Transport

An effective transport system is vital for the economic growth and social development of South Africa and, with goods and passengers moving more efficiently, it is a contributing factor for positioning the country as an attractive destination for investment.

The Department of Transport strives to lead the provision of an integrated, sustainable, reliable and safe transport system, by planning, developing, coordinating, promoting and implementing transport policies and strategies.

Although South Africa has a well-developed transport infrastructure with the rail and air networks being the largest in Africa, a great deal still needs to be done before the transport system will effectively meet all the country's transport needs.

Accordingly, government has unveiled plans to spend billions to improve roads, railways and ports.

The National Development Plan (NDP) proposes a number of strategic focus areas in transport infrastructure, which have to be addressed to achieve the ideals outlined for 2030. These areas involve:
- prioritising transport solutions that are safe, affordable and effective options
- focusing on transport as an entire network as opposed to individual transportation modes
- finding ways to become less dependent on transportation by improving spatial planning in cities so that people can live closer to areas of employment
- convincing South Africans to increase the use of public transport, thereby lowering carbon-intensive transportation mode usage, which will reduce the environmental, social and economic costs associated with transport.

Funding

The budget allocation for the Department of Transport for the 2012/13 financial year totalled R39 billion, growing to R48 billion in 2014/15.

The bulk of this was allocated as follows:
- R10 billion to the Passenger Rail Agency of South Africa (Prasa), of which R5 billion was to go into the acquisition of the new rolling stock

- R18 billion to the management of roads, of which R8,8 billion was intended for the South African National Roads Agency Limited (Sanral)
- R8,7 billion for the S'hamba Sonke Programme
- R10 billion to public transport, R5 billion of which was set aside for bus subsidies and the remaining R5 billion was earmarked for Bus Rapid Transport (BRT)-related projects and the Taxi Recapitalisation Programme (TRP).

In his 2012 State of the Nation Address, President Jacob Zuma announced a massive infrastructure development to boost the country's economy, promote job creation and enhance South Africa's attractiveness to foreign investment. For the immediate future, transport infrastructure spending was boosted to R80 billion for 2013/14, from R66 billion in 2011/12. The spending was to be spread across the country, with both urban and rural areas expected to benefit from the creation of jobs and tourism opportunities.

Legislation

The Department of Transport is guided by the following legislation and policies:

- The National Land Transport Act, 2009 (Act 5 of 2009), clarifies the concurrent roles and responsibilities of the different spheres of government in relation to public transport. It also consolidates public transport planning, service delivery, regulation and monitoring in the municipal sphere, establishes the national and provincial public transport regulators and enhances overall transport regulatory functions.
- The incorporation of the Shosholoza Meyl train service and the Autopax long-distance bus services into the Prasa has been finalised in the Legal Succession to the South African Transport Service Amendment Act 2008 (Act 38 of 2008). Autopax will continue to provide long-distance bus services that complement the long distance rail services provided through Shosholoza Meyl.
- The National Road Traffic Amendment Act,

2008 (Act 64 of 2008) and the Cross-Border Transport Amendment Act, 2008 (Act 12 of 2008) allow for better road traffic enforcement and improved cross-border regulation.
- The pilot project for the implementation of the Administrative Adjudication of Road Traffic Offences (Aarto) Act, 1998 (Act 46 of 1998), a demerit point system for traffic offences, has been rolled out in the muni-cipal areas of Tshwane and Johannesburg. Over the Medium Term Expenditure Framework period, the system will be extended to all municipal areas following the establishment of the Road Traffic Infringement Agency (RTIA), which will administer the system.
- The Civil Aviation Act, 2009 (Act 13 of 2009), was promulgated to harmonise and rationalise safety and security legislation for aviation to ensure compliance with International Civil Aviation Organisation (ICAO) standards.
- The Air Service Licensing Amendment Act, 2008 (Act 21 of 2008) addresses corporate governance issues relating to the Air Services Licensing Council. The department plans to implement the airlift strategy and improve aviation safety and compliance with the standards set by the United States of America (US) Federal Aviation Administration's international aviation safety assessment, and by the International Civil Aviation Organisation, an organ of the United Nations (UN).
- The Road Accident Fund (RAF) Amendment Act, 2005 (Act 19 of 2005) came into effect in August 2008 with the publication of regulations guiding, primarily, the assessment of injuries. The Act creates an equitable, affordable and sustainable system for victims of road accidents and their families. In November 2009, Cabinet approved the policy to provide benefits to road accident victims as a form of social security and to move away from the current fault-based systems.
- The RAF: No-Fault Policy for the proposed Road Accident Benefit Scheme was finalised. This will form part of the Comprehensive Social Security System and provide a more sustainable, affordable, equitable

and reasonable scheme. It will also further eliminate disparities regarding access to treatment and compensation.

Role players

The Department of Transport has established 12 public entities to deliver on certain elements of government's operational activities, namely Airports Company South Africa (Acsa), Air Traffic and Navigation Services (ATNS), the Cross-Border Road Transport Agency (CBRTA), Prasa, the Ports Regulator, the Railway Safety Regulator (RSR), the RAF, the RTIA, the Road Traffic Management Corporation (RTMC), the South African Civil Aviation Authority (SACAA), the South African Maritime Safety Authority (Samsa) and Sanral. These entities report to the Minister of Transport.

Commercial role players include Transnet, South African Airways (SAA) and SA Express (SAX).

Airports Company South Africa (Acsa)

Acsa is majority-owned by the South African Government, with the Public Investment Corporation owning 20% and Black Economic Empowerment shareholders and employees holding the remainder. It operates South Africa's nine principal airports, providing airlines with world-class, secure infrastructure.

Acsa is the largest airports authority in Africa. Together, its airports handle more than 200 000 aircraft landings and 23 million arriving and departing passengers annually. The airports handle over 98% of the country's commercial air traffic.

It is estimated that South Africa's three major

With road network of 16 170 km, South Africa has the longest network of roads of any African country. The drive from Musina in Limpopo in the north to Cape Town at the southern tip of Africa is a 2 000-km journey on well-maintained roads. While the Department of Transport is responsible for overall policy, road-building and maintenance is the responsibility of the South African National Roads Agency and the nine provinces and local governments.

international airports, namely OR Tambo, Cape Town and King Shaka international airports, sustain about 300 000 jobs (direct and indirect) and that planned future developments, as a result of passenger and cargo growth, will result in the creation of some 150 000 new jobs over the next 10 years, provided the envisaged infrastructure development plans are realised.

For the past nine years, service standards have been benchmarked through the Airports Council International's Airport Service Quality Programme. There are currently 180 airports around the world taking part in this programme, ranging from Atlanta in the US (the largest) to Incheon and Malaysia's Kuala Lumpur (the most efficient). To date, Acsa airports have won 20 achievement awards for passenger satisfaction.

Air Traffic and Navigation Services (ATNS)

ATNS provides safe, efficient and cost-effective air traffic management solutions and associated services on behalf of the state, in accordance with ICAO Standards and Recommended Practices and the South African Civil Aviation Regulations and Technical Standards.

ATNS is responsible for air traffic control in approximately 10% of the world's airspace and is the sole provider of air traffic, navigation, training and associated services within South Africa. ATNS trains air traffic controllers from South Africa, Africa and the Africa-Indian Ocean area.

Cross-Border Road Transport Agency (CBRTA)

The CBRTA was created to regulate cross-border road transport by providing an unsurpassed service through advising, facilitating and law enforcement. It plays a major role in promoting economic development within the Southern African Development Community (SADC) region through facilitating access to cross-border markets and improving the regulatory environment for trade and transport within the SADC region.

The Passenger Rail Agency of South Africa (Prasa) is set to introduce an electric high-speed train fleet in 2015, which will offer faster journey times and greater reliability. Prasa has appointed Gibela Rail Transportation, a consortium that is led by French company Alstom, to manufacture the trains. Gibela was selected after a rigorous and thorough evaluation process, which involved executive managers at Prasa and transaction advisors from reputable firms throughout the world.

Cross-border road transport is regulated through multi- and bilateral road transport agreements, concluded with various SADC member states and in line with the stipulations of the SADC Protocol on Transport Communication and Meteorology.

Passenger Rail Agency of South Africa (Prasa)

Established in 2009, Prasa merged the operations, personnel and assets of the South African Rail Commuter Corporation, Metrorail, Intersite Property Management Services, Shosholoza Meyl and the long-distance bus company, Autopax (Translux and City-to-City). As part of the process of integrating these entities, the role of Intersite was redefined to more effectively support Prasa's new strategic direction and objectives.

Prasa's initial objective was to upgrade the existing passenger railway system to meet the challenges of a modern society. This meant implementing plans for the modernisation of the signalling, telecommunications systems, rolling stock and train operating systems.

More recently, Prasa has shifted its focus away from the stabilisation of commuter rail services towards implementing a major financial turnaround to ensure that it becomes a viable entity capable of delivering on its legal and public transport mandate. Other objectives include integrating individuals and communities, and enabling a better quality of life through access to socio-economic opportunities.

Acquisition of new rolling stock for Prasa has made headlines with the approval of the feasibility study by Cabinet and launch of the procurement process by the Minister of Transport in April 2012.

The accelerated rolling stock programme on Metrorail coaches resulted in 510 coaches delivered for the financial year, 60 coaches above target.

Progress on key infrastructure investment programmes such as the National Signaling Programme and Bridge City Extension is making good progress.

Passenger numbers on the commuter rail side have improved by 9,5% on 2010/11, mainly as a result of actions of Prasa Rail operations to ensure all revenues are collected.

Autopax passengers increased by 65% in 2010/11 as a result of more buses run during the year on mainly existing routes.

The National Ports Regulator (NPR)

The National Ports Regulator was established in terms of the National Ports Act, 2005 (Act 12 of 2005). Its primary function is the economic regulation of the ports system, in line with government's strategic objectives to promote equity of access to ports and to monitor the activities of the Transnet National Ports Authority (TNPA). The regulator also promotes regulated competition, hears appeals and complaints, and investigates such complaints.

The TNPA is the largest port authority on the continent. It owns and manages ports at Richards Bay, Durban, East London, Port Elizabeth, Mossel Bay, Cape Town, Saldanha and Ngqura.

The TNPA provides suitable infrastructure as a conduit for the country's imports and exports. Besides being the port landlord, it also has a control function, which includes:
- providing vessel-traffic control and navigational aids
- licensing and leasing terminals to operators
- monitoring the performance of port operators
- ensuring the orderly, efficient and reliable transfer of cargo and passengers between sea and land.

Based on the *White Paper on the National Commercial Ports Policy (2002)*, the vision for South African ports is to become a system of ports,

seamlessly integrated in the logistics network, that is jointly and individually self-sustainable.

The Railway Safety Regulator (RSR)
The RSR oversees safety in the railway transport industry, through appropriate support, monitoring and enforcement, guided by an enabling regulatory framework, including regulations and safety standards. Over the medium term, the RSR will continue to strive to work towards an effective railway safety compliance regime.

Road Accident Fund (RAF)
The RAF is a public entity that compensates victims of motor-vehicle accidents for bodily injuries and/or loss of financial support caused by the death of a breadwinner.

It derives its income from tax levied on petrol and diesel sold in South Africa. The role of the RAF is to reintegrate victims of road accidents into society from a health and economic perspective and protect wrongdoers and their families from financial ruin.

The RAF provides compensation for loss of earnings and support, general damage, and medical and funeral costs to victims of road accidents caused by the negligent or wrongful driving of another road user.

Since the promulgation of the RAF Amendment Act, 2005, compensation has been limited to earnings and loss of support. Compensation for pain and suffering is available only to the seriously injured.

In June 2012, Cabinet approved the RAF (Transitional Provisions) Amendment Bill, 2012

South African heavy vehicle drivers scooped five awards in various categories at the 28th World Professional Drivers' Championships.

The awards ceremony, hosted by the Road Traffic Management Corporation and the Department of Transport, was held at Sun City Resort near Rustenburg in August 2012. Vishnu Naidoo from KwaZulu-Natal, was number one in the Rigid category. In the Group category, Team South Africa managed to get four awards, while Finland, Germany and Switzerland took the other awards. South Africa, Finland and Germany scooped most of the awards.

for debate in Parliament. The Bill seeks to provide for transitional measures in respect of certain categories of third parties whose claims were limited under the old Act and give effect to the Constitutional Court judgment of *Mvumvu vs the Minister of Transport.*

The Road Traffic Infringement Agency (RTIA)
The RTIA mandate is predicated on the objective of decriminalising road traffic infringements and dealing with them through administrative justice processes, thereby freeing the courts to deal with more serious crimes, including excessive speeding and driving under the influence.

The RTIA's objectives include:
- administering the procedures to discourage the contravention of road traffic laws and to execute the adjudication of infringements
- enforcing penalties imposed against people contravening road traffic laws
- providing specialised prosecution support services
- undertaking community education and community awareness programmes to ensure that individuals understand their rights and options.

Road Traffic Management Corporation (RTMC)
The RTMC is responsible for coordinating road-traffic management across the three spheres of government. The core mandate of the corporation is to improve traffic-law compliance and reduce road fatalities.

In line with the UN millennium development goals (MDGs) and the Moscow Declaration on Road Safety, which calls for a Decade of Action for Road Safety, the corporation set itself goals over the medium term to reduce the road fatality rate by 25%. This objective would be achieved through, among others:
- enforcing driver and vehicle fitness requirements
- coordinating effective prosecution of moving traffic violations
- implementing the national traffic law enforcement code.

Cape Town was one of four cities short-listed for the prestigious 2012 Sustainable Transport Awards held in Washington in February 2012, with its non-motorised transport and bus rapid transit network MyCiti receiving an honourable mention. Cape Town received recognition for its 16-km bicycle lane, the longest continuous such lane in Africa.

The corporation also reviewed its strategic focus and developed a five-year strategic plan to improve financial management.

The RTMC will continue with the zero-tolerance approach against traffic offenders, while a comprehensive public media campaign and consultative programme are underway to educate the public about the Aarto Act, 1998.

The allocation of demerit points to infringers will be introduced on a national basis.

South African Civil Aviation Authority (SACAA)

SACAA is charged with promoting, regulating and enforcing civil aviation safety and security standards. It performs administrative and oversight control over 11 827 registered aircraft, 2 040 licensed aircraft maintenance engineers, 564 air maintenance organisations, 303 air operating certificate holders, 200 aviation training organisations, as well as 15 595 male and 1 196 female pilots.

In 2012, there has been an increase to 123 accidents from 111 in 2011.

South African Maritime Safety Authority (Samsa)

Samsa leads and champions South Africa's maritime interests as custodian and steward of maritime policy, vigorous promoter of the maritime sector and giving full and complete effect to our obligations for the benefit of all stakeholders.

Samsa's mandate can be divided into two broad and distinct outcomes: meeting UN conventions regarding safety and pollution at sea, and attending to nation's developmental challenges as they affect the country's maritime interests.

The first outcome is achieved by ensuring safety of life and property, as well as marine environmental protection, within the South African waters and beyond, through:
• search-and-rescue services
• salvage tug services to protect the marine environment
• port state control ship surveys
• coastal state control
• qualification and certification of seafarers.

The South African National Roads Agency Limited (Sanral)

Sanral is responsible for the design, financing, maintenance, operation and rehabilitation of South Africa's national toll and non-toll roads.

Its functions include:
• being responsible for proclaimed national roads
• maintaining, upgrading, operating, rehabilitating and funding the national roads
• levying tolls to service toll roads
• managing concessionaires
• advising the Minister of Transport on road-related matters
• creating public value.

Sanral manages the following: 1 573 km of dual carriageway, 550 km of four-lane undivided roads; 14 047 km of two-lane, single roads; 1 288 km of toll roads; and 1 832 km of state toll roads.

The agency's Open Road Tolling (ORT) Project in Gauteng allows tolling without road users having to negotiate toll plazas.

The intelligent transport systems used in conjunction with the ORT will contribute to lessening congestion, improving road safety, reducing carbon emissions and limiting the impact of greenhouse gases on the environment.

Sanral's strategy of pursuing public-private partnerships (PPPs) has rendered substantial dividends. This policy is based on the reality that there are no "free" roads: they are either funded through general taxes or user fees. By applying the "user-pay" principle, a targeted portion of the national road network can be developed and expanded.

PPPs with Sanral's concessionaires – the N3 Toll Concession (Pty) Ltd (N3TC), the N1/N4 Bakwena Platinum Concession Consortium (BPCC) and the N4 Trans African Concessions (TRAC) – allow Sanral to reduce the cost of transport, provide a safer and more reliable road infrastructure, and build the economy of South Africa and its neighbours. To date, the concessionaires have financed capital work to the value of R5 159,7 million.

Transnet Limited

Transnet is a focused freight-transport and logistics company wholly owned by the South African Government.

It comprises the following operating divisions:
• Transnet Freight Rail
• Transnet Rail Engineering
• Transnet Port Terminals
• Transnet Pipelines
• TNPA.

In April 2012, Transnet announced the details of a R300-billion investment in infrastructure that is expected to create more than 1,5 million jobs, while making its freight rail division the fifth-largest in the world.

The lion's share of Transnet's R300 billion capital investment programme, R205 billion, will be spent on rail projects – R151 billion on freight rail – as the company pushed to increase freight rail volumes from about 200 million to 350 million tons by 2019, while increasing its market share of container traffic from around 79% to 92%.

A large-scale shift in freight transport from road to rail will also address costs, congestion and reduce carbon emissions.

Transnet's total contribution to employment is expected to increase by 54,8%, from 368 450 in 2011/12 to 570 263 jobs in 2018/19.

Transnet will implement a seven-year locomotive fleet procurement of unprecedented scale in South Africa's history, amounting to approximately R35 billion for 1 064 locomotives.

In July 2012, the arrival of a massive, custom-built pneumatic ship unloader at South Africa's largest exporting port in Richards Bay,

KwaZulu-Natal, marked the start of port operator Transnet Port Terminals' seven-year equipment renewal project.

The unloader is only the seventh of its kind in the world, and its arrival signals the start of the Richards Bay Terminal's ambitious R3-billion equipment replacement programme to improve capacity, equipment reliability and service delivery.

In a bid to increase the number of individuals in the technical and engineering fields, as well as to aid in youth employment, TRF had by October 2012 a total of 700 high school pupils on board its Cadet Scheme. Through the scheme, Transnet Freight Rail (TFR) is sponsoring learners from Grade 10 to 12 who are performing well in school, particularly in Maths and Science. The students must have an average of 60% and above. TFR has committed to provide the learners with school uniforms, as well as to pay for tuition fees for both high school and tertiary education.

Once learners have completed their Matric, they go on to study at the University of Johannesburg through a partnership between the university and TFR. The scheme is mainly aimed at young girls and people with disabilities. Other than expos and visiting schools, the scheme is also looking at assisting out-of-school youth through the help of non-governmental organisations and information handed over by local municipalities.

In September 2012, Transnet started to test the longest manangese train from the new Thipi Borwa manganese mine at Kathu in the Northern Cape to the port of Port Elizabeth. The train of 18 diesel locomotives, four test cars and 208 freight cars loaded with manganese was 2,23 km long.

The train will use radio-distributed power technology, which is also used on the iron ore line between Sishen and Saldanha. The new siding at Tshipi is unique in that it has a long loop that can accommodate three trains with 122 cars each without blocking the main line. The siding was designed to last at least 60 years. The trip to Port Elizabeth is 1 085 km and 13 000 tons manganese ore was transported.

South African Airways (SAA)

SAA is the leading carrier in Africa, serving 26 destinations across the continent, as well as major destinations within South Africa and internationally from its Johannesburg hub at the OR Tambo International Airport and is a member of the largest international airline network, Star Alliance.

SAA's core business is the provision of passenger airline and cargo transport services together with related services, which are provided through SAA and its four wholly owned subsidiaries: SAA Technical; Mango, its low-cost carrier; Air Chefs, the catering entity of SAA; and South African Travel Centre.

A new planned capital injection by government into SAA is part of a plan to make the carrier more competitive in routes to African countries. This will fund a new aviation strategy, which was submitted to Cabinet in June 2012. The strategy focuses on boosting services to the continent, thus boosting regional integration on the continent.

From 17 January 2012, operations started from Johannesburg to Kigali (Rwanda) and onwards to Bujumbura (Burundi). SAA's most recent addition to its African route network was the start of flights to Ndola, Zambia on 2 October 2013.

SAA launched the Johannesburg-Beijing route in January 2012, which is contributing to establishing South Africa as an aviation hub between South America and China, linking three of the five BRICS countries and connecting three continents.

The maiden flight for a new SAA service between Johannesburg to Cotonou, Benin took place in May 2012.

In December 2012, South African Airways won Airline of the Year Award, as well as Best Airline to Africa and Best Business Class White Wine, at *Global Traveller* magazine's annual awards gala in Los Angeles. The airline was praised as having the best product, service and on board amenities in the industry and for being a leader in the marketplace.

In April 2013, SAA received authorisation to fly new safety-enhancing and fuel-saving instrument departure and approach procedures. The approval, which is the first in Africa, paves the way for further developments that could enhance safety and increase operational efficiency throughout SAA's route network.

SA Express (SAX)

SAX is a domestic and regional passenger and cargo carrier established on 24 April 1994. Although the airline is operationally independent of SAA, its flights are incorporated within the strategic alliance with Airlink and SAA.

Programmes and projects

Road Transport Management System (RTMS)

The RTMS is an industry-led voluntary self-regulation scheme that encourages consignees, consignors and road transporters to implement a management system that preserves road infrastructure, improves road safety and increases productivity.

The system's key components are load optimisation, driver wellness, vehicle maintenance and productivity. It is designed to show transport companies how to take greater corporate responsibility for road safety.

A national RTMS steering committee is responsible for the promotion and administration of RTMS in South Africa. It comprises individuals representing major industries and aligned stakeholders within the country.

National Transport Master Plan (Natmap)

The Department of Transport presented Parliament with the R750-million Natmap in 2010. It includes linking Johannesburg to Durban and Polokwane via rapid train networks; expanding the ports of Saldanha and Cape Town, doubling the Huguenot tunnel outside Paarl.

Part of Natmap is to form partnerships with the private sector to help fund the projects and lower the burden on taxpayers. Its mandate further includes:

The construction of South Africa's latest bus rapid transit (BRT) system started in the Pretoria in July 2012. The R2,6-billion Tshwane BRT system forms part of the city's revitalisation programme. The system will cover a total of some 80 km of bus lines, comprising 62 stations and will run from Mabopane in the north through the Pretoria CBD, past Menlyn and on to Mamelodi in the east. The system will include about 340 buses, some of which will be powered by gas.

Pretoria will be the fourth city in South Africa with a BRT system, joining Johannesburg, Cape Town and Nelson Mandela Bay Municipality.

- facilitating long-term and sustainable socio-economic growth
- promoting comprehensive integrated development planning
- acting as the infrastructure implementation/action plan of macro-scale projects for the whole country.

Natmap's goals include:
- maximising the use of existing infrastructure facilities
- developing future infrastructure facilities
- developing an up-to-date and accurate central land-use/transportation databank.

Public Transport Strategy

South Africa is on its way to becoming the first country in Africa to have rapid public transport networks. Such networks will not only change the face of the country, but will boost economic development, job creation and tourism.

South Africa's public transport strategy, which comprises a multi-billion rand transport infrastructure plan, is set to entirely reshape travel in South Africa. At the core of the plan is a high-quality Integrated Mass Rapid Public Transport Network that includes rail, taxi and bus services. The strategy aims to accelerate the improvement in public transport by establishing integrated rapid public transport networks (IRPTNs), which will introduce priority rail corridors and BRT systems in cities.

The Public Transport Strategy is expected to improve public transport services for more than half the country's population.

The long-term goal of the strategy is to have 85% of a metropolitan city's population within one kilometre of the network, and provide a transport service that is clean, comfortable, reliable, fast, secure, safe and affordable.

Consolidated government transport improvements will amount to R80 billion in 2013/14.

As part of government's commitment towards rural development, the S'hamba Sonke Programme addresses road maintenance on secondary roads and rural roads, with particular emphasis on repairing potholes, using labour-intensive methods of construction and maintenance. R6,4 billion was set aside for this programme in 2011/12, R7,5 billion in 2012/13 and R8,2 billion for 2013/14, amounting to a total of R22,3 billion in the medium term.

Electronic National Traffic Information System (eNaTIS)

eNaTIS is a system which provides for the registration and licensing of vehicles. It manages and records applications for and authorisation of driving and learner's licences.

It is also a law-enforcement tool used to ensure that the details of stolen vehicles are circulated and prevents irregular and fraudulent re-registration of such vehicles.

The system delineates the life cycle of a vehicle, from the factory floor to the scrap yard.

In September 2012, it became compulsory for all new motor vehicles and motor vehicles requiring a police clearance to be microdotted.

The Department of Transport and the South African Police Service (SAPS) would enforce the requirements through eNaTIS.

The registration of a motor vehicle introduced onto the eNaTIS by the manufacturer, importer or builder after September 2012 would only be allowed if the microdot information was loaded onto the system.

S'hamba Sonke Road Maintenance Project

The S'hamba Sonke (meaning "Walking Together") Programme, launched in April 2011, is dedicated to the maintenance of roads. The

In May 2012, the Minister of Public Enterprises, Mr Malusi Gigaba, unveiled a plaque at the Salt River Engineering Works, the oldest railway plant in the Southern Hemisphere. The plant has been at the heart of South Africa's transport network since 1862. It is central to the maintenance facilities that support the Sishen-Saldanha iron-ore heavy-haul export corridor and the General Freight Business in the Western Cape.

objectives of the programme are to, among other things, allocate a sizable amount of budget for pothole repairs on a district-by-district basis, as well as the maintenance and upgrading of heavily trafficked rural transport corridors and ensuring access to public facilities.

Since the launch of the programme, the Department of Transport has created more than 13 280 jobs and spent more than R1,7 billion.

In 2011/12, the S'hamba Sonke Programme created 68 000 full-time employment opportunities. Between 2012 and 2014, another 50 000 employment opportunities are envisaged.

Through the project, 100 new contractors have created 6 500 jobs, benefitting co-operatives and companies owned by women, youth and people with disabilities.

The department allocated the project R75 billion for 2012/13 and R8,2 billion for 2013/14, amounting to R22,3 billion in the medium term.

Rural Transport Strategy
The deep rural areas are still isolated from major road and rail routes. The Rural Transport Strategy, approved by Cabinet in December 2007, is promoting mobility in such areas.

Regarding the improvement of strategic roads and implementation of the Road Infrastructure Strategic Framework of South Africa, National Treasury and the Department of Transport have rolled out the provincial road maintenance grant of more than R22 billion.

Rural infrastructure contributes to job creation and improves the socio-economic needs of people in rural areas. It ensures access to schools, clinics and economic opportunities.

The Rural Access Improvement Programme is part of a comprehensive rural transport strategy for South Africa, which addresses challenges in rural development, such as:
• building bridges and non-motorised transport (NMT) facilities
• developing and implementing the IRPTNs for regular transport services
• developing and upgrading the airport network with a proper road-link infrastructure and services
• revitalising rural railway operations by expanding rail passenger services and freight operations to the rural areas.

Through the EPWP, the department aims to contribute to job creation by implementing labour-intensive projects.

Non-motorised transport (NMT)
The promotion of NMT is mainly aimed at increasing transport mobility and accessibility, mainly in rural areas.

The Department of Transport has broadened its Shova Kalula ("Pedal Easy") Project into a more comprehensive NMT project that incorporates, among other things, cycling and animal-drawn carts. The project was first launched in 2001 and introduced in Limpopo in 2010.

The project forms part of government's action programme and is expected to contribute to its anti-poverty strategy and second-economy interventions. It is believed that these initiatives improve the mobility of and access to economic opportunities by rural communities.

The department aims to distribute a million bicycles countrywide by 2015, in line with the resolution and action plan of the African Ministers' Transport Summit held in Addis Ababa, Ethiopia, in 2005.

The Department of Transport has expressed interest in establishing a local bicycle-manufacturing plant to produce bicycles for the project. The Shova Kalula Project also incorporates micro-businesses, which sell, repair and maintain bicycles to ensure the sustainability of the project.

Taxi Recapitalisation Programme (TRP)
The TRP is an intervention by government to bring about safe, effective, reliable, affordable

and accessible taxi operations by introducing new taxi vehicles designed to undertake public transport functions in the taxi industry.

The TRP is not only about scrapping old taxi vehicles, but also about how best operators can be assisted to benefit constructively in the industry through empowerment.

Through the introduction of the new taxi vehicles in the TRP, the government for the first time prescribed "compulsory safety and other requirements" to protect passengers, operators, pedestrians, motorists and other road users. The compulsory requirements are also meant to ensure passenger comfort.

Through the TRP, government has ensured the following changes:

• introduction of safety requirements for passengers
• comfort for passengers by insisting on the size and number of seats
• promotion of accessibility on the size and number of seats
• branding and colour coding of taxi vehicles so that legal taxis could be identified and differentiated from illegal ones, and also that members of the public can easily identify a taxi vehicle.

Resources

Roads

National roads

Government is responsible for overall policy, while road-building and maintenance is the responsibility of Sanral.

The Department of Transport continues to improve the road network by ensuring that it is well maintained and safe.

A new national roads plan was developed, acknowledging the importance of roads to the economy.

Between 2010 and 2015, R75 billion is to be used for road infrastructure, maintenance and upgrading; with an additional R3 billion budgeted for the EPWP access roads, all of which are attempts by government to alleviate traffic congestion.

In 2012, more than R500 million was spent in Gauteng on the construction and maintenance of roads. The R82 (the old Vereeniging Road) linking Johannesburg and Sedibeng, as well as William Nicol Drive, were upgraded. The construction of the K154 was undertaken, stimulating development in the rural parts of south Sedibeng.

As part of rural development, roads in five rural development nodes – Magaliesburg, Winterveld, Hammanskraal, Rust de Winter and Bantu Bonke – had been upgraded.

Provincial roads

Provincial governments are responsible for planning, constructing and maintaining roads and bridges, except those falling under Sanral or local governments. The Department of Transport assists provincial and local governments to improve and develop the state of their roads.

Municipal roads

The construction and maintenance of most roads and streets within the municipal boundaries of cities and towns is the responsibility of the municipality concerned.

Toll roads

The toll road network comprises about 19% (3 120 km) of the national road grid. Some 1 832 km of these toll roads are managed by Sanral.

In its endeavour to continue with the expansion and maintenance of the comprehensive national road network, Sanral will continue with the selective expansion of the toll road network.

About 1 288 km of the tolled sections of national roads have been concessioned to private companies to develop, operate and maintain.

The Minister of Finance, Mr Pravin Gordhan, announced a special appropriation of R5,8 billion to Sanral for its Gauteng Freeway Improvement Project (GFIP) in efforts to reduce the toll motorists will pay for use of the highways. Government aimed to reduce the R20-billion

debt to be paid through the toll system and enable a further discount for regular users of the freeway.

In April 2012, Cabinet appointed a committee to be chaired by the Deputy President to coordinate all work around the GFIP. Other members of the committee include the ministers of transport, finance, public enterprises, and performance monitoring and evaluation in The Presidency; and the Director-General in The Presidency.

This committee was mandated, among other things, to move with urgency to ensure that Sanral's financial stability was not affected in any way. The committee assessed government's response to the North Gauteng High Court ruling that delayed the implementation of e-tolls and other related legal matters. It also met with appropriate stakeholders to find constructive solutions and consensus on the outstanding matters.

During the ongoing legal proceedings, government had to act responsibly, ensuring that it and the state-owned enterprises honoured their financial obligations timeously.

Government also had to ensure that nothing compromised its huge infrastructure programme, which is crucial for raising the level of South Africa's economic growth and for raising the standard of living of citizens, especially the poor and unemployed.

In August 2012, Cabinet approved the Transport Laws and Related Matters Amendment Bill, 2012 for submission to Parliament.

The Bill had been necessitated by the development of the GFIP, as well as future plans for the development of road infrastructure.

The second Congress of the African Association of Public Transport (UATP) took place in Johannesburg in October 2012. The UATP is an independent association that represents professionals in Africa in the field of public transport and the transportation of goods by road, rail, sea, air and water. This year's congress focused on bus rapid transit (BRT) systems as an adapted and sustainable solution for mobility in African cities.

Rail

Gautrain

The Gautrain is an 80-km mass rapid transit railway system that links Johannesburg, Pretoria and OR Tambo International Airport. It was built to relieve the traffic congestion in the Johannesburg-Pretoria traffic corridor and offer commuters a viable alternative to road transport, as Johannesburg had limited public transport infrastructure.

The project was announced in 2000, before South Africa won the rights to host the 2010 FIFA World Cup™. Government gave the go-ahead for the project in 2005, and construction began in 2006. In June 2012, the project was completed with the opening of the final section between Rosebank and Johannesburg Park Station.

In a survey conducted in 2012 by Catalyst Research, passengers had rated the service highly for train punctuality (94%), convenience (94%), value for money (93%), safety and security (92%), and cleanliness (92%).

Some 35% of passengers fall into the 35 to 49 year age bracket. About 20% are younger than 24 and the majority are women.

Less than three incidents of theft per million passengers had been reported since the start of operations between Hatfield in Pretoria and Rosebank in Johannesburg in August 2011. No contact crime, such as muggings, had been reported on the Gautrain. Over 400 security guards and 800 CCTV cameras keep a watchful eye over the entire system.

By April 2013, passenger figures were close to 50 000 people a day. That implicated that, with an average of 1,1 people per car in South Africa, there were almost 50 000 fewer cars on the roads per day.

Aviation

South Africa's nine major airports are:
- OR Tambo International in Gauteng
- Cape Town International in the Western Cape
- King Shaka International in KwaZulu-Natal
- Bloemfontein International in the Free State

- Port Elizabeth International in the Eastern Cape
- Upington International in the Northern Cape
- East London Airport in the Eastern Cape
- George Airport in the Western Cape
- Kimberley Airport in the Northern Cape

Acsa handles more than 10 million departing passengers and 200 000 aircraft landings annually.

Aviation is well placed to continue its strong support of South Africa's trade, business and leisure tourism objectives. Together with SAA and SAX, the department drafted an African Aviation Strategy that was submitted to Cabinet in June 2012. The strategy is aimed at focusing the state-owned airlines on opportunities in the continent and on promoting regional integration.

The dual challenge of a depressed global economy and high fuel prices means that shareholder support for SAA to procure a modern and fuel-efficient fleet is vital if it is to remain competitive.

The department is working with the SAX Board to address the internal control challenges that the company is currently facing to restore public confidence in the company.

The airline has launched three new domestic routes and has further established a base at King Shaka International Airport from which the airline will play a catalytic role in continental trade and economic integration, supporting the Dube Trade Port industrial development zone as well.

In January 2011, the Department of Transport announced the approval and coming into effect of the National Airspace Master Plan (NAMP) 2011 – 2015. It provides a strategic view and direction of airspace organisation and management within South Africa, as well as the notion of performance-based transition planning at global, regional and local level. It has been compiled in accordance with the National Civil Aviation Policy, as amended, and is effective as of January 2011.

The objectives of the NAMP include::

- servicing the airspace in accordance with ICAO standards and recommended prac-

In November 2012, Transnet Freight Rail's (TFR's) first train service to transport hematite products from Swaziland to South Africa's Richards Bay started. The service is expected to stimulate job creation and add an estimated 1,2 Mt a year to the TFR's annual railings. It was designed to run seven trains a week.

tices in such a way that it meets the requirements of all users and, particularly, the international community
- rationalising all managed airspace in accordance with ICAO standards and recommended practices in such a way that it meets the requirements of all users by a consultative process, strategically and tactically
- minimising all permanently prohibited, restricted and danger areas in accordance with ICAO standards and practices, and to facilitate the flexible use of airspace to the benefit of all users.

The NAMP will also guide the National Airspace Committee, established through the Civil Aviation Regulations, 1997, in the execution of its mandate, by providing measurable key performance areas, performance objectives, indicators and targets in contemplating amendments to airspace, procedures and infrastructure.

Airlift Strategy

Cabinet approved the Airlift Strategy in July 2006 to introduce effectively structured regulatory measures for increasing tourism growth for South Africa.

In particular, this strategy is based on aviation policy directives and contributes to the county's growth by:
- aligning with the Tourism Growth Strategy and industry
- prioritising tourism and trade markets
- unblocking obstacles to growth through regulatory mechanisms, and bilateral and multilateral air-services negotiations.

In particular, the strategy supports the MDGs and the objectives of the New Partnership for Africa's Development to increase African connectivity and access through the accelerated

implementation of the Yamoussoukro Decision of 1999 on the liberation of intra-Africa air-traffic services.

The overall objective of the Airlift Strategy is to increase aviation's contribution towards sustainable economic growth and job creation. This requires the creation and maintenance of an enabling framework, within which both suppliers and consumers of air-transport services may exercise reasonable flexibility and choice.

The strategy enhances the prospects of South Africa as a preferred air-travel destination and synchronises the basis for bilateral air-services negotiations with other priorities.

The strategy also provides specific guidelines for various unique markets, with emphasis on the needs of intra-African air services, and aims to improve the regulation of particularly the supply-side of air-transport services.

The department also developed the Airlift Implementation Plan, which provides a clear framework and capacity targets to be met. The Airlift Strategy is expected to promote the provision of adequate air-service capacity and infrastructure to cater for the projected growth in air movements within South Africa, and between South Africa and its key international partners.

Airlines

Several domestic airlines, as well as a number of smaller charter airline companies, operate in South Africa. SAA, British Airways (BA)/Comair, SA Express, SA Airlink and Inter-Air operate scheduled air services within South Africa and the Indian Ocean islands.

In addition to serving Africa, SAA also operates services to Europe, Latin America and the Far East.

Other airlines operating in the country are Kulula and Mango. Scheduled international air services are also provided by Air Afrique, Air Austral, Air Botswana, Air France, Air Gabon, Air Madagascar, Air Malawi, Air Mauritius, Air Namibia, Air Portugal, Air Seychelles, Air Tanzania, Air Zimbabwe, Airlink Swaziland, Alliance Express, BA, Cameroon Airlines, Delta Airlines, El Al, Egyptair, Emirates, Ethiopian

In May 2012, the Eastern Cape Provincial Government handed over Mthatha Airport to the South African National Defence Force for a maximum of five years. It will be used for training, particularly by the South African Air Force. In return, the Ministry of Defence will help to construct a new runway to accommodate larger aircraft. This initiative forms part of the Mthatha Airport Upgrade Project, which is in line with the Blue Skyway Aviation Strategy of the Eastern Cape Provincial Government and the King Sabata Dalindyebo Presidential Intervention Project.

Airlines, Ghana Airways, Iberia, KLM, Kenya Airways, LAM Mozambique Airlines, LTU International Airways, Lufthansa, MK Airlines, Malaysia Airlines, Martinair Holland, Northwest Airlines, Olympic Airways, Qantas, Royal Air Maroc, Saudi Arabian Airlines, Singapore Airlines, Swissair, Taag, Thai International, Turkish Airlines, Uganda Airlines, United Airlines, Varig, Virgin Atlantic, Yemenia, Zambian Air Services and Zambian Skyways.

In May 2012, the South African Government welcomed the introduction of regular flights from Eritrea. Eritrean Airlines will fly to Cape Town International Airport and OR Tambo Airport four times a week.

Freight transport

Ports

A major part of world trade depends on South Africa's coastal waters. The country is situated on a major sea route, which facilitates the safe and secure movement of about 500 million tons of crude petrochemical sea trade. This represents over 30% of the world's petrochemical production, on board over 5 000 tanker voyages of very large crude carriers per year.

The country's ports handle over 430 Mt of varied cargo types, carried on over 9 000 ship calls each year. The nine commercial ports play a crucial role in South Africa's transport, logistics and socioeconomic development. About 98% of South Africa's exports are conveyed by sea.

Hub ports

The Port of Durban is a full-service general cargo and container port. It is the most conveniently situated port for the industrialised Durban/Pinetown and Gauteng areas and cross-border traffic.

The Port of Durban has developed into Africa's busiest multiservice port, handling up to 80 Mt of cargo, and on average, 4 000 ships a year.

Multipurpose ports

The Port of Port Elizabeth, with its proximity to heavily industrialised and intensively farmed areas, has facilities for handling all commodities – bulk, general and container cargo. Being situated at the centre of the country's motor-vehicle-manufacturing industry, the port imports large volumes of containerised components and raw material for this industry. The bulk of exports comprises agricultural products. Apart from agricultural produce, manganese ore, motor-vehicle-industry-related products and steel are exported.

Located mid-way between Cape Town and Port Elizabeth, the Port of Mossel Bay has, in the past, specialised in serving the local inshore and deep-sea fishing industry, as well as limited commercial cargo. However, it now serves the oil industry as well as other client-oriented marine cargo. This port is the only South African port that operates two offshore mooring points within port limits. Both mooring points are used for the transport of refined petroleum products.

The Port of East London is situated at the mouth of the Buffalo River on South Africa's east coast, and is the country's only commercial river port. It boasts a large container terminal and grain elevator, and is the largest exporter of maize. With a world-class R80-million car terminal, the port has become one of the major motor-vehicle export and import terminals in South Africa.

Pipelines

South Africa consumes about 25 billion litres of petroleum products a year.

Transnet Pipelines transports almost 50% of all refined petroleum products in the country for the emerging and major oil companies of South Africa. The Tarlton storage and distribution depot is a vital conduit in the supply of fuel to Botswana. Transnet Pipelines plans to enhance this service.

Transnet Pipelines transports all the crude requirements for the inland refinery at Natref, from where almost 70% of their refined products and 80% at Secunda are transported through the pipeline network to the final markets.

Transnet Pipelines owns, maintains and operates a network of 3 000 km of high-pressure petroleum and gas pipelines.

Investment is ongoing in the pipeline sector. Construction on a R5,8-billion fuel pipeline between the Mozambican Port of Matola in Maputo and Kendal in South Africa started in 2009. The 450-km pipeline transports up to 3,5 Mℓ a year and is expected to prevent potential fuel shortages in South Africa.

The pipeline facilitates the importation of petrol and diesel from Mozambique, which has extensive natural gas and coal reserves, but no oil reserves. Of the pipeline's total capacity of 3,5 Mℓ of fuel and diesel, a maximum of 1,5 Mℓ is diverted to Mbombela while the remainder is transported to Kendal.

More than 60% of South Africa's liquid-fuels demand lies within the Durban-Johannesburg Corridor. The Durban-Johannesburg Pipeline has become inadequate to transport the required volumes of petroleum products from the coast to the inland regions.

The old Durban International Airport (DIA) was handed over from Airports Company South Africa to Transnet to meet the demand for container capacity in Durban. Once transformed, the DIA will become home to 16 container berths, five automotive berths and four liquid-bulk berths. It is expected to create 20 000 direct and 47 000 indirect jobs during the construction phase. Once operationalised, it will employ 12 000 people directly and another 16 000 indirectly through the value chain of suppliers.

The multiproduct pipeline, which is under construction at a cost of R23 billion between Durban and Johannesburg, will be replacing the existing Durban-Johannesburg pipeline and is expected to increase capacity from 4,4 billion litres to 8,4 billion litres by December 2013.

Freight

Africa's road access rate is only 34% compared with 50% in other geographical zones. Yet roads remain the dominant mode of transportation, accounting for more than 90% of passenger and freight transport in Africa, compared with around 50% of freight in Europe.

Government will also review its rail investment programme to accelerate the shift of freight transport from road to rail.

Transnet will invest about R63 billion in the freight rail system over the next five years. For its part, organised business will continue to promote greater use of rail freight by companies.

In August 2011, the Integrated Transport Planning Unit in the Department of Transport made a presentation to Parliament on *The Reduction of Freight Transportation by Road – A Shift Towards Rail*, which focused on, among other things:
- the challenges of transporting freight by both road and rail
- an analysis of the road and rail market share (with mostly the market share shifting to road)
- key freight corridors
- identified rail- and road-friendly commodities
- factors contributing to the decline of freight rail
- policy and strategic thrusts.

The Parliamentary Portfolio Committee on Transport, which requested the presentation, raised questions about interventions and solutions in addressing challenges caused by road in particular, which spill over to the deterioration of the rail market share, and current specific transport policies, strategies and implementation plans.

The Department of Transport has, in its efforts to address transport challenges, taken the following steps:
- the 2005 Cabinet-approved National Freight Logistics Strategy, which proposed an institutional arrangement for railways
- the draft Rail Branch Line Strategy, which seeks to capacitate the current challenges faced by the secondary rail network and allow private operators on this specific network, and subsequently competition
- the Natmap, which deals with a demand forecast model in relation to demand for both passenger and freight transport and the institutionalisation thereof
- the Road Freight Strategy, which recommends proposals on how to better manage the road freight environment such as through axle load mass limits, commodities that were identified as road friendly as well as those that are rail friendly
- the *Green Paper on Rail Policy* as a blueprint for railways (both passenger and freight in the country)
- a single transport regulator and related rail economic regulator, which seeks to regulate market access to the current rail network for private operators who would have an opportunity to operate on the secondary rail network.

In March 2012, President Jacob Zuma unveiled a state-of-the-art cargo terminal, a trade zone, an agrizone and associated property development at the Dube Trade Port in La Mercy, KwaZulu-Natal. The port, in which the King Shaka International Airport is located, has been operational for 22 months and the first phase has been completed. Included was the construction of the Cargo Terminal, Trade House, 29 South, Dube Square, Trade Zone and Dube City infrastructure, Agrizone and the information technology and telecommunications platform.

The establishment of an aerotropolis in the north of Durban, stretching from Umhlanga to Ballito, which will boost economic development and job creation on the north coast and take forward the campaign against poverty, unemployment and inequality, is envisaged for the port in the long term.

Transnet Freight Rail (TFR)

TFR, the largest operating division of Transnet, has as its primary purpose the transportation of rail freight. Core freight activities account for about 95% of its revenue. It is a world-class heavy-haul freight rail company that specialises in the transportation of freight.

Transnet Ltd, operating and controlling South Africa's major transport infrastructure, is also responsible for ensuring that the country's transport industries operate according to world-class standards. Forming an integral part of the southern African economy, Transnet:

- moves 17% of the nation's freight annually
- exports 100% of the country's coal
- exports 100% of the iron ore
- 30% of the core network carries 95% of freight volumes
- has annual revenues of over R14 billion
- will, over the next five years, invest R35 billion in capital
- has 25 347 employees system-wide.

The company maintains an extensive rail network across South Africa that connects with other rail networks in the sub-Saharan region, with its rail infrastructure representing about 80% of Africa's total.

Containers handled by South Africa's port would grow from 4,3 million to 7,6 million twenty-foot equivalent units (TEUs) – a TEU is the volume of a standard six-metre shipping container – while petroleum products conducted via pipelines would increase by over three billion litres to more than 20 billion litres by 2019.

The associated procurement programme would boost local industry, with about half of the R78 billion set aside for locomotives to be spent on local suppliers.

Maritime

Marine transport encompasses all forms of transport by sea, intermodal links and inland ports. It caters to a large degree for the freight market, and in the South African context offers no significant passenger-carrying ability.

The Department of Transport is responsible for South Africa's maritime administration and legislation, which Samsa controls on its behalf in terms of the Samsa Act, 1998.

The broad aim of Samsa is to maintain the safety of life and property at sea within South Africa's area of maritime jurisdiction, and to ensure the prevention of marine pollution by oil and other substances emanating from ships.

The Department of Environmental Affairs is responsible for combating pollution and uses Kuswag coast-watch vessels to perform this function. Samsa is responsible for introducing and maintaining international standards set by the International Maritime Organisation (IMO) in London, with respect to:

- ship construction
- maritime training and training curricula
- watch-keeping
- certification of seafarers
- manning and operation of local and foreign ships
- maritime search-and-rescue
- marine communications and radio navigation aids
- pollution prevention.

Samsa has an operations unit, a policy unit and a corporate support division to handle all financial, human resources, and information technology issues.

Other functions include registering ships, establishing a coastal patrol service and managing marine casualties and wrecks.

Samsa is steadily improving its capacity to monitor safety standards of foreign vessels. Numerous ships calling at South Africa's major ports are inspected, and those not complying with international safety standards are detained until the deficiencies are corrected.

The South African Marine Corporation, Unicorn Lines and Griffin Shipping are South Africa's predominant shipping lines. Their fleets of container, oil tanker, general cargo and bulk cargo vessels operate not only between South African ports, but also as cross-traders to other parts of the world.

South Africa signed an agreement to establish the subregional Maritime Rescue Coordination Centre (MRCC) in South Africa and subregional maritime subcentres in the

Comoros, Madagascar, Mozambique and Namibia, in 2007. South Africa also contributed R100 000 to be used in the operations of the International Maritime Security Fund.

The South African Maritime Training Academy

The South African Maritime Training Academy at Simon's Town in the Western Cape provides advanced training to the broader maritime sector, including the merchant navy, harbour-craft operations, the fishing industry and the South African Navy. The South African Merchant Navy Academy, General Botha, established at Granger Bay, is integrated with the Cape Peninsula University of Technology, with a similar training facility at the Durban Institute of Technology.

Deck and engineering students and officers complete their academic training at the Cape Peninsula University of Technology and the Durban Institute of Technology, while lower classes of certificates are offered at the Training Centre for Seamen, situated in the Duncan Dock area in Cape Town. This training institution also caters for deck, engine-room and catering department ratings.

Samsa is responsible for setting all standards of training certification and watch-keeping on behalf of the Department of Transport, while the Maritime Education and Training Board is responsible for accrediting all maritime courses.

Other maritime training organisations offer a wide range of courses that have been developed within the South African maritime industry. These are situated mainly in the ports of Cape Town and Durban and, to a lesser degree, Port Elizabeth.

As part of an initiative to reduce the vacancy rate of at least 45 000 jobs in the maritime industry, 12 Further Education and Training (FET) colleges across the country started to offer courses aimed at equipping young people for a career in the industry from 2013.

The FET colleges will meet at least 80% of the industry's skills demands, producing artisans such as riggers, welders and boiler mak-

ers. Between 1 200 and 1 600 students enter the maritime industry after completing their studies every year. But this total is not enough to meet the industry's immediate needs.

Africa's first-ever training vessel, the *SA Agulhas*, will go to Ghana, Abidjan in the Ivory Coast, before docking in Canary Wharf in London.

Through its involvement in the African Union, South Africa was leading the development of an integrated African Maritime Strategy.

On her way to London, the *SA Agulhas* will pick up 12 cadets to join the 51 already on board. The 12 cadets represent a myriad of cultures from Cameroon, Gambia, Ghana and the Ivory Coast.

Public transport

In terms of the Constitution, legislative and executive powers in respect of public transport are a provincial competency. National government, however, is responsible for policy formulation, monitoring and strategic implementation.

The Department of Transport continues to administer subsidies for buses and other subsidised forms of public transport.

The department identified public transport as a key legacy project for the World Cup and beyond. This included world-class airports, upgraded train stations, refurbished coaches and luxury buses, taxis and IRPTNs such as the BRT System.

Rapid public transport networks

Twelve cities in South Africa are involved in the implementation of rapid public transport networks. Polokwane, Rustenburg, Mbombela and Pietermaritzburg are some of the cities, in addition to the metros that are involved in the rollout of the rapid public transport infrastructure.

About R5 billion has been allocated in the 2012/13 financial year for this project.

Stimulated by the transport needs arising from the 2010 Soccer World Cup™, South Africa started to introduce BRT systems in Johannesburg, Cape Town, Mangaung, Nel-

The Freight Intra-Africa (FIA) South 2012 conference and expo was held in Pretoria in March 2012. The aim of the FIA is to highlight initiatives, projects and the role of the regions in the continent's development through effective transport solutions. The focus of the conference was on programmes that will fast-track Africa's cross-border transport networks by all transport modes (road, sea, rail and air) to facilitate trade and stimulate sustainable economic growth.

son Mandela Bay and the City of Tshwane. The City of Cape Town refers to its system as Integrated Rapid Transit, to emphasise its role in a broader system of public transport that involves more than just buses.

Rustenburg in the North West is the latest city to establish the system. The Rustenburg Rapid Transport Project was launched in 2011 to manage mobility and congestion within this medium-sized-city – and aims to satisfy the needs of all road users, including pedestrians, cyclists, public transport users and motorists.

South Africa decided to introduce BRT systems rather than other systems, such as light rail, because of the enormous infrastructure costs associated with such systems, and their lack of flexibility.

All the South African BRT systems will expand in phases over the next decade.

A particularly important dynamic in South Africa is how the system will integrate and include the minibus industry, since by law, public transport interventions need to involve existing operators.

The BRT systems are not seen as the final solution to public transport in South Africa, but will form part of an integrated system of different modes and linked to cycle ways and walkways as part of the NMT system that should also be developed.

Infrastructure development

It is the mandate of the Presidential Infrastructure Coordination Commission (PICC) to oversee the implementation of infrastructure projects that stimulate social and economic growth.

South Africa's infrastructure plans include economic and social infrastructure that will unlock key mineral resources and exports. This infrastructure plan is coordinated by the PICC, which was established in September 2011, bringing together ministers, premiers and metro mayors under the leadership of the President.

A total of 43 major infrastructure projects will be implemented between 2012 and 2014, amounting to R845 billion of which R300 billion is in the energy sector and R262 billion in transport and logistics projects.

Plans for transport development include the acquisition of new commuter coaches by the Prasa. The acquisition of the coaches will be divided into two 10-year batches, with approximately 3 600 vehicles included in each batch.

The new fleet will be introduced over a period of 20 years while the existing fleet is being phased out. New depots with the necessary equipment to maintain a modern fleet will be built while the existing depots are retained to maintain the existing fleet.

It is estimated that over the 20-year duration of the new rail project, approximately 65 000 direct, indirect and induced jobs will be created.

The 2010 – 2050 Vision for the Durban-Gauteng Transport Corridor provides an integrated transport solution to the growing expansion requirements of the corridor, which will form the foundation for the establishment of a Southern African Regional Freight Corridor.

The work being done includes the expansion of ports, finalisation of rail and road projects; finalising the concept of the Harrismith Freight Logistics Gateway, Cato Ridge and Tembo-Springs.

The Port of Durban, the Durban-Gauteng Corridor, logistics hubs and terminals are project development components aimed at speeding up the transportation of goods.

The expansion of the iron-ore rail line between Sishen in the Northern Cape and Saldanha Bay in the Western Cape will create large numbers of jobs in both provinces. The iron-ore capacity on the transport-side will

increase capacity to 100 Mt per year, which will allow for the expansion of iron-ore mining over the next decade.

A major new south-eastern node will also be developed to improve the industrial and agricultural development and export capacity of the Eastern Cape region and to expand the province's economic and logistics linkages with the Northern Cape and KwaZulu-Natal.

Rail

The Department of Transport has embarked on a process of developing an all-encompassing national rail transport policy which will cover freight, long-distance passenger and commuter rail.

Prasa is at the forefront of government efforts to transform public transport in South Africa, with rail services forming the backbone of the network. Prasa's main responsibility is to integrate inter-modal facilities and services into public transport solutions that optimise the performance of the whole transport system.

The main thrust of the rail policy will focus on investment and new modern technology. It will address the regulatory framework required, particularly economic regulation, infrastructure and operations. It will also make proposals regarding the investment required to restore rail to its rightful place in the country's economy.

Through Prasa, the Department of Transport is embarking on a programme to invest in new rail rolling stock over a period of up to 20 years. The programme enables Prasa to procure new rolling stock and locomotives for the metro service and long-distance rail services.

R136 billion has been set aside to acquire about 7 000 new trains and to upgrade and modernise railway stations, creating around 65 000 new jobs in the process.

Of the total amount, R13 billion will be spent on infrastructure development and about R3 billion on the construction of new depots in Cape Town and Gauteng. The first new trains are expected by 2015. A further 500 to 600 new coaches per year will be delivered until 2032.

By 2020 existing logistics corridors are expected to be expanded upon and new cor-

In July 2012, South African Airways (SAA) won the SKYTRAX Best Airline in Africa Award for the 10th time in a row. It also received the Best Staff Service in Africa Award for the third time in succession, confirming that SAA's service and connections to 26 African destinations via Johannesburg, ranks among the best in the world.

The World Airline Awards are the global benchmark of airline excellence. Other accolades bestowed on SAA in 2012 include a four-star rating in February by SKYTRAX.

ridors will have been established. A world-class export-orientated, rail manufacturing sector and 6 405 km of rail are expected to have been replaced for the general freight, coal and ore lines, increasing the rail network capacity by 149,7 Mt.

Long-distance commuter services such as the Moloto, Durban-to-Johannesburg and Durban-to-Gauteng corridors were identified for development.

The Durban-to-Gauteng Corridor is the busiest corridor in the Southern Hemisphere, both in terms of value and tonnage. It also forms the backbone of South Africa's freight transportation network.

Ports

Transnet Port Terminals will spend R33 billion over the next seven years on upgrading and expanding South Africa's ports, as part of a massive state-led infrastructure drive aimed at boosting the country's economic growth.

The expansion projects will see major increases in the container-handling capacity of the ports in Durban, KwaZulu-Natal and Ngqura outside Port Elizabeth in the Eastern Cape.

Durban Container Terminal's Pier 1 will see its capacity grow from 700 000 to 1,2 million TEUs by 2016/17, while its Pier 2 capacity will expand from 2,1 million to 3,3 million TEUs by 2017/18.

The Ngqura Container Terminal, which has been earmarked as a trans-shipment hub, will be expanded from 800 000 to two million TEUs by 2018/19.

Container capacity is also being created in other terminals, such as the Durban Ro-Ro and Maydon Wharf Terminal, through the acquisition of new equipment, including mobile cranes and various infrastructure upgrades.

In March 2012, President Jacob Zuma officially opened the new multi-billion rand Port of Ngqura.

The port is said to be the deepest container terminal in sub-Saharan Africa and will accommodate the new generation of giant container ships that regularly visit the country's shores.

Given its positioning and size, the Ngqura Trade Port will go a long way in boosting South Africa's trade with other countries in the region and is expected to support the country's new growth path. The planning of the Ngqura has been integrated with that of the Coega Development Zone.

The bulk handling capacity at Ngqura, Richards Bay in KwaZulu-Natal, and Saldanha in the Western Cape will also come in for major expansion.

R3,7 billion has been set aside for the ageing Richards Bay Terminal. Investments in mobile equipment, quayside equipment and weighbridges were fast-tracked for 2012/13. Safety-critical, environmental and legal compliance projects are also in the pipeline.

In addition, some R1,2 billion will be spent on creating new capacity, including new storage areas, at Richards Bay. Transnet is also pursuing the re-engineering of the port to create additional capacity for bulk products at the terminal.

Saldanha's iron-ore bulk facility, which has undergone significant expansion in recent years, will be further expanded, taking its capacity from 60 Mt to 82 Mt a year.

Additional manganese capacity will be created by relocating the existing 5,5 Mt a year export facility in Port Elizabeth to a new two-berth manganese facility at the Port of Ngqura, boosting capacity to 12 Mt a year from 2016/17.

Safety of travellers

World-wide, roughly 1,3 million people die on the roads and 50 million sustain non-fatal injuries every year. In South Africa, 14 000 people die in road crashes annually. This amounts to almost R56 billion annually in lost revenue, medical costs, insurance and lost income.

The Zenani Mandela Road Safety Scholarship, launched in April 2011 by the Nelson Mandela Foundation and the Commission for Global Road Safety, will help young South Africans tackle the growing epidemic of death and injury on the country's roads. The announcement took place at the launch of the *Make Roads Safe, Time for Action* report of the Commission for Global Road Safety. The report makes a series of recommendations for the UN Decade of Action for Road Safety 2011 – 2020.

In March 2011, the Traffic Police National Intervention Unit (NIU) was established. The NIU is a specialised intervention force that was deployed to deal with any traffic situation in the country. It is a joint programme of the RTMC and Sanral.

The 231 traffic officers who comprise the NIU received special training in advanced driving, interpersonal communication, anti-corruption, dealing with diplomatic personnel, first aid and incident management. This unit is intensifying the policing of the national roads network.

The unit engages in joint operations with provincial traffic authorities, municipal/metro police, the SAPS, CBRTA, the Military Police and other relevant agencies such as the South African Revenue Service, and the departments of immigration and environmental affairs.

The NIU is deployed at roadside checkpoints, multi-disciplinary roadblocks, high-impact visibility patrols, unmarked patrols and alcohol test centres.

A significant part of the unit's work is to intervene in corruption-riddled traffic centres around the country. The unit is available for deployment in areas identified for special attention. These include national roads where enforcement is particularly weak, provincial hotspots and municipalities and villages with high incidences of road accidents.

Arrive Alive

Government's Arrive Alive Road-Safety Campaign has become an important part of the Department of Transport's road safety projects and awareness efforts, especially during critical periods for road traffic management such as Easter and the December holidays.

The Arrive Alive campaign is seen as a national effort by all South Africans to take hands in the promotion of road safety.

The main goals of the campaign are to:
- reduce the number of road-traffic accidents in general, and fatalities in particular, by 5% compared with the same period the previous year
- improve road-user compliance with traffic laws
- forge improved working relationships between traffic authorities in the various spheres of government.

Decade of Action for Road Safety 2011 – 2020

South Africa is a signatory to the UN Decade of Action for Road Safety 2011 – 2020. The UN General Assembly resolution proclaiming a Decade of Action for Road Safety 2011 – 2020 was tabled by the Government of the Russian Federation and cosponsored by more than 90 countries.

The initiative aims to save lives by halting the increasing trends in road traffic deaths and injuries world-wide.

As part of South Africa's contribution to this global initiative, efforts were focused on four key areas in 2012:
- fatigue or driver fitness
- drinking and driving
- use of seat belts
- pedestrian safety.

Passenger rail safety

The National RSR Act, 2002 (Act 16 of 2002), is the enabling legislation for the setting up of the independent RSR, reporting and accountable to the Minister of Transport. The mandate of the RSR is to:
- oversee safety in railway transport, while operators remain responsible for managing the safety of their operations
- develop an appropriate regulatory framework through the development of regulations and standards for safe railway operations
- monitor and ensure safety compliance by conducting audits, inspections, safety assessments and occurrence investigations
- collect and disseminate information relating to safe railway operations
- promote the harmonisation of the railway safety regime of South Africa with SADC railway operations
- promote improved safety performance to support the use of rail.

In pursuance of this mandate, the RSR has, in collaboration with the railway industry and the South African Bureau of Standards (SABS), developed a series of standards to ensure a common and consistent approach to railway safety in areas such as safety management, technical and operational requirements, and management of human factors.

In May 2011, the SABS published the National Standard on Human Factors Management, which was developed to provide railway operators with the minimum requirements to manage human factors. The standard will be mandatory for all railway operators in South Africa. The standard is applicable to all employees undertaking safety-related work in the railway environment.

A key to the successful regeneration of the railway system in South Africa, and indeed the subregion, is the interoperability of the railways. This implies consistent standards and common usage of technology where railway infrastructure is used by more than one operator. The RSR and the railway industry continue to collaborate in developing the overarching broad technical and operating standards.

The need for harmonisation of safety standards within the SADC region is of strategic importance. The RSR is facilitating efforts to adopt and align the current railway safety standards by regional railway operators through the Southern African Railway Association (Sara).

In November 2012, Gauteng MEC for Roads and Transport, Ismail Vadi, officially opened the R600-million R55 dual carriageway stretching from Sunderland Ridge in Johannesburg to Laudium in Pretoria. The R55 serves as a principal link between Johannesburg and Pretoria West and connects the Mabopane and the N14/Krugersdorp freeways.

The R55 road project delivered 255 job opportunities for local community members. Of those employed in the project, 79 were women, 205 were youths and seven had disabilities.

Since the RSR's creation, there has been an increased awareness of safety in railways, improvements in safety management and accountability, and standardisation of safety management systems among railway operators in South Africa and regional railways operating into South Africa. The permit system employed by the RSR ensures the standardisation of safety management systems.

Through its Sara membership, the RSR plays a leading role in regional safety issues. The RSR played a central role in developing the Regional Safety Policy Framework and safety standards and in updating the *Handbook on the Transportation of Hazardous Materials by Rail*.

Since the reintroduction of the railway police, there has been a significant drop in crime on trains and at train stations.

Maritime safety

An estimated 7 000 vessels pass around South Africa's coastline annually, of which many are laden tankers carrying in excess of 30 Mt of crude oil. South African weather conditions present regular challenges to vessels, often resulting in distress calls to the Cape Town-based Maritime Rescue Coordination Centre (MRCC).

Piracy constitutes a serious challenge to the development and stability of the SADC member states, given the importance of the region's international seaborne trade and its vital contribution to regional food-stocks and economic development.

The sea plays an important role in both the SADC's economy and international commerce and thus maritime security is essential for the SADC's continued economic and political stability.

The SADC, therefore, has both an international and regional responsibility to help promote good order at sea. Threats of piracy are of particular concern to the SADC, whose coastline and shipping lanes are extremely vulnerable to maritime crime. As the SADC's coastal area does not fall within patrol areas of the international anti-pirate forces, the SADC will have to take responsibility for its own maritime security.

The threat around the Horn of Africa and SADC waters detrimentally affects the SADC's trade and economy. Maritime security is a regional concern to all SADC member states. Both SADC coastal states and SADC land-locked states are equally dependent on maritime trade.

The SADC's Maritime Strategy entails a regional partnership with all member states contributing within their means. Not all member states necessarily have the essential maritime and military capabilities, but they still contribute in other ways. Some countries, for example, provide land-based equipment such as radar, as well as soldiers to patrol coastlines and islands.

The SADC has established robust rules of engagement for anti-piracy, which are largely consistent with those of other regions and task forces.

Regarding the legal framework, SADC member states are expected to:
- ratify or accede to international maritime conventions/treaties/regimes and the incorporation of these into their national law
- put in place comprehensive legal regimes at national level, consistent with international law, to prosecute pirates
- stop the practice of "catch-and-release" of pirates since it allows experienced pirates to execute more sophisticated acts of piracy
- strengthen and harmonise regional and domestic legal frameworks for arrest, await-

In April 2013, Safmarine received the South African Maritime Industry's Commitment to CS' Award for its pioneering Containers-in-the-Community Programme, which uses decommissioned shipping containers for community development purposes.

The award – which was presented to Safmarine by the South African Maritime Safety Authority recognise the efforts of those within the maritime sector who reached beyond their own structures to uplift, empower and skill others.

Safmarine's container programme started in the early 1990s, when the company decided not to sell its highly sought after second-hand containers, but instead to convert these 'boxes' into infrastructure for community development purposes.

Safmarine has received a number of awards for its pioneering Containers-in-the-Community Programme, among them the Lloyd's List Award for creativity of using containers and Education Africa's Presidential and Premier Education Award.

ing trail detention, prosecution and imprisonment or repatriation of pirates
• take responsibility for its own maritime secur-ity in cooperation with other regions, task forces, navies and role players.

The MRCC enables South Africa to exercise its responsibilities to the international community by employing state-of-the-art search-and-rescue infrastructure and services. Various laden, very large crude-oil carriers have been assisted to safety, their cargo safely transferred by means of ship-to-ship transfers, and the affected vessels repaired or temporarily repaired to enable them to proceed to other ports for permanent repairs.

South Africa has a well-established Pollution Prevention Strategy, and is ready to respond in case of threats to the environment or to provide assistance to vessels at risk.

South Africa acts in terms of the Indian Ocean Memorandum of Understanding (MoU) on Port State Control and has a similar agreement with the states of west Africa in the form of the Abuja MoU.

Search and rescue services

The Southern African Search and Rescue (Sasar) has been in existence since 1957. It was formalised through the enactment of the South African Maritime and Aeronautical Search and Rescue (SAR) Act, 2002 (Act 44 of 2002). The Act gave the organisation a statutory mandate to coordinate all SAR activities within South Africa's area of responsibility.

South Africa is responsible for a huge SAR area, representing about 10% of the globe and about 28,5 million km^2 in total. To manage this vast area, the South African area is divided into two SAR regions, namely the aeronautical and maritime SAR areas.

The aeronautical SAR region covers South Africa, Namibia, Swaziland, Lesotho and associated flight information regions. The maritime SAR area stretches about halfway between South Africa and South America on the western side, and about halfway between South Africa and Australia on the eastern side. It also borders on Namibia, Angola, South Africa and Mozambique on the northern side and then extends to the South Pole.

Relevant operational structures and substructures were established for Sasar to execute its mandate successfully.

The Aeronautical Rescue Coordination Centre (ARCC) and the MRCC are the primary structures responsible for the execution of Sasar's statutory mandate. The ARCC and the MRCC are based at the ATNS and Samsa.

Search and rescue only works when several countries and all stakeholders collaborate across borders. This culture of collaboration dates back to 1959 when the Convention on International Civil Aviation first made provision for cooperation between states.

According to this provision, states will individually or in cooperation with other states, arrange for the establishment and prompt provision of search and rescue services within their territories to ensure that assistance is rendered to persons in distress.

Regional cooperation also uses scarce resources and helps nations to avoid duplicating efforts and facilities. Through this collabo-

ration, services are provided for poor states in a uniform way across a wide area. Collaboration also reduces the overall cost of search and rescue operations.

The SADC approached the ICAO and the IMO to fund the training requirements identified for the region. In collaboration with the Department of Environmental Affairs, the Department of Transport is also planning to create search and rescue capacity in the Antarctic region.

The Department of Transport, the South African National Defence Force, Telkom, Portnet, Samsa, SACAA, ATNS, SAPS, the Independent Communications Authority of South Africa, SAA and the Department of Cooperative Governance are members of Sasar and contribute their services and facilities.

Voluntary organisations such as the 4x4 Rescue Club, the Mountain Club of South Africa, Hamnet (the national amateur radio emergency communication network) and the National Sea Rescue Institute are also members of Sasar.

The ARCC Centre is an operational facility of Sasar that promotes the efficient organisation of search and rescue services and coordinates aeronautical search and rescue operations. This plays a significant role in improving the safety of South African airspace.

Delegates at a Fishing Safety Conference praised a South African negotiating team that helped seal an agreement that will provide added safety to tens of thousands of fishermen around the world.

A South African team, lead by Captain Nigel Campbell, helped to negotiate a compromise which led to the new agreement, after an impasse between Asian and European nations. The new agreement – the Cape Town Agreement of 2012 on Implementation of the 1993 Torremolinos Protocol – will go some way to bringing into effect the 1977 Torremolinos International Convention for the Safety of Fishing Vessels, which has yet to be ratified by International Maritime Organisation member states 35 years on.

The new agreement, which adds to a 1993 protocol on the 1977 convention, must still be ratified by member states.

Conclusion

Over the past few years, government has made significant strides in developing and improving South Africa's transport system to serve as a catalyst for socio-economic development. While its efforts have seen a meteoric increase in the provision of a safe, reliable, efficient and affordable transport system, a great deal of work still needs to be done before the transport system will effectively serve all sectors of society.

Government has identified the need for reliable, economical and smooth-flowing corridors linking its various modes of transport, namely road, rail, air, seaports and pipelines. It has therefore embarked on far-reaching improvements to the country's transport system as part of its NDP.

However, the transport portfolio does not exist in isolation, but as an integral part of the economic and social fabric of the country. It is for this reason that the department's programmes and interventions are also aimed at stimulating the attainment of other national policy goals such as job creation and poverty eradication; redressing apartheid spatial development; local economic development and regional integration; the safety of all users of the different modes of transport; and skills development.

The vision of South Africa's NDP is that by 2030, investments in the transport sector will bridge geographic distances affordably, reliably and safely so that all South Africans can access previously inaccessible economic opportunities, social spaces and services. It will also support economic development by allowing the transport of goods from points of production to where they are consumed. This will aid in facilitating regional and international trade.

Transport in South Africa will also promote a low-carbon economy by offering transport alternatives that minimise environmental harm.

The NDP further envisages that by 2030, the state will oversee a transport system that will provide basic infrastructure where needed.

South Africa's transport plan will not be implemented all at once, but through a phased approach. Between 2010 and 2015, greater emphasis will be placed on asset management, increased use of existing assets, extending economic infrastructure through joint private and public projects, and expanding public commuter rail-transit services.

Over the long term, between 2016 and 2020, the focus will be on developing the transport system in step with evolving land-use changes, increasing urban density and improving economies of scale of transport modes.

From 2021 to 2025, the emphasis will be on increasing the transport system's energy efficiency and resilience, while 2026 to 2030 should see mid-life system upgrades, and retrofitting of transport systems to incorporate technological improvements.

Acknowledgements

Suggested reading

Louw, B. 2008. *The Gibson Brothers of the Red Star Line*. Welgemoed: JBZ Louw.
Rorke, WB. 2007. *Trek Airways: A South African Adventure*. London: Athena Press.
Ross, G. 2007. *The Romance of Cape Mountain Passes*. Cape Town: New Africa Books.
South Africa. Department of Transport. [2000]. [e-resource]. *Moving South Africa: A Transport Strategy for 2010: Report and Strategy Recommendations.*