

BY THE WAY



Creating wealth through infrastructure

ISSUE 06

November/December 2015

Hopes for a safer FESTIVE SEASON

The festive season is generally a happy time, but it comes with its own challenges, as holidaymakers hit the road and unusually high traffic volumes are experienced around the country. Nonetheless, our mandate as SANRAL is to ensure that our roads are always ready to accommodate this kind of traffic and ensure that motorists and other road users have a pleasant experience. We do this by ensuring that our roads are built and maintained to world-class standards.

"We must intensify our collective efforts to make our roads safer."

Dipuo Peters
Transport Minister

However, road users also have a huge responsibility to work with SANRAL and other agencies to ensure their own safety while travelling. Road safety is a collective responsibility – not only the job of law enforcement officials or engineers. Roads are shared spaces for those in cars and trucks as well as pedestrians and cyclists.

Speaking at the recent annual Road Safety Summit in Cape Town, Transport Minister Dipuo Peters pointed out that South Africa, with about 32 deaths per 100 000

population per year, features high on the list of countries in terms of road traffic-related deaths.

"We must intensify our collective efforts to make our roads safer."

All road users must note that the following actions have been found to be among the most common causes of crashes:

- Speeds that are too high for particular conditions, such as inclement weather and darkness;
- Dangerous, reckless and/or inconsiderate driving, particularly barrier line infringements;
- Abuse of alcohol by drivers and pedestrians;
- Fatigue, particularly for the drivers of public transport;
- Unroadworthy vehicles, worn or damaged tyres and defective brakes, and
- Pedestrian negligence such as jaywalking, crossing over freeways, a lack of visibility at night and negotiating roads and verges after drinking.

Continued on page 2...



4

Connecting two communities

8

A bus station like no other

15

Road safety must be top priority

21

The sun leads the way for SANRAL

...continued from page 1

Hopes for a safer festive season

A failure to wear seatbelts, whilst not a direct contributor to crashes, has also been found to have been a major factor with regard to fatal or serious injuries.

We urge our readers to heed the following advice:

- Refrain from dangerous driving such as excessive speeding, reckless overtaking and all road violations;
- Wear a safety belt and ensure that children are properly restrained;
- Avoid overloading, especially by public transport operators like taxis, buses and trucks;
- Never drive under the influence of alcohol or drugs;
- Ensure any vehicle you drive is roadworthy;
- Behave responsibly as a pedestrian by not drinking and walking, jaywalking or crossing over freeways;
- Avoiding unnecessary fatigue;
- Never text and drive, or even text and walk.

SANRAL will continue to contribute towards road safety by ensuring that all the roads under its control are safe and reliable. We do this through a number of road network modernisation projects that we have planned throughout South Africa. This, together with community education, awareness campaigns, changed behaviour by road users and road safety infrastructure projects, will go a long way towards ensuring that our roads are among the safest in the world.



Never text and drive.



Ensure that children are properly restrained.



Avoid overloading.

Tolls are an old way



The history of tolling in South Africa goes back a long way – as far back as the 18th century.

And even then the funds raised in this manner were used to build, repair and maintain roads - of which there were not too many during the early colonisation of the Cape by the Dutch.

Then as now, the concept of tolling was not universally popular, often because the populace simply did not and does not understand why such a funding route has to be taken. But communication on tolling in South Africa has improved significantly in the recent past, as was acknowledged in Parliament.

“The communication on e-tolls is superb. When other entities come we note that their communication around their work is usually found wanting.”

Dikeledi Magadzi

Chairwoman: Transport Portfolio Committee

Different from the approach in many other countries where private initiative stepped in to the breach, tolls were erected by the government – initially by the governor of the Cape and much later in the 19th century in the then Natal and Free State.

The best known of the tolls were in the old Transvaal in the 1890s. Its origins were partly due to an attempt to control the trade traffic coming in from Natal and the Cape and to use the income to improve the rather rudimentary roads and bridges in the then independent Transvaal.

But it had a chequered history. There was so much opposition – from the colonial governments, local traders

and ordinary people – that the first tolls only lasted from November 1891 to August 1892.

Tolling commenced again at the end of October 1894 but was finally scrapped in December 1896.

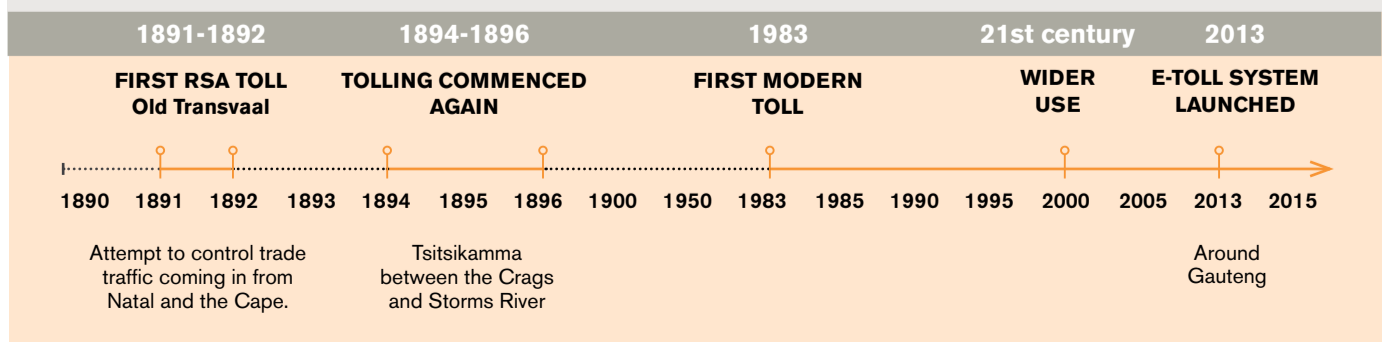
The first modern toll was established in the Tsitsikamma between the Craggs and Storms River in 1983. Construction of the road had started in 1980 funded by the then National Road Fund (NRF) but because of the latter’s financial difficulties, experienced from the late 70s, it was decided to charge a toll for the use of the road in order to raise revenue to repay the NRF.

In the 21st century tolls came into much more wider use - not only on national roads but also at Chapmans Peak in Cape Town and the Huguenot Tunnel on the N1 northwards of the Mother City.

Tolls are now mostly on national roads, constituting just over 14 percent of the network. Road users typically get to a toll plaza, stop and pay using cash or a credit card. This is the manual way of paying tolls and is the case with everything manual, it can be time-consuming. There is another more modern and efficient method called e-tolling. With this method, the road user does not stop at a toll point but travels at normal highway speed and the transaction takes place electronically. That is the method that operates in Gauteng.

Tolls accelerate the availability of funding because capital can be accessed from the markets instead of waiting public coffers to get filled first – which can be a long process in itself. Also, there is no guarantee that once the money is available in the fiscus it will necessarily be used for roads. There could be other priorities. Thus, tolling makes it possible for roads to be available sooner and means that repairs and maintenance on these roads will be funded by the tolls.

As the pressure on the national budget to increase social spending grows, so will tolls as a funding model also have to grow.



Asphalt way to go for roads

Pietermaritzburg-based project engineer-in-training Sasheen Rajkumar is paving the road to success after winning the award for the best paper presented by a young professional at the 11th Conference on Asphalt Pavements for Southern Africa (CAPSA 2015) held at Sun City recently.



Sasheen Rajkumar - SANRAL employee studying for a Master of Science degree part-time through the University of KwaZulu-Natal (UKZN).

Rajkumar, 25, who is employed at SANRAL's Eastern Region and is studying for a Master of Science degree part-time through the University of KwaZulu-Natal (UKZN) is still struggling to come to terms with the unexpected accolade he received at the prestigious conference.

The CAPSA 2015 conference hosted by the Southern African Bitumen Association (Sabita) focused on, among other matters, optimising structural design in new construction and rehabilitation; the design of asphalt layers and spray seals to ensure efficient application and adequate performance; and construction, practice and materials assessment for a high level of efficiency.

Rajkumar, who always enjoyed mathematics and science at Raisethorpe Secondary School, studied civil engineering at UKZN, thanks to a SANRAL bursary, and graduated with a BSc in Engineering in 2012.

In 2013 he registered as a full-time post-graduate student for the MSc in Engineering with a bursary from SANRAL.

He approached SANRAL's Eastern Region office and asked if there was a potential topic in pavement materials that the agency would like to be researched. The materials specialist, Dennis Rossmann pointed him towards the "green" roads that were being built by recycling the old milled asphalt pavement.

"I had spent a year at university gathering technical literature on the procedures of recycling reclaimed asphalt (RA) and compared international practice with local methods.

"At the time SANRAL had allowed up to 25% of RA to be used as a material component with new materials (new aggregate and bitumen) in hot mix asphalt.

"The incorporation of RA into a new mix results in a reduction of new materials - which in turn means cost savings as well as a benefit to the environment," said Rajkumar.

"I conducted lab experiments that simulated mixing at the hot mix asphalt plant using high proportions of RA mixed with new materials.

"I found that with up to 40% RA, all of the RA bitumen blended with the new bitumen whereas at 60% RA, only some of the RA and new bitumen blended.

"I compiled a technical paper of my findings and submitted this to for CAPSA 2015."

Rajkumar said he was grateful to SANRAL for all the opportunities he had been afforded and to all those people who had imparted valuable knowledge to him.

"...it will be my duty to be actively involved in the continual development of new roads and road infrastructure..."

Sasheen Rajkumar

Award winner - best paper presented by a young professional at the 11th Conference on Asphalt Pavements Southern Africa (CAPSA 2015)

"As a civil engineer and an employee of SANRAL, it will be my duty to be actively involved in the continual development of new roads and road infrastructure, as well as the maintenance of existing roads in order to meet ever growing traffic demands."

He is currently busy completing his Master's thesis which is going to be an extension of the CAPSA paper.

"It was a great privilege and honour to not only attend the prestigious event but present two papers that I had submitted to CAPSA."

Sasheen Rajkumar

Saied Solomons, CEO of Sabita, said he was thrilled that Rajkumar had won the award. He said it was the unanimous decision of the technical committee that he should receive the honour.

"From the innovative content of the paper that he presented to the youthful act of taking a selfie with his mobile phone after receiving the award - it all went down well with the delegates attending the conference," said Solomons.

SANRAL ENGINEERING AWARDS OVER THE YEARS

- 2015** Fulton award
SAICE award – Umgeni Interchange
Transportation category:
Candella Road Project
- 2014** The International Top Employers Institute,
Best Employer award.
- 2009** A SAICE award.
- 2008** M&G Greening the Future Award, an
International Footbridge Award, three
SAICE awards, Consulting Engineers
South Africa Visionary Client of the Year
Award and the Steel Awards.
- 2007** A Fulton award, a Concrete Society of
Southern Africa commendation, the Steel
Awards, the SAACE Glenrand MIB
Excellence Awards and two SAICE awards.
- 2006** Three SAICE awards.
- 2005** The Steel Awards and two SAICE awards.

Connecting two COMMUNITIES

Connecting two communities, increasing pedestrian safety, building the local economy, making travel easier for tourists. These are the benefits of the upgrading of the Pacaltsdorp Interchange.



This comprises the widening of the existing interchange bridge and the two-lane York and Beach Roads to convert it into a dual carriageway four-lane road with turning lanes at both ramp terminals at the interchange, the construction of sidewalks and a traffic median island, rehabilitation of existing asphalt surfacing and relocation of traffic signals, provision of street lighting and replacement of road markings and road signs.

special features and curved lines, but the end-result made the efforts of the construction team more than worthwhile," says Renaldo Lorio, project manager.

One of the major benefits of the new pedestrian bridge is that it provides a safe point for pedestrians to cross the N2. Residents of Pacaltsdorp also won't need to pay for transport to get them to work – they can now safely cross the N2.

A new paved walkway with lighting is provided on each approach to the pedestrian bridge for approximately 1 500m along the N2. Lynn Jansen, a resident of Pacaltsdorp, said she and the community are excited about the new pedestrian bridge. *"It is great to have a safe way to cross the N2."*

"With the approaching holidays, when many South Africans will be travelling, the direct user benefits of this necessary upgrade are reduced travel times and fuel consumption, increased reliability, and increased safety for motorists," said Kobus van der Walt, SANRAL Regional Manager.

"Infrastructure is key to unlock job opportunities and thus for economic growth. The N2 Pacaltsdorp bridge was opened for motorists and it is clear that this investment in the infrastructure of the city of George already has a positive impact."

Alister Twigg added that the pedestrian bridge now links Pacaltsdorp with the industrial area on the other side of the N2 where they work. *"It is a very, very good thing."*

"SANRAL, in partnership with the provincial government and George Municipality, have uplifted the community, not only creating on-site work opportunities amongst SMMEs but also providing greater security and safety for residents in the area."

Local labour was used and training was provided in steel fixing, scaffolding, application of basic concrete skills, laying of kerbs and channels and flagmen skills. Non-accredited training in the application of cable stressing was given to five workers by the company which undertook the stressing of the bridge deck.

"The pedestrian bridge connects the new residential area south of the N2 which with the George industrial/commercial area on the northern side of the N2 greatly improves safe access to work opportunities," Van der Walt added.

Supervisory training was given to one subcontractor and three workers of the main contractor. A young engineer-in-training seconded to the site by George Municipality, attended a bridge structures course in Cape Town.

"The construction of the pedestrian bridge – of which the design resembles a seagull in flight – contains

Charles Standers
Executive Mayor

YouTube <https://youtu.be/Soa6i2xf-98>



The pedestrian bridge resembles a seagull in flight.



Lynn Jansen
Resident of Pacaltsdorp



Local labour was used in the laying of kerbs.

More traffic, but also more safety

Increasing traffic capacity and improving safety along the important national route which runs from Cape Town to the Namibian border – the N7 – will result from major upgrades in and around Malmesbury.

Steph Bredenhann, Project Manager, says the project comprises the construction of a new carriageway and the upgrading of the existing carriageway of the N7 over a length of approximately 4km, between Abbotsdale and the Darling Interchange at Malmesbury, and the resurfacing of the existing dual carriageway section through Malmesbury of approximately 3km, between the Darling and Voortrekker Interchanges.

Due to the technical and environmental complexity of the project, it was decided to divide it into three stages.

Stage 1 comprises the upgrading of the Darling Interchange in Malmesbury, including the construction of a double carriageway towards Abbotsdale.

Stage 2 comprises the building of a double carriageway from the Voortrekker Road Interchange to the Hopefield Intersection and the construction of a new interchange where the N7 intersects with the road to Hopefield.

Stage 3 comprises the construction of a double carriageway from Leliefontein to Abbotsdale including interchanges at Tierfontein road and Abbotsdale.

Two towns now closer together



Citrusdal and Cederberg in the Western Cape are now closer together, or at least travelling time between them has been reduced. And travel will be safer as a result of SANRAL investing R450 million in improvements on the linking road.

Derek Wilson, who is overseeing the project, says the section between the two towns carries more than 3 000 vehicles per day of which 20% are heavy vehicles transporting goods between South Africa and Namibia.

"The improvement of this part of the N7, which was originally constructed around 1957, was long overdue due because of the increased volume of traffic and poor condition of the road surface," said Wilson.

The scope of the work includes widening the road from 7.4 metres to 12.4 metres and the provision of climbing lanes at various points along this very hilly route to provide safe passing opportunities on steep sections.

"During construction in 2013 we experienced some abnormal weather conditions which caused cracks developing in the cuttings which then resulted in the cutting to slip. A small portion of the road has been realigned away from the cuttings, which resulted in the construction of a retaining wall."

Wilson says another challenge for the contractors and SANRAL is to adhere to all environmental laws and regulations. For instance, they needed to identify and protect all endangered plant species along the route.

The contractor must also adhere to all environmental regulations regarding fuel and bitumen spills on the construction sites and do clean-ups where necessary.

The road construction has had a positive impact on the communities along the N7.

Skills transfers to sub-contractors is an important part of the investment in the development of SMMEs. Formal courses presented to the SMMEs included tendering and pricing. Also employed and trained were tradesmen from local towns such as carpenters, truck drivers and machine operators.

Shops in surrounding towns such as Citrusdal also benefitted from the construction as they got increased business from contractors and sub-contractors on the improvement project.



Bredenhann points out that pedestrian activity along the N7 is a major concern and this should be alleviated with the provision of a pedestrian walkway along the Old Malmesbury-Cape Town Road provided as part of an upgrading by the provincial government, and the provision of pedestrian and vehicular underpasses in Malmesbury.

A new bridge underpass structure will provide safe pedestrian and vehicle crossing access under the N7 at two locations south of the Darling Interchange in Malmesbury - between the Saamstaan / Linge Lethu residential area and the Schoonspruit industrial area. This will include a section of approximately 400m of new urban road through the N7 underpass, including

new intersections on Alfa Street to the northwest and Nywerheidsingel to the southeast.

The upgrading of the existing Darling Road Interchange includes the lengthening and widening of the existing on- and off-ramps, and the provision of a new northbound off-ramp to head west on Darling Road, which includes three bridge structures. These are a new northbound off-ramp bridge over Darling / Bokomo Road, a new southbound off-ramp bridge over the Platteklip River; and the widening of the N7 northbound carriageway bridge over the River.

Extensive road works at the Darling Interchange, financed by SANRAL (50%) and the Swartland Municipality

(50%, of which the provincial government contributes 80% in subsidy), is included in this contract, which entails the construction of a dual carriageway (Darling/ Bokomo Road) under the N7 between the east side of the Platteklip River bridge and the Silverboom Street intersection to the west - a total length of approximately 550m.

YouTube https://youtu.be/9ZbUlnwe4_4



Following Distance?



Seatbelts?



Stay Alert!



	BakwenaN1N4	0800 BAKWENA
	BakwenaN1N4	0800 2259362
www.bakwena.co.za		

MAKING YOUR JOURNEY BETTER AND SAFER

Keeping you informed...

Plan your journey in advance to **avoid the peak periods**

- On the **N1 Northbound and N4 Westbound** peak periods can be expected from **12 noon to 8pm** on the **11th, 15th, 16th, 18th & 24th of December 2015**
- On the **N1 Southbound and N4 Eastbound** peak periods can be expected from **12 noon to 8pm** on the **3rd & 10th of January 2016**

Keeping you safe...

- Bakwena has once again entered into an initiative with Imperial I-Pledge and Europcar for four additional route patrol vehicles to assist with route surveillance & road users who require assistance along our route during this busy period. These additional vehicles are equipped with a basic first aid kit, tool kit, water & jerry cans etc. This partnership with Imperial and Europcar has lead to a drop in incidents along our route over the past three years.

Keeping you moving...

- During peak periods all lanes at our toll plazas are open and in full operation

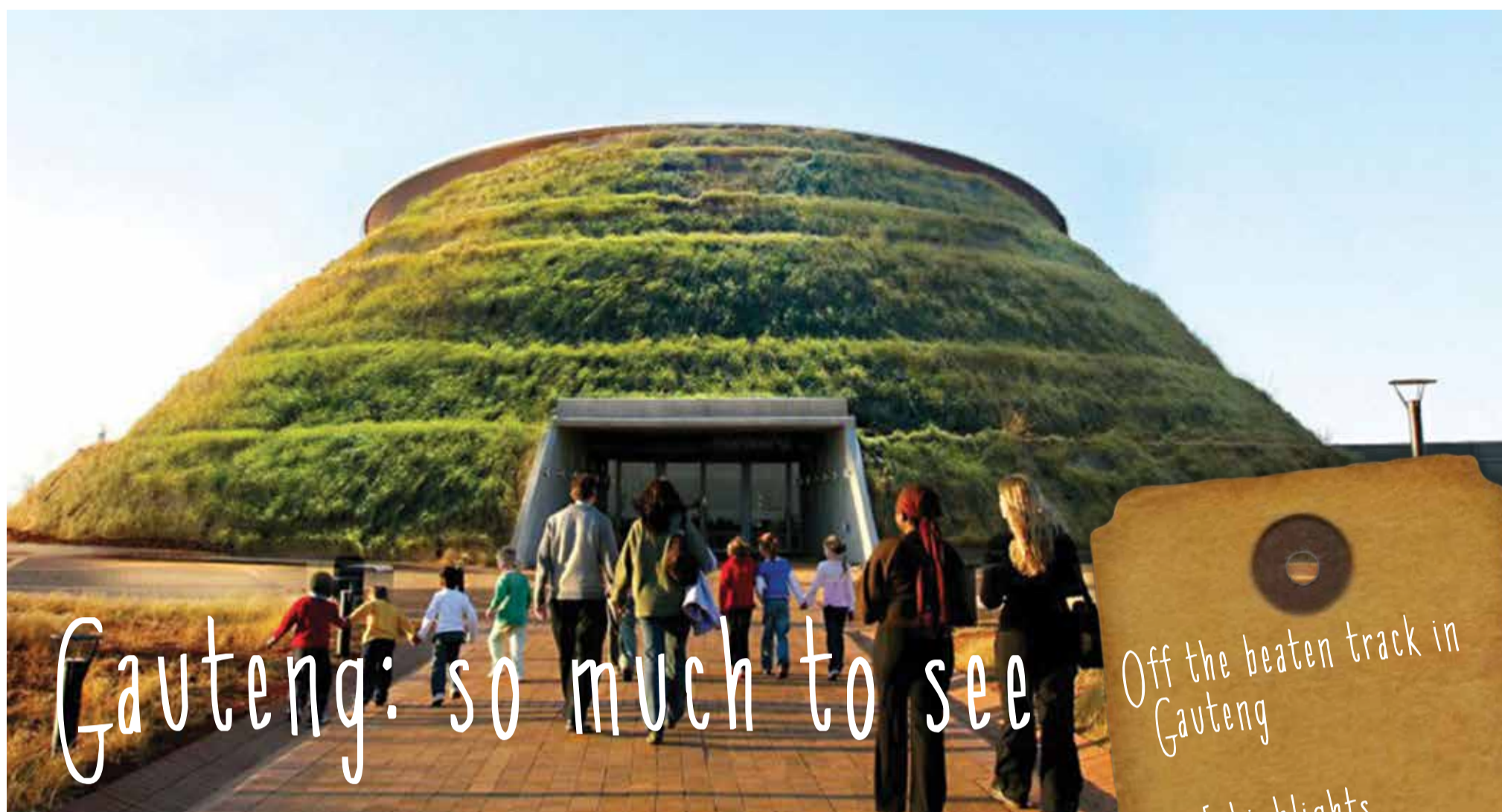
ROAD SAFETY INFORMATION THAT COULD SAVE YOUR LIFE!

The Blue marker boards are situated on the N1N4 toll road in 200m intervals to assist motorists in distress with identifying their position when they need help.

The board depicts which national road you are on (**N1**), in what section (**21**) and the kilometre distance (**39,0**)



Keeping you **informed...**
 Keeping you **safe...**
 Keeping you **moving...**



Off the beaten track in Gauteng

top 5 highlights

1. Cradle of Humankind
2. Constitutional Hill
3. Newtown & Maboneng
4. Soweto
5. Freedom Park & Voortrekker Monument



Driving through South Africa's smallest province, Gauteng, is easy because of the quality of the roads. There is much to do, and the offering covers a wide spectrum, making it difficult to decide what to include in a visit.

It is highly urbanised and produces more than a quarter of the county's gross domestic product and is one of the biggest economies in the whole of Africa. It contains the country's largest city, Johannesburg, and its administrative capital, Pretoria, with a number of large industrial areas.

Gauteng's estimated population in 2015 is 13.2 million making it the densest region in the country, almost as dense as the number and kinds of tourist attractions - national monuments depicting the past and the present, cultural villages, game parks, ultra-modern shopping centres. And so much more, that finding a single place to visit is difficult - some of the top places are thus grouped together below.

Right at the top is a local and international favourite - the Cradle of Humankind. It gives us a window into mankind's past when our earliest ancestors were evolving. The site is made up of a strip of a dozen dolomitic limestone caves containing the fossilised remains of ancient forms of animals, and very important, hominids - of which some 900 examples have been found.

The most recent find is that of Homo Naledi, which was an international sensation. It seemingly is a new species and a human relative.

Nearby is Johannesburg where one can achieve a lot in little time - visiting the iconic Constitutional Hill, which houses one of the most important institutions in the country, the Constitutional Court. Its symbolism is important - it is situated in the Old Fort where political prisoners were kept.

From there one crosses the visually appealing Mandela Bridge to get to Newtown which is an important part of the city's inner-renewal project with the Market Theatre, Kippies jazz club, restaurants and so much more. Nearby is Maboneng, a pioneering example of how an urban way of life can be defined - the development of an integrated, mixed-use community where people play, live and work.

The next set of sites is in Soweto, heart of the struggle against apartheid. But on one's way there, a visit to the apartheid museum situated next to Gold Reef City will give

one a window into apartheid and the 20th century history of South Africa. In Soweto, go to the Hector Pieterse Memorial Site which commemorates the student uprisings of 1976 during which he, only a schoolboy aged about 13, was shot.

Nearby is Vilakazi Street - well worth visiting as it houses the homes of two Nobel Peace prize winners - Nelson Mandela and Desmond Tutu.

Then on to Pretoria, to see the Voortrekker Monument, which captures the history of the migration of Afrikaners from the Cape to the northern parts of the country. Right opposite is Freedom Park, which focuses on the more recent history of the struggle against apartheid.

For something different, go to the nearby Willem Pretorius Agricultural Museum which preserves the country's agricultural history through its development from the Stone Age until just after the Second World War.

Gauteng - so much to do, so little time in which to do it.

A bus station like no other

Historically important buildings that connect the early days of Pretoria with the vibrant struggle period of the 1950s and 1960s have been used as inspiration in the design of modern bus stations that will facilitate the movement of passengers into the urban core.

The A Re Yeng bus rapid transit system project was started by the City of Tshwane in 2008. SANRAL was appointed to manage the implementation of a project that involves the phased construction of more than 80km of bus lanes and some 50 TRT stations.

In terms of an amended agreement SANRAL remained responsible for the design and construction of the bus stations along the 1A and 2A lines that connect the inner city with Mamelodi through the eastern suburbs of Tshwane and Soshanguve, explains the Project Manager, Hannes van der Merwe.

A competition for the design of the bus stations along the route was held and the City eventually approved the proposals submitted by two prominent firms of architects, Mashabane Rose and Mathews & Associates. The two selected station types are the Retro Tram concept and the “Memory Box” concept.

At least two of the stations on the 1A line are situated close to important heritage buildings, Church Square with its many structures dating back to the last decade of the 19th Century and the Old Synagogue on Paul Kruger Street.

This building was constructed with donations from a prominent businessman at the time, Sammy Marks, and completed in 1902. The building, however, soon proved

to be too small and the congregation later moved to a new synagogue in the City.

Later plans to develop a new Supreme Court at the site, just to the north of Church Square, did not come to fruition but the Old Synagogue was used as the venue for security-related trials during the apartheid years.

The founding father of South African democracy, former President Nelson Mandela, appeared in the makeshift dock at the Synagogue on three occasions. In the first, so-called Treason Trial, he was acquitted together with 156 other struggle stalwarts such as Walter Sisulu, Oliver Tambo and Ahmed Kathrada.

Later he was tried on two more occasions at the Old Synagogue, including during the well-known Rivonia Trial which led to his 27 years of incarceration, including a lengthy period on Robben Island.

The Old Synagogue was last used as a functional building for the inquest into the death of Black Consciousness leader, Steve Biko in 1977. Since then it was turned into a storage facility, and, eventually closed-down. Today this historical treasure is shuttered, surrounded by high wire fences and slowly falling into disrepair.

Architect Pieter Mathews says the intention with the design of the bus station in front of the Old Synagogue was to reflect the historical and architectural significance of the building and its environment. The Old Synagogue is one of the few remaining buildings in South Africa with a Byzantine façade and its characteristic onion domes are indicative of a strong Eastern European influence among the Jewish community at the time.

SANRAL’s creative design approach of bus stations for the Tshwane Rapid Transit (TRT) programme has helped to blend functionality with the rich architectural heritage in the capital city.

The “Memory Box” concept is being used at all the stations designed by Mathews & Associates and at the Old Synagogue this was further adapted to blend in with the historical significance of the inner-city precinct. The lines of the exterior design are simple and clean and the scale is lowered so as not to compete with buildings such as the Old Synagogue and the nearby Ou Raadsaal and Palace of Justice.

The glass exterior complements the historical significance of the environment because it reflects the image of the Old Synagogue back to the viewer, while simultaneously creating an open and inviting environment for the commuters who will travel on A Re Yeng buses on a daily basis.

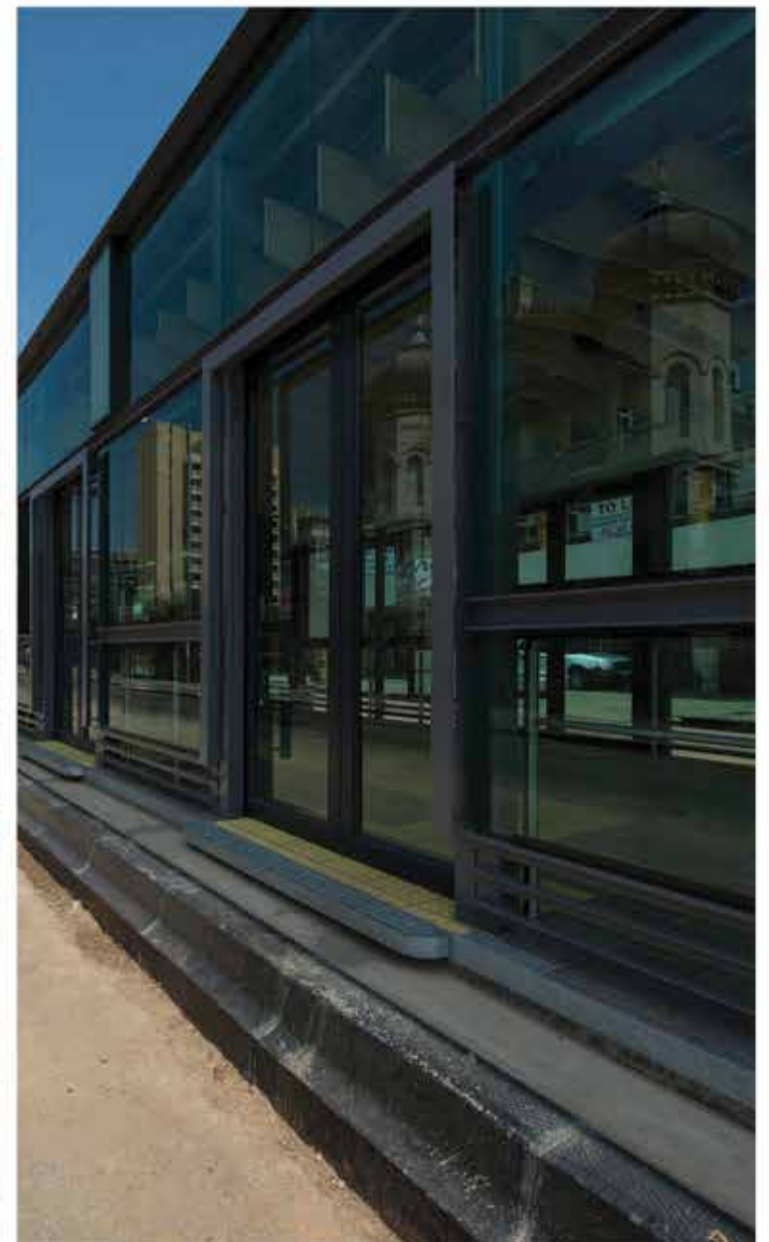
This experience is repeated on the inside where the wavy design of the ceiling points commuters towards the travel experience, serving as a shelter and ticketing centre. Hanging wooden panels create the impression of flow to create a tranquil space for commuters within the bustling urban traffic environment.

Van der Merwe says a distinguishing feature of the new stations is the location of vertical art works that represent the culture and history of the immediate environment. Pieter Mathews is also the curator of the artworks that will be placed at 50 stations along the two main TRT corridors.

At the Old Synagogue station – named after struggle activist, Molefe Makinta – an art work done by internationally acclaimed visual artist, Marco Cianfanelli, will be erected. He was also responsible for a sculpture of Nelson Mandela erected at the site in KwaZulu-Natal where he was captured in 1962 prior to his trial at the Old Synagogue.



Hannes van der Merwe and Pieter Mathews at the “Memory Box” Station.





Getting to Thaba Nchu easier

Travelling between Bloemfontein and Thaba Nchu will become easier and more pleasant. This stretch of the N8 is being substantially upgraded.

The contract value is some R920 million and work is scheduled to be completed in January 2017.

The main challenges faced on site in relation to both tenders has been gaining access to land adjacent to the existing road reserve, which was required to expand the road footprint and finding suitable material for construction.

Jason Lowe, Project Manager at SANRAL Eastern Region, said the rehabilitation and upgrading would result in a road of a higher standard, both in terms of alignment and capacity.

He said the two N8 projects would also set in motion the wheels of transformation, job creation and economic inclusion.

"As far as possible, we always ensure that communities where we operate are empowered through local job creation. This gives them ownership and a sense of pride to be associated with a particular project."

"Also, the local skills enhancement through on the job training as well as formal training received from the service providers will stay with them for the rest of their lives."

"The small businesses that were contracted will also be able to raise their profiles having worked on this project," said Lowe, adding that both projects will also result in cash injection for local SMMEs.

"I've got 35 people working for me on this project. We make sure that our work is of a high quality so that those using the road can admire our work. We enjoy working for SANRAL - they are professional."

Martha Mhlauli



The project created local employment.

END OF THE YEAR to be remembered

The end of this year is a time that road users of the R61 and residents of the Chris Hani District Municipality in the Eastern Cape will remember.

It will see the completion of SANRAL's R209 million upgrade on this link between Qumanco and Ngcobo.

"This region has been neglected in the past, lacking the necessary infrastructure to help create employment and stimulate the local economy through SMME empowerment," said Iqbal Hoosen, SANRAL Southern Region Project Manager.

The goal is to upgrade a fairly old road network, transforming it into a safe road for the public while unlocking economic growth.

"Now, with an upgraded road network, investment inflows are imminent. For example, a new shopping mall is planned for the town of Ngcobo after the road's upgrade. Business

can now transport goods in bulk to the towns of Ngcobo and Cofimvaba," said Hoosen.

It also improved traffic flow in the Ngcobo CBD.

The construction of roundabouts allowed for the free movement of traffic, thus reducing congestion. As most people from the surrounding villages walk to the CBD to work or shop, provision has been made for pedestrian walkways along the road to allow for safe and easy access. The dual carriageway will also allow easy passage for through-traffic.

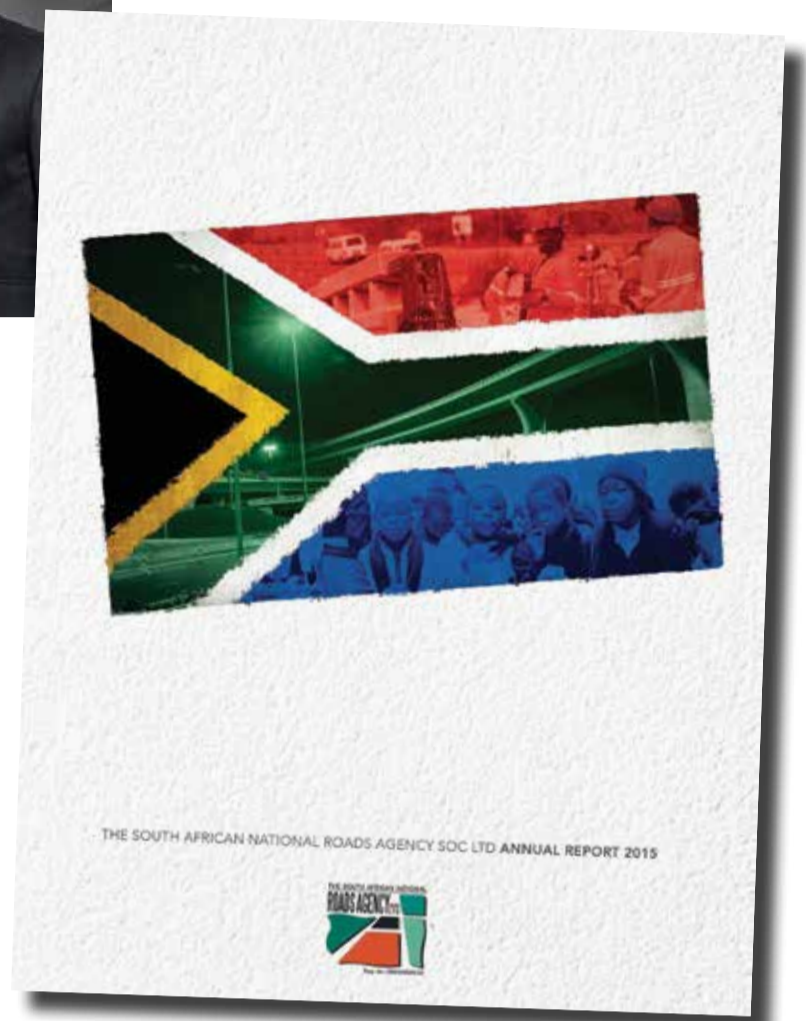
YouTube <https://www.youtube.be/52LdQ2zeWtU>



SANRAL's Board of Directors: From left standing: Allyson Lawless, Matete Matete, Zibusiso Kganyago, Nazir Alli (CEO), Roshan Morar (Chairperson), Christopher Hlabisa

From left seated: Daphne Mashile-Nkosi, Marissa Moore

SANRAL ANNUALLY tells it all



To ensure transparency and comply with Parliament's requirements, SANRAL compiles an annual report in which we provide information on our social, economic and environmental contribution. The report includes our yearly financial performance as well as the state of our national road network.

SANRAL is tasked with creating public wealth through the national road infrastructure and to ensure that all projects benefit South Africans and the environment.

As such, SANRAL is dedicated to the development of a vibrant economy, an empowered society and a protected environment, as outlined in the National Development Plan.

SANRAL recognises that it is vital that we function as an effective service delivery agent as well as a credible custodian of taxpayer and investor funds. We continue to fulfil this mandate with zero tolerance for corruption.

SANRAL has for the twelfth year running received an unqualified audit report by the Auditor-General.

"The past year brought great challenges and achievements, which the Board and SANRAL's executive team faced with integrity, honour and pride. As incoming Chair and a member of the Board, the past year has been an amazing and thought-provoking one. I have seen the organisation grow in leaps and bounds in just a few short years, not only in terms of the size of the road network it manages, but in the style of leadership and continuous commitment by its people to the delivery of road infrastructure to the people of South Africa."

"We cannot predict the future, but we can analyse current trends and guide future outcomes. Our challenge is to remain a focused, learning organisation that nurtures its talent and delivers on its mandate to the people of South Africa. As an ethical, knowledge-based organisation, we will continue to innovate and to be of service to the nation."

We take our responsibility of managing and spending public and investor funds seriously and our track record in this regard speaks for itself.

Corporate governance is a key element in achieving this. It defines and directs the responsibilities of SANRAL's Board and management towards improving corporate and economic efficiency and enhancing credibility.

Corporate governance and risk management, including prevention of fraud and corruption, are at the heart of how SANRAL conducts its business. We embrace a culture of the visible practice of good governance. This commitment has been well entrenched at Board level, where a virtuous cycle of candour and trust has been encouraged. This has filtered down through all levels of the organisation.

The Board sets objectives and strategy and oversees procedures for effective implementation, guided by SANRAL's legislated mandate. The Minister of Transport represents the state as the sole shareholder, and appoints the Board for a term of three years. This is confirmed annually at the shareholder meeting, which serves as the annual general meeting.

Nazir Alli
SANRAL CEO

Roshan Morar
SANRAL Board Chairperson

Shorten the journey by reading a good book, or two.

Book Reviews

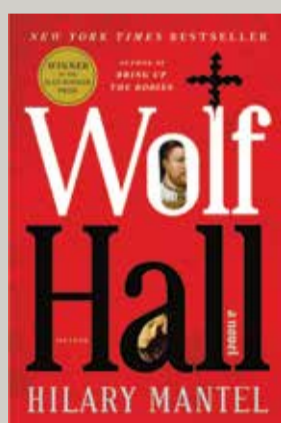


Wolf Hall and its sequel **Bring Up the Bodies** were two of the greatest literary sensations of recent times. Written by Hilary Mantel (**A Change of Climate, A Place of Greater Safety and Eight Months on Ghazza Street**) the novels were both winners of the Man Booker Prize - an annual accolade to honour the best British novel. **Wolf Hall** won in 2009 and **Bring Up the Bodies** in 2012.

The novels were brought to life as highly successful stage plays (eight Tony awards) and then by the BBC in a six-part adaptation for television – a series enjoyed by South African television viewers since October this year. With well-known actors like Mark Rylance (*The Other Boleyn Girl*), Damien Lewis (*Band of Brothers* and an Emmy and Golden Globe winner for *Homeland*), David Robb (*Downton Abbey*), Anton Lesser (*Game of Thrones*) and Bernard Hill (*Titanic, Lord of the Rings*) in key roles, the series was directed by Peter Kosminsky.

Thus fresh reader focus was directed at the two novels and on the period they highlighted - Tudor times of Henry VIII. The brutal and opulent world of the Tudors has been well-documented and two of its interesting characters, King Henry VIII and Anne Boleyn, are known to all. But the main protagonist in these novels and the current TV series is Thomas Cromwell, the most powerful of Henry's courtiers.

Let's look anew at these two books.



Wolf hall
Hilary Mantel

The Tudor period was a tumultuous one in English history. It was the epitome of blood and guts, political and deadly intrigue, brutishness, villainous, a time of mice and of men, of people being beheaded and scorned and raised up to exulting heights in fortune and social structures. It was a time, as Cromwell tells us "of worlds changed not by kings and popes but by people sitting at tables, changing thoughts and ideas across countries".

Now, Thomas Cromwell: he was a lowborn boy, became a charmer of men and women, a good family man, masterful schemer and adept at intrigue, arranger of divorces and marriages. A man, like the aptly described Sir Thomas More, 'of all seasons'. He is the man in *Wolf Hall* who became Anne Boleyn's confidant and King Henry's closest and mightiest courtier.

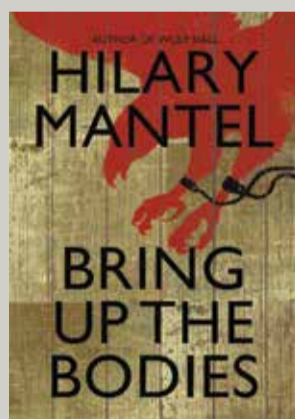
Thomas Cromwell was the son of a blacksmith. Mantel

sketches his childhood with sympathy and lyrical writing. This was a time when the nobles and royals were at the helm of everything. To achieve prominence without such a background was virtually impossible. But, nevertheless, Thomas Cromwell became the most powerful man in Tudor England.

The historical focus of *Wolf Hall* is Henry's infatuation with Anne Boleyn, his disenchantment with his wife, Katherine of Aragon, and their lack of an heir, his endeavours to divorce her, his battle with the Roman Catholic Church and its opposition to such a divorce, and his second marriage to Anne. It tells us of the execution of monks and cardinals, and of people like the illustrious Sir Thomas More, a pious but ruthless man.

And Thomas Cromwell is in the midst of it all, sided with Henry, sympathetic towards the cold and calculating Queen-wannabe Anne, opponent to More, instigator of hellish and necessary governmental acts. He was now at the top as Henry's chief mover and shaker, the man who had to provide Henry with a church-sanctioned divorce from Katherine, or the alternative, to lead the monarchy away from the Roman Catholicism. This he achieved and thus became involved with the Reformation and the destruction of abbeys and monasteries.

The reading of *Wolf Hall* is a serious and at times strenuous operation. Mantel provides a novel abounding with research, an illustrious cast of characters. She delves into the lives of Tudor people and how they survived and thought and acted. At times her writing is staccato and confusing, but the depth of knowledge is always there and she hardly ever bores. If you persist in reading the hundreds of pages, it will be an immensely satisfying pleasure.



Bring up the Bodies
Hilary Mantel

The sequel to *Wolf Hall* was part and parcel of the BBC's TV adaptation of Mantel's two Man Booker Prize winners. We return to Henry VIII's court, the calculating (as portrayed by Mantel) Anne Boleyn and the way Thomas Cromwell's life entwines with hers and Henry's and the lives and passions of a wealth of historical figures.

Henry has now divorced Katherine of Aragon, Anne Boleyn is Queen and with Cromwell's help England has now split with the Catholic Church. And the country is now

isolated, Henry still has no heir and the next-in-line for his affections is sticking up her head to fit the crown. She is Jane Seymour and Cromwell has to swerve his attentions and intentions in her direction. But it is no easy matter, even for the great manipulator Cromwell.

Anne has to go and we live through her final days. We know this terrifying time in history, the story of her beheading and the trials and tribulations before and after, the happenings of one single year told in gruesome and mesmerising detail by Mantel. Henry has now been married to Anne for three years, his country bewails the break with the Vatican, his annulled first marriage is loitering on the horizon, Anne has still not given him an heir. The king relies heavily on Cromwell. He is the man to rid the king of an unobliging wife – simply for the lack of a male offspring. As Cromwell philosophically remarks: "If she will not go, she must be pushed, and I must push her, who else?"

This is a novel peopled by well-known and well-loved and much-hated characters. There are meddling cardinals, disgruntled dukes, scions and advisers in plenitude. And, of course, a Henry pining for a new love and an heir, a worrisome Anne and a Cromwell and his apprentices beset by the royal load. There are the people of a country in turmoil and chaos and beheadings left right and centre. We mostly see these troublesome times through the eyes and ears and machinations of Cromwell, a man of thought and steel, a man of his times, a man close to his family and close to a king with wearisome troubles. A man not always kindly treated by history. Mantel tells it all with skill and a scholar's approach to what is and what isn't.

This book also needs to be read with patience and attention. At times it is confusing with a wealth of information and people that abound. But one is always aware of the author's meticulous care of detail and history.

Short quiz for our book lovers:

1. Anne Boleyn did produce an heir. Give the name.
2. What is JK Rowling's pseudonym for her books **The Cuckoo's Calling** and **The Silkworm**?
3. Which deceased author's characters live on in **The Girl in the Spider's Web**?
4. What is the title of the sequel, prequel to **To Kill a Mockingbird**?
5. What is the title of the third Cormoran Strike book?
6. Gillian Flynn wrote a bestseller. Name the title.
7. Which author writes the Jack Reacher thrillers?
8. Who wrote the young adult series **The Immortal Instruments**?
9. Name the investigator in Louise Penny's novels.
10. Paula Hawkins wrote a best seller – what is the title?

See answers on page 13

Editorial



Not complying with the law in South Africa is wrong. This also applies to those failing in their duty to pay e-tolls in line with the relevant legislation. This was made clear in a recent court finding. The importance of the judgement cannot be underestimated.

The slow erosion of the rule of law



Vusi Mona
SANRAL Spokesperson

On September 10 the first e-toll evader was convicted in the Pretoria Magistrate's Court.

Biochemist Dr Stoyan Stoychev was convicted of fraud (the falsification of number plates) and evading e-tolls – cited as a contravention of Section 27 of the SANRAL Act. It is important to note that there were two sentences handed down by the court – one for fraud and the other for non-payment of e-tolls.

For non-payment of e-tolls, Stoychev was sentenced to a R20 000 fine or six months imprisonment and ordered to pay all his toll bills (of more than R14 000). For the fraud charge he got 100 hours of community service, a 12-month jail term suspended for five years on condition that he is not caught committing fraud again, and another R20 000 fine or six months imprisonment.

Stoychev pleaded guilty to one charge of fraud and 987 counts of evading the payment of e-tolls. He was arrested on the 2nd of October 2014 after it was found that he had been driving on Gauteng's tolled highways with fraudulent number plates on his white Hyundai over the preceding seven months.

Pretoria's Chief Magistrate, Desmond Nair presided over the matter, ruled that failure to pay e-toll fees was

not only a crime, but that SANRAL was affected because *"as a direct consequence of his (Stoychev's) actions, the agency suffered prejudice"*.

"Mr Stoychev carefully planned these crimes. The crime of fraud in particular required presence of mind. He removed the license numbers, changed registration plates, used that vehicle to avoid detection. So, what visits my mind is that an individual – highly intelligent as he is, holding a doctorate – resorts to that level of criminality to avoid detection, makes this a very serious offence," said Magistrate Nair.

This case was brought to a court of law after following due process which involved the South African Police investigating the matter and the National Prosecuting Authority appointing a senior advocate to prosecute.

Advocate David Broughton noted during the trial of Dr Stoychev: *"We must also be wary of not seeing the proverbial wood for the trees. Whatever our personal views on the e-toll system, the fact remains that it has been legislated. The plain fact is: whether we like it or not, the law requires us to pay if we use the roads that are subject to the e-toll system."*

Now, there are some who argue that e-tolling is illegal but they have never sought to test this assertion with our courts – which are duly empowered to pronounce on the legality or otherwise of our laws.

Advocate Broughton reminded the court that we live in a constitutional democracy. One of the founding provisions of our Constitution is that South Africa is a democratic

"We must also be wary of not seeing the proverbial wood for the trees. Whatever our personal views on the e-toll system, the fact remains that it has been legislated. The plain fact is: whether we like it or not, the law requires us to pay if we use the roads that are subject to the e-toll system."

Advocate David Broughton

"It is a notorious fact that some within our society have vociferously in the public domain urged the public to refuse to comply with the legislation pertaining to the e-toll system. This is a clear incitement to commit a crime and is intended to render the e-toll system unworkable."

Advocate David Broughton

state founded on various fundamental values, including the 'supremacy of the constitution and the rule of law'.

Adv Broughton stressed the latter during his address on sentence when he argued against those who select which rule of the law to follow: *"It is a notorious fact that some within our society have vociferously in the public domain urged the public to refuse to comply with the legislation pertaining to the e-toll system. This is a clear incitement to commit a crime and is intended to render the e-toll system unworkable."*

This matter is a clear indication that we live in a constitutional democracy and that if citizens do not follow the rule of law they will face legal consequences. Critically, there has to be an appreciation that the rule of law requires of government and its agents as well as individual citizens and private entities to be accountable under law.

At the heart of the rule of law as a basic tenet of democracy is the idea that free people are ruled by law and not by the arbitrary views or powers of man. The day the rule of law is made an option rather a societal obligation, the day its erosion will begin. Unfortunately, to reverse that erosion is more difficult than the relative ease with which the rule of law can be undermined.

In our reaction to the Stoychev judgment, our actions and pronouncements can and should be evaluated to determine whether they advance the rule of law or do not.



60% Discount
from 2 November 2015

To find out more



Call: 087 353 1490



Visit less60.co.za



Sms ID*VLN to 43360
for your balance

Sms callback to 43360
for an agent to call
you back

To make a payment



Over the counter at FNB



At an advance FNB ATM
even if you are not a FNB client



Visit less60.co.za



EFT
using the public beneficiary:
SANRAL-less60

Bank Account Name:

Sanral less 60

Bank: FNB

Bank Account number:

62560197579

Branch code: 255005

Reference Number:

Your ID Number

We're making it easy for you to catch up and keep up with your e-toll account by separating your old debt (3 December 2013 – 31 August 2015) and discounting it by 60% to make it easy for you to keep up with the current amounts and make an arrangement to pay within 6 months.

Nothing could be easier.



For more details on the 60% discount please visit www.less60.co.za, phone us on 087 353 1490 or sms callback to 43360. T&Cs apply.

ROAD SAFETY must be top priority

If you live in a low or middle income country your chances of dying as a result of a road crash is higher than when you live in a rich country with more vehicles per head.

According to the World Health Organisation (WHO) 80% of road crashes occur in low and middle income countries which account for 72% of the world's population but only 52% of its registered vehicles.

You are 10 times more likely to die as a result of a road crash in Tanzania than in England. In South Africa road fatalities per 100 000 inhabitants per year stand at 25.1 while it is 4.3 in Germany.

Road deaths in South Africa are among the highest in the world, underlining how important it is that road safety should be a priority. The country has adopted a United Nations resolution to reduce road deaths by half by 2020.

SANRAL is committed to this initiative which encouraged countries to focus on five pillars of road safety - road safety management, safer vehicles, safer roads, safer road users and post-crash care. With the roads agency focusing on the latter three.

Safer roads are essentially an engineering matter. When designing, constructing or maintaining roads the safety of road users is a top priority. In some cases, solutions require close partnerships with education and traffic law enforcement agencies to achieve a safer road environment.

Safer roads alone are not enough as road user behaviour is very often the primary cause of crashes. SANRAL is thus committed to road safety awareness and educational programmes and its focus is the communities living along or near its roads.

Easily forgotten when road safety is discussed is that it is both a human issue and a developmental one.

This includes improving pedestrian routes, enforcing speed limits through design and training teachers, officials, youth and community groups.

There are incident management systems in place on major networks such as KwaZulu-Natal, Gauteng and the Western Cape to ensure an optimal and coordinated system. This ensures that victims are treated as rapidly as possible while also clearing the road so that traffic flows can be normalised.

Easily forgotten when road safety is discussed is that it is both a human issue and a developmental one.

Crashes cause deaths and injuries, high medical bills, pressure on the public health system, the possible loss of a breadwinner and often the need to look after one who has been disabled.

For developing countries it can mean a loss of up to 3% of the gross domestic product – which is a serious matter when the national budget is already under severe strain.

Thus, South Africa simply must have road safety as one of its highest priorities.

ROAD TRAFFIC INJURIES THE FACTS

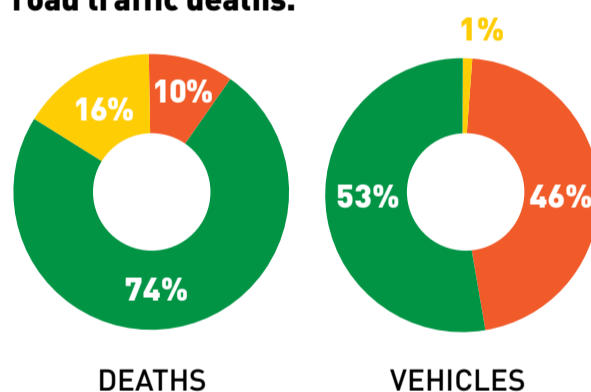
1.25 million road traffic deaths occur every year

#1 cause of death among those aged 15-29 years

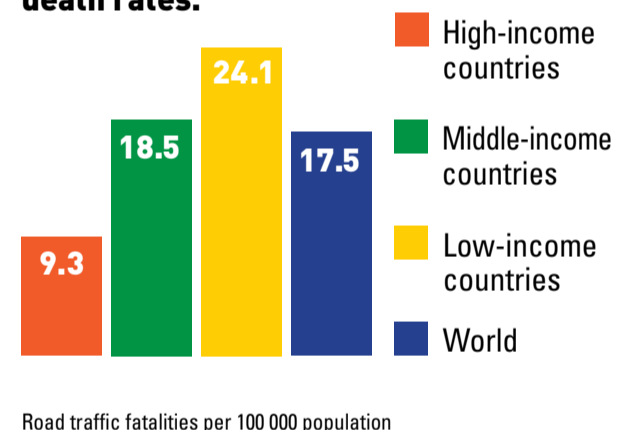
3 out of 4 road deaths are among men



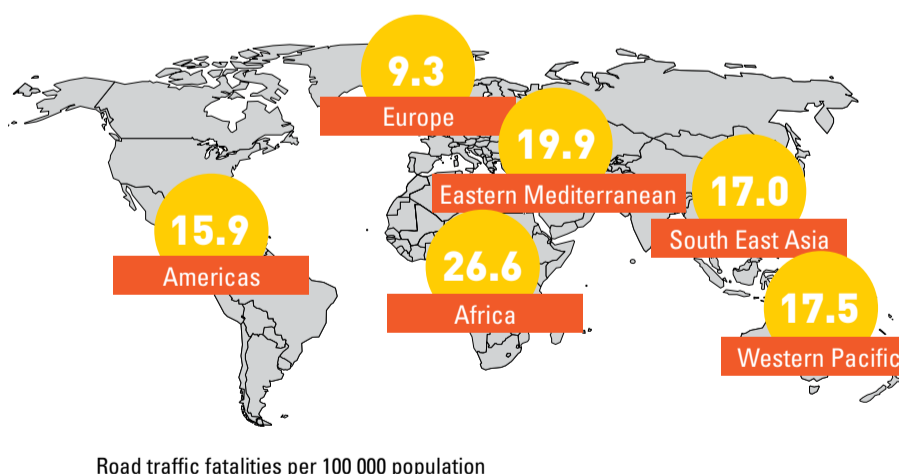
Although low- and middle-income countries have only half of the world's vehicles, they have 90% of the world's road traffic deaths.



Low-income countries have the highest road traffic death rates.



The chance of dying in a road traffic crash depends on where you live



World Health Organization

Global status report on road safety 2015

www.who.int/violence_injury_prevention/road_safety_status/2015/en/



Explore the many tourism gems along the N3 Toll Route this summer

Life happens at a fast pace. Our responsibilities often force us to rush from one point to another. We seldom get time to slow down and take it easy.

This summer, N3 Toll Concession (N3TC), encourages travelers to unwind and not rush from point A to B. Slow down and explore the many experiences offered in the different regions along the N3 Toll Route.

N3TC manages the N3 Toll Route between Heidelberg in Gauteng and Cedara in KwaZulu-Natal. This section of the route traverses four of South Africa's provinces – Gauteng, Mpumalanga, Free State and KwaZulu-Natal.

To unlock the tourism potential along the N3 Toll Route, N3TC initiated the N3 Gateway Tourism Association in 2008.

Today the N3 Gateway region stretches from Pretoria in the North to Valley of a Thousand Hills in the South, and incorporates cross-border tourism with Lesotho through Phuthaditjhaba, Caledonspoort and Sani Pass. It includes key destinations such as the mighty uKhahlamba Drakensberg World Heritage, the famous Battlefields Route up to Newcastle and picturesque

towns and routes such as Clarens and the Midlands Meander.

The beauty of the N3 Gateway route is that it allows travellers to explore and experience these areas in just about any way that takes your fancy from mountain biking; fishing; trail running and hiking to heritage tourism; arts and crafts; secluded retreats; pamper spas and gourmet feasts.

Adventure tourism opportunities along the route now delight many thrill seekers. This is evident in places such as the Karkloof which has been rated the best mountain biking destination in the country.

"N3 Gateway works closely with members and stakeholders to produce over 150 detailed itineraries to self-drive tourists. These itineraries can be accessed on the N3 Gateway website," says Andy Visser, director of the N3 Gateway.

Discover what lies beyond the beaten track, visit www.n3gateway.com or visit one of the thirteen N3 Gateway tourism nodes in the N3 Gateway region during your travels. Share your experiences on Twitter @N3Gateway and @N3Route.

For N3 Toll Route traffic updates or to report incidents contact the 24-hour N3TC Route Control Centre: 0800 63 4357 (0800 N3 HELP).

TRAC fights roadside CORRUPTION

Trans African Concessions (TRAC) has partnered with Kruger Lowveld Tourism (KLT) and the South African Police Services (SAPS) in a ground-breaking, four-month pilot project to boost KLT's Roadside Anti-Corruption Initiative until the end of December.

KLT launched its Roadside Anti-Corruption Initiative over a year ago to curb corruption among and the bribery of traffic officials by informing international and local tourists that it's illegal to pay cash to a traffic officer or any other official on the roadside.

It revolves around KLT and its members handing out business cards to tourists that warn them not to pay fines or handover cash to any individual on the roadside.

The business card also contains KLT's contact number, a 24-hour police telephone number, TRAC's 24-hour helpdesk number for emergencies and assistance and space for each accommodation establishment to write their number for tourists who need assistance.

"Legitimate fines should be paid at a police station or magistrate's court only, where a receipt must be issued. Road tolls, where applicable, must be paid at official toll plazas only," says KLT's Executive Director and Marketing Consultant Lisa Sheard.

She explains that many tourists have been taken in by unscrupulous traffic officials and toll scam artists as they are not familiar with South African law.

TRAC has now put its weight behind the initiative and will be printing and handing out the Roadside Anti-Corruption Initiative cards from two of its toll plazas – Middelburg and Machadodorp – en route to Mpumalanga.

TRAC will also be erecting boards, in key hot-spot areas, to further generate awareness around the campaign.

Graham Esterhuysen TRAC's Chief Executive Officer says, *"Tourism is one of the identified key areas leading to job creation in South Africa. The bad experiences of visitors who have encountered fraud, corruption and theft, reverberate overseas and undo all the good work done by our tourism ambassadors. To the extent that this campaign helps to prevent such bad experiences, TRAC is fully supportive of the initiative."*

The public is urged to take these telephone numbers down and keep them in their vehicle:

KLT: 013 755 1988 (office hours)
TRAC 24-hour helpdesk :
 082 881 4444 or 080 087 2264
SAPS 24-hour line: 082 451 7044

Swartruggens Toll Plaza cheaper

The Swartruggens Toll Plaza on the N4 is now considerably cheaper for local residents, Transport Minister Dipuo Peters announced in October.



Minister Dipuo Peters tells motorists about the discounts available at the Swartruggens Toll Plaza.

Local residents of Swartruggens and Groot Marico qualify for a 75% discount while those of Zeerust get 15%. The discount area has been extended to include the whole of Kgetlengrivier, Dinokana and Lehurutshe. The Minister also pointed out that there were two kinds of discounts - the other being a social discount.

To qualify, locals have to register by presenting their ID documents, proof of residence and their vehicle licence numbers. They can do so at the local Bakwena office – the concessionaire managing this national route.

The Minister said in addition to the discounts, toll fees had not been increased since 2013 to reduce the cost of travel for motorists.

Motorists and organisations such as Cosatu in North West complained about the high fees, calling Swartruggens the most expensive toll plaza in the country. The Minister said this was an unfair label - the toll gate was only expensive for occasional road users, but cheap for local residents.

KLT DNA

KLT is the tourism division of the Kruger Lowveld Chamber of Business and Tourism and represents the interests of the majority of tourism and leisure operators in the region. For more information about KLT, visit www.krugerlowveld.com.

Your holiday will start with these festive tidbits to enjoy when on the road

Padkos



MINI TURKEY AND HAM PIES

Perfect for any left-overs – makes six pies.

INGREDIENTS

- ½ an onion, chopped
- 1 clove garlic, finely chopped
- 2 teaspoons dried thyme
- pinch white pepper
- 1 cup left-over turkey, shredded
- ½ cup left-over ham, diced
- 8 tablespoons mascarpone cheese, or double cream or cream cheese
- 2 teaspoons smooth mustard
- salt, to taste
- 400g store bought puff pastry, defrosted
- 1 egg, beaten

DIRECTIONS

1. Preheat the oven to 180° C.
2. Sauté the onion in a little bit of butter and olive oil until translucent.
3. Add the garlic, thyme and white pepper, and sauté for a few more minutes.
4. Take off the heat and mix with the turkey, ham, mascarpone and mustard.
5. Add salt if needed.
6. Cut out 6 x 10cm circles using a pastry cutter or a small saucer; then cut 6 x 9cm circles for the lids.
7. Push the larger circles into 6 holes of a muffin tin.
8. Divide the meat mixture between them.
9. Brush the edges with a little egg. Place a lid on top of each and pinch the sides together to seal and brush with more egg.
10. Re-roll the trimmings and cut out any shape to embellish the pies. Place it on top of the lid and brush with egg.
11. Bake for 25 - 30 minutes until the pastry is crisp and golden.
12. Serve warm or at room temperature and serve with home-made mango chutney.

Homemade mango chutney:

(makes 350 ml)

INGREDIENTS

- 1 teaspoon butter and some olive oil
- ½ an onion, sliced
- thumb-sized piece fresh root ginger, peeled and finely grated
- ¼ teaspoon ground cardamom
- ½ teaspoon ground cinnamon
- ½ teaspoon ground cumin
- ½ teaspoon ground coriander
- ¼ teaspoon turmeric
- ½ teaspoon mustard seeds
- ¼ teaspoon mixed spice
- ¼ teaspoon nutmeg
- pinch white pepper
- ¼ teaspoon dried chillies
- 1 large ripe mango, peeled and cut into chunky pieces
- ½ cup (125 ml) water
- 3 tablespoons sugar
- 100 ml white wine vinegar
- salt, to taste

DIRECTIONS

1. Sauté the onion in the butter and olive oil until translucent.
2. Add the ginger, cardamom, cinnamon, cumin, coriander, turmeric, mustard seeds, mixed spice, nutmeg, white pepper and dried chillies and sauté for a 1 minute.
3. Add the mango and sauté for a few more minutes. Pour the water and sugar into the pan - let it simmer until the sugar is dissolved.
4. Add the vinegar and simmer until it thickens a little bit and half of the moisture has dissolved.
5. Add salt according to taste, take it off the heat and let it cool.
6. Serve with the ham and turkey pie and enjoy.

TOP TIPS: The turkey can be substituted for chicken and the ham with bacon. The chutney also compliments any cheese and fish.



FESTIVE TRIFLE

A South African favourite with a twist. Layer the trifle according to your own taste and preference, and add more ingredients or omit some ...create a dessert that's uniquely yours.

INGREDIENTS

- Homemade gingerbread (*recipe follows*)
- Mascarpone cheese
- Pouring cream
- Castor sugar
- Amarula (*optional*)
- Caramelised apples and pears (*recipe follows*)
- Roasted almonds and/or pecan nuts
- French nougat (*cut into bite size pieces*)
- Ginger biscuits (*crushed*)
- Ginger preserve (*optional*)
- Fresh raspberries and cherries (*or fresh berries of your choice*)

DIRECTIONS

1. Bake the gingerbread and cool completely
2. Meanwhile, prepare the caramelised apples and pears, and set aside to cool.
3. Whisk the cream until soft peaks form. Then add some of the mascarpone and sugar (to taste).
4. Slice the gingerbread according to the size needed for the glass jars. Use the lid to measure.
5. Now the fun and creative part can start - the layering.
6. Place the gingerbread slices at the bottom of the jars.
7. Scoop big dollops of the cream mixture on top making sure that the bread will not dry out. This is also the time to add the Amarula if you are using it.
8. Add a layer of the caramelised apples and pears, then the nuts, nougat, crushed biscuits (for texture), ginger preserve (if using) and lastly fresh berries of your choice.
9. Repeat all the layers (depending how big the jars).
10. Put the lid on and refrigerate overnight or for at least 2 hours. If travelling, keep in a cooler bag after refrigeration.

Spicy gingerbread

INGREDIENTS

- 240 g (2 cups) flour
- 10 ml ground ginger
- 5 ml mixed spiced
- 5 ml ground cinnamon
- ¼ t nutmeg
- ¼ t ground cardamom
- pinch white pepper
- 5 ml bicarbonate of soda
- 2 ml salt
- 120 g (½ cup plus 1 tablespoon) butter
- 125 ml (½ cup) syrup
- 100 g (½ cup) brown sugar
- 125 ml (½ cup) boiling water
- 1 egg, whisked

DIRECTIONS

1. Preheat the oven to 160° C.
2. In a bowl, sift together the flour, spices, baking soda and salt.
3. Put the butter, syrup, sugar and boiling water in a pot over low heat and stir until the sugar has dissolved.
4. Thoroughly combine the warm sugary mixture and the dry mixture.
5. Lastly stir in the egg.
6. Pour into prepared bread tin and bake for 5 5 minutes.

Caramelised Apples and Pears

(makes 250 ml)

This mixture is delicious on warm oats or with a soft cheese on toast.

INGREDIENTS

- 2 ripe apples, peeled, halved and cored
- 2 or 3 ripe pears, peeled, halved and cored
- 2 tablespoons butter
- 2 tablespoon brown sugar
- pinch white pepper
- pinch ground star anise (*optional*)
- ¼ teaspoon nutmeg
- ¼ teaspoon ground cardamom
- 1 teaspoon cinnamon
- pinch salt
- ¼ cup water

DIRECTIONS

1. Melt the butter in a pan over medium heat.
2. Add the pears, apples and spices and saute for a few minutes.
3. When the fruit begin to soften, add the water and let it cook for a few more minutes or until a syrup forms.
4. Take it off the heat and cool.

Creating jobs, expanding skills

Helping small businesses grow while creating jobs and expanding skills knowledge is an important part of what SANRAL does.

Ketane Nationwide Road Maintenance in the North West is one of these. Owned by Richard Stevens, David Olivier and Matsekiso Meshake, the company specialises in vegetation maintenance, which includes grass cutting, physical eradication and chemical control.

It operates in the North West and Northern Cape provinces.

Stevens said: "Not only are we getting valuable experience, but we are also able to make a significant difference in the communities in which we operate, by supporting small businesses and providing locals with employment opportunities".

Furthermore, grass bales coming off the road reserve are donated to developing stock farmers along the routes. The estimated rand value of revenue remaining in the area, specifically previously disadvantaged communities and individuals, is approximately R1 million per annum.

Also in the North West is Big Family Construction, owned by Bafana Radebe, Doshiwe Sithole and Elsie Mthombeni.

The company is currently working on six SANRAL projects, with a workforce of 119 employees.

In the North West it conducts routine road maintenance on the N14 and is also involved in a large fencing project along the same road.

Radebe said the company is excited to be working for SANRAL.

"Through the work that we have been doing for SANRAL, our company has managed to grow from strength to strength, and providing opportunities for people in the process..."

Bafana Radebe
Owner Big Family Construction



Bafana Radebe, Owner of Big Family Construction, 2nd from left, with some of his hard-working team.



Vegetation control and maintenance along the SANRAL network is one of Ketane Nationwide's key services.



Ismail Essa with the Leteane High School learners who won a mobile library worth R25 000.



Barolong High School pupils walked away in second place with a R5 000 cheque.



Botho Masigo-Moepeng, Mahikeng FM presenter.

School wins with SANRAL QUIZ

Leteane and Barolong High School pupils went head-to-head in Mahikeng in an engaging quiz hosted by SANRAL at the end of August.

The quiz, part of the "Taking SANRAL to the People Campaign", enabled the agency to engage with the community, educate people and also award prizes to the deserving schools.

David Sebopela, a teacher at Leteane High School said: "This initiative will enlighten students and by extension even the community about the role of SANRAL."

The first prize for the winning school was a mobile library worth R25 000, fully equipped with reading material suitable for high school learners while the runners-up walked away with a R5 000 cheque. The participating schools were given SANRAL's bimonthly publication, By The Way, to read and prepare for the quiz. They were then tested on the contents.

SANRAL's Northern Region Manager Ismail Essa said: "The quiz was fantastic and I am happy with the way the kids behaved and the support we got from the teachers. They were gracious in accepting the outcome of the competition; they appreciated the prizes and the conduct in general was very good."

"I was impressed with the level of knowledge those learners displayed. It showed that they took this seriously and read the newsletter," said Essa.

Tshegofatso Mantsi from Leteane High School could not hide her excitement after they were announced as the first prize winners. She said: "I am happy for our school. The

library is going to help me a lot with my studies and possibly learn more about SANRAL."

SANRAL was in the area as part of its community outreach programme and had earlier held a breakfast meeting with local businesses in Mmabatho to talk about its current and future projects in the province.

Resegofaditswe Chindiwo of Barolong High School said: "I learned a lot about SANRAL and the history of South Africa from the quiz."

Botho Masigo-Moepeng, Mahikeng FM presenter said: "SANRAL's visit to Mahikeng was good, because we know now what SANRAL stands for. It was an eye opener for a lot of us and it brought a clear understanding of how roads infrastructure works. It also taught the community at large about the importance of having good and safe roads as part of the roads network of our country."

Nkele Modimo'eng, community member said: "What SANRAL did by coming to our area is a good thing. We only see them on television and hear people talking about e-tolls. But listening to the kids answer the questions on the quiz helped me understand what SANRAL is all about."



No heavy vehicles, NO HEAVY DAMAGE

No heavy vehicles, no heavy damage. That is the motto of SANRAL's weighbridges, used to determine the static weight of a heavy motor vehicle.

Uncontrolled vehicle overloading has been proven to result in the accelerated deterioration of roads, as well as increasing the risks of crashes.

In crashes SANRAL's Northern Region alone, which comprises Gauteng, North West, Limpopo and Mpumalanga, there are 15 Load Control Centres (LCC) that operate 24 hours a day, 7 days a week, and 11 lay-by sites that are operated by means of Mobile Load Control Units.

Once a vehicle has been found to be overloaded it is directed into a holding yard. The load has to be corrected within the legal limits. No load is allowed to be left at the facility. Only after the load is corrected and the vehicle is re-weighed will it be released to continue on its journey.

The number of vehicles weighed varies between the various centres - from about 150 to 500 per day. In 2014 approximately two million vehicle weighs were conducted at SANRAL LCCs.

The existence of weighbridges along the network has had a positive effect. When SANRAL started operating the LCCs on the N4 the overloading percentage was 28%. It is currently below 5%. The average overloading percentage is 4.5%.

We asked SANRAL's Louw Kannemeyer a few questions about weighbridges and their importance:

Why is it important for heavy duty vehicles to comply with load capacity regulations?

Heavy vehicles that do not comply with the load design specifications of the suspension, brakes, tyres and steering of vehicles are a safety hazard to all road users. In addition, overloaded heavy vehicles cause exponentially more damage

to the road structure, resulting in accelerated deterioration and increased maintenance costs. As an example a single 9 ton axle that is 25% overloaded causes 155% more damage to the pavement.

What does SANRAL do to improve road safety?

SANRAL continues to support the road transport management system (RTMS), which is a Department of Transport strategy to promote self-regulation in the road freight industry. RTMS accreditation means that truck fleet owners must continually demonstrate that they load their vehicles correctly and securely, ensure that their trucks are roadworthy and that their drivers are healthy and well rested. The benefits of RTMS management are reduced road damage, promotion of road safety and reduction of road transport costs. SANRAL supports this initiative with data indicating that member organisations seldom overload and are involved in fewer accidents.

SANRAL also supports the "smart trucks" demonstration project. This is research being conducted to ascertain the benefits of allowing vehicles that meet stringent dynamic design criteria to carry heavier loads, while maintaining all loading criteria except for the maximum legal load of 56 tonnes.

In terms of road maintenance, every kilometre of the national road network has service providers appointed that are responsible for all the day to day responsive maintenance requirements that need to be performed, this includes cutting grass, cleaning drains, litter collection, repairing of damaged road signs, repairing of potholes, accident scene clean-up, etc. The impact of this preventative maintenance approach of SANRAL should be clearly visible to road users when travelling on the national road network.

LIST OF WEIGHBRIDGES

Mantsole NB	Gauteng	N3	N3TC
Heidelberg NB	Gauteng	N3	N3TC
Donkerhoek	Gauteng	N4-Main	TRAC
Heidelberg SB	Gauteng	N3	N3TC
Beit Bridge TCC	Limpopo	N1	LCO
Zebediela	Limpopo	N1	LCO
Mantsole SB	Limpopo	N1	Bakwena
Polokwane	Limpopo	N1	LCO
Komatipoort	Mpumalanga	N4-Main	TRAC
Middelburg East	Mpumalanga	N4-Main	TRAC
Farrefontein	Mpumalanga	N4-Main	TRAC
Middelburg West	Mpumalanga	N4-Main	TRAC
Machado West	Mpumalanga	N4-Main	TRAC
Middleburg- Witbank	Mpumalanga	N4-Main	TRAC
Wonderfontein	Mpumalanga	N4-Lay-by	TRAC
Ngodwana	Mpumalanga	N4-Lay-by	TRAC
Malelane	Mpumalanga	N4-Lay-by	TRAC
Van Dyksdrift	Mpumalanga	N4-Lay-by	TRAC
Badplaas	Mpumalanga	N4-Lay-by	TRAC
Middelburg- Bethal	Mpumalanga	N4-Lay-by	TRAC
Wonderhoek	Mpumalanga	N4-Lay-by	TRAC
Loskopdam	Mpumalanga	N4-Lay-by	TRAC
Wonderhoek	Mpumalanga	N4-Lay-by	TRAC
Loskopdam	Mpumalanga	N4-Lay-by	TRAC
Hendrina	Mpumalanga	N4-Lay-by	TRAC
Mid Hen	Mpumalanga	N4-Lay-by	TRAC
Stoffberg	Mpumalanga/ Limpopo	N4-Lay-by	TRAC
Bapong	North West	N4-Main	Bakwena
Midway (Estcourt)	N3	KZN	RTI
Mkondeni (Pmb)	N3	KZN	RTI
Westmead (Pinetown)	N3	KZN	RTI
Umhloti	N2	KZN	RTI
Groutville (Stanger)	N2	KZN	RTI
Kroonstad	N1	Free State	Free State Traffic Police

BURSARIES GROW ENGINEERS

Growing engineers through bursaries is one of the many things SANRAL does exceptionally well. Just ask Mari Venter and John Rammutla.

In asking “how things work and why” was the reason Mari became an engineer.

Born in Durbanville, Cape Town, Mari said: *“With a good education I have the necessary theoretical background needed for my career. Education is also important because it helps the country to grow.”*

Mari has a very supportive family and says they encourage and support her in her career.

“The SANRAL bursary is important because it means that I have a job after my studies. I hope to learn about all the aspects of civil engineering.”

She says engineering is a critical skill in South Africa and can contribute by improving the road network of the country.

“The SANRAL bursary is important because it means that I have a job after my studies. I hope to learn about all the aspects of civil engineering.”

Mari Venter

“Working on the SANRAL projects means that you help improve the infrastructure of the country.” Her goal is to be the best engineer she can be but first she would like to be professionally registered.

When John Rammutla, who hails from the remote village of Maroteng in the Limpopo province, wrote his matric in 2010, he had no idea then that he would end up studying Civil Engineering at the University of Cape Town.

“When I applied to study Civil Engineering at UCT, I honestly didn’t know much about the profession. Information regarding the SANRAL bursary scheme reached me when I was in my final year of high school. My science teacher one day came to school with about eleven hard-copy bursary application forms and handed them out to us. I applied for the bursary and was fortunately called for an interview at SANRAL’s offices in Pretoria, thanks to his outstanding achievements in maths and physical science.”

He explains: *“I knew and understood that South Africa is in need of qualified engineers for its socio-economic development. Hence, I decided to opt for civil engineering and got to learn more about the profession when I got to university and fortunately fell in love with it.”*

John’s family was struggling financially and he said it would not have been possible for him to study after matric, if it wasn’t for the SANRAL scholarship. *“Education is extremely important to me. To start with, I will be the first member of my family to attain a higher education qualification. Also, many young people from my community in Limpopo are looking up to me as their personal mentor and inspiration. I sometimes feel like my education is more important to them than it is to me! I want them to be proud of me.”*

He says that he strongly believes that education is the key to success and South Africa cannot and will never truly prosper if it fails to invest in the education of its people.

He is extremely grateful for the opportunity that the SANRAL scholarship has brought him. *“There is no way that my family could have been able to support me and the bursary covers all my expenses. I have also been afforded the opportunity to work on the N7 upgrade near Malmesbury to gain practical experience.”*

He is hoping to learn as much as he can from SANRAL, the work it does and the contribution it is making to the development of the country’s road infrastructure and economy.

“...I am looking forward to working for SANRAL and being part of a team carrying a national mandate.”

John Rammutla

“A robust and efficient national road network always results an increase in the country’s economic and infrastructural development. And I am looking forward to working for SANRAL and being part of a team carrying a national mandate.”

He hopes to inspire other young people in South Africa’s most disadvantaged communities to hold onto their dreams and give them hope for the future. John also hopes to establish his own civil engineering construction company in the future once he has graduated and gained more experience.

- John is certainly living his dream. Apart from being a full-time student in his final year, he was also the Chairperson of the UCT’s Engineering and Built Environment Student Council.



Mari Venter
Bursary Recipient and Intern



John Rammutla
Bursary Recipient and Intern



The sun leads the way

The National roads agency is going the sun route.

Toll plazas managed by SANRAL and its concessionaires have in the past all received their power from the national electricity grid. This power is used for the daily activities of the toll plazas – which operate on a 24/7 basis – as well as supporting infrastructure such as warehouses, training centres or workshops.

SANRAL took a decision to depart from this “business as usual approach” with the introduction of a solar plant at the Dalpark Plaza on the N17. This was a bold move as energy, and renewable energy in particular, is outside SANRAL’s core business activities and primary areas of expertise.

The agency introduced the use of renewable energy sources in managing road infrastructure and activities as far back as 2008 with the use of Variable Message Signs (VMS) during the construction of the Gauteng Freeway Improvement Project. This was later extended to fixed points along some of the major corridors in Cape Town and Durban.

Subsequently SANRAL introduced solar powered tolls at two of its plazas. The Dalpark Plaza – a SANRAL-run plaza – uses a solar plant for its mainline toll plaza operations and the Diamond Hill Plaza (managed by TRAC) started using solar power as an alternative energy source in September 2014.

Solar panels on the top of the plaza collect the sun power which is then converted into electricity to run the operational requirements of the plaza. At Dalpark, all the operations as well as an adjacent workshop are run through solar power during daytime. It generates 65 kilowatts of power into the grid (on average).

Diamond Hill generates up to 40 kilowatts of power into the grid and, depending on the weather conditions, has resulted in savings on energy of more than 50%. Solar power is used to run all operations.

The two plants serve as pilot projects and the objective is to roll out further solar powered toll plazas along the 3 120 kilometres of freeway that constitute SANRAL’s toll road portfolio.

In addition, energy-efficient lighting has been fitted to reduce consumption. This means that by replacing conventional

luminaires with LED technology, the agency is able to save 30% of its power requirement. Had this not been done, far more solar panels would have had to be fitted at a much greater expense.

Meanwhile, as road construction and maintenance activities have an inevitable impact on the environment, SANRAL’s approach is to mitigate the impact of these activities with interventions such as the use of Reclaimed Asphalt (RA).

For example, in the rehabilitation of the N2 between Murchison and Marburg, the use of RA was specified at 40%, resulting in 40% less aggregate to be crushed, thus less basic rock excavated from quarries, and in turn less diesel used in loading, transporting, and crushing of rock for aggregate, bitumen imports.

This translates to significant cost saving and also eliminates the need for disposal of used road building material, which means no requirement for landfilling which also comes at the usual costs of transport and space.

SANRAL has a dedicated environmental unit which oversees environmental impact assessment programmes prior to construction programmes and monitors the subsequent management of the construction process and gives inputs to maintenance programmes.

SANRAL’s approach is to go beyond compliance with the applicable national and provincial legislation. It is committed to an approach of ‘continual improvement’ that is demonstrated by the increasing use of renewable energy in road infrastructure management and reflected in its general environmental practices and support for research activities at tertiary institutions.

An example of this pro-active approach is its early decision to completely eliminate tar products used for road construction and to switch to asphalt which is bitumen-based and more environmentally friendly.

Construction projects on major roads such as the N2 in the Eastern Cape were accompanied by projects to relocate protected plants in collaboration with botany experts from the academic and research communities. Where required, road plans are changed to protect and conserve sensitive ecological areas.

SANRAL continues to conduct research into areas such as noise reduction caused by traffic on road surfaces and follows global trends in the sustainable management of road infrastructure.



The Diamond Hill Plaza (managed by TRAC) started using solar power as an alternative energy source in September 2014.



The agency introduced the use of renewable energy sources in managing road infrastructure with the use of Variable Message Signs.



On the N2 between Murchison and Marburg, the use of RA was specified at 40%, resulting in 40% less aggregate to be crushed.



RAF Mobile Office for your Convenience

The Road Accident Fund is coming to your doorstep with its new Mobile Office. Be on the lookout for the RAF Mobile Office in your area where you can lodge new claims and check claims status if you have already lodged one.

Take Charge by claiming directly with us

CALL US: 0860 23 55 23

 RAF Road  @RAF_SA  www.raf.co.za



This festive season choose your own adventure



Lebohang Thulo

What your favourite summer destination says about you, writes Lebohang Thulo

After 'will you marry me?' the next best question to be asked has to be 'where are you spending your festive break?'

Not only does it replace all usual talk of the weather or reality cooking shows, it offers an opportunity to fantasise about upcoming travels, and in turn a chance to experience them countless times even before you depart.

There are, however, differences in how each of us chooses to spend our vacations. Local summer travellers, I would argue, fall into three very distinct camps.

People of the south

The first group I refer to as the beautiful people. Like exotic birds, they all migrate south in December, except in their case it's during the summer.

Clifton, home to Millionaire's Row, with its white sands and frigid waters is this group's parade ground.

It's clear why Cape Town is referred to as South Africa's very own French Riviera – think bikinis, games of volleyball, jet skis and yacht parties with sundowners in every colour and hue being served.

The close proximity of the winelands is also a big draw card for these vacationers. After all, what is summer without some bubbly and a sampling of gourmet cuisine from some of the country's best restaurants located on the various wine estates along the region's wine routes.



The inlanders

For some the festival season is reason to head inland, whether it's to avoid the coastal crowds or to enjoy the serenity that the mountains and Highveld have to offer.

Fortunately the inland is not without its pleasures. For those in Gauteng, a three hour car trip leads you to Sun City located in the North West province.

The resort which is known for its waterpark, the Valley of the Waves, and casino offers all-in-one entertainment destination, from its world-famous golf course – home to the Gary Player Country Club – to safaris and adventure sports.

The nearby Pilanesberg Mountains are also ideal for nature lovers and a chance to spot wildlife from above on a hot-air balloon safari.

Another great option inland lies just west of the Free State border, the mountain Kingdom, Lesotho. Many may forget about this small landlocked country, except for those that have sampled the treasures that the country has to offer.

The small town of Semonkong, located in the centre of the country about 120km from Maseru, is a tourist attraction known for the Maletsunyane Falls, one of the highest single dropping waterfalls in Africa.

The town attracts travellers looking to enjoy active holidays filled with activities like hiking, pony-trekking, motor-trekking and quad-biking.

It's not all action however – stargazing and enjoying views of the majestic falls being some of the more sedate activities available.

The family fun favourite

The last group is my personal favourite, probably because I fall within it. If you enjoy warm waters and travel in a pack known as your family then you could fit in this group too.

The KwaZulu-Natal Coast and the friendly Eastern Cape coast are this group's favourite holiday destinations.

Also known as South Africa's 'wild' province, the Eastern Cape boasts beach, bush and even forest. The largest cities in the province are Port Elizabeth and East London both of which are great getaway options.

In terms of beach offerings, PE has King's Beach, a Blue Flag status stretch of golden sand. East London has its Eastern Beach among others, popular for surfing.

Other popular attractions in the province are its game reserves. The best known ones are Addo Elephant Park and Shamwari Game Reserve.

The Addo Elephant Park is home to over 450 elephants. Other wild life includes buffalo, black rhinos, antelope, and a flightless dung beetle, found almost exclusively in Addo.

The luxurious and award-winning Shamwari Game Reserve is located less than an hour outside Port Elizabeth. Visitors on a game drive in this locale can expect to see all big safari animals, including the Big Five, as well as both black and white rhino.

The ultimate family getaway however has to be KwaZulu Natal. Durban with its Golden Mile and the Durban Beachfront continue to be overwhelmingly popular tourist attractions. Other firm favourites are Moses Mabhida Stadium and uShaka Marine World, a world-class aquarium.

Not to be outdone are the beaches northwards from Durban including Salt Rock, Sheffield Beach and the ever popular Umhlanga and Ballito.

The good news is none of us is restricted to just one group. We all have the option to be any kind of summer traveller, depending on taste of course. Which summer traveller will you be this year?



Games and puzzles to keep you entertained on the long road

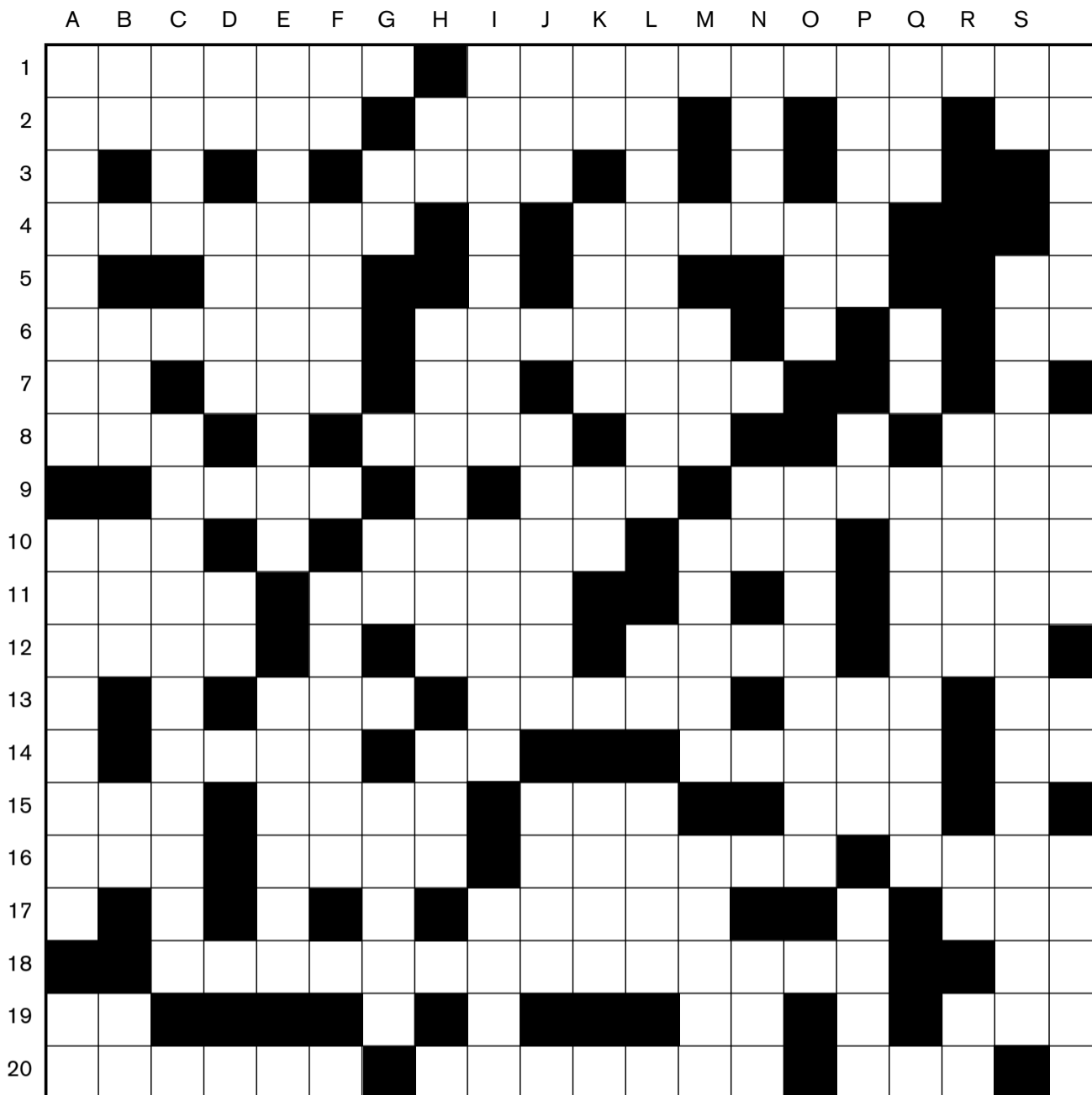
Captivate & Fascinate

Sudoku

4	2			3				1
8				2	9			4
1							7	
2		5						
6	7		8					
		6		4		4		
5							8	2
							1	3

Crossword

some answers can be found in By The Way



ACROSS CLUES

- A1 What does toll generate
- I1 Constructions to weigh trucks
- A2 A malt vinegar
- H2 Directly opposite
- P2 Alternative of boh
- S2 Symbol for hectare
- G3 Soft dress material
- P3 Slang for thanks
- A4 Other country in Africa with toll roads
- K4 Another word for overhead
- D5 Written promise to pay
- K5 Third sofa note
- O5 Automobile Association
- S5 Local political party
- A6 Scandinavian mythical creatures
- H6 Acronym for SA Bitumen Association
- S6 Internet domain name for Israel
- A7 Abbrev. Los Angeles
- D7 Affirmative
- H7 Abbr. East London
- K7 Part of cash register
- A8 Busy insect
- G8 Stop
- L8 Abbr. teetotaler
- R8 Use eyes
- J9 To put into service
- N9 A substance used for surfacing roads
- A10 Popular Irish first name
- G10 Slang for "Do not know"
- M10 Type of cloth from Syria
- Q10 Used for baking and roasting
- A11 Vehicle – short for automobile

DOWN CLUES

- F11 Italian city where toll road built in 1924
- Q11 Queen of Sparta
- A12 Harsh grating sound
- H12 Untruth
- L12 Mongrel dog
- Q12 First name of African leader Amin
- E13 Crafty
- I13 South American mammal
- O13 Cushion on animal foot
- S13 Slang for mother
- C14 The hook on the lower jaw of a salmon
- H14 Word used for comparing people
- M14 Former name of Katanga
- S14 Abbr. for Anno Domini
- A15 Yoruba chief or ruler
- E15 Great distance
- J15 Mineral spring
- O15 To speak
- A16 Afrikaans for 'uncle'
- E16 Monetary unit of Ghana
- J16 Food for travelling – Afrikaans
- Q6 Fragments of rock
- I17 Digested
- R17 Bustling activity
- C18 SANRAL received a clean audit from him
- S18 Internet domain name for South Africa
- A19 Expression of pleasure
- M19 Scot word for eye
- R19 Abbr. Massachusetts Institute of Technology
- A20 Nutty spice used in our mango chutney
- H20 Travelling industry
- P20 Plaything for children

DOWN CLUES

- A1 SANRAL bursary holder
- B1 Informal for elevated railway
- C1 To alter direction
- D1 Internet domain name for Egypt
- E1 Rare condition of uncontrollable episodes of sleep
- F1 Ancient city of Sumer
- I1 BBC TV series focusing on Tudor England
- J1 Large deer
- K1 Abbr. for Iowa
- L1 Granite with a high content of biotite
- N1 Black consciousness hero
- Q1 Abbr. for Dead on Arrival
- S1 Questioning or surprised expression
- T1 Acronym SA National Roads Agency
- H2 Sixteenth letter of Greek alphabet
- G3 Used to emphasise adverb or adjective
- O3 Gradually weakening of energy
- D4 Greasy
- F4 Curse or swear
- K4 Neglect to include
- S5 Chairwoman of Transport Portfolio Committee
- B6 Past tense of run
- H6 N2 Pacaltsdorp bridge resembles which bird
- M6 High in pitch
- Q6 Abbr. Roman Catholic
- C8 Where was the first modern toll in SA
- J8 Underground passage way
- P8 Abbr. University of Pretoria
- R8 Rescued

- T8 Active volcano in Sicily
- K9 Used in music
- N9 Abbr. Bachelor of Arts – US
- O9 Well-known SA mountain pass
- Q9 Free time away from work
- A10 Best mountain biking destination in SA
- B10 Yellow-eyed mullet
- G10 Abbr. detective
- I10 Horny plate on finger tips
- M10 Waters and colours
- D11 Abbr. for opus
- F11 First name of struggle activist Makinto
- L12 Abbr. kilometre
- E13 Drugged
- P13 Sleeveless outer garment
- T13 Abbr. for advertisement
- B15 Abbr. back order
- G15 Almost horizontal shafts in mines
- J15 To scratch with claws
- K15 Spread of finely minced meat
- L15 Main port of Yemen
- M16 Knobbly part of legs
- R16 Solfa tone
- T16 Agile bearded animals
- I17 Therefore
- P17 Apartment
- N18 Well-known band
- A19 Form of a before a vowel
- B19 Domain name for Hungary
- R19 Belongs to me
- P1 Abbr. International Bridge, Tunnel and Turnpike Association
- H14 Name of Onassis, Greek shipping magnate

Competition

Enter to win one of three MP3 players. Simply take a picture while driving on SANRAL roads, caption it and include #My SANRAL Road Trip and share on Instagram, Facebook or Tumblr. Judges decision is final and no correspondence will be entered into.

SANRAL wishes you a safe journey this festive season on our roads!