SOUTH AFRICA

Yearbook

2021/22

Transport

Transport

Transport is an essential part of the development of any country. The primary role of transport is to provide and improve access to different locations for businesses and individuals, for both freight and people movements. For the business sector, this involves connections between businesses and their suppliers, between businesses and other businesses, and between businesses and their markets. For the household sector, transport provides people with access to work, schools and shops. It connects them to social, recreational, community and medical facilities for personal and leisure activities.

The Constitution of the Republic of South Africa of 1996 identifies the legislative responsibilities of different spheres of government with regard to all modes of transport and its associated infrastructure. The Department of Transport (DoT) is responsible for the legislation and policies for rail, pipelines, roads, airports, ports and the intermodal operations of public transport and freight. The department conducts sector research, formulates legislation and policy to set the strategic direction of subsectors, assigns responsibilities to public entities, regulates through setting norms and standards, and monitors implementation.

The work of the DoT contributes to the realisation of the vision of improved social and economic development articulated in the National Development Plan (NDP), Priority 1 (economic transformation and job creation) and Priority 4 (spatial integration, human settlements and local government) of government's 2019-2024 Medium Term Strategic Framework (MTSF).

Over the medium term, the department will focus on intensifying its efforts to improve mobility and access to social and economic activities by cultivating an enabling environment for the maintenance of national and provincial road networks, the improvement and integration of road-based public transport services, and the modernisation of passenger rail infrastructure. Total transfers and subsidies account for an estimated 97.8% (R222.8 billion) of the epartment's planned expenditure over the period ahead, increasing at an average annual rate of 7.7%.

According to Statistics South Africa's General Household Survey of 2021, about 33,6% of South African households had at least one household member who used a minibus taxi/sedan taxi/bakkie taxi during the week preceding the survey.

The use of minibus taxi was most common in Gauteng (41,3%) and KwaZulu-Natal (38,3%). By comparison, 3,7% of South African households used a bus during the preceding week. It is notable that 10,5% of households in Mpumalanga used the bus. Only 0,2% of households used trains.

Maintaining South Africa's roads

The Road Transport programme facilitates activities related to the maintenance of the country's national and provincial road network. The national road maintenance backlog has grown over the years, partly due to the shifting of funds from non-toll roads to more economically viable toll roads. R76.4 billion goes to the South African National Roads Agency to upgrade, strengthen and maintain the national road network.

Over the MTEF period, 59.3% (R45.3 billion) of allocations to the agency to upgrade, strengthen and refurbish the national non-toll roads network, R2.8 billion is allocated for the R573 (Moloto Road) development corridor, R3.7 billion for the N2 Wild Coast project, and R2.1 billion is allocated to fund reduced tariffs for the Gauteng freeway improvement project. Transfers to the agency account for 33.5% the department's budget over the medium term and 65.5% of the budget of the Road Transport programme.

The maintenance of provincial roads is largely funded through the provincial roads maintenance grant: road maintenance component, which is allocated R37.4 billion over the MTEF period. Provinces are expected to use the grants to rehabilitate 8 277 lane kilometres, reseal 11 217 lane kilometres, regravel 16 605 kilometres and blacktop-patch 5.4 million square kilometres.

Factors such as the condition of roads, weather patterns and traffic volume determine grant allocations for the maintenance of provincial roads. To ensure that investment in and maintenance of the provincial road network is appropriately prioritised, R65 million is reprioritised over the medium term from the grant to finance the preparation and acquisition of a central roads data repository that will provide a comprehensive and uniform overview of the state of South Africa's provincial roads.

Facilitating integrated road-based public transport networks

This will cover issues relating to an inclusive funding model for buses and taxis, roll out of integrated public transport networks (IPTNs), integrated ticketing solutions for road and rail-based subsidised public transport, and scholar transport.

Some of the key elements for engagement include demographic, geographic, economic and technological trends that affect travel demand across all modes, and how those impact on the ability of our people to access economic opportunities and essential social amenities.

The desired outcome is to achieve seamless integration of all modal public transport operations that will ultimately ensure that the system is efficient, affordable, safe and reliable. Public transport should, thus play a critical role as a driver of economic activity and an enabler of economic output.

Another aspect is to remove the duplication of services and focus on integration, so that there are sufficient, universally accessible services to all locations. This means that where the private sector or a state-sponsored service is running, all passengers must be able to use the service, and not duplicate, particularly in Gauteng. Province, municipalities, state-owned entities and the private sector must coordinate their transport response to achieve an integrated system.

The Public Transport Network Grant funds the infrastructure and indirect costs of bus rapid transit services in Johannesburg, Tshwane, Cape Town, George, Nelson Mandela Bay, Ekurhuleni and Limpopo. In these cities and regions, funding from the grant is expected to lead to a combined increase in the number of weekday passenger trips on bus rapid transit services from 216 214 in 2021/22 to 331 275 in 2024/25.

To facilitate this increase, transfers to the grant are set to increase at an average annual rate of 14.3%, from R5.2 billion in 2021/22 to R7.7 billion in 2024/25.

The public transport operations grant, which subsidises the operations of bus services in provinces, is expected to increase from R7.1 billion in 2021/22 to R7.7 billion in 2024/25, at an average annual rate of 2.8%. Together, these grants represent an estimated 18.7% (R42.7 billion) of the department's planned spending over the MTEF period.

Addressing passenger rail challenges

Inefficient investments in, and the deferred maintenance and insufficient safeguarding of South Africa's rail infrastructure has resulted in the rapid deterioration of the passenger rail network and its services. As part of recognising that their recovery is key to providing affordable, safe and reliable public transport services, transfers to the Passenger Rail Agency of South Africa in the Rail Transport programme account for an estimated 27.1% (R61.7 billion) of the department's budget over the period ahead.

These funds will be used to focus on repairs and maintenance as part of the agency's rolling stock fleet renewal programme, and improved security. As a result, capital transfers to the agency are expected to increase at an average annual rate 11.5%, from R9.7 billion in 2021/22 to R13.5 billion 2024/25. Operational transfers are expected to increase more moderately at an average annual rate of 4.3%, from R6.9 billion in 2021/22 to R7.9 billion in 2024/25, as more commuter lines come online.

Safety as an enabler of service delivery

Safety and security remain the DoT's top strategic and organisational goal. Each mode has its own safety posture, but common themes cross all modes. These include the need to work effectively with all spheres of government, address human behaviours, employ life-saving infrastructure counter-measures, improve safety data analysis, ensure innovative measures that bring safety benefits, and pursue performance-based rather than prescriptive regulations.

Multiple factors contribute to transport-related fatalities and serious injuries. Successfully addressing such complex, multi-faceted safety challenges requires a comprehensive and system-wide approach to deploy safety counter-measures, programmes, and activities in a coordinated manner with multiple stakeholders. This approach must be informed by verifiable transport systems data that document transport incidences and accidents, serious injuries, and fatalities.

This area will cover all safety issues across the four modes of transport (road, rail, civil aviation and maritime), including safety of public transport; and applicable interventions that will be designed and employed to address such. The DoT's desired outcome will be to reduce all transport-related incidences and accidents, which will ultimately lead to a significant reduction in injuries and fatalities.

Infrastructure build that stimulates economic growth and job creation

The declining condition of infrastructure reduces the country's economic competitiveness and the citizen's quality of life. The situation is particularly severe in our roads, as shown by worsening traffic congestions in urban and peri-urban areas.

Repairing and modernising transport infrastructure must be a national priority to ensure continued economic growth, and to preserve freedom of movement and quality of life.

Targeted investments are needed to preserve mobility and accessibility of the traveling public and freight movements. Investment in maintaining, rehabilitating, upgrading and expanding infrastructure has not kept pace with growing needs.

As a result, the country's highways, ports and waterways, airport and air traffic facilities, and passenger rail facilities face growing maintenance and modernisation needs.

The DoT intends to improve the durability and lifespan of key strategic transport infrastructure, as well as maintain existing infrastructure to ensure that it is in a state of good repair.

Development and implementation of an integrated public transport network (IPTN) model in rural provinces

The National Guideline Framework for the development of integrated public transport plans provides a set of planning steps for district municipalities to use in formulating the rural district IPTNs. A process of formulating operational plans and designing of an integrated public transport system has been outlined to provide technical assistance in this regard.

The Rural Transport Strategy promotes the IPTN approach in districts that have higher densities of population. The system links rural settlements and district towns that have a concentration of economic activities and resulting in higher level of transport demand. The IPTN is aligned with the Municipal Spatial Development Framework because there is a spatial relationship between residential areas and economic activities.

Over the MTSF, the DoT plans to develop ten IPTN plans in line with the District Development Model (DDM). The purpose of District Municipality IPTN plans is to intensify the provision of integrated transport infrastructure and public transport services, and also to promote modal integration. IPTNs also strive to balance the public transport supply and demand, with the added outcome of reduced congestion on the road.

The Rural Transport Implementation Framework, which is also linked to the DDM, embodies the principles of the differentiated approach that guides targeted infrastructure investment to areas with proven potential for economic development. As a result, areas that do not qualify for the development and implementation of the IPTNs will benefit from the implementation of the ITPs with basic infrastructure provision. The provision of public transport services will be strengthened through better coordination, planning and management of public transport operations.

Sustainable solution on e-tolls

World-class road infrastructure is essential to the implementation of the NDP and other key government programmes. It is, therefore, critical to create policy and legal certainty about the future of the toll road system and the user-pay principle to ensure that the SANRAL continues to meet its infrastructure mandate, its ability to raise capital on the bond market, improve its credit ratings and meet its debt obligations.

With the decision on the Gauteng Freeway Improvement Project still outstanding by mid-2021, a number of options have already been considered. The DoT will continue to engage with National Treasury to ensure that the final decision made is sustainable and in the best interest of South Africans.

In relation to this, the DoT will, in the medium term, embark on the process of developing the Road Infrastructure Funding Policy to ensure that South Africa has a lasting solution to continued divergent stances around the toll road system and the user-pay principle.

Taxi industry formalisation and professionalisation

The mandate of the Taxi Recapitalisation Programme (TRP) dealt solely with the scrapping of old minibus taxi vehicles across the country with the overarching objective being the improvement of road safety by removing unroadworthy minibus taxis from the roads of South Africa.

The process involved the scrapping process and facilitation of an upgrade in the fleet of new TRP-compliant vehicles through a scrapping allowance paid directly to taxi operators. By 2021, a total of 77 971 of the initial target of 135 894 minibus taxis had been successfully scrapped.

A review of the TRP was conducted towards the end of the term resulting in the launch of the Revised TRP in 2019. The Revised TRP thus introduced key value-add elements to encourage sustainable continuity to the programme. As part of the Revised TRP, the scrapping allowance was increased from R91 000 to R124 000 per scrapped old taxi. Over the medium, and as part of the extended scope of the Revised TRP, the following will be prioritised:

- Commercialisation: the development of sustainable commercially viable Revised TRP management solutions leveraging and exploiting opportunities available in the minibus taxi industry's value chain. These will include affordable supply of new taxi vehicles, finance, short-term insurance, spare parts, repairs, fuel, lubricants, electronic fare collection and property management.
- Illegal operations and verification process: a national survey on the extent of illegal taxi operations across the country will be conducted and a comprehensive database of minibus taxi industry operators will be developed.
- Change management and unity: the Revised TRP will be used as a catalyst for change to the taxi industry's operating model, through the introduction of collaborative ownership, cooperatives and corporatisation.

Road transport safety and security

Motor vehicle accidents have proven to have a negative effect on socio-economic development in the country. South Africa has one of the highest vehicle accident mortality rates in the world. A comparative analysis of road deaths per 100 000 population indicates a rate of 25.2 for South Africa, which is above the world average of 17.4. Overall, over the past few years, the number of accidents reported has been increasing, while the number of vehicles on the road has also been increasing, although not as much.

South Africa is a participant to the second United Nations Decade of Action (UNDA) for Road Safety 2020 – 2030 and has endorsed the global undertaking seeking to build on the gains of first Decade of Action for Road Safety 2011 – 2020 to promote a coordinated effort towards sustaining the attainment of the road safety goals to save up to five million lives, and to contribute to the prevention of up to 50 million serious injuries by 2030 using 2020 as a baseline.

The high number of road traffic crashes and its associated consequences have a significant impact on South Africans. It hampers socio-economic development and impacts on the well-being of all South Africans. This impact is measured in terms of human lives lost, pain, grief and suffering, as well as an increasing cost to the economy. The extent of the problem is exacerbated when road fatalities and serious injuries are seen in the context of contributing to a significant economic loss for South Africa. People injured or killed on South African roads are often the breadwinners of their families and thus vital contributors to the economy at large. Cognisant of these facts, South Africa needs to strengthen its resolve to continue working to improve safety on roads by enhancing cooperation and coordination with the spheres of government, and improving stakeholder participation in road safety programmes. The economic and financial analysis emphasise the need to improve road safety in the country to ensure that South Africans can live long, productive lives and that fiscal resources may be made available to aid the country's further development.

The National Road Safety Strategy (NRSS) sets a new path for creating a safe and secure road environment in South Africa. The primary strategic target of the strategy is to ultimately reduce fatal crashes by 50% by 2030. The strategy is based on a safe system approach that looks at a holistic view of the road transport system and interactions among roads, and roadsides, travel speed, vehicles and the road user. In accordance with the UNDA, the pillars of the strategy that will remain consistent in the NRSS are road safety management, safer roads and mobility, safer vehicles, safer road users and post-crash response.

The strategy has also taken into consideration previous efforts made towards addressing road safety problems in South Africa, by carefully reviewing previous road safety strategies. Key findings of these strategies highlight a lack of effective implementation, insufficient resourcing, misaligned prioritisation, and lack of broader stakeholder participation among the key issues previously experienced. As such, the NRSS focuses on sequencing of proposed interventions in a manner that is realistic and implementable.

Recognising that the battle to improve road safety cannot be won unless all stakeholders played their role and took responsibility for their own safety, community-based structures have also been established in all provinces to improve civil society participation in road safety. Also noting that road crashes affect young people between the ages of 18 and 35 in large numbers, engagements continue to be held with the youth to empower them to be advocates for their own cause and to re-shape the South African road safety landscape.

Over the Medium Term Strategic Framework (MTSF), greater focus will be put on road safety education, engineering and law enforcement. Effective evaluation mechanisms will also be put in place to ensure the effectiveness, efficiency and impact of government programmes. The target set is to reduce road fatalities by 25% during the medium term.

Maritime Safety and Security

Maritime safety and security assist the industry to operate in a safe environment and provide a conducive environment to do business. Merchant ships operate in a hostile environment and certainty in terms of policy direction is important. The Comprehensive Maritime Transport Policy (CMTP) encourages stakeholders to support its initiatives as they assist with promoting shipping.

The attack against ships and other forms of criminal activities are a concern for the industry. These challenges must be addressed hence the National Maritime Security Strategy. South Africa must jealously guard against any form of pollution to its waters. It is important to have initiatives that will ensure that South African waters remain safe and secure from all forms of pollution.

To this effect, the development and application of risk assessment and management techniques to maritime safety and security must consider the complex regulatory and operational context in which the maritime industry operates. The DoT will thus strive to create a fit-for-conditions safety and security platform that will outline current concerns, provide 'fit-for-purpose' tools and management mechanisms, and enable focused operational programmes aimed at building capacity and critical mass.

Over the medium term, the DoT will focus on ensuring 100% compliance with the International Ship and Port Facility Security (ISPS) Code. The code, developed in response to the perceived threat to ships and ports after the 9/11 attacks, encompasses a set of measures to enhance security of ships and port facilities. It is part of the Safety of Life at Sea Convention and compliance is mandatory for South Africa as part of the contracting parties to the convention.

As part of ensuring compliance to the ISPS Code, the department will focus mainly on addressing the 'stowaway' problem, which seems to be an ever-present phenomenon for the shipping industry. Stringent measures will be put in place to ensure that no unauthorised personnel are able to gain access to vessels, and that all those who have been authorised to board disembark before sailing.

The DoT will aim to reduce stowaways by addressing inadequacies in security and watch keeping. Stringent measures will be put in place to ensure that no unauthorised personnel are able to gain access to vessels, and that all those who have been authorised to board disembark before sailing.

In line with the implementation of the national strategic plan to end gender-based violence and femicide (GBVF) in the country, the development of a monitoring system for GBVF in the maritime sector will enable support and the protection of women at sea. There is ample evidence which suggests that investing in women is the most effective way to lift communities, companies and even countries. It is reported that countries with more gender equality have better economic growth and the evidence is clear that equality for women means progress for all.

Legislation

For cross-modal functions of public transport and freight, the DoT is guided by the following legislation and policies:

- The Transport Laws and Related Matters Amendment Act, 2013 (Act 3 of 2013), aims, among other things, to amend the Cross-Border Road Transport Agency to collect toll on behalf of the SANRAL.
- 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 was finalised in the Legal Succession to the South African Transport Services Amendment Act, 2008 (Act 38 of 2008).
- 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 Administrative Adjudication of Road Traffic Offences Act, 1998 (Act 46 of 1998).
- 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 the 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 DoT plans to implement the airlift strategy and improve aviation safety and compliance with the standards set by the United States of America Federal Aviation Administration's International Aviation Safety Assessment Programme, and by the ICAO, an organ of the United Nations (UN).
- The Road Accident Fund (RAF) Amendment Act, 2005 (Act 19 of 2005), creates an equitable, affordable and sustainable system for victims of road accidents and their families.
- The RAF (Transitional Provisions) Act, 2012 (Act 15 of 2012), provides for transitional measures regarding certain categories of third parties whose claims were limited to R25 000 under the RAF Act, 1996 (Act 56 of 1996) prior to 1 August 2008.

The DoT has published a revised version of the Road Accident Benefit Scheme (RABS). The Bill proposed that the RABS Administrator replace the RAF. The new regulations, rules and forms were drafted to enable a better understanding of how the proposed scheme would operate in practice.

The RABS Bill provides for a new, no fault benefit scheme and a new administrator. The RABS Bill forms part of an initiative to replace the third-party compensation system currently administered by the RAF with a new scheme that is reasonable, equitable, affordable and sustainable.

Budget

For the 2021/22 financial year, the DoT was allocated R65.4 billion. The department will aim to remain within its ceiling for compensation of employees by managing the number of personnel, which is expected to decrease from 818 in 2021/22 to 750 in 2024/25 through natural attrition and retirement.

Accordingly, expenditure on compensation of employees is expected to increase at an average annual rate of only 0.7%, from R542.6 million in 2021/22 to R555.3 million in 2024/25. This takes into account an allocation of R11.2 million in 2022/23 to augment the shortfall arising from salary adjustments as part of the public sector wage agreement. Spending on goods and services is expected to increase at an average annual rate of 11.4%, from R851.4 million in 2021/22 to R1.2 billion in 2024/25.

Entities

Air Traffic and Navigation Service (ATNS)

The company is mandated to provide safe, orderly and efficient air traffic navigational and associated services to the air traffic management community, and in accordance with the standards set out by the ICAO. Over the medium term, the company will continue to focus on ensuring air traffic safety and service quality. Air traffic communication is expected to account for 50% (R2.4 billion) of the company's total expenditure over the medium term.

The company offered voluntary severance and early retirement packages in 2021/22 as part of a process to ensure its financial sustainability by rationalising its organisational structure in areas considered to have the least impact on core performance.

As a result, the number of personnel is projected to remain constant at 1 157 over the medium term and spending on compensation of employees is expected to decrease at average annual rate of 2.1%, from R1 billion in 2021/22 to R941.1 million in 2024/25. As a result, total expenditure is expected to increase at an average annual rate of just 1.2%, from R1.6 billion in 2021/22 to R1.7 billion in 2024/25.

The company is set to generate 83.6% (R3.8 billion) of its revenue over the medium term through aerodrome, en-route and approach fees. Total revenue is expected to increase at an average annual rate of 12%, from R1.3 billion in 2021/22 to R1.8 billion in 2024/25, as air traffic recovers to pre-pandemic levels.

Airports Company South Africa

The ACSA owns and operates nine of South Africa's principal airports, including OR Tambo International Airport, Cape Town International Airport and King Shaka International Airport.

The company has not been exempted from the severe effects of the COVID-19 pandemic on the global aviation industry. Major capital programmes have been deferred because of lower than anticipated traffic volumes and availability of funds. To ensure its operational sustainability, the company will focus on reducing capital expenditure in the short term by restricting it to R1 billion per year, and on reviewing its investment strategy to identify ways of monetising non-core investments such as its investment property portfolio and international airport concessions.

The company plans to access banking credit facilities to meet short-term liquidity requirements by borrowing R542 million in 2021/22 and R204 million in 2022/23. Total expenditure is expected to increase at an average annual rate of 3.3%, from R5.8 billion in 2021/22 to R6.4 billion in 2024/25, as the uptake of the voluntary severance packages offered at the onset of the COVID- 19 pandemic continues to contain spending on compensation of employees.

The bulk of expenditure is earmarked for airport infrastructure and asset management, and airport management. Total revenue is expected to increase at an average annual rate of 11.7%, from R4.8 billion in 2021/22 to R6.7 billion in 2024/25, driven by the expected increase in passenger numbers as air travel recovers from the impact of the pandemic.

Cross-Border Road Transport Agency

The agency is mandated to advise the Minister of Transport on cross-border road transport policy, regulate access to the market by the freight and passenger industry in respect of cross-border road transport by issuing permits, undertake road transport law enforcement, and play a facilitative role in contributing to the economic prosperity of the region.

Over the medium term, the agency aims to continue to ensure the unimpeded flow of freight and passenger road transport in the region; liberalise market access for cross-border freight road transport; introduce regulated competition for cross-border passenger road transport; reduce operational constraints for the cross-border road transport industry; and empower the cross-border road transport industry to maximise business opportunities and regulate itself to improve safety, security, reliability, quality and the efficiency of services. It plans to conduct 245 843 inspections per year over the MTEF period to enforce cross-border road traffic law.

The agency's total expenditure is expected to increase at an average annual rate of 4.6%, from R258.4 million in 2021/22 to R295.5 million in 2024/25, mainly driven by spending on administration, law enforcement, and research and development. These activities account for an estimated 81.8% (R692.1 million) of total expenditure over the medium term.

The agency is self-funded. Its primary source of revenue is permit issue fees, which account for an estimated 67.5% of total revenue over the period ahead, increasing from R175 million in 2020/21 to R200 million in 2024/25, at an average annual rate of 4.5%. Total revenue is expected to increase at an average annual rate of 4.5%, from R259.3 million in 2021/22 to R296.2 million in 2024/25, as cross-border road transport operator activities recover to pre-pandemic levels.

Driving Licence Card Account

The Driving Licence Card Account is responsible for manufacturing driving licence cards based on orders received from driving licence testing centres across South Africa.

Over the MTEF period, the entity will focus on improving data collection, and design and introduce a new format for driving licence cards. It will also invest in new production machinery to continue to ensure optimal manufacturing productivity. As a result, spending on production and infrastructure is expected to account for 64.3% (R381.2 million) of total expenditure over the medium term.

Total expenditure is expected to decrease from R224.1 million in 2021/22 to R187.4 million in 2024/25 at an average annual rate of 5.8%. This is mainly the result of a sharp increase in demand for driving licence cards in 2021/22 following the expiry of the extended validity of expired cards in response to the COVID-19 pandemic and lockdown.

Production and expenditure are expected to return to pre-pandemic levels over the medium term. Revenue, which the entity generates through the sale of licence cards, is expected to follow a similar trend, decreasing from R271.3 million in 2021/22 to R245.5 million in 2024/25 at an average annual rate of 3.3%.

Passenger Rail Agency of South Africa

The PRASA's primary mandate is to provide rail commuter services within, to and from South Africa in the public interest. The agency also provides long-haul passenger rail and bus services within, to and from South Africa.

Over the medium term, the agency will focus on ensuring the recovery of commuter rail services and modernising its core infrastructure, which includes the replacement of old rolling stock and investment in signalling infrastructure. Accordingly, total expenditure is expected to increase at an average annual rate of 7.8%, from R14 billion in 2021/22 to R17.6 billion in 2024/25, with 69.9% (R35 billion) of this spending earmarked for the Metrorail and Mainline Passenger Services programmes. Compensation of employees accounts for an estimated 38.9% (R18.7 billion) of spending over the medium term.

Transfers from the department account for an estimated 86.9% (R66.4 billion) of the agency's total revenue over the medium term. Other sources include the sale of train and bus tickets, rental income from the leasing of properties, on-board sales and interest earned.

Total revenue is expected to increase at an average annual rate of 22.7%, from R15.5 billion in 2021/22 to R28.7 billion in 2024/25, driven largely by a projected recovery in ticket sales as more commuter lines come back online following the modernisation of core infrastructure.

Ports Regulator of South Africa

The Ports Regulator of South Africa sets tariff increases for the National Ports Authority and regulates the provision of adequate, affordable and efficient port services at South Africa's commercial ports. It also provides dispute resolution, including hearing complaints and appeals under the tribunal programme, which is aimed at ensuring fairness, transparency and competitive practices in the ports sector to ensure equity of access to port facilities and services.

Total expenditure is expected to increase at an average annual rate of 3%, from R42.1 million in 2021/22 to R46 million in 2024/25. Transfers from the department comprise an estimated 97% (R130 million) of projected revenue over the MTEF period. Revenue is expected to increase in line with expenditure.

Railway Safety Regulator

The RSR oversees and promotes safe railway operations by providing an enabling national regulatory framework, while monitoring and enforcing compliance in the rail sector. Its legislative mandate covers all railway operators in South Africa and those of neighbouring countries whose rail operations enter South Africa.

Over the medium term, the regulator will continue to issue safety permits to railway operators based on an established safety management system and conduct annual reviews to assess its own safety improvement plans and safety management reports submitted by operators.

Total expenditure is expected to increase at an average annual rate of 3.8%, from R250.2 million in 2021/22 to R279.7 million in 2024/25. The regulator expects to generate 69.8% (R562.2 million) of its revenue over the period ahead through issuing permit fees and the remainder through transfers from the department. Revenue is expected to increase in line with expenditure.

Road Accident Fund

The RAF is mandated to compensate South African road users for losses or damages caused by motor vehicle accidents within the borders of the country. The fund receives its revenue from the RAF Fuel Levy, in terms of the Customs and Excise Act, 1964 (Act 91 of 1964).

Due to the impact of the COVID-19 pandemic and associate lockdown on road traffic volumes, less fuel was sold and fuel levy collection decreased. As a result, the value of claims paid by the fund decreased from R96.4 billion in 2018/19 to R49.2 billion in 2021/22, at an average annual rate of 20.1%.

Over the medium term, a change in the settlement policy of loss-of-income claims from lump sum to annuity will see a moderation in the payment of claims to match the fund's pay-as-you-go principle. Accordingly, the value of claims paid out over the MTEF period is expected to increase from R49.2 billion in 2021/22 to R49.3 billion in 2024/25, at an average annual rate of 0.8%.

The fund receives its revenue from the road accident fund levy in terms of the Customs and Excise Act (1964). Revenue from transfers received through the fuel levy is expected to increase at an average annual rate of 1.3%, from R44.7 billion in 2021/22 to R46.5 billion in 2024/25, in line with expected growth in fuel sale volumes.

Road Traffic Infringement Agency

The agency facilitates the adjudication of infringement notices dispensed by various issuing authorities to alleged infringers on South African roads. The act envisages the agency as an independent adjudicator to provide for an administratively fair and just system for road traffic law infringements while also upholding the rights of the alleged infringer.

A high court order in 2021/22 on the constitutionality of the legislation and this entity is yet to be confirmed by the Constitutional Court. Until this happens, the entity must continue to perform its statutory obligations. Total expenditure is expected to increase at an average annual rate of 3.3%, from R453.6 million in 2021/22 to R500.6 million in 2024/25.

The below-inflationary increase is mainly due to the one-off start-up costs in 2021/22 to roll out the AARTO system nationally. As a result, spending on the AARTO rollout programme is expected to decrease at an average annual rate of 6.2%, from R205 million in 2021/22 to R168.9 million in 2024/25.

The agency is set to derive 66.3% (R978.8 million) of its revenue over the MTEF period from administrative penalties and 33.7% (R487.8 million) through transfers from the department. Revenue is expected to increase in line with expenditure.

Road Traffic Management Corporation (RTMC)

The RTMC provides national road traffic strategic planning and law enforcement, and pools public sector resources for the provision of road traffic management.

Over the medium term, the corporation will continue to promote road traffic safety through education and awareness campaigns; improve and manage road traffic data and information through the automation of processes in driving licence testing centres and the maintenance of the electronic national traffic information system; and improve and coordinate road traffic law enforcement.

Accordingly, spending on operations, strategic services, and law enforcement is expected to account for 60.4% (R3 billion) of expenditure over the medium term.Total expenditure is expected to increase from R1.3 billion in 2021/22 to R1.6 billion in 2024/25 at an average annual rate of 7.3%, mainly driven by spending on compensation of employees, which is expected to increase from R620.1 million in 2021/22 to R838.5 million in 2024/25 at an average annual rate of 10.6%. This increase will accommodate the planned hiring of 300 road traffic trainees on 12-month contracts in each year over the medium term.

The corporation is set to derive 64.5% (R3.1 billion) of its revenue over the medium term through transaction fees and 14.7% (R674.3 million) through transfers from the department. Although transfers from the department are expected to increase at an average annual rate of only 1.9%, from R217.3 million in 2021/22 to R230 million in 2024/25, total revenue is expected to increase in line with expenditure over the same period.

This is driven mainly by increased transaction fees and new revenue streams as transactions on the electronic national traffic information system (eNATIS) recover to pre-pandemic levels and new online service offerings are introduced such as crash reports and driving licence card deliveries.

South African Civil Aviation Authority

The authority promotes, regulates and enforces civil aviation safety and security standards across the aviation industry. Over the medium term, the authority will continue to focus on improving compliance and adherence to the standards and recommended practices of the ICAO.

The authority planned to conduct 229 air safety infrastructure investigations and 1 374 air safety operations inspections per year over the MTEF period. The authority's total expenditure is expected to increase at average annual rate of 10.4%, from R710 million in 2021/22 to R956 million in 2024/25, mainly driven by the implementation of safety and security programmes in line with the standards and recommended practices issued by the International Civil Aviation Organisation.

The authority forecasts capital expenditure of R75 million in 2022/23 for an electronic records and document management system and cybersecurity software; and R195 million over the remainder of the MTEF period to replace flight inspection aircraft and flight calibration equipment.

The authority is set to generate 73% (R2 billion) of its revenue over the medium term through passenger safety charges, user fees and the aviation fuel levy, and 20.8% (R363.4 million) through transfers from the department. Revenue is expected to increase in line with expenditure.

South African Maritime Safety Authority (SAMSA)

The SAMSA promotes South Africa's maritime interests, ensures the safety of life and property at sea, and prevents and combats the pollution of the marine environment. Functions of the authority are also defined as per international maritime conventions to which South Africa is a signatory.

The authority will continue to focus on efforts to ensure maritime safety and prevent pollution over the medium term, with spending on these activities set to account for 69.2% (R1.1 billion) of expenditure over this period. Total expenditure is expected to decrease at an average annual rate of 0.6%, from R541 million in 2021/22 to R531.9 million in 2024/25, mainly because of cost-containment measures, including a planned reduction in the authority's number of personnel from 389 in 2021/22 to 384 in 2024/25.

These measures are intended to mitigate the impact of the COVID-19 pandemic on the authority's potential to generate revenue, particularly from safety levies, which are derived from ships operating in South Africa's waters.

The authority generates its revenue from levies, fees and user charges. Total revenue is expected to decrease at an average annual rate of 0.4%, from R542.5 million in 2021/22 to R536.4 million in 2024/25, due to a projected decrease in the number of ships operating in South Africa's waters in line with demand forecasts as the shipping industry continues to deal with delays and congestion at South African ports.

South African National Roads Agency Limited

The SANRAL is responsible for the management of South Africa's national road network, including finance, development, planning, control, operating, design and construction, maintenance and rehabilitation of national roads within the framework of government policy. The agency is responsible for the planning, design, construction, operation, management, control, maintenance and rehabilitation of the South African national road network, including the financing of these functions. This includes toll and non-toll roads.

South Africa has 750 000 km of roads, of which of which 618 081 km are proclaimed. This is the the 10th-longest road network in the world and by far the longest in Africa. The responsibility for administration, planning, funding, construction, maintenance and operations of the road network is a concurrent function between national, provincial and municipal road authorities.

The SANRAL is responsible for managing the national road network, and along with the DoT, plays a key role in influencing policy and setting standards. The agency is currently managing about 22 262 km of the 618 081 km proclaimed network, which represents only 3.6% of the road network and this network carries 34.5% of the annual vehicle km driven in South Africa.More than 70% of the long distance road freight in South Africa is transported on the SANRAL road network.

The Draft National Roads Plan 2030 has been developed for consultation. It provides an overview of SANRAL's planning over the next decade, supporting all four of its business pillars – the agency's medium term contribution to the Economic Recovery and Construction Plan; is based on current needs and forecasts, including national and provincial development planning; is aligned with SANRAL's Horizon 2030 document; was developed in accordance with the National Transport Master Plan (NATMAP); will be aligned to the National Infrastructure Plan 2045 being developed by Infrastructure South Africa.

These roads are the country's single biggest public asset and critical to South Africa's future economic and social trajectory. These roads facilitate development, commerce, mobility and access. Over the medium term, the agency will continue to focus on the construction, maintenance and overall preservation of the national road network, particularly the road maintenance backlog that has accumulated in recent years. These activities account for an estimated 86.7% (R71 billion) of the agency's total expenditure over the MTEF period.

Total expenditure is expected to increase from R21.4 billion in 2021/22 to R26.1 billion in 2024/25, at an average annual rate of 6.8%. Expenditure in 2022/23 is expected to reach R27.5 million and peak at R27.9 billion in 2023/24 as the agency accelerates road maintenance projects to deal with the backlog. Accordingly, the agency plans to increase the length of the network in active strengthening, improvement or construction contracts from 1 000 kilometres in 2021/22 to 2 400 kilometres in 2024/25. As a result, planned capital expenditure is expected to increase from R10.3 billion in 2021/22 to R33 billion in 2024/25, at an average annual rate of 47.6%.

Although the number of personnel in the agency is expected to remain unchanged at 695 over the MTEF period, spending on compensation of employees is expected to increase at an average annual rate of 9.9%, from R633.7 million in 2021/22 to R841.2 million in 2024/25. This increase is driven by an expected increase in higher paid professionals and specialists, specifically project managers and procurement specialists, in the agency's staff complement from 2021/22 to improve procurement processes and reduce the road maintenance backlog.

The agency is set to derive 75.4% (R66.1 billion) of its revenue over the MTEF period through transfers from the department, and 18.5% (R17 billion) through toll fees, concession income and rental income from investment property. Total revenue is expected to increase from R29.1 billion in 2021/22 to R31.7 billion in 2024/25, at an average annual rate of 2.9%. This is mainly due to an acceleration in line with the agency's plan to deal with the road maintenance backlog.

Rail Transport Safety and Security

In recent years, the rail environment became a target of theft and vandalism of infrastructure, senseless attacks on employees and private security while on duty, sabotage and general disregard for the rule of law. The DoT plays a key role in ensuring safe rail operations in the country through the development of policies, strategies and legislative regulatory framework. This role is augmented by the RSR, which is an independent entity of the department tasked with overseeing and promoting safe railway operations through appropriate support, monitoring and enforcement.

Rail networks

The purpose of the Rail Transport programme within the DoT is to facilitate and coordinate the development of sustainable rail transport policies, rail economic and safety regulations, and infrastructure development strategies; systems that reduce system costs and improve customer service; to monitor and oversee the RSR and the PRASA; and the implementation of integrated rail services planned through the lowest competent sphere of government.

The South African rail network is the 11th-largest in the world at 22 298 route km, and total track distance of 30 400 km. Public sector railways comprise three distinct vertically integrated entities, namely the Transnet Freight Rail (TFR) division of Transnet, the PRASA, and the Gautrain Management Agency. They fulfil distinctly different roles and responsibilities, and have different objectives and service delivery requirements.

The TFR owns 20 953 route km of the cape gauge track, of which 12 801 route km comprises the core network. The remaining track comprises 68 branch lines totaling 6 708 km in length. The PRASA operates metropolitan commuter services through its Metrorail division, and long distance commuter services through its Main Line Passenger Services division, Shosholoza Meyl.

The PRASA owns 746 route km of cape gauge network whilst Shosholoza Meyl trains run almost exclusively on the TFR track. The access relationship that PRASA has with TFR is heavily influenced by the history of the asset split criteria used to allocate infrastructure and rolling stock. The criterion used was that the main user of the network received ownership control of the asset.

In practice, this should have decreased the requirement to access each other's network as much as possible but over time, the pattern of asset usage has changed, and currently, in a number of cases Metrorail is operating on a network owned by TFR, but where PRASA trains comprise the majority of activity on the track. The Gautrain network is approximately 80 km-long and does not interconnect with any other network on basis of its standard gauge track.

The NDP provides a strategic framework to guide actions on the maintenance and expansion of economic infrastructure such as transport and, more especially, rail transport to support economic growth and social development goals.

The NDP states that given government's limited finances, private funding will need to be sourced for some of these investments. In addition to issuing licenses and setting tariffs, the NDP requires regulations to place emphasis on stimulating market competition and promoting affordable access to quality services.

The DoT has established an interim rail economic regulatory capacity, which prioritizes developing guidelines and frameworks to ensure fair and transparent access to the rail network, which will create a conducive environment for private sector participation.

To function optimally, South Africa needs reliable, economical, integrated smooth-flowing rail corridors linking the various modes of public transport. Investing in the rail network should increase access to an integrated rail network and create a conducive environment for private sector participation and investment in rail infrastructure.

Passenger rail is a critical function that creates enormous positive externalities for the economy and justifies significant subsidisation from government. The consequences of any move by passengers to alternative modes of transport include the new costs that are imposed on the rest of the economy; low-income households relying on more expensive and less safe modes of transport; traffic congestion increases; and people in outlying areas become even more marginalised.

Government's infrastructure delivery plan prioritises network industries to support a long-term increase in the productive capacity of the economy with the potential to crowd-in additional private sector investment. As part of prioritising infrastructure development for network industries, the modernization of the rail freight and passenger transport will receive immediate attention.

The adoption of the Private Sector Participation (PSP) Framework for the railway industry is an important step in securing private sector interest. The next step to encourage private sector investment should be a clear procurement framework and rail economic regulation. Areas identified for PSP included main line freight, terminal-to-terminal freight, terminal operations in the service areas, private line freight and private sidings in the services and asset upgrade areas, municipal rail infrastructure, rail infrastructure upgrade and maintenance concessions and the leasing of rolling stock in the asset areas.

In addition, there are other areas in the services provision and asset upgrade category, which include branch line freight services, commuter services, rapid rail intercity and marshalling yards. Over the MTSF, the DoT and PRASA will intensify implementation of its capital expenditure programme with focus on three programmes – rolling stock fleet renewal, repair and modernisation of station and rail signalling Improvement.

Rail infrastructure

While South Africa has a relatively good core network of national economic infrastructure, the challenge is to maintain and expand it to address the demands of inclusive economic growth. The economy has already been constrained by inadequate investment and ineffective operation and maintenance of existing infrastructure, while productive investment in historically black communities continues to face constraints.

South Africa needs to make large investments to propel economic activity. These need to be made in a structured, considered manner to prevent inappropriate initiatives, protect South Africa's resources and ensure that prioritised investments are efficiently implemented.

Given government's limited finances, private funding will need to be sourced for some of these investments, and policy planning and decision-making will require trade-offs between competing national goals.

Government needs not only to better coordinate collaborative investment by businesses and provincial and local government into key infrastructure projects, but to shape its institutional, policy and regulatory environment in order to enable investment, realise the desired efficiencies, improve infrastructure delivery, and contribute to economic growth and employment creation.

Rail-based public transport

The DoT, in its pursuit for a safe, affordable and reliable public transport system, has adopted an integrated policy approach that is based on peak intermodality. Besides its value proposition, intermodality is an integral part of sustainable mobility and its enhancement is vitally important for the provision of door-to-door transport services because of its advantages of economies of scale for both commuter and freight transport.

With this policy approach, the sector has set itself, amongst others, a medium-term target of realising the modal shift from road dominance to rail, not only to reduce the impact on our road infrastructure but also to reduce roadside emissions and to improve efficiencies in the broader transport value chain.

South Africa's passenger rail system has suffered years of underinvestment and deferred maintenance, creating fertile ground for the decline of the passenger rail system and hemorrhage market share over time. As part of positioning rail as a backbone of the public transport system, the Priority Corridor Strategy was introduced to ensure focused implementation. This included looking at corridors with high ridership to maximise impact.

It is thus important that rail is improved to compete with other modes to achieve proper share of passenger transport in order to reduce congestion on the road and further improve road safety. To achieve an optimum performance level, a number of interventions will be implemented over the medium term. These include maintenance, recovery and renewal of rolling stock fleet, modernisation of rail infrastructure, rolling out new train sets to priority corridors and to increase rail passenger trips.

Also targeted in the medium term is the revitalisation of branch lines to make rural economies more competitive by enabling provision of transport to some of the far-flung communities will be considered. These branch lines will not only benefit commuters but will also contribute to the proposed modal shift to rail for freight, thus alleviating pressure on the road network.

Transnet SOC Limited

Transnet is a focused freight-transport and logistics company wholly owned by the South African Government. Its divisions include, the TFR, Transnet Rail Engineering, Transnet Port Terminals, Transnet Pipelines and Transnet National Ports Authority.

The Transnet Port Terminals operates 45 cranes in seven ports across the country and plans to buy 39 new ship-to-shore cranes. 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.

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 Trade Port has been integrated with that of the Coega Industrial 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. The TFR is the largest division of Transnet.

It is a world-class heavy haul freight rail company that specialises in the transportation of freight. Its technological leadership goes beyond Africa as well as within Africa, where it is active in some 17 countries. The TFR has positioned itself to become a profitable and sustainable freight railway business, assisting in driving the competitiveness of the South African economy.

The company is made up of the following business units:

- Agriculture and Bulk Liquids,
- Coal,
- Container and Automotive,
- Iron Ore and Manganese,
- Steel and Cement, and
- Mineral Mining and Chrome.
- 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 country's iron ore,
- has annual revenues of over R14 billion,
- will invest R35 billion in capital over the next five years, and
- has 38 000 employees countrywide.

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.

Gautrain

The Gautrain is an 80-km long mass rapid transit railway system that links Johannesburg, Pretoria and the OR Tambo International Airport. It was built to relieve 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 Gauteng 25-Year Integrated Transport Master Plan will ensure integration of transport with spatial patterns, as well as the integration between various transport modes to transport people effectively.

The Gautrain ferries more than 60 000 people a day (including weekends) or 1.2 million people a year. The Gautrain Management Agency is planning to extend the rail route by 150 km over the next 20 years, including routes through Randburg, Fourways and Soweto. This expansion is expected to create 211 000 jobs.

A feasibility study that included demand modelling to determine transport needs for Gauteng in 2025 and 2037, indicated that the "cost of doing nothing" in the province will lead to major road congestion in 2037, at which stage cars will travel at an average of 15 km/h due to the doubling of car growth.

The feasibility study identified the following main links and stations of the Gautrain rail network extensions: On the link between Jabulani via Cosmo City and Samrand to Mamelodi, stations include Roodepoort, Little Falls, Fourways, Sunninghill, Olievenhoutsbosch, Irene, Tshwane East and Hazeldean.

The link between Sandton and Cosmo City has a station at Randburg. On the link between Rhodesfield and Boksburg there will be a station at East Rand Mall and possible link-up with the OR Tambo International Airport Midfield terminal development. A future link from Cosmo City to Lanseria Airport.

Passenger rail safety

The National RSR Act, 2002 (Act 16 of 2002), is the enabling legislation for setting up 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 the Southern African Development Community (SADC) railway operations; and
- 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, 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 the management of human factors.

A key to the successful regeneration of the railway system in South Africa, and 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 Railways Association (SARA).

Since the RSR's creation, there has been 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 part 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.

Civil aviation

Civil aviation is vital to international trade, investment, and tourism, as well as contributing to domestic transport, sports and recreation. Air transport connects South Africa to cities around the world and generates benefits to consumers and the wider economy by providing speedy connections between cities.

The DoT's Civil Avialtion programme exists to facilitate the development of an economically viable air transport industry that is safe, secure, efficient, environmentally friendly and compliant with international standards through regulations and investigations; and to oversee aviation public entities. Plans are underway to develop a business case for a government-owned national aviation academy.

Civil aviation safety and security

Accidents and fatalities continue to increase in general aviation, with a record of 11 fatal accidents recorded in the period between April and December 2021, indicating an increase of three when compared to the same period in the previous financial year. The contributing factor to the spike in incidents and accidents statistics can be traced back to the time when domestic aviation was inactive during hard lockdown.

This is coupled with the fact that a good number of aviators, in particular pilots, got laid off when some organizations folded. These aviators are now plying their trade in general aviation. Some of them do so without having underwent recency testing, which is strictly observed in scheduled commercial aviation.

However, General Aviation cannot continue to operate in an unregulated manner as it is currently happening. The Civil Aviation Policy Review, underway, unearthed some important aspects one of which is General Aviation sector. The latter has been strongly advocated for its economic potential whose role is critical especially small airports in promoting tourism access.

This is based on the benchmarking exercise done in India and Tunisia on how small airports promote tourism access. Such is critical for South Africa during the road to economic recovery. One of the important policy recommendations that has been advanced to counteract this issue is through amending or strengthening the current regulations that governs general aviation.

The Draft Comprehensive Civil Aviation Policy calls for SACAA to develop a strategy on how to reduce accident and incident high rate for general aviation and a clear strategy regarding the effective regulation of the sector. This is premised on the thinking that if general aviation is promoted, it must be monitored and regulated as well as made to adhere to operational guidance and principles.

Oversight is necessary to ensure operators adhere to the principles and processes of an effective safety management systems to ensure safety. With accident prevention as a priority among aviation participants, alignment with the SACAA brand promise of "keeping you safe in the sky" has to be maintained.

The SACAA has put in place a five-year general Aviation safety whose essence is to reduce incidents and accidents. It has also established the Civil Aviation Safety Plan Implementation Committee, which is complemented by working groups that look into specific areas – Airspace Safety Flight Data Analysis, Rotocraft (Helicopter), Safety, and Human Factor in the System.

Aviation infrastructure

The National Civil Aviation Policy acknowledges that airports are currently not integrated into a meaningful network that contributes to the socio-economic development of the country. The National Airports Development Plan has been initiated to guide present and future airport development; and the development of individual airports integrated within their broader spatial and transport contexts; and furthermore, to facilitate and promote development of aerotropolis and airport cities, in consultation with relevant stakeholders.

An integrated airport network system has the potential to support the NDP's objective by contributing to growing the economy and ensure that potential investments are utilised effectively and efficiently through economic initiatives such as the aerotropolis, airport cities, special economic zones linked to international airports to promote economic growth, trade and tourism and job creation. It could further facilitate the expansion of tourism, including sport and adventure tourism.

There are approximately 128 licensed airports, of which 10 are designated as international airports and 68 voluntarily registered airports. Of these, nine are owned by ACSA, nine owned by provincial governments, 38 military airports and around 100 municipal (local and district) airports.

There are also numerous privately-owned licensed airports with the vast majority of the remainder of the airports being private (business, non-profit, and individual). South Africa's nine major airports are:

- OR Tambo International Airport in Gauteng;
- Cape Town International Airport in the Western Cape;
- King Shaka International Airport in KwaZulu-Natal;
- Bram Fischer International Airport in the Free State;
- Chief Dawid Stuurman International Airport in the Eastern Cape;
- Upington International Airport in the Northern Cape;
- King Phalo Airport Airport in the Eastern Cape;
- George Airport in the Western Cape, and
- Kimberley Airport in the Northern Cape.

The ACSA has facilitated over 21.1 million annual departing passengers though its airport network; and has an annual departing and arrival throughput passenger capacity of 54.5 million across its entire airport network.

It is projected that the aviation sector will begin to return to the pre-COVID 19 passenger traffic and air traffic movements around 2023 – 2025. It is expected that the entity will increase CAPEX in response to the increasing air traffic volumes.

ATNS as a state-owned company and national provider of air traffic management services plays a significant role in contributing to South Africa's sustainability agenda through airspace infrastructure provision.

Air traffic management ensures orderly, expeditious, safe and secure aircraft movements in South Africa's airspace through the deployment of communication, navigation and surveillance infrastructure (terrestrial as well as space-based) in accordance with the strategies defined in the National Airspace Master Plan.

To enhance the ATNS Air traffic services provided at the nine statutory

ACSA airports and at 11 regional airports, it is planned to consolidate approach control services for various airports terminal control areas and to deploy remote tower technology for aerodrome control services without being stationed at the respective airports. Airspace, route and flight procedure designs are continually reviewed to allow for optimal performance by introducing continuous climb operations and continuous decent operations into airports.

In terms of airspace and airport congestion, a formal slot allocation system is applicable at the three fully coordinated airports in South Africa – OR Tambo International, King Shaka International and Cape Town International Airports. The purpose of slot coordination is to facilitate the optimal utilization of scarce resources at coordinated airports.

It also aims to facilitate stability of scheduled air services network serving South Africa; and orderly and safe operations at coordinated airports. Congestion is primarily experienced in the vicinity of the Johannesburg Terminal Area. There are also some airspace pressures at airports, which serve high volumes of non-scheduled traffic, flight training, general air services, and non-commercial aviation activity.

Airlift Strategy

The Airlift Strategy introduced structured regulatory measures for increasing tourism growth in 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; and
- unblocking obstacles to growth through regulatory mechanisms, and bilateral and multilateral air-services negotiations.

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 DoT also developed the Airlift Implementation Plan, which provides a clear framework and capacity targets to be met.

Airlines

Several domestic airlines, as well as a number of smaller charter airline companies, operate in South Africa.

The SAA, British Airways (BA)/Comair, SA Express, Airlink and Interair operate scheduled air services within South Africa and the Indian Ocean islands. In addition to serving Africa, the 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, Eswatini Airlink, Alliance Express, BA, Cameroon Airlines, Delta Airlines, El Al Israel Airlines, Egyptair, Emirates, Ethiopian 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.

South African Airways (SAA)

The SAA operates a full-service network in the international, regional and domestic markets. The airline is responsible for promoting air links with South Africa's key business, trading and tourism markets across the world, and contributing to key domestic air linkages.

The SAA was placed under business rescue in 2019 to create a value proposition within the restructured SAA which would make it an attractive proposition for a potential partner. In August 2020, the business rescue practitioners published an approved business rescue plan.

To implement the plan, R10.5 billion was allocated in the 2020 second adjustments budget. The restructured airline resumed operations in September 2021, operating domestically and regionally. However, the fourth wave of the COVID-19 pandemic negatively affected its restart and ramp-up plan as some destinations closed borders to South African carriers. Because the airline was in business rescue between December 2019 and April 2021, it did not generate any revenue from scheduled flights during this period, only a few charter flights.

The airline's total guaranteed debt was R16.4 billion. To settle it, government paid R10.2 billion in 2020/21, R4.3 billion in 2021/22, and is expected to pay the remaining R1.8 billion in the second quarter of 2022/23. The airline is in the process of disposing of some non-core assets as required by the appropriation conditions.

Government is in the process of concluding the sale of its majority shareholding in the airline to a strategic equity partner that is expected to bring in the funding and skills required to strengthen its balance sheet and improve operations. This partnership is expected to be finalised by the beginning of 2022/23. Over the medium term, the airline will focus on improving its operations as international flights resume.

SA Express

South African Express Airways has experienced severe operational and financial challenges for several years, and despite financial support from government, has been unable to recover. The airline was placed under business rescue in February 2020 but was unable to restructure, leading to it being placed under provisional liquidation in April 2020. By October 2020, the process of receiving expressions of interest had commenced. It was expected that the airline would be sold in the fourth quarter of 2021/22.

Resources

Roads

South Africa's road network, including unproclaimed roads, is approximately 750 000 km, making it the 10th-longest road network in the world. Roads in South Africa fall under the jurisdiction of the three spheres of government (national, provincial and municipal), and responsibility for the entire road network is split between the three spheres' road authorities. Travel on South Africa's paved roads runs to about 32 billion vehicle-kms per year and this includes travel on national, provincial and local roads. While national roads are mostly paved, the majority of the provincial network (more than 80%) consist of low-volume gravel roads, particularly in rural and peri-urban regions; and mainly provide isolated communities with access to public services, economic centres and other key facilities.

National roads

Government is responsible for overall policy, while the the SANRAL is the implementing agent of the national roads network, and along with the DoT, plays a key role in influencing policy and setting standards. The DoT continues to improve the road network by ensuring that it is well maintained and safe.

Provincial roads

Provincial governments are responsible for planning, constructing and maintaining roads and bridges, except those falling under the SANRAL or local governments. The DoT helps 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. The SANRAL manages some 1 832 km of these toll roads.

In its endeavour to continue the expansion and maintenance of the comprehensive national road network, the SANRAL will continue the selective expansion of toll roads. About 1 288 km of the tolled sections of national roads have been concessioned to private companies to develop, operate and maintain.

Freight transport

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

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. The company plans to enhance this service.

Transnet Pipelines transports all the crude requirements for the inland refinery at the National Petroleum Refiners of South Africa, 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 in the pipeline sector is ongoing. 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 millilitres (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. 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 was no longer adequate for the transportation of the required volumes of petroleum products from the coast to the inland regions.

Maritime transport

South Africa is bordered by the ocean on three sides. Studies suggest that the ocean has the potential to contribute up to R177 billion to the GDP and between 800 000 and one million direct jobs. It is a catalyst to facilitate international trade thereby providing necessary maritime/marine infrastructure and services, for goods to be seamlessly transferred from the manufacturing centres to the ports as imports and exports.

Maritime Industry Development manages the promotion of the maritime industry locally, regionally and globally. Current projects will assist in in developing programmes to improve the South African ship register and the inclusion of South Africans who are from historically disadvantaged backgrounds to participate in the maritime economic activities by supporting the establishment of a maritime broad-based black economic empowerment council.

The Oceans Economy Masterplan under Operations Phakisa is intended to use empirical evidence to galvanise stakeholders around a common understanding of challenges and opportunities, followed by the defining of a vision and the development of an action plan to address these challenges.

As part of its contribution to unlock the economic potential of the ocean, the DoT will look at a number of key area, including regional coastal shipping agreement within the Southern African Development Community (SADC), establishment of a national shipping carrier and corporatisation of the Transnet National Ports Authority.

The DoT's Marine Transport programme exists to implement the CMTP to ensure promotion and coordination; as well as infrastructure and industry development and achieve compliance through monitoring, evaluation and oversight, and collaboration with maritime-related public entities, including the Ports Regulator; National Ports Authority; the SAMSA industry and international bodies.

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

- The accelerated implementation of the CMTP towards the goal of South Africa becoming an International Maritime Centre by 2030 is expected to achieve the following:
- Create enhanced maritime awareness by participating in international maritime platforms such as the Rio Competition in 2023.
- Establish the Maritime Development Fund (MDF).
- Create a shift from road to rail – open new markets for cargo movements.
- Create and maintain port capacity to support trade in ports through an effective port tariff methodology and strategy.
  - Secure about 6% government cargo and use that to develop coastal shipping.

As a build-up and focused coordination, the following annual maritime thematic priorities have been agreed upon:

- 2022: Benefiting from the Maritime Value Chain;
- 2023: National Shipping Company;
- 2024: SADC Coastal Shipping;
- 2025: Maritime Infrastructure and Services;
- 2026: Revitalised South African Merchant Shipping;
- 2027: South Africa: Moving our Strategic Cargo;
- 2028: A vibrant South African Maritime Brand;
- 2029: Africa: a Thriving Maritime Market; and
- 2030: An International Maritime Centre in Africa.

The theme for 2021 was; "South Africa: A Sailing and Leisure Boat Nation". During the year, the DoT planned to deepen the South African sailing and boating culture. The department will further progress work towards an operational framework for the national shipping company and take strides to finalise the coastal shipping negotiation text in support of the Africa Free Trade Area Agreement.

Great progress will be made in developing the ground-breaking work of the MDF legislation. The fund will unlock key opportunities that must result in the implementation of the CMTP, including maritime infrastructure and services development, and positioning the country to attract international shipping.

In the coming years, the CMTP is expected to help achieve a revitalised South African Merchant Shipping to allow the country to move strategic cargo under the banner of a vibrant South African maritime brand: Maritime South Africa by increasing the:

- tonnage of identified commodities to be shipped by South African Shipping Companies;
- tonnage of identified commodities to be shipped by broad-based black economic empowerment companies;
- percentage strategic cargo moved by the national company using chartered vessels;
- number of ships, rigs and boats repaired in South African ship repair yards;
- number of ships ordering and taking offshore bunkers in South Africa;
- number of direct jobs supported by maritime transport economy;
- number of ship candling services offered by South African businesses;
- number of agreements entered into in terms of Section 56 of the National Ports Act of 2005, including number of licenses issued in terms of Section 75 of the Act;
- export of South African goods and services to other countries in the continent carried by local ships;
- number of vessels carrying the South African Flag as primary register; and
- redesigning ports and small harbours infrastructure to support coastal shipping.

The SAMSA, acting on behalf of the DoT, is South Africa's maritime safety enforcement agency as mandated by the SAMSA Act, 1998 (Act 5 of 1998). The broad aim of the 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 Forestry, Fisheries and the Environment is responsible for combating pollution and uses Kuswag coast-watch vessels to perform this function. The SAMSA is responsible for introducing and maintaining international standards set by the International Maritime Organisation (IMO) in London, United Kindom, with respect to:

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

The 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.

The 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 internatiomanal safety standards are detained until the deficiencies are corrected.

The DoT maintains a single emergency towing vessel that is available to respond to emergency incidents, which is mainly deployed in the Western Seaboard. This exposes certain areas of the coastline, especially of the Indian Ocean, to risks from ships oil pollution in the event of accidents or incidents. The DoT is working on a long-term strategy to enhance capacity and capability for oil pollution surveillance and response.

Comprehensive Maritime Transport Policy

South African's length of the coastline is estimated to be approximately 3 000 km. In South Africa, the greatest challenge has been the absence of a maritime transport policy that is required to provide guidance to the industry. The much-awaited Maritime Transport Policy will create certainty in the transport sector and the logistics market.

There are over 89 464 merchant ships trading internationally, transporting different types of cargoes and registered, in 150 nations, thus growing marine international trade by 4% per annum. South Africa currently has four ships on its ship register and there is commitment to grow the register through the creation of a conducive environment and providing incentives to ship owners as an encouragement to set up offices and possibly register under the South African flag.

The CMTP serves as the embodiment of government's commitment to the growth, development and transformation of South Africa's maritime transport sector. It represents South Africa's long-term vision, the underpinning philosophy and principles that inform its development and the direction that government has committed to take the sector to reach its full potential.

One of the key strategic objectives of the CMTP is to develop South

Africa to be an International Maritime Centre in Africa. In considering this bold objective, it is important to note that the CMTP Implementation Plan 2030 envisages that this status may be achieved by 2030. In the second year of the Maritime Decade, the focus is highlighting the sailing and luxury boat building subsector as being part of what the country offers to the world. South Africa's maritime sector must develop beyond its ability to serve national interest and provide efficient services to the global industry.

With the onset of the Fourth Industrial Revolution, South Africa should promote maritime analytical skills and tools. There is a need to learn from the bit of excellence in the ship and boat building industry, where South Africa is already highly recognised in the world and ranking number two, after France, as leader in the manufacture and distribution of catamarans and other sophisticated luxury yachts.

One of the areas requiring a better marine footprint is shipping and the CMTP Implementation Plan 2030 identifies coastal shipping as a key instrument, laying a firm foundation to build and grow the maritime sector. South Africa is expected to take steps to promote the development of a national shipping company in the light of the renewed impetus brought about by the CMTP.

Maritime Training

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, established at Granger Bay, is integrated with the Cape Peninsula University of Technology (CPUT), with a similar training facility at the Durban University of Technology (DUT).

Deck and engineering students and officers complete their academic training at the CPUT and DUT, while lower classes of certificates are offered at the Northlink College, situated in the Duncan Dock area in Cape Town. This training institution also caters for deck, engine-room and catering department ratings.

The SAMSA is responsible for setting all standards of training certification and watch-keeping on behalf of the DoT, 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, Gqeberha.

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 offer courses aimed at equipping young people for a career in the industry.

The FET colleges will meet at least 80% of the industry's skills demands, producing artisans such as riggers, welders and boiler makers. Annually, between 1 200 and 1 600 students enter the maritime industry after completing their studies.

Ports

Along its 3 000 km-long coastline, South Africa has eight commercial seaports: Richards Bay, Durban, East London, Ngqura, Gqeberha, Mossel Bay, Cape Town and Saldanha. South Africa is situated on a major sea route, which facilitates the safe and secure movement of about 500 megatonnes (Mt) 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 commercial ports are crucial to South Africa's transport, logistics and socio-economic development. About 98% of South Africa's exports are conveyed by sea. The Port of Durban is the busiest container terminal in Africa and the second busiest in the southern hemisphere, following Melbourne, Australia. The Ports Authority alone employs 6 200 people at the Durban Port, with an estimated 30 000 people employed indirectly.

Richard's Bay is the busiest port in South Africa by tonnage and is one of the top two coal-handling ports in the world. The port focuses on bulk cargo handling while the Durban Port focuses on general cargo. It has also been earmarked for expansion projects with R3.7 billion set aside for mobile and quayside equipment, as well as weighbridges. Safety-critical, environmental and legal compliance projects will also be carried out.

Cape Town, located at the southern-most point of Africa, is ideally positioned as a hub terminal for cargo to South America and the Far East. West/East Africa cargo has grown substantially, making the Cape Town Container Terminal the terminal of choice for trans-shipment cargo. The terminal handles 3 161 vessels per year for a gross tonnage of 44 501 297.

The Gqeberha Container Terminal is one of the three specialised container-handling facilities along the South African coastline. The terminal currently handles 1 271 ships with a total gross tonnage of 25 756 823.

Operation Phakisa

Operation Phakisa was modelled upon the Malaysia "Big Fast Results" methodology, where government and the private sector converged to address binding constraints which where obstructing growth and job creation.

The Oceans Economy Lab was launched in 2014. South Africa is endowed with ocean space on three sides, representing a vast untapped market to grow the gross domestic product (GDP) and create jobs, thereby addressing poverty, unemployment and inequality.

The Oceans Economy has the potential to grow the GDP by R177 billion and create one million new jobs by 2033. A key assumption driving the above targets was a GDP growth rate of 5% per annum and an annual job growth rate of 6%.

The binding constraints were analysed by a cross section of public and private sector participants on a six-week Operation Phakisa Lab process, which resulted in 18 marine transport and manufacturing initiatives being crafted into a detailed three-foot plan for implementation. These initiatives addressed policy and regulation, infrastructure, skills and market development.

Safety of travellers

Arrive Alive

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

At the end of 2015, it was announced that the RTMC could not use the Arrive Alive campaign anymore, as it had been registered as a brand. The safety campaign remains in place, operating under the name 365 Days of Road Safety Programme, which focuses on creating awareness all year round.

The 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; and
- forge improved working relationships between traffic authorities in the various spheres of government.

The campaign emphasised that the reduction in road deaths was urgent and non-negotiable. The RAF pays out about R15 billion to victims of road accidents every year. The DoT intends to harmonise road traffic law enforcement and establish a single traffic police unit.

As part of efforts to alleviate the scourge of road accidents and incidents, the department continues to work tirelessly to ensure that law enforcement is declared an essential service to guarantee availability of traffic officers 24/7 on the roads. Anti-fraud and corruption operations will continue to be intensified at all public and private driver learning testing centres and driving schools around the country.

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.

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.

The SADC's Maritime Strategy entails a regional partnership with all member states contributing within their means. Not all members necessarily have the essential maritime and military capabilities, but they still contribute in other ways by providing land-based equipment such as radar and 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, awaiting trial detention, prosecution and imprisonment or

repatriation of pirates; and
- take responsibility for its own maritime security 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.

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. The country 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 Organisation (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.

Its mandate is to ensure a coordinated and effective maritime and aeronautical search and rescue service within the South African search and rescue regions.

The SAR service is provided in terms of the obligations accepted by South Africa after signing and ratification of relevant IMO and ICAO Conventions inter alia, the International Convention on Maritime Search and Rescue, 1979 and the Convention on International Civil Aviation, 1944.

Other objectives include:
- minimising the loss of life and personal injury to aviators and mariners;
- minimising time spent searching for persons in distress by using top-of-the-range technology, research and development, education, regulation and enforcement;
- promoting and enhancing regional search and rescue capacity or capability and ensuring optimal use of SAR scarce resources;
- ensuring the implementation of international standards and recommended practices; and
- improving cooperation between aeronautical and maritime search and rescue authorities.

South Africa is responsible for a huge SAR area, representing about 10% of the globe and about 28.5 million km2 in total. The South African area is divided into the aeronautical and maritime SAR areas. The aeronautical SAR region covers Lesotho, Namibia, South Africa and Eswatini, 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.

The SAR 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 the SAR services within their territories to ensure that people in distress get assistance. Regional cooperation also uses scarce resources and helps nations to avoid duplicating efforts and facilities.

Through this collaboration, services are provided for poor states in a uniform way across a wide area. Collaboration also reduces the overall cost of the SAR operations.

Green Transport Strategy (GTS)

The movement of goods and services in time and space defines and influences economic activity. Demand for transport shapes the urban landscape and influences peoples' spatial choices in relation to schooling, places of work, religious services; and economic services such as banking, shopping and basic lifestyle requirements.

Businesses also choose to establish themselves based on market proximity and size, and ease of transport supporting labour, goods and services. These choices contribute in ways that are either favourable or extremely compromising to the well-being of individuals, households and businesses.

According to the Green Transport Strategy for South Africa (2018 – 2050), emissions from the transport sector in South Africa account for 10.8% of the country's total greenhouse gas (GHG) emissions. In addition to these direct emissions arising from the combustion of fuels, there are indirect emissions from the production, refining and transportation of fuels.

Continued growth within the transport sector is likely to have an increasing impact on land resources, water quality, air quality and biodiversity. In urban centres, transport is a major contributor to air pollution and emissions include nitrous oxides and particulates, which contribute to the brown haze seen over many of South Africa's main cities.

These pollutants have a significant impact on human health, increasing risks of respiratory diseases, heart disease, lung cancer and low birth weight – with children and the elderly particularly vulnerable. This places an even greater burden on the healthcare system with substantial medical costs.

Planes, trains and automobiles, carriages, carts and coaches, from history's earliest to modern man's most sophisticated modes of transport, have changed through the ages with little attention paid to man's first step in mobility: walking. In South Africa, walking is one of the most utilised forms of getting people from one place to another, but at enormous cost: financially, emotionally, morally and physically.

It is the responsibility of the DoT to contribute to national economic development through a people-centred approach that creates opportunity and stimulates growth. The department intends to do this by driving the goals of the National Transport Master Plan 2050 as South Africa confronts its crossroads to provide safe, efficient, reliable and affordable transport.

This makes the need for real change within the transport sector urgent and imperative. The GTS aims to minimise the adverse impact of transport on the environment, while addressing current and future transport demands. This is underpinned by sustainable development principles. The strategy will promote green mobility to ensure that the transport sector supports the achievement of green economic growth targets and the protection of the environment.

The objectives of the GTS include:
- enabling the transport sector to contribute its fair share to the national effort to combat climate change in a balanced fashion;
- promoting behavioural changes towards sustainable mobility alternatives through information, education and awareness raising;
- engaging the low-carbon transition of the sector, to assist with the aligning and developing of policies which promote energy efficiency and emission control measures in all transport modes;
- minimising the adverse effects of transport activities on the environment; and
- facilitating the sector's just transition to a climate resilient transport system and infrastructure.

Road transport has been identified as the primary source of transport-related carbon dioxide emissions in South Africa, contributing 91.2% of total transport GHG emissions. The heavy reliance of the sector on fossil fuels contributes significantly to total GHG emissions for the country. This justifies a focus on immediate and targeted interventions around road transport to ensure a significant reduction of emissions in the transport sector as a whole.

This will require commitment to resources: significant long-term finance and investment, as well as supplementary work to prepare detailed business plans for finance and investment in transport-related mitigation. There are broad-scale economic opportunities for growth in the public and private sectors.

Some of the benefits include access to employment opportunities for poor communities, an efficiently run public transport system, access to clinics and other healthcare services and less polluted air. Improvements in transport efficiency will also have positive knock-on effects for all economic sectors that use transport.

During the MTSF, as part of implementation of the GTS, the DoT will develop its carbon emission just transition plan to ensure that it contributes to the country's target of keeping emissions between 398 Metric tons of carbon dioxide equivalent (Mt CO2e) and 614 Mt CO2e range and the commitments set out in the Nationally Determined Contributions.

Transport Month

Transport Month is commemorated in October each year. During Transport Month 2021, government unveiled the S'hamba Sonke Programme, an initiative aimed at addressing the maintenance backlog in the secondary network and contribute to sustainable livelihoods through job creation initiatives.

The initiative allows national and provincial spheres of government to work towards common road maintenance targets while augmenting funding through the Provincial Roads Maintenance Grant. The conceptualisation of the S'hamba Sonke Programme was premised on the reality that while South Africa's national road network is in good condition, this is not the case with secondary road networks or provincial roads.

The initiative is one of the projects that will accelerate efforts to meet the government's target of creating 11 million job opportunities by the year 2030 as outlined in the NDP.

Transport Month 2020 focused on service delivery across all modes of transport, paying particular attention to roads infrastructure development. It was commemorated under the theme; "Together shaping the future of transport".

The aim was to raise awareness on the important role of transport in the economy and to invite civil society and the corporate sector to participate in providing a safer, more affordable, accessible and reliable transport system for the country across all modes of transport.