

It's Crunch-Time for a New National Road Safety Strategy

Report on a Seminar by the Australasian College of Road Safety, NSW (Sydney) Chapter by Harry Camkin FACRS

Introduction

The current National Road Safety Strategy encompasses a vision of "Safe road use for the whole community", and a target "to reduce the number of road fatalities per 100,000 population by 40%, from 9.3 in 1999 to no more than 5.6 in 2010". (1)

The 2009-10 Action Plan (1) accepted the likelihood that the target will not be attained, and acknowledged that serious injuries, as the major component of the total financial cost of road trauma, should be targeted in future.

In response to an invitation by the Federal Minister for Transport (published in the August 2009 Special Edition of the College Journal "Preparing for the National Road Safety Strategic Plan 2011-2020", for members of the College to put forward their views on "key directions and priorities for Australian road safety over the coming decade", the NSW (Sydney) Chapter convened a seminar on the subject: "Crunch – Time for a new National Road Safety Strategy". This paper presents a summary of the proceedings of the seminar, which was held in Sydney on December 9th 2009

Seminar Objectives and Participants

The current strategy not having run its course, the seminar was constructed as an exploration of its progress to date and the issues likely to surround the development of a new strategy, and as an aid to preparation of possible input to the new strategy by the College, its members, and other major stakeholders. It took the form of a panel discussion by eminent road safety professionals, with further discussion from the floor. Initial presentations by the panellists covered:

- a brief review of the current strategy – its progress, successes and shortcomings,
- the context in which the new strategy will be prepared – other major domestic and international issues with which it must compete for community and government attention, and
- recent and emerging concepts and philosophies for planning at the strategic level.

The panel was selected for their experience and expertise at the strategic level of planning for road safety, this, rather than the relative merits of individual countermeasures, being the focus of the seminar. The panellists were:

- *Mr Lauchlan McIntosh AM, President, ACRS, Chairman ANCAP, and Director Asia Pacific IRAP*, whose presentation covered performance, responsibility and accountability, need for independent reviews of progress and economic analysis of the total costs of crashes, recent international developments, and a potential role for the College

- *Mr David Healy, Senior Manager, TAC and Co-Vice-President ACRS*, who discussed vision and target setting, making a "safe system", and State/Federal relations and their respective roles,
- *Professor Barry Watson, Director of CARRS-Q and Co-Vice-President, ACRS*, on the purpose and function of road safety strategies, the need for a guiding vision, ambitious targets including injury reduction, robust performance monitoring, leveraging support through linking to other agendas, and research-strategy interfaces, and
- *Professor Raphael Grzebieta, Chair of Road Safety, IMRC, UNSW, Immediate Past President, ACRS and current Chair, Sydney Chapter*, who discussed the relevance of traditional areas of focus, updating the Haddon-based approach, the USA's traffic efficiency approach to roads versus that of Europe's liveability and safety, and the influences of technology.

I was privileged to be invited to be the moderator of the seminar, perhaps with some deference to my participation in the development of the first national strategy, as well as New South Wales' Road Safety 2000. While this experience is perhaps of some relevance, both of these were formulated in somewhat less challenging times, and I have no envy whatsoever of those charged with the preparation of the strategy for the next ten years.

The presentations by the panellists as outlined above and subsequent discussion are summarised herein in terms of a review of the progress of the strategy, the international and domestic context in which its successor will be developed, and some major issues for consideration by those tasked with it.

There was consensus evident on many of the views presented, but it should not be inferred that they were universally subscribed to by each of the panellists. In particular the final summation is my own, as is the responsibility for any erroneous conclusions presented therein.

Progress with the Current Strategy

Any definitive appreciation of the effectiveness or otherwise of the 2001-2010 strategy must perforce await not only the passage of its full term, but also the assembly and analysis of much more data than is available at this time. Nevertheless there are some clear indications from the information already in the public domain that enable some worthwhile observations to be made. The principal issues noted relating to progress to date were:

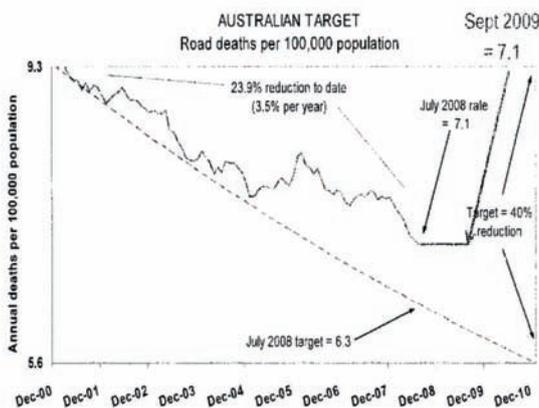
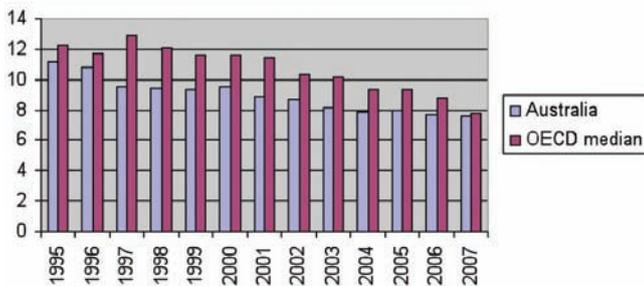
Targets

The absence of interim targets and performance indicators for implementation of the strategy has made it very difficult to evaluate the success of the strategy at any stage

“Benchmarking” was promised in the strategy as an adjunct to the transfer of “best practice”, and was strongly recommended in the 2004 House of Representatives Inquiry report “Eyes on the Road Ahead” (3) for all road safety activities. But the only benchmark in general use in the current action plan is that of fatality rates in OECD countries. It is of some concern that against the measure of the fatality rate of the median OECD country, Australia’s performance has slipped progressively from around 80% of that rate at the turn of the century to 97% in 2007.(4)

There is virtually no prospect of the target of 5.6 fatalities per 100,000 population being achieved. The strategy was aimed at saving 3600 lives over ten years, but fatalities up to September 2009 were some 1300 in excess of those that would have been experienced had the rate decreased linearly from 9.3 in 2000 towards the target. All 3600 lives can now only be saved by the avoidance of almost all fatalities in 2010. (10, McIntosh and Grzebieta)

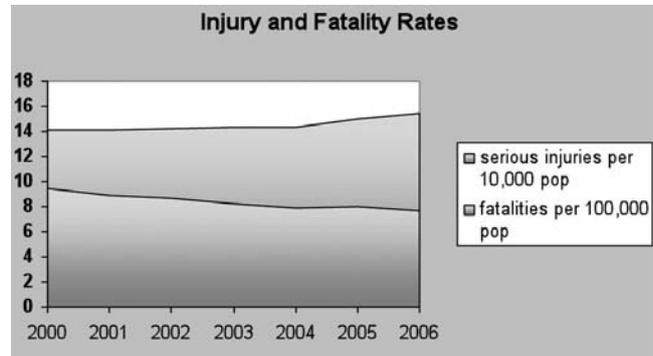
Fatalities per 100,000 population



Injuries

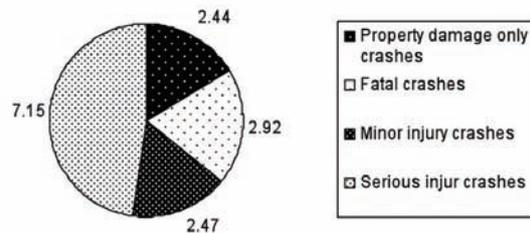
The shortcomings of reliance on fatality rates for assessment of either the total cost or the relative significance of crashes involving different classes of road user, well recognised in, for example, “Eyes on the Road Ahead” remain as sources of possible misallocation of effort.

It is of particular concern that serious injuries actually increased each year from 2000 to 2006 – an indication that the total cost of road trauma is increasing rather than declining. (1,6)



Of the total financial cost of road trauma of \$15 billion estimated in the National Road Safety Strategy, two thirds was associated with non-fatal injury crashes.(1)

Financial cost of road trauma (\$billion)



Action Plans

The Strategy’s provision for biannual action plans and its employment of a widely-representative Advisory Panel has been of value, the latter providing a forum for discussion across a wide range of professions, jurisdictions, and stakeholder groups prior to its disbandment in favour of a new National Road Safety Council. Limited leadership restricted the Panel’s effectiveness in later years, for example in facilitating the initiation of the safe systems approach, but the development of which has been left largely to individual jurisdictions, albeit with some degree of national coordination.

More rapid implementation of “safe systems” is called for, but even so, the benefits of this approach will largely not be realised until after the present strategy has run its course. Some elements, eg the prospect of moving road design away from the traffic efficiency-oriented USA standards towards the more liveability/safety orientation being pursued in Europe will take some time to develop.

Similarly there needs to be greater support of efforts to promote the incorporation of the best of ITS technology into vehicle design and manufacture.

The 2009-10 action plan has acknowledged the need to include serious injury targets, and the decision by the Australian Transport Council to create a new National Road Safety Council has gone some way towards establishing an independent (if not really external) review process. The new Council's first formal meeting will not be until early 2010 however, and it remains to be seen to what extent the Council can improve on the input from the broader representation of the Advisory Panel, and especially to the commitment of the major players and stakeholders represented on the latter. The same plan concedes that there is still a pressing need for more effective performance monitoring and progress management.

Successive Action Plans have reported progress on a wide range of road safety activities, including priority actions from previous plans, but have been largely silent on lack of progress in other areas, including accountability and performance monitoring. They do not appear to have been very effective in accelerating the implementation of specific programs or countermeasures that they have promoted.

Issues of exposure and vulnerability arising from increased use of motorcycles and growth of road freight and countermeasures to address these have received little attention in recent Action Plans.

Technology

Emerging technology was heralded in 2000 in the current strategy as a significant means of reducing human error. Austroads e-transport, the National Strategy for Intelligent Transport Systems, was quoted as estimating that the total cost of crashes, congestion, and vehicle emissions could be reduced by at least 12% by 2012 from the use of ITS⁽¹⁾. While improvements in vehicles and traffic management have made, and will continue to make, substantial contributions to safety, progress seems to have been slower than anticipated, and it is difficult to see this result being attained. For example, the introduction of electronic stability control into all new light vehicles and trucks has not occurred, although one State, Victoria, is moving ahead of the Commonwealth to legislate for ESC in light passenger vehicles.

The time that such developments take to become fully effective is generally much longer than that of the innovations in entertainment and personal communication that tend to be more distractive than protective in the traffic environment. The current strategy and its action plans acknowledge this dilemma, but with a few exceptions have made little impact on accelerating penetration of "good" technology or diverting that of the "bad". Overall, there is little prospect of a "technology fix" making a major contribution in the short term.

Monitoring and Research

Recent experience of the impact of unforeseen external circumstances on exposure, behaviour, and the nature of traffic, and in consequence on even our "best-laid plans", has further

demonstrated the importance of monitoring both the implementation and effectiveness of programs and countermeasures. The same is obviously true for the strategy itself.

While research has informed both establishment of the overall target and the various action plans in terms of monitoring progress towards it, and assisted in identifying emerging issues and appropriate countermeasures, there has been little progress (outside of Researchers' and College Conferences) in promoting the interface between health, medical, and road safety research, or in coordinating research data linking across the various sectors and jurisdictions. Evidence-based selection of activities calls for a more co-ordinated and strategic approach to research.

Accountability

Under the framework-collaboration concept of the current strategy, individual jurisdictions are accountable only for the selection and implementation of activities that they deem most appropriate for their circumstances. Given the constitutional independence of the States in the transport arena, it is difficult politically to avoid such sub-optimisation of the effectiveness of the overall resources utilised. It would be minimised however if all such major activities were attended by targets for both their implementation and outcome.

As pointed out in "Eyes on the Road Ahead", amongst others, there is an accountability vacuum in the strategy that calls out for clearer specification of the authority and responsibilities of the jurisdictional parties to it. While accountability for the strategy finally rests with the Australian Transport Council, the role of lead agency in future appears to be split between the relevant federal department and the incipient National Road Safety Council.

The 2009-10 Action Plan's reference to a new "Safety and Security Working Group" with "responsibility for progressing the National Road Safety Strategy and its action plans to ATC" further complicates the situation.

In the absence of a national accord or agreement perhaps similar to that establishing the new Council, it is difficult to see how the issue of accountability under the current "distributive" model of governance can be effectively addressed

Success or Failure?

In the absence of indicators for the implementation of specific activities promoted by the strategy and its action plans it is impossible to assess the success or otherwise of the strategy other than in relation to its single target. On this basis it can be deemed to date as only partially successful. More generally perhaps, it has been a useful stimulus of national activity and a focus for dissemination of new concepts such as the safe systems approach.

Pending formal analysis of final data it is only possible to surmise on the extent to which the shortfall on the fatality rate has been due to deficiencies in the strategy, the inertia or

commitment of major players, the estimates of exposure (eg increasing motor cycle and freight vehicle use), countermeasure effectiveness, or external factors such as the economy. The effect of increased exposure has been acknowledged in the current Action Plan, but the point was missed that had the overall exposure in terms of vkm per head been kept at the year 2000 level instead of increasing at an average rate of approximately 2% p.a.(6), the fatality rate might have been very close to target for 2009.

Furthermore, while considerable attention has always been focussed on the funding of new initiatives, scarce consideration has been given to quantifying the resources required just to maintain the status quo in the face of increased exposure.

We should be wary of the counterfactual situation, and not be too hasty in declaring the strategic approach itself a failure, but the fact remains, that the application of considerable resources has not made a major impact on the total cost of traffic accidents. The Productivity Commission has undertaken inquiries into issues of far lesser economic import in recent years.

The Context in which a New Strategy will be Prepared

Government Priorities

The environment in 2010 will be very different from that in which the current strategy was prepared. Governments today are affording far greater priorities to international issues of climate change, national security, and the world economy, while domestically, health, transport and education will probably be the prime objectives of government attention over the next couple of years.

Given these distractions, the cost-effectiveness of road safety activity, not just as a determinant in prioritising safety initiatives, but also in terms of its potential to reduce health expenditure and improve occupational health and safety, should be utilised to garner political and inter-sectoral support for the strategy.

International Rapport

International developments in recent years have supported the concepts and substance of strategic planning for road safety, driven largely by European Community and World Health Organisation initiatives, but with a significant input of Australian expertise. This can be seen particularly in the 2009 “Moscow Declaration” (7) and the OECD/ITF 2008 report “Towards Zero: Ambitious Road Safety Targets and the Safe Systems Approach” (8), with the call for a UN Decade of Action on Road Safety, and confirmation of the need for strong lead agencies and commitment at the highest levels of government. There have been renewed calls also to leverage road safety through the seeking of allied priorities in health, transport, and the environment.

Foundations for a New Strategy

Vision, Goals, and Targets

“Vision Zero” has been held to be too aspirational for a national strategy, but similar concepts have been effective in occupational health and safety in many industrial areas, albeit in more “closed” environments, and there might well be a place for it at some level.

Nevertheless a guiding vision is sought that is more explicit than the current one. One that:

- avoids the perception of a stand-alone document that competes with other health, social, and environmental agendas,
- acknowledges the trade-offs that might need to be made between competing demands for safety, mobility, transport efficiency and environmental sustainability, and
- highlights the contribution that a more holistic approach can make to objectives in other arenas.

Bearing in mind the gestation periods of technological and infrastructure improvements, a vision needs to be sustainable beyond the 10-year horizon required to guide short-term improvement. Such a horizon might best be regarded as a staging-post with its own specific goals, and its own targets in terms of both implementing the strategy and defining its effectiveness.

The strategic vision also needs to provide a solid foundation for the principles underpinning the strategy and its action plans.

Australian expertise and Australian initiatives have met with frequent international applause, and given the necessary level of commitment by governments, a level of safety commensurate with that of the top quartile of OECD countries (current fatality rate about 5.2 fatalities per 100,000 population) would appear to be an achievable primary goal for the next decade.

The indications of a long-term rise in the serious injury rate, and the major contribution that serious injury crashes make to the financial cost of crashes make it imperative that the 2009-10 Action Plan proposal that injury targets be incorporated in the strategy be progressed and embraced by the strategic goals.

Effective monitoring of progress with the strategy and its goals demands the setting of interim targets in terms of both casualty outcomes and implementation of countermeasures and machinery processes. Research goals should include the early development of valid proxy measures to be used as indicators when there are significant lags in the availability of definitive measures.

The establishment of progressive targets should be associated with enhanced reporting of trends in circumstances likely to have a bearing on progress and analysis of their potential impact and implications for the strategy.

Accountability and Lead Agencies

There is now very strong insistence internationally on the establishment of effective lead agencies. In the absence of an identifiable alternative, the new National Road Safety Council's terms of reference appear to define its role as tantamount to that of a lead agency, but there is concern that the resources indicated will fall far short of those required to enable it to assert the necessary authority. Ultimately, accountability for the current strategy rests with the Australian Transport Council, but the diversity of responsibility under the collaborative mechanism with which ATC operates requires a parallel accountability schema.

A new strategy would benefit greatly from a lead agency that has both the capacity and the resources to identify and promote best practice and the authority to monitor, report, and recommend to ATC.

The statutory roles of individual jurisdictions are well established, but none is held accountable for its contribution to the strategy. The concept of the strategy as a framework, guiding individual jurisdictions but allowing them to proceed with activities that best address their particular problems and priorities, is probably inevitable. But at the very least, process targets should be established for the introduction of major road safety programs chosen by the individual jurisdictions.

Marketing

The contextual challenges and the likely perception of failure of the current strategy will demand the careful and persuasive marketing of the very concept of a national strategy, as well as and its principles, to governments and other major players, including the media as well as the community at large. This should focus not only on the human and total cost of road accidents in comparison with levels of social and financial cost in other areas of the national accounts, but also on the benefits to be derived from road safety activity that is synergistic to objectives in other sectors, as discussed elsewhere.

As envisaged in the COAG Agreement establishing the National Road Safety Council, and beyond marketing of the strategy itself, there is a major role to be played in promoting acceleration of safe system principles into the design and delivery of vehicles and highway infrastructure.

Principles

A set of principles underpinning the strategy and directing the application of resources and countermeasures should be clearly articulated and agreed at the highest levels of government. Many such principles have been advocated in the current action plan and in reports such as *Eyes on the Road*, *Towards Zero*, and the *Moscow Declaration*. In short, they should include cost-effectiveness, safe systems, best practice, and accountability.

In amplification:

- Evidence-based cost-effectiveness as the principal determinant in the selection of programs and countermeasures.
- A focus on safety programs as a highly cost-effective contribution to objectives in other sectors, particularly health, and those industries where profitability is challenged by deficiencies in the safe transport of goods and personnel.
- A strong lead agency with adequate resources for both monitoring and advocacy, and with the prestige and authority to influence governments and major stakeholders.
- A strong alliance between the many professions, academics and practitioners already involved in road safety work, perhaps through the College, to ensure improved data collection, reduce duplication of effort, and enhance the dissemination of best practice.
- Clarity in accountabilities, and commitment at the highest levels of Federal, State, and Territory Government.
- Importation, and translation where necessary to local conditions, of best practice from overseas and domestic sources.
- Promotion of the *Safe Systems Approach* as an appropriate balance between the concepts of *Vision Zero* and the realities of competition between mobility, efficiency and safety on Australian roads.
- Quantifying the externalities and taking their impacts into account whenever major decisions are made in the transport and land use sectors so as to mitigate the sub-optimisation of social costs otherwise derived from conflicting objectives for efficiency, mobility and safety.
- Likewise so far as the relationships between transport, land use, the environment, energy and health are concerned.
- Continued, strategic research into the design, cost-effectiveness and promotion of programs and countermeasures.
- Support for non-government programs that conform to the safe-systems approach, such as ANCAP, AusRAP, and Local Government-oriented programs in the various States.

These principles align closely with the key recommendations of the 2008 OECD report *Towards Zero : Ambitious Road Safety Targets and the Safe Systems Approach* as adopted in the College's 2009 declaration "A highly ambitious vision needed for the next decade in road safety".

Summation

The total cost of road accidents appears to have increased, hindsight has illuminated many shortcomings in the current strategy, and the action plans and occasional reviews that have been attempted since its inception have not prompted much in the way of urgent change.

Does this mean that the strategy has failed? After all, the fat lady is yet to sing! Have we made any progress towards attaining “safe road use for the whole community”?

Like the proverbial “curate’s egg”, the strategy has been good in parts, and the fatality rate, if not the total cost of road trauma, is currently running about 25% below that of 1999. There are many measures in the pipeline that will undoubtedly bring benefits in future years, and perhaps some of the shortfall can be explained by an over-optimistic expectation of the timing of the stream of benefits from the strategy. But short of an unforeseeable and unprecedented dip in fatalities in 2010, it will certainly fail to meet its one and only target.

Notwithstanding our inevitable ignorance of what economists allude to as the “counterfactual situation” – where we might have been without it, the strategy can hardly be hailed as a success.

Has it failed by way of design or has its execution been flawed? The jury will be out for a long while waiting for analysis to cast some light on this question, a dilemma arising largely from the absence of indicators designed to measure progress and effectiveness of implementation of the strategy and its action plans.

In particular, the Strategy’s expectation of “little growth” in per capita vehicle use, and “moderation” of the growth of road freight by the use of larger vehicles has proven to be erroneous. The annual growth of 2% in total vehicle travel is in fact almost synonymous with the target shortfall.

Reviews have suggested change, but there seems to have been no imperative and no effective lead agency to accelerate the process or drive the changes indicated. Execution is to a large degree a product of the design of the strategy, and there is clearly a major flaw in the strategy itself in this regard.

The community will be looking to better performance from a new strategy, and “more of the same” is most probably not an option, even if it can address the major deficiencies in the current strategy.

Has the framework/distributive-responsibility model of the last two strategies seen its day and do we need a completely different approach for the future?

Footnote

A New Policy?

Perhaps the overarching document should be a national policy, endorsed by COAG, establishing a long-term vision, mid-term goals, short term targets, and the principles underpinning a strategic approach to improving road safety nationally. It might charge federal, state, and territory governments with pursuing their own strategic plans that reflect those principles, but focus on their particular domestic issues and priorities while contributing to the national goals.

Each jurisdiction could be accountable under the policy for the execution of its own plan, and an independent lead agency to ATC for such coordination as is necessary and the monitoring and review of the overall process.

Given the recent agreement by COAG to establish the National Road Safety Council, is it overly optimistic to expect that given an appropriate briefing on the total social cost of road accidents and its impact on other sectors, particularly health, a similar agreement at the highest level of governments can be reached?

A Role for the College?

The recent special edition of the College’s journal reflects some of the concern at the present situation and the considered response of many of its members to the Minister’s invitation to provide input to the new strategy.

Should the College marshal the technical and administrative skills amongst its membership and submit its own recommendations for a new national strategy?

Should the College demand change, and should it go so far as calling for perhaps a Productivity Commission inquiry into the national cost of traffic crashes and the strategy for addressing it?

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