4

The Road Environment

4.1 Improving the safety of the road environment is vital to reducing the road toll. Road improvements are expected to be responsible for half the reductions in the fatality rate over the life of the National Road Safety Strategy, and are a focal point of the National Road Safety Action Plans.

Improving Road Safety—the National Road Safety Strategy

4.2 The National Road Safety Strategy identifies improving the safety of roads as 'the single most significant achievable factor in reducing road trauma'. Investment in roads 'improves road safety through general road improvements—typically, 'new' roads are safer than 'old' roads—as well as through treatment of black spots'.[1]

4.3 Under the Strategy, investment in roads is to be primarily targeted at:

- improving the estimation of the costs of crashes used in the economic evaluation of road improvement options;
- widespread use of road safety audits in assuring safety outcomes from road improvement projects and in designing and planning proposed major developments;

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1 ATC, *National Road Safety Strategy, 2001–2010*, p. 6.

- conducting safety investigations on the existing road network, taking into account the needs of all road user groups, giving priority to sites with a crash history and identifying significant remedial opportunities; and
- improving road design and traffic engineering measures to create a safer environment for pedestrians, cyclists and motorcyclists.

4.4 Management of roadside hazards has also been identified as a significant issue. They are a major factor in some 40 per cent of car occupant fatalities.[2]

4.5 The first National Road Safety Action Plan identified a range of measures to improve the safety of existing roads, including:

- continuing and expanding black spot programs;
- conducting road safety audits of the road network, taking into account the needs of all road user groups, giving priority to sites with a crash history and identifying significant remedial opportunities;
- ensuring road design standards and road management practices are consistent and reflect world's best practice in the provision of safe road infrastructure;
- providing rural local governments with guidelines for the construction and maintenance of road types which reduce the incidence and consequences of crashes; and
- identifying, assessing and evaluating potential treatments for roadside hazards.[3]

4.6 Measures to improve the safety of new roads include:

- fostering investment in new roads and road improvements;
- improving the estimation of the cost of serious injury and fatal crashes used in the economic evaluation of road improvement options to provide optimum return on investment in terms of both finance and safety;

2 ATC, *National Road Safety Strategy, 2001–2010,* p. 7.

3 ATC, *National Road Safety Action Plan 2001 and 2002.*

- making road safety audits a requirement for major road projects, land use planning and development approval processes for large projects, with the threshold for requiring audits being progressively lowered over time; and
- reviewing road design guidelines relevant to older drivers' reduced performance levels, especially with regard to placement, legibility and night-time reflectivity, adopting best practice where different standards exist.[4]

4.7 The *National Road Safety Action Plan 2003 and 2004* identified a number of measures for improving the safety of roads, with potential for cost effective mass application and high safety benefits, including:

- clearance of roadside hazards, or use of barriers to reduce the hazard;
- shoulder sealing, audible edge lining, nigh-time delineation;
- replacement of intersections by roundabouts;
- programs to minimise the risks posed by utility poles; and
- separating road users, using centre barriers, pedestrian precincts, bike tracks etc.[5]

4.8 Proposed actions under the plan include:

- providing funding for mass application of proven countermeasures;
- implementing road safety risk assessments in road planning, construction and maintenance;
- eliminating unsafe roadside planting programs; and
- maintaining and extending black spot programs.[6]

4 ATC, *National Road Safety Action Plan 2001 and 2002.*

5 ATC, *National Road Safety Action Plan 2003 and 2004,* p. 15.

6 ATC, *National Road Safety Action Plan 2003 and 2004,* p. 16.

Commonwealth Funding

4.9 The Committee is cognisant of the important role the Australian Government plays in road funding and the significant contribution this makes to road safety.

4.10 The Australian Government budgeted some $1.784 billion in road funding for 2003–04, under six different programs, comprising:

National Highway	$704.6 million
Roads of National Importance	$227.1 million
Grants to local government	$462.7 million
Roads to Recovery	$302.2 million
National Black Spot Program	$45.0 million
Federation Fund	$43.0 million[7]

4.11 The Australian Government funds all maintenance, rehabilitation and construction activity on the National Highway, with the aim of providing a safe, efficient means for the transport of passengers and freight. The Government has spent more than $15 billion upgrading the National Highway in the last 25 years. This includes road improvements such as sealing shoulders and increasing the number of lanes and divided highways.[8]

4.12 The Roads of National Importance Program is also directed at upgrading key road links with clear safety benefits, such as the Pacific Highway. Grants to local government are funded under the Roads to Recovery Program and Financial Assistance Grants. Measured as road length, local councils are responsible for the bulk of the Australia's road network. Commonwealth grants contribute significantly towards maintaining local roads.[9]

7 DOTARS, Submission no. 23, Attachment 7, p. 1.
8 DOTARS, Submission no. 23, Attachment 7, p. 1.
9 DOTARS, Submission no. 23, Attachment 7, p. 2.

The Black Spot Program

4.13 One of the most significant contributing factors to the reduced road toll has been the National Black Spot Program, which has been replicated in one form or another in most of the States.

4.14 The Australian Government commenced a Road Safety Black Spot Program in 1990, as a direct response to the high level of road trauma. The current Black Spot Program was initiated in 1996. The program is now in its eighth year having been extended twice. Since 1996, more than 2900 projects have been approved representing an investment of over $320 million. Funding for Black Spot locations will be $44.5 million per annum through to 2005–06. Each State and Territory receives an annual allocation according to population and proportion of casualty crashes.[10]

4.15 The Black Spot Program is directed at improving the physical condition or traffic management at locations with a high incidence of crashes involving death and serious injury. The purpose of the program is to maximise lives saved per dollar spent. Funding is mainly available for the treatment of sites with a proven history of crashes. Project proposals must demonstrate a safety benefit to cost ratio of at least 2:1. Up to 20 per cent of proposals may also be considered on the basis of a safety audit. Approximately 50 per cent of program funds are reserved for rural roads.[11]

4.16 The success of the National Black Spot Program and its state counterparts was lauded by most witnesses at the inquiry's one day forum. Mr Kym Bills, Executive Director of the Australian Transport Safety Bureau, told the Committee that 'there is unequivocal evidence that the black spots program is very effective in saving lives and there are extremely high benefit to cost ratios'.[12]

4.17 In his evidence, Mr Howard presented the Victorian view:

> We are very strong believers in those black spot programs. We appreciate the federal program. Victoria ran a very large black spot program over the last four years—spending $240 million. That is certainly giving us some benefits and will continue to provide benefits into the future. From memory, the benefit–cost ratio of the federal black spot program as assessed independently in Victoria

10 DOTARS, Submission no. 23, Attachment 7, pp. 2–4.

11 DOTARS, Submission no. 23, Attachment 7, p. 4.

12 *Transcript of Evidence*, p. 6,

> was about 13 to one. They are enormous cost–benefit ratios for the community.[13]

4.18 Dr Soames Job, General Manager, Road Safety Strategy, for the Roads and Traffic Authority of New South Wales, agreed:

> This has been an excellent program. We have already heard from the other states that there is excellent evidence for extremely good cost–benefit ratios. The Bureau of Transport Economics estimated that we get $14 worth of economic return for each dollar spent. So we agree with what has been said and we think that an extension and full funding of that program has value.[14]

4.19 The Committee has been impressed by the evidence presented as to the success of black spot programs in reducing the road toll. Such programs have clearly had a significant, and cost effective, impact on the road toll, and should be maintained as a specific component of overall road funding.

4.20 The Committee had concerns that Black Spot funding could be allocated in cases where fatalities are the result of driver behaviour rather than the state of the road in question.

4.21 In evidence to the Committee Mr Barry O'Neil from DOTARS made the point that the way Black Spot funding is allocated (based on fatality data) would suggest that poor road user behaviour would not have enough of a statistical impact to influence funding decisions. He stated:

> We expect that the one-offs that are going to be related to that would not necessarily distort the picture. If there was a consistent pattern of a certain type of accident happening, that would come through as the crash history rather than be distorted by one-offs that might be unrelated to the road. So that is why we look at the crash history of a site.[15]

The need for greater funding

4.22 While the Committee acknowledges the Commonwealth's important contribution to road funding, it has received a considerable amount of evidence to the effect that more needs to be done.

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13 *Transcript of Evidence,* p. 9.

14 *Transcript of Evidence,* p. 23.

15 *Transcript of Evidence (11/02/2004) p. 30.*

4.23 In evidence before the Committee, Mr Ray Taylor, General Manager, Business and Marketing, ARRB Transport Research Limited, applauded the success of the black spot programs. However, he also called for new approaches and significant increase in the level of investment in road safety.

4.24 Mr Taylor argued that much of what governments were now doing was reactive, dealing with problems after casualties had occurred. What was needed was a proactive approach—applying the knowledge gained from years of research and program implementation to preventing problems. He told the Committee:

> When you are moving to address problems in the future, you have got to be looking at proactive approaches, which are more risk based. A road safety audit is one approach … but the approach which is emerging as one to be used in Australia is what I would call risk management. A risk management approach draws on what was undertaken in the formal road safety audit program but places the identification of risks in the roadside in relationship to one another and enables a road authority or a local council to prioritise those risks.[16]

4.25 The other requirement was increasing investment:

> The key question is: if we know what to do, if we know a lot of the treatments work and if we have programs on which to place those treatments, why aren't we achieving the goals? My answer to that is … we need a genuine scale of implementation. We are just below a significant enough scale of implementation across the country in order to achieve the benefits from known treatments on the road environment.
>
> …I have done some arithmetic; essentially I have estimated that across Australia we spend about $225 million a year on road environment treatments in safety programs. These are estimates; they are not precise but, by rule of thumb, they are pretty well right. Assuming a four to one BCR [benefit–cost ratio] across the whole lot, we get something like a three per cent net improvement in our road toll … With a decent scale of activity and investing $600 million Australia-wide, there would be a benefit in the region

16 *Transcript of Evidence*, p. 79.

> of 13 per cent and we would get Australia's fatality rate strategy very well back on track.[17]

4.26 Mr Taylor believed that significant results could be achieved through the widespread application of proven low-cost measures, such as:

- Roadside hazard removal
- Hazard protection
- Shoulder sealing
- Edgelining and audible edgelining
- Road delineation
- Roundabouts
- Roadside pole replacement
- Road user separation.[18]

4.27 In its submission, the Queensland Government noted both the expense of maintaining road networks and the need for greater investment:

> Providing safe roads is a particular challenge for Queensland, as the State has the largest road system in Australia and 44 percent of the state controlled road network is older than 20 years. The estimated cost of maintenance and rehabilitation of the state's roads is $4 billion. Queensland is also experiencing unprecedented population growth, and increased related economic activity is expected to double the freight task over the next 15 years.[19]

4.28 The Queensland Government argued strongly for the application of black spot funding to national highways (currently national highways are specifically excluded from the National Black Spot Program[20]). 'Extending the national black spot program to include a specific focus on locations where crashes are occurring on national highways would help to reduce crashes resulting in fatalities and hospitalisations.'[21]

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17 *Transcript of Evidence*, p. 80.

18 Powerpoint presentation by Mr Ray Taylor, General Manager, Business and Marketing, ARRB Transport Research, Exhibit no. 3.

19 Government of Queensland, Submission no. 31, p. 4.

20 DOTARS, Submission no. 23, Attachment 7, p. 2.

21 Government of Queensland, Submission no. 31, p. 14.

4.29 The critical issue, however, is the overall need for more funding:

> Queensland also endeavours to plan and work proactively, undertaking road safety audits and mass application of remedial measures. Although these activities are effective in reducing crashes they are potentially costly to implement. Often, road authorities can only afford to implement some of the higher priority road safety audit findings, due to lack of funds. Similarly, road authorities can only afford to apply, to a limited extent, mass applications such a shoulder sealing, audible edge lines, and utility pole treatment. Solutions to these matters need to be found.[22]

4.30 The AAA also called for a greater funding commitment to road safety. It believed that current levels of funding for black spots were relatively low 'at around $40 million per annum, which is not enough to treat the long list of identified locations'. It also called for a 'system wide comprehensive upgrade of the National Highway System to incorporate safety features that are proven to be effective in preventing crashes and reducing the severity of crashes which do occur'. According to the AAA, the economic and social benefits involved made a compelling case for increased investment in a safer road environment.[23] It argued that the unwillingness of governments at all levels to commit funding and other resources to road safety was one of the factors impeding the progress of the National Road Safety Strategy.[24]

4.31 The Committee is concerned that lower cost work is not able to be assessed for Black Spot funding due to the cost of preparing safety audits and reports in applying for that funding. It believes that 10% of Black Spot funding should be available for lower cost projects, to approximately $35,000. These funds should be allocated by some simple system, such as on the basis of two engineer's certificates.

22 Government of Queensland, Submission no. 31, p. 14.

23 AAA, Submission no. 18, pp. 17–18.

24 AAA, Submission no. 18, p. 27.

4.32 The Committee is of the view that the total of Black Spot funding should be increased by 25%. The Committee was not persuaded by the view of the AAA that the Black Spot Program should be extended to national highways; but should continue to be addressed through the Safety and Urgent Minor Works program—referred to later in this chapter.

Recommendation 7

4.33 **The Committee recommends to the Australian Government that:**

- **the pool available for Black Spot funding throughout Australia be increased by 25%; and**
- **thereafter, Black Spot funding should be divided on the basis of:**
  - ⇒ **major projects 70%**
  - ⇒ **projects requiring a safety audit 20%**
  - ⇒ **lower cost projects 10%.**

4.34 The Committee is in accord with the view that it will be necessary to increase Commonwealth funding to road safety and maintenance programs in order to accelerate improvements in the road toll. Significant progress has been achieved, but there is a substantial gap between what is being done and what could, and should, be done.

4.35 The Committee believes that the national highway system should be the exemplar of road safety measures. The Safety and Urgent Minor Works component of National Highway funding should be increased by a substantial amount.

4.36 There needs to be a greater commitment to mass application of road safety measures. National design and maintenance standards need to be established to ensure that all roads are built or rebuilt to meet minimum safety standards.

4.37 Such actions will require greater levels of commitment and resources from all levels of government. The Committee believes, however, that the Australian Government should take the lead in terms of prescribing safety standards and committing resources to achieve those standards. This requires developing a national investment strategy in the safety of the road environment as part of the broader National Road Safety Strategy.

4.38 It also requires a substantial increase in funding. The Committee took evidence that a figure of around $600 million per annum in direct investment on measures specifically designed to improve the safety of the road environment would be appropriate.[25]

A Safer Road Environment

4.39 The importance of creating a safe road environment, an environment more 'tolerant' and 'forgiving' of error, was emphasised by a number of witnesses at the one day forum.

4.40 Mr Howard of VicRoads told the Committee that:

> The road transport system should be designed on the premise that accidents are going to happen and in a way where people could withstand the forces that they would endure if they were in a collision. We expect individuals to abide by the rules—we cannot do a lot for people who break the law—but system designers have to build in safety.[26]

4.41 Similar sentiments were expressed by the AAA in its submission to the inquiry:

> AAA believes that the highest priority road safety area in Australia should be investing in safer and more forgiving roads. The safety features and standard or road infrastructure are closely linked to crash rates … and it is clear that well founded improvements to infrastructure have a direct correlation to crash reduction.
>
> Motorists should be able to travel on Australia's road system in safety, knowing that the features of the road itself, such as sharp bends, will not cause them to lose control. Roads must be of a

25 *Transcript of Evidence,* p. 80.

26 *Transcript of Evidence,* p. 10.

> standard such that the likelihood of a crash is minimised, and for those crashes that do occur, the road and the associated road environment, is more forgiving, that new vehicles are as crashworthy as possible, making crashes survivable.[27]

4.42 In integral part of achieving better road safety is improving standards of design and construction. Because road infrastructure is long lasting and not easily or cheaply modified, it is vital that roads and roadsides are designed to the highest appropriate standards. The AAA regards safety auditing is a vital part of the design stage.[28]

4.43 One of the problems cited by Mr Howard was the prevalence of run-off-road accidents on rural roads. A high proportion of all casualty crashes on rural roads are run-off-road. The problem is that many rural roads have dangerous roadside environments. The result is 'that about 70 or 80 per cent of those run-off-road crashes end up hitting a fixed object, mainly a tree … clearly, where there is vegetation next to a 100 kilometres per hour road, it is high risk'.[29]

4.44 Professor Johnston also emphasised the need for greater roadside safety not so much as a way of preventing crashes, but of minimising their effects:

> The most common rural road death comes from running off the road … The reasons for all those road run-offs are alcohol, speed, fatigue, driver distraction and all the rest of it. It is very difficult to control in rural areas, as other people have said, but we can manage that outcome. We have sealed the shoulders and put in rumble edge lines—and I think we should put in rumble centre lines at the same time—and we have put in small amounts of guard rail.[30]

27 AAA, Submission no. 18, p. 16.

28 AAA, Submission no. 18, p. 17.

29 *Transcript of Evidence,* p. 9.

30 *Transcript of Evidence,* p. 54.

4.45 He argued for a much greater effort to be made in improving the standards of our national highways, which, despite their low death rates per kilometre travelled, were still responsible for a considerable number of casualties in absolute terms. Australia's national highways had high geometric standards, but 'not very high roadside safety standards in terms of guarding the roadside. There is an opportunity for the federal government to lead in that respect'.[31]

4.46 In his submission, Mr Douglas Gardiner of Portsea, Victoria, brought attention to the basic need to simply maintain roads:

> While it is agreed new roads are often far safer than old roads, the percentage of roads ripped up and re-laid is very close to nil, even in a 20-year cycle (the typical life of a road). Repairs are often very rough and therefore disturbing patchwork horrors, and the materials used can be quite different to the surrounding surface. The Hume Highway displays this problem, and even with Roads to Recovery Funding inherent problems are not addressed so the subsequent failure occurs even within 12 months.[32]

4.47 The Committee agrees that the first principal of road design is the need to create a more tolerant and forgiving road environment. Road design and maintenance must be in accord with best practice principals. Critical to this is creating a roadside environment that is forgiving of error. Equally important are maintenance regimes which maintain the quality and safety of roads.

4.48 The Committee also supports a national scheme for rating the safety of roads. In its submission, the Western Australian Government urged the development of a system for rating the relative safety of roads for the information of motorists in the same manner as vehicle rating for consumer information.[33]

4.49 The AAA noted that it had 'commenced discussion with AustRoads and individual State Road Authorities on an Australian Road Assessment Program (AusRAP)':

> This program would ideally be undertaken in collaboration with government, following the EuroRAP model in Europe which is a collaborative effort between a number of motoring clubs, road

31 *Transcript of Evidence,* p. 55.

32 Mr Douglas Gardiner, Submission no. 33, p. 9.

33 Government of Western Australia, Submission no. 37, p. 14.

> authorities and others. AusRAP aims to do for roads what the Australian New Car Assessment Program (ANCAP) does for cars, that is, assess the inherent safety of roads.[34]

Road Markings and Signs

4.50 One of the measures emphasised in several submissions and in evidence before the Committee was the need to improve road marking and signs.

4.51 In evidence before the Committee, Mr Rod Hannifey, a working truck driver and road transport and road safety advocate, proposed changes to road signs to improve road safety. He suggested that the length of overtaking lanes should be indicated on signs so that people knew how long they had to overtake. He questioned the value of advisory speed signs on corners—most people ignored them because they were often not relevant to modern cars. He also proposed signposting off-camber turns (where the road surface slopes away from the angle of the turn).[35]

4.52 The Committee endorses the idea of indicating the length of overtaking lanes and signposting off-camber turns. Both are sensible road safety measures. It also supports the idea of reviewing the use of advisory speed signs, and the idea of colour coding road markings to indicate changes in speed limits. This idea may have some merit and the Committee believes that federal and state road authorities should investigate the feasibility of introducing colour coded speed markings.

4.53 In his submission, Mr Gardiner highlighted the problem of road signs being incorrectly installed:

> One of the glaring facts in road safety is the matter of dealing with glare. Reflective material has the propensity to cause glare, and one component of this is reduced dramatically by the installation of signs at the correct angle to avoid specular glare. This is a management item that appears in all roads' manuals yet in Victoria it is estimated that no better than 10% of signs are installed at the correct angle to avoid this "white out" problem. Signs have to be angled away from the approach of the on-coming vehicle—yet there is a plethora of signs (possibly as many as 80%) that are installed square to the road. Even worse are those signs whose angle to the adjoining road is inside square.[36]

34 AAA, Submission no. 18, p. 18.

35 *Transcript of Evidence*, pp. 93–5; Mr Rod Hannifey, Submission no. 40.

36 Mr Douglas Gardiner, Submission no. 33, p. 4.

4.54 Mr Gardiner also regarded the placement of signs as 'a science that requires further study … how often are signs placed either at the point of turn / departure or even after that crucial point?' He cited the off ramp signs on freeways as the most outstanding example in this category:

> Placement of such signs can only be user friendly if located approximately 150m before the departure point, and for clear observation in close proximity to the lanes is vital. Peering 300m to a sign in fog is totally counterproductive, and not much better in rain.[37]

4.55 Mr Gardiner also noted the impact of aging and lack of maintenance on line marking—'the gradual downgrading of the reflective markings as road hardware suffers from poor maintenance, age, and the complications … where headlights are improving but the reflective surface of the road markers remains unchanged'. This results in a loss of delineation, with the inevitable consequences in terms of driver concentration and fatigue.[38]

4.56 The Committee agrees that the placement and installation of road signs is an important issue, that national standards should be created and enforced to ensure that road signs are appropriately sited and installed. Road marking is also an important issue. Faded or damaged road markings are a hazard, particularly in wet conditions, demanding high levels of concentration from drivers. In recent years there have been a number of measures introduced, both inside vehicles and in the environment, aimed at reducing driver distractions. The Committee is of the opinion that, while mandatory and advisory speed signs and road condition signs are of the utmost importance, there is an obligation on State and local authorities to see that travel distance advisory signs, directional signs and street markings, are kept up to date and clearly displayed, to allow motorists to concentrate on the safety aspects of their driving. The Committee believes that this should be extended even to clear house or block numbering, so that motorists' attention is not unduly distracted. Again, minimum design and maintenance standards should be created and enforced.

37 Mr Douglas Gardiner, Submission no. 33, p. 8.

38 Mr Douglas Gardiner, Submission no. 33, p. 7.

Recommendation 8

4.57 **The Committee recommends that the Australian Government adopt the following measures to improve the safety of the road environment:**

- **With the State and Territory Governments, establish a national investment strategy for improving the safety of the road environment.**
- **With the State and Territory Governments, carry out further work on national road design, maintenance and safety standards.**
- **Increase black spot funding by 25%.**
- **Increase the Safety and Urgent Minor Works component of National Highway funding by 25%.**
- **Increase funding for low cost measures to improve the safety of the road environment.**
- **Ensure that design and maintenance standards on the national highway system conform with world's best practice.**
- **With the State and Territory Government establish a national system for rating the safety of roads.**

Heavy vehicles and other road users

4.58 The evidence presented to the Committee revealed that aside from the general issue of safety and design standards of the road environment, there were a number of issues pertaining particularly to specific road user groups.

4.59 Mr Chris Althaus, Chief Executive Officer of the Australian Trucking Association, emphasised the importance of road infrastructure improvements from the point of view of the road transport industry:

> We look at the investment in roads, we look at the contribution via taxation mechanisms and the like from the industry and it is very

> important that we see a growing investment in our road infrastructure. Right now we have a situation where there is a very important and essential component in AusLink being considered. We constantly request that this be fast-tracked and appropriately funded, not just for the development of new infrastructure but most importantly for the maintenance of existing infrastructure. We know only too well the balance that this holds between the Commonwealth and state jurisdictions. However, in the context of this inquiry and this committee's work, the safety burden and additional safety risk that comes out of decaying infrastructure is substantial and deserves a much faster response from both levels of government than we are currently seeing.[39]

4.60 In his submission to the inquiry, Mr Hannifey also highlighted the importance of maintaining and upgrading road infrastructure:

> Whilst many roads have improved, many are still below standard for the volume of traffic and the size of trucks, with many roads still with no shoulder, leaving soft edges and or deep ruts. Also little consideration is given to how road surface irregularities affect trucks. There are many savage dips and bumps that have no justification for being there, other than that no one but truckies feel and are affected by them. This not only increases wear and tear on the road, the truck and the driver's fatigue, for every action there is a reaction and this reaction is what is doing more damage to roads and bridges.[40]

4.61 As he told the Committee in evidence:

> …if a truck is driven along the road, rather than pounding into it or onto it, the truck and the driver suffer less fatigue and wear and tear and the road will also suffer less wear and tear. If those dips and bumps could be filled in, that is one less hazard and one less road maintenance issue.[41]

39 *Transcript of Evidence,* p. 99.

40 Mr Rod Hannifey, Submission no.14.

41 *Transcript of Evidence,* p. 91.

4.62 Mr Hannifey also attached a proposal to his submission for a national 1800 number for reporting potholes and other damage, which he believed 'could save road repair costs and lives through early notification of damage to roads'.[42] Problems could be reported quickly and easily from any part of Australia. He told the Committee:

> If there was one number—obviously, it could be just a recorded service at night—not only could we save lives but also we could improve road quality and save the road authorities money by having those things fixed when they are small, simple and cheap.[43]

4.63 The Committee was particularly taken by this suggestion and felt that a call centre could disseminate prompt information to state and local authorities. The Committee believes that this call centre number should be advertised on the reverse side of registration stickers and other relevant road advice brochures.

Recommendation 9

4.64 **The Committee recommends that the Australian Government ask the Australian Transport Council to establish a well advertised national call centre for reporting road damage.**

4.65 In his evidence before the Committee, Mr Rick Bedford, National President of the Ulysses Club, a motorcycle club for those over 40 years of age, stressed the need to make roads more motorcycle friendly:

> As a club we think one of the biggest issues which needs addressing is the road environment because a motorcycle only has so much tyre on the road and a bad road environment makes it so much more unsafe for a motorcyclist than for a car driver.[44]

42 Mr Rod Hannifey, Submission no.14.

43 *Transcript of Evidence,* pp. 95–6.

44 *Transcript of Evidence,* p. 69.

4.66 In its submission, the Club highlighted the benefits of the black spot program, the construction of passing lanes, the sealing of shoulders(especially on the inside of corners), and the sealing of side roads and driveways that connect to major road. It recommended that side roads should be sealed back to a distance of ten metres and driveways to a distance of five metres.

4.67 The submission also criticised the practise of crack sealing to extend the life of roads on the grounds that it created differentials in skid resistance on the same piece of road. It recommended that all roads be subject to regular road safety audits—once every two years or when changes have been implemented to the road environment.[45]

4.68 Mr Scruby alerted the Committee the perils of poor roadside design from the pedestrians point of view—'footpath obstructions, illegal and dangerous parking, construction sites, footpaths which lead nowhere, footpaths which are not maintained'.[46] Illustrating his points with examples of poor design and dangerous practices, he asked:

> When we create pedestrian crossings, where do we park? Always in from of them so no-one can see people as they step out. You can see the traffic lights there on the far side; that is where a young boy from our children's school was killed He came out from the pub. And where does Chubb stop every day? It stops right in the middle of the pedestrian zone. Where do the taxis drop off their fares? It is always in the pedestrian zone. What does the City of Sydney do with its street furniture and the millions of [advertising] dollars that come from J. C. Decaux? They place them at every set of traffic lights so that you cannot see the pedestrians emerging from behind the street furniture…
>
> Have a look at this. This is a picture of Pitt Street Sydney at Martin Place. A nib is constructed to give pedestrians and motorists better visibility of each other, so where do we put the kiosk? It is right in the middle where you cannot even park, so no-one can see each other on the busiest intersection in the city. And now we make them [the advertisements] scroll. J. C. Decaux has said that, if they scroll, 95 per cent of motorists actually watch them, so what are they watching when they are driving through the intersection? The RTA's very own policy states that street furniture should never be

45 Ulysses Club Incorporated, Submission no. 17, pp. 2–3.

46 *Transcript of Evidence*, p. 71.

> placed in a position that obstructs vision between pedestrians and motorists, but it does and everyone turns a blind eye…Pedestrians do cross against the lights, and motor vehicles do run red lights. It is a recipe for disaster.[47]

4.69 Mr Scruby also criticised governments for failing to make adequate provision for the elderly and disabled. Scooters gave the elderly greater mobility, but the pedestrian infrastructure was often not fit to use them.[48] Roll-top kerbs not only allowed cars to park on footpaths, but the vision impaired now had no way to tell when they had left or entered the roadway.[49] Pedestrian access was all too often an afterthought, with little regard for safety in view:

> We are creating an environment which is unsafe and dangerous. When council built this road only a year ago with a brand new footpath, where did they leave all the power poles? They left them right in the middle of the footpath—where else?[50]

Recommendation 10

4.70 **The Committee recommends that the Australian Government ensure that any national standards for the design, maintenance and safety of roads reflect the needs of all road users including heavy vehicles, motorcycles, bicycles and pedestrians.**

47 *Transcript of Evidence,* p. 72.
48 *Transcript of Evidence,* p. 71.
49 *Transcript of Evidence,* p. 73.
50 *Transcript of Evidence,* p. 71.