

VicRoads Association Newsletter No 183



Membership of the Association is available to all who have been members of VicRoads or forerunner organisations or the spouse of deceased members and bestows on them all the rights of the Rules of Association. Current cost of membership is a once only fee of \$30 plus a joining fee of \$5. Enquiries about membership or receipt of the Newsletter by e-mail should be directed to the Secretary at 60 Denmark Street Kew 3101 or by phone or e-mail as shown in the footer below. An application for membership of the Association can be found at the end of the Newsletter.

Dear Members,

I wrote the last newsletter early in January before I left for my camping holiday. However it wasn't issued until half way through February because the Design Studio at VicRoads was inundated with work and they had to defer it a couple of times. This provides me with a grand opportunity to express our appreciation to the people in the Design Studio, the Printing Section and the Mail Room for the work they do for us. I think everyone would agree with me that the newsletters are very professionally produced and some people have told me that they save them and re-read them from time to time. That is a great compliment.

Our camping was the marvellous experience we expected. On our last night there, we experienced the most violent thunderstorm I have endured. Lightning flashed and the thunderclaps followed immediately after indicating that the storm was right on top of us.

The rain belted down and everything outside got soaked but I am happy to say our tents stood up to the test. The noise was horrendous but we had to put on a brave face for the small children. Little did they know that I was more concerned than they! By the following morning everything had dried out and we were able to pack up with ease. We all agreed that it was the most memorable part of the holiday.

Of course the cheating at Scrabble continued. Three of us painted and we had a most sophisticated exhibition one evening when most of the campers came along to look at our work and have nibbles and drinks. It could become a regular event.

Rather than always write about my stories I would dearly love to write about yours. I would love to know what you did on your holidays – and I don't mind if you want to boast about your grandchildren. So how about it? Drop me a line – on anything you like – and if you have any photographs send those to me as well.

Dates for your diary

We have made one amendment to the program shown in the last newsletter. The Linking Melbourne Authority has been disbanded so, in November, we propose to visit another project site as yet to be determined. We will keep you informed of future events via the newsletter.

DATE		TIME	EVENT
April	Monday 13	12 noon	Occasional Lunch, Shoppingtown Hotel
	Wednesday 22		Lunch in Geelong with local retirees
May	Monday 11	12 noon	Visit to a Metropolitan Road Project
June	Monday 15	6 pm	Occasional Lunch, Shoppingtown Hotel
July	Thursday 9	12 noon	Drinks and dinner at Waverley RSL
August	Monday 10		Occasional Lunch, Shoppingtown Hotel
September	17 – 18	12 noon	Delegation to visit Western Region (Ballarat and Horsham)
October	Monday 12		Occasional Lunch, Shoppingtown Hotel
	Thursday 29		Visit – yet to be decided
November	Monday 9	12 noon	Occasional Lunch, Shoppingtown Hotel
	Thursday 12	12 noon	Visit another VicRoads Project
December	Monday 7	12 noon	Christmas lunch at Head Office
February (2016)	Monday 8		Occasional lunch, Shoppingtown Hotel

Please remember too that family and friends are always welcome to attend our functions.



News from our members

The article by Tom Russell in our last newsletter regarding the reduction in the 1969 Transportation Plan has prompted comments from a couple of members – Bill Sagers and Laurie Jones.

Bill wrote as follows:

'It is not uncommon to have the 1969 Plan attributed to the American consultant Wilbur Smith & Associates but this is not so. Wilbur Smith's role for the Metropolitan Transportation Study covered:

- The extensive Home Interview Survey;
- Parking Study;
- Development of travel models;
- Testing of the travel models on 'Plan 1', an extensive range of transport planning proposals put forward by the Study's Transportation Committee that comprised Senior Executives of local transport agencies, a Councillor of the City of Melbourne and the Ministers responsible for those agencies.

This ended Wilbur Smith's role circa early 1966, save for a short period later on to cover an adjustment to an aspect of the travel models.

From that point, the 1969 Plan was developed by a local Study Team under the direction of a local Study Director, firstly Joe Delaney then John Bayley, that reported to a Steering Committee of senior representatives of the agencies and the Council. The Study Team was made up by assigned staff from the Country Roads Board, Melbourne & Metropolitan Board of Works, Melbourne & Metropolitan Tramways Board, Victorian Railways and the Melbourne City Council, who worked through an iterative process of trial Plans 1 through 6. Feasibility designs for the freeway proposals were prepared co-operatively by CRB and MMBW freeway planning teams.

The Study Team never got the chance to examine a reduced scale of freeway development nor any staging proposals. The Transportation Plan was essentially compromised by an agency's senior officer insisting that it was the function of the Steering Committee/Study Team to produce the 'Best Plan', it being the responsibility of the Government to find the money."

Tom's response is as follows:

"Bill is extending the intent of my original letter to talk about the 1973 reduction of the plan. We could write a book on the plan and its methodology and I have no intention of doing that. I was well aware of the organisational structure. I was at the official release of the study, had many meetings with various members, arranged estimates of bridge costs for various alternatives (it would have been a big boom for the bridge industry), and being "ticked off" with others by the Minister of Transport Vern Wilcox for being too supportive of the plan. I agreed with Joe Delaney that a plan was better than no plan, but my views were well known at the time, that considering the large costs required, the plan was unlikely to be achieved. In general parlance it was often referred to as the Wilbur Smith study, and of course it was much more than that. I J O'Donnell was the CRB representative on the Transportation Committee and he had difficulty with the CRB being involved in urban areas. It was not a good outcome for the engineer planners. I was relieved to see the freeway reduction by the Government in 1973. It could have been so much better."

Laurie wrote to me as follows:

I was interested to read the note from Tom Russell in February's Newsletter about the Board's discussion with the then Minister Alan Hunt in March 1973, and the Premier's directive in December 1972 that 'no new freeways would be commenced in inner areas where their construction would involve substantial loss of housing and community disruption'.

I haven't got any copies of old reports etc like Tom apparently has, and I haven't even got a diary to which I could refer for names and dates (in the years I ran Metropolitan Division I'd not have had time to write one), so if you think the following might be worth including in a future newsletter as an extra to Tom's story, I'd suggest you first ask him to check and edit the following notes. My regards and best wishes to all, **Laurie Jones.**

He then wrote:

'At times the problems of dispersal of traffic at freeway terminals generated serious and prolonged community opposition as in the case of the opening of the Eastern Freeway, but potential traffic problems in the case of the opening of the Mulgrave Freeway were soon sorted out to everyone's mutual satisfaction.

It must have been shortly after the Premier's policy statement in December 1972 referred to in Tom Russell's note in the February newsletter (or the Cabinet's decision in March 1973 to adopt the much reduced planned freeway network), that a meeting was held in the theatre with Councillors and Engineering representatives of all the Councils between Waverley and Richmond. At that meeting it was announced that the Government had decided that no new freeways would be commenced in inner areas, and it was explained that the Board needed to sort out what was to happen about handling and dispersal of traffic at the western end of the Mulgrave Freeway which was at that stage nearing completion as far as Huntingdale Rd.

After discussion of a number of the issues involved, including traffic problems closer to the City as well as those in the immediate vicinity of the Mulgrave Freeway, the meeting agreed to appoint a committee under my chairmanship consisting of the City Engineers of all the Councils to study the question. The Board's only instruction to me before those committee meetings, was whatever else I had to agree to, I should persuade the committee that because Huntingdale Rd was inadequate, the freeway should be extended to Warrigal Rd which had sufficient reserve width to enable it to be duplicated for sufficient length to disperse the freeway traffic.

As it turned out however the Committee finally recommended much more than this. They were quite happy to abandon the line of the route proposed for the freeway in the 1969 Transportation Study, which headed west for St Kilda and Melbourne through heavily built up residential areas, but they wanted something done. Mt Waverley and Oakleigh Councils were very concerned about potential congestion on Huntingdale Rd, and between it and Warrigal Rd; and Malvern Council and local pressure groups were concerned about potential traffic increases on Waverley Rd and Malvern Rd which were already seriously congested. Richmond and Camberwell Councils were also concerned about traffic congestion, particularly on Toorak Rd at the then eastern end of the South Eastern Freeway Freeway.

New member

I am pleased to welcome a new member, Graeme Johnson. He sent the following note with his application.

'Thank you for the information re Association membership and the accompanying newsletter ... interesting reading. I was advised of "your existence" by Alastair Robinson and he suggested I join ... as a link and a reminder of my time/employment with the then CRB. I am glad I have done this. My time at the CRB commenced in 1972 as a survey draftsman in Plans & Survey ... Third floor south wing in Denmark St. My induction class of that year included recently retired VicRoads CEO Gary Liddle. I enjoyed my time there working under Alastair and even though I left the CRB in 1979, I am proud to say that Al and I still catch up regularly such was the friendship made over that time. Other CRB staff that I still reflect on in that time include David Berry, Andy Noble, Bob Morrison & Noel Anderson ...all great blokes.

I worked in High St., Princess St. and went on to "see the CRB version of the world" with secondments in Bendigo and Benalla where the likes of Gary Martin, Reg Patterson & Peter Leyden made a lasting impression on me with interesting and challenging work and in Peter's case ... also as mine-host of the famous "Yin Barun" lodgings and refreshment centre for young wayward CRB employees ... great memories. After the CRB, I spent a decade in Local Government and then worked for Thiess Services in their waste and environmental areas up until 2011. Since then I have been working for myself in field of waste management.

I often reflect on how lucky I was to commence my working life at the CRB. It was a tremendous organisation to work for ... projects of major scale and great teachers/mentors ... some of which I have mentioned here and others that I was fortunate enough to work with across a wide range of sections/divisions within the CRB.

Thank you for the information and newsletter and I look forward to my "renewed" association with the CRB.'



Finally, I think all the Councils without exception, opted for extending the Mulgrave Freeway to Warrigal Rd, and provision of an expressway connection from there along the south side of the East Malvern Golf Course and on to the east end of the South Eastern Freeway at Toorak Rd along a route part of which had been included as a secondary connection in the 1969 Transportation Study. This solution was more than the Board (and I) had hoped for, and was the basic solution finally adopted, with controlled access except for three at-grade signalized intersections along the expressway, and land reserved sufficient for future grade separation of the cross-traffic if needs be. That provision of course enabled the expressway to be later readily converted to freeway conditions'.

Tom's response is as follows:

I remember the concern about a terminal for Mulgrave Fwy, and the Board's desire that it be Warrigal Road. After the 1973 reduction the F14 in the St Kilda – South Melbourne area was deleted, and the only available route was to make the connection to F9 via a short section of F6 along Gardiners Creek. The anti freeway policy resulted in the connection being built first as an arterial road. As Laurie points out this was later converted to freeway standards. This is now history, and what a blessing to the Melbourne economy - The Monash Freeway.

Bill Sagers

Bill submitted the following comment regarding the history of ramp metering which occurred in the history we published several newsletters ago.

'The history article covering the 2005 reporting year refers to freeway Ramp Metering being introduced on the Monash Freeway. Modern-day ramp metering on the metropolitan freeway network began with a particularly successful installation on the outbound Thompsons Road on-ramp to the Eastern Freeway at Bulleen in July 2002. This was followed a few months later with installations on the outbound on-ramps to the Monash freeway at Warrigal Road and Huntingdale Road.

For the initial Thompsons Road project, at an installation cost of the order of \$150,000, the technology was never an issue: local driver compliance was the unknown. At its commissioning and in the weeks following, personal checks showed a 2 per cent non-compliance whereas it could be 5 per cent in the United Kingdom or as high as 10 per cent in the USA.

What's been happening

Annual General Meeting - Thursday 12 March 2015

At this meeting I presented the Annual Report of last year's events and if you would like a copy, please contact me and I will send it to you. Our membership is growing (now 270 members) and attendances at the occasional lunches are also increasing.

Committee members are: David Jellie (President), Jim Webber (Secretary), Ken Vickery (Treasurer) and members Annette Willis, Ted Barton, Edgar Bartrop, Frank Brown, Lyn Briggs, Jeff Briggs, John Rebbechi and Peter Lowe. Please note that Peter Lowe will continue as Secretary for the next few months before handing over to Jim Webber – to allow Jim the time he needs to shift house.

I believe that this early work is worthy of acknowledgement in the documentation of the organisation's history as a significant step forward in the State's freeway operational management. The Warrigal Road installation was recognised as unique by our American fraternity for its incorporation of the truck bypass lane while the success of these initial undertakings became the catalyst for subsequent wide-spread installation of ramp metering in Auckland New Zealand, refined and widespread application on the recent M1 Project and, the compilation of the current-day Austroads Manual covering ramp metering for all future freeway management plans.'

What's coming up

Occasional Lunches - Shoppingtown Hotel - Monday 13 April and Monday 15 June 2015

Bookings are not essential, but it would help with arrangements if you can let Kelvin York know on 9438 1028 if you can attend. We hope to see you there.



Geotechnical Division

Graeme Newman sent the following photograph to Bob Body. It appears to be the Geotechnical Division taken in the 1980s.



From left to right: Tony Bortko (in the truck), Peter Masciangioli (on the drill rig), Ivan Haustorfer, Nelson Fok, David Capon, Steve DiCicco, Graham Granger (back), Paul Billington, Peter Scott, Bob Body, Marie Keck, Graeme Newman, Peter MacDonald (back), Tom Flintoff, Jim Holden, John Jobson (back), Hilda Thein (engineering vacation student), Sam Plesiotis, Ben Munforte, Michael Ma, John Stevenson, Greg Chenoweth, David Tilley, Fred Cigana.

Vale

Bruce Watson

Bruce Watson died in January 2015. Bruce was born in Perth in 1919 and he attended the Perth Modern School from which he won a scholarship to the University of Western Australia to study civil engineering. In the late 1940s he went to Tasmania to take up a position as a District Railway Engineer – and it was here that he met and married his wife, June. In 1950 they moved to Melbourne for Bruce to join the Bridge Division of the Country Roads Board. He remained there until his retirement. June said that he enjoyed every day working at the CRB saying that there were so many talented engineers there.

I started working in the Design Section of Bridge Division in 1961 and on many of the design files I saw the distinctive initials of BAW which I was to learn later, were Bruce's initials – Bruce Ashton Watson. Later I transferred to the Construction Section managed by Bruce as the Bridge Construction Engineer. He became my mentor and was probably the greatest influence on my understanding of contract administration. He was always calm and polite and his decisions were carefully considered taking into account all points of view. He commanded the respect of the most hardened of contractors because they came to realise that they had had a fair hearing and decision based on the conditions and requirements of the contract documents.

This approach to his professional life was reflected in his personal life as well. Bruce was a dedicated Christian and his fairness and thorough consideration of all the facts might appear rather old-fashioned in today's more commercial and litigious approach to construction management. I never heard Bruce express a negative judgement on anyone - be they colleague or contractor - and this gentlemanly behaviour was illustrated further in the rough and tumble world of construction management by the fact that he never swore.

Some of you may remember the story I told against myself when I was supervising the demolition of the old San Remo Bridge. One of the explosive charges we set off underwater to sever the concrete piles was overloaded and the resulting explosion broke the windows of the pharmacy and the fish and chips shop in San Remo – among others. Another boss would have torn a strip off me but when I rang Bruce to tell him what had happened he just politely asked me to arrange for the repairs as soon as possible. I think he knew that I had learnt my lesson.

Bruce enjoyed good physical health up until 5 months before his death when he had a fall – injuring his head. He deteriorated significantly after this accident and spent his remaining time in hospital and nursing homes. June said that he was marvellous during this period and he had a most peaceful death. Bruce and June had three children – Kenneth, a civil engineer, Margaret, an anesthetist, and Sandra who works in the financial world. They have four grandchildren. We express our condolences to all of them.

After writing this tribute, I received a letter from June which provides not only more details about Bruce's early life, but also some interesting insights into his professional life. Because of space limitations for this newsletter, I will hold these details over to the next edition as I believe they are worthy of publication in full.

Ray Tomkins

Ray Tomkins died early in January 2015. He joined the CRB in Bairnsdale in 1956 and moved to the Plant Branch in Syndal in 1969. He worked as a plant inspector and was later responsible for auctions of VicRoads and other government agency plant in the early to mid 1980s.



Ray receives an award from the then Chairman of the Board, Tom Russell, in May 1980

His son, Bill, is the Planning Engineer in VicRoads Metropolitan South East Region. He fixed the hydraulics on a snow plough stranded up on Mt Hotham. This saved the need to ship it back to Europe for repairs.

Myrtle Patterson

Reg Patterson's wife, Myrtle, also died late in 2014 and we extend our sympathies to Reg and his family.



NEWS FROM VICROADS



Relocation from Kew

John Merritt recently reported to staff as follows:

'In relation to the relocation from Kew, we don't have any update in relation to the previous Government's promise in regard to Ballarat. Notwithstanding this, we are putting some thinking into other relocation options to support the new Government's decision making. Some of the factors we are considering include:

- Where our staff live to ensure we can maintain and build our capabilities;
- Ease of access to regional Victoria and Metropolitan Melbourne;
- Links to Government strategic policy;
- Proximity to our customers and stakeholders;
- Access to transport options to make it easy for our staff to get to and from work; and
- The economic boost we would provide to a local economy by having us move to an area."





CENTENARY STORIES

The following story was written by Peter Vulcan AM in 2012. An abridged version was reproduced in the VicRoads Centenary book. It is reproduced here in full. It is an excellent history of all the initiatives taken to reduce road trauma in Victoria. VicRoads is currently assisting many countries in Asia in developing similar approaches to road safety management.

Victorian Achievements in Road Safety

Road deaths in Victoria progressively increased from 760 in 1960 to a peak of 1061, as the number of registered vehicles and the population increased.

As shown in Figure 1, the number decreased in several large steps, joined by periods of moderate progress down to 287 in 2011. This is a drop in deaths per 10,000 registered vehicles from 8.1 in 1970 to 0.7 or from 30.8 deaths per 100,000 population in 1970 to 5.1 in 2011. The number of injuries followed a similar pattern although the percentage reductions were not as large.

Some of the initiatives which contributed to these large reductions are summarised in this note. They are presented under the categories of safer roads, safer vehicles and safer road users, which are the components of the modern safe system approach, which now also recognises safe speed as a separate component. There was no comprehensive road safety strategy published until "Safety First 1995-2000", followed by "Arrive Alive 2002-2007".

Rather, the approach was to identify road trauma countermeasures which had been shown to be effective elsewhere, or had such potential and to present the case for their implementation to government and other stakeholders. Wherever possible evaluations were done on the effectiveness of these measures and feedback provided to the stakeholders.

Before discussing each of these categories it should be mentioned that the Victorian Parliamentary Road Safety Committee has played an important role in investigating and recommending a wide range of specific road safety initiatives, many of which required legislation. It has operated since 1968 under several different names and has generally consisted of members of both houses and from the Government, the opposition and other parties. This has facilitated a bi-partisan approach to many road safety initiatives.

Figure 1

Fatalities Victoria, 1960 to 2011





Safer Roads

During the past 60 years or so there has been a continuous program of road improvement and introduction of improved standards for road construction and for maintenance.

Such improvements have provided road safety benefits over the whole of their effective life.

Higher standard roads and improved traffic control devices have been shown to be effective in reducing crashes. Examples of designs and treatments used with proven road safety benefits include:

- limited access freeways with high standard geometric design
- provision of divided carriageways on rural highways and major urban arterial roads
- staggered T junctions, particularly on rural roads
- skid resistant pavements
- improved street lighting in urban areas
- improved road delineation
- sealed shoulders with tactile edgelines

The State Intersection Control Program, which, together with the T junction rule, pre-determined who should give way at all intersections began in the mid 1970s.

It also led to the installation of more than 1000 traffic signals over a 15 year period, improved channelisation and the installation of many hundreds of roundabouts. These treatments reduced crashes at intersections significantly. The subsequent provision of fully controlled right-turn phases further reduced such crashes.

There was also a continuing program to reduce the severity of crashes through removal of roadside hazards, provision of guard rails and fencing as well as frangible poles for roadside furniture.

In 1979 an accident black-spot program was commenced with modest funding, using relatively low cost treatments which showed high benefit/cost ratios. During the early 1990s this was expanded by the provision of \$85 million by the Transport Accident Commission (TAC). Mass action treatments along sections of roads with above average crash rates were also implemented. As a result of the savings in road trauma and consequent compensation payments the TAC decided to continue to invest a further \$240 million in accident black-spot programs, during four years commencing in 2000.

Safer Vehicles

In the early 1960s there were regulations regarding vehicle lighting, brakes, wheels, modifications, etc to ensure a minimum level of safety for vehicles registered in Victoria.

By 1963 locally manufactured seat belts meeting a new Australian Standard became readily available and some owners began fitting them. In October 1964, lap belt anchorages for the driver and left front passenger became compulsory in new cars registered in Victoria.

In 1965, a new Australian Standard required lap/sash belts for all outboard seating positions, together with certification mark scheme to ensure quality control and compliance with this new Standard. In 1967, all Australian car manufacturers began fitting lap/sash belts for the outboard front seats.

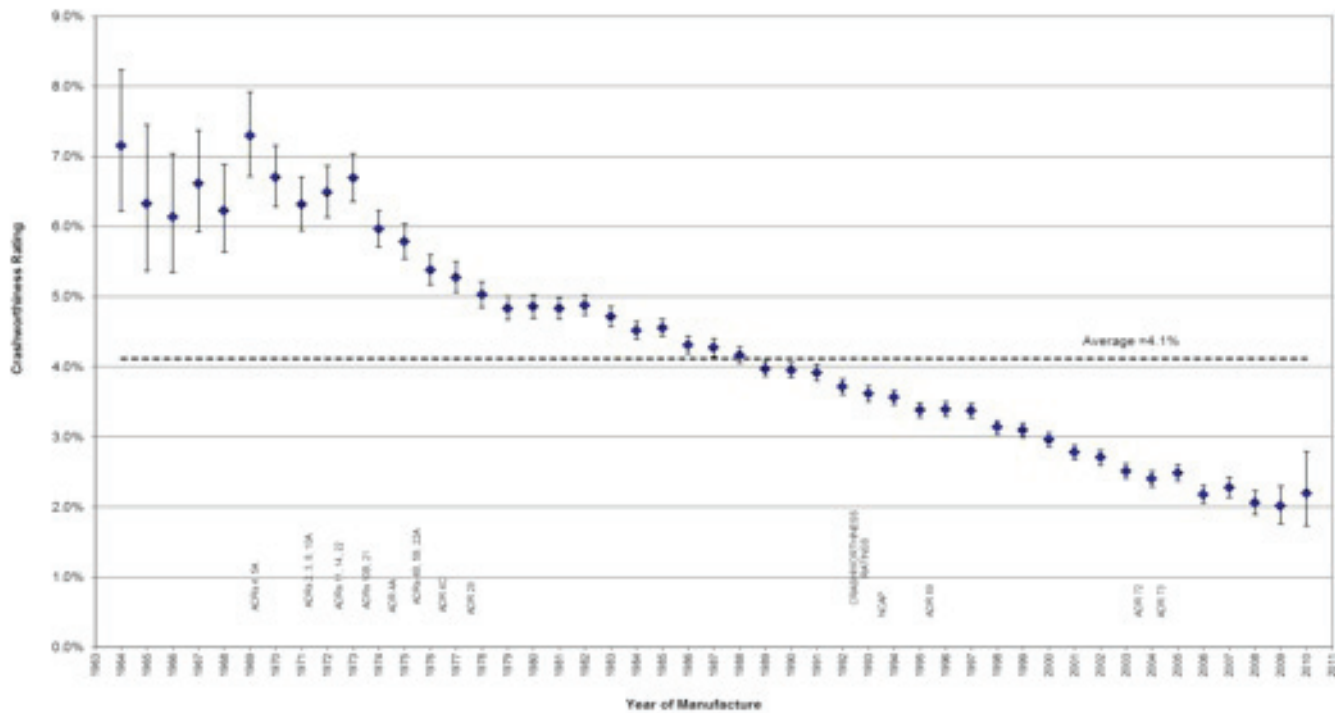
After that safety standards for new vehicles were formulated on a national basis, through endorsement by the Australian Transport Advisory Council. Most of these, except those relating to seat belts were based on international standards, generally with proven effectiveness. Certification of compliance was also done on a national basis, with all States being represented on the Australian Motor Vehicle Certification Board.





Figure 2

Crashworthiness by Year of Vehicle Manufacture



An illustration of the improvement in occupant protection since 1970 is given in Figure 2 which shows the average crashworthiness rating of cars by model year. This is compiled by the Monash University Accident Research Centre using the severity outcome of 654,934 drivers injured in real world crashes during 1987-2010. It corrects for factors such as driver age and sex, speed zone and number of vehicles involved. Crashworthiness has been defined as the probability of a driver being killed or severely injured if involved in a tow away crash. The dates at which the Australian Design Rules for Motor Vehicle Safety relating to occupant protection came into effect, as well as the introduction of the Australian New Car Assessment Program are shown.

The progressive improvement in crashworthiness also illustrates the increased crash protection provided by manufacturers, beyond that required by the Australian Design Rules. It can be seen that a pre-1974 model car has a crashworthiness rating about 3 times worse than a post 2005 car.

Unfortunately there is not yet a reliable method of assessing the crash-avoidance performance of cars, but it is known that there have been significant improvements through the provision of systems such as anti-skid brakes and electronic stability control.

Safer Road Users

In contrast to safer roads and safer vehicles

measures involving legislation to improve road user behaviour require continuing enforcement to maintain their full effectiveness.



Seat Belt Wearing

In September 1969, the Parliamentary Road Safety Committee recommended that all occupants of motor vehicles should be required to wear seat belts within a maximum period of two years (Immediately for learner and probationary drivers).

During the second half of 1970, it became clear that Victoria was heading for a record high road toll. The Royal Australian College of Surgeons had been publicly supporting compulsory seat belt wearing for some time, as had some academics from Melbourne University. They were joined by the RACV and the Sun newspaper. The legislation for compulsory wearing, where fitted, was implemented in December 1970. It was the first in any motorised country.

Seat belt usage rates were about 25% before the law and they jumped to about 50% immediately afterwards. By the end of the first year they had increased to 75%, but further increases required sustained education and enforcement. Vehicle occupant fatalities for 1971 were 18% below the number expected, with a similar reduction for injuries.

Although seat belts were required to be fitted in rear seats of new cars from January 1971, their usage rate was low. By 1980 it was only 19%, compared with 85% in front seats. A combined publicity and enforcement campaign a year later resulted in an increase in rear seat belt usage to 66%.

Drink Driving

During the 1960s, the Police Surgeon drew attention to the presence of alcohol in many of the serious crashes which he attended.

His vocal campaign for action, together with the recommendations of a Royal Commission led to the adoption of legislation in 1966 specifying 0.05g/100ml (0.05%) as the maximum legal blood alcohol concentration (BAC). This law, together with the use of the breathalyser, facilitated the detection and conviction of drink drivers although it was not until the mid-1970s that sufficient Police resources were provided to have a significant effect.

A major breakthrough in the reduction of drink driving was the random breath testing legislation, introduced with a "sunset clause" in 1976 and confirmed in 1978, an Australian first. This enabled Police to stop and test a driver at a properly designated breath test (RBT) station, without the need to suspect that the driver was affected by alcohol, as previously required.

A useful measure of the extent of alcohol involvement in fatal crashes is the proportion of drivers and motorcyclists killed (and tested) with an illegal BAC. In the period up to 1978 it was about 50%. As shown in Figure 3, with the increase in random breath testing operations commencing at the end of 1978 and supported by publicity, that percentage dropped progressively to below 38% by 1981 and remained at or below that level until 1988.

The increase in monetary penalties and doubling in the period of mandatory licence cancellation for exceeding various levels of BAC, introduced in December 1978, may also have contributed to this reduction. The number of fatalities dropped from an average of about 912 during the period 1971-1978 to an average of around 690 during the period 1980-1988, but there were undoubtedly other factors which contributed to this overall reduction.

As a result of an increase in road deaths during 1989, RBT was given new emphasis. Commencing in September the use of the four existing "booze buses" was increased initially in the Metropolitan area and progressively throughout the state as 13 new purpose-built highly visible booze buses were provided by the Transport Accident Commission (TAC). This resulted in the number of RBT tests increasing from around 0.5 million in 1989 to over 0.9 million in 1990 and 1.2 million by 1992.

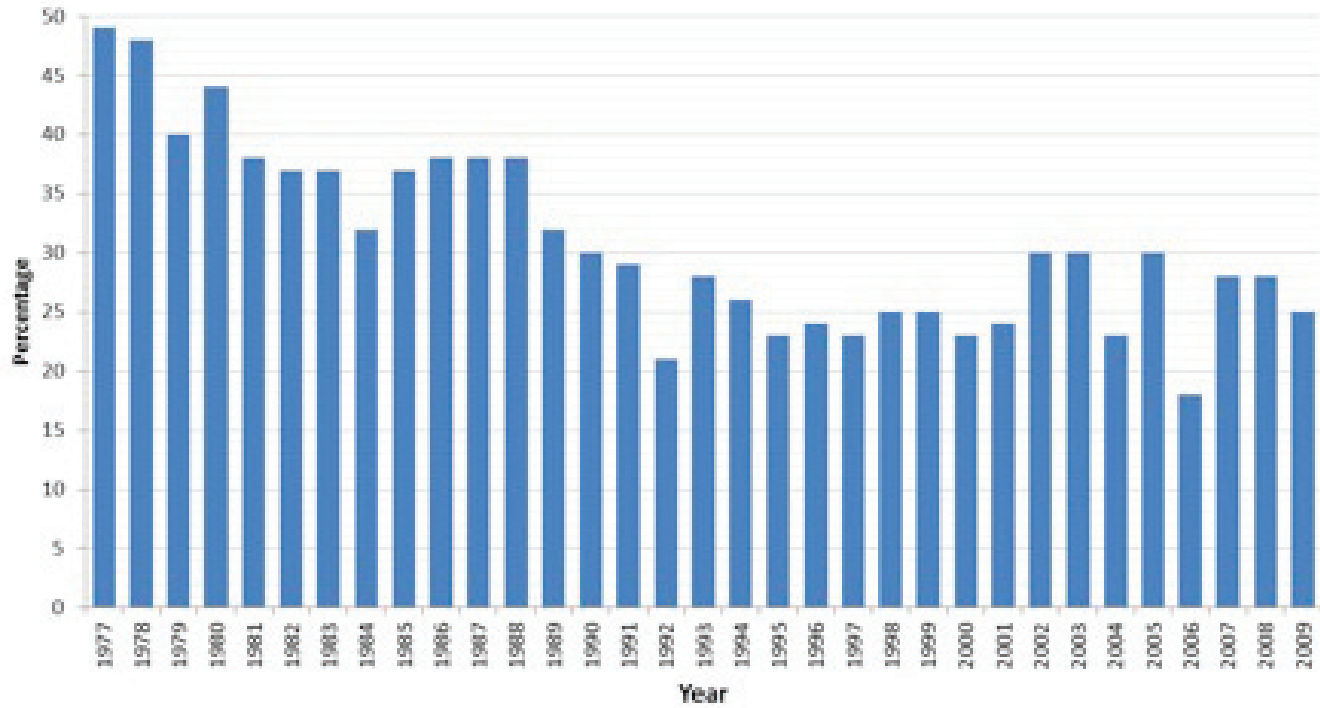
In December 1989 a state-wide multi-million dollar publicity campaign "If you drink then drive – you're a bloody idiot" was launched by the TAC and other publicity campaigns to support the RBT operations were undertaken at a level of several million dollars during 1990-1992.

Fatal crashes in Melbourne during high alcohol hours (mainly at night) dropped by 19-24% over these three years and serious casualty crashes in rural areas during high alcohol hours dropped by 13-15%.

As shown in Figure 3, the proportion of drivers and motorcyclists killed (and tested) with an illegal BAC dropped progressively from 38% in 1988 to 21% in 1992, but then climbed to an average of 25% in subsequent years.



Figure 3 Proportion of killed and tested drivers and motorcyclists with a blood alcohol concentration of 0.05g/100mL or over (Victoria 1977-2009)



Total fatalities dropped by a massive 49% from 776 in 1989 to 396 in 1992 and then averaged 400 until 1999. The reduction in serious injuries from the expected trend was 46%. Other countermeasures associated with these reductions included:

- new speed cameras supported by publicity
- bicycle wearing law
- lowering the 110km/h freeway speed limit
- improvements to the road system
- various other measures

The downturn in the economy and reduced alcohol sales probably also contributed.

The coincidence of all these factors during the same three year period made it difficult to determine accurately the extent to which each of them contributed to the total drop, but modelling by the Monash University Accident Research Centre (MUARC) estimated that more than half was associated with the drink driving and speed enforcement programs, supported by publicity campaigns.

Child Restraints

In January 1976, children under 8 years were required to be suitably restrained when occupying a front seat (but not in rear seats).

The main effect of this law was to shift many of these children to the rear seat where they remained unrestrained. In December 1981 the legislation was amended to require children to be restrained in available restraints in rear seats. A baby bassinet loan scheme, managed by municipalities on behalf of the government was introduced in 1985.



Speed Enforcement

In January 1972 the 50mph prima facie speed limit was replaced by a 70mph absolute limit. In January 1974, this absolute speed limit was reduced to 60mph and then metricated to 100km/h in July 1974.

Significant reductions in both fatalities and injuries occurred in 1974, but the numbers returned to earlier levels in the following years.

New slant radar speed cameras were progressively introduced commencing with 4 in December 1989 and increasing to 54 by January 1991. The program included an intensive state-wide mass media publicity campaign "Don't fool yourself – speed kills" to increase the perception of the level of speed camera operations and their legitimacy.

This multi-million dollar publicity campaign was launched in April 1990 and continued during 1991 and 1992.

An analysis by MUARC found reductions in serious casualty crashes during "low alcohol hours" (mainly daytime) of 20% on 60km/h roads. There were also significant reductions in crash severity on Melbourne arterial roads.

There was considerable variation in the hours of camera operations and the levels of supporting publicity during the two year evaluation period from December 1989 and the reductions were not found during the whole period.

In January 2001 a default 50km/h speed limit in built-up areas was introduced. This was associated with a 12% reduction in casualty crashes. For pedestrians reductions of 25% in fatal crashes and 40% in serious injury crashes were associated with the program.

In December 2001, a further package of initiatives was introduced. They included a progressive increase in camera operating hours from 4200 to 6000 per month, new cameras and other speed detection equipment, as well as a progressive reduction of the speed detection threshold (from 10km/h down to "a few") supported by the "Wipe off 5" publicity campaign.

Recently there have been 40km/h speed zones introduced along sections of strip shopping centres.

Bicycle Helmets

Children participating in "Bike-Ed" at school were required to wear an approved helmet. In some cases these were provided on loan during the course, while other schools facilitated bulk purchase of helmets.

Some schools required that any student riding to school must wear a helmet.

After nearly 10 years of promoting the benefits of bicycle helmets and several government subsidy schemes (generally \$10 per helmet) the wearing of an approved helmet became compulsory for all cyclists in July 1990. The helmet wearing rate was estimated at about 36% before the law and rose to 73% within a year. The law was associated with a significant reduction in head injuries among cyclists admitted to hospital.

Red Light Cameras

Red light cameras, which had been shown to be effective in reducing crashes at intersections in Europe were introduced in 1983.

In order to increase deterrence, 12 cameras were initially rotated between some 50 intersections where camera boxes were installed by the RoSTA/RTA. Warning signs were placed on all approaches to these intersections, although the camera operated on only one approach. A limitation on the number of offences which could be processed (and hours of operation) was the requirement for Police to visit the owner of the vehicle and ascertain the identity of the driver at the time of the offence. Amendment to the legislation required the owner to nominate the driver in response to a Traffic Infringement Notice served by mail. This paved the way for handling the large number of Traffic Infringement Notices resulting from the speed camera program introduced in 1989.

Fixed digital speed and red light cameras were placed at 71 signalised intersections, commencing in 2005. Warning signs were placed on all approaches to these intersections. There was a 26% reduction in casualty crashes at these intersections.



Motorcyclists

In January 1961, compulsory wearing of helmets by motorcyclists was introduced, which was a world first. It resulted in virtually 100% wearing rate and about 50% reduction in motorcyclist fatalities during the following two years.

In January 1979, learner and first year probationary motorcyclists were restricted to motorcycles with engine capacity less than 260cc. This resulted in a 30% reduction in casualty crash rates among this group.

In June 1983, the motorcyclist learner permit test was upgraded to include a written test in riding knowledge and road craft. A basic riding skills test was also progressively introduced in those areas, where off-road training facilities were available.

Road Safety Education in Schools

In cooperation with the Education Department, an integrated program of curriculum units was developed, commencing in 1980 with "Bike-Ed" (years 4-7).

Other units included a child pedestrian and passenger unit for years 1 to 4 and several specialist units for years 8-10.

Drug Driving

Random roadside testing to detect drivers under the influence of illicit drugs was introduced in December 2004 (a world first).

In the period 2002 to 2004, the target drugs (THC, methamphetamines, MDA) were detected in about 18% of drivers killed. Although there was a small increase in this percentage during the first three years, it had dropped to 15% by 2009. The effect on fatalities has not yet been fully evaluated.

Graduated Licensing

A new graduated licensing scheme commenced in July 2008.

It includes 120 hours supervised driving experience as a learner (12 months) then a new driving test, four years on a probationary licence with per passenger restrictions and no mobile phone during the first year and zero BAC for four years. Preliminary evaluation shows a significant reduction in casualty crash involvement during the first 21 months as probationary drivers. Further evaluations are continuing.

Future Progress

The current road safety strategy "Arrive Alive 2008-2017", aims to reduce deaths and injuries by a further 30%.

This should be possible provided the initiatives proposed are implemented effectively. Further reductions beyond 2017 will be possible if the strategy which has been successful to date is continued, namely to identify, implement and evaluate proven or promising countermeasures.

The emerging crash avoidance technologies in new vehicles show considerable potential and there will be continuing opportunities to improve the safety of the road system.

Acknowledgements

The information presented here has been based on the published work of my former colleagues at RoSTA, RTA, VicRoads and MUARC. Their contributions are gratefully acknowledged.

Peter Vulcan

Peter is a member of our Association and was Founding Director of the Monash University Accident Research Centre until his retirement in 1988, prior to which he was the Chief General Manager (Road Safety & Traffic) in the Road Traffic Authority and Chairman of the Road Safety and Traffic Authority.



The Country Roads Board Visits Maldon 100 years ago

The following report appeared in the local newspaper in Maldon in 1915.

“On Friday February 19 1915, William Calder, Chairman of the Country Roads Board, and Board member, Frederick Fricke, visited the Shire of Maldon. The Board had been formed in 1913 and during the following two years Calder undertook an exhaustive inspection of Victoria’s road system. The previous day he and Fricke had toured roads around Dunolly and Tarnagulla.

At 10 am they were met at Eddington by a delegation of Maldon Shire councillors and officials led by Shire president, Cr Robert Hutton. From Eddington the party motored through Baringhup and out to the Moolort Station where they stopped for lunch. They then travelled via Newstead to Maldon and along the Bendigo road to Ravenswood before returning, dusty and tired, to Maldon at about 5.30 pm. During their day’s motoring the party had covered 84 miles.

On returning to Maldon everyone repaired to the Shire Hall where Calder and Fricke were officially welcomed. Cr Hutton said he hoped their tour of the Shire would show that Maldon’s roads were in a reasonable condition given the limited funds available. Councillors had heard much criticism of the Board; in particular that it would only build roads for motorcars. They now realised that its aim was to pave the way between producers and consumers. Better and cheaper roads would help farmers market their produce.

William Calder thanked the councillors for their courtesy and for accompanying Mr Fricke and himself on their tour. They found having access to local knowledge was of great assistance.


Calder said the Board had two objectives when looking at the State’s road problems. The first was to provide the greatest good for the greatest number and the second was to serve producers and so encourage settlement. The Government had provided two million pounds in funding. This might seem a large sum, but in the past two years he had travelled over 40,000 miles around the State and could see that it would barely touch the surface of the problem. Initially the Board would concentrate on two major projects, one of which would be the Bendigo to Melbourne road.

Frederick Fricke outlined the Board’s funding arrangements. Councils would repay half the capital cost of work performed in their shires over 31 years. Motor licence fees and fines would be used to finance road maintenance.

The meeting later adjourned to the Royal Hotel where Miss Edith Page provided a capital dinner.”

With thanks to **Nancy Whittaker** of Maldon.

Editorial note: The Bendigo to Melbourne Road mentioned above was named after Calder and it now extends to Mildura.



Getting paid for an honest fortnight's work

Each month, I write a small story for an internal magazine circulated within VicRoads – called Frog and Toad. I write about how things were managed in the past. If any of you would like to write something in say, no more than 350 words, please send it to me and I will submit it to the editorial staff. The story below describes how we used to be paid.

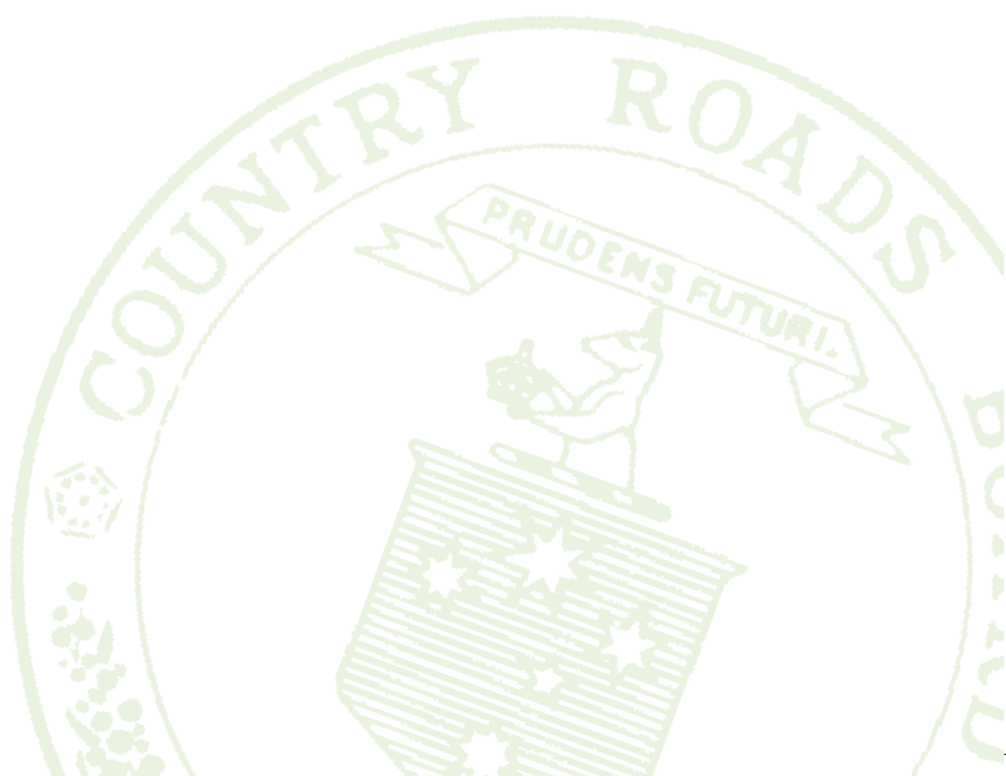
We are now quite used to being paid by direct transfer into our bank account. However this was not always the case. The Country Roads Board (CRB), like most companies, paid its employees in cash. A security company delivered the necessary bulk cash to Head Office and regional offices, and pay staff placed the cash into small cash packets for distribution. A slip was included showing how much tax was withheld and other deductions such as donations to charity and social club contributions. The packets were hand-delivered by two men. I later learnt that one of them toted a pistol. A large, flat, rectangular tray was draped around the neck of one of them and the pay packets were loaded in alphabetic order for easy retrieval. You had to state your name and the pay packet was retrieved from the tray and handed over. No proof of identity was required.

Distribution involved hand delivery to every individual - either in the office, or at a depot, or at every job site in the state on a Thursday. Obviously this was not only a time-consuming task but also one of high security risk.

I can never recall there being a mistake in anyone's pay and if you happened to be absent on payday, you had to visit the paymaster's office later. If you were going on leave, you could request advance payment for the period of leave.

The change to direct credit to each employee's bank account was hastened by safety concerns and the threat of a major robbery at Head Office uncovered by police in early 1978. The targeting of the CRB payroll was referred to in the book "Underbelly" in which the CRB payroll was listed as the next target for the gang that undertook the Great Bookie Robbery. Whilst the robbery did not eventuate the uncovering of the plan certainly had a significant impact on payroll distribution across the organisation.

In my first year of employment (in 1961) I played full forward for the Engineer's footy team against the Administration team. My opponent was one of the men who delivered the pay. Unfortunately we collided during the game and he broke his collarbone. Happily, no deductions were made to my salary.



Trivia and Didactic Whimsies

Camping

I waxed lyrical in the previous newsletter about the joys of camping. However there are some forms of camping I would not participate in – including those shown here.



I hate cliff camping ...



... and I don't like the eating arrangements either!



Just as long as I can safely sit somewhere...



...and I don't like climbing over rocks to get home.



Camping in trees might be better



Seniors and Banking

The following letter was sent to a bank by an 86 year old woman.

Dear Sir:

I am writing to thank you for bouncing my cheque with which I endeavoured to pay my plumber last month. By my calculations, three nanoseconds must have elapsed between his presenting the cheque and the arrival in my account of the funds needed to honour it.

I refer, of course, to the automatic monthly deposit of my entire pension, an arrangement which I admit, has been in place for only eight years. You are to be commended for seizing that brief window of opportunity, and also for debiting my account £30 by way of penalty for the inconvenience caused to your bank.

My thankfulness springs from the manner in which this incident has caused me to rethink my errant financial ways. I noticed that whereas I personally answer your telephone calls and letters, when I try to contact you, I am confronted by the impersonal, overcharging, pre-recorded, faceless entity which your bank has become. From now on, I, like you, choose only to deal with a flesh-and-blood person.

My mortgage and loan repayments will therefore and hereafter no longer be automatic, but will arrive at your bank, by cheque, addressed personally and confidentially to an employee at your bank whom you must nominate. Be aware that it is an OFFENCE under the Postal Act for any other person to open such an envelope.

Please find attached an Application Contact which I require your chosen employee to complete. I am sorry it runs to eight pages, but in order that I know as much about him or her as your bank knows about me, there is no alternative. Please note that all copies of his or her medical history must be countersigned by a Notary Public figure, and the mandatory details of his/her financial situation (income, debts, assets and liabilities) must be accompanied by documented proof.

In due course, at my convenience, I will issue your employee with a PIN number which he/she must quote in dealings with me. I regret that it cannot be shorter than 28 digits but, again, I have modelled it on the number of button presses required of me to access my account balance on your phone bank service. As they say, imitation is the sincerest form of flattery.

Let me level the playing field even further. When you call me, press buttons as follows:

Immediately after dialling, press the star (*) button for English.

#1. To make an appointment to see me

#2. To query a missing payment.

#3. To transfer the call to my living room in case I am there.

#4 To transfer the call to my bedroom in case I am sleeping.

#5. To transfer the call to my toilet in case I am attending to nature.

#6. To transfer the call to my mobile phone if I am not at home.

#7. To leave a message on my computer, a password to access my computer is required. The password will be communicated to you at a later date to that Authorized Contact mentioned earlier.

#8. To return to the main menu and to listen to options 1 to 9

#9. To make a general complaint or inquiry.

The contact will then be put on hold, pending the attention of my automated answering service. While this may, on occasion, involve a lengthy wait, uplifting music will play for the duration of the call.

Regrettably, but again following your example, I must also levy an establishment fee to cover the setting up of this new arrangement.

May I wish you a happy, if ever so slightly less prosperous New Year?

Your sincerely,

David Jellie

pdjellie@hotmail.com

