

## **Speed - the biggest and most contested road killer**

Mooren, L. Grzebieta, R. & Job, S.

Transport and Road Safety (TARS), University of New South Wales

### **Abstract**

Speeding is arguably one of the most prevalent, if not the most prevalent, behavioural factor involved in fatal road crashes. However, the interventions to redress this continuing serious threat to public safety are amongst the most controversial done by governments in Australia. Media outcries of "revenue raising" when speed cameras are installed are deafening. This is despite the voluminous evidence that speed cameras save lives. In early 2012 there were a number of current affairs programs on commercial TV channels and web internet discussions that were blatantly anti-speed camera enforcement. Expert road safety researchers have attempted to present the facts and provide evidence-based opinions about the injury risks of speeding and the safety benefits of speed camera enforcement. Australian community surveys have indicated that the majority of people do understand that speeding is a road safety risk, and they support speed limits and speed enforcement. But broad public and media understanding of the issues are still confounded by misleading publicity and opinionated non-expert mass and social media discussions of views opposing speed enforcement and even views that disagree that speeding is a road trauma risk. This paper explores this phenomenon, discusses issues concerning mass and social media and suggests ways to address the problem.

### **Keywords**

Speeding, media, nanny state, community debate, dialogue communication

### **Introduction**

The definition of “speeding”, in simple road injury risk terms, means driving a motor vehicle too fast for the road conditions. This simple definition may be more generally agreed than the definition, “exceeding the legal speed limit”. Indeed, underlying the community debate about speeding and speed management interventions is a notion that speed limits are arbitrary and do not accurately reflect the injury or crash risk that can be attributed to all road users, all vehicles or all roads.

There is an abundance of research demonstrating the ways in which speed influences crash risk and crash severity (Aarts & van Schagen, 2006; Kloeden, McLean, Moore, & Ponte, 1997; Nilsson, 2004; Taylor, Lynam, & Baruya, 2000). These mostly reside in academic journals, government departments, inquests and conference proceedings and are rarely read by the general community. The findings, however, have been used by policy makers and in public education campaigns. For example, the Transport Accident Commission used the findings from Kloeden et al (1997) to build a message around why driving 5 km/h slower can exponentially improve chances to prevent a serious injury crash.

Most Australian road users are getting the message that speed increases crash severity and crash risk. A survey of 4,100 Australian drivers found that there was acceptance of the need to lower speed limits on roads such as undivided rural roads, but there is still a lack of understanding that small speed increments can make a large difference in crash risk

(Lahauesse, van Nes, Fildes, Langford, & Keall, 2010). Indeed, they found that 88% of respondents admitted exceeding the speed limit by 5-10 km/h. While this low level speed behaviour is common, fatal speed related crashes make up around 78-88% of all speed related crashes in Australia (Job, Sakashita, Mooren, & Grzebieta, 2013). Whether or not Australian drivers know this, around 90% believe that speeding would increase their risk of crashing, even on a clear day (Hatfield & Job, 2006).

Moreover, there is solid extensive evidence that speed camera enforcement reduces road trauma (Pilkington & Kinra, 2005; Wilson, Willis, Hendrikz, LeBrocq, & Bellamy, 2010). Yet, there are a number of people who are vocally and strongly critical of speed enforcement in Australia. There have been numerous outcries about how Australia is a “nanny state” in its speed enforcement efforts. Note that “nanny state” is defined as: “A government perceived as having excessive interest in or control over the welfare of its citizens, especially in the enforcement of extensive public health and safety regulations” (“nanny state,” 2000). Moreover, a survey of public attitudes on road safety in 2011 found that 62% of Australians thought that fines for speeding are mainly intended for revenue raising (Petroulias, 2011). This result followed an upward trend from 1995 when 54% held this view. But over the same period the community view that driving at speeds 10km/h over the speed limit significantly increases chances of crashing rose from 55% in 1995 to 70% in 2011. A community survey (Niuwesteeg, 2012) in Victoria found that while the community don’t approve of high-level speeding, there is an acceptance of low-level speeding (10km/h or less over the speed limit).

Finally, negative attitudes to speed enforcement include the view that speed enforcement is “capricious, unfair and revenue-raising” and this view is most intensified when cameras versus roving patrols are used for enforcement (McLean, 2012).

This paper examines the community discussion on speeding and especially speed enforcement in an effort to understand the apparent paradoxical views on the issue of speeding.

## **Methodology**

The method used to research the nature of community discussion about speeding was to use the popular internet search engine, Google, using the search terms, “Australia nanny state speed enforcement” and “Australia road safety speed enforcement”, thus aiming to find pro-speed enforcement and anti-speed enforcement commentary. Those articles that did not specifically address the issue of speed enforcement were omitted from further examination. The items examined were social media/chat rooms, mainstream media, social commentary articles, and websites. An analysis of relevant articles, web pages and blogs posted since 2009 was performed to gain an understanding of arguments in the public domain for and against speed enforcement. It was considered that blogs posted within the last three years could be considered as a reflection of current community attitudes.

## **Results**

Searching Google using the search term “Australia nanny state speed enforcement” resulted in some 3 million articles being identified. The search on the term “Australia road safety speed enforcement” identified around 1.36 million articles. This indicates that there are close to three times the number of “nanny state” articles compared with “road safety” articles found through this search. The articles from the search on “nanny state” tended to be authored by

political lobby groups, members of the general public or journalists, whereas those from the search on “road safety” were largely authored by government sources and university researchers.

Much of the anti-speed enforcement commentary is based on civil liberties arguments. The Liberal Democratic Party believe that “Drivers should be free to risk their own safety provided that they are responsible for the consequences of the choices they make...Enforcement of speed limits in Victoria, for example, has gone beyond the limits of what is compatible with a free society” (Liberal Democratic Party). Similarly, the Outdoor Recreation Party’s policy is that the community should be asked to determine speed limits – not governments (Outdoor Recreation Party, 2011). Both parties suggest that using the 85<sup>th</sup> percentile method to determine speed limits is good practice.

Racing personality, Mark Webber, publicly complained about fellow racer Lewis Hamilton being booked by the police for doing a burn-out, lamenting the nanny state that Australia had become. Deputy Commissioner Ken Lay, head of Traffic Police replied that it was disappointing that Webber’s comments may have undermined police road safety efforts on a weekend where four people died in speed related crashes (Litras & Spits, 2010). Nonetheless, a poll of 2640 readers of the article found that 72% of people agreed with Webber. Then in a blog about Webber’s view, 131 comments were elicited (Deancm, 2010). These were mostly supportive, with a poll, asking if Australia is a nanny state, finding that 77% per cent thought so.

In 2010, another racing driver, Mark Skaife, was interviewed by a number of Australian media outlets suggesting that, like Germany, Australia should raise speed limits (to 140 km/h), reduce enforcement and instead train young people to drive safely at higher speeds. Skaife argued that Australia should stop being a nanny state focused on speed reduction and should instead take a road safety approach more similar to that of Germany with high speed Autobahns. When two of the authors of this paper (Mooren and Grzebieta, 2010), refuted his claims about Germany, it elicited 39 comments on their opinion piece. The authors noted that contrary to the myth being promulgated, Germany had stepped up its speed enforcement and lowering of speed limits in recent times similar to Australia. They provided road safety links with speed management, particularly speed camera enforcement with hard data, showing Germany, a country that is less than half the size of New South Wales but slightly larger than Victoria, now deploys around 3489 speed cameras compared to Australia’s total of 1125 cameras. They further highlighted that German drivers are the second most likely to be detected for speeding offences behind the Dutch in Europe whereas the average total road length per camera deployed in Australia is four times less than in Germany. Mooren and Grzebieta further elucidated that part of Germany’s road safety improvement is because they have taken the unlimited speed off many of their autobahns contrary to what most believe. Only 2 of the 39 comments supported the opinion piece (Mooren & Grzebieta, 2010) despite this hard evidence.

Another blog takes issue with the heavy handed authority in Australia, where Governments treat people like naughty little children, citing mandatory seatbelts and helmets, and strictly enforced speed limits (Hendrie, 2011).

The general anti-nanny state arguments go beyond a dislike of being caught for breaking a law considered to be trivial. Some have argued that excessive regulation can be socially detrimental. For example, the Institute of Public Affairs posts on its site that: “Much

contemporary social regulation is designed to shield individuals from voluntary risk-taking behaviour. However, having the government assume the role of risk manager is damaging to the principle of individual responsibility.” With regards to driving they say, “A spontaneous order emerges when people feel they are fully responsible for their own driving. And it's a safer one than in a traffic management system that tries to push drivers along pre-determined paths, barking orders along the way” (Berg, 2010). One example they mention is the notion that raising speed limits would help combat driver fatigue.

But even the blogs found by searching “nanny state” sometimes contain mixed views. To show an example, the following first 10 comments from a total of 53 comments to an article (McCowen, 2013) on how Australians love high performance vehicles is provided below.

*I don't get it! How is it possible to get the full value out of a performance car without breaking Australian road rules? Commenter Noddy*

*Exactly. The article is based on myth. It is the Europeans and autobahns which offer true high speed performance. We just copied American offerings with just a few quick machines like the Pacer and GTHO. We have no real speed pedigree. Commenter mojo*

*The value is not in the speed. You don't even need to drive it at all. The thing that matters most is that it's parked where your mates and the girls can see you with it. That's in front of your house and club, not on the racetrack or outback road. Commenter sissifus*

*When you're on a country road with no one in sight for km's, and the only person at risk is yourself, you don't care about the nanny state road rules. I don't, and never will. The more they try and hold me back, the more I fight. Commenter AdamA*

*You can't. And you will be in trouble if you get caught. Commenter The Genuine Article*

*its called trolling mate. desperate car manufacturers coming up with a new tack on trying to flog useless cars. a zombie could see this one coming. there are various versions of this "article" doing the rounds on the web. busted so badly. Commenter smilingjack*

*Performance is not just top speed but acceleration, handling and braking. Even below 60km/h these 3 traits can be a powerful attraction in a Performance car (depending on the road). So yes maybe you can't get 'full' value without losing your license but you can still have a lot more fun driving than in a "normal" car. Also, as RKDiamond says many people who own these cars take them to the track. Then there is the added attraction of prestige. Just knowing your car can go 3 times the speed limit is something people will pay (a lot) for. Commenter Jason*

*Don't you realise how important it is to be the first to drag away from the traffic lights? (..... and beat all to the next set of lights.....) Performance is just soooo important these days! Commenter Gaggs*

*@Adam A, @ToxicDebt, @Gus and others - "Nanny" State road rules are there to protect lives. And they are working. Sorry to disagree with you. In Australia fatal accidents dropped from 3,798 road deaths in 1970 to 1,248 in 2010. Do your maths that's more than 2,500 lives saved per year based on the 1970 base line. Reflect on that for a moment. Ponder this also - the highest category of fatal accidents more than 47% in zones with 100km limits, single vehicle crashes 44% and more than 40% under 25 years of age. There has been a concerted effort through greater enforcement of road rules, better roads and car safety features to help bring down the road toll. Over this period there has been a substantial increase in the number vehicles on the roads. The one thing missing is better driver education and training. Yes, the cars are very seductive - but this country does not offer the same standard of road or driver*

*quality as in Europe. Safe driving to you... Source of data: Australian Bureau of Statistics. Commenter Noddy*

*I rely on my vehicle's performance for extra safety on the roads. If you don't understand what I mean, get back in your Corolla and keep out of the right-hand lane. Commenter Problem?*

Separately, another set of 39 replies comment on a first blogger's question about what he should do about receiving 3 speeding tickets in the mail within a month of his return to Melbourne from the United Kingdom (JYK, 2009). The bulk of the responses were that he should just pay up – either because he broke the law or because he has no way of fighting the fines. Only two bloggers were sympathetic to the bloggers plight of copping fines. They had both been booked by speed camera and complained that they should have been warned about the locations of the speed cameras. Sites including this one often compare Australia with other countries, with commenters often saying that Australia is less free than other countries. Adman75 claims that only North Korea is less free (Adman75, 2009). A total of 121 comments to his blog were posted. Some were claiming that speed cameras were evidence that Australia is a police state, and that road laws generally indicated that it is a nanny state as well.

Sometimes people feel so strongly about an issue that they chose to directly communicate their views with people quoted in the mainstream media. After the first author was reported to have called for lower speed limits on undivided roads she received the email below:

*“dear Lori , have read your opinion about lowering speed limits. I think you are an interfering [sic] academic you have to realise that state and federal govs are ripping off us country people. the roads are shit ! Ill grant you that, but we deserve better and we certainly have paid for better. this is a cop out. how much do you get paid to publicly spruke your bullshit? take a trip to Germany. then you will see that you are living the lie. what lie? the one about speed ie. stay out of my local paper please, regards X, Inverell, NSW”*

In 2010/2011, two of the major commercial television channels, 7 and 9, ran blatant anti-speed camera stories on their prime time current affairs programs, specifically Today Tonight and A Current Affair (ACA). Today Tonight showed motorcyclists setting fire to speed cameras without interviewing an opposing criticism from a safety expert (Today Tonight , Channel 7, 2/2010). Tracy Grimshaw from A Current Affair interviewed Jeremy Clarkson from the famous Top Gear program. He was stated to say that ‘speed never killed anyone, suddenly becoming stationary that’s what gets you’ and that nothing could be done to save the deaths of our youth on the roads from speeding ‘it’s just kids being kids’. (A Current Affair, Channel 9, 12/2/10). Such stories do nothing but reinforce our speeding culture. Today Tonight continued to run such stories entitled, “Underhanded Speed Cameras”, Speed Camera Secrets”, and “Crazy Speed Cameras”, while ACA ran a story staging a mock evaluation of speed cameras claiming to ‘prove’ that speed cameras make “no discernible difference to driver behaviour.”

ACA was eventually taken to task by Media Watch, where the show's host, Jonathan Holmes, presented a wealth of scientific evidence that speed cameras do influence behaviour and save lives, concluding that: *“By reinforcing those doubts with its absurd trial, A Current Affair is actively reducing public confidence in a program that saves lives. That's about as irresponsible as the media can get... (Holmes, 2011)”*

It is worth noting that, around this time (July and August, 2011), two State Governments, New South Wales and Victoria – no doubt driven by public opinion – called for critical audits

of their speed camera programs. The New South Wales Auditor General concluded from his review that: *“In general, speed cameras change driver behaviour and have a positive road safety impact. We found that the number of speeding offences, and the total number of crashes, injuries and fatalities reduced after the introduction of fixed speed cameras. (Achterstraat, 2011)”* The Victorian Auditor General found that: *“Road safety cameras improve road safety and reduce road trauma, and their ongoing use as an enforcement tool remains appropriate.... A strong body of research shows road safety cameras improve the behaviour of road users, and reduce speeding and road crashes.” (Pearson, 2011)* The Auditor General urged the Department of Justice to educate the community more on the benefits of speed cameras and to dispel community myths that the purpose of the cameras were to increase State revenue.

However, after these reports were released, the Sydney Morning Herald, ran a story entitled “Top Speed Cameras still make a fast buck” emphasising that Minister, Duncan Gay, would shut down some of the cameras that he described as “cash cows for the former Labor Government” (Smith, 2011). Grzebieta and Mooren’s article, “Slow down on speed camera hysteria” was published by The Conversation and elicited only one comment (Grzebieta & Mooren, 2011). A PhD candidate in Christian Ethics at the University of Edinburgh wrote: *“Thanks - very helpful to have these statistics to put a bit of perspective on the issue. Using a car (a.k.a. being allowed to hurtle round in a tonne of metal at speeds that pack more punch than a bullet) is a privilege, not a right. As a society, we extend this privilege to those who demonstrate that they are capable of respecting it.”*

## **Discussion**

Many more people read newspapers and watch commercial television, than read government reports or articles in academic journals or websites. So, how can public misconceptions and baseless opinions about speeding and speed enforcement be turned around?

Civil libertarians tend to argue that governments should let people be responsible for making their behavioural decisions, especially when they only risk harm to themselves and no one else. Given that at least two political parties in Australia have formally expressed these views, and a number of individuals have also made comments on social media sites in support of this view, it seems that while this may be a minority of the population, it is a fairly large and vocal one.

Another problem is that risk behaviour is natural (Wilde, 1982) and even desirable in many contexts. So, to some degree, educating drivers on the risks associated with speeding could be counterproductive for safety. Indeed, there is a body of research that indicates that “high sensation seekers are more likely than non-sensation seekers to engage in a range of risky and illegal driving behaviours” (Lewis, Watson, Tay, & White, 2007). Moreover, the current public discussion on the Northern Territory Government’s proposal to derestrict speed limits on open rural roads has included arguments that higher driving speeds will reduce fatigue-related crashes (Hall, 2013). It is worth noting that Hall’s “Open speed limits” article was recommended by 235 people on Facebook, and elicited 201 comments – mostly in favour of lifting or removing the limits (many citing the German autobahns as proof that high speeds are safe).

The community is clearly divided on the issue of speed management. It seems that there are people who either don't want to know about the evidence that challenges their views or don't really care. Some seem to indicate that, to them, “freedom” is more important than “safety”. There are others that dispute statistical evidence, basing their thoughts more on their own personal experience, e.g. “I speed all the time and have not had a crash, therefore my speeding is safe speeding.” This perspective may be supporting the view in some driver's mind that others just need to be trained to drive better. Then, there are a vocal few that support lower speed limits and rigorous enforcement.

Certainly, there is strong evidence that publicity backed enforcement campaigns are effective behavioural countermeasures in road safety (Elliott, 1993). But there is evidence that when road users favour a law, they are more likely to comply with it (Jonah & Dawson, 1982). If speed regulation is seen as unnecessary, it is more likely that drivers will exceed maximum speed limits even at the risk of being caught.

In 1991, seeking to shift away from the former authoritarian style of road safety campaign, and recognition that speed was a highly contested issue in the community, the NSW Roads and Traffic Authority (RTA) applied a ‘community dialogue’ approach to addressing the speed problem. A campaign was designed to foster community debate on speed and speed related government policy and practices. Using newspaper advertising, the RTA asked people to tell them the problems they have with speeding. Surprisingly, thousands of letters were received with mostly positive road safety suggestions. The responses were collated and reported back to the community using another newspaper advertisement. Other mass media advertising was confined to radio and outdoor advertising – and the brief to the advertising agency was to omit a tagline or “Government message” from the advertisement. After the first set of advertisements went to air many people phoned into the RTA hotline saying that when they heard one of the advertisements on the radio saying “how fast are you going now?” they immediately checked their speedometer. Post-campaign market research confirmed that this tagline resonated strongly with the target audience. So, “How fast are you going now?” was chosen as the tagline the RTA was not originally going to have. To this day, some 12 years later, the NSW road authority still features this tagline on variable message signs. This is an example of an attempt to “dialogue” with the community instead of broadcasting instructional messages to road users.

Some of the more recent road safety advertising in NSW again seems to be using a genre that conveys public sentiment, illustrating differing perspectives on road safety issues. The 2007 “Pinky” television commercial [www.youtube.com/watch?v=JqWO7fzwSLM](http://www.youtube.com/watch?v=JqWO7fzwSLM) and the “Get your hands off it” commercial <http://www.youtube.com/watch?v=RsgxNLUivy0> are examples of this genre. The authors don't know the evaluation results of these ads but the internet version of “Pinky” attracted 17,679 hits. The comments about the online Pinky video again conveyed a mix of community sentiment – positive and negative.

## **Conclusion**

Perhaps we need to rethink the way in which we communicate anti-speed messages that takes into account the perceived benefits of reducing risky behaviour, similar to the Victorian Transport Accident Commission's TV advertisement with Professor Ian Johnston of a car crashing into a truck (Slow Down: June 2003), where a small increase in speed over the limit is shown to have a detrimental effect in avoiding a serious crash. The road safety messages may be more effective if they can directly speak to this perception and make road risk, like

speeding, less desirable or even stupid. It may also help road safety to personalise the story with specific victims of speeding crashes rather than reliance on broad statistics.

Moreover, there has been a community debate on speed and speed enforcement raging for a number of years. The road safety community has been largely absent from this debate.

Having a two-way conversation with the community is worthy of consideration. The social media mechanisms and other tools are currently underutilised for communications between the road safety community and the general community. While, this form of communication can be time-consuming and resource intensive for use in a road safety campaign, dialogue communication is a mechanism for engaging people in a more positive way.

## Recommendations

Road safety researchers and practitioners are urged to:

- gain an understanding of the key anti-speed enforcement positions held by major and minor opinion leaders in Australia;
- develop more effective ways of influencing community debate on speeding; and
- explore, develop, trial and evaluate “dialogue communications” campaigns on speeding.

## References

- Aarts, L., & van Schagen, I. (2006). Driving speed and the risk of road crashes: A review. *Accident Analysis & Prevention*, 38(2), 215-224. doi: <http://dx.doi.org/10.1016/j.aap.2005.07.004>
- Achterstraat, P. (2011). Improving road safety: Speed cameras, Roads and Traffic Authority. Sydney.
- Adman75. (2009). Is Australia a police state/nanny state? Retrieved from <http://www.topix.com/forum/world/australia/TK2S7C20E4HQV02J>
- Berg, B. (2010). An illusion of safety. *Nanny State* Retrieved 20 June, 2013, from <http://www.ipa.org.au/sectors/nanny-state/news/2224/an-illusion-of-safety/pg/4>
- Deancm. (2010). Aussie F1 Driver Mark Webber Calls Australia a Nanny State [Response to a survey question: Do you think Australia is a nanny state?]. Retrieved from <http://britishexpats.com/forum/showthread.php?t=661644>
- Elliott, B. (1993). Road safety mass media campaigns: a meta-analysis. Canberra: Federal Office of Road Safety,.
- Grzebieta, R., & Mooren, L. (2011). Slow down on speed camera hysteria. *The Conversation*. Retrieved from <http://theconversation.com/slow-down-on-speed-camera-hysteria-2625>
- Hall, S. (2013). Open speed limits for Territory?, *Drive.com.au*. Retrieved from <http://news.drive.com.au/drive/motor-news/open-speed-limits-for-territory-20130508-2j6zy.html>
- Hatfield, J., & Job, R. F. S. (2006). Beliefs and attitudes about speeding and its countermeasures. Canberra: Australian Transport Safety Bureau.
- Hendrie, D. (2011). The great Australian Conformity. Retrieved from <http://www.doughendrie.com.au/blog/?p=34>
- Holmes, J. (2011). Double demerits for A Current Affair. Retrieved from <http://www.abc.net.au/mediawatch/transcripts/s3326211.htm>



- Job, S., Sakashita, C., Mooren, L., & Grzebieta, R. (2013). *Community perceptions and beliefs regarding low-level speeding and suggested solutions*. Paper presented at the 2013 Annual Meeting of the Transportation Research Board
- Jonah, B. A., & Dawson, N. E. (1982). Predicting reported seat belt use from attitudinal and normative factors. *Accident Analysis & Prevention*, 14(4), 305-310. doi: [http://dx.doi.org/10.1016/0001-4575\(82\)90042-2](http://dx.doi.org/10.1016/0001-4575(82)90042-2)
- JYK. (2009). Advice for speeding ticket. Retrieved from <http://www.fodors.com/community/australia-the-pacific/advice-for-speeding-ticket.cfm>
- Kloeden, C. N., McLean, A. J., Moore, V. M., & Ponte, G. (1997). Travelling speed and the risk of crash involvement: Federal Office of Road Safety, Department of Transport and Communications.
- Lahauesse, J., van Nes, N., Fildes, B., Langford, J., & Keall, M. (2010). Assessing community attitudes to speed limits: Final report (pp. 89): Monash University Accident Research Centre.
- Lewis, I., Watson, B., Tay, R., & White, K. (2007). The Role of Fear Appeals in Improving Driver Safety: A Review of the Effectiveness of Fear-arousing (threat) Appeals in Road Safety Advertising. *International Journal of Behavioral and Consultation Therapy*, 3(2), 2003-2222.
- Liberal Democratic Party. Traffic Laws Retrieved 19 June, 2013, from <http://ldp.org.au/policies/1165-traffic-laws>
- Litras, P., & Spits, S. (2010). Mark Webber attacks 'nanny state', *Sydney Morning Herald*. Retrieved from <http://www.smh.com.au/sport/motorsport/mark-webber-attacks-nanny-state-20100328-r585.html>
- McCowen, D. (2013). Australia's need for speed, *Drive.com.au*. Retrieved from <http://news.drive.com.au/drive/motor-news/australias-need-for-speed-20130405-2habf.html>
- McLean, J. (2012). Reflections on speed control from a public health perspective. *Australasian College of Road Safety*, 23(3), 51-58.
- Mooren, L., & Grzebieta, R. (2010). High-speed driving should stay on the track. *National Times*. Retrieved from <http://www.smh.com.au/opinion/politics/highspeed-driving-should-stay-on-the-track-20100621-yrwd.html>
- nanny state. (2000, 2009). *American Heritage Dictionary of the English Language* Retrieved 19 June, 2013, from <http://www.thefreedictionary.com/nanny+state>
- Nilsson, G. (2004). *Traffic safety dimensions and the Power Model to describe the effect of speed on safety*. (PhD), Lund Institute of Technology and Society, Lund, Sweden.
- Niuwesteeg, M. (2012). How unacceptable is speeding? Insights from a social acceptability survey in Victoria. *Australasian College of Road Safety*, 23(3), 75-79.
- Outdoor Recreation Party. (2011). Greens go for the authoritarian option on speed limits Retrieved 19 June, 2013, from <http://www.orp.org.au/Campaigns.html>
- Pearson, D. (2011). *Road Safety Camera Program*. Melbourne: Victorian Auditor-General Retrieved from <http://www.audit.vic.gov.au/publications/20110831-Road-Safety-Cameras/20110831-Road-Safety-Cameras.pdf>
- Petroulias, T. (2011). Community attitudes to road safety - 2011 survey report. Canberra: Department of Infrastructure and Transport.
- Pilkington, P., & Kinra, S. (2005). Effectiveness of speed cameras in preventing road traffic collisions and related casualties: systematic review. *BMJ*, 330(7487), 331-334. doi: 10.1136/bmj.38324.646574.AE

- Smith, A. (2011). Top speed cameras still make a fast buck, *Sydney Morning Herald*. Retrieved from <http://smh.drive.com.au/top-speed-cameras-still-make-a-fast-buck-20110727-1i0de.html>
- Taylor, M. C., Lynam, D. A., & Baruya, A. (2000). The effects of drivers' speed on the frequency of road accidents. Crowthorne: Department of the Environment, Transport and the Regions.
- Wilde, G. J. S. (1982). The Theory of Risk Homeostasis: Implications for Safety and Health. *Risk Analysis*, 2(4), 209-225.
- Wilson, C., Willis, C., Hendrikz, J., LeBrocq, R., & Bellamy, N. (2010). *Speed cameras for the prevention of road traffic injuries and deaths (Review)*: Cochrane Library.