

Dear Members of the Legislative Council Road Safety Inquiry,

I am pleased to have this opportunity to submit my comments to this inquiry. I have suggestions covering three general topics: tailgating, general signage, and dual-lane vs single lane roads.

### TAILGATING

The practice of 'tailgating' is very prevalent in Australia, and in my experience, especially Tasmania. For very many years, I have noticed that Australia, and Tasmania in particular, is one of the worst places in the world for the incidence of what we call 'tailgating' - following too closely behind the vehicle in front. This is quite dangerous, as it can contribute to an accident or even cause a serious one.

A particular place where tailgating happens is on Launceston's Southern Outlet road, on the flat section of the Glen Dhu area and the steep incline immediately to its south. When I was working in Launceston, this was often part of my route home, and I lost count of the number of rear-end collisions I passed, which, remarkably, were on the uphill section of the road.

It struck me that surely, cameras could be mounted on the overpasses to detect drivers who are tailgating. In contrast to drivers who, for example, accidentally travel at 70 km/h in a 60 km/h zone, drivers who are tailgating are not doing so accidentally: they do not even need to glance down at their speedometer to judge that they are doing the wrong thing.

I have a suggestion that I hope that Tasmania will adopt. Some years ago, I noticed that in England, chevrons are painted on major roads, spaced a distance apart to guide drivers travelling at a particular speed as to how far (at minimum) they should be behind the vehicle in front. They are an excellent idea, and I have cut and pasted some information about these from a UK website about 'traffic signs and meanings':

*The use of chevrons is commonplace in the UK. Motorists will recognise them from warning signs for bends or they can be painted on the road to warn motorists from driving too close to the car in front.*

#### ***Chevrons Point the Road Ahead***

*Chevrons have been used on warning signs for years. The chevrons point to which way the bend goes.*

*Chevrons on a sign mean sharp deviation of route to the left (or to the right if the sign is reversed)*

*Another common sighting of chevrons is when you approach a raised roundabout - these chevrons are painted on block paving giving the driver a clear warning of what way the road deviates.*

#### ***Painted Chevrons on the Motorway***

*One of the most important usages that chevrons now have are as warnings on motorways and dual carriageways across the UK. They are painted on to the road as a warning to drivers that they should leave at least a two second gap to the vehicle in*

*front. The authorities hope that this will cut accidents caused by vehicles driving too close to each other.*

*When motorists are driving at 70mph their concentration can lapse, so that they don't the authorities have painted chevrons at accident black spots on the UK network.*

*The chevrons are usually placed at 40metre intervals and road signs are usually placed before the start of the chevrons to advise drivers to "keep two chevrons apart."*

*There are usually other signs placed near parts of the road network where chevrons are used. These can state: "Check your distance" and "Tiredness can kill take a break" to further improve safety in these black-spot areas.*

### ***Chevrons Reduce Accidents***

*Research carried out by the Transport Research Laboratory (TRL) has shown that sections of motorway that have chevrons have shown significant reductions in the number of accidents caused by "close following." The benefits have also been shown to continue for a further 18km beyond a chevron marked stretch.*

*TRL claims from its research that when chevrons are used on a section of motorway there is a reduction in accidents on the same stretch of road by 56 per cent compared to the same stretch of road before the chevrons were installed.*

*During this study TRL also carried out a tailgating survey, the findings revealed that motorists when in a stretch of motorway with chevrons tended to leave at least two-second gaps to the vehicle in front. However, after the chevron patch, tailgating did tend to pick up again but TRL believes that chevrons could reduce accidents on the motorway network by being strategically placed.*

### ***Chevrons Aid Motorists***

*Chevrons are a good way of helping motorists keep the two second rule as are the Highways agency signs that state: 'Keep Your Distance' from gantries. But the fact of the matter is that all motorists have a responsibility to keep their distance and drive with care and attention.*

*The Highway Code recommends that motorists keep a two second gap in dry conditions but in adverse weather this gap should be at least doubled – if you're on a motorway with a stretch of chevrons then double the chevrons to give yourself the required gap.*

I think this is an excellent idea, but I have not yet seen these in use in Tasmania. I urge you to have these painted in many places, accompanied by the signs that are mentioned in the extract above. Action should be taken now.

I have another suggestion for a type of device that could be installed on motor vehicles that could be called a 'tailgate cam'. This would be a camera installed in the rear of the vehicle, in much the same way as a reversing camera. As is well known, proximity devices are already part of the equipment supplied with modern vehicles, so it seems to me to be obvious that such a camera, in conjunction with a device to measure the distance to the car behind, could be developed and installed. Of course, it is not always a driver's fault that he is following too closely—for example, someone could overtake and then cut in too soon or slow down unnecessarily. So there would need to be some 'clever software' that images a driver's number plate

only after, say, 15 seconds following too closely, with a computation that takes the image only when the distance is inappropriate for the speed. Onboard software could send this image directly to the police with the coordinates of the location of the offence, saving police resources. There could even be a tax deduction for the purchase of such devices, or even a reduction in the vehicle registration cost so as to encourage drivers to install such a device.

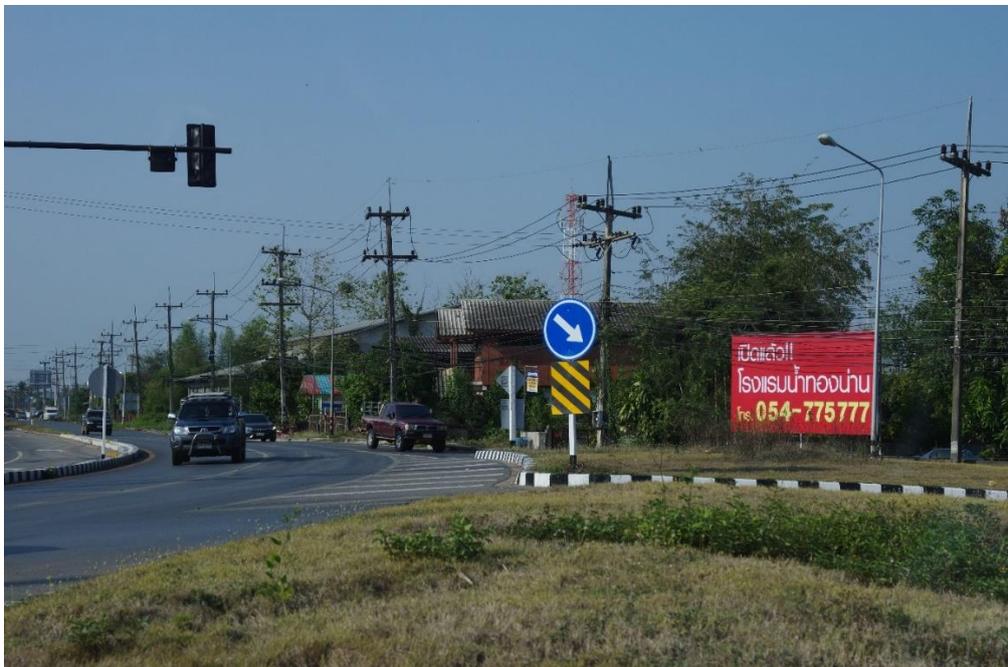
## ROAD SIGNAGE

Australia has a rather odd 'mix' of road signage. Some signage is in the form of recognised international signage such as speed limit signs with the speed limit on a white background with a red circle around it. However, other signage appears to be 'left over' from days gone by, or is similar to signage used in the USA.

In very many countries in the world, the 'international' standard signage is used. This especially applies in the UK and all over Europe, and I urge consideration for this to be used all over Australia.

As one example that I think is especially 'standout', there is a set of international signs that indicate 'pass this side', 'one way', etc., which take the form of white arrows on blue backgrounds, that are not used in Tasmania, and I don't think they are widely used (or used at all) elsewhere in Australia.

Here are two examples of the 'pass this side of the sign' type, from Thailand and the UK, respectively:





Instead of these really clear signs, in Australia, although sometime we see a 'Keep Left' sign with an arrow, we often see a group of chevrons pointing to the right or left, which are dangerous because they seem to indicate that the traffic must turn, rather than simply pass a particular side of the sign.

It is also possible to have a pair of these blue and white signs to indicate 'pass either side', which is far clearer than the strange vertical chevrons we see in Tasmania.

Here is an example of the same style of sign in Thailand (although these are used widely across the globe too) indicating 'compulsory right turn':



## DUAL-LANE vs SINGLE-LANE ROADS

I have given considerable thought to the tragic head-on collisions that have taken place in Tasmania (and other places, too, of course), and it has occurred to me that this may in some cases be due to drivers thinking that they are in a two-lane section of road (i.e. two lanes travelling in the same direction). This may cause drivers to pull out to overtake the vehicle in front thinking that the 'right lane' is an overtaking lane. In such a case, they may simply look in their driver's side rear view mirror to make sure that there is no car in what they think is the 'right lane', but fail to look *ahead* into that 'right lane' to check for oncoming traffic, simply because they don't expect there to be any oncoming traffic.

This would especially be the case for the first few kilometres after entering a two-way stretch of road, with the driver accidentally 'thinking back' to the dual-lane section of several minutes ago.

The solution? There is no perfect solution for this but I think there need to be many more reminders where roads are single-lane in each direction. Perhaps more arrows painted on the roads (there are indeed some, but not enough), and big signs stating 'SINGLE LANE IN EACH DIRECTION' mounted at the end of a two-lane section and at strategic point(s) perhaps two or three kilometres farther on.

Perhaps, in addition, there could be a road safety campaign on TV to remind drivers to 'check ahead' before overtaking.

Yours sincerely,

Dr Martin George

