Testing the Waters in Relation to Public Acceptance of Lower Speed Limits on Arterial Roads
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Abstract

Evidence since the introduction of the 50km/h default urban speed limit in Australia has supported Australian research indicating that reduced travelling speeds do lead to a reduction in casualty crashes.

Reduced limits in the local street network have been implemented with relatively little community resistance, but community attitudes towards the so-called ‘harm minimisation’ approach to setting speed limits, and hence lower limits, are largely unknown.

Speed and speed limits are already recognised research priorities in Australia and overseas. Research conducted by ATSB, MUARC, CASR and other road safety research organisations clearly demonstrate the benefits of reducing speeds on arterial roads, however there are two schools of thought on how these speed reductions could be achieved:

1. Reduce speed limits across the board and enforce the limits to obtain compliance.
2. Educate drivers on the risks associated with exceeding the speed limit, and then enforce existing limits with a reduced enforcement tolerance.

In order to progress the debate on which strategy should be adopted, in April 2005 the Royal Automobile Association of South Australia commissioned market research to determine the level of community acceptance of lower speed limits on urban arterial roads, what impact drivers believed it would have on their travel time, and what attitude they would have to reduced enforcement tolerances.

Subsequently most of the other motoring organisations have followed suit and this paper reviews the results of this survey and the implications of these results on the introduction of Lower Speed Limits in Australia.

Introduction

With Australia at the half way mark of the National Road Safety Strategy target it is likely that States and Territories will be looking for a fail-safe way to achieve the target reduction in fatalities of 40% to ensure that they meet the 2010 timeline of the Strategy.

Over the next few years the investment required to meet the 40% reduction will be significant and for those States with limited funding options, it is clear that they will be looking for a cost effective countermeasure that will enable them to meet the target.
Most States and Territories to date have implemented low cost measures. Typically these have included increased enforcement tolerances, greater restrictions on novice drivers, and more stringent testing regimes to detect illicit substances and behaviour, but these treatments only address one aspect of the safe systems approach advocated by the National Strategy, *the driver*.

In keeping with this desire to find a low cost countermeasure, the reduction of speed limits across the board on arterial roads, has been offered to Governments as a means of meeting the National Road Safety target.

Much debate has taken place across Australia, in local jurisdictions and also in national forums on this issue, with proponents arguing that this move must take place for the good of the community and that acceptance will come with time.

Opponents have argued that the reductions of travel times, regardless of how small in absolute terms, are something that the community will not willingly sacrifice. When the community is prepared to pay tolls to use routes that provide even small levels of improved travel times it seems unlikely that there would be support for reduced speed limits. This coupled with the fact that drivers do not perceive that the existing speeds on metropolitan arterial roads are too high, together with the increased risk of infringement whilst drivers modify their driving behaviour, indicate that there is likely to be a very strong resistance to the imposition of reduced speed limits on arterial roads.

In April 2005, after attending many forums on this issue and being on the cautious side of such an introduction the Royal Automobile Association of South Australia (RAASA), decided to take the temperature of the South Australian public and see whether the feedback that they were receiving was reflective of the broader community, or whether it was simply the voice of a vocal minority.

Not long after this decision was made other motoring clubs across Australia decided to do the same thing and this paper will summarise the results from the South Australian survey and compare these with those from the other participating clubs around Australia, namely, New South Wales, Queensland and Western Australia.

**Survey Criteria**

The RAASA engaged an external service provider to prepare, implement and report on market research to take the temperature of the South Australian community on the issue of speed limits and tolerances.

As is common when surveys are conducted there is a need to ensure that the process is transparent and that a representative samples is undertaken. Every effort was made to ensure that this was the case in this process with careful consideration given to ensuring the sample was random, that it reflected the opinion of drivers, since that is whom would be most affected by the reduction in speed limits and that there was a statistically significant mix of regional and metropolitan respondents based on population data.
The survey sample ultimately was 603 drivers aged over 18 years (403 metropolitan Adelaide residents; 200 regional SA residents) and conducted using the CATI (computer assisted telephone interviewing) system.

The second most critical component of a survey of this type is the survey questions. What is asked, and in what order the questions are asked, are usually the most criticised components of surveys. To ensure that the integrity of the responses was not eroded by either of these factors the RAA gave the market research company typical examples of the questions that should be posed, but left the structure of the survey and the final wording of the questions with the market researchers.

The survey deliberately did not attempt to educate participants on the benefits or otherwise of increased or decreased speed limits, mainly because the purpose of the survey was to ascertain opinions at this moment in time based only upon the respondents existing exposure to road safety messages and driving experience.

Three filters were utilised to ensure that the random sample was representative of the driving community, these were, that the person was over 18 years of age, had a drivers’ licence and that they had more than 3 individual car trips per week.

Typical demographic questions were asked at the conclusion of the survey including household descriptors, locality, gender, age group and employment status. Added at the conclusion of the survey was a question to ascertain whether the respondent was a member of the RAASA.

Who Responded
Of the 603 respondents, 49% were Males and 51% were females. 63% of respondents were in paid employment, 23% were retired, 3% were students and 4% were unemployed. Of those in paid employment 51% were either blue or white collar workers and 11% were in professional or executive employment.

The distribution of suburbs was weighted in the metropolitan area to the outer south 15% and outer north 10%, but this weighting was not deemed significant as the mix of inner suburbs, including north, west, south and east ranged from 6% to 9%.

The age group of respondents was heavily weighted with the majority of respondents 48% in the 31 to 54 year old age group. Over 65’s accounted for 19% of all respondents and 18-24’s accounted for 11%.

69% of respondents reported as being a member of RAASA. This result reflects the existing penetration of membership of the Association into licence holders in South Australian, hence further verifying the statistical significance of the sample.

These demographics are typical of the South Australian population distribution and therefore the sample satisfies the representative requirement for the State.

Sampling Tolerances
All of the responses attained from the sample were deemed to be significantly different and hence statistically valid differences.
The sample size used ensured a 95% confidence interval for a population of 1 million, typical of the Adelaide population of 1.5 million.

What They Were Asked
The survey questions were designed to assist in the determination of how reduced speed limits would affect drivers in South Australia based on their existing trip patterns. In order to determine these, questions were asked in relation to the number of individual trips made per week, what types of roads were driven on, local or arterial and how many kilometres were travelled each week.

These responses would be compared with the responses to the questions pertaining to, both impacts on travel time and support for the extension of the existing 50km/h speed limits on local streets to the arterial road network.

The last grouping of questions was aimed at determining at what existing speed the respondents currently travelled at on arterial roads, and then what their views were on enforcement tolerances based on the speed that they currently travel at.

Key Findings

**Question 1 How many individual trips would you personally drive per week?**
68% of respondents reported making less than 20 trips per week. 5% of respondents reported more than 50 trips per week.

**Question 2 Do you mainly drive on main arterial roads, local streets or both?**
71% of respondents mainly reported as driving on both main arterial roads and local streets, while 15% responded that they mainly drove on arterial roads.

**Question 3 Approximately how many kilometres do you drive each week?**
46% of respondents reported that they drove between 50 to 200km per week. 38% reported that they drive more than 200 kilometres each week.

**Question 4 To what extent would you support or oppose existing 60km/h speed limits on main roads being reduced to 50km/h?**
73% of respondents reported that they would oppose such a change with 61% strongly opposing and 12% slightly opposing such a change.

**Subgroup analysis.**
Of those who opposed or strongly opposed such a move, the demographics most likely to oppose such a move, were:
- Those aged 25 to 30 (93%)
- Those who drove more than 30 trips per week (87%)
- Those residing in the outer south of Adelaide (85%)
- Those who drove over 100kms per week (80%)
- Metropolitan Adelaide residents (81%)
- Males (77%)

Although relatively low (22% overall), the highest levels of support for implementing such a change were from:
- Regional residents,
- Those who drove the least,
Those who reported as being retired
And those aged over 55 years.

**Question 5 If existing 60km/h speed limits on all main roads were reduced to 50km/h, how would you feel about the extra travel time that this would add to your driving?**

Just over half 53% of respondents reported that they would be concerned or very concerned about the increased travel time from the widespread introduction of lower speeds on main roads.

46% of all respondents reported that they would not be concerned at all.

**Question 6 At what speed do you generally drive when you are on a main road with a 60km/h limit and the traffic is flowing well?**

The highest proportion, 61%, of respondents stated that they travelled at 60km/h on main roads with a 60km/h speed limit, the remaining 39% were widely spread across a range from 50km/h to 70km/h.

**Question 7 At what speed do you think drivers should be fined in a 60km/h speed zone?**

The results from this question indicated that 74% of those responding suggested a tolerance level below that which currently applies in South Australia.

Questions 8 to 12 were classification questions and the final question was to ascertain how representative the sample was of RAASA membership.

**National Comparisons**

Following the RAASA’s decision to conduct this market research other motoring organisations around Australia decided to conduct similar research.

The NRMA, RACWA and RACQ commissioned market research on this topic and the results from the RAASA survey were compared with those from these other States.

Table 1 summarises the responses received from each State that participated in the market research in relation to questions 4 to 7
Table 1 Comparison of Responses

<table>
<thead>
<tr>
<th>Question</th>
<th>SA</th>
<th>NSW</th>
<th>QLD</th>
<th>WA</th>
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</thead>
<tbody>
<tr>
<td>Support for existing speed to be reduced to 50km/h</td>
<td>73% oppose</td>
<td>76% oppose</td>
<td>71% oppose</td>
<td>79% oppose</td>
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<tr>
<td></td>
<td>of strongly oppose</td>
<td>or strongly oppose</td>
<td>or strongly oppose</td>
<td>or strongly oppose</td>
</tr>
<tr>
<td>Extra Travel Time</td>
<td>53% very concerned or concerned</td>
<td>57% very concerned or concerned</td>
<td>50% very concerned or concerned</td>
<td>53% very concerned or concerned</td>
</tr>
<tr>
<td>Reported general travelling speed at 60km/h</td>
<td>61%</td>
<td>62%</td>
<td>71%</td>
<td>59%</td>
</tr>
<tr>
<td>Tolerance before speeding drivers should be fined when travelling in 60km/h zone</td>
<td>38% - 65km/h</td>
<td>30% - 65km/h, 28% - 70km/h</td>
<td>34% - 65km/h</td>
<td>45% - 65km/h</td>
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These comparisons highlighted that across the surveyed States, the clear majority of drivers at the time of the survey, were either strongly opposed or slightly opposed to the extension of 50km/h speed limits to main roads.

The additional travel time as a result of the introduction of lower speed limits appears to most concern drivers in NSW.

The self reporting of travelling speeds reveals that drivers in Queensland are most likely to obey the posted speed limits.

The results from NSW, Queensland and Western Australia in relation to speed tolerances were more difficult to draw conclusions from, than those in South Australia, due to the fact that the tolerance levels operating in these States were unknown.

Discussion of Findings

The interpretation of these responses in the context of progressing the debate on how the Community in South Australia would have been likely to react to the introduction of 50km/h speed limits on main roads, if they were to have been introduced in May 2005 is quite clear. There would be strong opposition to the introduction. Drivers in NSW, Queensland and Western Australia would have the similar sentiment.

In South Australia the regional sample revealed that opposition would not be as significant as that of those who lived and drove regularly in the metropolitan area. This position is probably explained by the fact that most country towns already have a 50km/h speed limit through their main street. Speed limits elsewhere in the region would be much higher than 60km/h i.e. 100km/h or 110km/h and therefore respondents would not perceive this change would have a direct affect on them.

The interpretation of the results in relation to Travel Times and how drivers believe the reduced speed limits will impact on their travel time is interesting. This result appears to be clearly split in half between those who are either concerned or very concerned and those that are not concerned at all. How does this result affect the
argument that drivers assign a high value to their travel time? This clearly polarised view on the issue discounts the position held by some proponents of a 50km/h speed limit on main roads, that travel time losses are not an issue for drivers. If this were the case, we would have expected an overwhelming response in the “not at all concerned” category.

The response in relation to enforcement tolerances confirms what perceived and existing tolerance levels most of these jurisdictions operate within. However the results, in South Australia, at least, highlight that the community may be accepting of a slight reduction in the current “unofficial” enforcement tolerance.

**Where to From Here**

Not surprisingly RAASA and other motoring organisation will use these results to highlight to politicians and decision makers that the driving community would not receive openly a decision to introduce 50km/h speed limits on main roads in the metropolitan area.

These Survey results provide statistically significant and representative results to the questions posed when the survey was conducted.

If reduced speed limits are to be seriously considered by jurisdictions, it would be a very brave lawmaker who would introduce such a measure in the face of such overwhelming lack of Community support.

Instead the RAASA recommends, and has recommended to our own state Road Safety Advisory Council that these results should form a benchmark to work from and further sampling of communities should take place on a regular basis to measure how the wave of public opinion is moving over time.

These results clearly indicate that much more time and money, than is currently the case needs to be invested to convince the community that lower speed limits will benefit them over and above other proven, but more expensive countermeasures that could be implemented to assist State’s to meet the target set down in the National Road Safety Strategy.

In the case of whether lower speed limits should be expanded to the main road network, RAASA does not dispute the safety benefits that could be derived from even small reductions in travelling speeds. Where the RAASA differs with the proponents of a 50km/h limit on arterial roads, is that the same benefit may well be achieved through other means such as increased driver education.

With the 2010 date approaching it is unlikely that there will be a significant shift in public opinion prior to this time to support the introduction of 50km/h speed limits on metropolitan arterial roads. Jurisdictions should instead, be looking at a wide range of countermeasures to assist them to reach the 40% reduction based on the safe system approach endorsed by the National Road Safety Strategy.

Investing in Safer Roads is the obvious choice, but the political will do so ahead of low cost measures, like lower speed limits on metropolitan arterial roads does not seem to be there.
Conclusion
The use of market research to assist in identifying and quantifying public opinion on issues is a useful tool for Road Authorities, researchers, law makers and Automobile Associations.

A truly representative sample, without bias can assist in decision making when strong opposing views cannot find a middle ground.

In this application market research on this topic has provided a benchmark of public opinion on a topic that had yet to be openly discussed with the community.

References


McGregor Tan Research, Report on Research into: Community Tolerance to Reduced Speed Limits Consolidated State Results, Adelaide, South Australia, June 2005