

Building community capacity for road safety – are we doing it?

By Andrea Smithson^a and Terri-Anne Pettet^a

^a WA Local Government Association's RoadWise Program

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Abstract

Capacity building is a familiar term. But what does it mean in a particular context, and can it be measured? This challenge was faced by the WA Local Government Association in exploring more inclusive methods of evaluating the RoadWise Program, with the aim of better reflecting the role of community road safety in the safe system framework.

Following extensive research and consultation, members of the RoadWise community road safety network were invited to participate in a survey which examined the following five key capacity building domains:

- Participation and community ownership;
- Opportunities for leadership;
- Community structures – with a focus on the health and functioning of RoadWise Committees;
- Access to resources for effective road safety activity; and
- Strengthened individual skills.

The results of the survey provided benchmarks, in each domain, for the RoadWise Program along with opportunities to address any gaps in delivery. Overall, the findings revealed a healthy, functioning and enthusiastic road safety network. Members of the network firmly believe they can make a difference, utilising the tools and programs offered for road safety action at a local level.

This process has helped redefine the activity of the RoadWise Program and value the role of community capacity building. It has given capacity building shape as a framework for future planning and delivery.

Background

The Western Australian Local Government Association's (WALGA) RoadWise Program works with Local Governments, community groups, private businesses and individuals to support the implementation of Towards Zero, the road safety strategy for Western Australia 2008-2020. The Program aims to achieve this by supporting local road safety committees, providing access to resources and training and increasing road safety skills and knowledge, which all contribute to building the capacity of the network to make an effective contribution to improving road safety

in Western Australia. The RoadWise Program receives funding through the Road Trauma Trust Account and the State Government Funds to Local Roads Agreement.

The RoadWise Program supports the road safety network across eleven regions, encompassing metropolitan, regional and remote areas of Western Australia. A Regional Road Safety Advisor is based in each of these regions, with the exception of the Pilbara and Gascoyne regions which are serviced, in addition to the Metropolitan South region, by a Senior Road Safety Consultant based in Perth. Project staff provide additional support through research and the development of new resources. The Program also includes the coordination of the Type 1 child car restraint fitting service, which involves the training of new Type 1 fitters and the provision of information for both Type 1 fitters and the general public regarding the correct use of child car restraints.

Community road safety programs such as RoadWise are recognised as playing an important role in generating the community support, partnerships and engagement in road safety that is integral to achieving a safe road transport system. However it is difficult to assess the effectiveness of such programs due to the challenges associated with small population sizes, relatively low numbers of crashes in individual communities, and the difficulty in separating the effects of local activities from broader campaigns or projects (Cairney, 2009).

Traditional evaluation efforts, which have focussed primarily on delivery and processes, do not provide a complete picture of the contribution of community road safety programs in the safe system. Evaluations of other broad scale community based injury prevention programs have found that a narrow view of success (for example, using only the criteria of reduction in hospitalised injuries) did not account for other broader measures of success, such as developing partnerships or increased community capacity to address safety issues (Nilson, Ekman, Ekman, Ryen, & Lindqvist, 2007).

Currently the RoadWise Program reports on a range of program delivery results to meet the requirements of funding received from the State Government. However this reporting regime does not provide a 'big picture' view of the impact of the program, which is central to driving future development.

Why community capacity building?

A brief review of relevant literature was undertaken to explore how similar community based programs have been evaluated, and to identify alternative means of defining the work done by the program and the network. Laverack (2007) refers to a continuum of community based concepts, ranging from community readiness (a state of community preparedness to engage in a series of stages and partnership with an outside agent to implement a program), to community empowerment (a process by which communities gain control over the decisions and resources that influence their lives). Along this continuum, community capacity building provides the best fit with the aims of the RoadWise Program.

Community capacity building can be considered as the combined influence of a community's commitment, resources and skills, that enables people to work together to make decisions and take action towards a positive future (Gibbon, Labonte, & Laverack, 2002). The benefits to the community of working in a capacity building approach include better reach of the target population, improved use of resources, increased levels of local participation, engagement and commitment to health action (Liberato, Brimblecombe, Ritchie, Ferguson, & Coveney, 2011).

The literature indicates that a number of different domains have been used to describe the characteristics of community capacity building and to enable the assessment of levels of capacity. Liberato et al (2011) undertook a review of capacity building domains which had been developed or utilised by other authors. The review sought to describe the attributes of each domain, and develop a set of agreed broad domain areas which could serve as a foundation for other practitioners working in this area. The authors reassembled the information to form nine domains of capacity building:

- Learning opportunities and skills development;
- Resource mobilisation;
- Partnerships/linkages/networking;
- Leadership;
- Participatory decision making;
- Assets-based approach;
- Sense of community;
- Communication; and
- Development pathways.

Six sub-domains were also identified, which were shared vision and clear goals; community needs assessment; process and outcome monitoring; sustainability; commitment to action; and dissemination.

The domain areas identified by the authors provide a guide to considering the assessment of capacity building, with the expectation that sub-components of the domains can

and should be adapted and modified to suit the context and purpose of particular projects. Subsequently, the domains were reviewed to ensure they were applicable to the context of the RoadWise Program, and consolidated into the following five domains:

- Participation and community ownership;
- Opportunities for leadership;
- Community structures – with a focus on the health and functioning of RoadWise Committees;
- Access to resources for effective road safety activity; and
- The facilitation of skills and knowledge development within the network.

Method

A study of the RoadWise network was proposed to further explore the concept of community capacity building and its potential implications for future planning and development.

The goals of the study were:

1. To identify the capacity within the network to deliver effective road safety activities and initiatives,
2. To identify opportunities for WALGA's RoadWise Program to develop and deliver future capacity building within the network, and
3. To enable WALGA's RoadWise Program to more effectively engage with our network and stakeholders.

In 2013, Research Solutions were appointed to undertake the study on WALGA's behalf. Given the geographical diversity of the network, an online survey was determined to be the most appropriate approach. To inform the development of the survey, one focus group was held in the metropolitan area, along with thirteen in-depth phone interviews with members of the road safety network (eight from regional/remote areas, five from the metropolitan area).

The survey was distributed using the Local Government and community road safety network database that is maintained by the RoadWise Program. The database includes the contact details of approximately 2500 RoadWise Committee members, Type 1 restraint fitters, Local Government staff and Elected Members with an involvement with road safety, and other individuals and organisations who have been involved with the RoadWise Program in some way (for example, applied for a road safety grant). An email was sent by the RoadWise Program to all contacts on the database, informing them about the purpose of the survey, and that an email with a link to the questionnaire would be sent to them by Research Solutions in the near future. As well as making people aware of the survey in advance, this initial step also provided an opportunity to 'clean' the database by investigating or

removing any emails which bounced back. The survey was emailed to a final sample of 1920 individuals.

To maximise responses, a survey reminder email was sent approximately 7-10 days following the initial survey invitation. A series of telephone reminder calls were also made following the three week survey administration period, and provided the opportunity for a potential respondent to be re-sent the online survey or to complete the questionnaire over the phone.

Results

The survey returned a sample of 384 respondents, representing a response rate of approximately 20%. It explored each of the five community capacity domains, with a series of questions in each part of the survey designed to examine each concept in detail.

Participation and community ownership

This domain explored the active involvement of people in the activities and decisions of the road safety network, along with the commitment of individuals to working together towards a shared road safety vision.

Individuals who responded to the survey (n=384) came from all regions in WA, and represented the full range of membership categories including Local Government officers and elected members, community members, State Government agency employees, Type 1 child car restraint fitters, and the private sector. Almost half of respondents (49%) had been involved with the road safety network for between two and ten years, while an additional 17% had been involved for more than ten years. On average, respondents contributed an average of nine paid hours and three unpaid or volunteer hours per month to RoadWise network activities, including implementing road safety initiatives, attending road safety meetings, providing technical advice and educating target groups.

Respondents were asked what motivated their initial involvement in the RoadWise network (more than one response was allowed). For a majority (69%) of respondents, being involved with RoadWise was a part of their employment, while other major motivators included being passionate about road safety (44%) and a desire to make the community a safer place to live in (38%). This indicates that for many members of the network, their participation goes beyond a sense of obligation as part of their job and extends to a sense of personal purpose.

Survey respondents reported a strong need for a coordinated approach at a state level (83% agree/strongly agree), along with placing a high level of importance on the effectiveness of local initiatives (74%) and the empowerment of local communities (70%). Two thirds (66%) of respondents felt that by being a part of the RoadWise network, they were making a contribution towards the vision of Towards Zero. However it is interesting to note that only around half of respondents (53%) felt that their efforts were valued at a local level, and less than a third (28%) felt that they were valued at a state level.

Leadership

The survey explored the domain of leadership, particularly in terms of where leadership comes from within the network, and whether individuals considered themselves to be leaders in local road safety. The results, while not overwhelmingly strong, were nonetheless encouraging. More than a third (38%) of respondents considered themselves to have developed leadership qualities as a result of their involvement with the network, and just under half (45%) reporting that strong road safety leaders exist in their community. There was some feeling however that additional leadership and direction could be provided by RoadWise (36%), along with more support from Local Government (30%).

Community structures

RoadWise Committees (and other road safety groups) form a framework for generating local road safety activity, and provide an opportunity to bring people together for a common purpose. Respondents who had indicated that they were a member of a RoadWise Committee or group (n=135) answered a series of questions exploring the 'health' and functioning of such group.

More than half (58%) of respondents were either satisfied or very satisfied with how their particular group operates, which high levels of satisfaction reported for functional tasks such as record keeping (81%) and meeting conduct (78%). The level of leadership (64%), diversity (61%), respect (80%) and cooperation (74%) were also high. Levels of satisfaction were lower for more strategic activities such as advocacy (53%), sourcing funding (37%) and attracting local volunteers (18%).

Access to resources

The ability of the community both to mobilise resources from within and to negotiate resources from beyond itself is an important factor in its ability to achieve success. For the RoadWise Program, the effectiveness of local road safety activity is reliant on the ability of the network to access appropriate resources.

Almost two thirds (62%) of respondents reported that they needed more road safety resources and materials to assist them in spreading the road safety message. The same number (62%) also felt that it would be beneficial to have stronger links to other RoadWise or road safety activities and programs happening in other parts of the state. Just under half (48%) of network members reported difficulties in attracting local volunteers to assist with their road safety activities and programs.

Strengthened individual skills

Individual skill development is an important element of community capacity building, with the level of contribution to the network increasing as individuals develop new skills and expertise. The survey provided an opportunity to explore how well the RoadWise Program had facilitated

opportunities to develop and apply new knowledge and skills.

The results showed that for 72% of respondents, being part of the RoadWise network had opened up new opportunities for them as an individual. Sixty percent of respondents also reported that being part of the network enabled them to learn or know things that helped in other parts of their lives. More than half (59%) said that their involvement in the network has led to an increase in knowledge and understanding of road safety.

Smaller numbers of respondents reported that they had been able to develop and apply new road safety skills, with 19% stating that they had gained new skills through professional development opportunities arising from their involvement with the network.

Future intentions of the network

At the conclusion of the survey, respondents were asked to indicate if they anticipated staying involved with the RoadWise road safety network, with the vast majority (92%) reporting that they did intend to stay involved in the future. Respondents were also asked to note the one most important thing that WALGA's RoadWise program could do to assist them as an individual or their committee/group to address road safety issues in the future. Responses to this question were diverse, but were summarised as relating to:

- Additional funding or improved access to funding
- The introduction of new road safety campaigns
- Additional engagement between RoadWise committee/groups across the state to facilitate sharing of ideas
- An extended role for Local Government and RoadWise Regional Road Safety Advisors, and
- Additional advocacy for road safety at a State Government level.

These issues are broadly reflective of the results in other parts of the survey.

Discussion

The key findings of the survey are:

1. Membership of the road safety network is driven by employment and being interested and passionate about making a contribution to the overall vision of zero deaths and serious injuries on the WA road network. Aligned with personal motivators, members of the network are committed to the cause and aware of the importance of local involvement and actions. They do feel that they can make a difference. However there is a need to address the lack of value that is felt by members of the network at both a local and state level.

2. On average, members of the network devote nine paid hours and three volunteer hours to the RoadWise road safety network each month, performing a wide range of activities including implementing road safety initiatives, attending meetings, providing technical advice, educating target groups, and providing support for road safety events. With two thirds of respondents reporting that they needed more resources to assist in the delivery of these activities, more investigation is required to determine the additional tools and resources that are required.
3. Network members strongly believe in the value of community empowerment and the effectiveness of local initiatives, linked with state-level coordination. This suggests that the model of generating road safety activity through a local RoadWise Committee structure is an appropriate one, and is providing a means of interpreting Towards Zero for local communities.
4. There is significant scope for the RoadWise Program to provide support for network members to increase and apply road safety skills and knowledge through professional development and networking opportunities.
5. The community structures associated with the network are perceived to be sound and appropriate, with individual RoadWise committees/groups also perceived to be performing well. However there is an opportunity for the RoadWise Program to provide additional strategic guidance to enhance the functioning of such groups.
6. The overall health of the network is strong, with the vast majority intending to stay involved in the future. This is particularly encouraging given the range of interests and causes that compete for the time and energy of individuals and organisations.

Overall, the feedback from the network paints a clear picture of a committed and passionate group of people who, through their involvement with the RoadWise Program, feel that they are making a real contribution to reducing deaths and serious injuries in their communities. The network is the greatest strength of the RoadWise Program, and there is a clear need to continue to provide support, resources, recognition and encouragement to the network to enable the continued generation of local level activity in support of Towards Zero.

Does this mean that the RoadWise Program is building capacity? As this is a first step in a significant change of thinking, it is still a difficult question to answer. Capacity is not something that can be assigned a number or percentage to ascertain success or failure. The literature suggests that an appropriate method of assessing the overall success or otherwise of a program whose aim is building capacity, is to use a process of self-reflection, assessment and ranking by those involved in delivering the program. Program staff assign a rating to each area or theme, which are then

visually represented utilising a ‘spider web’ approach (Gibbon, Labonte, & Laverack, 2002) (Bush, Dower, & Mutch, 2002). Such a process would provide an overall assessment of how the program is progressing towards the goal of building community capacity, along with a benchmark for the future. Repeating the survey will also provide the necessary feedback from the network, and will enable a comparison of data in each of the domains. These two steps will be undertaken by the RoadWise Program in the future.

This research represented a significant step for the RoadWise Program in the way it considers and values the way in which it operates. The process of identifying community capacity building as the best fit with the goals of the program, and then clarifying and defining the relevant domains, has in some ways been just as important as the findings of the survey itself. It had led to a significant change of thinking within the program, which is reflected in the restructure of the Program’s action plan to reflect the five capacity building domains. Understanding what community capacity building means and how it is relevant to the RoadWise Program has provided a strong basis for developing the Program in the future.

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An analysis of driver behaviour through rural curves: exploratory results on driver speed

by Blair Turner^{a,b}, Jeremy Woolley^b and Peter Cairney^a

^a ARRB Group Ltd, ^b Centre for Automotive Safety, University of Adelaide

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Abstract

Speed, whether above the speed limit or too fast for the conditions, is a significant contributor to fatal and serious injuries at curves on rural roads. The driving behaviour of 40 motorists was assessed using an instrumented vehicle. This vehicle tracked driver behaviour around 200 curves on a set driving route. Factors including speed, acceleration, side force and lane position were recorded for each driver. Details regarding the design elements of the route were also collected, including curve severity, direction (left or right), horizontal alignment, grade and cross slope. This paper provides initial results for driver speed behaviour through different types of curves, and discusses the implications of the findings.

Introduction

Road crashes result in a significant number of deaths and serious injuries every year. The high incidence of crashes on rural roads has been identified in various countries. IRTAD (2010) report figures for fatal crashes, including those outside urban areas in many countries. These range from a low of 46% in Japan, to a high of 79% in Spain, with the average of all countries providing data being 62%. In the UK 58% of all deaths, and 41% of deaths and serious injuries occurred on rural roads (King and Chapman 2010). In the US, rural crashes accounted for 57% of fatalities, despite less than a quarter (23%) of the population living in rural areas (NHTSA 2007). The rate of crashes (per km travelled) was 2.5 greater than for urban roads.

The situation is also similar in Australia. In a review of road safety on rural roads, Tziotis et al. (2006) calculated that 60% of fatal crashes in Australia occur on the rural high speed road network resulting in over 1,000 fatalities per year in Australia, and more than 22,000 injuries. A number