system is simple and convenient and allows capturing information about the use of the bicycles.

The AGO has also funded a number of projects involving the Bicycle Federation of Australia: including the development of a "bikeability" checklist principally for local government; an investigation of best practice in cycling proficiency training; and seed funding for a Centre of Excellence for Cycle Tourism.

[Australian Cyclist, Nov-Dec 2004]

#

Indian builds world's biggest cycle

Hyderabad resident K.Sudhakar has built the world's biggest cycle. "It took me two-and-a-half years to design and build this bicycle," he told rediff.com. "With this feat, I am going to break the record currently held by a bicycle built in the United States, which is 23.4 feet high. My bicycle is 42 feet high."

The cycle weighs three tonnes and the diameter of its wheels is 17.5 feet. "I am ready to give this giant bicycle to the government for public viewing in Hyderabad," he said, adding, "I am seeking an entry in the 'Guinness Book of World Records' and am in touch with the publishers."

Sudhakar has designed 28 types of cycles, including the smallest bicycle in India which is only six inches high, as well as 12 types of motorcycles, the smallest being 13 inches high, and 49 types of cars and buses, including the smallest double-decker.

[http://in.rediff.com, 13 January 2005]

杨杨杨

Police use cycles to fight air pollution

The Ahmedabad police department is planning to introduce 'eco-friendly' bicycles for night patrolling, officials have said. "As the city has a very low crime rate of five percent, bicycles can be inducted in a phased manner for night patrolling," deputy commissioner of police Ajay Tomar said.

"We have arranged for making about 10-15 bicycles available in every police station. It will keep the personnel physically fit, apart from reducing air pollution and making bicycles a more acceptable option," he said.

The announcement came on "Cycle Day" Friday, observed to sensitise the public against rising air pollution, which saw hundreds of students, police officials and professionals take part in a bicycle rally that started from the Gujarat University grounds.

"The vehicle population in the city is on the rise. It leads to increasing air pollution apart from other problems like shortage of parking space. The cycle rally was organised to counter the trend and boost the popularity of bicycles as a non-polluting option for commuting," Tomar said.

Police commissioner K.R. Kaushik agreed. "We are habituated to using scooters or cars for going even small distances. We could use bicycles instead. This can also improve our health," he said.

[Indo-Asian News Service. 28 January 2005]

杨杨杨

Selling cycling to 'greys'

A new US study has found that moderate exercise – such as cycling – can significantly offset the deadly mix of risk factors for heart disease and diabetes known as the metabolic syndrome.

Researchers at Johns Hopkins University School of Medicine in Baltimore found that exercise improved overall fitness, but the 23 per cent fewer cases were more strongly linked to reductions in total and abdominal body fat and increases in muscle leanness, rather than improved fitness.

The researchers' findings raise the importance of physical exercise in treating both men and women with the metabolic syndrome, a clustering of three or more risk factors that make it more likely for a person to develop heart disease, diabetes and stroke – including high blood pressure, elevated blood glucose levels, excess abdominal fat and abnormal cholesterol levels.

One half of the study participants were randomly assigned to a control group that received a booklet that encouraged increased activity, such as walking, to promote good health. The other half participated in a supervised series of exercises for 60 minutes, three times per week. These exercises included cycling.

The study is believed to be the first to focus on the role of exercise training in treating metabolic syndrome in older persons, a group at high risk for heart disease and diabetes.

[BikeBiz.com, 3 January 2005]

#

Singapore launches first bicycle sharing scheme

It is now easier for residents in Bukit Batok, Singapore, to move around the area on two wheels, following the launch of a pilot bicycle sharing project called TownBike.

Apart from paying S\$12 a year and an S\$8 registration fee to get access to the bicycles 24 hours a day, 7 days a week, residents have to pay 50 cents for every half hour of usage.

Currently there are 10 docking stations with three at Bukit Batok MRT and Bus Interchange, with 30 bicycles each.

If the S\$200,000 pilot project proves successful, the scheme will be expanded islandwide.

[www.channelnewsasia.com, 29 January 2005]

#



Professional Excellence Integrity

Environmental and Social Responsibility

Engineers

Scientists

Planners

Project Managers

Risk Management Specialists

SPONSOR and PARTICIPANT

Bike to Work Breakfast
Auckland City and
Bikewise Business Battle

Auckland Tauranga Wellington Christchurch



A FOLDING BIKE FOR UNDER \$500!



Yes, it sounds too good to be true. Certainly that's what I thought when I saw the Sheppard Industries folding bike for just \$449 in Cycle Traders October last (particularly when it was sitting next to the \$2800 Birdy folder). What was the catch? So the next time I was in the neighbourhood I took it for a spin and, before you knew it, I was the proud owner of a folding bike!

Many of you will know that

Sheppard Industries are responsible for distributing the Avanti range of bikes throughout New Zealand. Evidently they also decided to try their hand at an inexpensive folding bike. The result is a reasonable (and certainly trendy-looking) little number.

The shiny silver bike comes with standard 16-inch wheels, a smooth 6-speed rear-shifter, calliper front brakes and a drum brake on the back. A comfy spring saddle, mudguards and a kickstand complete the ensemble. There are even lugs to attach a rear rack if desired too. All this weighs in at about 12kg, so you should be able to include it with the checked-in luggage.

As you can see from the photos, folding system involves the unscrewing and folding down handlebar head unlatching the main tube. lowering or removing the seat post, and folding down the pedals. I don't think I'd set any records doing all this, but it still seems very manageable in 20-30 seconds. There's no obvious way to keep it securely folded up, but I find that a cable lock does a pretty good job of holding it all in place. There's even a "handle" to pick it up by.



The bike doesn't come with a carry-bag, so you might need to think about what to wrap it in for those trips away. The folded dimensions (about 70 x

 70×30 cm) are an awkward square shape that doesn't tend to fit any suitcases I've come across. My solution was to get a large "multi-sport" bag from a tramping shop, which has plenty of space for both the bike and my other luggage.

If I was to make some suggestions for the "Mark II" version of this model they'd be:

- Find a longer seat post. The one supplied with the bike is way too short for anyone slightly tall. I had a 40cm post installed instead at the time of purchase, which only just suits my 1.83 m (6 ft) body (and a few more centimetres really wouldn't go amiss). Probably an easier way to go would be to make the seat tube slightly taller it wouldn't affect the foldability.
- Provide a bigger front chain-ring. As you could expect with small wheels, you have to pedal pretty quickly to make headway, even in top gear, resulting in a more tiring effort. I've just recently given up on the original 40-cog chain-ring and replaced it with a 52-cog ring, making for a much easier ride (unfortunately I lose the nice encased chainguard on the original).

With these additions, I've found that the Sheppard folding bike suits my needs perfectly adequately. Certainly I don't think I'd go cycle touring on it, but for wee jaunts while away from home or when I want a bike to throw in the car-boot, it does the trick. And judging by some of the "wow" reactions I've encountered to date, it certainly catches people's attention!

Maybe with the upgraded components and a carry bag, this bike doesn't come under \$500 any more. But it's still far cheaper than any other folding bike I've seen on the market.

• Sheppard Industries Folding Bike: \$449 from Cycle Trading Company, Manchester St, Christchurch

Glen Koorey

Got something to Advertise?

Short "classified" advertisements of up to three lines (approximately 35 words) will be printed in *ChainLinks* for CAN members free of charge (one per issue) – contact the *ChainLinks* editor at *chainlinks@can.org.nz*.

For details of commercial advertising rates, see our website at:

http://www.can.org.nz/chainlinks/

by Stephen Knight, BikeNZ

Sporting and events representatives, and BikeNZ are addressing *Issues Facing Event Organisers* – with an emphasis on the need to reverse a trend away from organizing events as a result of the Astrid Andersen case. This particularly affects grass-roots events. Sport and Recreation New Zealand (SPARC) is helping to manage the process.

Briefly, Andersen organized Le Race through to Akaroa. One cyclist died when she crossed onto the wrong side of the road and hit an oncoming car. The Court of Appeal overturned Andersen's conviction of criminal nuisance last year. However, the initial conviction appears to have led to event organisers, particularly those volunteers organizing relatively small events, becoming increasingly reluctant to expose themselves to liability should an accident occur. This is backed up by data showing a reduction in the number of events being held in NZ. Despite the overturning of the conviction, there remains residual concern over liability.

In addition, road controlling authorities (Transit and the territorial authorities, in the main) are imposing increasingly stringent conditions on event organisers. This is not universal, with some RCAs being very cooperative. However, some (such as Auckland City) are using Transit's temporary traffic management guidelines as an absolute requirement to be met as a precursor to getting permission to hold an event. This, claim event organisers, in turn leads to high compliance costs (in terms of time and money), which then leads to having to charge higher entry fees to the point where fewer participate; or, in some cases, the relocation of events away from those centres requiring higher levels of compliance; or their outright cancellation.

The risk-averse nature of the RCAs and the Andersen case are not of course unrelated. In the main, it is felt that the higher compliance demands are evidence of a shifting of the burden of the assumption of risk onto event organisers, to an unfair degree. Arguably, the additional risk mitigation measures do not materially reduce the probability of a serious accident happening; but they do disproportionately ratchet up costs, thereby reducing participation. There is some evidence that an increasingly risk-averse society is also operating, whereby participants are more likely to take an event organizer to court if something goes wrong.

Events include any mass participation event, not just races etc.

The group is considering a strategy to:

 Reduce unreasonable fears among the general public about the risks of taking part in an event, by, for example, emphasizing the benefits of events and how few major accidents happen;

- Provide digestible information to event organisers on what level of risk mitigation will both address the real level of risk (i.e. the probability of something happening combined with its scale if it does happen); and meet existing legal requirements;
- Discuss these risk issues with central and local government agencies (roading, police, OSH; ACC), to ensure they understand both the actual legal requirements, rather than the assumed ones, and where the responsibility of managing risk should lie.

It should be noted that while SPARC is helping to manage this process, the comments and aims come from the group itself.

Part of this process will be to help explain the newly-released Standards NZ *Guidelines for Risk Management of Sport and Recreation* (HB 8669:2004), and provide a digestible version of this document for those running events.

For more information, or comments, please contact Stephen Knight (*stephen@bikenz.org.nz*; PO Box 2710, Wellington; 04-916 1873).

Calling all Legal Eagles!

CAN and Bike NZ are setting up a special interest group (SIG) to look at some legal matters relating to cycling. It's planned that the group will operate informally via e-mail.

If you have experience in legal matters and would be interested and available to take part in the group, we'd love to hear from you. You'd only have to get involved in issues as your time and level of interest dictated!

A couple of things that have been identified as priority issues are:

- · legal grey areas like 'overtaking' on the left
- what cyclists should do if they have a crash

BikeNZ is also interested in the area of temporary traffic management.

If you'd like to be part of the Legal SIG, or would like more information, please contact CAN, 04-972 2552, Email *secretary@can.org.nz*

WANTED TO BUY

Bevan Woodward would like to purchase a second-hand cycling trailer suitable for touring. You can contact him at **bevanw@can.org.nz**

REVISITING THE CAN NELSON WORKSHOP

In the review of the CAN Workshop in the last issue of Chainlinks, we expressed the hope that we could reproduce some of the Workshop presentations in future issues. Here, we offer an edited version of the presentation from Kirsty Barr, Road Safety Coordinator for Tasman District Council.

The Road Safety Coordinator (RSC) Role

I am new to this role, having started in July this year and coming to the role without a road safety background. My intention here is to talk about my 'first impressions' since being in this role, particularly in relation to cycle safety.

I see the role of a RSC being one of a bridge between the public and other organisations that have an interest in road safety (for example LTSA, local authorities, the Police, ACC etc). A RSC is also a 'one stop shop' when it comes to road safety matters. They should be able to facilitate things and steer people in the right direction. The work of a RSC is focussed on community driven projects – local people coming up with initiatives in their areas that addresses a particular issue relevant to them. The RSC is there to facilitate, organise, and to support this drive.

First Impressions

There is a wide diversity of views between different road user groups and the various agencies/voluntary groups that represent them. I expected this diversity, but was less prepared for the diversity of views amongst cyclists themselves (although to a cycle advocate, this may be quite obvious). It has been a good process for me to learn to open up to a range of different (and sometimes conflicting) views amongst cyclists in relation to cycle safety, cycling habits and what makes good cycle facilities.

We're all pretty well versed in the "share the road" theme. The feedback I've had from cyclists so far is that most vehicles attempt to share the road most of the time. As a road safety coordinator however, the times when this doesn't happen is what I will hear the most. I've been exploring the idea of whether this is something particular to New Zealand and the indication seems to be that we are perhaps more reluctant to share the road compared to other western developed countries. I wondered why this was. Why do drivers have more patience sitting behind a slow moving tractor or that slow truck on the hill, but not a bike? Was it just size of the vehicle that commanded respect?

Perhaps there are some more entrenched reasons for this than I had first thought. There are some factors that are commonly referred to, such as:

• The challenging roads of NZ due to its particular geography/topography.

- The fact that NZ roads, particularly in rural parts are often based on the goat tracks of our pioneering past.
- We have a strong 'car has priority' mentality. It's more important to *not* hold up the traffic rather than risk passing the cycle 'obstacle'.
- There is the 'chicken & egg' syndrome of there not being enough people cycling with the result of drivers not *expecting* to encounter bikes. But of course the suppressed demand issue means that in parts, roads can be too unsafe to enable more people to ride their bikes.

But I also think there are historical factors at play to do with us not having the same experience in NZ of the bike in the community. I was interested to hear from a Golden Bay cyclist who recently returned from France telling me of their equally narrow rural roads & high speeds there, but the very different attitude towards bikes. There was the *expectation* of waiting to pass when a cyclist was on the road. In France, the bike has been around for generations. It is far more likely that your mother, brother or grandparent uses a bike or has used one. This legitimises its place in the community and allows it to become part of the general psyche over time. The different culture and attitude towards a bike on the road is still evident in France, whereas the situation in NZ is very different.

I think the "share the road" theme is a natural place for a RSC to be, as education is at the centre of this role's approach. A good example of the "share the road" theme which is community-driven can be found with the Golden Bay Cycling Project. Victoria Davis (Bicycle Lanes in Paradise) together with other members of the Golden Bay community and my predecessor secured funding from LTSA and TDC for this project. The project focuses on the 'share the road' theme through education (e.g. billboards, community involvement).

At a recent brainstorming meeting, people suggested taking a more positive approach and rewarding good driving instead of trying to 'preach' a message to drivers about what they were doing wrong. We came up with the idea of a "driver of the month" competition which is planned to be profiled in the media. I was very inspired by this approach because it is positive, and because it presents an opportunity for dialogue between conflicting road users.

Because I started out in my job with a cyclist perspective, I was already tuned into many of the difficulties that advocates faced, such as 'battle weariness', the huge drain on volunteers' time and money, a lack of acknowledgement or monetary compensation, and the constant refrain of lack of consultation early enough in the design process. After being in the job for a while, I inevitably began to notice things more from a local authority's perspective as well:

• I realised there were some people in councils, who over a period of time, were doing all they could for cyclists (I realise advocates are

aware of this in many cases). These people can often be a lone voice in the council. Acknowledging any of the small changes they are able to bring about can go a very long way.

- Even though an advocate might feel "well this is how it should have been all along" or "we've doing <u>you</u> a favour", acknowledging the partial or small successes of these people fuels the relationship and gives energy to further support you.
- It seems that cycle advocacy connections to RCAs are mostly limited to an operational level. It is very hard to create links with those in strategic roles. Basically, the higher up you go, the more resistance is felt. There is a firm view that there is not enough money. People at this level also feel that their hands are tied, that they are powerless too and that there is a general lack of national funding to local authorities.
- I appreciate the counter argument that "it isn't necessarily about funding but new ways of thinking of using those resources". However, I don't know enough about the strategic aspect of local authorities to comment on how this could be realised.

Feedback from other RSCs

To go back to the importance of consultation & the idea that the relationship between the advocate and the local authority is key to this, I decided to get some feedback from other RSCs around the country and canvass their views on this relationship. If some comments come across as unfair or negative, it's worth remembering they were asked to give their take on this issue, from a local authority's perspective:

- Cycle advocates are incredible!
- Their passion & dedication is overwhelming
- If they were not so persistent, frankly the facilities would just not be there
- Passion also brings out emotion
- A Road Safety Coordinator can struggle to meet their needs within this single role (I can also relate to this, as road safety is a very wide brief, of which cycling is one small part)
- Accountability to ratepayers can't disproportionately focus on needs of one small group.
- Relationship sometimes great, sometimes fraught.
- Personalities are issue rather than the issue themselves
- Advocates have a suspicion and distrust of council staff at times
- Advocates are not always comfortable approaching staff this can lead to misunderstanding.
- There is a need to "keep councils in loop". (These last two comments perhaps reflect a breakdown in communication and the impact this has on the relationship).

- Advocates can find it hard to separate a council's political stance (e.g. prioritising/funding) from staff roles.
- I think that funding restrictions are the councils' constant refrain it is a message they think they are not able to get across
- Staff can have the same frustrations working within council as advocates do.
- · Change takes time
- Both parties need to be more open/respectful to allow discussions to follow through
- Need for constructive feedback
- Suggest CAN market themselves more so when Council needs to consult on cycling issues they have access to group of cycling enthusiasts to mediate with.
- The more unpleasant an interaction is, the more chance there is that council staff won't want anything to do with you in future. If there is anger, it is only natural to think "well I can't deal with him that was too hard". The memory is, "that was not a good exchange". Consultation suffers as a result.
- Good relationship between advocates & council staff exists in Christchurch (although not perfect)
- In Christchurch there is a *cycle steering group* (comprised of engineers, advocates, councillors & community reps). Group works on cycle strategy, advise/lobby council, input into annual plan and physical works, education.

Summary

The relationship between advocates & council staff is fundamental to creating good processes around consultation. I guess the question is how much energy should be invested in the relationship and how much in the issue itself. My personal view is that by focussing more on the former, the latter might just still follow. Or is this too simplistic?

Following this presentation, both CAN members and Road Safety Coordinators expressed a need to share information between their respective networks to seek expert cycle advice or to get feedback on particular issues around cycle safety. In an effort to help this along, and on suggestion from the Executive of Road Safety Coordinators Association, Kirsty agreed to be a point of contact for CAN members.

Kirsty also suggests that CAN members access the Community Road Safety Programme website at: **http://www.crsp.net.nz** for more information on what work is being carried out by coordinators and within the community road area nationwide. Kirsty's contact details are:

Kirsty Barr, Road Safety Coordinator. Tasman District Council, Private Bag 4, Richmond, Ph 03-543 8551, email kirsty.barr@tdc.govt.nz.

NEWS FROM THE CAN EXECUTIVE

Executive members designated to keep in touch with groups

The CAN workshop in October last year agreed to establish three positions on the Executive for people responsible for developing communication between CAN groups and the Exec. This was mentioned in the report in the last issue of ChainLinks.

A 'job description' for the role of Exec-group contact person has been developed. The main tasks of the role are:

- first point of contact on the Executive for groups
- a key avenue for CAN and the Executive to provide support and personal contact to groups
- encouragement and support to people seeking to form new groups

As a reminder, the Executive members who have agreed to take on the roles are:

Upper North Island: Bevan Woodward: Ph 09-366 2000 x8308 (w); 09-815 1117 (h); email **bevanw@can.org.nz**

Lower North Island: Christine Cheyne: Ph 06-350 5799 ext 2816 (w); 06-356 3588 (h); email *christinemcheyne@paradise.net.nz*

South Island: Axel Wilke: Ph 03-941 6418 (w); 03-366 9493 (h); email *axel.wilke@can.org.nz*

If you want someone from the Executive to attend a meeting, help you with a problem, or if you're interested in forming a group in your area, get in touch with these three as your first port of call!

#

Lobbying resources now available

CAN has produced two resources to assist you in lobbying local authority councillors and staff.

'What Councils Can Do to Encourage Cycling' is a one page summary of key actions for councillors, transport planners, road safety co-ordinators and enforcement and customer service staff. It aims to help councils get more people cycling, and to better support those who already cycle.

You can use this document to establish contact with your councillors elected late last year - either e-mail it to them, or print it out and send it to them before meeting them. It can also assist you in your work with council staff, or in making submission on your Long Term Council Community Plan (LTCCP).

'What Councils Can Do' is accompanied by a one page guide to campaigning for cycling advocates. It's designed to help you work out what your key objectives are and who your main target audience is.

'50 Ways to Please Your Cyclists' provides more in-depth information to help local and regional authorities to improve conditions for cycling. Use it as follow-up for 'What Councils can do...' or as an important source of information in its own right.

Many thanks to Bevan Woodward and Andrew Macbeth for their hard work in compiling these documents, and to other CANners for their feedback. The resources are available online at

http://www.can.org.nz/articles/What_Councils_can_do.pdf http://www.can.org.nz/articles/50_ways_PDF.pdf

or in hard copy from: CAN, 04-972 2552, PO Box 6491, Auckland.

杨杨杨

Promote yourself!

Would you like to promote your local group and attract more members? Well, good news! - the CAN Executive

has prepared a flyer to help local groups promote themselves.

It's a Word document so you can customise it as required. Exec member Bevan Woodward will e-mail the flyer out to all groups by 3 February, so you'll have it in time for Bike Wise Week. If you have any queries or would like a copy e-mailed to you, please contact Bevan by

(Right:) The CAN Executive working on Marketing Strategy?



Handy tool for cycling advocates

e-mail: bevanw@can.org.nz

CAN have received a CD from New York Bicycling Coalition which has a range of tools in electronic form to assist advocates in improving conditions for cyclists. A copy will be sent out to each group as it's OK to freely reproduce it.

PLANNING AND DESIGN FOR CYCLING

The Retro Look

With the recent release of the *NZ Supplement to Austroads Part 14* (*Bicycles*), we now have consistent guidance on what cycling facilities to provide in New Zealand.

One thing lacking is handy guidance on the minimum road widths required to achieve various traffic lane configurations. A lot of cycle provision work consists of "retro-fitting" cycle facilities onto existing roads. This requires some understanding of what can reasonably be accommodated within various road widths.

The table below enables designers to quickly identify what configurations are practically feasible in their particular situation. Note that these are **not** "desirable minimum" widths; it is expected that greater widths would be used when providing for cyclists on new roads or when kerb replacement is proposed.

Suggested Minimum Road Carriageway Width Table

Minimum Carriageway Width Required for		No Parking		Parking on One Side		Parking on Both Sides	
		50 km/h	70 km/h	50 km/h	70 km/h	50 km/h	70 km/h
Two-lane carriageway	with wide kerbside lanes	8.0m	8.4m	10.3m	10.7m	12.6m	13.0m
	with cycle lanes	8.4m	9.6m	10.9m	12.2m	13.4m	14.8m
	with flush median & cycle lanes	10.9m	12.1m	13.4m	14.7m	15.9m	17.3m
Four-lane carriageway	with wide kerbside lanes	14.0m	14.8m	16.3m	17.1m	18.6m	19.4m
	with cycle lanes	14.4m	16.0m	16.9m	18.6m	19.4m	21.2m
	with flush median & cycle lanes	16.9m	18.5m	19.4m	21.1m	21.9m	23.7m

The assumptions used for the above calculations are based on these minimum values from the *NZ Supplement* and elsewhere:

		(50 km/h)	(70 km/h)
•	Basic traffic lanes:	3.0m	3.2m
•	Wide kerbside lanes:	4.0m	4.2m
•	Basic cycle lanes:	1.2m	1.6m
•	One side of parking + cycle lane	3.7m	4.2m
•	Flush median: (could use narrower sometimes)	2.5m	2.5m

These values assume a flat kerb in good condition, so that all widths can be measured from the kerb face. Also, lane marking widths have not been separately allowed for; they are assumed to straddle the lanes in question. For arterial routes where a significant proportion of heavy vehicles are present, basic traffic lane and flush median widths could be slightly widened. Ideally, parking lane widths should be 2.0m (or less); additional buffer space should be added to the cycle lane or wide kerbside lane width.

When using the above table, the signposted speed limit should be used unless operating speeds are known to be significantly higher. You can interpolate/extrapolate for other road speeds.

There are a number of caveats to the above values, and you should pay close attention to the notes that accompany the relevant parts (Section 4.4) in the *NZ Supplement*. But the above table provides a handy starting guide to see what can be reasonably retro-fitted to existing roads to help cyclists.

Remember that there are other tricks available to find space for cyclists (e.g. "road diets"), so refer to Section 4.3.2 in *Austroads Part 14* and the previous *ChainLinks* design article on this topic (Jan-Mar '03).

Some Relevant Reading

- Transit NZ, 2004. NZ Supplement to the Austroads Guide to Traffic Engineering Practice Part 14: Bicycles (draft Oct '04) should be your first port of call for cycle design standards in NZ. Web: http://www.transit.govt.nz/technical_information/view_manual.js p?content_type=manual&=edit&primary_key=43&action=edit
- Austroads, 1999. *Guide to Traffic Engineering Practice, Part 14: Bicycles*, is the key document that the *NZ Supplement* refers to and should also be on your bookshelf.
- G.Koorey, 2003. "Space The Final Frontier", *ChainLinks Jan-Mar '03*, summarises some of the techniques available to find a bit more space on the road. Web: *http://www.can.org.nz/technical/*

Glen Koorey (koorey@paradise.net.nz, ph.03-3317504)

WHEELBENDERS, FRAMESCRAPERS AND CYCLING ADVOCATES

By Ron McGann

In ChainLinks Apr – May 2004, there was a news item about the successful outcome of a two year campaign by Cycle Aware Wellington and Kapiti Cycling to get Wellington Regional Council to install bike parking racks outside Wellington Railway Station.

ChainLinks' readers may be interested to know what eventuated at Wellington Railway Station. Photo 1 shows the bike racks installed on the left of the station entrance in the open air. Unfortunately they are far from ideal bicycle parking facilities.



Photo 1: Bicycle parking racks outside Wellington Railway Station.

They consist of:

• a wheelbender rack which can hold nine bicycles. These wheelbender racks do not support modern bicycles properly, are capable of damaging front or rear

wheels as well as rear derailleur arms and are not suitable for securely locking bicycles with U locks which is common practice for cyclists these days. Often the versions shown here have pipe spacing suited to narrow roadster bike wheels of yesteryear rather than the wider-tyred mountain bikes of the present era.

Photo 2: Metal to metal contact on Framescraper bike racks outside Wellington Railway Station.

three framescraper Sheffield hitching rail racks. These racks, which are common around Wellington City, consist of painted galvanised steel pipe without any plastic rubber padding or to prevent and derailleur frame/paint damage bicycles using them. Many of the City Council *framescraper* stands have their paint scraped off by bicycles leaning against them. In turn the stands have scraped their share of paint off bicycles where metal touches metal (see Photo 2). These racks don't have any metal rings through which cyclists can loop their locking cable or U lock to keep



their bicycles upright. If cyclists lock the top tube of their bicycles to the top of the stand, the bicycles can slip, if bumped or be blown over on windy days, and the bicycles can slide down the rack. The lack of any padding on these racks, as well as scraping paint, can also cause *dings* in the very thin-walled alloy frame tubing of modern bicycles. There are three more *framescraper* bike stands on the right of the station entrance.

- an *out in the weather* location. Although the City/Regional Councils have constructed mushroom shelters and covered walkways outside the station and nearby streets for people waiting for trains or walking to/from the station, there is no such provision for bicycles and if it rains, the bicycles, including their saddles get wet! Why should cyclists have to ride around town with wet bums and de-lubricated chains? Another *not so obvious hazard* for cyclists using the railway station outdoor parking facilities is that directly above the bicycle parking stands in nooks and crannies of the station front wall is where the pigeons reside. Their lack of toilet training when they were little pigeons is evident from the extensive deposits on the station wall and the concrete area at ground level where the bike stands are located.
- A simpler type of bicycle parking arrangement (similar to the old reliable parking meter post of last century and now replaced by on-street cash registers) is also available at Wellington Railway Station (see Photo 3). The bicycle is locked vertically by cable to one of the metal poles

supporting one of the two passenger mushroom shelters outside Wellington Railway Station. The roof of the shelter protects the bicycle from the elements, while the Wheelbender/Framescraper stands do not.

Photo 3: Bicycle (under cover) locked to metal pole supporting passenger mushroom shelter outside Wellington Station.



Elsewhere around Wellington, Council policy is to give all parked bicycles plenty of fresh air, as can be seen with the *framescraper* racks outside the Central Library (see Photo 4).

Just around the corner there is a wide concourse on the northern side of the Library, which is completely sheltered from the weather (see Photo 5), but there are no bike racks there!



Photo 4: Sheffield framescraper bike stands outside Wellington Central Library in the open air. Note: the leftmost stand has a suggested modification.

Photo 5: Wide bikerack-less sheltered concourse on the northern side of Wellington Central Library.

Padding on bicycle racks

None of the on-street bicycle racks around New Zealand has any padding. One wonders why. Maybe the average Kiwi cyclist who uses these racks is unaware that it is relatively easy to cover the racks with plastic tubing, or perhaps the Kiwi cyclists don't notice (or care) whether bicycle paint is scraped and/or the tubing dinged. Certainly motorists are concerned



about scraped paint/dented panels when parking at supermarkets and all supermarkets have notices in the parking areas disclaiming responsibility for damage caused by their trolleys. Maybe cyclists are indifferent when it comes to cosmetic damage to *their vehicles* (bicycles)?

On the other hand bike racks designed for fitting to towballs of motor vehicles are padded in order to avoid frame paint damage. Every year the Lake Taupo Cycle Challenge organisers shift thousands of bikes on large trucks and trailers on specially designed steel racks, padded with foam plastic to avoid any damage to the participants' bikes. The 26 metre vertically-parked bike rack in the basement of NZ Post building in Wellington (see Photo 6) has plastic tubing on all the hooks on which the bikes are hung. The horizontal stainless steel cable to which bikes are locked, also has plastic tubing covering it, resulting in no frame or gear train damage.

Just about every large supermarket and McDonalds in New Zealand has one of the *Wheelbender* bike parking racks. Some, like Newtown Mall in Wellington, even have new ones, but many of them are in various states of disrepair.

The other major offenders who routinely provide *wheelbender* bicycle parking facilities (if they provide any parking at all) are *Bike Shops*! They

also commonly use this type of stand to support bikes on display in their shops.

Photo 6: NZ Post bike rack with plastic covered hooks and horizontal plastic covered locking cable.



Improving the Bicycle Parking Situation:

What can be done to improve this less than ideal bicycle parking situation?

The Sheffield parking stand can be simply improved by welding to the top pipe two horizontal steel rods with U-shaped ends to act as a cradle for bicycle top tubes (see Photo 4). These steel rods would be covered with plastic tubing and would support the top tube of the parked bicycles in the same manner as some basic models of bike racks attached to the tow balls of motor vehicles. The bicycles on the modified Sheffield stands would be supported vertically and not fall over if bumped or buffeted by the wind and the bicycles could still be locked by cable or U lock to the main part of the stand. An additional steel ring welded to the stand would be useful for securing the bicycle frame/wheels to the stand via a cable or U lock.

Cycling advocates should contact local supermarkets and bike shops to inform them of the unsuitability of their bicycle parking facilities and supply alternative improved designs for replacement.

Cycling advocates should also consider lobbying their local councils to *bring back parking meters* as they were *everywhere* around the city and their poles provided practical immovable objects to lock bicycles to while the cyclists went about their shopping.

Want to get something off your chest?

ChainLinks welcomes letters and articles on any relevant topic; whether in response to a previous article, or on something completely new. So get writing today! Send your letters/articles to our *ChainLinks* Editor at *chainlinks@can.org.nz*, or c/ PO Box 6491 Auckland.

QUOTABLE QUOTES

"I need to get the feel for what it's like in traffic - on a bike, or in a train or bus... There is no doubt a city this size can do better by giving better choices to people."

New Auckland Regional Transport Authority chief executive Alan Thompson has been keen to try out all the city's transport options, but he has a tough job ahead of him to get others to follow suit... (NZ Herald, 2/12/04)

"The children are telling us over and over again in our surveys that they would prefer to cycle and walk to school, yet their parents are taking that choice away from them."

North Shore City transport operations manager Tom Morton is frustrated at parents' attitudes. (NZ Herald, 2/12/04)

"Once we started we realised what a brilliant way to travel it is. We have been offered so much hospitality simply because we are on our bikes."

English tourist Sue Gill observes an interesting phenomenon while pursuing her dream of cycling around the world to New Zealand with her partner. (Nelson Mail 7/1/05)

"One of the good things about it is that the people who use it say hello to each other. It seems a small thing, but really it is important in this day and age when (people) are separated from one another."

Napier Mayor (and keen biker) Barbara Arnott is thrilled with the success of the district's Rotary pathways. (Dominion Post 8/1/05)

"Our grandfathers worked hard to build things, our fathers pulled them all apart, and now we're trying to put them back together again,"

Chatto Creek local Gray Campbell is proud to be part of the success of the Otago Central Rail Trail. (Otago Daily Times, 9/1/05)

"We have got to start to push [cycling] as a recommended alternative. There are a lot of plusses for it."

Ashburton District Council Roading & Street Services Manager Dave Robertson wants his town to jump on the cycling strategy bandwagon this year. (Ashburton Guardian 26/1/05)

BICYCLE CRASHES AND INJURIES

Human error and rider behavior are the most common causes of bicycle crashes, argues John Schubert.

A friend of mine often says, "When I go to parties and tell people I'm an oncologist, it's a conversation stopper." An equally effective conversation stopper is to tell people, "I'm a forensic expert in bicycle accident reconstruction." Everyone's geek-meter starts flashing, and someone breaks the uncomfortable silence by saying, "Hey, how 'bout them Red Sox." But regardless of whether you want me at your next party, this much I can promise you:

I've learned a lot about who gets hurt, who doesn't, and why. Here are the major points, which I'll return to discuss later:

- (1) Adventure Cycling Association events and tours have a very good safety record. Good old fashioned road touring, the kind we were founded to promote, is safe when done properly.
- (2) Most bike accidents are simple falls or collisions with fixed objects, not collisions with motor vehicles.
- (3) Of those accidents that are collisions with motor vehicles, the likelihood that the accident is the rider's fault varies inversely with the rider's age.
- (4) A rider's skill and judgment have a dramatic effect on riding injury free or not. Skill and judgment have a greater effect than all other factors combined.

Crashes have (A) causes, (B) ways of being prevented, and (C) ways of leaving evidence that can assign fault.

As a cyclist, your biggest concern should be with prevention. How fault is determined has an impact on both our legal rights and the social acceptability of what we do. It also affects how the legal system treats the parties to an accident.

According to Richard Blomberg, former chair of the National Aeronautics and Space Administration safety committee and a distinguished researcher on human factors in bicycle accidents, "Your safety objective is to break the causal chain of the crash. This might not be strictly assigning fault. In a car/bike collision, a cyclist may be at fault, but the best way to break the causal chain might be to affect motorist behavior."

All of us can think of simple examples of what Blomberg is talking about. When driving, you scan for kids popping out of driveways or otherwise doing the unexpected. You brake to avoid these kids, even if they are behaving incorrectly. Likewise, when cycling, you should behave properly and look for other people's mistakes so you can avoid accidents.

The causes of bicycle crashes are usually simple. I've been reviewing the literature on accident causes for twenty-seven years, and what continually emerges is that most crashes are caused by basic errors in rider behavior. (Which means these accidents can't be prevented by "safe places to ride," especially when those "safe places" have unsafe intersection designs.)

For simple falls, the crash-causing behavior is very often poor control of the bike. Since it's easy for a willing student to learn good bike-handling skills, the obvious accident-reducing intervention is to teach those skills.

For bike/motor vehicle collisions, the crash-causing behaviors are often very basic errors. Riding on the wrong side of the road is at the top of just about every accident-cause study ever performed. Maneuvers such as running stop signs and abruptly swerving are also high on the list. And the ever-popular invisible nighttime rider continues to dominate the statistics. A few years ago, Washington researcher David Smith did an in-depth study of one teenage and five adult fatal bicycle accidents that were reported in the Seattle Times over an eighteen-month period. All six were riding at night without lights. The teenager was riding with her father, who was not injured in the collision. Another, a lightless sixty-six-year-old, ran a stop sign resulting in a collision, which caused his death.

This tells us a lot. When you and I think of bicycle safety education, we might think of sharpening our rock dodging skills or practicing hand signals so we can negotiate a traffic circle. But most of the people who are getting hurt and killed simply need to be convinced that riding on the correct side of the road, using lights, and believing in traffic control devices will improve their safety.

Let us return to what I call the Blomberg Doctrine. The rider can prevent many crashes that have causes in addition to rider error. The rider just has to be alert enough to break the causal chain. This may be as simple as steering around a pothole or as erudite as taking possession of the traffic lane when appropriate.

A former Olympic cyclist once told me of a crash in which he collided with a motorist emerging from a driveway. "I was in the bike lane, and he didn't see me," the Olympian said. I thought, "Well, if you had ignored the bike lane and positioned yourself away from the curb in the flow of traffic, you'd have been in a much more visible location. That may well have prevented the crash."

Some bicycle advocates object to giving riders advice like this. They don't want you, the noble, non-polluting cyclist, to have to watch out for other people's errors. One nationally prominent advocate once told me she opposed education programs because she thought they were "blaming the victim."

Nonsense. This is basic defensive driving, and it's part of the Blomberg Doctrine of avoiding the crash any way you can. I'm much more concerned

with my personal safety than I am with some political notion that I deserve "victimhood" for blowing through stop signs at night without lights.

So what are the greatest opportunities for improving the public's accident rate? I think the best one is to sell cycling as a skill to acquire, much the way we tend to think of golf. No golfing novice believes he'll enjoy the sport much if he doesn't learn the basic skill set. Why should the toy bike syndrome exist in cycling?

According to Adventure Cycling Tours Director Brian Martindale, each year Adventure Cycling launches 900 riders on 11,000 rider days. It's a bad year if Martindale hears of one or two car/bike collisions. Dehydration and minor injuries are more typical incidents.

Does this mean that riding is perfectly safe? The answer is no. The safer you ride, the greater the odds are that if you do have a crash it'll be another person's fault. The odds are also good that you can avoid that other person entirely, and in a world that is never risk-free, well-informed cycling emerges as reasonably safe. So go get on your bike and have fun.

Copyright 2004 by John Schubert. First published in 'Adventure Cyclist', Sep/Oct 2004: http://www.adventurecycling.org

NEW MATERIAL IN THE CAN LIBRARY

The following material has been added to the CAN library:

Advocacy

Mallard T, *Lobbying and the government*, Wellington, NZ, 2003, 7pp. Text of a speech given to the Four Winds Communications seminar, Te Papa, 25/11/03. Available at

http://www.beehive.govt.nz/PrintDocument.cfm?DocumentID=18449

New York Bicycling Coalition, *Improving Bicycling and Pedestrian Safety in New York State*, New York Bicycling Coalition, New York, NJ, USA, 2003. This CD contains a series of powerful tools in electronic form (including workshop resources, videos & pictures) which advocates and professionals can use to improve bicycling and pedestrian safety.

Environment

Department of Prime Minister & Cabinet, *Sustainable Development for New Zealand - Programme of Action,* Department of Prime Minister & Cabinet, Wellington, NZ, 2003, 30pp. Available on-line.

Engwicht D, Street Reclaiming: Creating Livable Streets and Vibrant Communities, New Society Publishers, Gabriola Island, Canada, 1999, 207pp

Ministry of Economic Development, *Sustainable Energy - Creating a Sustainable Energy System*, Ministry of Economic Development, Wellington, NZ, 2004, 72pp. Also summary report (23pp).

Facilities

Department of the Environment & Heritage, *Cycle Connect Guidelines: bicycle lockers at public transport nodes,* Department of the Environment & Heritage, Canberra, Australia, 2004, 8pp. Promotes provision of cycle lockers at public transport nodes and gives advice on applying for funding for them. Available on-line.

Transit NZ, New Zealand Supplement to the Austroads Guide to Traffic Engineering Practice Part 14: Bicycles, Transit NZ, Wellington, NZ, 2004, 25pp. Available on-line at http://www.transit.govt.nz. CAN also holds a copy of Austroads 14.

Wilke A, *Cyclists at Wide Intersections*, Christchurch, NZ, 1999, 30pp. Examines the problem of insufficient intergreen times for cyclists at wide signalised intersections on multi-lane avenues in Christchurch. A proposal for an all-red time extension on demand using detectors within the intersection is recommended. Available electronically.

Funding

Lawrie J, Guenther J, Cook T & Meletiou M, *The Economic Impact of Investments in Bicycle Facilities: A Case Study of the Northern Outer Banks,* North Carolina Department of Transportation, Raleigh, North Carolina, USA, 2004, 11pp. Study overview only. Demonstrates the benefits of 10 years of investment in bicycle facilities. Available on-line.

General

Towards Sustainable Land Transport - Conference Proceedings, NZIHT, NZ, 2004. CD-ROM - only works on Windows platform.

Health

Hillman M, *The Impact of Transport Policy on Children's Development,* Canterbury, UK, 1999, 9pp. Paper delivered to Canterbury Safe Routes to Schools Project Seminar, 29 May 1999.

Kjellstrom T & Hill S, *New Zealand Evidence for Health Impacts of Transport,* National Health Committee, Wellington, NZ, 2002, 57pp. Background paper prepared for the Public Health Advisory Committee.

Sullivan C, Oakden J, Young J, Butcher H, Lawson R, *Obstacles to Action - A Study of New Zealanders' Physical Activity and Nutrition*, SPARC, Wellington, NZ, 2003, 20pp. Overview report only. Other parts available at *http://www.sparc.org.nz*

Miscellaneous

Kennett S, Kennett J etc., *Ride - the story of cycling in New Zealand,* The Kennett Brothers, Wellington, NZ, 2004, 213pp. 2 copies held.

Litman, T & Blair R, *Managing Personal Mobility Devices (PMDs) On Nonmotorized Facilities,* Victoria Transport Policy Institute, Victoria, British Colombia, Canada, 2004, 17pp.

Planning

Hamilton City Council, *Cycling in Hamilton*, Hamilton City Council, Hamilton, NZ, 2003, 9pp. Excerpt from HCC Policy Manual.

Pucher J & Buehler R, *Transport Policies in Central & Eastern Europe*, New Brunswick, NJ, USA 2003, 19pp. Available on-line.

Wilke A, *The Forgotten Transport Modes - Planning for the Future*, Christchurch, NZ, 1999, 21pp. Gives helpful concepts of how to engineer the transport sector for the whole community without reducing the options available to future generations. Available electronically.

Promotion

Gribble A, *Strategies and initiatives to improve cycle participation and safety - A background report,* Allen & Clarke, Wellington, NZ, 2004, 46pp. Report prepared for the Health Sponsorship Council & Bike Wise. Available electronically.

Ogilvie D, Egan M, Hamilton V & Petticrew M, *Promoting walking and cycling as an alternative to using cars: systematic review,* British Medical Journal, Vol 329, UK, 2004, pp763-766. Full version of article at *http://bmj.com/cgi/doi/10.1136/bmj.38216.714560.55*

Roth M, Overcoming obstacles of car culture: promoting an alternative to car dependence instead of another travel mode, Brisbane, Australia, 2003, 10pp. Available on-line.

Transport 2000, Realising the potential - walking and cycling in London, Transport 2000, London UK, 2004, 2pp. Leaflet based on data in the report *The Potential for Walking and Cycling in London*. Leaflet available online.

Safety

Koorey G, *Cycling and Walking Safety from a National Perspective - New Thinking Needed*, Christchurch, NZ, 2004, 30pp. Printout of powerpoint presentation made at the TRAFINZ conference, Napier, July 2004. Electronic version available at *http://www.can.org.nz*

Ministry of Transport and Communications, *Road Safety Programme 2001-2005*, Ministry of Transport and Communications, Helsinki, Finland, 2001, 51pp. Available on-line.

Rose J, *If the helmet fits, wear it,* Consumer, Wellington, NZ, Sept 2004, pp20-22. Article deals with a variety of safety issues, with helmets to the fore.

Strategy

Banks Peninsula District Council, *Recreation Plan*, Banks Peninsula District Council, Lyttleton, NZ 103pp.

Christchurch City Council, *Cycling Strategy,* Christchurch City Council, Christchurch, NZ, 2004, 37pp.

Environment Canterbury, *Model Cycling Strategy*, Environment Canterbury, Christchurch, NZ, 2003, 31pp. A model strategy for use by Canterbury's constituent councils in developing cycling strategies for their areas.

Environment Southland, Southland Regional Transport Strategy, Environment Southland, Invercargill, NZ, 2003, 67pp.

Environment Waikato, *Cycling and Walking Strategy for the Waikato Region* - *Workshop Proceedings and Discussion Paper*, Environment Waikato, Hamilton, NZ, 2004

Hamilton City Council, *Hamilton's Integrated Transport Strategy*, Hamilton City Council, Hamilton, NZ, 1999, 52pp.

Hutt City Council, *Cycling in Hutt City - Review of Policies and Plans,* Hutt City Council, Hutt City, NZ, 1998, 55pp.

Kapiti Coast District Council, *Cycleways, Walkways and Bridleways Strategy*, Kapiti Coast District Council, Paraparaumu, NZ, 2004, 31pp.

Nelson City Council, *Cycle Strategy 2001 - Cycle Safety & Route Options*, Nelson City Council, Nelson, NZ, 2001, 71pp.

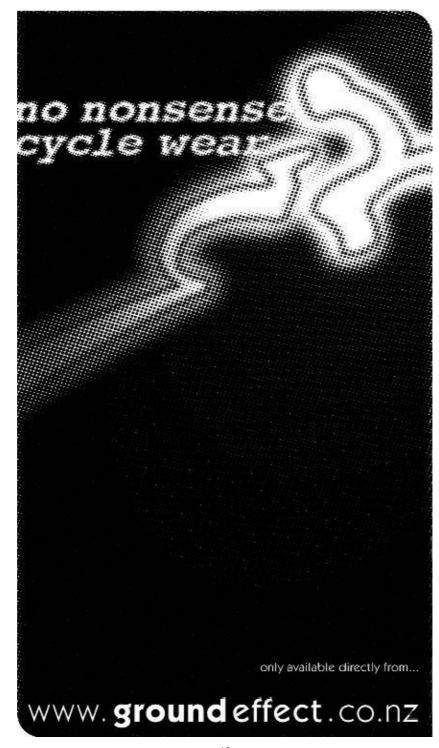
North Shore City Council, *Cycling is for everyone - North Shore City Strategic Cycle Plan*, North Shore City Council, North Shore, NZ, 2003, 52pp

Opus International Consultants, *Rotorua Cycleway Policy & Action Plans*, Opus International Consultants, Hamilton, NZ, 1999, 105pp.

Timaru District Council, *Draft Active Transport Strategy - Timaru District,* Timaru District Council, Timaru, NZ, 2004, 19pp.

Wanganui District Council, *The Wanganui Cycling Strategy,* Wanganui District Council, Wanganui, NZ, 2003, 19pp.

If you're interested in donating money or publications to the CAN library, or if you want to suggest items for us to buy, please contact Robert Ibell on 04-972 2552, *dawbell@actrix.co.nz*. See the CAN website for a full listing of the library resources. Contact Robert (as above) for a paper copy, or to borrow stuff.



JOIN CAN Name	NC)W - Recei	ve <i>ChainLinks</i> every to	wo months!
Address	••••			
nduress				
Phone	••••			
Fax				
Email				
Occupation				
MEMBERS	SH	IP FEES	(per calendar year)	
Unwaged		\$15	Membership Fee	\$
Waged		\$20	Plus a donation of	\$
Family		\$25	Total	\$
Supporting Organisatio	n	\$50	Please make cheque pa Cycling Advocates Netv	
Please send ii	nfo	rmation abo	out 'Cycle Safe' Insurance [
How did you	fino	d out about	CAN?	
		•	que to: Cycling Advocate	

We respect your privacy and won't give your details to anyone not affiliated with CAN.

Deadline for next issue of ChainLinks: Friday Mar 25th 2005

Please submit news items, articles, "Letters to the Editor", "comment", etc. Send to ChainLinks@can.org.nz, or post items c/o CAN, PO Box 6491, Auckland - electronic submission is strongly encouraged. For advertising enquiries please email *secretary@can.org.nz* or write to CAN.





