

Produced by **SANRAL**

2023

# BEYOND ROADS

## WESTERN REGION



**SANRAL**



# TRANSPORT MONTH

## ABOUT THIS PUBLICATION

This special October Transport Month publication showcases some of the work that the South African National Roads Agency SOC Ltd (SANRAL) is doing to ensure our national road network supports economic growth, helps to create jobs and continues to connect all South Africans to essential services and work opportunities.

This year, SANRAL celebrates 25 years of achievements – from its inception as the first roads agency under the democratic government to its present position as a leader in delivering world-class infrastructure.

Our story has been defined by dedication, innovation and a deep commitment to enhancing connectivity, stimulating economic growth and uplifting communities across South Africa.

Throughout this process, SANRAL is committed to transforming and opening up the transport sector to parties who may have struggled to gain meaningful access before, including women.

Our future success depends on the expansion and maintenance of our roads, prioritising road safety and ensuring that our infrastructure can accommodate the demands of a changing world.

With 25 years of engineering excellence under our belt, we will continue to build a brighter future for South Africa – one road at a time.



**REGINALD DEMANA**  
SANRAL CEO



With an estimated value of **R450 BILLION**, SANRAL's road network is considered one of South Africa's **largest infrastructural assets**.



Despite comprising just **4%** of South African roads, SANRAL's network handles **38% of annual road traffic** and **70% of freight**.



Did you know

## WESTERN REGION FAST FACTS

**Western Region Office:** 021 957 4600  
**Traffic Management Centre:** 021 812 4442/8

From the cities, mountains and dorpies of the Western Cape to the arid landscapes and red dunes of the Northern Cape, SANRAL's Western Region spans some of the country's most scenic routes.

Throughout this year, SANRAL has forged ahead with a range of projects designed to support the region's economic and social development, from large, innovative construction projects to routine road maintenance and community upliftment.

### SANRAL network length in the Western Region

Northern Cape 4,409km

Western Cape 1,465km

### Project highlights

In 2022/23, SANRAL carried out various projects in the Western Region, involving 380.3km of roadway.

### Key projects in 2022/23

VALUE	PROJECTS
<b>R31 million</b>	Slope stabilisation on the N2 Sir Lowry's Pass, City of Cape Town Metropolitan Municipality, Western Cape
<b>R160 million</b>	Thembalethu Bridge upgrade George, Western Cape
<b>R47 million</b>	Intersection improvements between Olifantshoek and Kathu on National Route 14, Sections 6 and 7
<b>R700 million</b>	N1 upgrade between Laingsburg and Matjiesfontein

SANRAL has a proud history of safely operating the Huguenot Tunnel for over **35 years**. In that time, the tunnel has served more than **110 million vehicles**.

Did you know



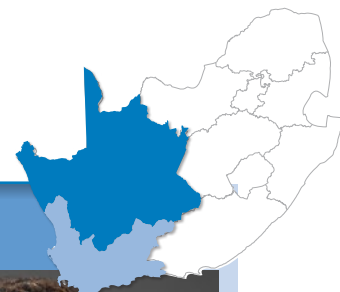
### Message from RANDALL CABLE Western Region Manager

With Transport Month upon us, we recognise the pivotal role of efficient mobility as a catalyst for growth, connectivity and shared progress within the Western Region and beyond.

In the Northern Cape, the N14 intersections in Kathu are nearing completion, promising improved safety and significant economic impact. In the Western Cape, the R600 million upgrade of the N7 between Malmesbury and Moorreesburg is making steady progress, with significant opportunities for local labour and targeted enterprises. The upgrade of the Thembalethu Interchange in George, which is a partnership between SANRAL and the George Municipality, is also taking shape.

Embracing innovation, the region is pursuing safety advancements through technologies such as intelligent road studs and distracted driver technology. Pilot projects are on the horizon to test their effectiveness.

We are optimistic that the 84 new projects awarded in the region in 2022/23 will improve the quality of the road network and the lives of local communities.



## N1 UPGRADE BETWEEN LAINGSBURG AND MATJIESFONTEIN



**R700 million**  
value



**Late 2025**  
estimated  
completion

This project is set to drive economic recovery in the region and make a significant contribution to the economy of the Central Karoo. The wheels of economic recovery will begin to turn in the area as local labour will largely be sourced from Matjiesfontein.

The scope of work entails construction of a new carriageway so that the N1 becomes a four-lane, divided dual-carriageway road. Opportunities for project participation include vegetation clearing, construction of gravel farm access roads, asphalt surfacing, reconstructing two existing bridge structures, and reconstructing seven major drainage structures, as well as new bridges and culverts.



**R220 million**  
prioritised for SMME  
subcontractors

To maintain uninterrupted two-way traffic flow, the new westbound carriageway will be constructed while road users continue to travel on the existing road. After completion, traffic will shift to the new carriageway, enabling reconstruction of the eastbound one.



**Did you know**



**SANRAL'S FLAGSHIP PROJECT:** As SANRAL celebrates 25 years of roads excellence this year, we're highlighting a special regional project that showcases our dedication to innovative infrastructure, community empowerment and sustainable progress.



## HUGUENOT TUNNEL



**25,000**  
number of vehicles  
passing through  
during peak days



**3.9km**  
tunnel distance  
(Africa's longest  
road tunnel!)

One of the most strategic assets of the national road network is the N1 Huguenot Tunnel through the Du Toitskloof Mountains, located approximately 80km from Cape Town. This is a major transportation link between the Western Cape and the interior of South Africa.

The tunnel requires 24/7 ventilation and vehicle monitoring. The R333 million operations and maintenance contract offers R101 million in subcontracting opportunities for targeted enterprises.

In addition to major upgrades which include new lighting and fire detection further upgrades to the south bore are being planned.

- Sensors for air quality, traffic conditions and lighting conditions
- Wind turbines next to the tunnel entrances to reduce energy demand
- Rooftop solar opportunities to be maximised
- Intelligent jet fan ventilation system to replace single fans at each end
- Additional high-level reservoir to provide water for fire emergencies

Plans are in design for a **second tunnel** (the North Bore), creating two separate single-directional carriageways. This will cost an estimated **R4 billion** and will generate significant economic opportunities.



**Did you know**

## BEYOND INFRASTRUCTURE:

### TRANSFORMATION IN ACTION

At the heart of SANRAL's mission lies our steadfast commitment to transformation, propelling South Africa's road infrastructure towards an inclusive and dynamic future.

## Q&A: EXPLORING TRANSFORMATION

### WHAT DOES TRANSFORMATION MEAN FOR SANRAL?

The landscape of South Africa's road construction industry has been shaped predominantly by White-owned companies, particularly in the supervisory and technical spheres. For us, transformation means creating a much more inclusive and representative sector, where Black individuals – the majority of the population – have the opportunity to step into positions of influence. The potential exists, but it must be nurtured and mentored.

### HOW DOES SANRAL PRACTICALLY DO THIS?

We work within South Africa's B-BBEE legislation and ensure that our tender requirements stipulate specific percentages of Black representation in designated roles. More importantly, our strategy hinges on skills development. We actively encourage companies to support the development of Black individuals, emphasising practical exposure to the industry.

Each SANRAL project also mandates that a minimum percentage of the work be performed by smaller contractors with lower Construction Industry Development Board (CIDB) gradings. This allows emerging players to gain experience and ensures that established contractors take on the role of mentors.

### IS TRANSFORMATION MAKING ENOUGH PROGRESS?

Transformation is not an event; it is an ongoing journey that spans generations. It takes years of exposure for new entrants to rise through the CIDB grade levels and build their presence within the industry. SANRAL's true impact may not be evident for some time – but each step forward represents important progress.

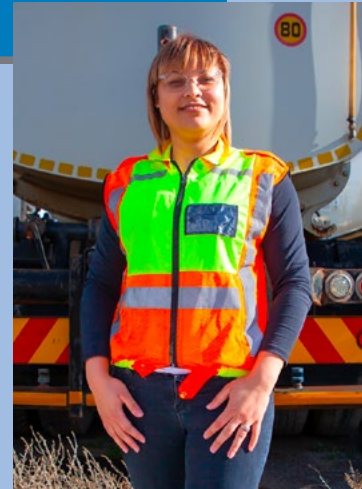
SANRAL has a well-structured approach to foster collaboration on our projects.

**Our 14-Point Plan is our roadmap for working closely with communities and contractors.** It provides for the creation of Project Liaison Committees that allow us to understand community needs and actively contribute to local skills development and community improvement.

Did you know



## SMME spotlight



### GAYNOR PIETERS

*Procos (Pty) Ltd*

Procos (Pty) Ltd is carving out a niche on routine road maintenance projects in the Western Region. While the work has its challenges, it's also infused with excitement and continuous learning. The team is not alone – they benefit from invaluable mentorship from the main contractor, which aligns with SANRAL's vision for transferring knowledge and expertise.

Dispelling the notion that the industry remains male-dominated, Gaynor Pieters emphasises, "Don't believe the stigma. Things have changed – we as women can also lead."



**88%**  
of 2022/23 contracts  
awarded to Black-  
owned SMMEs



**94%**  
of 2022/23 work  
value went to Black-  
owned SMMEs

## BEYOND SAFEGUARDING:

### FOSTERING A ROAD SAFETY CULTURE



Whether it's through infrastructure improvements or research to enhance road safety, SANRAL is committed to going above and beyond to ensure safer journeys for everyone.

### SAFER ROADS THROUGH RESEARCH

The SANRAL Road Safety Research Programme aims to gather essential insights into road user behaviour, attitudes toward safety measures and regional challenges that affect road safety. This effort guides us in developing targeted solutions.

One key research project is allowing SANRAL to test out an empowering data-collection method known as 'Photovoice'.

**This research methodology puts cameras into the hands of research participants and allows them to document road safety issues from their own point of view.**

A recent Photovoice workshop held in Libode, Eastern Cape, shed light on risks such as stray animals, potholes and insufficient road signs, underlining the critical importance of addressing these challenges for enhanced safety.

Based on the outcomes of the research, SANRAL will review the content, and where supported and practical, will then consider how the findings can be further developed and implemented.

SANRAL's other research efforts include assessing the risks faced by young children on their school routes in areas like Ermelo and De Doorns, as well as projects evaluating infrastructure improvements that encourage responsible road user behaviour.



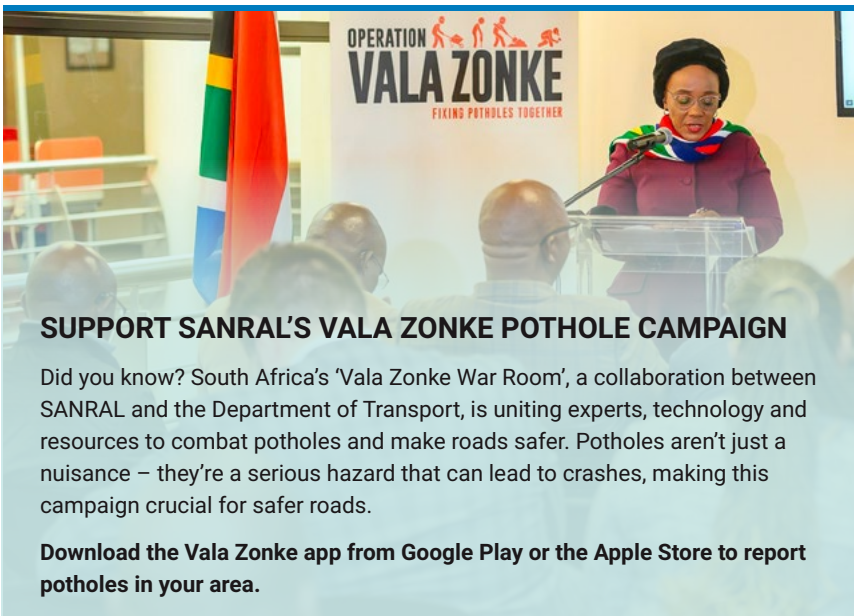
### SWIFT N7 REPAIRS ENSURE SAFE ACCESS

The Northern Cape has experienced some severe weather conditions this year, including persistent flooding across the province. At the height of winter, a 4km stretch of the N7, an area known as Vyf Myl Poort just south of the border post, sustained extensive flood damage, resulting in its complete closure.

Following an engineering assessment of the damage, interim repairs were promptly initiated, and access to the road was safely restored while work was in progress. Due to the extent of the damage, some sections accommodated single-lane traffic, managed by a stop-and-go system.

As an added safety measure, an escort vehicle guided traffic through the clearly marked construction zones.

"We have a full appreciation for the economic importance of the N7, and as such endeavoured to complete the road repairs as quickly as possible, while maintaining safe access to all vehicle classes through the construction area," said Randall Cable, SANRAL's Western Region Manager.



### SUPPORT SANRAL'S VALA ZONKE POTHOLE CAMPAIGN

Did you know? South Africa's 'Vala Zonke War Room', a collaboration between SANRAL and the Department of Transport, is uniting experts, technology and resources to combat potholes and make roads safer. Potholes aren't just a nuisance – they're a serious hazard that can lead to crashes, making this campaign crucial for safer roads.

**Download the Vala Zonke app from Google Play or the Apple Store to report potholes in your area.**

## BEYOND CONVENTIONAL:

### THE INNOVATIONS SHAPING TOMORROW



By pushing the boundaries of technology and innovation, SANRAL is leading the way in shaping a better future for mobility.

#### ENHANCING EVERYDAY LIFE WITH SMART MOBILITY

'Smart mobility' is an exciting concept that marries cutting-edge technology with our existing road infrastructure, resulting in enhanced efficiency, safety and convenience.

Siveshni Pillay, SANRAL's Project Manager for Planning, Toll and Transportation, captures the essence of the concept: "Smart mobility is taking technology and applying it to things we do every day to make our lives better."

**One of SANRAL's flagship 'smart mobility' projects, the Freeway Management System (FMS), showcases the Agency's commitment to smarter solutions.**

Through round-the-clock monitoring using technologies like CCTV and variable message signs, SANRAL ensures optimal traffic flow, minimising freeway congestion and enhancing safety.

Active in KwaZulu-Natal, Gauteng, Western Cape and soon Gqeberha, the FMS collaborates seamlessly with law enforcement and emergency services, allowing for swift response to incidents. In Gauteng, the Agency provides an additional service in the form of the SANRAL-owned On-Road Services (ORS), a dedicated team equipped with towing and emergency response vehicles.

SANRAL's account-based ticketing (ABT) project is another 'smart mobility' initiative, offering an exciting glimpse into the future of transportation. Once rolled out, ABT will streamline the management of public transport fares, allowing commuters to access various modes of transportation across the entire country using a single, unified ticket.



Integrating various forms of transport into a single mobility service (Mobility as a Service or MaaS) empowers road users and leads to a better travel experience. "SANRAL imagines a future where road users have access to real-time data to guide them on the most efficient way to travel to their destination," notes Pillay.

By embracing change and the possibilities of technology, SANRAL is paving the way for a future where seamless mobility is a reality for all.



#### REVOLUTIONISING ROAD REPAIR WITH NANOTECHNOLOGY

Amid the challenges and demands of maintaining road infrastructure, an emerging technology offers an improved approach to road repair.

The power of nanotechnology lies in its ability to reinforce road surfaces more effectively and economically. By minimising water seepage and offering enhanced durability, it holds great potential for reducing costs and maintenance needs.

The Department of Transport (DoT) estimates the country's road repair costs at over R197 billion, so implementing nanotechnology could help to ease the financial strain on roads authorities dealing with limited budgets.

SANRAL is taking the lead in embracing the technology, approving seven major projects with a total length of 180km for implementation during the 2023/24 financial year.

According to Transport Minister Sindisiwe Chikunga, nanotechnology has the potential to **reduce road surfacing costs by 50%.**



Did you know

## BEYOND THE CLASSROOM:

### EDUCATION FOR LASTING CHANGE

SANRAL is proud of its long-term investment in education and the support given to hundreds of young people over the years through its scholarships and bursaries.

#### SANRAL SCHOLARSHIPS 2022/23



**R7.2 million**  
total expenditure



**260**  
scholarships awarded

Scholarships are available to all high school learners (Grade 8 to Grade 12), irrespective of subject choice.

- Awards are based on academic merit and financial need.
- Applicants must be South African citizens.
- Minimum overall aggregate: 60%



#### IMPACTING LIVES

Isabella Smithdorf, 17, a learner at Fairmont High School in Cape Town, received a scholarship from SANRAL for her matric year.

"When I heard of the SANRAL scholarship programme, I saw it as a great opportunity to assist my parents financially. The scholarship covers my uniform, my books and school fees. What SANRAL is doing is something that can't be replaced."

#### SANRAL BURSARIES 2022/23



**R11.6 million**  
total expenditure



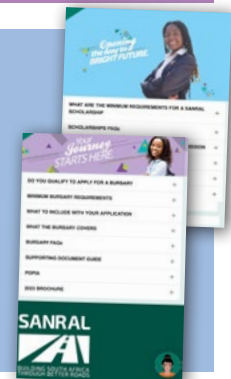
**154**  
bursaries awarded

To qualify for a bursary, you must be a South African citizen under the age of 35.

- You must meet the academic requirements for your chosen course.
- Stipulated academic average:
  - For students at tertiary institutions: 60% overall average
  - For matriculants: 70% overall average



Find out more about our bursaries and scholarships at [www.nra.co.za](http://www.nra.co.za).



SANRAL's Technical Excellence Academy (TEA) aims to provide a **comprehensive training programme for engineers** to become registered professionals with the Engineering Council of South Africa through a five-year training programme.

Did you know



**121**  
engineers have completed the programme



**53**  
candidate engineers (including 18 women) are in training