ROAD SAFETY

ROAD safety issues always grab public attention during holiday periods and on long weekends when large numbers of people take to the country’s roads. Each season it is preceded by dedicated safety messages and at the end, we collectively analyse crash statistics to spot trends and, hopefully, find a decline in the death toll.

As the agency responsible for the management of South Africa’s primary road network, SANRAL has a strong interest in road safety campaigns. Large volumes of holiday traffic take places on our 22 197km national road system.

In recent months SANRAL completed a comprehensive review of its long-term strategy, drafted as a guiding document to chart the agency’s journey into its third decade. In this strategy – Horizon 2030 – SANRAL emphasises that road safety requires more than just seasonal campaigns; more than just communication; more than just awareness. We have now elevated road safety as one of the primary pillars of our strategic activities.

In a modern society the surge in technology is changing the way in which people conduct their daily lives. It has an inevitable impact on the way in which we travel, in our commuting habits and our interaction with other users of the road.

We strongly support the “Safe System” approach to road safety, which is widely accepted by the global community and also features prominently locally in the recently approved National Road Safety Strategy.

In this edition of Investing in Road Safety, we demonstrate how engineering solutions, innovation and technology can be effectively merged with awareness and education to improve road safety in the country – 365 days a year.
MESSAGE FROM THE BOARD

Chris Hlabisa

THE 2017/18 festive season saw an 11% drop in road fatalities from the previous year. A decrease of 1 527, or put differently: more than 1 500 lives were saved. This statistic surpasses the 10% target set by the Department of Transport and agencies responsible for road safety in South Africa.

As much as we applaud this decrease, we should always remind ourselves that one death is one too many. A thorough analysis of the statistics will show us which areas require our collective and immediate attention.

As an agency of the Department of Transport, SANRAL continues to align its road safety programmes with the key pillars of the United Nations’ Decade of Action for Road Safety Global Plan. SANRAL builds the national road network to meet world-class standards. And I’d like to stress to readers of this publication: Don’t become a hazard to other road users.

Road users must at all times obey the rules of the road. People must do simple things like not drink and drive, avoid speeding and use safety belts to mitigate severe injuries during crashes. People must be considerate on the roads because they are a shared space. Don’t be inconsiderate to other road users. I also urge pedestrians not to cross highways and freeways. Roads are not meant to be weapons for mass killing.

Randall Cable

TECHNOLOGY is changing society in so many ways and we must intensify our search for more technological solutions when addressing the very complex issue of road safety.

The use of technology to promote road safety is also very much aligned with the ‘Safe System’ approach adopted globally through the United Nation’s Plan for Road Safety, and which also underpins South Africa’s National Road Safety Strategy approved by Cabinet last year.

The Safe System approach accentuates the need for all stakeholders to accept responsibility for road safety. Road authorities such as SANRAL will continue to play a proactive role in ensuring a road environment that is self-explaining, forgiving and which provides for the needs of all road users, including pedestrians.

Apart from the lives lost or changed forever, road safety is also an economic issue. Research has told us that crashes cost the country more than R148bn. This is unacceptable, given how many people suffer from inexcusable poverty and lack of access to basic services. Consider what could have been done with that amount.

SANRAL’s focus on the use of technology to improve road safety has earned us high praise from many quarters. The agency took home the Award for Excellence from the Intelligent Transport Society of South Africa, which recognises the innovation behind our intelligent transport system project.

In this edition of Investing in Road Safety, we put the spotlight on our Freeway Management System, our nationwide WHOA! campaign and our study of human behaviour and pedestrian patterns on the country’s busy highways.

On the engineering side, we showcase our road safety interventions, including the construction of roundabouts on three major intersections in the Northern Cape and the upgrade of the N7 that connects Cape Town with Namibia.

These programmes affirm our recognition of road safety as one of SANRAL’s key pillars of operation, as defined in our long-term strategy, Horizon 2030.

Chris Hlabisa is a member of SANRAL’s Board of Directors

EMBRACING TECHNOLOGY FOR SAFER ROADS

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OVERLOADING and speeding are major concerns on the country’s roads and pose serious safety risks for all road users.

Technology that is being introduced by SANRAL will revolutionise the way in which overloaded trucks are detected and more effective action taken against serial offenders.

Michelle van der Walt, the Project Manager: Traffic Monitoring, says overloaded vehicles are one of the contributing factors to road damage. This has an impact on the safety of road users and on SANRAL’s maintenance budgets. In addition, such heavy trucks are more likely to break down on the road resulting in traffic jams, delays and frustration among motorists.

The weigh-in-motion enforcement (WIM-E) technology enables road authorities to get accurate data on the weight of vehicles while they are travelling at normal speeds on the SANRAL network. It will no longer be necessary for trucks to stop at traffic control centres or weigh bridges next to the road.

Some of the components of the WIM-E technology are already embedded in the expansion of the network infrastructure. The system will be able to track the movement of overloaded vehicles during their entire journeys including those vehicles that enter the country from neighbouring states.

Van der Walt says the system will also bring major benefits to provincial and local traffic authorities.

Dangerously overloaded trucks will no longer be able to evade physical weigh stations by diverting onto secondary roads, causing serious damage to roads that are not designed to sustain such loads.

Moreover, the WIM-E process will improve the productivity of law enforcement officials and cut down on risk of corruption that could occur at weighbridges.

One of the key issues that are currently being resolved is to ensure the WIM-E data generated will be sufficient to prosecute offenders. This will require several changes to existing legislation – including the SANRAL Act – and regulations to bring them in line with the development in technology.

The WIM-E equipment will comply with the provisions of the Legal Metrology Act and be monitored by the National Regulator of Compulsory Specifications, the watchdog that keeps an eye on measurements and verifications.

In future SANRAL will also work with prosecutors and magistrates to ensure a greater understanding of the WIM-E system and build confidence in the data that is generated. A successful pilot project has already been run on the N3 in KwaZulu-Natal during which the system was tested and accepted by local prosecutors.

Van der Walt says the WIM-E system is another example of how modern technology that has been used with great success in other parts of the world can be used locally to improve the safety of road users.

DRONES SUPPORT ROAD SAFETY

ENGINEERING grade surveys can be conducted using drones, properly known as remotely piloted aircraft systems (RPAS Photogrammetry). This allows the accurate and comprehensive capture of geospatial, topographical and engineering survey data along roads.

Drones are also well suited for use in the management of incidents that have an impact on roads such as fires, floods and earthquakes. They can assist in the detection, intervention and post-incident monitoring.

Drones are useful in monitoring traffic trends such as the level of service, intersection operations, origin-destination flows and real-time traffic data. They can be equipped with all kinds of sensors and equipment such as chemical sensors and infrared cameras.

LED BETTER THAN CAT’S EYES

REFLECTIVE road studs, or cat’s eyes as they are often referred to, have been used on South Africa’s roads for more than 40 years to improve visibility and provide guidance to motorists travelling at night. The problem is that they rely on a car’s headlights for illumination. Thus, they only assist a driver when they are properly illuminated by the vehicle’s headlights.

Light Emitting Diodes (LED) road studs, on the other hand, use stored energy to illuminate themselves when visibility is low and provide guidance on the roadway to motorists of up to 1000m.

LED road studs make use of small solar (photovoltaic) panels to charge during the day. When the light on the panels is reduced at night, during mist or heavy rain, the road studs will light up. They require no special timers, as they react to the lighting and visibility conditions in their immediate location.

The use of LED road studs greatly improves a driver’s reaction time to potential hazards or sudden changes in road alignment.
WHEN a crash occurs on any major road in South Africa, the first priority is to assemble emergency services and traffic management teams to the scene.

Emergency services can help save the lives of crash victims while traffic officials must manage the traffic flow and prevent any further incidents.

These processes are coordinated by the Road Incident Management System (RIMS) that is in place on major roads in the country. SANRAL has been mandated by the Department of Transport to establish and implement RIMS.

The system sets in motion a sequence of coordinated activities when an incident or crash occurs. The intention is to minimise the direct and secondary effects of the incident and to restore traffic to normal operating conditions as soon as possible.

Essential functions such as traffic authorities, the SA Police Service, emergency medical, fire and rescue services are connected to RIMS to ensure coordinated action and the implementation of standard operating procedures.

RIMS is already implemented on all national roads and will be rolled out to provincial roads as a priority project. In each province coordinating systems have been established. This includes centralised communication centres that receive emergency calls from the public and dispatch emergency teams to the scene of an incident.

SANRAL is constantly working on methods to improve the speed of detection and response to support crash victims, manage traffic flows and remove obstructions that might cause further incidents.

RIMS also facilitates the training of members of emergency services to ensure coordinated actions take place according to the correct protocols. Detailed debriefings and assessments are done after major crashes to determine the cause of the incident and evaluate the action of the responders.

Comprehensive statistics are fed into the RIMS system and the data is analysed to identify incident trends and hazardous locations. This information enables SANRAL to introduce road safety interventions that mitigate the risk of serious injury and fatal crashes in future.
THE introduction of innovative technology to curb speeding on major highways have already resulted in a significant reduction in contraventions. Average Speed over Distance – Asod – is the latest global trend in speed enforcement. In the Western Cape where it has been installed from 2013, it has contributed to a significant drop in speeding, says Randall Cable, the Engineering Manager for SANRAL’s Western Region.

“ This collaboration with the Western Cape Department of Transport is an example of how partnerships and cutting-edge technology can offer solutions for some of the country’s most pressing safety issues – road fatalities caused by speeding,” he says. Through the implementation of Asod, traffic authorities can move away from the surprise approach and encourage safe and sensible behaviour among road users.

Asod is a method of speed enforcement where the system calculates the average speed of a vehicle, measured from the time it passes a camera, until it reaches a second camera at a fixed distance away. The cameras are carefully calibrated, and the technology is able to recognise the vehicle’s number plate. Time-stamped pictures are taken at both locations. Should the vehicle pass by the second camera in a shorter time than what is determined by the speed limit, it indicates that the driver was exceeding the posted limit. The system has been installed on portions of the N1, N2 and R61 routes in the Western Cape. There are ample warning signs for road users that they are about to enter a monitored stretch of road with accompanying messages to encourage adherence to the speed limits.

Encouraging safe road behaviour
Cable says the Asod measurements are routinely used as evidence in prosecutions for speeding, but the real benefits of the technology are its ability to change speed behaviour. The concern is that road users only adhere to the speed limits to avoid punishment.

“We must focus our efforts more on the encouragement of good behaviour rather than on punishment for transgressions,” says Cable. “Our experience with Asod shows that most drivers are willing to follow this approach, while the technology ensures that transgressors are identified and suitably punished.”

The statistics support this approach. According to Cable, there are higher levels of compliance with speed limits on the roads where the system is installed and a concurrent reduction in fatal crashes. However, speed remains a major contributor to road crashes and fatalities. The global and local evidence shows a direct relationship between increased vehicle speeds and increased severity of injuries.

In addition to enforcement systems such as Asod, engineering and technology initiatives have been introduced by SANRAL to address the issue. These include measures such as speed-calming road designs and the introduction of intelligent transportation systems, which include CCTV camera surveillance.

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RESEARCH conducted on the Cape Town freeway network is shining more light on the reasons why pedestrians cross busy highways and brave fast-moving vehicles, despite the presence of pedestrian bridges.

Coordinated by Prof Manon Sinclair of the University of Stellenbosch’s Department of Civil Engineering and Prof Mark Zuidgeest of the Centre for Transport Studies at the University of Cape Town, the study adds to a greater understanding about pedestrian behaviour and will have an impact on the provision of road infrastructure, traffic law enforcement and education and awareness campaigns targeting specific road user behaviour.

The research was facilitated by SANRAL which commissioned the pedestrian count and provided the data for analysis. CCTV cameras located on the freeways in Cape Town monitor the activities of pedestrians. Figures show that up to 30 000 pedestrian activities are observed on a regular week day. This poses obvious dangers to both the pedestrians as well as vehicles travelling on the roads. The risk increases should the pedestrian decide to cross the freeway.

SANRAL has built a number of pedestrian bridges across the roads and part of the research was aimed at determining whether people make use of these bridges and what can be done to influence their choices.

The study found that time saving and fear of criminals were among the top reasons why pedestrians decide to cross the road, both in instances where bridges were close by and where they were absent. Many pedestrians were prepared to take the risk of venturing onto the road rather than becoming victims of crime on, or close to the bridges.

Among the recommendations are that more pedestrian bridges should be erected – but that they cannot be provided without reliable security systems that ensure the personal safety of pedestrians who cross. This will require partnerships between road authorities and law enforcement in implementing sustainable solutions.

A good example of this is the deployment of additional CCTV cameras as part of the Freeway Management System, located specifically at known hotspot pedestrian bridges. These cameras are monitored 24/7 by law enforcement operators on the lookout for suspicious behaviour or potential danger.
ROAD safety concerns were prioritised during the upgrading of the Kimberley Ring Road, R31. Three major intersections were identified – at the N8 which cuts across the Northern Cape province in an east-west direction; the N12 which connects the province with Gauteng and the R357, leading towards Prieska and the Orange River.

A study was conducted to identify interventions that can be introduced to improve intersection safety and ensure predictable, efficient and safe travel for all road users. The investigations showed that vehicles operated at unsafe speeds at these intersections.

Roundabouts are widely considered to be among the safest forms of intersection control and the addition of supplementary street lighting will bring further significant benefits to road users. These interventions are supported with changes to the road alignment to passively enforce speed reduction for vehicles approaching these intersections.

Construction started in August 2017 and is expected to be completed by late 2018. The expectations are that the interventions will reduce approach speeds and vehicle conflict points, leading to a reduction in the occurrence and severity of crashes.

MAJOR upgrades to the busy R61 near Mthatha in the Eastern Cape will contribute greatly to the safety of both road users and pedestrians.

The R550m project which covers the stretch from Mthatha Sprigg Street to Ngqeleni forms part of a master plan for tourism and other long-term mega projects in the Eastern Cape.

The SANRAL project commenced in September 2013 and was completed four years later in September 2017. It consists of the construction of a new 7.3km dual carriageway between Mthatha and the turn off to Ngqeleni. The east-bound carriageway was newly constructed, while the west-bound carriageway entailed an upgrade of existing road infrastructure.

The new carriageway required the construction of six new bridges, one each over the Mthatha River, the Corana River, Sidwadweni River on Bernard Schultz Drive, an agricultural overpass bridge at Ngqeleni turn-off, and two new interchange bridges at the Ngqeleni turn-off.

Mbulelo Pietersen, SANRAL’s Southern Region Manager said the safety of road users and pedestrians took priority with the closing of unsafe intersections, a new interchange at Ngqeleni turn-off and the construction of formalised and channelised intersections.

This resulted in an integrated road safety approach, which aims to decrease the road hazards that may lead to fatal crashes.

Many crashes on the R61 between Mthatha and Ngqeleni involve motorists hitting stray animals. Between December 2014 and January 2015, local traffic authorities impounded 266 stray animals including goats, cattle, sheep and donkeys. To address the problem, SANRAL has constructed two agricultural underpass culverts as part of the R61 upgrade.

“One of the successes of the project is that we succeeded in injecting a wide range of benefits to communities living in villages from Mthatha to Ngqeleni,” Peterson said.

SANRAL delivered 31 new replacement houses to residents whose dwellings fell under the construction footprint, and in the process eradicated poorly constructed homes.

“The project has thus brought meaningful initiatives of social development to residents and communities.”

The project also links with other programmes in the region including the conversion of Sprigg Street and Madeira Street in Mthatha’s Central Business District into one-way streets to help improve traffic flow.

The risks of working on the project included work that was carried out in a heavily trafficked and densely populated built-up area, and within a confined construction zone involving the simultaneous construction of earthworks, structures, and the relocation of services.
**MAJOR SAFETY RELIEFS ON BUSY ROUTE**

The safety of pedestrians on the East Rand has improved significantly with the construction of three new pedestrian bridges across the busy N17 between Springs and Johannesburg.

The three bridges constitute a R90m investment in road safety and engineering excellence by SANRAL, which is responsible for the management of this important regional road. The N17 is a national toll route that runs from Gauteng, through Mpumalanga, to the Swaziland border.

Pedestrian safety has been a major concern in the urban areas of Ekuhuleni and eastern Johannesburg. Several pedestrians and cyclists trying to cross the busy double-carriageway were hit by vehicles in recent years.

SANRAL’s solution was to construct three new pedestrian bridges across the freeway – in line with its commitment to provide safe road infrastructure. The new bridges were completed in August 2017. SANRAL Project Manager Tshidi Lethale said: “An important part of our work is to ensure our roads are safely engineered for all road users.”

“Pedestrians are the most vulnerable road users. That is why the safety needs and requirements of pedestrians and cyclists are considered in the planning, design and implementation of road infrastructure.”

No details are spared during the design and construction phases and once the bridges are built, they are maintained, cared for and inspected rigorously.

All the bridges have rest points for the elderly and disabled, and concrete bolards at the entrances prevent cars from driving on the surfaces. Entrances prevent cars from driving on the surfaces. Along its length, the N17 has seen many horrific fatal crashes in recent years.

SANRAL’s engineering interventions to address the safety concerns related to people crossing the freeway at a stretch that carries a lot of traffic. The new self-anchored suspension bridge has a main span of 57m, with a reinforced concrete deck suspended beneath the bridge to prevent people from making fires that could compromise safety and cause the bridge to deteriorate.

The new pedestrian bridges are welcome additions for the communities whose lives are being improved. “The bridge changed our lives,” said Sibongile Sibya, the ward committee member representing the Mkhancwa informal settlement in Springs/Brakpan area. “Before the pedestrian bridge was constructed, there were multiple deaths.”

**SAFE CROSSINGS FOR EAST RAND PEDESTRIANS**

**SAFER STOPS FOR HEAVY TRUCKS**

The N7 is a strategic national route linking the metropolitan area of Cape Town, through Namaqualand to the border with Namibia. Recent studies show major traffic growth on a stretch of road that is offering primary access to communities on the Cape West Coast.

This can be attributed to rapid economic development in areas just to the north of Cape Town, including Melkbosstrand, Atlantis and Malmesbury. SANRAL took over the N7 from the Western Cape government and initiated a study to determine its future planning.

The study identified the need for a second carriageway on the portion of the N7 between Melkbosstrand Road and Malmesbury. This road has seen many horrific fatal crashes in recent years.

The upgrading of the road is being done in three phases:

- **PHASE 1**: Melkbosstrand Road to Philadelphia Road in Atlantis. Construction of a second carriageway and two new intersections have been completed.

- **PHASE 2**: Philadelphia Road to Leliefontein Farm. The design of this section has commenced.

- **PHASE 3**: Leliefontein to Malmesbury. The project to procure engineering services for this stage as well as safety improvements to the Hopefield intersection has started.

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**THE N8 connects the Free State with its mountainous neighbour, Lesotho. At the point where it approaches the Maseru border post, the road is on a very steep downgrade. Although it carries a high volume of traffic the width of the road is limited, leading to vehicles having to park on the N8 while awaiting border clearance. This has resulted in several rear-end crashes, especially by heavy vehicles. SANRAL introduced engineering interventions to address the safety concerns raised by both the trucking industry and the many private vehicle owners who travel between South Africa and Lesotho on a regular basis. Among the interventions are:**

- A barrier-separated truck lane and staging area
- A compulsory stop within the truck lane
- Increased number of lanes on approach to the border post

The construction of the project is expected to be completed soon to meet the higher volume of traffic during the upcoming holiday seasons.
TEACHERS and parents across the country will soon have access to innovative teaching aids that will enable them to convey vital road safety messages at schools and family settings.

SANRAL is developing these educational materials based on extensive research conducted over the past five years and with the aid of experts in the fields of education, road safety and graphic design.

The resource box will be provided to schools that participate in SANRAL’s road safety education and awareness programmes, and were selected for the agency’s behavioural research project.

Elna Fourie, SANRAL’s Manager: Road Safety Education and Awareness, says the teaching material is designed and developed to support teachers, especially in rural communities, who do not have ready access to resources.

Basic road safety education is included in the curriculum in Grades 1 to 6 but it is expected of teachers to develop their own learning opportunities (lessons) that fit in with the development stages of their learners. The SANRAL material helps to fill those gaps.

Included in the resource box are colourful education aids that can assist in teaching children various aspects of basic road safety, explaining the importance of road signs, traffic lights, pedestrian zebra crossings and much more, supplemented by road safety tips and basic information on good road behaviour. It is made up of transparencies, flash cards, posters and signs and contains ideas on how teachers and learners can design and make their own material.

Teachers also receive manuals and documents that they can use in the presentation of the lessons as well as suggestions for activities that can take place in the classroom or outdoor settings. SANRAL is working closely with the Department of Basic Education, provincial and local transport authorities in the implementation of this road safety education programme.
PARENTS can play a vital role to influence safe road behaviour among children from an early age. “Children follow the example set by their elders and the behaviour they will themselves display as adults is determined at an early age,” says SANRAL’s Manager: Road Safety Education and Awareness, Elna Fourie.

The global trend in road safety education and awareness campaigns is to create partnerships between road authorities, law enforcement, civil society and communities in the broader efforts to reduce crashes and the number of fatalities. SANRAL’s own programmes are in line with the Decade of Action for Road Safety launched by the United Nations and the World Health Organization. In its objective for “safer road users”, the UN Action Plan calls for increased awareness about road safety risk factors and campaigns that can help change attitudes and opinions.

“Knowledge gives power,” says Fourie. To this end SANRAL has already built a strong partnership with the districts of the Department of Basic Education (DBE), provincial and local transport authorities as well as individual schools that are part of its ongoing research and road safety education programme.

This year will see the roll-out of specially developed teaching aids and course material which will be supported by workshops and mentoring programmes for teachers. But the aim is to reach a broader audience and include parents – and even grandparents – in the workshops that will be held in the communities around identified schools. The intention is to equip them with knowledge about the specific road safety risks associated with children – especially as pedestrians and passengers using public transport that ferry them to and from schools. Once parents are aware of the risks, they will be able to work on their own behaviour and set a good example to learners. Fourie says SANRAL’s programmes are based on a longitudinal research project that was conducted in communities located close to hazardous locations on the national road network.

This links to an ongoing evaluation of data and feedback from educators and researchers on the impact of programmes. New learning opportunities for teachers have been developed to reflect the experience gained over the past few years. The research conducted by SANRAL concluded that road safety is a transversal subject. One of the objectives is to integrate road safety awareness into the broader education curriculum – especially in the later primary and secondary stages. The education specialists are developing learning opportunities containing road safety messages that can be used in mainstream subjects such as languages, mathematics, science, geography, arts and culture.

“We want to reach a stage where all the information that is offered to learners through teachers, parents, civil society and social media lead to changed behaviour and safer road use,” says Fourie.

**CALL ON PARENTS TO SET SAFETY EXAMPLES**
BAKWENA’s commitment to road safety can be seen in various initiatives, in partnership with the North West road safety and education departments, along the N4. They vary from the unusual (fitting donkeys with ear tags) to the expected (backing scholar traffic patrols), underlining the commitment of the Bakwena Platinum Corridor Concessionaire.

In Dinokana the animal visibility project helps to keep animals away from road crossings and the N4 itself. It also helps to make animals more visible - even donkeys are fitted with retro-reflective ear tags.

Also, in the same community and in Swartnuiggrens, a scholar patrol project has been running for several years.

In Bapong the Bakwena Community Disaster Team of nine youths spent some 5 000 volunteer hours patrolling the N4 between the pedestrian bridge and the R556. In the same area, in partnership with Total, it implemented a Road Safety Cube Project in eight primary schools. Four officials from the Department of Education, two teachers, four representatives from North West Road Safety and 1 021 Grade 4 learners took part in the project, which is designed to help children understand the rules and signs of the road and how to use it safely.

THE N3 Toll Concession (N3TC) works closely with law enforcement agencies along the route and deploys significant resources to enhance overall safety. Various interventions, such as speed-over-distance monitoring, road blocks, alcohol and drug screening tests, as well as specialised training for law enforcement and emergency agencies are bearing fruit.

The training focuses on monitoring roadworthiness, checking tire conditions, impounding vehicles, policing dangerous goods, hosting specialised operations and road blocks, monitoring and fining illegal and unsafe truck parking and stopping, as well as driver-wellness testing.

Almost 2 000 drivers were caught and fined for not displaying number plates – an attempted way to transgress the law without being caught!

N3TC also helped with average speed enforcement. Statistics show that this has played a significant role in reducing speeding and reducing fatal crashes.

Better road signs and markings helped to improve reaction times for drivers, such as:

- Increased use of sharp curve chevron signs in horizontal curves
- Regular repainting of lines
- Regularly cleaning, replacing and adding road signs
- Maintaining the reflectivity of signs
- Improving the specifications and materials for road marking
- Implementing a CCTV Pilot Surveillance Project
- Providing post-crash support to victims of vehicle accidents.

There has been a considerable reduction in fatalities - 43% (196 in 2011 to 111 in 2016). The most common causes of fatal crashes are vehicles that rolled (24%), left the road (21%) and head-on collisions (17%).

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The training focuses on monitoring roadworthiness, checking tire conditions, impounding vehicles, policing dangerous goods, hosting specialised operations and road blocks, monitoring and fining illegal and unsafe truck parking and stopping, as well as driver-wellness testing.

Almost 2 000 drivers were caught and fined for not displaying number plates – an attempted way to transgress the law without being caught!

N3TC also helped with average speed enforcement. Statistics show that this has played a significant role in reducing speeding and reducing fatal crashes.

Better road signs and markings helped to improve reaction times for drivers, such as:

- Increased use of sharp curve chevron signs in horizontal curves
- Regular repainting of lines
- Regularly cleaning, replacing and adding road signs
- Maintaining the reflectivity of signs
- Improving the specifications and materials for road marking
- Implementing a CCTV Pilot Surveillance Project
- Providing post-crash support to victims of vehicle accidents.

There has been a considerable reduction in fatalities - 43% (196 in 2011 to 111 in 2016). The most common causes of fatal crashes are vehicles that rolled (24%), left the road (21%) and head-on collisions (17%).
MOST of us have experienced that critical moment on the road… that fleeting instance when you realise you have just missed becoming involved in a horrific crash. One second too soon, and you would have careened into an oncoming vehicle. A split reaction too late and you might have overturned your car when going too fast around that bend.

It is at times like this when you say to yourself WHOA! I should be taking better decisions on the road. WHOA! I should not endanger my own life or that of my precious passengers. WHOA! next time I really must be more aware.

A fresh road safety campaign launched by SANRAL wants to avert those stomach-churning, heart-thudding moments on the road by encouraging drivers to say “WHOA!” at an earlier stage while they still have full control over the situation.

Texting, checking social media and driving under the influence of alcohol or substances have caused far too many needless deaths on the country’s roads. Citizens need to change how seriously they take this negligent behaviour.

Road users are encountering numerous messages that make them aware about the potential dangers that lurk on the roads and that encourage responsible behaviour. SANRAL’s campaign is intended to recreate those WHOA! moments and prompt reaction.

Launched during the December 2016 festive season it wanted to reinforce the point that responsible road use by all motorists, passengers and pedestrians can reduce the number of crashes and save lives.

WHOA! means “stop” or “slow down.” It is understood by everyone – young and old, experienced drivers and novices – and it transcends language barriers.

Through messages like “WHOA! Don’t drink and drive,” people were urged to use alternative transport if they know they would be over-indulging or if they find themselves over the blood-alcohol level.

“WHOA! Call a cab” advises revellers during the festive period to consider the implications of their actions, to plan ahead and to make alternative travelling arrangements.

And for those who cannot bear the thought of being disconnected from social media the messages are quite obvious: “WHOA! Put that phone down buddy” and “WHOA! Don’t text and drive.”

WHOA! was launched with a series of TV and radio commercials across various stations as well as print adverts, billboards, wall murals and social media interventions. Activations were held at venues such as pubs and shishanyamas, where messaging was aimed directly at the patrons.

The campaign ran concurrently with another SANRAL road safety awareness initiative, CHEKICOAST. The idea was to extend the reach and impact of ongoing campaigns and strengthen SANRAL’s continuing efforts to combat road fatalities.

WHOA! will be carried through to other key holiday periods when road safety communication is essential.
CHEKICOAST has grown into South Africa’s most popular and influential road safety awareness programme and a runaway success on social media. The multimedia campaign is aimed at people under the age of 25 – the most vulnerable group on the country’s roads and the most likely to become victims as drivers, passengers and pedestrians.

Core road safety messages are conveyed through social media, visible communication and campaigns that are supported by local celebrities and social influencers.

Supa Strikas is a comic strip which appears regularly as a free supplement in the most widely read family magazines. Fans follow the adventures of “the world’s greatest football team” both on and off the pitch as they travel the globe and take on the world’s best.

Important road safety messages are woven into the Supa Strikas story lines which have grown into a multiplatform brand that fans can enjoy via TV, print, online and mobile devices.

The success of Supa Strikas has been phenomenal:
• Nine million young South Africans read Supa Strikas comics monthly
• The YouTube channel is attracting more than 13 million views per month
• More than 1.5 million people are following the team on Facebook

The expectation is that the popularity of Supa Strikas will grow significantly in 2018 with the introduction of both isiZulu and isiXhosa channels on YouTube.

The creative team behind Supa Strikas also works with a team of young bloggers, vloggers and local social media celebrities that are followed by young people to ensure the ChekiCoast messages are amplified through social media.

In recent months this has branched out into campaigns focusing on specific road safety issues such as a cycle safety initiative and the #iRide4Burry event, in memory of top cyclist, Burry Stander, who was killed while practicing on the road.

ChekiCoast has set itself several objectives:
• Raise awareness about road safety
• Create positive changes in behaviour on the road
• Showcase SANRAL’s role in road safety initiatives
• Create a nation of road users that are accountable for their actions
• Inspire road users towards actions that will lead to a decrease in pedestrian and road safety fatalities.

SANRAL’S commitment to use technology to make South Africa’s roads safer is increasingly being recognised by industry experts.

In mid-February 2017 SANRAL received the Award for Excellence from the Intelligent Transport Society of SA (ITSSA). The award recognises the innovation behind SANRAL’s intelligent transport system project.

The award was received on behalf of the agency by Kersen Naidoo, SANRAL’s Eastern Region ITS project manager.

The i-Transport and UATP Conference and Exhibition is a well-established event on the transport calendar. It serves as a platform for knowledge sharing and promotes the sustainable deployment of ITS projects.

Last year’s conference theme, Future of Public Transport: Go Green – Go Smart, reflected the need to improve transport efficiency, to reduce the carbon footprint of the transport sector and to encourage shifts to other modes of transport.

This theme specifically speaks to the relationship between public transport and intelligent transport systems.

While SANRAL received the ITSSA Award for Excellence for the Freeway Management System (FMS) in the Western Cape, the submission was also judged for the larger national FMS project, which extends to Gauteng and KwaZulu-Natal. These projects have had significant positive impacts on the motoring public by relaying real-time information on the flow of traffic.

“It was a great honour to receive this award on behalf of SANRAL,” Naidoo said.

“Our team of engineers can be proud of the world-class system they have developed and continue to maintain. This is a great example of how infrastructure improves the quality of life of commuters and sustains the economy of the country,” he said.