A STRATEGIC APPROACH TO ROAD SAFETY AT THE LOCAL LEVEL

Author: Liz de Rome, LdeR Consulting;

Tel: (02) 9550 2292; Fax (02) 9516 2780, liz@lderconsulting.com.au

Introduction

The 2004 WHO Report on Road Traffic Injury Prevention recommended safety features should be incorporated into land-use and transport planning, and new road projects should be subject to road safety audits. These are not new ideas in Australia, but the process of implementing them has been slow. A major focus in NSW has been to encourage local councils to develop strategic plans for their road safety programs.

This presentation looks at what we have learned about the process of developing road safety strategic plans at the local government level in NSW. The process promotes a council wide approach to road safety, provides a focus for other stakeholders and promotes community ownership and participation. The result is a model which has been refined as it has been applied with over thirty local councils.

Background

One of the early initiatives of the NSW Local Government Road Safety Program was a research project on the development of council road safety strategic plans.   The project was coordinated by the IMEA and funded by the RTA[1]. Nine councils were funded and supported with training and access to expertise, to develop plans as demonstration projects. The objective was to monitor and document the process and implementation of these projects to determine best practice. The outcomes were compared to a further six councils who had also developed road safety strategic plans but without the resources of the demonstration project. Project managers and their supervisors from each council were interviewed to obtain their insights gained from the process. The outcome was a model of effective practice based on their experience and an assessment of the products. The model was developed into a detailed process and published as a guide to the development of road safety strategic plans (de Rome, 1998).[1]

While early approaches had emphasised community consultations, a significant conclusion of the demonstration project indicated that this was not a cost effective practice. Members of the general community were not sufficiently interested or well informed about road safety issues to make a significant contribution at the strategic level. The model does not exclude community consultations, but provides a means of determining the most appropriate stage and format for community involvement.

For example, rather than survey all residents to identify the key road safety issues in a community, the model recommends using crash data and the input of police and traffic engineers. Local residents can be more effectively engaged at the implementation stage in the development of local solutions.

---

[1] The IMEA Institute of Municipal Engineers Australia (NSW Division) is now known as the Institute of Public Works Engineering Australia (IPWEA).

The second major conclusion of the demonstration projects was to emphasise that these strategic plans should be developed as council management documents rather than as community plans. The rationale for this approach was to discourage councils from externalising or disowning responsibility for road safety. While plans should include strategies for community ownership and activities undertaken in partnership with external stakeholders, the plan must be driven and implemented by the council.

The model emphasises a process of informing, educating, lobbying and negotiating with key stakeholders. The focus is on organisational change and establishing working relationships. At the local government level the key stakeholders who need to be involved and persuaded are Council managers whose responsibilities are outside the roads and traffic area (eg Planning, Corporate Services, Parks and Gardens etc).

The Guide was issued as a working draft to all NSW local councils and is now required practice as a condition for road safety strategic plan project grants from the Motor Accidents Authority of NSW. An independent evaluation of the Guide in 2001 found it to be highly regarded and recommended only minor modifications for a further edition.[2]

What is a road safety strategic plan?

There are many definitions but for our purposes a strategic plan is a long term framework and direction for achieving goals. A road safety strategic plan is a coordinated approach to reducing road trauma and the associated cost for a council and community.

It is "strategic" in that it seeks to make the best use of all available resources to achieve objectives by identifying opportunities for internal and external stakeholders to contribute to the achievement of mutually beneficial outcomes.

Liquor Accords are a good illustration of the product of a strategic alliance between different stakeholders. These are participatory agreements between local stakeholders such as licensed premises, local council, police and drug and alcohol health services to work cooperatively with their communities to find practical solutions to liquor related problems.[3] An Accord may include training on responsible service of alcohol, community education on drink driving, designated driver programs, alternative transport provision and agreements to refuse service or ban offending individuals from all licensed premises within an area. Councils are often the instigators of such initiatives because they are well placed in the community to offer leadership and coordination.

The planning process helps stakeholders think through what they want to achieve and how they will achieve it. It enables a coordinated approach by enabling people coming from different perspective to focus on shared goals.

A plan also:

- ❖ Sets clear road safety goals for council and the community.
- ❖ Increases understanding and awareness of local road safety issues.
- ❖ Integrates road safety as a value across council operational areas.
- ❖ Positions councils to take advantage of State and Federal road safety grants programs.

❖ Enables organisations to remain focused and allocate resources for the long term without being diverted by short term distractions.

The strategic planning process

There are essentially three stages in this model for the development of a strategic plan.

Stage 1 Data analysis

Crash and casualty data is analysed for the local area over a 5 year period. The results are also compared to regional and state data to identify any variations in patterns or trends.

Data sources

Most of the data required is drawn from the State (RTA) crash statistics. But we also use:

❖ Council studies and data

❖ Australian Bureau of Statistics

❖ Hospital separation data.

❖ Police enforcement data

The other data sources help to fill out the picture. For example council traffic studies, road safety audits, pedestrian access and mobility plans, bike plans, social plans and the management plans. A traffic study may help explain why there are suddenly so many single vehicle crashes on a particular section of road. Perhaps people have started using the road as a short cut or to avoid some other change in traffic conditions somewhere else. The management plan is useful for determining where the council wider approach to road safety should be incorporated for planning and budgeting purposes.

Population statistics allow comparison with rates of crash involvement for particular groups as well as rates of vehicle ownership per dwelling, journey to work destination and method of travel. For example, does a higher crash rate for young people relative to the State, reflect a higher youth population (eg in a university town) or a higher rate of crashing?

Hospital data may supplement information, particularly in relation to pedal and motorcycle crashes – as these tend to be under reported. For example one English study reported that only 8% of non-injury motorcycle crashes and 24% of injury crashes were reported to police (Helen James, 1991).[4]

Police enforcement data can provide a different way of measuring driver behaviours such as drink driving and speeding.   This type of data may also help identify high risk driver groups or the licensed premises where such drivers drink.

The residence of drivers (as recorded on their licence) is useful as it indicates the extent to which you can target local residents, or need to find strategies for reaching drivers who are not locals.

In some instances we have found that the majority of drivers involved in crashes in a particular LGA were not local residents, but they were from neighbouring LGAs and could there for be reached through regional programs and media. Some times the majority of drivers in crashes are neither residents nor neighbours. There is still

value in trying to identify who they are. If they are commuters, we may be able to work through employers; if they are tourists, we can work with the tourism industry; if they are just motorists passing through – then perhaps we have to work with road houses or use billboards.

Managing the data

The main focus in the data analysis is on casualty figures because we are concerned about injury reduction rather than property damage, however crash factors are also relevant and useful. Begin by identifying casualties by road user group, age and gender. Look for any associated factors include alcohol, speed and fatigue and use of relevant protective devices (helmets and seat belts).

The next stage is to look at the site and circumstances of crash. What is the proportion of single and multi-vehicle crashes?

Single vehicle crashes are commonly assumed to be due to driver error, but it may pay to examine the road environment. Some vehicle have a higher incidence of single vehicle crashes (motorcycles, 4 wd and trucks). Is this due to driver behaviour or road condition, or a combination? What were the road conditions and road side environment? Were these drivers driving for conditions on relatively good roads but then caught out driving too fast when conditions changed?

A similar analysis is conducted for all crashes and multi-vehicle crashes – again where, why and with who.

The objective is to develop a picture of the types of crashes, their circumstances and the road users involved.

3.   The next step is to use this information to identify trends and to compare the pattern for your local area to other similar areas or a wider region that represents a reasonable basis for comparison purposes. (e.g. ABS statistical division).

Any variations in trends or patterns indicates something different happening at the local level, which may offer an opportunity for intervention.

For example, in one area we identified a relatively high proportion of elderly driver casualties. This was a rural area to which many city people were retiring. It emerged that their fitness to drive was affected by age but further compromised by their lack of experience of driving on rural roads. Strategies were put in place to encourage these drivers to assess their own fitness to drive and adopt strategies to reduce their exposure to risk.

Stage 2   Consultation

The next stage involves consultation with key stakeholders.

Key local stakeholders may include:

* ❖   Council managers,
* ❖   Government agencies (eg RTA, Police and the Area Health Service)
* ❖   Council elected representative
* ❖   Community representatives of identified road user groups.

We have found that one to one in-depth interviews with a small number (e.g. 10) of key stakeholders is the most effective means of identifying issues and strategies for achieving road safety improvements at the local level.

Note: In our research for the IMEA/IPWEA, we compared the processes undertaken by 15 councils in the development of their road safety strategic plans. Our findings indicated that general community consultations via surveys or other mass data collection methods, did not produce information that was of cost effective value in the strategic planning process. It was recommended that community involvement is more effective later in the process when specific projects/ actions are being developed to address issues identified at the strategic level (de Rome, 1998).

Interviews

In depth interviews are conducted asking each manager to consider what opportunities exist within their operational area for making an impact on road safety. Key external road safety stakeholders are also interviewed to identify road safety issues and opportunities for cooperation with the Council.

One of the objectives of a road safety strategic plan is to be able to take a Council wide approach to road safety. Each stakeholder is asked to consider what opportunities exist within their operational area for making an impact on road safety. For some it will be in they way they deliver their own services (e.g. fleet management, meals on wheels, waste collection) for others it will be by incorporating road safety considerations into their products (e.g. road safety as a criteria in setting priorities for a maintenance program, or in development control plans), or by encouraging community ownership by setting road safety standards for events management and use of council premises.

The interview process allows for a flexible approach to the different operational contexts of each stakeholder. It also allows the interviewer to follow up ideas or clarify questions raised by stakeholders. Interviews provide an opportunity for Council managers to clarify their own understanding and expectations of the Plan. We have found that the one to one interview often encourages individuals to speak more frankly than would occur in group situations. The process is essentially interactive and depending on the stakeholder may involve a mixture of informing, educating, lobbying, discussing and negotiating.

The aim of the interviews with **Council officers** is to:

- ❖ identify road safety issues,
- ❖ record what their section of Council already does, and
- ❖ what else they could do for road safety,
- ❖ their ideas for initiatives in other areas of Council or the community,
- ❖ introduce new ideas for their consideration.

In respect of the latter point, the interviewer uses the opportunity to describe strategies implemented by other Councils and discuss their relevance to the local operational context.

The aim of the interviews with key **external road safety stakeholders** is to identify road safety issues and opportunities for their intervention and cooperation with the Council.

Stage 3   Development of strategies

Stakeholder Workshop - The information from the interviews and the data analysis is collated and presented for discussion and consideration at a workshop of all key stakeholders.

The objective of the workshop is to determine which issues should become Council priorities, to set objectives and develop strategies for achieving them. Participants may include all those stakeholders who have been interviewed together with a selection of other stakeholders from within Council and the community.

Strategies that were discussed in the interviews are presented in lists for review by the whole group. The function of the workshop is for stakeholders to work together to review the ideas arising from the interviews, and to discuss and negotiate a feasible plan for the Council. The focus is to facilitate the process by which the key stakeholders work together to determine their mutual priorities, objectives, strategies and responsibilities in a Road Safety Strategic Plan. The objective being to ensure full ownership of the Plan by Council's officers and other road safety stakeholders. These workshops have proved to be a cost effective and efficient means of achieving agreement on the proposed Road Safety Strategic Plan.

The outcome of the workshop is a draft strategic plan (containing priority issues, objectives and strategies). This is circulated back to all key stakeholders for final comment and endorsement. The advantage of this process is that it is a highly cost and time efficient way of ensuring that all managers are involved in determining the strategies and actions for which they will be responsible under the Road Safety Strategic Plan within the overall framework of the Management Plan.

Strategic areas

In order to promote a broad approach to addressing road safety, we look at the identified road safety issues from a number of different perspectives. These were derived from the original NSW state road safety strategic plan at the time the model was first developed (Road Safety 2000)[5].

1. Road user behaviour

2. Community ownership

3. Road environment

4. Land use planning and management

5. Transport planning and management

6. Vehicles and equipment

7. Strategy communication and coordination

The following illustrates the types of strategies that may be included. They are taken from a road safety strategic plan recently developed by a rural council in NSW.

1. Road user behaviour

❖ Work with police and the RTA to promote awareness of the risks of speeding, alcohol and fatigue.

❖ Incorporate road safety warnings in tourism information products about driving on narrow undivided roads zoned 100 kph.

❖ Develop a strategy to address issues of heavy vehicles not slowing down at road work sites.

❖ Raise awareness of the high local incidence of single vehicle crashes.

❖ Raise awareness of the high incidence of local residents involved in crashes.

❖ Continue to assist local Police in publicising enforcement operations.

2. Community ownership

❖ Develop a community information campaign to raise awareness of road safety issues in the Shire.

❖ Continue to work with local community groups on road safety projects.

❖ Promote road safety as part of the councils healthy life style alternatives program.

❖ Provide a single contact number to encourage community notification of road hazards.

❖ Establish program to mark fatality sites with crosses as community service to family and as a warning to others.

❖ Involve police in workshops for parents on teaching young drivers.

❖ Work with Health to develop road safety and mobility awareness program for aged citizens including fitness to drive, safe driving strategies and alternatives.

3. Road environment

❖ Establish a program and budget for clearing of obstructions to create roadside safety clear zones.

❖ Establish a computerised system to provide accurate accessible information on hazards and assets to prioritise maintenance and improvement programs.

❖ Councils to work with police to identify black spots for targeting for funding for remediation work.

❖ Establish a program of road safety audits on the existing road network with criteria for frequency and level of audit to include crash history.

❖ Establish a program for Stage 3 Road Safety Audits on all road designs.

❖ Formal safety reviews to be conducted of all casualty crash sites to identify any remediation to prevent future crashes.

❖ Undertake Pedestrian Access and Mobility Plan (PAMP) and Bike Plan.

❖ Develop a gravel road delineation program

4. Land use planning and management

❖ Incorporate road safety considerations into the long term strategic planning of land use and development in the LGA.

❖ Review the Local Environment Plan to incorporate road safety and access to emergency services.

❖ Prepare a road safety Development Control Plan with checklists.

❖ Prepare plain English guidelines for developers on Council's requirements for road safety.

❖ Require road safety impact statements by developers for all sub-divisions and multi-dwelling development applications including actual costs of such developments to the community.

5. Transport planning and management

❖ Promote and develop alternative transport options from private and public drinking venues.

❖ Lobby State government for the continuation of school bus services during school holidays to provide ongoing transport services for other commuters.

❖ Require a statement on the availability of alternative transport options as a condition of development approvals for licensed premises.

6. Vehicles and equipment

❖ Establish skill and safety operations training program for operators of Council heavy vehicles and plant. Train member of staff to provide training.

❖ Incorporate annual licence inspection as a component of annual development appraisal process for all staff who drive Council light or heavy vehicles.

❖ Develop an incentive scheme to encourage safe practices by vehicle drivers/ operators.

❖ Revise Occupational Health and Safety Policy to enshrine provision for overnight accommodation or airfares to prevent Council staff from driving while fatigued.

❖ Review options for establishing a Council Fleet Safe policy as an umbrella policy to identify gaps in the coverage of existing policy.

❖ Incorporate road safety awareness into Council's induction program for staff and Councillors.

7. Strategy communication and coordination

❖ .Develop a communications strategy to promote the benefits and achievements of the council's Road Safety Program.

❖ Produce a planning fact sheet to inform Councillors or background to increase focus on road safety in land use planning.

❖ Ensure Road Safety Officer attends all Traffic Committee meetings and reports on activities bi-monthly.

❖ Include statements of Councils commitment to road safety as part of Tourism marketing messages.

- ❖ Continue to assist local Police in publicising enforcement operations.

- ❖ Establish a 24/7 protocol with Police to notify Council about road safety hazards and when crashes occur to enable Council officers to attend and evaluate the crash site.

- ❖ Provide Police with digital cameras to provide Council road operations with photos of road hazards to ensure rapid response for remediation.

- ❖ Reactivate the campaign to trial the 80km/h advisory signs on sections of gravel road.

- ❖ Establish the road safety plan as a specific action under the Traffic Facilities and Road Safety section of the Council's Management Plan.

- ❖ Include the implementation of relevant sections of the Road Safety Strategic Plan in each Directors Operating Plans.

Conclusion

The model has been applied in the course of developing road safety strategic plans for over thirty local councils in NSW. It has also been successfully applied it to the road safety issues of a specific road user group (motorcyclists) leading to the development of a state wide, community based strategic plan for motorcycle safety in NSW called Positioned for Safety.[6]

The process seems to work well, because:

1.   The project manager does most of the work and is extremely well informed, about the crash incidence in the local area and about the operations of council. This enables the project manager to negotiate, lobby and persuade managers to incorporate road safety considerations into their existing operations.

2.   The planning process is treated as being more important than the final document. We don't worry too much about terminology and whether something is a strategy or an action. If it is a good idea and the relevant stakeholders agree – then it is included.

3.   There is a high level of ownership by those responsible for implementation. Sometimes this sets limits on the vision of the project manager, but it is better to set realistic goals for incremental change, than to have the entire plan dismissed as too ambitious.

References

1.   de Rome, Liz (1998), **A guide to the development council road safety strategic plans,** Prepared for the Institute of Municipal Engineering Australia (NSW Division) as part of the IMEA/RTA Local Government Road Safety Project. IMEA, Sydney.

 Note: The IMEA is now known as the IPWEA, (Institute of Public Works Engineering Australia (NSW Division)).

2 .   Newman, Shannon & Warren Harrison (2001), **Evaluation of "A Guide to Developing Council Road Safety Strategic Plans"** , A report for the Institute of Public Works Engineering Australia by ARRB Transport Research, RC 1677-1.

3.   RTA (2000), Drink **Driving: Problem Definition and Countermeasure Summary**, Roads and Traffic Authority of New South Wales, Sydney, p.26.

4 .   James, Helen F. (1991), **Under-reporting of road traffic accidents**, Road User Safety Division, Transport and Road Research Laboratory in Traffic Engineering and Control, December.

5 .   RTA (1995), **Road Safety 2000: The Plan for Road Safety in New South Wales 1995 to 2000**, Roads and Traffic Authority, Sydney.

6 .   de Rome, L. & Stanford, G (2002), **Positioned for Safety: Road Safety Strategic Plan 2002-2005**, Motorcycle Council of NSW.