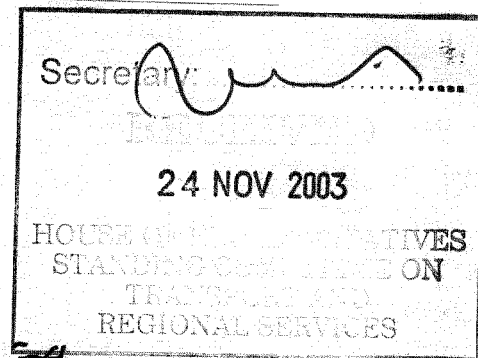


November 17th, 2003.

Ref. No 03/051010.4

Mr. Paul Neville M.P.
 House Transport Committee Chair,
 Transport and Regional Services Committee,
 House of Representatives,
 Parliament House,
 CANBERRA 2600.



Dear Mr. Neville,

Herewith my submission on Food Safety.

Please note:

- 1) No views are expressed or inferred. I have only relied on facts.
- 2) My resources are many. I have letters on file which I can forward, together with an extensive record of photographs - in excess of 500 - should you have need to see some substantiation of the points I have made.

I have appreciated the extension in time. I was not informed of this inquiry until just before the closing date, and some of my research has taken weeks to collect.

I look forward to the Public Forum, at which time I would welcome the chance to meet you and

your committee members.

Martin Ferguson was my link on this occasion.
With over 500 letters to Victoria and associated
bodies of knowledge including the Minister's office,
I am sorry I was not informed earlier.

Yours faithfully,

Douglas M. Gardner

Encl.

National Road Safety. How can we stop more deaths on our roads?

Target - 40% reduction by 2010.

Road safety encompasses many facets. I will address a number of these under the following headings:

The need for transport; managing the various segments (trucks/cars); Keeping people safe - from the driver's perspective, and the on-road environment.

Our transport needs are many and not always equal. The road network caters for all those movements not carried by air, rail, or sea, and the pounding of our roads is testament to the volumes that no doubt will continue to increase.

With this growth factor comes other positives: advances in both trucks and cars - compare tyre developments in the past ten years with the basic stocks in the 70's ... there is no comparison;

Air conditioning is almost a standard component, so too cruise control;

Automatic wipers and headlights are the

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latest items to be added to a growing list of innovations;

Crash "proofing" of vehicles improves almost with each new model - Renault has introduced plastic panels, while composite metals are used in the firewall of sophisticated European makes;

The lighting of vehicles is currently going ahead in quite a leap thanks to LED componentary, while headlights are evolving almost with each new model: gone are the days of a glass lens, with the polycarbonate replacement being ten (10) times stronger: High Intensity Discharge (HID) lights and their clones proliferate the market, but only in the more expensive range - after market units can cost \$2,800.

For those who cannot afford to fly, but with a need to travel intra state or cross borders, the most popular option is to travel by car / people mover / four wheel drive (F.W.D.), while many caravans or trailers share some of the load.

At two tonnes for a large F.W.D. plus a sizeable dual axle caravan of an equal weight, there is no special license required, nor a limit on daily distance travelled.

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Articulated and requiring many skills anyone can hitch up and drive off. Yet a truck driver requires an endorsed license for a gross vehicle mass of just 4.5 tonnes.

Speeds are not differential, which highlights a recent trip interstate. How refreshing it was to travel in the company of full sized trucks and B-doubles doing the posted road speed. With no special limit on (100) rated roads, there is no sense restricting large vehicles to (100) on (110) rated freeways.

Keeping people safe -

The technical advances in car transport are endless, many of which I shall not detail in this submission. However it is pertinent to record how widespread ABS brakes are in the market place, so too the developments in traction control. Now we have systems that control decent speeds on F.W.D's.

While road safety cannot revisit the introduction of seatbelts and all they did for each occupant, it is possible to look at the road network in detail.

The contribution signs play in road safety.

A large proportion of the signage network

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involves materials developed in the 1950's and 1970's. A senior roads manager put it plainly: "The signage on our roads was developed in the 60's."

Materials that enhance driver awareness that were developed in the 1990's are yet to be appreciated.

One of the glaring facts in road safety is the matter of dealing with glare. Reflective material has the propensity to cause glare, and one component of this is reduced dramatically by the installation of signs at the correct angle to avoid specular glare. This is a management item that appears in all Roads' manuals yet in Victoria it is estimated that no better than 10% of signs are installed at the correct angle to avoid this "white out" problem. Signs have to be angled away from the approach of the on-coming vehicle - yet there is a plethora of signs (possibly as many as 80%) that are installed square to the road. Even worse are those signs whose angle to the adjoining road is inside square.

(Please note: The writer has been involved in such cases of incorrect signage installation, and even up to Regional Manager level it

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is not sufficient to see this complication corrected. Only when the C.E.O. of the State authority became involved did the matter of one sign carry sufficient weight to warrant correction - which requires dismantling of the sign, re-installation of the poles, and then fixing the sign on the new alignment.)

This then explains why so many signs are clearly on view for all to see yet cannot be because at night specular glare complications produce a white out similar to a dense fog. It seems the cost to re-install is too large, and anyway older drivers are being hounded off the roads so why bother!

Another complication that troubles older drivers supposedly almost exclusively but in fact is a complication for some even in their early 30's is the matter of seeing 'stars'. Headlights have become so intense that many drivers are all but blinded/dazzled by the array of on-coming lights.

Possibly the simplest example of this interface between glare and reflective materials is the KEEP LEFT sign positioned at the nose of a splitter island. With the on-coming headlights the driver approaching such a sign is almost

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blind if the reflected message is markedly less than the glare from the vehicle approaching when it is adjacent to the splitter or even a little ways off.

Positioning of signs -

With such a vast network of signs across this continent on roads that are 30 years old or more, it would be reasonable to assume their positioning would have been well sorted out. However the progressive vehicle lighting culture, where the asymmetrical beam (low) is currently controlled from the engineering of the reflector rather than the lens (glass) as in years now almost forgotten, has resulted in even young drivers being not comfortable using roads at night that they travel so frequently in daylight. It is also very common that many F.W.D. vehicles have had their lights set higher to enable the respective driver to see appreciatively more than when set to the correct level.

The next complication is the fitment of after market globes that provide 30% or 50% more light, while others work in a different spectrum - Cool blue, ice, and other variants are freely available.

Add to this mix the H/D lights that are so

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powerful they require fitment to vehicles with self-leveling suspensions, but due to our non-autobahn style of roads result in glare occasions that require extreme concentration by the approaching driver.

The combination of all these facets results in a collage of problems for most drivers. Thinking that road safety is a network of improving road conditions is all but totally inaccurate.

By extension of the problems listed above the delineation of the lanes of the road network is yet another problem - the gradual downgrading of the reflective markings as road hardware suffers from poor maintenance, age, and the complications detailed above where headlights are improving but the reflective surface of the road markers remains unchanged results in a loss of delineation.

As drivers struggle with these complications the frustration increases, nerves become jaded, and concentration shows decrease proportionally. These values are often not considered in road toll statistics.

Placement of signs, it would seem is a science that requires further study. The in-advance message is the only treatment that can meld with

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the progression of the driver's awareness. Yet how often are signs placed either at the point of turn/ departure or even after that crucial point?

The rule-of-thumb has to be directly associated with the speed rating of the freeway, or on lesser roads the typical speed should that be somewhat less than the posted speed, resulting in sufficient time to allow for the mandatory signalling.

Possibly the most outstanding example in this category are the off ramp signs on freeways.

Placement of such signs can only be user friendly if located approximately 150 m. before the departure point, and for clear observation in close proximity to the lanes is vital. Passing 300 m. to a sign in fog is totally counterproductive, and not much better in rain.

By extension of these indicators even truck drivers suffer from the very same complications - albeit in a totally different environment. Their problem more usually involves the on-coming glare of vehicles being driven with the annoying and next to useless in-bumper lights. With no criteria to limit these lights their glare is often extreme. Their penetration across the median area between freeways is well recognized, yet there is no mechanism to require drivers to restrict their use.

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While it is agreed new roads are often far safer than old roads, the percentage of roads ripped up and re-laid is very close to nil, even in a 20-year cycle (the typical life of a road).

Repairs are often very rough and therefore disturbing patchwork horrors, and the materials used can be quite different to the surrounding surface. The Hume highway displays this problem, and even with Roads to Recovery funding inherent problems are not addressed so the subsequent failure occurs even within 12 months.

With the typical reference point of the cost/benefit ratio approach to road safety a proactive remedy is often not considered. I cite a classic example.

Encroachment of branches out to the bitumen on freeways has produced a situation where the mowing equipment would have to be driven onto the through lane to get past the obstruction.

The Work Care/Work Safe authority could not see reason to exercise some level of concern, preferring to advise that local papers should be the option of preference together with a covering letter to the local councillor.

Keeping people safe -

Progressive erumphe rates, safety cell construction,

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together with ABS brakes (to mention just a few) combine to protect occupants in crash trauma. These values have progressed quite quickly during the past ten years - just compare the vehicle so sought after in the early 90's with today's standard issue... airbags for both front seats, even automatic headlight switching is included.

Please note the growing list of vehicles that display a reflector set well below the tail light assemblies. Manufacturers recognise this logical requirement to cater for better awareness, so it then becomes a matter of some concern that our Roads authorities should likewise move with the times. Experience shows this does not happen - I have personal filed material that details years of procrastination. My current efforts with freeway signage placement shows six (6) years, with no response to questions posed two years ago.

Road Safety is a very poor cousin to best practise.

Douglas W. Gardner