

PUBLIC PRIVATE PARTNERSHIPS IN ROAD SAFETY: A CASE STUDY - DILOKONG CORRIDOR IN LIMPOPO PROVINCE - THE ROLE OF GRSP SA

E KOEDYK and P VENTER*

Limpopo Department of Roads and Transport, Private Bag X9491, Polokwane, 0700

*CSIR Transportek, P O Box 395, Pretoria, 0001

ABSTRACT

Traffic crashes are the leading causes of death among children. The situation in South Africa is that school children are often forced to cross very dangerous, high-risk intersections and roads – a hazardous task to perform with limited training and education. At the same time road safety education is receiving insufficient attention in South African schools. The Global Road Safety Partnership SA (GRSP SA) members took a decision to implement an extensive road safety education programme at Tubatse, an area that has been identified as one with outstanding road safety problems in the Limpopo Province. This is a community that lives along a major route that connects the Province with the Maputo Corridor. The present number of incidences, as well as the projected increase in incidences due to a rise in industrial activities, calls for the implementation of specific measures to address the situation. The unsafe situation demands an approach that will integrate engineering, law enforcement and education solutions. The aims of this project are to develop and implement by means of a pilot project a sustainable road safety education programme which will be focused on changing the knowledge and behaviour of learners in the secondary school phase, build local capacity in order to make the interventions sustainable, and to create and promote partnerships. The project is experimenting with a partnership approach towards road safety education in South Africa, not only as a GRSP partnership, but also a partnership between a community, government and community stakeholders. The following target groups are involved in the project: teachers, traffic law enforcers and community role players, local businesses and industry, and gr.8, 9, and 10 learners of the four secondary schools in Tubatse. The programme consists of various activities involving these groups, and the effect of the interventions will be determined through the comparison of results of before and after studies.

1. INTRODUCTION

Traffic crashes are the leading causes of death among children. Hundreds of children's lives could be saved every year if every school took steps to make road safety a priority. Globally more than 750 children die every day in road traffic collisions – this number is rising steadily (World Health organization, 2004).

The situation in South Africa is that school children are often forced to cross very dangerous, high-risk intersections and roads – a hazardous task to perform with limited training and education. According to research, children under the age of 8 should not be crossing the road alone, but in South Africa this is not a reality. Furthermore, communities are also not always aware of the impulsive behavior of children, or the developmental limitations they have at certain ages with regard to road use behaviour.

Road safety education at schools in South Africa is presently functioning at a critically low level, compared to international standards of road safety education. At some schools road safety education is a key priority – whilst not at all at others. The level of interest and commitment of educators in the field of road safety education influence this all. Thus, there is an inconsistent approach towards road safety education at schools in South Africa. The lack of clear guidance on how to integrate road safety into the Curriculum of Outcomes Based Education (OBE) aggravates the problem even more. According to educators there is a critical shortage of support material and road safety resources. In addition to this, educators feel that they are already overloaded with other issues such as HIV/AIDS that have to be addressed at schools, and they do not have the time or energy to develop their own material for the curriculum.

The Global Road Safety Partnership SA (GRSP SA) members took a decision to implement an extensive road safety education programme in an area that has been identified as one with outstanding road safety problems. The Limpopo Province has identified several such areas in the Province and it was decided to select the rural community at Tubatse. This is a community that lives along a major route that connects the Province with the Maputo Corridor. The present number of incidences, as well as the projected increase in incidences due to a rise in industrial activities, calls for the implementation of specific measures to address the situation.

2. GLOBAL ROAD SAFETY PARTNERSHIP

The Global Road Safety Partnership (GRSP) is a partnership between business, civil society and government dedicated to the sustainable reduction of death and injury on the roads in developing and transition countries.

The World Bank, Department of International Development in the United Kingdom, International Red Cross and Red Crescent Societies initiated the GRSP in 1999. The global members are the United Nations agencies, car manufacturers, oil companies, vehicle component producers, research organisations and NGOs. GRSP is not a funding organisation and does not finance safety interventions normally paid for by governments. It operates as a broker, linking organisations and sectors together in new partnership projects benefiting from the strengths of each organisation. The international day-to-day management is handled by a Secretariat in Geneva, guided by an Executive Committee. The in-country work is facilitated by part-time advisors and locally appointed coordinators. Together with the national GRSP Secretariat, they animate the focus projects, provide advice and facilitate and monitor impact.

By creating and strengthening links between partners, GRSP aims to increase awareness of road safety as an issue affecting all parts of society. It seeks to establish sustainable partnerships and to improve road safety interventions through increased resources, better management, greater innovation, and knowledge sharing.

The GRSP SA members participating in this project are AASA, BP SA, CSIR, Daimler Chrysler SA, Drive Alive, 3 M SA and the Limpopo Department of Roads and Transport.

3. DESCRIPTION OF THE STUDY AREA

Route R37 between Polokwane and Tubatse, generally known as the Dilokong Corridor, serves as a transport corridor from the central part of the province to the South-Eastern areas. It also provides access to Mpumalanga, especially to Burgersfort, Steelpoort and Lydenburg. It is used by a mix of vehicles consisting of heavy vehicles (trucks) from the

mines, buses, long-distance and local taxis, and light motor vehicles used for business and personal trips. Apart from local trips, it carries long-distance traffic, especially over weekends, from and to the central part of the Province. The average vehicle volume on this section of the road is about 6 000 vehicles per day (Ribbens & Makhafola, 2004).

A specific section of the route in the Tubatse area, a stretch of about 7 km in the vicinity of the junction with the Steelpoort Road (Riba Cross), is notorious for the number of road crashes that occur there. Over the period January 2002 to September 2004, altogether 175 crashes were recorded on this section of road, involving many casualties (27 fatalities and 104 injuries).

This section of Route R37 consists of a built-up low-cost residential area on both sides of the Steelpoort T-junction. The types of crashes vary from single-vehicle and multiple-vehicle crashes, to pedestrian and stray-animal-related crashes. Apart from Riba Cross, some of the other problem areas along this stretch are at Driekop Post Office, which is situated on a curve in the road, at Dilokong Hospital, at the Madikwe Platinum Mine intersection and at Gowe, where a restaurant, informal market and welding and scrap yard are situated.

There are nine primary schools and four high schools. Most of these school children cross this busy road twice a day at high risk. In the vicinity of the Steelpoort T-junction (Riba Cross), there is a multitude of commercial activities, such as a bus depot, informal fruit stalls, a public phone service, retail businesses, RDP houses, a sports ground, a cemetery, cafes and housing settlements.

The speed limit in the direction of Polokwane to Burgersfort on the 7 km stretch is 60 km/h, with posted pedestrian crossing signs in some instances. From the direction of Burgersfort to Polokwane, an 80-km/h speed limit applies and there are no signs to warn road users about pedestrians.

4. TUBATSE COMMUNITY PROFILE

The original name of the community is Pulana-Maroga. The name Pulana comes from Mapulaneng (the original place of Maroga). Maroga comes from the surname of the first leader, Chief Maroga, and Dilokong means "place of mud". The area is rural and has nine primary and four high schools that accommodate children in this area, two hospitals, no clinic or police station, one bus depot and some businesses, such as bar lounges, general dealers, bottle stores, etc.

The community is located on 5 000 hectares of land, surrounded by mountains. The community is mainly rural and water supply comes from a river flowing along the foot of the mountain range. The area has strong winds in summer and a very cold winter. The population consists of about 23 000 people, of which 65% are youth. The language spoken is Sepedi (Northern Sotho) and the people believe in traditional norms as they still take their children to the initiation school.

The community has a high unemployment rate, with 65% of the population being out of work. Ninety-six per cent of the unemployed receive social and child grants from the government. Most of the youth are still at school. There are a number of forums, such as the CPF (Community Policing Forum), the Electricity Forum, the Water Forum, and Tubatse Transport Forum operating in the community and the community leaders and the councillors drive them.

As far as the economics of the area are concerned, mining companies extracting platinum and chrome and which employ some of the community members, surround the community. Some people have opted for self-employment by doing gardening, sewing, brick-making, keeping poultry and running spaza shops in the area.

Because of the mining industry in the area, Route R37, which passes through the villages, carries about 100 trucks a day making several trips to and from the mines and the smelter. The other vehicles are predominantly local and long-distance public transport vehicles, such as buses and taxis. Motor vehicles and other long-distance vehicles drive at high speed through the area, which poses a risk for the local community, especially the elderly and children wanting to cross Route R37.

Emergency services are not well deployed in this community as there is no health clinic, no police station and no ambulance/fire station in the area. Law enforcement is taken care of by 13 provincial traffic officers who work in the area and the South African Police Service, who patrols the area on a daily basis to ensure the safety and security of the community.

5. STATISTICS ON THE STUDY AREA

Table 1 contains the reported casualties in the study area from January 2002 to September 2004 on the 7 km stretch of Route R37 at Riba Cross, Driekop, Gowe and surroundings.

Table 1: Reported casualties in the area by location: January 2002–September 2004

Location	Number of fatalities	Number of injuries	Number of crashes involving casualties
Driekop	13	27	23
Riba Cross	8	53	24
Gowe	3	9	7
Garagopola	0	10	3
Madiseng	3	4	5
Mooihoek	0	1	1
Total	27	104	63

During the period under review, altogether 175 crashes occurred in the study area. Sixty-three crashes (36%) resulted in casualties, with 27 people being killed and another 104 sustaining injuries. The database is not very accurate and underreporting of crashes and casualties (fatal and injury) is suspected. At least eight of the fatalities were confirmed as having been pedestrians and another 7 pedestrian injuries were reported. In the case of 20 reported injuries, however, the type of crash is unknown and it can be expected that some of these were also pedestrian-related.

6. POTENTIAL REMEDIAL MEASURES

The unsafe situation for road users in the Tubatse area is due to various factors and therefore demands an approach that will integrate engineering, law enforcement and education solutions.

6.1 Engineering measures

The following are examples of engineering measures that will contribute towards the improvement of the road safety situation:

- Upgrade road signs and markings
- Upgrade bus and taxi stops
- Provide fences and cattle grids to keep stray animals off the road
- Provide pedestrian turnstiles and crossings

6.2 Traffic law enforcement measures

Traffic law enforcers can make a difference through:

- More visible traffic policing.
- Intensified law enforcement to curb speeding, illegal overtaking, stopping on the road surface, etc.

6.3 Education and communication

The community's road safety knowledge and understanding can be enhanced through:

- Messages through local radio stations, posters, etc.
- Road safety education initiatives in schools.

7. PROJECT AIMS AND TARGET GROUPS

7.1 Aims

The aims of this project are to:

- Develop and implement by means of a pilot project a sustainable road safety education programme which will be focused on changing the knowledge and behaviour of learners in the secondary school phase.
- Build local capacity in order to make the interventions sustainable.
- Create and promote partnerships.

The project is experimenting with a partnership approach towards road safety education in South Africa, not only as a GRSP partnership, but also a partnership between a community, government and community stakeholders.

7.2 Target groups

The following groups are involved in the project:

- Teachers, traffic law enforcers and community role players
- Local businesses and industry
- Gr.8, 9, and 10 learners of the four secondary schools in Tubatse: Sehlako, Nakgwadi, Mogolo, Lehlaba

8. EDUCATION PROGRAMME

The project comprises of the following activities:

8.1 Road safety education curriculum refinement

The CSIR curriculum for the integration of road safety education into Outcomes Based education OBE was modified and revised into a user-friendly and easily accessible document for educators. Educational media were developed to supplement the curriculum.

8.2 Capacity building/workshops

Educators and road safety officials received training to be orientated towards the promotion of road safety and attended a training workshop on road safety education for secondary school learners. This workshop covered key principles regarding educating learners about road safety; the limitations of learners in traffic and how to integrate road safety across the various learning areas of the curriculum.

8.3 School theatre

Teachers and learners will stage road safety plays in order to raise traffic safety awareness amongst the young road users. The use of plays as communication medium has been proved to be very successful. Teachers were given the opportunity during the teacher workshops to contribute towards the writing of the script. They were also given basic training to stage the plays.

8.4 Song competition

Road safety awareness will be promoted through the singing of songs. Teachers will be provided with the words of existing road safety songs or they can write and compose new ones. The aim will be for the schools to participate in a song competition and win prizes donated by businesses in the community.

8.5 School safety club

A teacher was appointed as road safety champion at each of the participating schools. These teachers are given all necessary materials and information to start a road safety club at the school. The club will consist of a task team made up of learner representatives. This activity will be very closely linked to the "Safe Routes to School" project.

8.6 Pedestrian visibility

Learners are educated regarding the importance of visibility and reflectivity. They are provided with reflective material to make them more visible on their way to and from school.

8.7 Pedestrian warning signs

An assessment has been done of the deficiencies regarding pedestrian warning signs within the target area. The SA National Roads agency is dealing with this aspect as part of the engineering remedial measures.

8.8 Art competition

Road safety awareness is promoted through an art competition open to all learners. Prizes will be awarded to the learners with the best pictures/posters/ designs.

8.9 Integrated lessons

During the workshops teachers were given examples of lessons to integrate road safety into existing subjects.

8.10 Evaluation and monitoring

The impact of the programme on the learners will be determined through special assessment activities. This will be done through a pre- and post study to determine knowledge, attitudes and perceptions. This is done through surveys as well as focus group evaluations with educators and learners. A research report will be written outlining the impact of the programme, the partnership as well as recommendations for further implementation.

9. CONCLUSION

It needs to be understood that the GRSP SA partners working on this project do not expect to see an immediate drop in the number of traffic related injuries and fatalities in this area, firstly because the target group does not make up the majority of casualties, and secondly because education on its own has not yet been proven to be successful (Duperrex et al., 2002). An integrated approach, involving supporting activities such as traffic law enforcement and engineering measures, is essential for any comprehensive holistic approach (Department of Transport, 2001). The main purpose in this case is to achieve improvement in the children's safety behaviour and to develop safe community attitudes to road use in the long term. It is therefore expected that the programme will:

- Create an increased awareness of safe road behaviour amongst the teachers, the school children and their families
- Foster developmentally appropriate practices for the delivery of road safety education by the teachers

It is for this reason that the success of the project will not be measured according to the statistics, but instead according to the change in the target group's knowledge and behaviour.

10. REFERENCES

- [1] Department of Transport, 2001. The Road to Safety, 2001-2005, Department of Transport, Pretoria.
- [2] Duperrex, O, Bunn, F, Roberts, I, 2002. Safety education of pedestrians for injury prevention; a systematic review of randomized controlled trials. British medical journal, 324,1129
- [3] Ribbens, H, Makhafa, F, 2004. Road safety improvement plan for the Dilokong Corridor (Route R37) at Tubatse, CSIR, Pretoria.
- [4] World Health Organization, 2004. World report on road traffic injury prevention, WHO, Geneva, Switzerland (ed. M. Peden et al.).