

INQUIRY INTO THE INCREASE IN VICTORIA'S ROAD TOLL
Economy and Infrastructure Committee, Parliament of Victoria

Responses to Questions from Committee Members by Robert Morgan (Ref: S101)
28th August 2020

Thank you for your written questions, which I answer on the following pages.

So that my responses may be as helpful as possible for your inquiry, I circulated the questions to several other people with experience in these areas.

An overwhelming theme was obvious in their comments: it was 'Credibility'. If actions to improve road safety are to be *effective*, they must be *credible*; and where we are coming unstuck now is where there's a lack of credibility.

If your committee was to make only one finding and recommendation, I hope it would be this:

The key is Credibility

Every philosophy, vision, objective, program, government decision
and action to improve road safety in Victoria must be credible.

Everything else follows . . .

- >> Victoria's *Towards Zero* strategy (zero fatalities and serious injuries) lacks credibility because since it began, serious injuries have increased 30% instead of reducing by 15% (S101 pg 6).
- >> The Safe System lacks credibility as it considers only half the road safety issues (and only 1% of crashes). Notably absent are human factors and road safety engineering (S101 pp 9 & 11; S145 pg 4).
- >> The Safe System has no credibility because it cannot fix Victoria's worst blackspot (S101 pg 38).
- >> The aim of 'Zero road fatalities and serious injuries' lacks credibility because to achieve it means severely curtailing mobility, imposing extreme financial costs and under-funding other areas where lives can be saved ('A life saved on the road is more important than a life saved at home or in hospital').
- >> The over-arching philosophy of my alternative Safety Star System (S101 pg 11) does have credibility.
 - >> Road Safety Victoria lacks credibility as an agent for effective change in this state because its creation was just a name change (a change on paper), its Head holds two unrelated senior roles in the Department of Transport and its Executive Director has no experience whatsoever in road safety.
- >> Attempts to reduce the legal BAC below 0.05% will lack credibility as research shows alcohol-related crash numbers will be unaffected and hardened drinkers will still be on our roads (S101 pg 18).
- >> 40 km/h limits past every school lack credibility because there was no problem at or near the vast majority of schools (S101 pg 21). VicRoads lacks credibility for not publishing the research on this.
 - >> The '40 km/h past flashing red/blue lights on high speed roads' Rule lacks credibility because VicRoads' (unpublished) data shows it results in traffic-flow shock-waves and secondary crashes.
- >> The recent roll-out of wire rope barriers on major roads lacks credibility – not only because sites where barriers shield 'nothing' look absurd, but because (as the VAGO report identified) research results were misused and planning, project management and record-keeping were deficient.

. . . and so on and so forth.

Q1. With regard to speed enforcement and management, do you have any suggestions about what could be done to improve speed camera management to achieve both better road safety outcomes and to restore public confidence that speed cameras are not simply there to generate revenue?

Thank you for this question – it goes to the heart of the *Credibility* issue.

This is not simply a perception issue (a public misperception of a more honest reality). It is a public recognition of the actual reality. If it was a misperception we wouldn't see speed cameras where there is negligible risk, such as where travel speeds are higher due to inappropriately low limits (e.g. 60 km/h on wide divided roads that should be 70 km/h).

From the highest levels the system is corrupt: not financially corrupt, but ethically and morally corrupt. The public rightly senses the unfairness of it. The system is organised to maximise enforcement – and therefore revenue. Victorian governments now rely on the \$400m p.a. from cameras. It is not organised to improve road safety. If it was, then the earlier thorough research on cameras would prevail, rather than more recent research which appears biased towards the views of the funding organisation¹.

What can be done?

Top-Down Credibility

Firstly – at the highest levels – how to restore public confidence in speed and red light cameras is the same as how to restore the effectiveness and credibility of all road safety activities:

- Employ a knowledgeable, experienced and credible road safety champion as the head of a new road safety-related Division to lead the redirection of road safety (see Question 8).
- Get back to a science-based approach; reject the dogma of Zero and the Safe System.

Strategy for Use of Cameras

- Establish credible objectives that clearly set out the purpose.
- Include matters like: cameras to be credible in their context (e.g. their location with respect to other traffic control devices); unnecessary use will be avoided; overt use rather than covert; etc.
- Publish those objectives and adhere to them
- (Also see: using point-to-point cameras under Speed Cameras, and the need to review red light camera effectiveness under Red Light Cameras, below)

Speed Limits

Next, you cannot have a publicly supported enforcement program if the speed limits being enforced are unreasonable. Due to Safe System dogma over recent years, many limits are now unreasonable.

- Immediately withdraw the existing Safe System-based VicRoads Speed Zoning Guidelines, because they have allowed abuse of process by Councils and VicRoads regions, resulting in

¹ Gaffney (2018) at page 189 references earlier research by Andreassen (1995), Kent et al (1995) and Kloeden et al (2009). He also notes 'An analysis of CASR 2018 report on crashes at red light camera sites seemed to have conclusions not related to the report's findings – the analytical work implied none of the answers were significant yet the conclusion strongly supported the current agenda despite evidence showing increased number of crashes.'

speed limits that lack credibility and result in unwarranted penalties being imposed on drivers who are otherwise acting reasonably.

- In the interim, revert to the 1999 pre-Safe System Speed Zoning Guidelines.
- As a matter of urgency, revise the Speed Zoning Guidelines, basing speed zones on research and requiring credibility to be a key component. Align speed limits with traffic function and levels of road and roadside activity – and not with who administers the road. This will automatically mean that the guidelines cannot be based on the Safe System. If this cannot be done, all efforts to restore credibility / public confidence in speed cameras will fail.
- Review all existing speed limits and bring them into line with the research-based guidelines.
- Remove all unwarranted 40 km/h limits. This will be a positive action to restore public confidence.
- Rescind the 40 km/h speed limit law for passing an emergency vehicle with flashing red/blue lights on high speed roads (as has been done in NSW), due to the risk of secondary crashes.
- *Note also:* community acceptance of the South Australian system of reduced monetary fines and increased demerit points (as proposed by the RACV in S53) also hinges on the credibility of signed speed limits and enforcement tolerances.

Speed Enforcement Tolerances

- Given that:
 - the reduction in enforcement tolerances (the *Wipe Off 5* campaign) led to a 5 km/h drop in travel speeds, but no significant change in casualty crashes (S101 pg 22),
 - tight enforcement tolerances are leading to serious injury shock-wave crashes on freeways (So many drivers have been booked across the road network due to low tolerances and unreasonable limits that they brake approaching fixed speed cameras on freeways), and
 - tight enforcement tolerances trap drivers who are trying to act responsibly:
 - review Victoria's tight enforcement tolerances and ease them.
- In this review make credibility a significant requirement.
- Publish what the enforcement tolerances are.

Speed Cameras

- Ensure enforcement practices align with the revised speed zoning guidelines and the published strategy and objectives.
- Locate single-point mobile speed cameras only where there is a road safety issue (which used to be the approach) – where speeding is most likely to be the cause of the road trauma.
- Stop using them at lucrative 'cheap trick' sites like High Street, Reservoir past the reservoirs or Centre Dandenong Road, Heatherton past the airport and golf course.
- Prohibit the use of single-point mobile speed cameras and police hand-held speed detection devices within a reasonable buffer distance of a change of speed limit. For example, restore the 300 m enforcement buffer on entry to rural towns (now 100 m).
- Where single-point speed enforcement is used, sign it on the approach (If it's about safety, we want travel speeds to conform; if there's no warning, it's about enforcement and revenue).
- Change the majority of single-point cameras to point-to-point (average speed) cameras². Do not enforce single-point speeds at these locations. Establish reasonable enforcement tolerances.
- Provide a network of point-to-point cameras across the state³.
- Sign point-to-point camera locations so drivers understand single-point speeds are not being enforced (to avoid crashes from sudden braking and shock-waves).

² See Gaffney (2018) pg 148 for European experience with this. Copy supplied.

³ I understand that with current number plate recognition and matching technology, fewer than 100 cameras would be needed across the state's major road network to bring this into effect.

- As point-to-point enforcement through changing speed zones (e.g. open roads plus towns) results in the averaged speed being a 'curious' number, use market research and publicity to achieve public understanding and support for the system.
- Remove all single-point cameras from freeways (to remove the shock-wave crash problem) and implement the next generation of managed motorway technology to achieve reductions in crashes and overall improvements in safety.
- For roadworks/emergencies on major roads, develop specific speed management guidelines and (if enforcement is required) use point-to-point enforcement at each end of the works.

Red Light Cameras

The evidence appears to be that these cameras have little or no positive effect on crash occurrence.

- Get an independent review carried out on research papers on this topic. The required level of independence necessary for credibility will preclude several well-known road safety researchers and research organisations from doing this task. Try CSIRO or Deakin University.
- Decide on a strategy for red light cameras based on the review of the evidence.

Road Safety Camera Commissioner

- Review the legislation for this office to provide community confidence. Legislation must provide the commissioner with adequate powers to permit dealings to be fair and reasonable, considering not only enforcement but road safety risk. There must be transparency and credibility in the commissioner's activities.
- Require that the Road Safety Camera Commissioner is truly independent.
- Prohibit any former servant of the system (such as former employees of Victoria Police, Transport Accident Commission, Department of Transport, Department of Justice and Community Safety, etc.) from taking the role.

Q2. You pointed out that data collection could be improved by addressing gaps in collection relating to non-injury crashes. Could you expand upon how this could be achieved and what safeguards that address issues of data accuracy and reliability and privacy concerns might look like?

Here are the broad issues. Each is discussed in turn below:

- Basic crash data is deficient (not enough of the crashes are recorded).
- The amount and type of information now available for each crash is not being recorded.
- Data is not easily accessible to researchers, crash investigators and project planners.
- Privacy concerns.

Not Enough Crashes are Recorded

Issues

- The causes of most non-injury crashes are the same as the causes and circumstances of most fatal and serious injury (FSI) crashes.
- The more collisions that are reported, the more robust is the data and the more effective the solutions will be (public money will be more effectively spent).
- VicRoads stopped collecting non-injury crash data in 1990, purely as a cost-cutting exercise.
- In ~2016 the TAC no longer required a crash to be reported to the police before a claim could be made. This led to a 14% drop in crash records.
- Compared with the number of insurance claims, the current 'RCIS' data base contains less than 10% of crashes.
- Delays in reporting; errors in reporting: insufficient number of analysts.

Actions

- Require, through legislation or regulation, that all non-injury (i.e. property damage only or *PDO*) crashes above a threshold value be reported. In WA the threshold is \$3,000. This is in addition to injury crashes or crashes where the representative of the damaged property is not present.
- Make reporting as simple as reasonably possible (e.g. via a website). Give each report a unique crash reporting reference number.
- Ensure safeguards are in place to encourage reporting. The objective is to obtain data, not to increase prosecutions.
- Use cross-referencing to maximise reporting. Require that for the following activities (and probably others) a crash reporting reference number must be provided: TAC claims, motor vehicle repairs, vehicle write offs. Number can be provided by the police, by a tow truck company or from self-reporting via a website. Link to hospital and medical records.
- Employ and train sufficient numbers of data analysts, for timely and accurate data.

The Amount/Type of Data Recorded for Each Crash

Issues

- There will be a balance between amount of data obtained and encouraging the reporting of crashes.
- Useful technology for information capture is not being used.

Actions

- Develop standard data sets for different reporting methods or crash severities.
- Equip police with state-of-the-art mobile data capture. E.g. instead of descriptions being written much later, use voice recording on site; include images on-site – including number plate. Device would prompt for images up and down the road, roadside features, vehicle parts, drivers' licences, etc.. GPS and time recording allow a match to meteorology information, etc..
- Link registration and licencing (R&L) data, road condition data, coroner's reports and a host of other information.
- Review the above in relation to the existing nationally agreed minimum data set.

Accessibility of Data (excluding privacy issues – see final item below)

Issues

- The database technology is old and difficult to use.
- Simple queries of the data are impossible. While the data is notionally 'available', it is inaccessible without significant programming skills and manual effort.
- Different types of study require different levels of information (E.g. for my crash investigations of an intersection of length of road I need the police description and sketch and existing types of data, but other information may also be useful; for broader-scale studies more information items will be required to allow patterns or trends to be established (more details of vehicle type, weather, etc.).

Actions

- Develop/create an entirely new, expanded-capability database with a modern search engine and data extraction tools and up to date mapping capabilities.
- Determine levels of access suitable for the optimum use of the data by professionals.
- Design it to allow easy public access to useful amounts of data, subject to privacy arrangements (see below).
- Design it so it's also easy for state government, local government and consulting professionals to use, because at the moment those with access to the information appear unable to use it.

Privacy Concerns

Issues

- Issues are discussed in Submission S101, pp 29-30.
- In all my time using 'restricted' data, I have never heard of any breach of privacy or inappropriate use of private information. Current concerns exaggerate the actual risk.
- Need to ensure private information is not made public.
- Privacy concerns are currently preventing available crash details (i.e. contributing factors) to be accessed by professionals who need it.

Actions

- Make the starting point that access to data needs to be maximised for the benefit of the community – and work back from there. Do not start from 'absolute privacy must be guaranteed' and see what pieces of data that allows to be made available.

Q3. Can you expand on your reasons why a stand-alone Victoria-only approach toward data collection and storage be of greater worth than an integrated national approach?

This comes from my perhaps-poorly-worded second recommendation (S101, bottom of pg 30)

What I meant was that, if necessary, the crash information (within Victoria) should be put in a separate database from all the other government information (within Victoria), that it is linked with.

The purpose was to enable easy access to the crash information – which used to be easy to access with the now obsolete/closed down ‘Crashstats’ database, but which is currently virtually impossible to access without programming skills.

It has since been pointed out to me that the reason for this problem of data inaccessibility is that the database now being used is technologically antiquated.

- Thus, the solution lies not in a separate database, but in funding a completely new, up-to-date crash database, as described in the ‘Actions’ in answer to Question 2.

While on the topic of Victoria-only vs. national approaches, it is worth saying that the benefits of national uniformity are limited. Often, national uniformity (or ‘harmonisation’) simply results in lowest-common-denominator, least-best practices being adopted.

Consider that if, 50 years ago, Victoria had waited to get every other state to agree to compulsory seat belt wearing. It would have taken years to implement.

On any road safety issue, you have to start somewhere. Cars without seat belt didn’t work – Victoria took action in 1970 and others followed. Now, the Safe System and *Towards Zero* certainly aren’t working. Do we wait for national agreement? Why would we? What is needed now is the same as back then – political will supported by the scientific evidence.

In 1970 RoSTA, the Road Safety and Traffic Authority was created. Its Head was the esteemed road safety researcher, Dr Peter Vulcan who was able to provide leadership, give the organisation credibility and give road safety in Victoria a credible direction.

Q4. In your submission you suggest that “the objective of ‘zero fatalities and serious injuries’ should be removed from any state road safety strategy”. Does this mean we should accept a certain level of death and trauma in any road safety strategy? How do calculate an acceptable tolerance?

The short answer to the first part is ‘Yes, of course – that’s what we have to accept’.

Regarding the second part ‘How do you calculate an acceptable [level of death and trauma on our roads]?’ , I’ve heard this question before from Safe System advocates. To me it’s one of those “When did you stop beating your wife?” type of questions – it’s loaded.

I understand that your constituents may wish to be comforted by the thought that road trauma may one day end, especially if they have lost a loved one in a road crash and have to come to terms with the pointlessness, futility and unfairness of it. Perhaps someone has acted wilfully or carelessly, causing a road death or trauma that has affected a family. That would be difficult to deal with. Some certainty would be a comfort.

But there is no certainty in life. At times life can be unfair. One of the roles of government is to reduce unfairness. But eliminate it? You can’t completely eliminate something you don’t have complete control over (and maybe not even then). For example, a government can’t control:

- the car I buy (a small car, an SUV, an older car if I don’t have much money),
- the weather when I make a journey (see the last item under this Question 4),
- the momentary carelessness of me or another car driver or another pedestrian,
- whether I turn left or right to get where I’m going,
- exactly how each driver might respond to supposed safety improvements in their car,
- the tree that falls across the road,
- all the circumstances that prevent the rural ambulance reaching the crash site in time on that particular day – and so on.

If safety on our roads is paramount and Zero must be achieved (as many Vision Zero advocates claim), then all else must be subservient. So, for example, we will be told:

- which vehicles we can buy (only the safest ones), and
- when and how we can use them

- with severe penalties if we don’t conform, because my personal safety as I go around the road network is more important than anything else, like my personal safety at home, or my personal freedom, or my mental health, or the health of ‘my aunt in the cancer ward’ , or any other social good.

What will it take – a 30 year state of emergency? Good luck getting that through parliament.

One thing Vision Zero advocates avoid is describing what our society would look like once Zero has been achieved. Not only what the roads and streets will look like, but also describing that era in terms of the form of government, levels of taxation, how government is financed, what levels of police activity and other enforcement activity will be present, how the 'Justice' system will be structured, how it will affect freedom of speech (Vision Zero is dogma, so truth’s not an option), freedom to do other activities (will other risky behaviours be banned – or encouraged?), business activity, air pollution, global warming, mobility, equal opportunity, job security, etc., etc..

As parliamentarians, you are always needing to think about wider consequences. Those are a few.

If none of the above sounds possible, let alone desirable, then the only honest course of action is for you to recommend that the aim/vision/concept/target of Zero deaths and serious injuries on our roads must not be included in this state’s road safety thinking or strategy.

This doesn’t mean we stop trying to reduce the number of fatalities and serious injuries through targeted, effective and cost-effective actions. In fact, that’s exactly what we must do. Apply science instead of dogma.

If someone has lost a loved one or had someone suffer a serious injury in a road crash you can at least empathise with them and say that road safety improvements are being made in a targeted way on a priority basis. So long as money is spent effectively, it then becomes an issue of the speed of improvements: how much money is spent on roads vs. hospitals and schools, etc.. Better that, than someone saying that you promised Zero, so why haven’t you achieved it yet?

But right now we can’t actually honestly say that fatalities and serious injuries are being addressed in a targeted, effective and cost-effective way, when we see a program like the TAC-funded wire rope barrier roll-out wasting money and creating new problems – or when I see detailed crash analyses not being done because the skills have been lost.

The Alternative

Success never comes from setting goals which are seen as unachievable.

A more credible approach would be to select a realistic target of a percentage reduction in the fatalities and serious injuries. The community is more likely to buy in to a target which is viable, than a goal which is idealistic, but not realistic. To do this is not a case of ‘accepting a number of fatalities’, but rather being credible.

We can’t control everything, but we can seek to be honest and do our best. Even achieving the proposed 15% reduction in serious injuries (from late 2015) is going to take effort⁴, seeing the number has increased by 30% instead, under *Towards Zero*.

Time to Consider the Weather

Your inquiry is into the increase in the road toll. That is, the increased number of fatalities in 2019.

248 (2014)	252 (2015)	290 (2016)	259 (2017)	213 (2018)	266 (2019)
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From these numbers, it would appear that 2019 was on trend, but 2018 was the exception.

I am now aware of research that shows these fatality number fluctuations follow weather patterns. For example, in early 2018 the weather was extremely stable and wet or damp pavements were very infrequent. In early 2019 there were frequent rain events and pavements were damp (not obviously wet, just damp) on numerous occasions and for longer periods.

Lower speed limits won’t fix this, but a public awareness campaign may have major benefits (see the last item under Question 5).

⁴ It will take a re-direction, increased use of skills and credible research, and adequate and targeted funding.

Q5. In terms of modifying driver behaviour and attitudes, do you have a view on the effectiveness of the TAC road safety advertising programs?

TAC ads have been great for brand enhancement of the TAC. So much so that perhaps we think no one else does ads like us and there's a successful 'Victorian model'. Here are some comments:

- There has been a vast amount written on this topic, on campaigns in Australia and elsewhere. E.g. see Australasian College of Road Safety (ACRS) Journal Vol 22, No. 4, 2011 (copy supplied).
- There is no consensus. There is certainly no consistent positive support.
- Effectiveness should not be based on how many people remember the ads (which is an advertising success metric), but on whether it can be demonstrated the ads are effective in changing the attitudes and behaviours of the road users they target (whether alone or in combination with other activities like enforcement).
- The high levels of self-congratulation on the TAC website about the 'success' of its campaigns appears to be at odds with the amount of information about effectiveness.

FEAR CAMPAIGNS

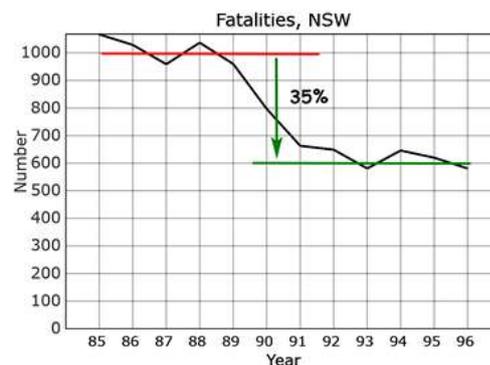
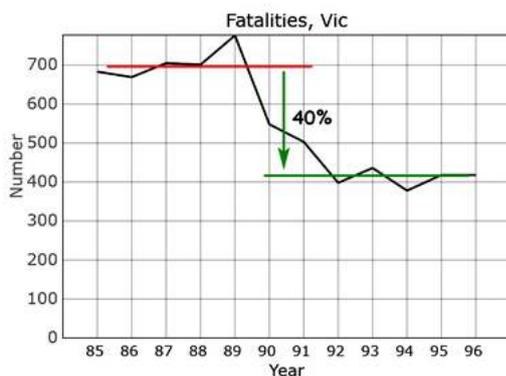
- Generally they don't work. (It doesn't apply to me – I'm a good driver).

DRINK DRIVING CAMPAIGNS

- A range of outcomes, from 0% effective to 28% effective.
- When ad campaigns are associated with enforcement campaigns, the results are even less clear.

THERE'S NOTHING SPECIAL ABOUT TAC ADS

- Ads have been used in other states.
- Anderson & Howard (S. 45) refer to 'the Victorian Model' of co-ordinated government agency cooperation and action, including ads and enforcement. But the 40% drop in fatalities (between trend lines) in Victoria over the period mentioned is similar to the 35% drop in NSW. Other factors were in play that are not acknowledged.



OTHER ISSUES THE ADS RAISED BUT WHICH WEREN'T ADDRESSED

- It occurred to me that several TAC fear-type 'safe driving' ads through the 1990s relied on a vehicle being parked in the left traffic lane on an arterial road, to set up the hazardous condition for the risky behaviour to feed into.
- One way to address this is behaviour change (difficult); the other way is to remove the hazard.
- No one in a responsible position thought to address the physical causes of the problems shown in the ads (apparently making ads is easier).

WIRE ROPE BARRIER ADS

These expensive ads were 'required' after the poorly planned and executed TAC-funded wire barrier program and adverse community reactions to it (a lack of credibility). The ads would have been unnecessary if the barrier program had been properly planned and managed.

- The VAGO report identifies some issues with that TAC-funded program
- The cost of ads was in addition to wasted (ineffective) elements of the barrier program
- There's no available assessment (that I can find) of the effectiveness of the 'Safety Barriers Save Lives' ad campaign, but anecdotally I still hear of a level of community resistance.

ADS WE DON'T SEE

Market research by the TAC shows that key distractions for drivers are inside the vehicle (vehicle controls, passengers, pets) and roadside activity (people, advertising). Mobile phones are low down on the list. But mobile phones are an easier message to sell in an ad.

What about other road user behaviours where a change might reduce crash numbers and severities? Many of these behaviours arise from a lack of awareness of the risks or the rules (rather than a refusal to acknowledge the risks or obey the rules).

The following issues (for example) receive no attention, leaving the public unaware:

- Driving on damp pavements (see last item under Question 4)
- Defensive cycling
- Pedestrian visibility
- Good practices when your car breaks down
- The risk of being run into if you stop on a freeway⁵
- Respecting trucks
- Safely changing lanes
- Road rule changes like what different lines mean, or how to use different lanes
- Thinking ahead to be in the correct lane for turns

Effectiveness should not only be thought of in terms of 'the effectiveness of an individual campaign', but also in terms of 'for the dollars spent, is there something else the TAC or the government could be doing or making us aware of that might have a greater effect in reducing trauma?'

⁵ I have raised this issue a number of times over many years. For decades in the UK there has been regular media information about the hazards of stopping on motorways and that if you break down you must get out of your vehicle and get to the outside of the crash barrier, because you risk being run into. The recent Eastern Freeway fatal truck crash was just the latest episode of this problem in Victoria, yet here there is no community awareness of the risk. While the way that freeway site was managed may well be a police OH&S issue, there is no avoiding that the one person on foot who survived was behind the crash barrier. Had there been ongoing media ads on this topic over the past 20 or 30 years, I expect no one would have been standing in the emergency lane for long.

Q6. How do we get through to people who, no matter how much legislation or regulation is put in place for speed limits and speeding, will continue to drive above the limit if they are so inclined? How do we deal with high risk behaviour (the 'aberrant few') relating to speed without utilising broad-based speed restriction measures?

Exactly – more legislation and regulation is no guarantee of better safety:

- This is why 'Laws' is one of the six points in my Safety Star System (S101 pg 10).
- Laws need to pass the credibility/effectiveness test.

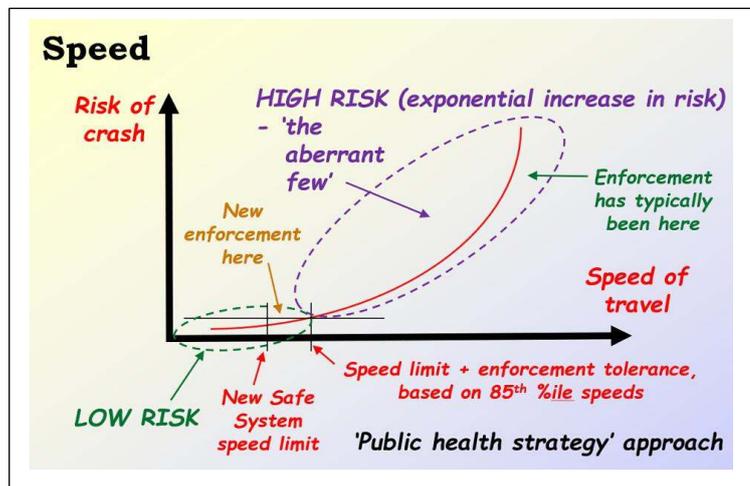
Additional 'broad-based speed restriction measures' will only further impose on the majority who are already doing the right thing. The result will be:

- No increase in effective outcomes (no decrease in trauma)
- Disdain and disregard by the reasonable majority: a decrease in the credibility of laws.

You will recall this diagram (S101 pg 19)

There will always be 'the aberrant few'. Existing laws and enforcement generally have the ability to deal with this minority.

This minority is likely to ignore more broad-based limits. They are already up in the 'HIGH RISK' area in the diagram. It's the 'New enforcement here' (any additional 'broad-based speed restriction measures') that will trap some of the reasonable majority – for no worthwhile purpose.



Appropriate Speed Limits

Regarding the part of the question about drivers who 'will continue to drive above the limit if they are so inclined':

- It is important that speed limits are appropriate for the conditions
- Speed limits based on 85th percentile speeds as the starting point are more likely to be self-enforcing, with the vast majority travelling within the limit (S101 pp 23-25)
- A lower speed limit does not automatically result in lower travel speeds or better safety (S101 pp 21-22)
- Drivers need to see an obvious reason for a lower limit, for it to be credible and adhered to.

What Can Be Done

Speed-limit All Vehicles

Here is the one topic on which your committee can make a specific, high-benefit recommendation.

Japan has had speed-limited vehicles for over 30 years⁶. Gaffney notes that regulating the maximum speed of vehicles is not related to the power of vehicles. Nor does it affect the safety of overtaking on high speed roads, as modern vehicles can have an automatic override to allow for short (30-60 sec) overtaking manoeuvres.

In view of these factors, what arguments would there be to limiting vehicles to 140 or 150 km/h? Even if speed limits on high standard rural freeways increased to 130 km/h, a limit in the order of 140 – 150 km/h would appear reasonable. Then perhaps vehicle manufacturers would provide speedometers that show a useful gradation of speeds.

- Financial incentives could be given to car buyers for speed-limited vehicles.
- Anyone guilty of travelling, say, 30 km/h over the limit (assuming limits are sensibly set – see my answer to Question 1) could be required to only drive a vehicle that is speed-limited.

Occupational Health and Safety

Accidents which occur during a person's work activity also need to be considered from an occupational health and safety (OH&S) viewpoint.

- In some cases, accidents can be avoided or accident severity can be substantially reduced if better OH&S practices are in place for the times employees are on the road (as drivers or pedestrians). Part of a road safety strategy would be to encourage OH&S plans to consider road safety issues.
- Draconian OH&S laws involving jail are probably unhelpful in achieving this.

⁶ See Gaffney (2018) Chapter 15, starting on pg 153. In Japan the limit is 180 km/h.

Q7. *If road safety strategies are disproportionately focussed on high risk behaviour, does it risk breeding complacency in the reasonable majority of road users?*

'Complacency by the Majority'

I'm sorry, but 'breeding complacency' sounds like the pre-scientific days of the 1950s and 1960s, when the driver was blamed for road trauma. Here is a quote from a state road authority in 1950:

"Main Roads are thus built, improved and furnished in such a way as to facilitate their safe use, and to aid the drivers of vehicles in the safe operation of their vehicles. In the final analysis, however, it is the judgment and care of the individual driver and of the individual pedestrian which determine the issue."⁷

In other words, as I commented in my submission (S101 pg 25), in those days the view was that *everyone just needs to be more careful*. Now (under the Safe System) it's *everyone just needs to slow down*. With a 'complacency' view it'll be *everyone just needs to stay focussed and pay attention*.

Most people aren't candidates for complacency; most people do the right thing. It is important not to think that some magical, low fatal and serious injury target, like Zero, can be achieved by giving the majority a hard time. Punitive measures breed avoidance behaviour and resentment.

Road safety strategies should focus more on the social psychology of driving – on the fact that the reasonable majority of road users, almost every time they drive, cooperate with – and compensate for – the high risk behaviours of others, to avoid collisions. This is a significant responsibility, almost always well executed. That's why crashes are, statistically, such rare events⁸.

We should give drivers some credit for this and stop thinking of the next way we can make their task more difficult.

Example

Say there are rural overtaking crashes (which there are). Do we say the driver 'at fault' took too much of a risk or wasn't concentrating enough? Every overtaking event on a two way road requires judgment. Perhaps there was an error of judgment, rather than a lack of concentration. Then also consider this: because of our punitive speed laws and covert enforcement in Victoria, did the overtaking driver think they'll lose their licence if they take the sensible approach of momentarily going 20 km/h faster, to get past with minimum exposure? Did they instead overtake too slowly? In recent years I have seen some drivers take an eternity to overtake in rural areas.

⁷ *Building Safety into Roads*, Main Roads magazine March 1950, pp 91-95, Department of Main Roads NSW.

⁸ I am indebted to Dr Mike Regan of UNSW for this succinct statement.

A Strategy Focussed on High Risk Behaviour

I am not advocating that we have a road safety strategy focussed on high risk behaviour.

I am saying that the laws and enforcement around speed and drink driving should be focussed on people with high risk behaviour, because the alternative is ineffective.

Laws and Enforcement are (or, at least, should be) only a small part of a whole road safety strategy – as my alternative approach illustrates (S101 pp 9-11). Concentrating laws and enforcement on high risk behaviour does not mean other road safety issues should be ignored.

Misusing the Term 'High Risk'

There is no agreed definition of high risk. With drink driving, I have chosen to call a BAC of more than 0.05% 'high risk'. With speed, I have chosen to call a speed which is greater than a reasonable speed limit plus a reasonable enforcement tolerance 'high risk'.

For me, 'speeding' is going over a reasonable speed limit by a significant amount for an extended time. But proponents of the Safe System have chosen to manipulate the language by calling speeds that are a few km/h over the speed limit 'low level speeding', thereby tarring these speeds with the same brush as blatant high risk speeding.

Given that I've exposed the fraud in the claim that going 5 km/h faster in a 60 km/h, 70 km/h or 80 km/h zone doubles your chance of a crash (S101 pg 22), it's important to be alert to how people define and use the term 'high risk'.

Complacency Elsewhere?

If there is complacency in any quarter, it is with:

- State governments who since ~1990 have downsized, de-skilled, outsourced and underfunded the state authority most-tasked with achieving safety on our roads (VicRoads),
- The Transport Accident Commission, which despite (or because of) having large annual budgets has not adequately acquainted itself with crash risk and crash causation when developing remedial programs, and
- Managers who think that relevant technical experience doesn't matter and that simplistic concepts like the Safe System or Vision Zero are a solution to something as complicated and multi-faceted as reducing trauma on our roads (though that may just be their arrogance).

Q8. Could you provide some more detail in relation to how you would restructure and/or resource the Victorian road and transport governance framework to better meet road management and safety needs across the state?

What Hasn't Worked

To get some perspective, the following actions haven't worked:

- Absorbing the RTA (Road Traffic Authority) into VicRoads. The culture of a large project-delivery organisation overwhelmed and undervalued the specialist traffic and road safety skills.
- Downsizing VicRoads by successive governments. Loss of experience, loss of skills, loss of corporate memory about traffic and road safety issues. No time to do things properly. Generalists survived over specialists. Knowledge vacuum allowed simplistic ideas (Vision Zero and the Safe System) to gain traction and allowed unskilled 'road safety celebrities' to shine.
- Managerialism. Appointing as the head of VicRoads' Road Safety Department people with no working experience in road safety engineering or road safety research. Lack of expertise and leadership.
- Allowing project-delivery people to sign off on traffic projects. Without internal skills, external road safety engineers were employed by price (not skills or experience). Final decisions were made by project staff. Project-delivery's objective was (and still is) to get it built ASAP, not to get it to operate effectively and safely. This applies to all road project-delivery organisations.
- Underfunding of road maintenance by successive governments. The condition of road surfaces, signs and lines has a direct impact on road safety.
- Setting up a non-engineering road safety organisation (the TAC) with little budget constraint or oversight and a legislated mandate so loosely described that the organisation has been able to promote its brand far more effectively than it has been able to reduce road trauma. It has capitalised on the knowledge vacuum at VicRoads. Dominance has led to wasteful funding of engineering projects.

There are other problems like compromised road safety 'research' reports for government agencies, of which I do not fully understand the causes (except for the obvious loss of skills – and thus technical scrutiny – within government agencies).

Preamble to My Recommendations

The dire direction of road safety in Victoria is not an isolated problem. There is not even a Transport Plan for Victoria or for Melbourne – a very basic need. The government avoids having a Plan, as that requires a commitment of direction. Instead of a Plan, we have a collection of projects⁹.

In road safety the state has no Plan. It has a long term objective (to achieve the unachievable Zero) but no published action plan to achieve it. It's had interim targets (including a 30% reduction, then a 15% reduction in serious injuries), both of which had no credible action plan, and failed.

Fixing road safety is likely to expose other areas in the Department of Transport. I trust we won't have to wait for a catastrophic failure that cannot remain hidden, before there is major improvement.

⁹ If you're unsure of the difference between a Plan and a collection of projects, you are in good company. The Secretary of the Department of Transport stated publicly in late 2019 that they are the same thing. An alternative view might be that a Plan includes aims and objectives (and maybe performance measures), so that actions are not just big 'announceable' projects, but also include (for example) activities like removing parking from arterial roads, to support objectives like 'optimising the use of existing infrastructure' and 'improving road safety'.

Restructuring Road Safety

The key is credibility:

- Have bipartisan political buy-in, through a Parliamentary Road Safety Committee.
 - Acknowledge past/current failures (truth and reconciliation) and move forward.
 - Commit to excellence, effective research-based actions, cost-effectiveness, and adequate funding and other resources – so that advice received is robust. This is a major point: the hollowing out of government agency expertise is the main reason for current problems.
 - Have all relevant government agencies get involved, be committed and pull in the same direction.
- As a consequence of those commitments, put the Safe System, Towards Zero and Vision Zero behind us. Establish a credible new direction, by doing the following:
- Create a specific Road Design, Operational Management & Road Safety Division.
 - Responsible for road safety and the effective operation of the road network.
 - Responsible for a co-ordinated approach to developing improvement programs for road safety gains.
 - Has adequate authority and resources; able to develop training programs for supporting agencies (Victoria Police, TAC, etc.).
 - Collects data, analyses data and makes it readily available.
 - Reviews, supports and uses sound research, including international experience.
 - Connects with and supports road trauma recovery services.
 - All road designs and project-delivery by state entities to be subject to approval of this Division.
 - Provide clear guidelines, e.g. for local government who manage most of the road length, but rely on technical expertise of state agencies.
- Leadership: require that the head of the division and the head of the road safety section have had direct professional experience (not just managerial experience) in the relevant road safety areas such as road safety engineering and road safety research.
- Review the various roles of the TAC. Identify those roles that would be better placed within the Road Design, Operational Management & Road Safety Division.

Resources

- Identify where the limited amount of remaining, uncompromised technical expertise is, including those who've been side-lined in the era of the Safe System.
- Identify research needs.
- Assess funding needs and sources for state and local government road authorities and other state agencies. Relate these to road safety targets.
- Rebuild road safety from the ground up: employ competent people with expertise in vehicle engineering, traffic engineering, road safety engineering, road user behaviour, road design, road pavements, statistical analysis, etc. (principally – though not exclusively – within the Road Design, Operational Management & Road Safety Division).

References:

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Australasian College of Road Safety (2011) *ACRS Journal* Vol 22, No. 4, 2011, Canberra