

Presentation Title: The ‘Yalgoo Experience’: applying the Safe System Approach in a remote setting.

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Abstract

In Western Australia, 7,876 serious crashes were recorded in rural areas between 1995 and 2004. Of the 7,876 serious crashes recorded, 22 serious injury crashes were recorded in the Shire of Yalgoo including 4 fatalities. The Shire of Yalgoo is located approximately 524km north-east of Perth, has a population of 242 and is classified as a remote area in terms of road safety.

This paper investigates the implementation of the safe system approach to road safety in a remote setting and outlines the partnerships that have been developed to create a shared responsibility for road safety within the community and other key stakeholders.

The paper will focus upon a meeting of relevant stakeholders and community members from Yalgoo that occurred to address the issue of pedestrian safety on the Geraldton Mount Magnet road.

The OLA process was used to address the issues surrounding pedestrian safety which provided a proactive and coordinated approach to resolving the issue.

Under the OLA approach all parties are encouraged to provide *objective data* from their area of expertise, jointly work as a team to *list the opportunities* to overcome the concern, and then develop an *action, responsibilities and timeline plan* and implement to deliver the required road safety outcomes.

The paper will outline the benefits of such an approach in achieving desired outcomes in relation to this issue and other similar issues facing local governments with road safety issues around Western Australia.

Author's Biography

Ryan Gibson and Peta Vince are Regional Road Safety Officers with the WALGA RoadWise program. Ryan has a Bachelor of Science (Health Science) degree and 3 years experience in road safety. Peta has a Bachelor of Arts (Primary teaching) and 6 years experience as a Regional Road Safety Officer.

Introduction/ Background

Local governments are important players in road safety as road transport system designers, operators and managers. Local governments are well positioned to positively influence road safety outcomes as leaders and influencers in their local communities. *Towards Zero*, the WA road safety strategy 2008-2020, recognises the part local governments play in the shared responsibility approach to road safety (Road Safety Council of WA 2008).

The Shire of Yalgoo is one of 141 local governments in Western Australia, located in the Mid-west region approximately 524 km north-east of Perth. The Shire of Yalgoo is a small remote local government covering an area of 33,528 km with a population of 242. The shire is responsible for design, operation and management of 115km of sealed roads and 1,126 km of unsealed roads.

In the period from 1995-2004 non-metropolitan Western Australia recorded 7,876 serious injury crashes including 22 serious injury crashes in the Shire of Yalgoo. The Midwest Region in which the shire of Yalgoo is located is over represented in the KSI rate with 180.8 people killed and seriously injured per 100,000 population compared to the state average of 134.4 people killed and seriously injured per 100,000 population (ORS, 2006).

The Western Australian road network ranks as one of the worst in the country in terms of deaths per 100,000 population with 8.7 deaths per 100,000 compared to the Australian average of 6 deaths per 100,000 population. Non-metropolitan Western Australia is significantly worse than the rest of Australia with over 20 deaths per 100,000 population (Figure 1). *Towards Zero*, the WA road safety strategy 2008-2020, recognises that we should not accept any death or serious injuries on our roads and aspires to a long term vision of a road transport system where crashes resulting in death or serious injury are virtually eliminated (Road Safety Council of WA 2008).

Towards Zero is underpinned by the safe system approach to road safety. In creating a Safe System we recognise it is perhaps not possible to eliminate all crashes, but instead we should aim to prevent crashes that result in death and serious injury. The Safe System recognises that we make errors and we need to build a road transport system that allows for human fallibility and people simply making mistakes. Taking a holistic view of the road transport system the safe system approach looks at the interactions between travel speeds, roads and roadsides, vehicles and road users. The Safe System uses a shared responsibility approach in that everyone is responsible for road safety (Road Safety Council of WA 2008, Transport Research Centre 2008).

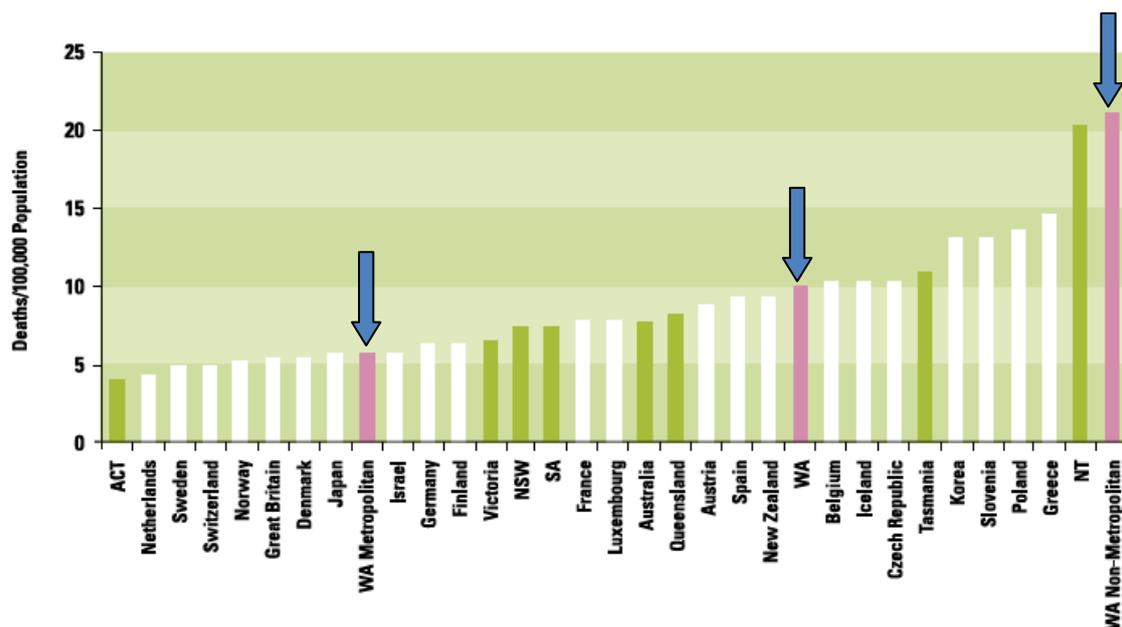


Figure 1: WA in comparison to other jurisdictions (based on 2006 data) (Towards Zero, 2008)

Method

The Shire of Yalgoo identified an issue regarding pedestrian safety on the Geraldton Mount Magnet Road which passes through Yalgoo. The Road is controlled by Main Roads Western Australia and is used by a number of heavy haulage operators servicing mine sites east of Yalgoo.

A meeting of relevant stakeholders and community members was called by the Shire of Yalgoo on the 6 October 2010 to discuss the issue and identify collective actions to be commenced by the appropriate stakeholder. Prior to the meeting the shire of Yalgoo had a strong relationship with heavy haulage companies, state government agencies and mining companies with operations east of Yalgoo. These strong relationships and a positive community attitude towards road safety issues in the shire of Yalgoo was a key to positive and proactive approach taken in addressing the road safety issues identified.

The meeting followed the OLA approach which was developed in Sweden. The OLA approach encourages all parties to provide objective data from their area of expertise, jointly work as a team to *list the opportunities* to overcome the concern, and then develop an *action, responsibilities and timeline plan* and implement to deliver the required road safety outcomes. A key to the success of the OLA approach is strong community and stakeholder participation, which was the case in Yalgoo.

During this process the stakeholders were presented with objective data from Main Roads, the WALGA RoadWise Program, the shire of Yalgoo and Heavy Haulage companies. The objective data presented outlined the Towards Zero strategy and the safe system approach to road safety specifically focusing on human fallibility (i.e. there are physical limits to the amount of force our bodies can take before we are injured), creating a road transport system that protects road users from violent forces and safe speeds for conflicts between road users. Table 1 outlines safe speeds for conflicts between road users.

| Road type | Safe speed (km/hour) |
|--|-----------------------------|
| Possible conflict between cars and unprotected users | 30 |
| Possible side-on conflict between cars | 50 |
| Possible frontal conflict between cars | 70 |
| No possible frontal or side-on conflict between road users | ≥100 |

Table 1: Safe speed thresholds for different road types (Towards Zero 2008)

Main Roads WA presented the meeting with information on speed limit setting, road design and possible safe roads and roadside solutions that can be used in remote areas. Main Roads WA controls all speed limits setting in Western Australia and has a specific policy in regard to setting speed limits in WA.

The shire of Yalgoo outlined the actions that had been taken so far, a background to the issue for the relevant stakeholders and previous consultation with relevant stakeholder to bring all parties up to speed with the current status of the issue. The heavy haulage companies also outlined actions that have already been taken to address community concerns regarding the issue of pedestrian safety in the township of Yalgoo. These actions included the heavy haulage companies implementing a speed limit of 60km/h for all of their vehicles through the township of Yalgoo, conducting road safety education with the children at Yalgoo Primary School and controlling the release of heavy vehicles from port and mine sites to have 30 minute gaps between vehicles.

Following the presentation of objective data to the stakeholders and community a list of opportunities to address the issue was created by the meeting. The list was discussed and reviewed as to what is realistically possible and what needed to be delivered to ensure the required road safety outcomes were achieved. These actions were then noted and distributed to all stakeholders and the Yalgoo community to progress. The action, responsibilities and timeline plan provided a framework to address the pedestrian safety issue on the Geraldton Mount Magnet Road.

Results

Pedestrian safety in the shire of Yalgoo has been progressed by stakeholder and community participation in addressing the issue and agreeing to implement or investigate a number of actions. Since the meeting a number of developments have occurred and many of the actions outlined have been completed.

The majority of actions identified in the actions, responsibilities and timeline plan (appendix 1) have been completed or have been progressed by the relevant stakeholder. The distribution of a contact list for heavy haulage companies to report any dangerous driving and/or offensive language and behaviour has been completed by the shire of Yalgoo. The WALGA RoadWise program has provided information to the shire of Yalgoo regarding the acquisition of a speed display trailer from the community road safety grants program as well as assistance in completing the grant application. The grant application is still in the process of being completed and Crosslands resources have hired a speed display trailer for the shire of Yalgoo to use.

A pedestrian maze and signage at the intersection of Geraldton Mount Magnet road and Gibbons Street has been added to the forward capital works plan by the shire of Yalgoo. The

pedestrian maze has been budgeted for the 2011-2012 capital works program subject to main roads approval. An upgrade to Gibbons Street has also been included in the shire of Yalgoo's forward capital works plan which includes the provision of footpaths on all side streets leading to Gibbons Street. Main Roads WA have installed rumble strips on the entry and exit to the township of Yalgoo on the Geraldton Mount Magnet road as an audible warning to alert drivers of the township. Main Road WA has also improved the delineation of the road by line marking the edge of the road and line marking double white lines down the centre of the Geraldton Mount Magnet Road within the town boundaries.

Road safety articles are included each month in the Yalgoo "Bulldust" newsletter to remind the community of the importance of road safety. School Drug Education and Road Aware (SDERA) have been working closely with the Yalgoo primary school in relation to road safety and have run the Challenges and Choices program, living with heavy vehicles program and Smart Steps program with the school.

The Yalgoo community and relevant stakeholders have committed to improving road safety in the shire of Yalgoo and will continue to work together in addressing pedestrian safety on the Geraldton Mount Magnet Road through the shire of Yalgoo.

Discussion

Towards Zero provides a framework for improving road safety within Western Australia and outlines a number of specific initiatives to be implemented in regional and remote Western Australia under each of the four cornerstones. Specific initiatives outlined under the safe roads and roadsides cornerstone include lighting and path definition around indigenous communities and separation of pedestrians from traffic in remote areas. Under the safe speeds cornerstone, fine tuning of speed limits in and around remote centres is outlined as a specific initiative for regional and remote areas. The incorporation of these specific initiatives as well as the initiatives outlined for all of Western Australia in *Towards Zero* into the actions, responsibilities and timeline plan from the meeting in Yalgoo demonstrate that the safe system approach can be applied to a remote setting (*Towards Zero 2008*).

Overall the approach to pedestrian safety in the township of Yalgoo was a positive step in the right direction however the process and approach used can always be improved. The information provided to the meeting by relevant stakeholders was relevant but not comprehensive. A road safety audit, a longer lead time to prepare objective data and a stronger explanation of the safe system approach would all have added value and improved the outcomes from the meeting. One other consideration is a number of other agencies and community members could have been in attendance to strengthen the community and agency support for action on the issue.

The actions in the meeting highlight short, medium, long term and ongoing actions which provide a framework to improve pedestrian safety in the shire of Yalgoo. The framework is aligned to *Towards Zero*, and will be actioned over a number of years. Due to the long term actions outlined the success of the framework will not be known for some time but many of the short term actions on the framework have already been actioned. Community involvement and support has been a key factor in the process to date and the high level of community and agency participation shows a shared responsibility for road safety in the Shire of Yalgoo.

Conclusion

The use of the OLA Process has highlighted that the safe system approach to road safety can be applied in a remote setting. Key to the success of any road safety initiatives in remote areas is community and agency participation as well as strong leadership from one agency (in this case the Shire of Yalgoo).

References

Road Safety Council of Western Australia (2008), *Towards Zero, Road Safety Strategy to Reduce Road Trauma in Western Australia 2008-2020*. Road Safety Council of Western Australia, Perth.

Appendix 1: Summary of Actions

| What | Why/Comment | Cornerstone | Who (agency) | Time frame | Status |
|---|---|--------------------------------|--|-------------|--|
| Prepare & distribute a list of 24 hour contacts for haulage companies | For complaints about dangerous driving and/or offensive language/behaviour | Safe Road Use Safe Vehicles | <ul style="list-style-type: none"> Haulage Companies to email contact details to pa@yalgoo.wa.gov.au Shire to Prepare & distribute list | Short Term | Completed |
| Put road safety articles in Bulldust(Shire of Yalgoo newsletter) | Email articles to Shire pa@yalgoo.wa.gov.au | All cornerstones | All agencies | ongoing | Ongoing |
| Model safe behaviours such as using the footpath | Children learning through repetition and observation | Safe road use | Community | ongoing | Ongoing |
| Educate children about road safety | E.g.: walking school bus, use of traffic course opposite school, road-train visits | Safe road Use | School Haulage Companies | Ongoing | Ongoing |
| Obtain a Speed Display trailer | Ruth Burmeister indicated that she is preparing a funding submission to the WALGA RoadWise program for child car restraints and could include the speed display trailer | Safe Speeds | Centacare to add speed display trailer to submission WALGA RoadWise Program to assist with grant submission | Short Term | Grant application currently in development with the assistance from the WALGA RoadWise Program |
| Audit Signage on town approaches and replace signage as required | Ensure signs are modern and clearly visible to drivers (some are old and due for replacement) | Safe roads and roadsides | Main Roads | Medium Term | |
| Double white lines on | Address the issue of | Safe Roads and | Main roads | Medium Term | |

| | | | | | |
|--|--|------------------------------|---------------------|-------------|---|
| Geraldton Mt Magnet Rd through Yalgoo | overtaking through town when vehicles are slowing down | roadsides | | | |
| Edge Lining on Geraldton Mt magnet road through Yalgoo | Give better visual delineation of road edge to drivers and pedestrians | Safe Roads and roadsides | Main Roads | Medium Term | |
| Install rumble strips on town approaches | Calm traffic speeds and alert motorists of the town area | Safe Roads and Roadsides | Main roads | Medium term | Completed |
| Monitor Speeding Traffic | Drivers have been seen speeding through Yalgoo particularly in the morning and around 4-630pm, community to report to police | Safe Speeds Safe road Use | Police Community | Ongoing | Ongoing – police perform regular enforcement in & around the Yalgoo |
| Apply for funding to introduce footpaths consistently in Yalgoo particularly main roads (Gibbons Street, Henty Street) | Improve pedestrian safety by keeping pedestrians off the road | Safe Road Use | Shire | Medium term | |
| Events traffic Management – applications to Main roads for reduce speed during events | Reduce speed of through traffic when there are specific events such as gymkhana and races | Safe Speeds | Shire | As Required | |
| Install pedestrian maze at intersection of gibbons St and Geraldton Mount Magnet Road, consider additional treatments such | Better separation of pedestrians from vehicle traffic when crossing, visual warning to drivers of pedestrian presence | Safe roads and roadsides | Shire | Long Term | Budgeted in Shire of Yalgoo's forward works plan |

| | | | | | |
|---|--|--------------------------|-------|-----------|---|
| as lighting, fencing and pedestrian island | | | | | for 2011/2012 financial year |
| Major long term project to install lighting and median strip as part of gibbons Street Beautification project | Work towards achieving reduction of speed through Yalgoo and increased pedestrian safety | Safe Roads and Roadsides | Shire | Long Term | Added to Shire of Yalgoo's Works Plan – currently un budgeted |
| Youth Centre | Creating a safe place for children to play | | Shire | Long Term | Liaison with appropriate stakeholders to develop |