Submission No 53

INQUIRY INTO VULNERABLE ROAD USERS

Organisation: City of Sydney

Name: Mr Terry Lee-Williams

Position: Manager, Transport Strategy

Telephone: (02) 9265 9333

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Submission by the City of Sydney

Staysafe Committee

Inquiry into Vulnerable Road User Safety

Bicycles

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Prepared by:
Len Woodman - Road Safety Project Coordinator
Fiona Campbell – Manager, Cycling Strategy

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Introduction

Riding a bike is a highly efficient form of transport for short to moderate distances. Bikes provide exercise, do not pollute the air nor create noise. With more people riding bikes traffic congestion in cities is reduced. It is easier and less costly to park and bicycles create negligible damage to roads. The health benefits for the community are enormous.

There is a much lower likelihood of causing a fatality by riding a bike than driving a motor vehicle. Research in the U.K. has found that *the gain of 'life years' through improved fitness among people who regularly cycle is "about 20 times greater than the loss of 'life years' through cycle fatalities* (*Road Transport & Health*, British Medical Association, London, 1997).

The City of Sydney welcomes the opportunity to have input into this *Inquiry into Vulnerable Road User Safety* and supports all initiatives which bring about a reduction in road trauma involving bicycle riders, motorcyclists and all other road users, whilst increasing active transport.

In June 2009 the City of Sydney made a submission to the Staysafe I*nquiry into Pedestrian Safety*. The City believes that the current inquiry will complement the Pedestrian Inquiry and provide valuable information and feedback that will help the City of Sydney achieve its goals of making Sydney a world leader in terms of bike riding and pedestrian safety and amenity.

In 2007 the City engaged the world-leading expert Danish Architect Professor Jan Gehl and his team to conduct a Public Spaces and Public Life survey just as he had done in London, Copenhagen, Wellington, Stockholm, Rotterdam and Zurich.

Professor Gehl said of Sydney, "*Sydney has excellent natural conditions for developing a strong cycle culture since the climate and topography does not provide too many difficulties.*"

The *City of Sydney Cycle Strategy and Action Plan 2007-2017* is Council's commitment to making bike riding an attractive and safe choice of transport. The strategy outlines the infrastructure needed to ensure a safer and more comfortable cycling environment and the social initiatives that will encourage more people to ride bikes. It is based on comprehensive analysis of cycling issues prepared by consultants for the City with significant input from the community during its preparation.

The City is already building the first parts of a high-quality 200 kilometre bicycle network which will create cycling links with surrounding council areas and between the villages in our LGA.

The introduction of the Strategy is timely given the substantial increase in cycling that is occurring with record sales of new bikes and visibly more riders within the City. Bike riders have been increasing in numbers at the rate of about 10 per cent each year over the past 10 years. The Strategy will accommodate and manage the increase in bike riders and encourage even more people to choose a bicycle as their preferred mode of travel.

The *City of Sydney Cycle Strategy and Action Plan 2007-2017* is a major component of the *Sustainable Sydney 2030 Plan,* which aims to make Sydney a Green, Global and Connected City. More bike riding and more walking together with reduced

conventional motor vehicle use will benefit the people of Sydney and contribute to improved safety, health and environment.

There is a need for people to have choices in mode of transport and this includes motorcycles and cars, particularly for travelling longer distances or carrying heavy goods. The City of Sydney supports car share schemes which contribute to reduced car ownership and distance travelled. In 2008 the city released the *Motorcycle and Scooter Strategy and Action Plan 2008 – 2011* demonstrating how motor scooters and motorcycles can be accommodated in Sydney.

As the number of residents and commuters riding bikes, walking and riding motorcycles increases there is, in the short term, more potential for conflict between these more vulnerable road users and other motor vehicles.

The ultimate solution to the competition for road space is to follow the example of many cities around the world and restrict unnecessary motor vehicle movement where people walk or ride bicycles. This is not only important in terms of road safety but for long term solutions to environmental issues including climate change. It is the City's intention to create a friendly environment which encourages walking and cycling.

The key solutions to road trauma within the City of Sydney and particularly central Sydney are clearly seen as reducing unnecessary vehicle accessibility, reducing vehicle speeds and improving pedestrian and bicycle movement within the city.

The City of Sydney is aware that there is a need for essential motorised vehicles within the urban areas to cater for public transport and essential services and to supply and service residents and businesses. Operators of these vehicles will also benefit from changes to the City environment that favours bike riders and pedestrians. Less traffic congestion will make it more efficient and safer for deliveries and for taxi and bus movements.

With less congestion there will still be the issue of vehicles being driven at inappropriate speeds that are too high where there are high numbers of people walking and riding bikes. Many European cities have adopted 30 km/h (or 20 mph in the U.K.) as the standard speed limit for residential and CBD areas.

A speed limit of 50km/h is considered too high for central Sydney where the speed limit should be reduced at least to 40km/h. Elsewhere in the City of Sydney Local Government Area lower speed limits should apply to the inner city residential areas to improve safety and amenity for bike riders and pedestrians.

There are many different speed limits around the City of Sydney from 10km/h in Shared Zones, to 40km/hr in residential areas, a 50km/h Urban Speed Limit with a number of State Roads zoned at 60km/h. Clearly this can be confusing, particularly where there are some streets with 50 km/h signs and others without signs that are zoned 50 km/h. The City was pleased that the RTA introduced a 30 km/h speed limit along Druitt Street in 2008 following a number of pedestrian injuries and a fatal crash in 2007. The City suggests that a consistent regime of low speed limits be applied to city streets with immediate effect which will make all speed limits more effective.

According to considerable research the most effective way to improve safety for bike riders (and other vulnerable road users) is to increase the number of people riding bikes *(* P L Jacobsen, *Safety in numbers: more walkers and bicyclists, safer walking and bicycling* BMJ 2003). Rates of cyclist injuries and fatalities are lower in countries

where more people regularly cycle. The theory of *safety in numbers* will be realised as the bike network grows across the City of Sydney and neighbouring councils.

Sustainable Sydney 2030

In less than a decade the residential population of the City of Sydney has increased by 49,000 (38%). It is estimated that employment for the current City of Sydney LGA totalled approximately 385,000, including 300,000 within the CBD and Pyrmont-Ultimo alone. An estimated 483,000 people travel to the City on any day to shop, be educated, conduct business with firms in the City or simply to be entertained.

With a population of 177,000 and over 850,000 people in Sydney on a typical weekday, pedestrians, bicycles and motor vehicles compete for space. As a result of a disproportionate bias to maintaining high vehicle capacity and speed, the safety of vulnerable road users is compromised.

The City of Sydney has consulted widely to identify how Sydney can be a world class city in terms of pedestrian safety and amenity. In 2007 the City engaged Jan Gehl Architects, the internationally renowned specialists in city planning, to undertake research and studies that would provide the basis for the City of Sydney to plan the future of the City.

The resulting *Public Life and Public Spaces Study* is a key component of the City's plan for the future, *Sustainable Sydney 2030.*

The *Sustainable Sydney 2030 Plan* proposes key directions for the City and a series of progressive actions for the next 20 years. It sets a strategic framework and agenda for the City's annual Corporate Plans and will drive capital works priorities and work programs for the years to come.

Increasing public transport use and reducing the unnecessary use of private vehicles together with encouraging the riding of bikes and walking as preferred transport modes will be the major objective that impacts on road safety.

The key objectives in *Sustainable Sydney 2030* that relate to vulnerable road user safety issues include giving greater priority to pedestrian and cycle movements and amenity in the City of Sydney by,

- Integrating cycling and pedestrian movement into transport planning,
- Managing the road space to encourage cycling, walking and the use of public transport,
- Reducing speed limits in central Sydney and residential areas to improve safety and amenity for vulnerable road users, and
- Developing a liveable green network between activity hubs which will be a safe and attractive walking and cycling network across the City's streets, parks and open spaces.

The City's key objective with regard to cycling is to follow the lead of cities around the world where the culture of bike riding is more developed and accepted by all road users. The Netherlands, Germany and Denmark are the best examples of where this occurs. The City also looks to cities like London where great efforts are being made to improve the city environment for bike riders and pedestrians.

Dutch, Danish and German cities strongly support the concept that cities are for people. This approach is permeating into other cities around the world that have, since the 1950s been dominated by car use.

Submission addressing the Terms of Reference

The following are the City's comments relating to the Terms of Reference.

This submission covers bike rider safety and bicycle use in the City of Sydney. The Committee will be aware that the City of Sydney considers the implementation of an extensive bicycle network a key feature of the City of Sydney's plan, *Sustainable Sydney 2030.* A bicycle network will not only improve safety and amenity for bike riders, but will create traffic calming and reduce crashes and their severity for all road user groups.

a) Patterns of bicycle usage in Sydney

Whilst Australians in the late 1800s and early 1900s took up cycling with vigour, the introduction of the motor car together with population growth and the excuse that great distances needed to be travelled quickly overtook the bike as the key mode of personal transport.

In the 1990s few people chose to ride to work or ride within the City for recreational purposes. Many of those that did ride to work were confident cyclists with the rider skills to interact with Sydney traffic, or they were professional cyclists working as bicycle couriers. There were few facilities for cyclists either on road or at the end of their trip.

Bicycle couriers received a great deal of negative criticism and were regularly reported on in the media. This was so prevalent that in May 1996 Staysafe presented a report, *Staysafe 30: Pedestrian Safety-Bicycle courier activities in the Sydney CBD.* A number of recommendations were made regarding improving the infrastructure to make it more bicycle friendly and referred to the City of Sydney's strategy, *Accessible City* (1995) which identified a need to improve facilities for commuter cyclists. The number of professional bike couriers has dropped in number to approximately one-third of the 2000 peak of around 220 riders. To address the complaints and negative media reports the City implemented an *Accord with Bicycle Courier Companies* in May 2003. Five courier companies signed the Accord, which included reporting procedures and determined levels of responsibilities for couriers and their employers. The introduction of the Accord resulted in a considerable reduction in complaints and media coverage.

By 2003 there was a noticeable increase in the number of bike riders within the City as commuters and as recreational cyclists. Perhaps inspired by the sporting events of the *Sydney 2000 Olympics* more people seemed to be interested in health and fitness. There was also an increasing number of cyclists joining or starting groups promoting the needs of cyclists.

In 2003, the City of Sydney released its first bicycle strategy, *Central Sydney Bike Plan 2003-2006*. In the same year South Sydney Council, which had a larger resident base and was at this time more receptive to the needs of bike riders, released the *South Sydney Bicycle Plan*.

Following the amalgamation of the City of Sydney and South Sydney Council, the City released the *Cycle Strategy and Action Plan 2007-2017* which clearly stated the City's interest in improving the facilities for bike riders and encouraging cycling as a preferred choice of transport.

Since 2000, according to RTA bicycle counter data, there has been a consistent growth, of around ten per cent per year, in the number of people riding a bike into the City *(NSW State Plan – Annual Performance Report 2010)*. This coincides with a major increase in the number of new bikes sold in recent years. Since 2002 Australian bicycle sales have been in excess of one million each year. Globally, in 2007, 130 million bicycles were sold (Earth Policy Institute, 2007). The ABS Census, 2006, showed an increase in people choosing to ride to work in the capital cities – with 10,887 people (18% increase since 2001) riding to work in Sydney.

Data collected by the Australian Bicycle Council shows that the five major capital cities in Australia all had increases in the use of their key cycle routes between 2005 and 2008 as below:

Sydney	38%
Melbourne	76%
Brisbane	51%
Perth	22%
Adelaide	51%

A survey by the Australian Sports Commission shows that between 2001 and 2008 there has also been the following increases in regular recreational cycling:

Sydney	43%
Melbourne	8% (in 2001 there was already a high number of cyclists)
Brisbane	124%
Perth	14%
Adelaide	63%

The City is building a 200 km bike network to connect the City's villages, green spaces and destinations. Separated cycleways will be constructed for more than a quarter of the bike network. The City's social research shows that 85% of non-riders and occasional riders say they would ride, or ride more, if separated from the hostile traffic conditions found in Sydney. Separated cycleways will give current non-riders and occasional riders the security to start riding in the city.

b) Short and long term trends in bicycle injuries and fatalities across a range of settings, including on-road and off-road uses

Issues relating to crash data collection and supply to road safety practitioners were discussed in detail as part of *Staysafe Committee Report 3/54 – Report on Pedestrian Safety, December 2009* and recommendations were made.

The City of Sydney relies on the official crash data provided by the RTA. There is still a need for crash data to be available within a shorter time frame.

Crash data for incidents that occur away from road related areas are not collected by the RTA. Therefore there is little information regarding crashes involving bicycles in

parks or other open areas. There are occasional reports of "someone being hit" through letters to the City, but statistically this is very low.

It is generally understood, internationally, that many crashes involving bicycles go unreported. To a lesser extent this is true of crashes involving pedestrians and motorcyclists.

Chart 1 below shows all the reported crashes and casualties that occurred within the current boundaries of the City of Sydney in the ten years 1999-2008.

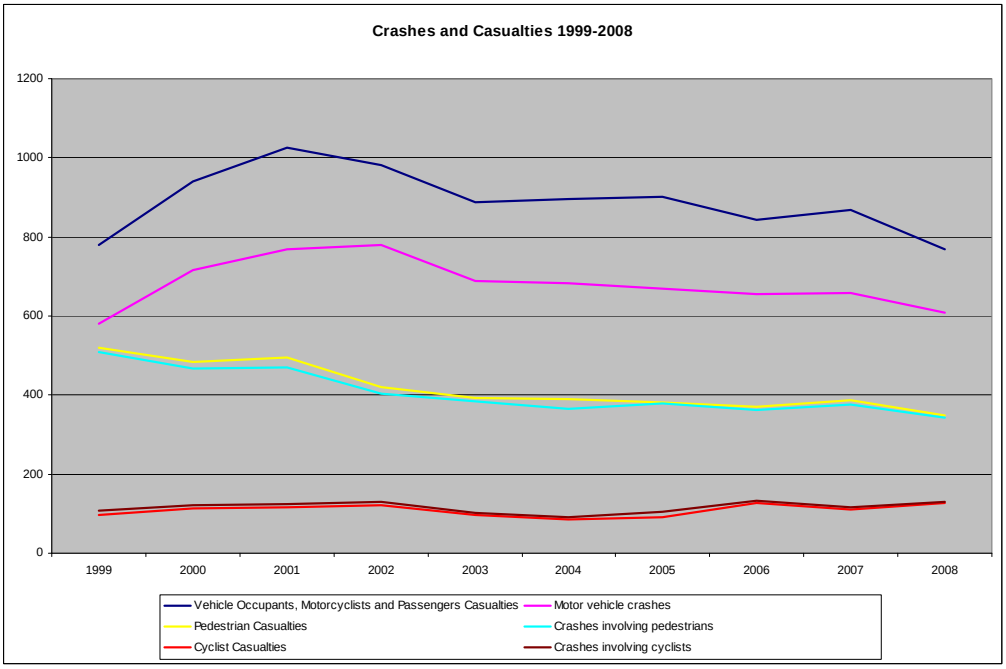
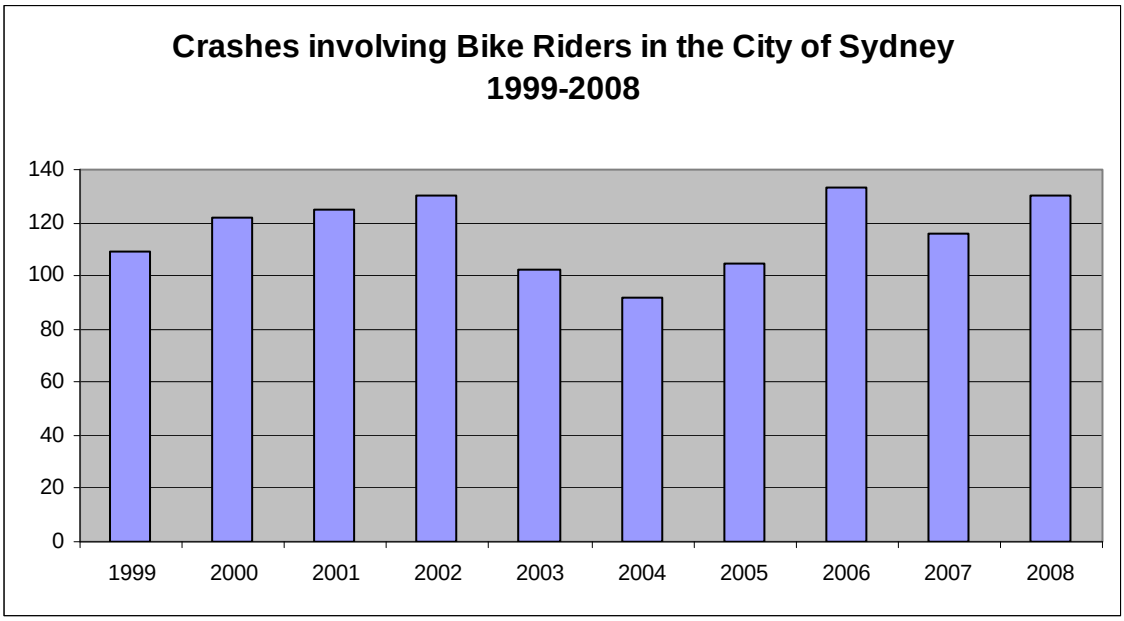
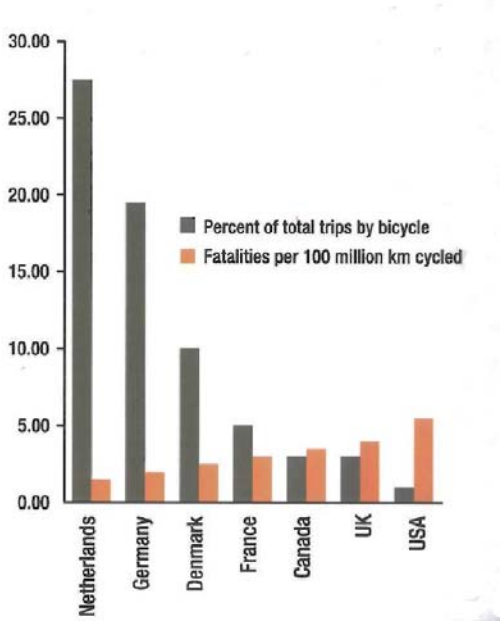


Chart 2 below shows the number of reported crashes that involved a bike rider between 1999 and 2008. Crashes involving bike riders have not increased at the same rate as the growth in bike usage.



Internationally it has been well documented that those countries that have high levels of bike usage for all types of trip have a lower proportion of bicycle related road trauma. The most obvious is the Netherlands, closely followed by the other leaders Germany and Denmark. Chart 3, right, from the Bicycle Federation of Australia's *Cycling Fact Sheet - Cycling and Safety* shows this clearly.



c) Underlying factors in bicycle injuries and fatalities in the City of Sydney

When the crash data is analysed in detail we can identify the type of crashes and separate them into different types. The RTA uses the RUM (Road User Movement) coding system that categorises crashes.

Generally there are four scenarios in which a bike rider is injured.

In the ten years 1999 to 2008:

- The bike rider is in a collision with a motor vehicle – 898;
    - Car – 749
    - Light Truck – 66
    - Bus – 58
    - Motorcycle - 11
    - Heavy Truck – 8
    - Articulated Truck – 6

- The bike rider is in a collision with a pedestrian – 108 occurrences;
- The bike rider is injured in a non-collision crash (i.e. as a result of avoiding a collision with another road user and/or losing control – 68 crashes); and
- The bike rider is in a collision with another bike – four occurrences.

A review of the data supplied by the RTA shows that;

- 13.4 % of crashes involving cyclists were due to vehicle doors opening in their path
- 11.2% of cyclists were hit by vehicles at right angles at cross intersections
- 10.1% of cyclists were hit by vehicles turning right, across the cyclist's path
- 8.4% of cyclists were side swiped
- 6 % of cyclist crashes involved pedestrians stepping into the cyclists path
- 1.2% of cyclist crashes involved pedestrians on a footpath (even taking into consideration under reporting this is a very low number)

Fatal crashes in general are random and rare events. Two bike riders were killed during this ten year period.

One rider was killed in February 2001 as she joined Sussex Street from the RTA constructed Shared Path that links Pyrmont Bridge to Sussex Street and King Street. In 2009 the City opened the first of its separated cycleways along King Street to provide a better and safer link into the CBD.

The second cyclist fatality occurred in October 2004 in Redfern and was as a result of a car occupant opening a door in the path of a 38 year old woman – a very typical risk that bike riders face, representing over thirteen per cent of all reported crashes involving bike riders in the City of Sydney LGA. Hospital admission data which gives a more complete picture of cyclist injuries, shows that opening vehicle doors are the most common cause of cyclist injury representing 40% of all injuries in the CBD and 17% in the rest of the inner City. (*Austroads* AP-R157 – *Pedestrian and Cyclist Safety, 2000*).

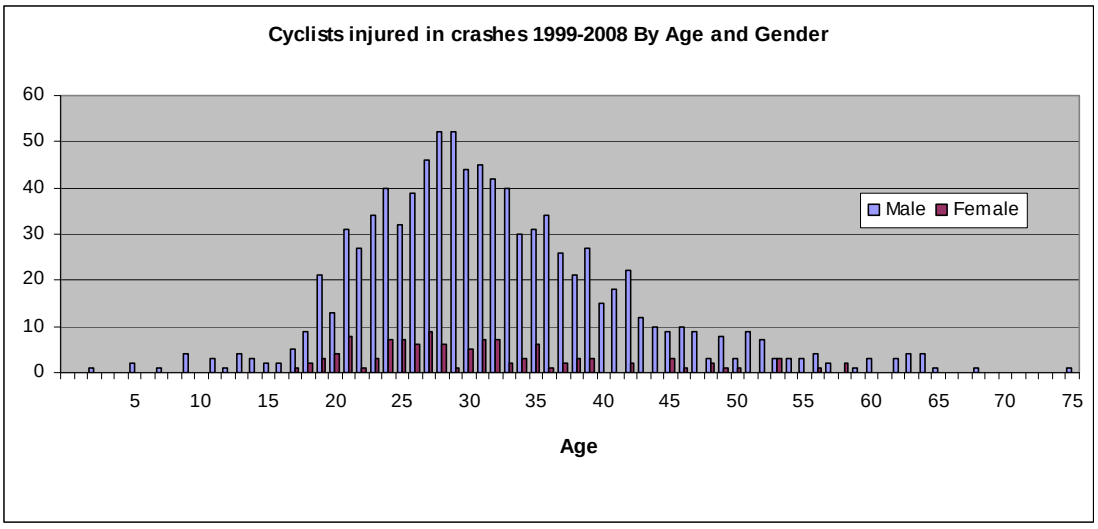


Chart 4, above, shows the breakdown of the ages and gender for the period 1999 to 2010.

Male riders account for 89% of the injured bike riders and also that the highest numbers of bike riders involved are those in their twenties and early thirties. This is a common trend in most vehicle crashes and other types of accidents. It may also be that younger males are more likely to ride under conditions that present greater risks.

When analysing crashes we tend to look to identify who was at fault and not how crashes can be avoided by addressing both the prime cause and other contributory factors. For example cyclists, pedestrians and motorcyclists are sometimes injured as a result of their 'incorrect' actions. As a result they are seen as 'being at fault'. This often leads to the assumption that the driver did not contribute to the crash irrespective of the fact that had they been moving at a speed from which they could stop in time then the crash would not have occurred. Giving bike riders, and pedestrians, more rights, particularly on urban roads may prevent this. This can be seen in countries like the Netherlands, Germany and Denmark where drivers have by law a much greater responsibility to vulnerable road users than in Australia.

d) Current measures and future strategies to address bicycle safety, including education, training and assessment programs

The City of Sydney has taken a lead role in developing and implementing a range of awareness strategies and training programs to address bicycle safety.

Bike rider behaviour

There have been comments made regarding the behaviour of bike riders; including their failure to adhere to road rules and that some ride on footpaths. There have been some reports of anti-social behaviour directed at other road users.

Often complaints relating to bike rider behaviour result from adults riding on footpaths not designated as Shared Paths. In NSW adult riders may only ride on footpaths if they are accompanying a child under twelve years old who is also riding on the footpath. ***Note:*** This does not allow an adult bike rider with a small child in an appropriate seat to ride on a footpath.

In Queensland bicycle riders are allowed to use footpaths, unless specifically signed as "No cycling", as long as they give priority to people walking. In the ACT bike riders may ride on a footpath, giving way to pedestrians, but must dismount if within ten metres of an open shop doorway. Although these jurisdictions allow footpath riding, conflict between bike riders and pedestrians does not appear to be a major road safety issue.

Statistically few crashes are reported between bike riders and walkers. Quite often riders use the footpaths because they feel safer than riding on the roadway. The City's objective of building a comprehensive bike network will contribute to the reduction in the number of people riding bikes on a footpath by, in the first instance making routes safer to travel, and by increasing the number of people choosing to ride which will make riding safer by numbers.

The City of Sydney has already implemented programs aimed at improving bike rider behaviour, including education campaigns. The City also provides free bike riding courses, *"Cycling in the City"*, to improve riders' traffic skills and increase their confidence. This reduces the need for bike riders to use footpaths to travel on because they do not feel confident on the road.

There has been some discussion on the effect of legislation that compels bike riders to wear helmets. Compulsory use of helmets contributes to people not choosing to ride a bike. This in effect reduces the level of participation in cycling activities and therefore does not help make roads safer for bike riders through greater numbers. In all European cities there are no laws requiring bike riders to wear helmets. In the United Kingdom, the most recent reports show that many bike riders are choosing to wear helmets voluntarily. However research also carried out in the U.K. suggests that drivers do not take as much care passing helmet-wearing riders than those without helmets.

Pucher and Buehler have commented on this issue in their paper, *"Making Cycling Irresistible" (2008)*.

> In the USA *(and Australia)*, much of the effort to improve cyclist safety has focused on increasing helmet use, if necessary by law, especially for children. Thus, it is important to emphasize that the much safer cycling in northern Europe is definitely ***not*** due to widespread use of safety helmets. On the contrary, in the

> Netherlands, with the safest cycling of any country, less than one percent of adult cyclists wear helmets, and even among children, only 3-5% wear helmets (Dutch Bicycling Council, 2006; Netherlands Ministry of Transport, 2006). The Dutch cycling experts and planners interviewed for this paper adamantly opposed the [mandatory] use of helmets, claiming that helmets discourage cycling by making it less convenient, less comfortable, and less fashionable. They also mention the possibility that helmets would make cycling more dangerous by giving cyclists a false sense of safety and thus encouraging riskier riding behaviour. At the same time, helmets might reduce the consideration motorists give cyclists, since they might seem less vulnerable if wearing helmets (Walker, 2007).

With the introduction of extensive cycleways, especially where bike riders are separated from motor vehicles as well as reduced speed limits it would be timely to review laws relating to the mandatory use of bike helmets.

Rider education programs

In 2004 the City of Sydney opened a dedicated cycling education centre, the CARES (*Community and Road Education Scheme*) facility at Sydney Park to provide basic rider education for children aged 9-12. Initially rider education was carried out only by police officers from Redfern Police Command operating the facility on weekdays during school terms. The City provided support including bicycles and classroom facilities.

The City's *Cycle Strategy and Action Plan 2007 to 2017* includes programs aimed at reducing crashes involving bike riders. The key objective is to encourage more commuters of all ages and gender to take up riding a bike and to increase the number of journeys to ten percent from the 2006 level of just one per cent.

To help encourage more adults to take up bike riding, many of whom can ride a bike and already own a bike, the City has implemented a rider training program for adults. Since March 2009 the City has engaged a specialist in rider education, Bikewise, who has designed, implemented and managed adult programs continuously. Courses are provided free of charge.

The objective of the *Cycling in the City* course is to improve the traffic skills and confidence of people who have either returned to riding after a period of time, or provide guidance for recreational riders now wishing to become commuter riders. Emphasis is on teaching responsible and low-risk riding techniques for urban bike riding. This includes observation skills and anticipating the actions of others. Safe route planning, to avoid traffic congestion and use of appropriate speed, particularly on Shared Paths is also covered fully.

The half-day courses, which run at least twice-weekly, can be booked on-line and have generally been fully booked since the program started approximately eighteen months ago. Attendance is high and the courses have generated a substantial number of compliments from participants.

To support the *Cycling in the City* courses the City introduced basic bicycle maintenance courses that provide bike riders with the information to keep their bikes safe.

Courses have also been developed for children and a successful pilot program was run with Forest Lodge Public School in June 2010. The City and Bikewise will liaise with the bicycle police at Redfern Police Command in August 2010 to integrate the children's programs that they run at the CARES facility.

The City of Sydney Children's Services unit also runs a number of cycling courses for children as part of their after-school and holiday programs. Emphasis is made, particularly to parents that programs prepare children under twelve with the very basics of riding a bike, so that they can ride away from roads, or on footpaths supervised by an adult.

Behaviour change research

In early 2010 the city of Sydney commissioned consultants GHD to develop a *Cycling Behaviour Change Strategy.* The brief was to develop a strategy that, in the first instance would consider the barriers and enablers to cycling in Sydney and to develop appropriate interventions to increase the take up of bike riding. The second part is to address the issues that result in conflict between bike riders and other road users, in particular pedestrians.

The research has reviewed many programs from around the world and has evaluated their value. The preliminary draft of the report relating to this research has identified a number of interventions that will increase bike riding and improve the on-road and on-path relationship between bike riders and other road users.

Note: The report will not be finalised until late-August 2010 and therefore is not currently available. The final report will be forwarded to the Staysafe Committee as soon as it has been completed.

Driver behaviour

There is concern that some drivers show inadequate respect for vulnerable road users such as cyclists and motorcyclists. Many bike riders travelling in Sydney have encountered instances of abuse from motor vehicle drivers, whether it is verbal or actual physical contact. There are many reports of riders being targeted by drivers. In her article, *Cyclists up against shock-jock ravings,* in the Sydney Morning Herald (27/7/2010) Elizabeth Farrelly quoted Professor John Pucher of Rutgers University in the United States as commenting that there was, "an incredible level of aggression from Sydney motorists – even compared with US cities". This can be witnessed daily on Sydney roads. In the same article Ms Farrelly comments that external influences, in this case a well-known talkback radio presenter, may affect the behaviour of drivers in a negative way towards bike riders. This can result in situations where physical violence occurs.

A view that is often taken by drivers is that because they pay registration fees and bike riders do not then bike riders should not have the same rights to use a road. This may lead to negativity towards bike riders. Those drivers with this view need reminding that working adult cyclists pay taxes that in part pay for road building and maintenance. Also many bike riders own cars but are choosing to ride. In effect these riders could be seen to be subsidising those who drive more.

Another negative view from some drivers revolves around the belief that roads are built for motor vehicles, not bicycles.

In the early 1900s personal mobility in many cities in Australia was influenced by the extension of public transport, predominantly rail and tram, and the bicycle. City streets were designed around the use of horse drawn vehicles and bicycles. Unfortunately the availability of cheap mass produced cars had a major effect on transport modes.

> "In addition to its impact on rural Australia, the bicycle also had a major effect on the people living in cities because it provided them, for the first time ever,

> with personal transport which they could afford. This broke the nexus between where working class people lived and where they worked. It enabled people to explore the hinterland around the city during weekends and on public holidays. **Indeed the demand of touring cyclists for better roads led to the grading and maintenance of many country roads and the first maps were drawn by George Broadbent (himself a cyclist) to assist cyclists – not drivers!**
>
> In 1890 there were an estimated 10,000 cyclists in Melbourne. This number continued to grow up to the early 1920s, when many people moved to motoring primarily because of the cheap Ford Model-T. By then, on average, every household in Melbourne had a bicycle." (*Getting Around,* Graeme Hawthorne 1992).

The opening of vehicle doors in the path of bike riders is the most common cause of injury (and one death) to bike riders in the City of Sydney between 1999 and 2008. More often this is because of lack of care on behalf of drivers and other vehicle occupants.

A greater emphasis could be placed on drivers recognising and dealing with vulnerable road users during the learner driver phase to address these concerns. By doing so, new drivers would learn to respect vulnerable road users when driving.

Compared to drivers in the Netherlands, Germany, Belgium, Denmark, France and other European countries, Australian drivers are inexperienced in treating bike riders as road users. They just do not see enough of them to gain experience in dealing with them as a road user. Increasing numbers of bike riders will over time help to address this. The RTA's Graduated Licensing Scheme (GLS), which requires all new young drivers to complete 120 hours of supervised driving prior to getting a full driving licence, will only begin to have a greater effect as more drivers go through this process. Hopefully more new drivers will have early effective experience in sharing the road with bike riders. The City of Sydney, like most other councils, runs a number of workshops for driver supervisors each year. The City does put a great deal of emphasis on driver attitude towards vulnerable road users, in particular bike riders. The City also operates a specific program, called *Drivin' 4 Employment* that provides comprehensive training for young people who do not have the resources to complete the GLS. During this program new drivers have considerable experience in driving in city and urban areas as part of their 120 hour program. The professional instructor engaged to manage the program, who is also a bike rider, also puts emphasis on sharing the road with bike riders.

In August 2009 the City's Road Safety Officers delivered presentations on the City of Sydney *Cycle Strategy and Action Plan* to members of the Australian Driver Trainers' Association at their meetings around Metropolitan Sydney. This allowed discussion with professional instructors about developing positive attitudes in new drivers towards vulnerable road users. Information about new cycleways was also provided as this was not available from other sources. The professional instructors had a very positive response to the City's work.

The current RTA Learner Driver Log Book places city driving in the "*City and motorway driving"* category and neither cyclists, motorcyclists nor pedestrians are specifically mentioned. All RTA publications relating to motor vehicle driving should be updated to include specific references to driver behaviour towards bike riders and pedestrians.

In many European countries drivers in urban areas are expected to be ready to deal with unexpected and even illegal behaviour by vulnerable road users. It has always been interesting to study the differences between rules and regulations between one jurisdiction and another when it relates to road safety. The difference may contribute to the variations in behaviour between one state and another or one country and another. For example why is it seen as safe to allow bike riders in Belgium to be able to ride contra to one-way traffic in almost all situations, yet in Australia, special signage and markings are required?

The major underlying risk in the City of Sydney is that drivers do not adequately adjust their speed for the narrow city streets and congested inner city conditions.

It is a simple law of physics that the lower the speed of a vehicle then the shorter distance it takes that vehicle to stop. The RTA demonstrates this on their website under *"Why a lower speed limit"*.

Observation of traffic in central Sydney reveals that there is a high incidence of drivers running through red lights. The recent introduction of RTA managed *Safety Cameras* that combines red-light cameras and speed cameras may have some effect on reducing this type of offence. There is scope to adopt this new technology and locate them on all signalised intersections in central Sydney and make drivers aware that they are being 'observed'.

The City of Sydney has made requests to the RTA for lower speed limits in the interest of pedestrian safety. The City recommends that lower speed limits should also be introduced, together with better enforcement of speed limits, in the interest of bike rider safety.

Pedestrian behaviour

Pedestrian behaviour can often compromise bike rider safety particularly when crossing away from controlled crossings. A pedestrian may when crossing inadvertently step into the path of a bike rider simply because they did not see the rider. This may be due to distraction, using a mobile telephone or listening to an audio device. This issue has been discussed in detail as part of Staysafe's *Inquiry into Pedestrian Safety* in 2009.

It must be noted that where conflict occurs between pedestrians and bike riders, there is a greater chance of injury to the rider, compared to the chance of injury to a motor vehicle driver whose vehicle collides with a pedestrian. There is considerable anecdotal evidence that some bike riders who swerve to avoid a pedestrian in their path are injured in the process. Sometimes this is recorded as a single vehicle crash and the fault wrongly attributed to the rider.

The City recommends that the RTA *Road Users' Handbook* be revised to include specific road safety information for pedestrians as well as bike riders and other vehicle drivers.

The City's riding courses strongly emphasise the use of long range observation and anticipation of the actions of other road user and most importantly the importance of travelling at a speed from which a rider can stop safely, under control.

On Shared Paths, where pedestrians have right of way it is reasonable for bike riders, riding at a speed from which they can stop easily, to expect adult pedestrians to be predictable. The City asks bike riders to use their bells, or other forms of polite warning to alert pedestrians of the rider's presence.

City of Sydney safe road user campaigns

The NSW BikePlan has referred to the City of Sydney's marketing campaign that started in early 2009 to encourage safe road use by all road users:

> *Case Study – City of Sydney Safe Road User Campaigns, NSW BikePlan, May 2010.*
>
> Increased cycling and new cycleway designs present their own road safety challenges. In 2009 a City of Sydney marketing campaign reinforced the responsibilities of different road users, whether they're getting around town on two wheels, four wheels or two legs.
>
> The City's marketing campaigns ask bike riders to respect red traffic signals in order to increase safety, protect other road users, and legitimise the perception of cycling as practical, day-to-day transport.
>
> Based on research showing the proportion of cycling injuries in central Sydney involving car doors, the City's driver message encourages motorists to look behind them before getting out.
>
> Pedestrian messages coincided with the opening of Sydney CBD's first bi-directional separated cycleway on King Street. This runs parallel to a road with one-way motor traffic, requiring pedestrians to look both ways.
>
> Complementing the City's safety messages, new pavement markings, developed with RTA support, at busy shared paths, like the popular Pyrmont Bridge path, highlight how pedestrians and cyclists should consider each other's needs.

The pavement markings referred to remind riders they must always give way to pedestrians.

The City has also implemented awareness programs relating to the interaction of bike riders and pedestrians on Shared Paths and in parks and open spaces. The "Considerate Cyclist" campaign uses a combination of media advertising together with on-the-ground activities that promote low-speed, low-risk riding, awareness of pedestrians' right of way on Shared Paths and the use of bells to alert pedestrians of their approach.

[Please refer to Appendix 1 for the graphics relating to these programs.]

The City of Sydney has also produced a number of resources that promote bike riding and provide safety information for road users:

- Sydney's bicycle network – introducing a new transport option for Sydney
- Live Green – Sydney Cycling Map, produced with the University of Sydney and Sydney South West Area Health Service – 2009. A new edition is currently in production.
- Your new cycleway- introducing Bourke Road, Mandible Road and Bowden Streets Priority Cycleways.
- Sydney's bicycle network – keeping safe on our new look streets

[Copies of these resources have been provided for the Inquiry]

e) The integration of bicyclists in the planning and management of the road system in Sydney

Through the City's *Cycle Strategy and Action Plan 2007-2017* the City demonstrates the importance of integrating bike riding into the planning and management of the road system in Sydney. The City has taken the lead role to address global warming and the health of people in the City by initiating this and other strategies that are included in *Sustainable Sydney2030*.

However unlike most overseas jurisdictions the City of Sydney has to involve numerous different agencies including the Roads and Traffic Authority, NSW Transport and Infrastructure and the State Transit Authority. In London, for example there is just one agency, Transport for London (TfL). This greatly simplifies planning and implementation.

City of Sydney Cycle Strategy and Action Plan 2007-2017

The City of Sydney's *Cycle Strategy and Action Plan 2007-2017* is Council's commitment to making cycling an attractive a choice of transport

The strategy outlines the infrastructure needed to ensure a safer and more comfortable cycling environment and the social initiatives that will encourage more people to cycle.

It is based on comprehensive analysis of cycling issues prepared by consultants for the City with significant input sought from the community during its preparation.

The *Cycle Strategy and Action Plan 2007-2017* includes considerable research in how an effective and efficient network should be built. Consideration for safety is paramount and has taken into consideration the available road space in which to build the network.

The key objectives are to provide an integrated and connected network of bicycle routes that supports the on-going increase in bicycle use and to further encourage people of all ages to use bicycles as a preferred mode of travel.

Where possible use is made of separated cycleways where bike riders use a dedicated path alongside a road. This provides a safe lane in which riders have priority and drivers of vehicles are required to give way to them when entering or leaving driveways.

However it is not always possible to completely separate bike riders from other road users. Therefore the network is made up of a number of other types of cycleways. This includes Bike Lanes which are separately marked lanes on roads specifically for bike riders, who must use them. Where motor traffic levels are high and pedestrian activity is low then use is made of Shared Paths, which allows bike riders to share the footway with people walking. Walkers have right-of-way on Shared Paths. To improve accessibility, where possible, *bike only* contra-lanes are provided allowing riders to travel both ways on streets that are marked as one-way for other vehicles.

Mixed traffic lanes are used where other types of cycleway cannot be used for practical reasons. These type of cycleways on quieter and narrower roads do not separate riders from other traffic but markings on the road do inform drivers that cyclists regularly use these routes.

All the types of cycleways used conform to the RTA's *NSW Bicycle Guidelines* and extensive consultation is carried out with the RTA as well as bicycle user groups and organisations such as Bicycle NSW.

A number of the cycleways the City, in conjunction with the RTA, will include treatments that will enhance safety at intersections.

The design shown (right) shows how a separated cycleway can be integrated into a shared environment intersection that calms traffic and improves safety for all road users. Currently new cycle routes including Separated Cycleways and Shared paths have been built along Bourke Road, Alexandria and Bourke Street, Woolloomooloo. In the near future the Bourke Street route will be extended to link with Bourke Road providing a continuous route from the south of the City to the Harbour.

As the cycle network develops many more bike riders will use the facilities provided. In the first ten weeks the new Separated Cycleway along Bourke Road, Alexandria recorded a forty-nine per cent increase in bike riders using that route.

The experience of Copenhagen is that the construction of cycle tracks resulted in an increase in cycle traffic of 18-20% and a decline in car traffic of 9-10% (*City of Copenhagen)*.

The implementation of dedicated bicycle lanes and the increased number of cyclists on all roads will contribute to identifying the City as a low speed environment. Lowering speed limits to 40 km/h, or preferably to 30 km/h, in central Sydney will contribute to cyclist safety where separated bicycle lanes cannot be provided, as well as enhance pedestrian safety.

[Copies of the City of Sydney Cycle Strategy and Action Plan 2007-2017 have been provided as part of this submission.]

Pedestrian, Cycling and Traffic Calming Plans (PCTC Plans)

Pedestrian, Cycling and Traffic Calming Plans (also referred to as Local Area Traffic Management Schemes) are considered an effective tool to improve local areas in terms of cyclist and pedestrian safety and amenity. A key component is that of reducing traffic speeds through creating a low speed environment.

As many people start their journey from residential areas it is important that the environment encourages the use of bike riding or walking right from the start of their journey.

These plans are community driven to manage and calm traffic on local roads, increase pedestrian, bicycle and public transport access and provide better safety and amenity for local residents.

The City has completed a number of studies as part of its Pedestrian, Cycling and Traffic Calming Plan (PCTC) program. This includes Redfern, Glebe and Forest Lodge, City East, Chippendale and Surry Hills.

Shared Zones

This was covered by the City in detail in its submission and subsequent evidence for the Staysafe *Inquiry into Pedestrian Safety* in 2009.

Sydney Harbour Foreshore Authority has introduced a Shared Zone across Pyrmont Bridge which in effect applies solely for bike riders as motor vehicles are prohibited in this zone.

In general where Shared Zones are signed bike riders can integrate with pedestrians, who retain right of way – but motor vehicles can use the street at low speed.

Shared Paths

The City of Sydney has taken a lead role in developing a system of marking Shared Paths to clarify on which paths bike riders may share with people walking. The signage and information relating to Shared Paths are shown in Appendix 1. The City has, through its road user campaigns, promoted bike rider and pedestrian safety on Shared Paths More general promotion of the responsibilities of bike riders and pedestrians is required through RTA handbooks and other publications. Shared Paths are referred to in the NSW BikePlan – *Next Steps* 2.6.

Safe system approach to crashes

The RTA has adopted the *Safe System* approach to road safety. The *Safe System* philosophy recognises that, even with the best preventative programs in place, people will continue to make mistakes and crashes will continue to occur. *Safe System* seeks to not penalise road users with death or serious injury when they make mistakes.

Speed limits

Appropriate speed limits are an integral part of *Safe System*. Even a marginal reduction in speed can result in a drop in casualty crashes. The Australian Transport Council (ATC) reported in 2006 that small reductions in average speeds (even one or two per cent) result in substantially greater percentage reduction in deaths and injuries. It was also reported that the chance of surviving a crash decreases dramatically above certain impact speeds. For vulnerable road users the risk increases above 20-30 km/h.

Austroads Guide to Road Safety – Part 3: Speed Limits and Speed Management states:

> Speed limits on much of Australia and New Zealand's road network are higher than limits many OECD countries set on comparable roads.
>
> In Australia, most local and collector roads in urban areas (including residential streets) are zoned to 50 km/h – in many OECD countries 30 km/h or 40 km/h limits are used extensively.

The RTA *NSW speed zoning guidelines, 2009,* states:

> Speed limits should be set to promote safety and encourage, as far as possible, a uniform travel speed. Excessive variation among vehicle speeds can indicate an inappropriately set speed limit or suggest that other measures are warranted, such as enforcement.
>
> Speed zoning needs to reflect the use of the road and the nature of the road in the road hierarchy. Relative uses relating to local amenity, eg property

> access of roadside facilities such as pavement restaurants, compared with inter regional transport also need to be recognised.
>
> A lower speed limit, that is speed limits less than 50 km/h, can improve amenity for local communities. Lower speed limits, particularly in commercial centres, will often encourage outdoor activities with local authorities providing suitable infrastructure.

Considering the number of pedestrians and the ongoing increase in the number of bike riders in central Sydney it seems that a speed limit of 30 km/h, such as along Druitt Street and within the Botanic Gardens, would best meet these guidelines.

Speed limits along many state roads are still set at 60 km/h. Within the City of Sydney LGA these routes would be ideal for connecting with the bicycle network if traffic speeds were reduced to at least the urban default of 50 km/h. This would also simplify and standardise speed limits in the inner city areas.

The City of Sydney has made numerous requests for lower speed limits in central Sydney and urban residential areas. Whilst this has predominantly been for the safety of people walking, reduced speed limits benefit all other road users. Requests have generally been made for 40 km/h speed limits, which has been the usual limit set by the RTA where there are high numbers of vulnerable road users.
[This is referred to in the NSW BikePlan – *Next Steps* 2.8]

In November 2003, a default Urban Speed Limit of 50 km/ h was adopted in all built up areas. This followed trials in the late 1990s and the gradual introduction of 50 km/h at the request of local councils. Since becoming the default limit it is no longer a requirement to signpost streets in built up areas. However some streets still have 50 km/h signage which leads to confusion by drivers who may still think the urban speed limit is 60 km/h. Some state roads in the City of Sydney LGA are signed 60 km/h which adds to the confusion particularly if the road 'looks' similar to surrounding 50 km/h roads.

The RTA has specific programs that promote increased safety for pedestrians through lowering the speed limit. This includes the *40 km/h In High Pedestrian Activity Areas* (HPAA) and *School Zones* for children. This same program has benefits for bike rider safety as well. The criteria for implementing the HPAA program should be reviewed to include bike riders as well as pedestrians.

New South Wales BikePlan, 2010

In May 2010 the NSW BikePlan was released by the NSW Premier's Council for Active Living. A key element that relates to the City of Sydney's Strategy is State commitment to a program that connects key missing cycleway links and supporting councils to join up local routes into one cycle network.

The BikePlan has set a target of five per cent travel by bike for all trips in Sydney of less than 10 kilometres by 2016.

It is important to the City of Sydney that there are comprehensive cycleway links to the City's cycleways so that there are no 'barriers' to bike riding, and people can choose to ride longer distances within and around the City.

The *NSW BikePlan* includes safety measures that will contribute to enhanced safe travel for bike riders such as:

2.19 – Consider the routine delineation of green-painted "Bike Boxes" that provide a head start for cyclists at traffic signals – on a road with a speed limit of 50 km/h or less.

3.4 – Provide NSW Police and local communities with cycling policy and safety advice.

3.12 – Develop and deliver road safety information and campaigns based on research evidence about key road safety issues affecting cyclists and other road users.

3.13 - Continue to implement, evaluate and update regular 'Share the Road' activities to encourage mutual respect among road users, including:

a. *educating the public on road rules affecting all types of road users*
b. *enabling cyclists to obtain online advice about quiet street route alternatives to major roads*
c. *promoting safe behaviour by cyclists towards pedestrians and wheelchair users on shared paths with signage and pavement markings to reinforce pedestrians' right-of-way*
d. *providing information to minimise conflicts between cyclists and high-speed traffic on motorways where breakdown lane cycling is permitted and*
e. *liaising with transport industry associations, unions and operators to understand the road-sharing needs of cyclists, trucks, buses and taxis and develop strategies to reduce conflicts.*

3.14 Complement information campaigns with ongoing enforcement of cycling-related road rules, including initiatives directed at both cyclists and drivers.

3.15 Investigate ways to increase learner and novice driver understanding of cyclists' needs, including:

a. appropriate coverage in the Driver Knowledge Test and
b. information and assistance provided through driving instructors to students who may benefit from additional training in this area.

All of the above elements are welcomed as they fit in with the City of Sydney's long term planning and implementation of cycleways and bike rider safety.

f) Bicycle safety issues and strategies in other jurisdictions

There are road safety issues relating to bike use in almost all cities throughout Australia and cities and towns overseas. In many developed countries the actual number of bike riders killed and injured is relatively low, compared to the number of motor vehicle occupants killed or injured. This is in part due to the low use of bikes. However crash data then identifies bike riders as being 'over-represented' in the statistics collected. This implies that cycling is unsafe.

As previously discussed cities that have high levels of bike usage also have low levels of bicycle related road trauma. However as bicycle use increases the modal mix of traffic will change and so will the types of crashes that occur. Road safety intervention strategies will need to be flexible to adapt to these changes.

The experience of Copenhagen, Denmark has shown that:

> Although there has been a reduction in the number of cyclists killed or seriously injured over the last decade, the percentage of such accidents in relation to other categories of accident has risen and continues to rise in Copenhagen. It is a matter of concern that this percentage is still considerably higher in our city compared to other large Danish cities. Over the years, the City of Copenhagen has successfully promoted cycling. It is a natural consequence that this promotion must be followed by a systematic effort to improve safety for cyclists. (*Traffic Safety Plan 2007-2012 – City of Copenhagen*).

The Copenhagen *Traffic Safety Plan* includes:

> The City of Copenhagen will carry out an analysis of types of accidents or of defined traffic groups.
>
> The aim of this analysis is to select and address traffic accidents with common features using relatively cheap, preventive mass actions. The relative cheapness of these actions would mean that they could be put into practice on a larger scale in locations where there is a higher risk of accidents of that specific type. Examples of such mass actions would be:
>
> • Advanced stop lines for bicycles at signalised intersections
> • Pre-green signal for cyclists as an alternative or supplement to the advanced stop line
> • Two simultaneous red pedestrian signals
> • Background plates to signals to prevent blinding by sun

The Netherlands, Denmark and Germany have all made bike riding a safe, convenient and practical way to get around their cities. It is often thought these countries have always had a high level of bicycle use and that cycling is, and always has been, just part of their way of life.

John Pucher and Ralph Buehler of Rutgers University, New Jersey, in *Making Cycling Irresistible* 2008 stated, “Cycling was not always thriving in the Netherlands, Germany and Denmark. Cycling levels plummeted in all three countries from about 1950 to 1975. It was only through a massive reversal in transport and urban planning policies in the mid-1970s that cycling was revived to its current successful state.”

In each of these countries cycling has re-emerged for a number of reasons. The key components which are common across all three are:

- Driving is more expensive (than Australia and the US);
- The provision of separate cycling facilities along heavily travelled roads and at intersections;
- Traffic calming of most residential areas;
- Extensive cycling right of way, complemented by comprehensive traffic education and training for both cyclists and motorists (and most people are both);
- Ample bicycle parking and full integration with public transport;
- A wide range of promotional events that generate enthusiasm and wide public support for cycling.

In the United Kingdom, London in particular has made great inroads in recent years to encourage more cycling. This is mostly due to the revival of the Greater London Authority and the establishment of one government body to manage all transport - Transport for London (TfL). A key motivator for many people in London to take up riding a bike was the introduction of congestion charging in Central London. Making

driving a car in a city expensive is a major way of reducing unnecessary motor vehicle use.

Increases in the use of bicycles in other UK cities have also brought about changes to the type of road safety issues. In the university cities of Cambridge and Oxford where there has always been a high level of bike use, recent increases have led to a greater use of Shared Paths. As a result there are some issues relating to conflict between pedestrians and bike riders. Oxford Council has developed resources that encourage bike riders and pedestrians to work together for better, safer off road routes and demonstrating that, "*Cyclists and pedestrians are natural allies in wanting and needing safe and attractive routes around the city.*" This theme is being adopted in many other UK cities.

In London, a key issue that has been identified is that of bike riders injured as a result of being in a collision with a large truck. Working with the haulage industry and the police, Transport for London has developed a major awareness program - *Exchanging Places,* which is a monthly event that gives cyclists and truck drivers the opportunity to swap places and see the problems each has in negotiating city streets. This program is a part of the recently released Transport for London, *Cycle Safety Action Plan*.

Other, non-government organisations in the UK have recently shown their support for bike riding. The *Institute of Advanced Motorists* is an organisation that since 1956 has conducted voluntary higher level driving tests and provided extensive workplace driver training. In August 2009 it published a report, *Cycling Motorists,* which looked at how many drivers are also bike riders (a copy of this has been provided to the Inquiry). This organisation now provides cycling courses for companies and encourages the use of bikes to enhance the health of workers.

In the United States and Canada there are some exceptional cities that have also started to move away from supporting motor vehicles as the ultimate mode of travel. This includes cities like Portland, Vancouver and New York.

The pedestrianisation of roads in city centres is quite common throughout many European cities and more recently in some major North American cities such as Portland, Oregon and New York. In South America Cities such as Bogota, Columbia, Santiago, Chile and Buenos Aires, Argentina have extensive pedestrian areas that are shared with bike riders. Often this is supported by an effective public transport system and by restricting access to central city areas by non-essential vehicles. This strategy also contributes to improving the safety of bike riders.

The second strategy that is notable is that of reducing the speed of vehicles that travel in and around city areas. It is common for cities to have control over setting appropriate speed limits on their roads.

Internationally there have been a number of different schemes involving the lowering of speed limits in areas where there is benefit to vulnerable road users in terms of safety and amenity.

In the United Kingdom recent changes in Department of Transport guidelines have relaxed the recommendations and in many residential areas 20 mph (32 km/h) limits may be set by councils without any physical measures at all.

In March 2009, the London Borough of Islington in the United Kingdom announced that it would be implementing a 20 mph (32 km/h) speed limit on all of its council

controlled roads. About half of Islington's 1,420 residential roads, covering 278 kilometres, are already 20 mph (32 km/h).

Other major cities and towns in the UK that have introduced 20 mph speed limits include Oxford (population 151,000), Leicester (292,600), Portsmouth (197,700) and Newcastle upon Tyne (189,000).

Shared space

In some towns and cities in the Netherlands, and the United Kingdom have introduced a 'Naked Streets' concept, also known as "shared space", which is a very promising approach to both bike rider and pedestrian safety and to improving the vitality of an area. Naked street schemes place importance on how drivers make decisions about their behaviour, recognising the importance of how they perceive their surroundings. It is a significant departure from attempts to control behaviour through interventions like road humps, or engineering cyclists and pedestrians out of our streetscape through subways or guardrail or separated paths.

The shared space concept was masterminded by the innovative Dutch Traffic Engineer, Hans Monderman and is based on a principle that removing all priorities will make all road users work together to bring traffic speeds down and improve road user access and safety.

The Netherlands has, since 1999, made great use of the Woonerf system where cyclists and pedestrians have legal priority over motorists on a street or group of streets in a town or city. As of 1999, the Netherlands had over 6000 Woonerf schemes in place.

g) Other related matters

The major theme of this submission revolves around the concept that an increase in bike riding and pedestrian activity together with a reduction in motor vehicle use will together improve the safety of vulnerable road users. The following sections cover a number of topics that when addressed will contribute to increased bicycle use and therefore safer streets.

Changes in road rules to improve safety for bikes

Those countries that are successful in promoting bike riding are those that have implemented more pro-bike measures and reinforce their impact with restrictive policies that make unnecessary car use less convenient in city environments.

In the Netherlands, Denmark and Germany bike riders have extensive rights-of–way which affords them much greater safety. The approach from authorities in towns and cities in these countries is that drivers are no longer given the highest priority for travel within cities. Drivers are usually held responsible in crashes involving children and elderly cyclists.

Motor vehicle drivers within urban areas should be prepared to give way to pedestrians and bike riders. The Road Rules include rules making drivers give way to pedestrians when turning into another street. This should be extended to include bike riders.

In many other jurisdictions bike riders are allowed to ride contra to motor vehicles on the majority of one-way streets. Cities and towns in NSW should follow this example. [This is referred to in the NSW BikePlan – *Next Steps* 2.8]

Traffic light synchronisation and phasing

It is important that as more traffic lights for bicycles are installed in Sydney and other towns that their synchronisation and phasing are realistic and do not create an undue delay for bike riders. Traffic lights should favour bike riders and encourage compliance by bike riders. This in turn adds to the encouragement of cycling.

Advanced stop lines ("Bike Boxes") should be used universally at traffic lights in urban areas to allow bike riders to move ahead of other vehicles and be seen by drivers.

Bicycle traffic lights installed as part of the King Street Cycleway often delay bike riders considerably. This discourages compliance by bike riders and can result in conflict with other road users.

Where appropriate, flashing amber should be able to be used at intersections, giving pedestrians and bike riders priority where other traffic is turning is recommended

New technology in regard to speed and red light cameras should be adopted in central Sydney and other high risk locations.

Use of modern technology in traffic lights

The Staysafe Inquiry into Pedestrian Safety made recommendations relating to the use of modern technology and that pedestrian user friendly (PUFIN) traffic lights be trialled. In the UK an additional type of controlled crossing is used extensively where Shared Paths intersect with roads. A **toucan crossing** is a type of pedestrian crossing that also allows bikes to be ridden across. Since both pedestrians and cyclists can cross together, the name Toucan was chosen because the "*two can"* cross.

The City suggests that use of this type of crossing be trialed in Sydney where appropriate.

Use of footpaths by bike riders

Other states (Queensland and the ACT) allow bike riders to share all footpaths. This removes confusion and allows the promotion of safety to be clear and concise.

Currently children under twelve may ride on a footpath and if accompanied by an adult, that adult may also ride on the footpath. However it is not legal for an adult carrying a child in an approved passenger seat or trailer, or riding a bike specifically designed to carry small children, to ride on a footpath. Rule 250 should be revised so that it allows adults carrying children under twelve to ride legally on any footpath.

Insurance and registration

The City of Sydney does not support compulsory insurance and registration of bicycles. However it does encourage bike riders to insure themselves, and their bike in case they are involved in a collision.

In many cases riders are insured through membership of bicycle organisations and clubs such as Bicycle NSW. Others may be insured through home and household contents insurance. The 'nominal defendant' scheme should be extended to cover pedestrians in the case of a collision with an unidentified bike rider.

The Motor Accidents Compensation Act 1999 (s50(3)), requires the insurer to accept provisional liability in cases where the injured person is a pedestrian or a motor vehicle passenger. We understand that in practice cyclists are included by some

insurers. It would be preferable to formally change the Act to specifically include bike riders.

When renewing registrations, drivers should be reminded that bike riders are entitled to use the road and that they are not charged a registration fee because their effect on the road is negligible and that many cyclists are also drivers who pay registration for a vehicle they are not using unnecessarily.

NSW BikePlan

The NSW BikePlan is welcomed in that it supports the City of Sydney's *Cycle Strategy and Action Plan* and provides guidance for other authorities, agencies and organisations in their planning for the integration of bike riding into transport management which in turn enhances bike rider safety.

The *NSW BikePlan* and the City of Sydney's *Cycle Strategy and Action Plan* should complement each other in promoting cycling by addressing issues including:

- **Better promotion through NSW health and stronger promotion from state agencies**

  It is essential that the importance of cycling as a low cost way of improving health is promoted effectively through all levels of government. This is covered in the NSW BikePlan.

  Action 6.13 Encourage relevant Australian Government agencies to work together and with the NSW Government to promote cycling as part of healthy and active lifestyles, through transport planning and design activities including social housing programs.

  Lead agency: Department of Premier and Cabinet.

- **Tax incentives**

  Reduction in costs of using a bike and the encouragement of businesses to include bicycles as a viable fleet asset will further encourage commuter cycling and work related cycling. The City supports initiatives that will increase work related bike riding and reducing motor vehicle fleets.

  NSW BikePlan Action 6.14 Encourage the Australian Government to remove tax-related disincentives to the choice of cycling for personal transport, and to establish incentives for the use of cycling for work-related purposes.

  Lead agency: Department of Premier and Cabinet.

- **Better provision of end-of-trip facilities for bike riders**

  Action 4.10 As part of strategies to achieve 'Green Star' sustainability ratings for commercial development, encourage the installation and use of high-standard bicycle parking and employee shower facilities:

  a. in existing and new developments
  b. in major shopping areas, promoted through the offer of free or reduced-cost shopping delivery for bike-riding customers and
  c. at facilities shared and supported by partnerships of adjacent businesses in regional and major centres.

Lead agency: Department of Environment, Climate Change and Water

- **Integration with Public transport**

  Actions:

  5.5 Promote bicycle carriage on off-peak CityRail services that have the vestibule capacity to accommodate bicycles without inconveniencing mobility-impaired passengers, to access recreational riding opportunities in the Illawarra, South Coast, Central Coast and Blue Mountains.

  5.6 Investigate an online booking service for bicycle carriage on Countrylink services.

  5.7 Ensure the improved capacity of Intercity and country trains to carry bicycles when rolling stock is replaced.

  5.8 Provide guidelines for the establishment of small-scale touring bike hire schemes at destination rail stations which can be packaged with rental car and accommodation deals.

  Lead agency: NSW Transport and Infrastructure

- **Integrated building of cycleways**

  The City of Sydney's work in promoting cycling has been acknowledged in the NSW BikePlan.

  > "Central Sydney's innovative designs for separated cycleways, improved signposting and linemarking on shared pedestrian and cycle paths, and locally adapted programs to deliver cycle skills training to workers and residents, provide pointers for similar projects in other parts of the State."

  It is essential that the continuing work of the City of Sydney be supported by ensuring that there are cycleways that link to the City's boundaries and provide bicycle routes that are integrated with other high quality cycleways in bordering council areas.

  The NSW BikePlan has a number of actions that should address this including:

  Action 2.1 Improve cycle networks in Sydney by:

  a. completing missing links in the Metro Sydney Bike Network of off-road regional routes, to connect all Metropolitan Strategy centres
  b. completing subregional cycle networks within a 10 kilometre catchment of western Sydney's River Cities, Parramatta, Liverpool and Penrith
  c. working with local councils to improve the neighbourhood connections that serve Metropolitan Strategy centres to offer a 40-minute low-stress cycling travel time for residents within a 10 kilometre radius of any major centre.
  d. considering parallel cycleways as part of rail construction and upgrade projects and
  e. working with local councils to accelerate construction of an inner Sydney strategic cycle network to help relieve congested inner area public transport services.

  Lead agency: Roads and Traffic Authority of NSW

Action 6.12 Work in partnership with the Australian Government, under the National Cycling Strategy, to improve cycle networks in NSW's major cities.

Lead agency: Department of Premier and Cabinet.

Recommendations

The City of Sydney suggests that the following ten recommendations are the most important if we are to reduce the number of crashes involving bike riders and over the longer term improve drivers' attitudes and behaviour towards cyclists. Improvements brought about by these recommendations will encourage more people to ride bikes.

1. Safety legislation – bells as original equipment

Many cycle shops sell bikes without bells. The City recommends that there should be some enforcement of current legislation that requires bicycles to be sold with a bell. [This is referred to in the NSW BikePlan – *Next Steps* 3.17]

2. Improved driver awareness of bike riders and pedestrians

The City recommends that the RTA should include more specific information relating to all vulnerable road users with emphasis on motor vehicle drivers' responsibility towards those less protected. This can be done as its manuals, handbooks, in particular the *Road Users' Handbook,* and other road safety related resources are updated. Greater emphasis should also be made to the effects and penalties that apply to anti-social behaviour by all road users. [This is referred to in the NSW BikePlan – *Next Steps* 3.13, 3.14, 3.15]

In addition it is recommended that the NSW Government fund a major awareness program that promotes sharing the road. This could be modelled on the Queensland "Share the Road" campaign.

The City also recommends that professionals in the legal system, from police officers through to magistrates and judges should be better prepared to improve understanding of non-driver issues. This is particularly important with regard to 'road-rage' incidents.

3 .Speed limits

The City requests that 30 km/h speed limits, similar to Druitt Street, Sydney be implemented. Australia is generally behind many European cities who regularly use 30 km/h speed limits in towns and cities.

The following recommendations were made in the City's submission to the *Inquiry into Pedestrian Safety, 2009*. They are equally relevant for the current inquiry and are repeated:

- Approval of lower speed limits, on Local Roads, including 10 km/h Shared Zones, should be delegated to local councils, approved by the Traffic Committee.

- The RTA should review its criteria for speed limits to reflect the special conditions in the City of Sydney.

- A consistent regime of low speed zoning is introduced that in urban areas prioritises bicycle and pedestrian movement and will identify central Sydney and residential areas as low speed environments.

4. Use of footpaths by bike riders

The Road Rule 250 relating to bike riding on footpaths by adults should be reviewed to allow riders carrying children to ride on footpaths.

5. General changes in road rules to improve safety for bikes

The City recommends that there should be changes that provide a legislative shift of responsibility that is more weighted towards motor vehicle drivers, particularly in cities, urban and other residential areas, so that vulnerable road users are better protected.

6. Traffic light synchronisation and phasing

The City requests that the synchronisation and phasing of traffic lights be revised to better accommodate bike riders. This should be together with a more universal use of advance stop lines (referred to as 'Bike Boxes' in the NSW *BikePlan*).

Where appropriate, flashing amber at intersections giving pedestrians and bike riders priority where other traffic is turning.

New technology in regard to speed and red light cameras should be adopted in central Sydney and other high risk locations.

7. Use of modern technology in traffic lights

With reference to Recommendation 17 in the Staysafe *Report on Pedestrian Safety*, 2009 the City recommends that the RTA consider the use of traffic lights that provide safety advantages to bike riders as well as pedestrians. This includes reviewing the value of the UK Toucan crossing system.

8. Insurance and registration

The City recommends that the Motor Accidents Compensation Act 1999 (s50(3)), requiring the insurer to accept provisional liability in cases where the injured person is a pedestrian or a motor vehicle passenger be formally changed to specifically include cyclists.

The City also recommends that when renewing registrations drivers are reminded that bike riders are entitled to use the road and that they are not charged a registration fee because their effect on the road is negligible and that many cyclists are also drivers who pay registration for the vehicle they are currently not using.

9. NSW BikePlan

The City recommends that the RTA and other responsible government agencies report annually on progress of the implementation of the NSW BikePlan, for example, the number of advanced stop boxes implemented each year.

10. Mandatory use of approved bicycle helmets

The City of Sydney recommends that current legislation relating to mandatory use of bicycle helmets should be reviewed.

Conclusion

The City of Sydney is working towards a city that is bicycle and pedestrian friendly and will continue to encourage walking and cycling as key modes of transport. However it is important to recognise that motor vehicle use in the City will continue and there is an ongoing need to improve driver skills and behaviour for the benefit of all road users, especially vulnerable at-risk groups such as pedestrians and cyclists.

The City of Sydney has identified many of the positive strategies that have been implemented in European and other cities around the world. Through *Sustainable Sydney 2030* the City will be transformed into a world class city with a network of safe, linked pedestrian and bicycle paths integrated with green spaces throughout the City.

In making the City of Sydney more bike rider and walker friendly there will be road safety benefits. In the short term during the process of transforming the City some of these benefits may not seem obvious and apparent to some people. There can be no doubt that moving the City away from car domination and making bike riding a legitimate form of travel will reduce the serious injuries that are currently caused to vehicle occupants as well as reducing injuries to pedestrians and bike riders.

It should be no surprise that the Netherlands has one of the safest road networks. This may in part be because so many drivers are also 'vulnerable' pedestrians and bike riders, on a daily basis.

Aside from the social benefits of reduced crashes there are also the financial benefits. The generic cost for an injury crash in an urban area is $174,935 and a fatal crash $1,787,646 (*RTA Economic Analysis Manual, Sept 2009*).

Economic research carried out by AECOM in 2010 identified other areas where there will be economic advantages in changing transport modes to sustainable forms such as cycling and walking. Cutting car numbers and reducing congestion will make essential car travel easier and more efficient. An Inner City Regional Bicycle Network will bring an estimated $97.8 million in decongestion savings by 2016.

Strong political decisions at all levels are necessary to implement change. This has been done in Denmark, Germany and other European countries and is happening in the United Kingdom and North America. The City has welcomed the NSW BikePlan which should bring together the RTA, the Department of Planning, NSW Transport and Infrastructure, the Department of Environment Change and Water, Industry and Investment NSW and the Department of Premier and Cabinet. By working together with local government and other stakeholders this group of agencies can provide the power to make the considerable changes to transport choices to the benefit of all of NSW.

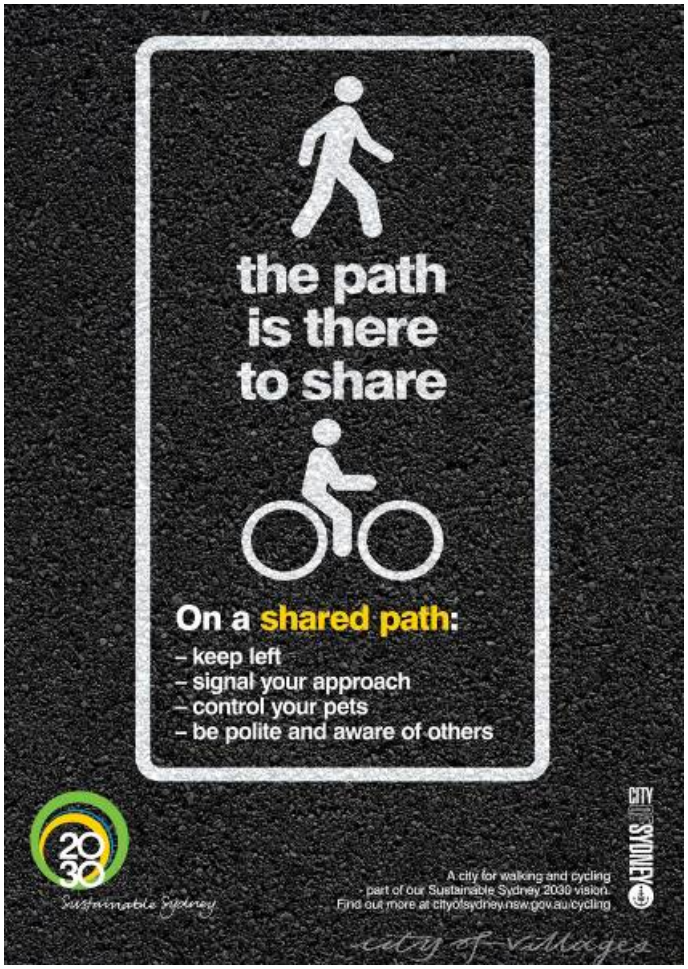
Many councils in Australia are making plans that will reduce the effects of global warming. The advantage of addressing the effect motor transport has on global warming is that it has major benefits in reducing road trauma and the high cost this has on communities.

Appendix 1

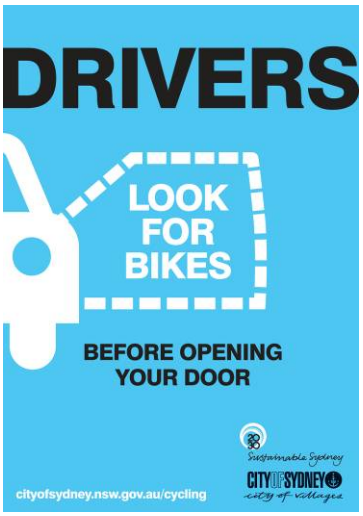
Shared path signage and awareness resources:

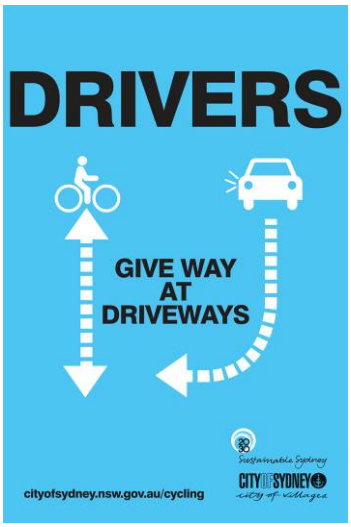
Messages stencilled on Shared Paths advising bike riders.

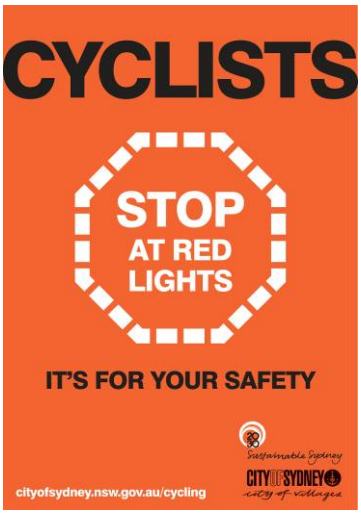
Local advertising promoting Share the Road:

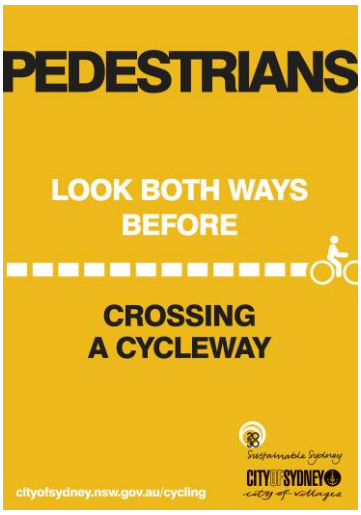


On street advertising messages to drivers, pedestrians and bike riders:



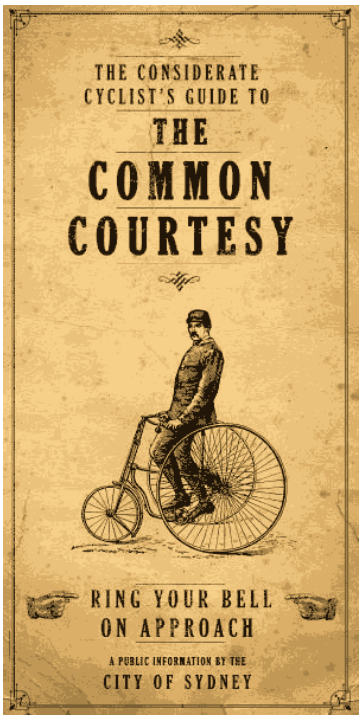




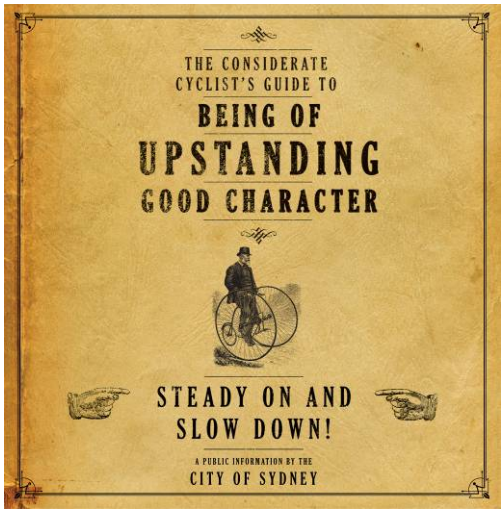


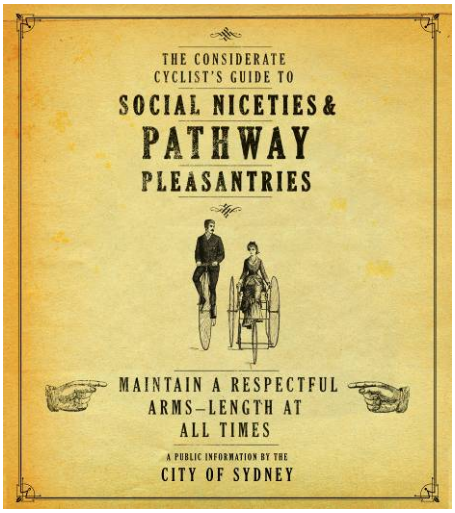
The *Considerate Cyclist* program, 2009:

Advertisement in *Sydney Morning Herald:*



Advertisements in *Central* and *City News*:





On street advertising: