



Creating wealth through infrastructure

# GAUTENG

## [ what you need to know ]

Road users are already experiencing the benefits of the upgraded Gauteng freeway network through reduced travel time, which means more time to engage in business and doing things that they value, even though the project is not completed yet.

### FREEWAY IMPROVEMENT PROJECT (GFIP)

# 2010

# background of the project

The Gauteng Freeway Improvement Project (GFIP) comprises different phases to upgrade and implement new freeways of an ultimate 560km freeway network. The first phase, comprising the upgrading of 185km of the most congested freeways is currently under construction (a total of 15 work packages).

Apart from widening of the freeways, the GFIP project will also ensure that bottlenecks at interchanges are resolved. For the first phase of the GFIP, 34 interchanges are significantly upgraded, including infamous interchanges such as the Allandale, Rivonia, William Nicol, Gilloolys and Elands interchanges. Furthermore, median lighting and Intelligent Transport Systems (ITS) will be provided on the network.

ITS, comprising of Variable Message Signs (VMS), CCV cameras and Incident Management Services, allow SANRAL to manage the national road network in Gauteng for optimal use of the road capacity available. Through the VMS, SANRAL is able to warn road users of congestion. The CCTV cameras ensure that incidents are noticed and emergency services dispatched immediately. This information is also available on SANRAL's traffic website [www.i-traffic.co.za](http://www.i-traffic.co.za).

With the planning of the Gauteng Freeway Improvement Project, SANRAL took other transport modes into consideration (the Gautrain, Metrorail and Bus Rapid Transport) and strived to create links with other transport modes to provide citizens with the choice of using public transportation or car-pooling that will alleviate congestion caused by single-passenger vehicles.

The project was approved by cabinet in 2007 after which SANRAL followed the Intent to Toll process. Amongst other requirements, SANRAL widely advertised the details of the project, the intent to toll, the proposed toll points, expected toll tariffs, upon which the public were given the opportunity to comment. The comments were considered by the Minister of Transport where after the related road sections were declared as toll roads.

Following the declaration of these freeway sections as toll roads, SANRAL could continue to raise funding from the capital markets and procure contractors to commence with construction.



## current status of the project

It should be noted that this project was not a FIFA World Cup (2010 event) project, since it was already planned before the 2010 event was awarded to South Africa. However, the event, and need for additional road capacity was taken into consideration during the design and documentation stage of the project, resulting in construction milestones to be achieved for the event. These milestones were mostly achieved, and for some projects, event exceeded. These milestones included additional lanes, interchange upgrades, availability of Intelligent Transport Systems (ITS) and additional lighting on certain sections of the network.

20 of the 34 interchange upgrades were completed, before the commencement of the FIFA World Cup and phased opening of interchanges like Allandale and Lynnwood were also completed.

With the commencement of the FIFA World Cup, 80% of the overall first phase project was completed. Most road works was suspended during the World Cup and the estimated completion of the construction works for Phase I will be at the end of 2010. The construction of these projects will be completed over the next 12 months (all have different completion dates), but the sections on which the tolling will commence, will be completed in time for toll commencement in April 2011.



**The funding method of this project is by means of the user-pay principle (tolling), because;**

## funding of the project

- Tolling delivers the much needed infrastructure sooner than later.
- Tolling ensures dedicated funding for maintenance of the road.
- Tolling ensure a high quality road network. In addition to contributing to improved road safety, toll roads generally reduce travelling distances and result in substantial savings on the running costs of your vehicle and much valued travel time.
- The user-pay principle represents a fair way of paying for transportation facilities.
- Tolls link the benefits for the road user with its fees by charging users only in direct relationship to how much of the road they use.

Tolling provides a sustainable revenue stream to upgrade and expand the freeway network in order to meet the demands for and stimulate economic growth opportunities in the Gauteng province.

# impact on Gauteng's economy

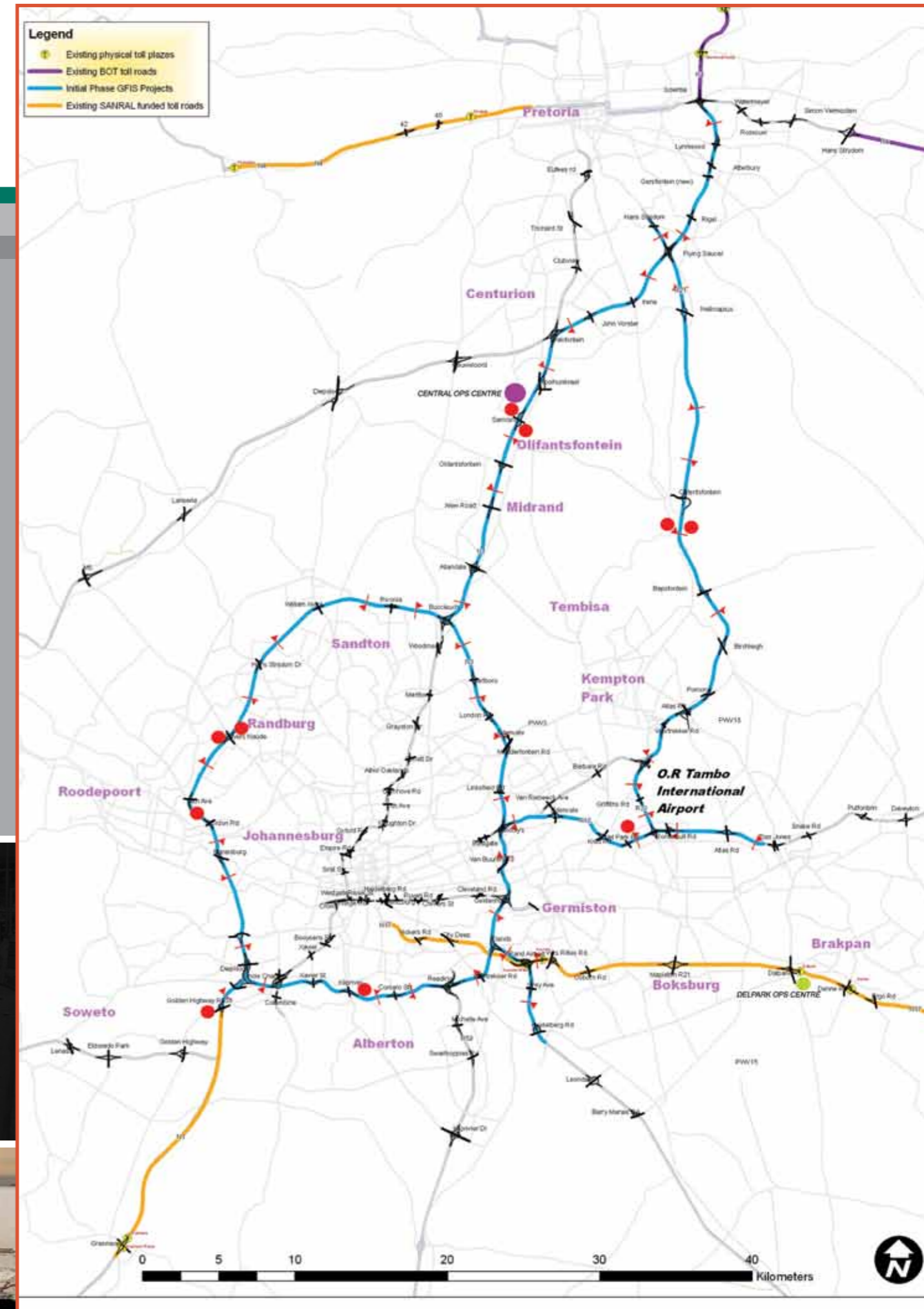
Various studies were undertaken as part of the preparatory phase of this project. It included an extensive Economic Impact Assessment, done by the University of Cape Town (UCT).

The study indicated that the project will have a high economic rate of return and economic benefit to cost ratio. Furthermore, it indicated directly and indirect job creation as a result of a project. A snap shot of the current workforce on the project is 20 000 people.

When determining the viability of a toll project, SANRAL investigates the financial and economic viability of the project. It is a requirement that the benefit should outweigh the costs and that an acceptable rate of return on investment is achieved. It is commonly known that congestion impacts on economic growth potential, loss of business opportunity, and increased road user costs. Not addressing the congestion experienced on the freeway network is simply not an option.

## the toll points

There are 42 toll points (gantries) on the Gauteng e-tolling network. The choice to erect 42 gantries allows for the toll fees to be contributed fairly by all those that use the road.



# gautengs e-tolling network

An Open Road Tolling system will be implemented. This form of electronic toll collection (or e-tolling) is a multi lane free flow electronic tolling system that allows for tolls to be charged without vehicles having to stop or slow down i.e. there are no physical toll booths. Overhead gantries will be fitted with the toll collection equipment that will recognise the electronic transponder (e-tag) in a vehicle, toll will be deducted from a user's registered e-toll account and they will be able to travel without any disruption. A vehicle's number plates will be photographed from the front and back as part of the verification process, as well as for those that do not have an e-tag.

**Toll will be raised from April 2011.**



## registering for e-tolling

SANRAL will request that road users register their vehicles for e-tolling. Road users will have the option to either be recognised by their number plates, or by an e-tag. e-Toll account registration will be user friendly and road users will have the option to register through a website, at an e-toll kiosk located at a mall, e-toll customer services centre situated along the freeway network, phoning in to the call centre, or buying an e-tag at retail outlets that can be used immediately.

The e-tag is supplied by SANRAL. It will be at no cost to the user. However, if the user elects to obtain an e-tag, the user will need to deposit a minimum credit (will be specified by SANRAL) into the user's e-tolling account. However, this credit, will then allow the road user free toll passes in the same amount.

The e-tolling account that road users link to their vehicle can be set up as a pre-paid account with the Transaction Clearing House and money can be paid into this account via various options (retail outlets, the internet, at an e-toll kiosk, ATMs, e-toll customer services centres etc), or road users can link their e-tolling account to their own credit card account. More than one vehicle can be linked to your e-tolling account.

Bakwena e-tag holders do not need to re-register their account. Their accounts will automatically be migrated to the new e-tolling system from April 2011.

e-Tags can be used at any toll plaza/point that display the e-tag symbol. Therefore, as more electronic tolling is implemented countrywide at existing or new toll plazas, users do not need to set up a new or additional account.

**Registration will commence in the beginning of 2011. SANRAL will announce the opening of registration in the media.**





# discounts

SANRAL is considering discounts for e-tag holders that are frequent users, as well as time of the day discounts – this would be applicable for light vehicles. SANRAL is also considering discounts for public transport vehicles on specific routes where commuter services are provided.

# vehicle classes

Due to the sophisticated equipment, the traditional toll classification system (axle based vehicle classification) would be changed to volumetric based classification system. The number of vehicle classes will be reduced from IV to III vehicle classes.

# no or fraudulent number plates

Law enforcement on the network will increase. Special law enforcement vehicles are being developed and equipped with number plate recognition equipment. These vehicles will roam the network for law enforcement.

# visitors

to Gauteng & non-registered users

Road signs will warn visitors to Gauteng to phone or visit the e- Toll Customer Services Centre to register or obtain a Day Pass. Should a road user make use of the network without registering, they will receive an invoice and be given a set time to pay the toll fees. Should the toll fees not be paid within the set period, additional debt collection and enforcement actions will be taken.

# toll tariffs

Toll tariffs have NOT been set. In 2007 the estimated toll tariff was identified as 50c per kilometre, however, the toll tariffs and the discount structures have not been finalised, as SANRAL is in the process of updating the financial model of the project (this is the 'tool' used to determine the toll tariffs).

The construction of new infrastructure and additional lane capacity allow for a reduction in stop-go conditions, which reduces fuel consumption and vehicle wear and tear. It is also friendly to the environment, as less traffic congestion results in a decrease of vehicle emissions. However, the most significant contribution to this infrastructure investment is made to ordinary citizens by improvement of their quality of life and family time, as road users will spend less time on the road and more time doing what is important to them.



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## **FREEWAY IMPROVEMENT PROJECT (GFIP)**

**Enquiries and registration for  
SANRAL's electronic newsletter  
on the GFIP e-tolling**

E-mails can be send to [info@nra.co.za](mailto:info@nra.co.za)

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