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KEEP KIDS FREE FROM HARM
– 1978 - 2018 –

PREVENTION OF ROAD INJURIES IMPACTING CHILDREN IN SOUTH AFRICA (PRISCA)

Policy briefs: **Safer School Zones**

unicef

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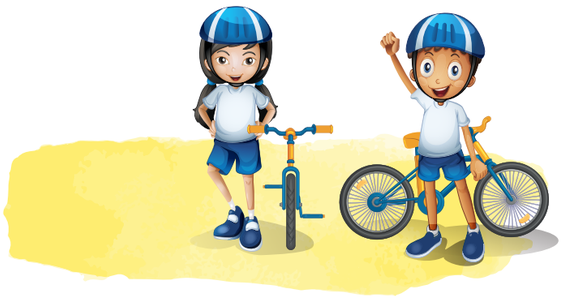
CONTENTS



PROJECT OVERVIEW

From January to December 2018, research and stakeholder engagements were conducted as part of Childsafe's Prevention of Road Injuries Impacting Children in South Africa (PRICSA) project.

The objective was to: explore the major South African contributors to this challenge; establish what interventions could be best suited to help address the problem; and lastly, to identify the correct stakeholders to adequately engage with, in addressing the issue of child pedestrian safety.

This policy brief considers the findings that emerged from the research programme relating to child passenger safety, child pedestrian safety and the need for safer zones around schools in particular. It also contains recommendations related to each of these three areas.

METHODS

ChildSafe[2] is an advocacy organisation that promotes child safety. It has been doing so for 40 years. With funding from UNICEF, and research conducted by the University of Cape Town, the PRICSA research project used primary and secondary methods and research tools to investigate the problem. The purpose of using these various research methods was to capture the complexity of the challenge and surface multiple perspectives. These include:

- A comprehensive literature review of the magnitude and extent of the challenge globally
- A comprehensive secondary data collection and report on the status quo of child road safety
- A series of stakeholder workshops conducted in all nine provinces of South Africa. These workshops included representatives from the departments of Transport, Health and Education. These fields play an important role in child road safety. Collaborations with multiple departments enables Childsafe to understand and tackle the problem through partnership
- A policy review of current legislation and policies that impact children, from the South African Constitution to national, provincial and local government mandates

[2] Registered Non-Profit Organisation as Child Accident Prevention Campaign of Southern Africa - www.childsafe.org.za

SAFER SCHOOL ZONES

Background

A third of South Africa's children are under the age of 15 years old. Their health and wellbeing should be considered a priority.

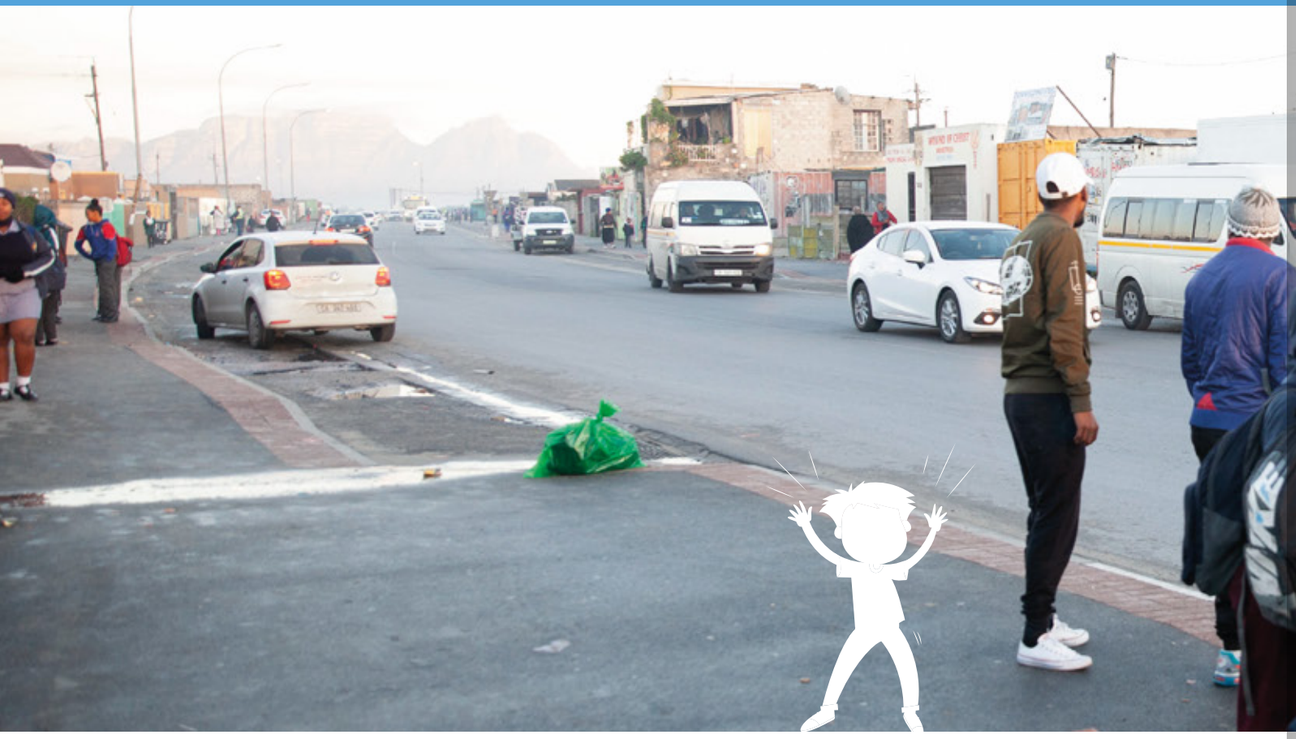
Globally, 21% of road fatalities impact children under the age of 20 who live or study close to the road. **Additional statistics show that many road-related injuries occur in the early morning during peak traffic and in the afternoons, when children are travelling to and from school. Statistics also show that learners who walk or travel to school in rural areas have different needs from those in urban areas.**

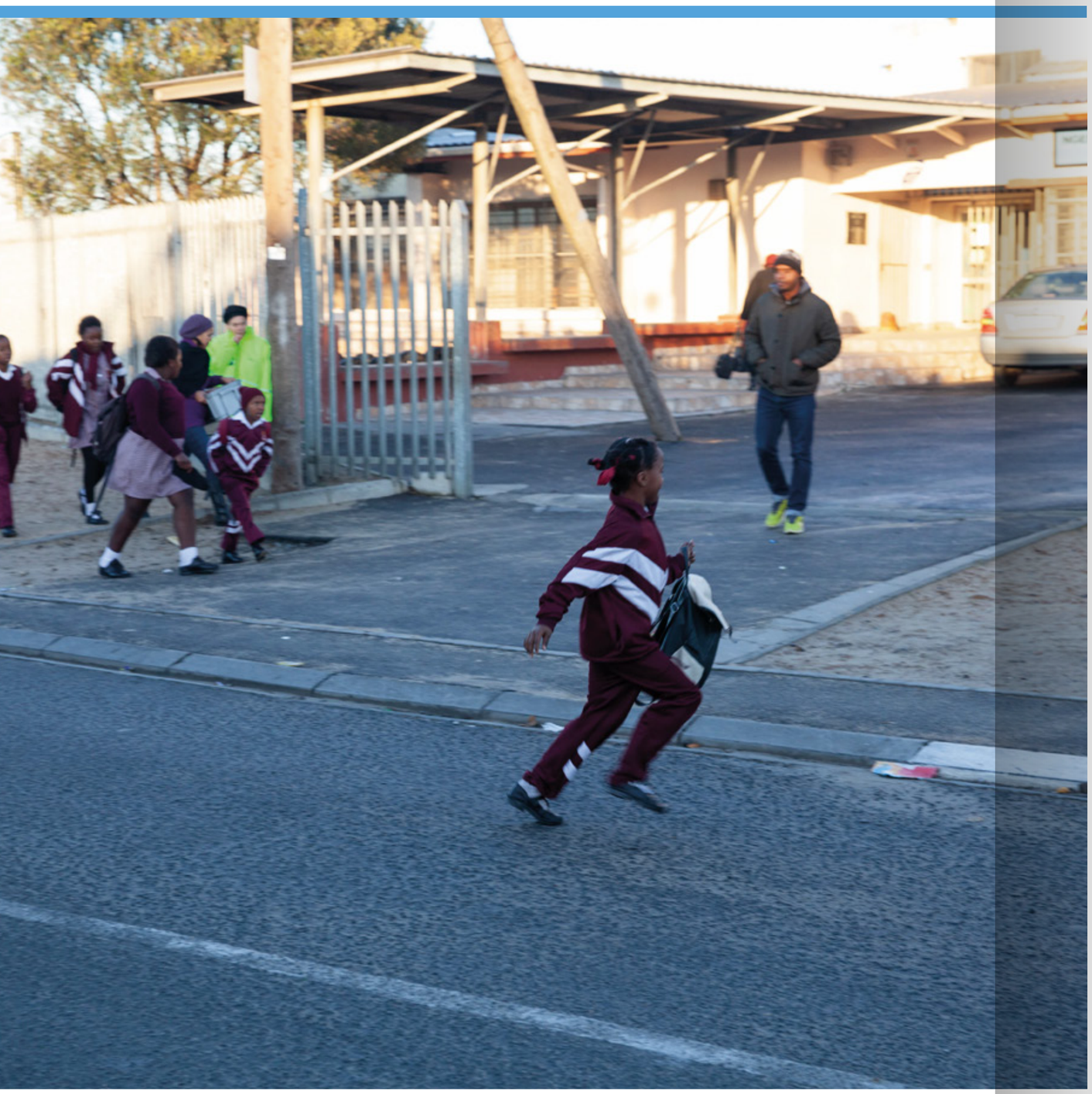
The National Household Travel Survey conducted in 2013 showed that 11 million learners in South Africa, who reside in both rural and urban areas, walked to school and educational centres.

The National Road Safety Strategy[6] states that the road infrastructure and environment in South Africa is estimated to have a 12,3% causal contribution to fatal crashes. The Road Traffic Management Corporation (RTMC) has identified **jaywalking as the highest contributing factor in road crashes.**

However, it is important to note that pedestrian behaviour is also driven by the lack of infrastructure to enable safe passage. In rural areas, stray animals on the road are also considered a problem, suggesting that local conditions need to be considered to tackle the road safety challenges. These factors all expose South Africa's children to particularly high risks, in terms of road safety, when they are simply accessing education.

[6] *National Road Safety Strategy 2016-2030*





Findings

School location is a major determinant of a safe school zone. Research showed that some schools are located in areas characterised by high vehicle traffic volumes. Some are located adjacent to highways or main roads where vehicles travel at high speeds. In some communities, such as those located near the R300 in Cape Town, the construction of a major highway creates a physical division through their area. This poses imminent danger to learners living on either side of the road from their school. For example, some learners have no, or inadequate, access to routes that should enable their safe passage. In locations where walkways have been provided, criminal elements harass learners, which forces them to use unsafe crossings over the road network (Zuidgeest *et al.*, 2018).

The school site and surrounding areas need to be planned and designed to invite pedestrian and bicycle travel, while ensuring a high level of pedestrian safety. Schools should, ideally, be centred within a community and paths provided so that the school can be accessed from all sides. Schools have traditionally been one of the focal points of the community, serving a variety of functions, such as meeting and voting. Siting a school so it can be easily reached from all directions and providing a sufficient level of pedestrian and cycling facilities further assists in establishing the school as a strong community centre.

The following are specific elements of good school zone design that have been profiled (DoT, 2003):

- School buildings should be accessible to pedestrians from all sides with entries and exists.
- Trails and pathways provide direct and continuous links between the school zone and the surrounding neighbourhood.
- Public transport drop-off zones should be separated from private vehicle drop-off zones to minimise conflict.
- Vehicles and pedestrians are separated and provided with their own designated areas for travelling.
- Strategically located, well-delineated crossing opportunities are provided, including midblock crossings and crossings at controlled junctions.
- Pedestrians are directed to specific crossing points and pedestrian accesses by directional signs, fencing and other elements.
- Traffic calming devices are installed with the purpose of reducing speeds.
- Sight distance obstructions are removed so that there is clear visibility of pedestrians throughout the area.

The application of traffic calming measures around schools in many cities and towns has been proven an effective measure to promote child safety. The implementation of **lower speed limits during the morning and afternoon traffic peaks on school days** has also made a significant contribution to school zone safety where this measure has been applied.

Another major concern is the fact that many children have to **walk to school without parental supervision** which also exposed them to risk in the road environment. Apart from being able to walk or cycle safely to school and back home, the residential area itself must also be safe for children because they use the streets for other than school trip purposes as well. Child road casualty statistics show that a large number of child casualties are also recorded in the afternoons and early evening when children are at home. A walkability audit of residential areas, assessing the different origins and destinations of pedestrians in the residential areas and the adequacy of walkways, road crossings and other amenities for pedestrians, is a practical tool to provide a safe road environment for children, adult pedestrians and cyclists.

The use of bicycle helmets for journeys to school and leisure trips should be promoted among all children. Studies have shown that bicycle helmet use decreases the risk of head injury by 85% and brain injury by 88%. The protective effects of helmets during a crash or fall are increased by:

- The helmet being fitted properly.
- The helmet being properly worn (sitting at the front of the head).
- The retention straps being tight and fastened. This prevents the helmet from moving or coming off and the risk of head injury being reduced during a crash.

Arrive Alive (2018) states that a **large proportion of pedestrian and cyclist collisions** in low-income countries **occur around dusk, dawn or at night,** possibly because of poor visibility. Colourful clothing, accessories and vehicle parts can make pedestrians, riders and non-motorised vehicles more visible to all road users. Brightly coloured clothing or accessories may be suitable alternatives to the reflective vests that are used in high-income countries. The use of reflectors and bright colours for wheels and rear ends of bicycles may also have the potential to increase visibility. Reflective armbands or reflective strips on clothing or book cases could also enhance visibility of scholars.

Key insights

Road safety is everyone's responsibility. School zone safety requires a multi-stakeholder approach that should commence from the initial planning phases, or future upgrades, of a school. Mandates from various government departments can conflict with each other. This makes it important to include experts in engineering, such as town planners, road engineers and others; the education sector, including non-governmental organisations and school representatives; and law enforcement; to place the safety of the child at the centre of decisions.

Government is fulfilling its mandate of building more schools around the country. However, these schools should be carefully located in areas where children's safety is not compromised; or they should feature engineering enhancements to promote safety — particularly with respect to children's safe passage to and from the school.

In some areas studied, clear and unambiguous signage, road crossings and markings, road humps or calming measures, walkways and speed differential zones are some of the many interventions that have been attributed to safer school access. However, for many learners, the route to school is hazardous in locations where violence or crime prevents them from accessing infrastructure such as pedestrian bridges or subways; where schools are close to major thoroughfares; and sidewalks are lacking or blocked.

Where learners are transported to school, drop-off zones are inadequate or not evident and facilities for cycling paths or bicycle storage may not be provided. The mix of motorised and non-motorised modes at school entrances also poses major challenges for younger learners that still lack the physical skills to be safe in the road environment. To respond to these various needs, it is therefore **crucial to engage with representatives of learner safety authorities throughout the planning process, while also considering the learner's perspective.**

The improved road safety of the school precinct can be promoted through a number of measures, such as:

- Linking road safety themes with explicit and clear curriculum topics.
- Making safe travel to school an aspect of the school inspection process.
- Individual schools to adopt the Safe Routes to School concept.
- Apply a star rating system for schools to promote a safe road environment (Safety Label in The Netherlands). Such a system can be administered by the Road Traffic Management Corporation (RTMC) and the National Occupational Safety Council for South Africa.

Recommendations

A one-size-fits-all approach will not achieve the desired outcomes. Evidence presented and statistics show that road safety issues vary between provinces. However, an integrated approach across a range of cross-functional bodies, in collaboration with education facilities, could determine appropriate measures, such as:

- **Traffic calming measures should be implemented** to promote a school safe zones to protect children on their route to and from school
- **These improvements can be low cost measures** such as road markings and child barriers at exit points. These should be implemented in existing schools. In newer schools these should be factored in from the planning and construction phase
- **New schools should not be located along arterial roads** but rather on lower order roads in residential areas to promote child safety.
- **Learners, teachers and parents should be educated** on the risks and dangers of unsafe road practices, with a particular focus on how each stakeholder group can take preventative measures to ensure child safety.
- **Providing reflective gear and bags as a part of the school uniform** to make children more visible to drivers
- **Delivering road safety education** frequently throughout the education sector
- **Road safety learning materials** need to be integrated throughout the school curriculum, starting at the Early Childhood Development phase.
- Children's' primary care-givers and the broader community should be **exposed frequently to road safety materials**
- Rural, urban and peri-urban areas **require solutions tailored** to their specific challenge, locality and need
- Schools and road safety officials should have **a requirement to teach the children** to be more vigilant in traffic situations. This education should expand to more schools, inter-faith establishments or clubs.
- Consider **implementing speed differentials around school zones** over peak morning and afternoons to slow passing traffic within 500m of the school. A similar approach has been used in Tshwane. Please refer to the literature review for full details
- Implementation of Safe Routes to School and School Buses to assist children that are unsupervised in the traffic environment

- **Walkability audits** between the school precinct and the surrounding residential catchment areas should also be conducted to ensure that the road environment is safe for children
- **Enforcement and removal of taverns** from operating within the 500m school zone
- **Dedicated sport and recreational areas** for children in their neighbourhoods
- **Adequate lighting and visible policing** in high safety risk areas around the school zone
- **Enforcement of seat-belt use** for all scholar transporters and contracted buses transporting scholars

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