In defence of mandatory structured Defensive Driver Training courses.

Preamble

It's hard to imagine but in 1976 a total of 108 people lost their lives due to crashes on Tasmanian roads and that is exactly three times the total for 2020.
So what caused this massive reduction in the road toll.?

There are many and varied reasons in no particular order such as

Our road infrastructure was upgraded with corner and crest realignments.

Roads were widened and resurfaced.

Crash barriers were installed on road verges and in the centre of converging lanes on dual lane carriage ways,

Road signage was upgraded with the intended message easier to understand.

A myriad of safety features were introduced into vehicles over time such as anti-lock brake systems ,traction control ,lane keep assist ,emergency autonomous braking ,hazard warning systems plus vast improvements in the dynamics and handling capabilities of the vehicle.

There were significant improvements in tyres in terms of available grip and more efficient tread designs to disperse water in wet conditions.

All those items were designed to assist the driver from getting into a dangerous situation in the first place.

If unfortunately the situation got to the point of a crash the occupants now had improved protection due to activation of air bags in conjunction with seat belts that pre tension and restrict movement.

Manufacturers have spent billions of dollars over the years developing crash structures that are designed to crumple on impact and reduce the risk of injury or death.

Side intrusion bars have long been included in doors ,all glass is now laminated ,hard surfaces have been replaced with softer materials to cushion the impact of a crash and high grade steel is now used in critical areas most likely to be impacted in a rollover.

There was a greater focus by Police on speeding ,failure to wear seat belts ,phone use while driving ,drink and drug driving and inattention.
The ANCAP safety rating criteria was upgraded over time to meet higher safety requirements forcing manufacturers to implement improvements to achieve the best possible star rating of five.

Bearing in mind the number of vehicles on the road would have increased significantly during that 44 year period it would have been very easy to sit back and pat ourselves on the back for such an improvement.

In 2011 Tasmania recorded a record low 24 deaths on Tasmanian roads but over the ensuing nine years to the end of 2020 the highest was 36 and the lowest was 29 for a ten year average 32.1

There were 2690 serious injuries recorded in that ten year period with the lowest of 241 in 2012 and the highest of 298 in 2015 for a ten year average of 269.

If a graph was drawn for both fatalities and serious injuries covering that ten year period they would be very close to a straight line.

In short ,by any measure ,there has been zero improvement for ten years.

That is despite millions of dollars being spent advertising safety campaigns ,increased police presence on the roads ,roadside checks ,drug and alcohol tests and the hand wringing pleading from the relevant authorities.

And lets not forget all the other factors mentioned earlier in this submission.

The fact is we have seen virtually no improvement in ten years and if this result reflected the progress of a business it would be considered a failure and heads would roll.

It is way past time for this model to reduce the road toll to be buried and those responsible for future decision making to go back to square one and the basics.

Putting aside the current licenced drivers as a separate issue lets focus on our future drivers and the most efficient method to engender a safety first attitude and a realisation that a licence is a privilege to be earned.

For many years I have advocated mandatory structured defensive driver training courses as part of getting a licence only to be told by members of parliament ,bureaucrats and numerous so called experts that the concept is a waste of time and dangerous.

Comments such as
“drivers will become over confident”
“because the courses are generally conducted at a race course participants are more likely to drive too fast”
“Drivers are more likely to be involved in crashes”
Etc Etc Etc.

On one occasion a senior bureaucrat ,who clearly was frustrated by her inability to counter the reasoning that I provided for mandatory defensive driving courses for learner drivers ,ended the meeting by stating “the only reason you are here pushing this concept is to make money”.

Ask these same people to produce the evidence to support their negative view they will inevitably point to “a study conducted by X university”.

Ask them if they have ever participated in a structured defensive driving course the answer is always. No.

Ask them to nominate what significant areas are addressed in the course content the usual answer is “they teach you how to control a skid”.

The current learner driver licencing system relies on a stepped process over a specified period of time involving on line testing and education plus a minimum of 80 hours of **supervised** driving including a minimum time of night driving.
There is no stipulation for driving on gravel roads of which there are hundreds of kilometres in the state and which pose far greater risks for an inexperienced driver. !!!!

The first question is Who can be a **supervisor** and what qualifications are required.?

1 Any person who holds a full Australian Drivers Licence.
2 Must not have been suspended or disqualified in the past two years.
3 Must have a blood alcohol reading of less than 0.05 (preferably 0.00)
4 Must be seated in the front passenger seat of the vehicle.

That’s it No testing required and no medical required.

At the present time ten 50 minute lessons with the RACT will cost $650-00 and obviously the more lessons booked the higher the outlay.

With that in mind you don’t have to be a genius to work out that the primary supervisor will finish up being either Dad ,Mum ,Uncle ,Aunt etc.

The next question is. Are they equipped to provide the correct instruction to achieve the objective to be a safe driver who at this point has no real life on road experience ?.

Between 1992 and 2009 I conducted over 700 one day structured defensive driving courses in the state at Symmons Plains ,Baskerville Raceway and the Wynyard Airport.

On training days I engaged an experienced and credentialed driving instructor to assist in the program which commenced at 9-00am and finished at 5-00pm and was limited to a maximum of twelve participants.

There was a balance of theory ,practical and demonstration segments with a maximum speed set at **80kph** and participants used their own or company vehicles.

It's interesting to note that the majority of participants came from the corporate or government sectors with very few "private" drivers choosing to be involved.
The reason. "I have a licence and I have not had an accident (read crash) so the course will do nothing for me".

Bearing in mind many of the course participants had children or possibly would have later in life it would be reasonable to assume that at some point they would finish up as " **Supervisors**"

So what did these seasoned experienced drivers have to work through on the day and more importantly how did they shape up.?

Following distances.

Course participants were asked to nominate how they establish a safe following distance to the vehicle in front.

The answers ranged from
Gut feeling.
A couple of car lengths.
One car length for every 10 kilometres of speed. (How can you measure in your mind multiples of car lengths) ?
Very occasionally someone would ask if it was based on a time factor which is correct but they had no idea what that time factor was or how to measure it.

Item 3 on Page 6 of the Tasmanian Road Rules booklet states three seconds and while there is a diagram to emphasise the rule there is no explanation as to how to achieve that.

More importantly there is no reference to **reaction time** which is a critical component to a successful outcome.

From my observation and experience the first clue that a driver realises something has happened in front is when the stop lights of the vehicle in front come on.

When you ask a driver what is the first thing you have to do they almost universally will say "put my foot on the brake".

Unfortunately there is a gap between the moment when the brake lights come on and the following drivers foot hits the brake pedal and that time will vary from an absolute bare minimum of one second assuming the driver is focused.

It needs to be understood that in that reaction time period (more likely to be two seconds) nothing has happened to the following vehicle whereas the driver in front already has his foot on the brake and that vehicle is already slowing.

Now imagine if the vehicle in front is a late model car with quality tyres and the latest development in brake technology and the following vehicle is old with a less than efficient brake package and fitted with tyres that are well past their use by date.

Bear in mind Tasmania has on average the oldest vehicles in the country at 12 years.

It's all very well to look at computer screen or read a rule book but there is no substitute for a demonstration in a controlled environment with two cars and two experienced instructors.

Car A travels on the left hand side of the road and car B on the right hand side but some distance behind with each traveling at an agreed speed.

Each car carries three volunteer course participants and the ones in car B have to nominate to the driver what is in their opinion a safe following distance.
Without warning the driver of car A will apply the brakes simulating an emergency situation and the driver of car B has to respond and stop the vehicle.

Inevitably car B will stop either alongside or past car A which means there has been a crash.

The exercise is repeated at different speeds and gaps while remaining participants observe the demonstration from a safe distance.

This simple exercise never failed to shock most participants who suddenly had to reassess their following distance and the need to look well ahead.

As for how the all important three second following distance is measured. 5

When the rear of the vehicle in front passes a fixed point the following driver counts out three seconds and if the front of his vehicle passes that fixed point before he finishes counting then his vehicle is too close.

The major benefit of this system is that it is always relevant to the speed and takes away all the guess work.

The faster you go the bigger the gap and the slower you go the smaller the gap but the gap will always be three seconds.

Ergonomics and use of controls.

How we position ourselves in the drivers seat will have an impact on our comfort level and the ability to safely control the vehicle in an emergency.

The general rule of thumb is "if you are not comfortable you will not respond safely".

There is no mention of this important issue in the book and even if it is covered in an on line presentation there is no substitute for gathering the participants around the drivers door with an instructor demonstrating key areas to address.

Correct seating position including the angle of the seat back and the relationship to the steering wheel. Note. Many drivers sit too far back which impedes their ability to control wheel movements.

Ensuring there is always a bend in the arms when holding the wheel and similarly being seated in such a way that there is always a bend in the legs. With straight arms and legs in a crash there is a far greater risk of major injury to limbs.

Correct position of hands on the steering wheel.
Previously this was at the ten to twelve and the ten past twelve location but to ensure the hands are not impacted by the activated air bag it's now widely recommended to place the hands at the quarter to twelve and quarter past twelve position. The widest possible location.

The adjustable head restraint (it's not a headrest) needs to be positioned to prevent rearward movement of the head if there is an impact from the rear.

The importance of setting up rear vision mirrors to minimise head movement and maximise efficient and safe use.

The necessity to be familiar with all controls ie Indicators ,lights ,wipers ,heater/demister control etc.

The correct fitment of the seat belt on the body.

Many vehicles have a seat belt height adjustment on the B pillar that can be adjusted to ensure the sash location is as low as possible to the shoulder.

Frequently we witnessed the belt anchor point in the highest position which ,depending on the height of the person ,meant in a crash the belt could cause a neck injury.

Similarly the lap section needs to be as low as possible across the hips and not higher across the stomach.

An open window is a major problem in a crash ,especially in a rollover ,as it's possible a persons head or arms can be exposed to injury.

Despite wearing a belt the violence of a crash will still cause significant body movement which cannot be controlled in that situation.

Even a half open window can inflict serious injury if the head movement causes impact with the sharp edge of the glass.

Maintenance Tips.

While at the vehicle it is an ideal opportunity to lift the bonnet and give a brief overview of how to check the engine oil ,engine coolant ,brake fluid and washer bottle levels and the importance of changing wiper blades every twelve months as a minimum.

Tyres are the only contact with the road so therefor are critically important to ensue your safety and your passengers safety yet we found almost a universal lack of knowledge about correct tyre pressures and where to find the information.

Almost to a person the answer to the question "why do we have tread on tyres? " was **grip** which is totally wrong as the tread is there to disperse water.

The mention of "wear bar indicators and the minimum legal depth requirement" was met with puzzled looks until pointed out on the vehicle.

Also explained was the impact on tread wear due to underinflation (extremely common) overinflation and poor wheel alignment.

Universally no one knew that tyres go through heat cycles during their life which hardens the rubber and reduces the amount of grip as they get older which is why it's recommended tyres be replaced after five years irrespective of tread depth.

Yes there is a cost involved but then how much is a life worth if you slide into the path of an oncoming vehicle or a tree and there are fatalities.

When participants arrive at the beginning of the day each vehicle on the course had a tyre check carried out by the second instructor and a verbal report was provided together with advice to each driver.

The impact of loose objects (Projectiles) in a vehicle.

Over the years we were provided with many examples of occupants who were either killed or seriously injured by flying objects left unrestrained in a vehicle that was involved in a crash. Ie Brief case ,umbrella ,screwdriver ,metal lunch box ,computer ,tin of paint ,metal pen ,hard hat ,thermos flask , etc.

Frequently we removed an almost endless list of "deadly weapons" from vehicles and when it was explained to the driver what forces were at play even in a low speed crash the standard answer was "no one ever told me that".

For example. If a vehicle ran into a stationary object at 60 kph an unrestrained 15 kilogram child produces a force of 550 kilograms ,the weight of 22 bags of cement in only three hundredths of a second. (Reference Safe-n-Sound)

Have you ever considered that man's best friend "your beloved pooch" could kill you.

Steering technique and judgement skills.

For this exercise eight orange cones were placed in a straight line 12 metres apart and each participant ,under supervision ,was required to negotiate the cones to highlight the smoothest and safest way to steer the vehicle and maintain control of the steering wheel.

The second consideration was how the driver judged the position of the vehicle relative to the cones which has obvious implications in real world driving situations. For example how you judge the safe location of the vehicle on the road.

The exercise was conducted initially at slow speed and then increased incrementally to highlight that even a small increase in speed produced a far more dramatic result.
Steering control diminished and there was a dramatic reduction in the ability to avoid the cones. Exactly what happens in the real world, 8

Emergency braking on a wet surface.

Drivers were required to travel at 60 kph and make an emergency stop when the front of the vehicle reached a point delineated by cones.

The aim was to stop in the shortest possible distance without locking up the wheels and most importantly be able to change direction if necessary to avoid a crash.

The technique of threshold braking was explained (controlling brake pedal pressure) to avoid lockup and still stop safely.

These days all new vehicles are fitted with ABS brakes ,which prevents wheel lockup ,but during my time conducting courses there was a mix of no ABS and ABS equipped vehicles.

The sad reality was that only a very small number were aware of the ABS feature on their vehicle and even if they did they knew nothing about the system or what to expect when it was activated.

Depending on the vehicle ,when the ABS is activated ,there will be some pulsing through the brake pedal accompanied by noise from the brakes and it was often the case that when a driver had that experience for the first time they imagined something had broken and took their foot off the brake pedal.

This segment provided a safe environment for drivers with ABS equipped vehicles to gain that understanding and experience.

Emergency exercise on a wet surface incorporating the previous steering and braking components.

For this exercise a number of cones were placed across the left hand lane to simulate the rear of a stationary bus with further cones placed in the right hand lane at a point representing the front of the bus. (Approximately ten metres ahead of the first line)

This second line of cones represented the rear of another stationary vehicle.

Drivers were required to approach in the left hand lane at 60 kph and take no action until the instructor blew a loud whistle.

The driver was then required to change direction due to insufficient space and time to stop and then apply the brake in a controlled manner using threshold braking to not only stop but to do so without locking up the wheels.

It should be noted the vast majority of drivers initially applied the brake first only to lock the wheels and therefor were unable to change direction.

Once the wheels are locked it will not matter what you do with the steering wheel the car will not change direction.

This scenario would not have occurred had the driver been more observant (lack of observation skills) and realised earlier there was a problem and therefor had more time to respond to the situation ahead.

It should also be noted that for both the emergency braking and the emergency steering and brake exercise drivers were able to have multiple runs with and without activating the ABS if it was fitted.

Demonstration of the relationship between speed and brake distance.

For this demonstration the instructor would approach a point delineated by cones at a speed of 50 kph at which point he would apply the brakes to stop in the shortest possible distance.

Course participants were required to stand at a safe distance from the track edge and position themselves where they think the front of the vehicle will stop.

The range of distances was vast and very few got it right.

The demonstration was then repeated but this time at 100 kph and the success rate was negligible.

This very simple demonstration highlighted the fact that if you double the speed (city and suburban to highway) the brake distance will be **four times as long.**

Course participants were generally shocked by the result especially when the following point was made in the critique.

It must be born in mind that the experienced driver was fully aware of what he was going to do and there was no reaction factor in the exercise so it was the best case scenario.

Observation skills and Hazard perception.

There is no question that drivers are having avoidable crashes because they did not see the problem early enough which meant they had limited time to respond to the issue.

To highlight that point it should be noted that the " fatal five" includes inattention as a major cause of crashes.

To highlight this important area a film was shown with on board vision taken from a car ,a motorcycle and a truck with explanatory commentary of all the hazards that should be picked up by the driver/rider.

It clearly demonstrated how essential it was to look as far ahead as possible and use a scanning technique to understand what was happening through 360 degrees.

In short early detection of hazards requires observation ,awareness ,concentration and anticipation.

The above is a brief overview of the training day which was completed with each driver receiving a booklet that covered all those points as a reference plus some additional items such as a list of "The Ten Commandments" to be followed for safe driving.

In addition.
There were 32 questions on the current road rules for course participants to answer with answers at the back of the book.

Detailed information on how to safely change a wheel.

Fourteen safety points for gravel road driving.

It should be noted that during the conduct of over 700 one day structured defensive driving courses involving well over 7000 drivers not one vehicle was damaged nor did any participant sustain any form of injury.
To this day I have previous participants tell me of occasions where they were able to avoid a crash due to what they learned at the course.

More importantly were the parents who told me how much the course helped them in their role as a supervisor when going through the learner driver process with their children.

So here is the question to all the so called experts ,and there are many, who have consistently condemned defensive driver training courses as being of little or any value to the essential safety of our future young learner drivers.

Please tell me which bits of the above submission are not appropriate or unsafe or dangerous or will make young drivers over confident. ??????

As you will no doubt realise I am very passionate about this whole issue and it hurts me deeply when any person is killed or injured in a crash but particularly if it is a young driver.

I always wonder what the circumstances of the crash were and if it could have been avoided had more training been in place.?????

Over the years figures have been established as to the cost to the community over the projected life span of a person who is killed and similarly for serious injury to a person.

I have no idea how these figures are established and what factors are taken into consideration but at least we can safely say it's multi millions.

On page 5 of the Tasmanian Road Safety Strategy 2007-2016 document under Financial Impacts it says "According to the conservative Human Capital method it has been estimated road trauma costs the Australian economy $18 billion per year.
Using the same approach it is estimated that road crashes in Tasmania cost the state on average nearly $500 million a year."

It goes onto to say that "Recent Tasmanian figures indicate that the cost of an 18 year old male with acquired brain injury as a result of a crash will be $12 million in care ,support and medical fees over his lifetime."

And these are very old figures that would be massively higher at the present time.

Multiply the number of deaths and serious injuries over a twelve month period in the state by their respective estimated figures and immediately it should be obvious the cost of conducting mandatory courses should not even be considered as a reason not to implement them.

Clearly if the authorities were to ever consider mandatory defensive driving courses as part of the learner driver criteria there are many and varied "nuts and bolts "issues that would have to be addressed.

While the focus of this submission has been on the training of learner drivers there remains the question of the current licenced drivers.?

It's a vexed question simply because no current licenced driver would be prepared to accept they need further training.

Quite frankly any government who was prepared to mandate a revision initiative would be condemned by an indignant public.

Based on 60 years of driving experience and observing driver attitudes and the stupidity of drivers on a daily basis it is my considered opinion that the overall driving standard in Tasmania is very poor.

That is a reflection of the poor standards that were set in the past to gain a licence which really failed to establish even reasonable competency.

Whether we like it or not we have to accept there is an element in driver land who will continue to put themselves and sadly their fellow drivers at risk irrespective of what is put in place.

You only have to look at the figures from the most recent Police blitz in the state that demonstrates obvious contempt of drivers for what authorities are trying to achieve.

In short they don't care and they never will which means "Towards Zero" will never happen.

We owe it to our learner drivers to provide them with all the tools they need to be safe and respectful drivers in the future.

Barry Oliver.

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