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Submission to House of Representatives Standing Committee on Health and Ageing Inquiry into Obesity in Australia

Australia's state governments should urgently review mandatory bicycle helmet laws that have discouraged healthy cycling for the past 16-18 years with consequent harm to road safety, transport efficiency and greenhouse gas emissions.

All available evidence proves a 30-40% decline in public cycling participation following enforcement of the law.

According to West Australian government data, more than 50% of children stopped cycling to school in the five years following enforcement. Any increase in cycling numbers over the past 10 years has been from disastrously low levels recorded throughout the 1990s.

The most thorough data outlining the impact of mandatory helmet legislation can be found in Western Australia, where government road surveys showed 6.5% more cyclists in 2006 than in 1991, despite 30%> population growth and a doubling in petrol prices.

As reported in 2007 and based on data from Western Australia, Queensland and Victoria, the number of Australian children walking or riding a bicycle to school has plunged from about 80% in 1977 to the current level around 5%. WA Government road survey data shows the massive decline in cycling began from 1991 when the helmet law was enacted.

International research published in 2008 shows less people cycle in Australia than any other country in the world. Studies also indicate women in particular are discouraged from cycling by helmet laws.

As outlined in the March 2005 issue of the Health Promotion Journal of Australia, the number of regular cyclists in Western Australia almost doubled between 1982 and 1989 from 220,000 to 400,000. During this time, the numbers of cyclists admitted to West Australian hospitals and reported deaths and serious injuries per 10,000 regular cyclists fell by 48% and 33% respectively.

Australian Bureau of Statistics figures show the proportion of people cycling to work or study in Western Australia fell from 1.9% to 1.1% in the decade to 2006. Nationally, the proportion fell from 1.9% to 1.6%.

The average proportion of people using a bicycle as their transport to work or study among all Australian states was 1.5% in 2006. In the Northern Territory it was 5.2%. The average proportion of people using a bicycle as their recreational transport among all Australian states was 4.8% in 2006. In the Northern Territory, it was 16%. There is no bicycle helmet law for adults on cycle paths in the Northern Territory.

The West Australian Government road department Main Roads WA compiles cyclist survey data which constitutes the official gauge of cycling numbers on Perth roads.

Narrows
Main Roads WA provides Annual Average Weekday Cycling Flows for the Narrows Bridge based on 12 month averages.

The bridge has been doubled in width with provision of a new western cycle path and cyclist numbers increased sharply after 1999.

Monthly cyclist numbers from October 2002 to June 2003 were 44% higher than from October 1991 to June 1992 (before helmet law enforcement). However, cyclist numbers fell significantly after 2003 and by 2006 were about 6% more than their pre-helmet law average, despite 30%> population growth and petrol prices doubling.

The survey series began in October 1991, nine months before compulsory helmet law enforcement, so an accurate 12 month pre-law comparison is not possible.

Weekday cycling flows on the Narrows Bridge - October to June averages

Oct 91-Jun 92 - 1065
Oct 92-Jun 93 - 926
Oct 93-Jun 94 - 874
Oct 94-Jun 95 - 752
Oct 95-Jun 96 - 767
Oct 96-Jun 97 - 986
Oct 97-Jun 98 -899
Oct 98-Jun 99 - 1391
Oct 99-Jun 00 - 467
Oct 00-Jun 01 - 1422
Oct 01-Jun 02 - 1405
Oct 02-Jun 03 - 1533
Oct 03-Jun 04 - 1302
Oct 04-Jun 05 - 1115
Oct 05-Jun 06 - 1133

Annual Average Weekday Cycling Flows on the Narrows Bridge

1992/93 - 920
1993/94 - 730
1994/95 - 660
1995/96 - 710
1996/97 - 790
1997/98 - 870
1998/99 - 810
1999/00 - 453
2000/01 - 1263
2001/02 - 1343
2002/03 - 1364
2003/04 - 1164
2004/05 - 1038
2005/06 - 1005

Cyclist numbers fell sharply on the Narrows Bridge after 1992 helmet law enforcement but recovered from 1998 to 2003. Cyclist numbers have since fallen close to pre-law levels, despite the inner city population trebling, petrol prices doubling and a CBD employment surge over the 14 year period thanks to Western Australia's booming resource economy.

In December 1991, 11,406 bikes were counted on the Narrows on weekends. In December 1992, it was down to 4526. By December 1993, it was 6507 and by December 1994 it was 6863. This is down from a mean daily count of 1267 in December 1991 to a mean of 762 in December 1994... a reduction of approximately 40%.

In December 1991, 35,122 cyclists were counted on the Narrows on all days. In December 1992, it was down to 20,581. By December 1993, it was 29,506 and in December 1994 it was 27,216. This is down from a mean daily count of 1132 in December 1991 to a mean of 877 in December 1994... a reduction of approximately 23%.

Causeway
Main Roads WA data provides Annual Average Weekday Cycling Flows for the Causeway based on 12 month averages.

The survey series began in October 1991, nine months before compulsory bike helmet law enforcement, so an accurate 12 month pre-law comparison is not possible.

Weekday cycling flows on the Causeway - October to June averages

Oct 91 - Jun 92 - 956
Oct 92 - Jun 93 - 649
Oct 93 - Jun 94 - 673
Oct 94 - Jun 95 - 588
Oct 95 - Jun 96 - 655
Oct 96 - Jun 97 - 805
Oct 97 - Jun 98 - 779
Oct 98 - Jun 99 - 1014
Oct 99 - Jun 00 - 518
Oct 00 - Jun 01 - 1023
Oct 01 - Jun 02 - 977 Oct 02 - Jun 03 - 1030
Oct 03 - Jun 04 - 867
Oct 04 - Jun 05 - 937
Oct 05 - Jun 06 - 1025

Annual Average Weekday Cycling Flows on the Causeway Bridge

1992/93 - 610
1993/94 - 580
1994/95 - 500
1995/96 - 540
1996/97 - 710
1997/98 - 700
1998/99 - 720
1999/00 - 416
2000/01 - 951
2001/02 - 905
2002/03 - 943
2003/04 - 843
2004/05 - 856
2005/06 - 938

Cyclist numbers on the Causeway Bridge fell sharply after helmet law enforcement and barely increased in 14 years, despite a tripling of the inner city population, a doubling in petrol prices and substantial CBD employment growth thanks to Western Australia's booming resource economy.

In December 1991, 10,596 bikes were counted on the Causeway on weekends. In December 1992, it was down to 6719. By December 1993, it had fallen to 5295. By December 1994, it was down to 4564. This is down from a mean daily count of 1177 for weekends in December 1991 to a mean of 507 in December 1994... a reduction of approximately 57%.

In December 1991, 33,828 bikes were counted on the Causeway on all days. In December 1992, it was down to 26,227. By December 1993, it had fallen to 22,772. By December 1994, it was down to 18,101. This is down from a mean daily count of 1091 in December 1991 to a mean of 584 in December 1994... a reduction of approximately 47%.

Narrows/Causeway combined daily average cyclist comparison

Main Roads WA monitoring of the Causeway and Freeway cycle paths began in October 1991. During the following nine months till helmet law enforcement in July 1992, the combined total number of cyclists across the two bridges was 18,230. Fourteen years later, in the nine months to June 2006, the combined total number of cyclists across the two bridges was 19,433 - an increase of 6.5%. Western Australia's population rose by approximately 30% between 1991 and 2005.

Oct 91 - 2500 / Oct 05 - 1740
Nov 91 - 2200 / Nov 05 - 2327
Dec 91 - 2200 / Dec 05 - 2148
Jan 92 - 2250 / Jan 06 - 2493
Feb 92 - 2100 / Feb 06 - 2527
Mar 92 - 1950 / Mar 06 - 2579
Apr 92 - 2280 / Apr 06 - 2266
May 92 - 1700 / May 06 - 1868
Jun 92 - 1050 / Jun 06 - 1485

Census data shows the percentage of people in the Perth Statistical Division of Western Australia who ride a bicycle to work fell from 1.3% in 1991 (pre helmet law) to 1% in 2006. The results from four Census counts were:

1991 - 1.3%
1996 - 0.8%
2001 - 0.9%
2006 - 1%

West Australian police crash statistics indicate cyclists fell as a percentage of all road users from 1.3% in 1987 to 0.9% in 1996. Western Australia's compulsory bike helmet law was enforced in 1992.

NSW
In the state of NSW, where the mandatory helmet law was enacted in 1990, a 1993 study was conducted by Smith MC and Milthorpe MW (An observational survey of law compliance and helmet wearing by cyclists in New South Wales, RTA 1993)

- School students riding to / from NSW schools: total counts 3107 in 1991 to 1648 in 1993, a drop of 47%.
- For female students the figures were 654 in 1991 down to 222 in 1993, a drop of 64%.
- For secondary female students the reduction in cycling was greater: 455 in 1991 to 106 in 1993, a drop of 77%.
- For secondary children cycling to school in Sydney the reduction was from 904 to 294, a drop of 67%.
- The largest reduction in cycling was among secondary female students in Sydney: 214 in 1991 down to 20 in 1993, a drop of 90.6%.

An official cyclist count in regional NSW post-legislation found a 43% reduction. A separate survey of children's cycling two months before and 10 months after law enforcement found an overall reduction of 38%.

Victoria
In Melbourne, surveys at the same 64 observation sites in May 1990 and May 1991 found there were 29% fewer adults and 42% fewer child cyclists (36% overall).

Each site was observed for two 5 hour periods chosen from the four time blocks of weekday morning, weekend morning, weekday afternoon and weekend afternoon, representing a total of 640 hours of observation. The weather was broadly similar for both surveys. Victoria introduced compulsory bike helmet legislation in late 1990.

In the first year of compulsory helmet legislation in Victoria, child cycling went down by 36% and child head injuries went down by 32%. Surveys taken in May/June 1990, 1991 and 1992, reported by Cameron et al. (1992), indicated that total children's bicycling activity in Victoria had reduced by 36% in the first year of the helmet law, and by a total of 45% in the second year.

Commuter cycling

Commuter cycling to work in Australia dropped sharply following enactment of compulsory bike helmet legislation. The following ABS Census data shows a massive decline in commuter bike trips to work:

Census Year	Percentage cycling all the way to work
1976	1.11%
1981	1.47%
1986 (no law)	1.63%
1991 (law enforced in some states)	1.63%
1996 (law enforced in all Australian states)	1.21%
2001	1.15%

In 1997, the European Union's Directorate General for Transport commissioned Measures to Promote Cyclist Safety and Mobility, the study finding with mandatory helmet laws that "this measure has proven to be very restrictive. In Australia it has resulted in a decrease of bicycle use of about 35%. In that way the measure is totally counterproductive. Positive health effects of cycling (prevention of untimely death because of heart and coronary diseases and such) outweigh by far the negative health effects of dangerous road conditions."

The Cycling 100 study conducted by the Western Australia Department of Environmental Protection in 1999 found that a short bike ride three times a week improves cardiovascular fitness, reduces blood pressure, cuts elevated cholesterol levels by half, and reduces the risk of heart attack, stroke and debilitating backache. Tens of thousands of West Australians have abandoned these health benefits of cycling. The year long study involved 65 "habitual car users", aged 21 to 65, who swapped their cars for a bike to travel to work four times a week. The researchers calculated the trial group also saved 37 tonnes of greenhouse gas from otherwise being emitted by their vehicles.

Cycling is one of society's most popular and frequent forms of recreational exercise, and its discouragement is a major element in Australia's soaring obesity rates. People discouraged from cycling drive their cars instead, increasing the accident/injury risk for all road users and contributing to greenhouse gases.

Mandatory bicycle helmet laws have not improved cyclist safety as compensation for their disastrous impact on public health and greenhouse gas emissions.

Hospital and Health Department data in Western Australia shows there was no decrease in cyclist injuries following helmet law enforcement, despite the 30-40% decline in cyclist numbers.

Government data in Western Australia shows cyclist numbers had recovered to 1991 pre-law levels by 2000, by which time cyclist hospital admissions were 30% per annum higher than the pre-law average.

There is ample evidence available to prove that mandatory bicycle helmet laws discourage a large proportion of the population from cycling. There is ample evidence published on the internet... e.g. http://www.cycle-helmets.com or http://www.cyclehelmets.org

The discouragement of cycling as a result of mandatory bicycle helmet laws harms public health and cyclist safety, but also causes larger numbers of people to use their cars instead. This congests road traffic and results in significantly greater emissions of greenhouse gases.

Chris