DEPARTMENT OF TRANSPORT

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NATIONAL LAND TRANSPORT STRATEGIC FRAMEWORK 2023 - 2028

"TRANSPORT, THE HEARTBEAT OF ECONOMIC GROWTH AND SOCIAL DEVELOPMENT"

transport
Department:
Transport
REPUBLIC OF SOUTH AFRICA

NDP 2030

NATIONAL LAND TRANSPORT ACT, 2009 (ACT NO.5 OF 2009)

NATIONAL LAND TRANSPORT STRATEGIC FRAMEWORK (NLTSF)

2023-2028

In terms of section 34(1) of the National Land Transport Act, 2009 (Act No. 5 of 2009), I **Sindisiwe Chikunga**, Minister of Transport, after consultation with the Members of the Executive Councils (MEC's), hereby publish the National Land Transport Strategic Framework (NLTSF) 2023-2028 contained in the schedule here under; to guide land transport planning countrywide.

MS SINDISIWE CHIKUNGA, MP

MINISTER OF TRANSPORT

DATE: 2023/06/16

transport

Department:
Transport
REPUBLIC OF SOUTH AFRICA

National Land Transport Strategic Framework (2023 -2028)

EXECUTIVE SUMMARY

This National Land Transport Strategic Framework (NLTSF) is a legal requirement in terms of the National Land Transport Act, 2009, NLTA, (Act, No.5 of 2009), section 34. The NLTA empowers the Minister to prepare a National Land Transport Strategic Framework (NLTSF) every five years. It embodies the overarching, national five-year (2023 to 2028) land transport strategy, which gives guidance on transport planning and land transport delivery by the national government, provinces in the development of Provincial Land Transport Frameworks (PLTFs) and municipalities in the development of the respective Integrated Transport Plans (ITPs) for the five years.

Besides the legislative requirements; the recent developments in the transport environment internationally; regionally (Africa); at national, provincial and local levels as well as the new strategic objective of the current administration, dictates the proposed review and update of the NLTSF. The Public Transport Strategy and the Action Plan, the approval of the National Development Plan (NDP) by the government, National Learner Transport Policy (2015), White Paper on National Transport Policy, 2021, National Rail Policy White Paper 2022, National Transport Master Plan 2050 (NATMAP 2050), including the strategic imperatives of the current administration that might have an impact on the development of the NLTSF five-year horizon and many other developments in the transport environment needed to be considered in the review and update of the Framework.

Nationally there are Constitutional implications for transport planning, which affect the right to safety, equality, dignity, and freedom of movement. The NLTSF sets out strategic priorities to apply transport planning in achieving social, health, economic and environmental outcomes. The identified strategic priorities and outcomes link the Framework to the NDP, NATMAP, provincial and municipal transport and spatial planning (SDFs, CITP, Bulk Infrastructure Master Plans and DDDM at the Local Government level).

The purpose of the NLTSF is:

- To serve as a five-year framework for integrated land-use transport planning;
- To serve as an enabler of land use and transport planning aspects as guided by the National Development Plan (NDP) 2030;
- To provide the guiding principles that integrate various modes of land transport within the planning context of the NDP and support wider relevant national legislation and policy;
- To provide clarity and certainty about the transport planning priorities to enable effective decision-making about programmes and initiatives at all levels of government;
- To align transport to sustainable economic development and universal accessibility; and
- To enhance coordination between the various spheres of government.

The NLTSF is a framework for Transport Planning; effective for all spheres of government. It sets the overarching goals, vision, and objectives for each element of the transport system which would be reflected in the Provincial Land Transport Frameworks (PLTFs) and Integrated Transport Plans (ITPs), and which must align with the NLTSF. The success in achieving these objectives depends on the implementation of the transport programmes and projects that emanate from the respective PLTFs and ITPs reflected through the Key Performance Areas as defined in the NLTSF.

The overall vision of the NLTSF is to create:

An integrated and efficient land transport system supporting a thriving economy that promotes sustainable economic growth provides safe and accessible mobility options, socially includes all communities and preserves the environment.

"The National Land Transport Strategic Framework must serve to guide land transport planning countrywide and must not derogate from the constitutional planning functions of provinces and municipalities."

An efficient, effective, integrated, universally accessible and sustainable transport system is one of the most critical factors for the performance of the South African economy, its growth and the creation of the employment and wealth necessary to help overcome the significant social challenges. An efficient transport system will further benefit export and transit links within the SADC region.

The NLTSF defines the strategies and policy intent of the Department of Transport (DOT) relevant to key priority areas in land transport over the next five-year period to achieve the vision. While not prescriptive and detailed, it is sufficiently flexible in that stakeholders are expected to adopt the relevant intentions and guidance of the NLTSF and apply it to local needs and circumstances.

The functional areas that are covered include the following:

1) Integrated Land Use and Transport Planning

2) Urban Transport and Smart Mobility

3) Universal accessibility

4) Rural Transport

5) Public Transport

6) Non-Motorised Transport

7) Learner Transport

8) Freight Transport

9) Transport Infrastructure

10) Cross-Border Transport

11) Transport safety and security

12) Institutional management

13) Funding

A vision, strategic intent and key performance areas have been developed for each functional area. Key performance Areas (KPAs) are provided to measure the effectiveness of the NLTSF, ensure accountability by the DoT and the planning authorities, and monitor value for money.

Proper monitoring and review of the KPAs will ensure a balanced view at the national, provincial, regional and local levels of the critical role of transport services in reducing poverty, facilitating growth and contributing to the achievement of key development targets and sustainability. The DoT established the National Transport Forum (NTF), which will assist the effectiveness of the NLTSF through all spheres of government.

Funding for transport infrastructure and operations for new development, management and maintenance of the transport system is a prerequisite to achieving the goals and vision of the NLTSF.

The NLTSF requires that transport schemes including public transport investments should follow a rigorous formal appraisal that covers the full range of impacts of improved public transport systems and prioritise projects by the overarching goals of the NLTSF. All transport schemes and major Integrated Public Transport Networks (IPTNs) project interventions must be supported by a strong socio-economic case for investment and by the institutional commitment from municipalities with their associated provinces.

The NLTSF aims to establish a legacy beyond 2028 based on the principle of sustainability, universal accessibility and prioritising facets of the transport system that would create a firm foundation for the development of an integrated efficient transport system.

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LIST OF ABBREVIATION

AARTO- Administrative Adjudication of Road Traffic Offenses Act

BBBEE – Broad-Based Black Economic Empowerment

BMA – Border Management Authority

BRT – Bus Rapid Transit System

CBRTA – Cross Boarder Road Transport Agency

CCTC – Central Communications Transport Centre

CITP – Comprehensive Integrated Transport Plan

COGTA – Cooperative Governance and Traditional Affairs

COTO – Committee of Transport Officials

CPTED – Crime Prevention Through Environmental Design

CPTR – Current Public Transport Register

CSIR – Council for Scientific and Industrial Research

DBE – Department of Basic Education

DBSA – Development Bank of Southern Africa

DDM – District Development Model

DFFE – Department of Forestry, Fisheries and the Environment

DMC – Disaster Management Centre

DOA – Decade of Action

DORA – Division of Revenue Act

DOT – Department of Transport

GIS – Geographic Information System

GHG – Greenhouse Gas

GVA – Growth Value Add

HOV – High Occupancy Vehicle

ICC – International Chamber of Commerce

IDP – Integrated Development Plans

IGR – Inter-Government Relations

IPTN – Integrated Public Transport Network

ISRTS – Integrated Sustainable Rural Transport Strategy

ITF – International Transport Forum

ITP – Integrated Transport Plan

ITS – Intelligent Transport Systems

LUM – Land Use Management

MaaS – Mobility as a Service

MBT – Mini-Bus Taxis

MCCCC – Municipal Central Communications Centre

MIG – Municipal Infrastructure Grant

MINMEC- Minister and Members of Executive Council

MOD – Mobility on Demand

MTEF – Medium Term Expenditure Framework

Natis –National Administration Traffic Information System

NATMAP – National Transport Masterplan 2050

NDP – The National Development Plan

NEF- National Empowerment Fund

NFLS – National Freight Logistics Strategy

NHTS – National Household Travel Survey

NIDC – National Inter-Departmental Committee

NLTA – National Land Transport Act

NLTB – National Land transport Bill

NLTSF – National Land Transport Strategic Framework

NLTIS – National Land Transport Information System

NMT – Non-Motorised Transport

NPC – National Planning Commission

NPTR – National Public Transport Regulator

NPTSP – National Public Transport Subsidy Policy

NSDF – National Spatial Development Framework

NRSS – National Road Safety Strategy

NRTR – National Road Traffic Regulations

NTF – National Transport Forum

OLAS – Operating Licence Administration System

OLS – Operating Licence Strategy

OSBP – One-Stop Border Posts

PFMA – Public Finance Management Act

PICC – Presidential Infrastructure Coordinating Committee

PLTF – Provincial Land Transport Framework

PRASA – Passenger Rail Agency of South Africa

PRE – Provincial Regulatory Entity

PRMG – Provincial Roads Maintenance Grant

PT – Public Transport

PTNG - Public Transport Network Grant

PTOG – Public Transport Operations Grant

RAF – Road Accident Fund

RAI – Rural Access Index

RAMS – Road Access Management System

RISFSA – Road Infrastructure Strategic Framework For South Africa

RSR – Railway Safety Regulator

RTI – Rural Transport Infrastructure

RTS – Rural Transport Services

RTQS – Road Transport Quality System

SADC – Southern African Development Community

SANRAL – South African National Roads Agency Limited

SARS – South African Revenue Services

SOV – Single-Occupancy Vehicle

SPLUMA – Spatial Planning and Land Use Management Act

Stats SA - Statistics South Africa

TAT – Transport Appeals Tribunal

TDM – Transport Demand Management

TER –Transport Economic Regulator

TMH – Technical Manual for Highways

TRF - Taxi Relief Fund

TRH – Technical Recommendations for Highways

TSM – Transport System Management

TOD – Transit-Oriented Development

UDAP- Universal Design Access Plan

UNFCCC – United Nations Framework Convention on Climate Change

1 INTRODUCTION

The National Land Transport Act, 2009, (NLTA) empowers the Minister of Transport to prepare a National Land Transport Strategic Framework (NLTSF) at five-year intervals, to guide the constitutional objectives of land transport planning countrywide, without detracting from the constitutional planning functions of provinces and municipalities.

This document sets out the National Land Transport Strategic Framework (NLTSF) for South Africa over the next five years. This version of the NLTSF supersedes the version published in 2017. The National Land Transport Strategic Framework is a legal requirement in terms of Section 34 of the National Land Transport Act, 2009 (NLTA), (Act, No. 5 of 2009) aimed at guiding land transport planning countrywide.

Transport is essential for many aspects of daily life. It provides opportunities for people to gain access to jobs, business opportunities, leisure and social activities as well as vital services, social, education and health. Furthermore, transport connects businesses with customers and suppliers. Transport networks are essential arteries of a vibrant economy., and a catalyst for development and economic growth. However, transport activities can also have profound effects on our environment, communities, and social and personal well-being. The NLTSF seeks to provide a strategic framework that will guide planning decisions for all modes of land transport including integration with airports and harbours.

The NLTSF further seeks to create a transport sector which is resilient, responsive and adaptive to any unplanned scenarios e.g. pandemics, climate-related disasters, electricity crises, that affect the transport industry. It aims to create a transport industry which is customer-focused, supporting mobility and access to amenities; as a service, and as a supplier of services. Also, as an enabler of training and development initiatives.

The strategic drivers as defined in the National Development Plan 2030 are to improve the economy, job creation, poverty alleviation, and reduced inequality. Hence the need to improve access to employment, health, education and leisure, and efficient movement of goods and; whilst minimising the negative impact on the environment, and promote social inclusion. The NLTSF sets out strategic priorities to apply transport planning in achieving our economic, social, environmental, safety and security outcomes.

Therefore, several overarching goals have been developed against which all transport planning considerations should be weighed:

- Consider the District Development Model approach
- Planning and investment should support economic development
- Ensure well-integrated land use and transport planning decision-making
- Promote social inclusion and universal accessibility

- Improve safety and security for all transport users, including persons with special needs.
- Reduce the impact of transport greenhouse gas (GHG) emissions on the environment
- Promote sustainable, integrated transport modes

The NLTSF defines the strategies and policy intent of the Department of Transport relevant to key priority areas in land transport over the next five-year period. The NLTSF confirms the broad overarching strategies relevant to land transport planning in South Africa applicable to a wide variety of functional areas. Whilst the NLTSF describes what actions to be taken, it is sufficiently flexible in that stakeholders are expected to adopt the relevant intentions and guidance of the NLTSF and apply it to local needs and circumstances.

1.1 Purpose of the NLTSF

The NLTA, Act 5 of 2009, defines the NLTSF as a Strategic Framework that informs integrated transport planning countrywide. The Framework should therefore:

- Define National Objectives and Policy Statements that give direction to transport on a National scale;
- Encourage the coordination and integration of transport nationally;
- Form the basis for the preparation of the Provincial Land Transport Frameworks (PLTFs) and Integrated Transport Plans (ITPs); and
- Provide a reporting mechanism on the progress of the respective transport plans and projects through the KPIs in the NLTSF.
- Include institutional mechanisms to ensure the implementation of transport plans in line with the Constitutional objectives

Translating these legislative prescriptions into policy terminology, the **purpose of the NLTSF** is to:

- Serve as a five-year framework for integrated land use and transport planning;
- Serve as an enabler of land use and transport planning aspects as guided by the National Development Plan (NDP) 2030;
- Provide the guiding principles that integrate various modes of land transport within the planning context of the NDP and support wider relevant national legislation and policy;
- Provide clarity and certainty about the transport planning priorities to enable effective decision-making about programmes and initiatives at all levels of government; and
- Align transport to sustainable economic and universally accessible development

1.2 The role of the Department of Transport

The DOT's mandate is to maximize the contribution of transport to the economic and social development goals of our country by providing fully integrated transport operations and infrastructure.

The main roles of the DOT and its public entities are:

- Policy and strategy formulation in all functional areas covering civil aviation or air transport, maritime transport, public transport as well as rail and road transport; and non-motorised transport;
- Substantive regulation in functional areas where the DoT has legislative competence;
- Implementation in functional areas where the DoT has exclusive legislative competence;
- Leadership, coordination and liaison in all functional areas;
- Capacity building in all functional areas;
- Skills development in all functional areas;
- Monitoring, evaluation and oversight in all functional areas; and
- Stimulating investment, research and development across all modes.

The DOT is responsible for developing transport policy in South Africa while provinces and local governments are responsible for executing policy mandates. This is achieved using provincial legislation and regulation, policy and guidelines, by-laws, strategies and implementation plans. The provinces prepare PLTFs, monitor and support the district and local government and coordinate and approve both district and municipal plans. Metropolitan and District Municipalities prepare Comprehensive Integrated Transport Plans (CITPs) and Local Municipalities prepare Local ITPs, which are required to fund and implement an integrated transport system. The development of the PLTFs and ITPs is aligned with the prescripts of the minimum requirements as outlined in the regulations. The NLTA maintains a plan-driven system based on the PLTFs and ITPs of municipalities. Supporting current policy direction

The recent development in the transport environment at the national, provincial and local levels as well as the new strategic objective of the current administration are significant, given the continuously changing transport environment. These adjustments have been reflected in this Framework to ensure that its content remains relevant and valid, while considering strategic developments within the transport policy and strategy environment.

The NLTSF specifies the strategic priorities and outcomes that link the Framework to the NDP, NATMAP 2050, provincial transport and spatial planning, and broader strategies and plans at the local Government level.

1.3 Structure of the document

Figure 1 (below) shows the process of preparing the Framework. The Framework ensures that:

- a clear vision of the integrated transport system that is desired, is defined with supporting objectives;
- the three spheres of Government and other stakeholders collaborate to develop an integrated transport system;
- Progress is measured through key performance indicators in the monitoring and evaluation program by the DOT.

The Framework and the current realities in transport inform the vision and key priorities for Transport in South Africa for the period 2023-2028. The NLTSF is a framework for Transport Planning, effective for all spheres of Government and sets the overarching goals, vision, and objectives for each element of the transport system which would be reflected in the PLTFs and ITPs. The success in achieving these objectives depends on the implementation of the transport programmes and projects that emanate from the respective PLTFs and ITPs reflected through the Key Performance Areas defined in the NLTSF.

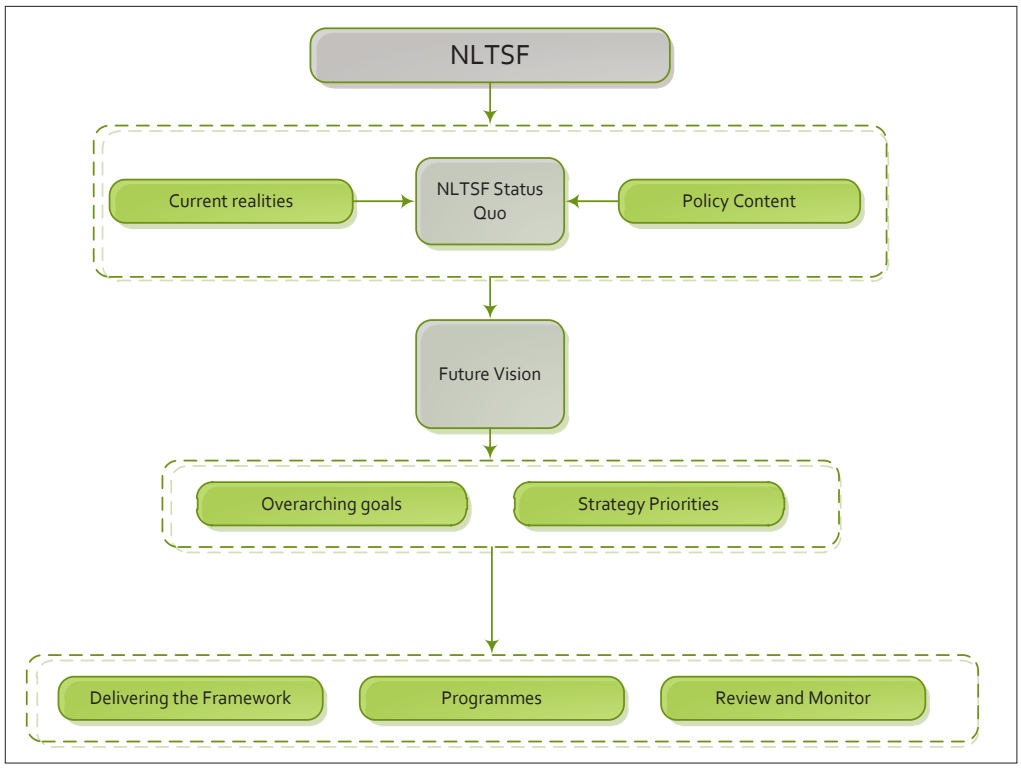


Figure 1 Structure of the NLTSF

The document is set out in the following parts:

Chapter **one** sets out the overarching goals against which all transport planning considerations should be weighed.

Chapter two outlines the legislative and policy context for the NLTSF, relevant statutory powers and responsibilities for the three spheres of Government.

Chapter three reflects on current realities and challenges and derives the key priority areas to focus on during the 2023-2028 period.

Chapter four outlines the vision, objectives and outcomes that the Framework seeks to achieve.

Chapter five outlines the key strategic transport elements with the vision, strategic intent and objectives for each element.

Chapter six outlines the action plan to achieve implementation through the NLTSF, and

Chapter seven- explains how the Framework will be reviewed, and monitored and how progress is evaluated.

2 POLICY CONTEXT FOR THE NLTSF

The revised White Paper on National Transport Policy (2021), vision is to provide safe, accessible, reliable, effective, efficient, environmentally sustainable and fully integrated transport operations and infrastructure that will best meet the needs of passengers, pedestrians and freight customers, improving levels of services at a cost and in a fashion that supports government strategies for economic and social development; whilst being environmentally and economically sustainable.

The approach in developing the NLTSF was to start with the broader policy framework and strategic intentions of these policies. The NLTSF specifies the outcomes and strategic priorities that link the Framework to the NDP, the MTSF, NSDF, DOT Strategic Plan, NATMAP 2050, and broader strategies and plans.

2.1 National Development Plan 2030

The National Development Plan (2030) is regarded as the highest level of policy, capturing the government's overall strategic objectives and should therefore guide any decision-making in South Africa (National Planning Commission, 2011). The Plan sets out a multidimensional framework to bring about a virtuous cycle of development, with progress in one area supporting advances in others. Given the complex nature of development, the Plan defined six interlinked priorities:

- Uniting all South Africans around a common programme to achieve prosperity and equity;
- Promoting active citizenry to strengthen development, democracy and accountability;
- Bringing about faster economic growth, higher investment and greater labour absorption;
- Focusing on key capabilities of people and the state;
- Building a capable and developmental state; and
- Encouraging strong leadership throughout society to work together to solve problems.

To enable inclusive sustainable development, the NDP defined a number of strategic aims in "writing a new story for South Africa":

- Creating jobs and livelihoods;
- Expanding infrastructure;
- Transitioning to a low-carbon economy;
- Overcoming barriers that prevent participation in society;
- Transforming urban and rural spaces;

- Informing education and training;
- Providing quality health care;
- Building a capable state;
- Fighting corruption and enhancing accountability; and
- Transforming society and uniting the nation.

As a follow on to NDP, the government developed the Medium-Term Strategic Framework (MTSF) 2019-2024 to help prioritise projects and programmes in South Africa that would work towards achieving the aspirations of the NDP.

The NDP acknowledges the increasing living costs and intends to address the drivers of the cost of living. Improving the standard of living includes amongst others, better access to public transport, reducing costs of public transport by creating more compact and universally accessible, safe neighbourhoods and communities; education and skills development, health care, and housing in close proximity to basic services. The NDP acknowledges that Government faltered by promoting employment and building houses further from job opportunities.

As a result, the NDP in its entirety recommends several transportation-related interventions to improve the quality of life for all citizens, whilst addressing job creation, poverty reduction, and inequality through those proposed interventions.

2.2 Medium Term Strategic Framework

The Medium-Term Strategic Framework (MTSF) 2019-2024 is the 5-year implementation plan for the NDP. It sets out the package of interventions and programmes that will advance the seven priorities adopted by the Government. The MTSF also sets out the actions Government will take the and targets to be achieved. It further provides a framework for other plans of national, provincial and local government.

The aim of the MTSF is to ensure policy coherence, alignment and coordination across government plans as well as alignment with budgeting processes.

The MTSF 2019-2024 is built on the three foundational pillars: a strong and inclusive economy, capable South Africans and a capable developmental state. There is a need to move with speed as we focus on planning and implementation. It is the era of Khawuleza (MTSF 2019-2024). The Strategic Framework has therefore prioritised integrated development planning which also encompasses the District Development Model (DDM) and effective implementation of the interventions

The three pillars set out above underpin the seven priorities of the MTSF. These priorities will be achieved through the joint efforts of government, the private sector and civil society, and are as follows:

Priority 1: A capable, ethical and developmental state

Priority 2: Economic transformation and job creation

Priority 3: Education skills and health

Priority 4: Consolidating the social wage through reliable and quality basic services

Priority 5: Spatial integration, human settlements and local government

Priority 6: Social cohesion and safe communities

Priority 7: A better Africa and world

It is worth noting that many priorities in the NDP are not about new policies and programmes but rather, giving effect to existing laws and policies and improving the implementation process. Policy uncertainty and organisational instability have sometimes impeded progress. The policy consistency provided by the NDP, and taken forward through the election manifesto of the governing party and the MTSF, allows greater impetus to be given to implementation. It also allows new programmes, legislation and regulations to be assessed against long-term goals and priorities.

2.3 The National Spatial Development Framework (NSDF) and its Implication on Transport

Transport and land use are inextricably linked. A relationship exists between land use development and in many respects, land use development is unlocked by the provision of high-quality integrated transport infrastructure and services. The main objective of land use planning is to ensure that economic development is stimulated and that the spatial location of activities, people and amenities, in, turn have a positive impact on the economy.

The role of institutions governing both transport and land use is important in achieving the land use planning outlined above. Ineffective institutions or institutions that fail to correctly plan with Constitutional objectives will not succeed. The institutional structures described in the NLTA at the national, provincial and municipal levels must ensure that Constitutional objectives are upheld.

The NSDF (2023) is a central instrument which should inform the review and update of the NLTSF which is a subservient framework.

Proactive integration of land use and transport planning is a core function of the municipality. For example, new housing and commercial developments require Traffic Impact Assessment Studies. Historically, traffic impact assessment studies provided a greater emphasis on single occupancy vehicles and less focus on public transport, and the developer was obligated to provide part of the road infrastructure, while the Municipality is supposed to address mass transit operations and infrastructure. This has resulted in the lack of provision for walking and cycling, dangerous roads and poorly planned communities, with highly restricted access to amenities.

The NSDF views a well-functioning and well-managed National Transport and Connectivity Infrastructure Network as key in ensuring: (a) The safe and efficient movement transport of people (b) The rapid and reliable flow of information and communication (c) The efficient transport of goods, and (d) The provision of services and the ability to participate and interact in the global economy as crucial to the Spatial Development and Economic life of a country

As a result, the NSDF conclude that with regard to Transport and Communication Infrastructure Networks, amongst others seeks to ensure investment in maintaining, strengthening and expanding connectivity to ensure the creation of a solid transport and communications network between urban areas and regions, with a focus on (1) ensuring the roll-out and continuous upgrading of broadband access to all South Africans, and (2) prioritising rail over road infrastructure, (3) ensuring the continuous maintenance of Transport and Communication Infrastructure Networks.

a) More people-focused infrastructure investment, such as (1) upgrading infrastructure networks in major urban areas and towns that support sustainable and universally accessible transport use, to accommodate far higher densities and intensities, (2) installing, de-segregating and maintaining infrastructure networks in former township areas at scale, so as to develop these previously neglected areas into high-quality urban living spaces, and (3) developing universally accessible, quality public spaces, pedestrians walkways and efficient, affordable and safe public transport networks for use by all;

b) More upgrading of ageing urban municipal services infrastructure and large-scale investment of municipal infrastructure in regional development anchors and rural services centres; and

c) More investment in enabling and catalytic infrastructure is required for (1) Renewable energy generation, storage and distribution, (2) smallholder farming and agro-processing, (3) tourism, culture and entertainment-led economic growth, and (4) innovation and knowledge-creation, packaging and transfer.

2.4 Environmental protection and sustainability

The overall strategic approach for the country's climate change response is guided by the National Development Plan (NDP 2030). The NDP 2030 proposes moving towards a low-carbon economy. Different sectors of society have roles to play in fulfilling Vision 2030. The DoT's objective in supporting the transition to a low carbon economy is to 'increase the contribution of transport to environmental protection.

The Department of Transport is committed to making a significant impact in reducing Green-House Gas (GHG) emissions, by enabling the transport sector to contribute its fair share to the national effort to combat climate change in a balanced fashion, considering the DoT and the sector's primary responsibility of socio-economic development. Therefore, the government through the DoT has developed the Green Transport Strategy (GTS), which aims to minimise the adverse impacts of transport on the environment, while addressing current and future transport demands. The Strategy promotes green mobility to ensure that the transport sector supports the achievement of green economic growth targets and the protection of the environment.

Decarbonising transport is a significant challenge, as it is one of the major sectors where emissions are well above their 1990 levels, and have continued to increase at about 33% over the same period.

Emissions from the transport sector in South Africa account for 13,3 % of the country's total GHG emissions. A majority of transport-related GHG emissions are from road transport which is currently accounting for 95,7% of transport emissions. This places the transport sector second in the energy sector in terms of emissions volume. These figures represent direct emissions only, principally consisting of tailpipe emissions. If indirect GHG emissions associated with the transport sector were to be included, such as GHG emissions associated with fuel refineries and electricity generation for transport, these figures would be substantially higher.

Climate change effects linked with energy consumption and security of supply of fuel are considered one of the most serious and pressing threats to sustainable development, with adverse impacts expected on human health, food security, economic activity, natural resources, physical infrastructure and the environment. The international political response to climate change began with the adoption of the United Nations Framework Convention on Climate Change (UNFCCC) in 1992. Accordingly, South Africa has committed to taking concrete measures to mitigate climate change, through economy-wide measures that include the transport sector.

Changing these problems requires a change in focus, and a far greater emphasis on walking and cycling, which would automatically reduce the amount of carbon consumed. However, the spatial inequalities already developed must be actively overcome in order for the move to a low-carbon economy to be successful. The DoT is cognisant of the effects that transportation activity has on the environment, as such these are some of the interventions that have been put in place to address these concerns:

- Developing a Transport Sector Strategy on Climate Change and Environmental Protection, which was achieved through the cabinet-approved Green Transport Strategy (2018 - 2050);
- Supporting green technology with an emphasis on efficient vehicle technologies, as well as promoting the uptake of electric vehicles as well as promoting the shift towards cleaner propulsion fuels such as Green Hydrogen, Compressed Natural Gas, hydrogen and higher quality fuel available in the country (Euro VI);

- Developing an integrated, efficient and effective public transport system, with a far greater emphasis on the promotion of walking and cycling; which is universally accessible;
- Encourage a shift towards sustainable transport modes, that will support the decarbonisation of the transport sector;
- Addressing congestion mitigation and improving air quality caused by transport activities, which requires a revised approach to planning road transport networks;
- Create awareness programmes into Climate Change and Green Technologies related to Transport; and
- Develop Infrastructure to support Green Technologies like Electro Mobility in Public Transport and mobility on Main Economic Corridors.

The DOT is determined to secure positive change through planning for and ensuring cohesive interaction of social, economic and environmental improvements.

Transport policies can contribute to a sustainable future by supporting a strong and prosperous economy and helping to promote safe healthy living. The impact of transport on the social, economic and environmental fabric of our nation is fully recognised.

The NLTSF, therefore, acknowledges its role as an enabler in bringing about economic growth, spatial integration, environmental protection and so well-being of all living in South Africa through land transport. Therefore, sustainability and the three (3) key aspects of sustainability, namely the environment, the economy and society as a whole – is the underlying thread connecting this framework and subsequent planning.

2.5 DoT Revised Strategic Plan 2020/21 – 2024/25

The DoT Strategic Plan and accompanying Annual Performance Plans are aligned with the approved Medium-Term Strategic Framework (MTSF) of Government and also articulates the long-term vision of the NDP 2030. To that effect, the table below shows a schematic illustration of the alignment between MTSF pillars, apex priorities of the 6th Administration and the strategic focus areas of the DoT.

Table 1: Strategic focus areas of the DoT.

MTSF Pillars	Apex Priorities	DoT Strategic Focus Areas
1. Achieving a More Capable State	• Priority 1: A Capable, Ethical and Developmental State	• Governance - Greater Efficiency, Effectiveness and Accountability
	• Priority 6: Social Cohesion and Community Safety	• Safety *(and Security)* as an Enabler of Service Delivery

MTSF Pillars	Apex Priorities	DoT Strategic Focus Areas
	• Priority 7: A Better Africa and World	• Building a Maritime Nation, Elevating the Oceans Economy
		• Environmental Protection – Recovering and Maintaining Healthy Natural Environment
2. Driving a Strong and Inclusive Economy	• Priority 2: Economic Transformation and Job Creation	• Infrastructure Build that Stimulates Economic Growth and Job Creation
		• Building a Maritime Nation, Elevating the Oceans Economy
		• Accelerating Transformation Towards Greater Economic Participation
	• Priority 5: Spatial Integration, Human Settlements and Local Government	• Public Transport that Enables Social Emancipation and an Economy that Works.
3. Building and Strengthening Capabilities of South Africans	• Priority 1: A Capable, Ethical and Developmental State	• Governance - Greater Efficiency, Effectiveness and Accountability
	• Priority 3: Education, Skills and Health	• Improved Efficiency and Effectiveness of Support Services

Source: DoT Strategic Plan and APP 2020/21 – 2024/25

The Department identified fundamental priority areas to focus on during the 2020 - 2025 MTSF period as follows:

1. Safety and Security as enablers of service delivery;
2. Public Transport that enables social emancipation and an economy that works;
3. Infrastructure building that stimulates economic growth and job creation;
4. Building a Maritime nation, elevating the ocean economy;
5. Accelerating transformation towards greater economic participation;
6. Innovations that advance efficiencies and support and continuous improvement model;
7. Environmental protection aimed at recovering and maintaining a healthy natural environment; and

8. Governance with a focus on greater efficiency, effectiveness and accountability.

2.6 National Transport Master Plan 2050

The primary driver of the National Transport Master Plan (NATMAP 2050), by the DOT, is "to develop a dynamic long-term and sustainable land use multi-modal transportation systems framework for the development of infrastructure facilities, interchange terminal facilities and service delivery that is demand responsive to national/provincial/ district and/or any socio-economic growth strategies, and any sectorial integrated spatial development plans".

The NATMAP 2050 defined a number of overarching objectives to support its strategic intent, including the following:

- Maximizing utilisation of existing infrastructure facilities;
- Development of future infrastructure facilities and improve operations;
- Development of an up-to-date and accurate central land use/transportation Data Bank - Geographic information system (GIS);
- Promoting effectiveness and efficiency of maritime Transport;
- Integrating multi-modal public passenger transportation;
- Improving the economic role of transport; and
- Integration of transport and land use development.

The NLTSF is aligned with the overarching objectives of NATMAP 2050.

2.7 NLTSF 2017

The 2017 NLTSF contained strategies for 12 functional areas with outputs and actions on how to achieve those outputs:

1) Integrated Land Use and Transport Planning
2) Urban transport and
3) Rural transport
4) Public transport
5) Motorised transport
6) Learner transport
7) Freight transport
8) Transport infrastructure
9) Cross-border transport

10) Transport Safety and Security

11) Institutional management

12) Funding

Having consulted widely, the 2017 NLTSF functional areas were retained, and only one functional area was added, Universal Accessibility.

2.8 Other strategies and policies

The NLTSF is aligned with a wide range of strategies and policies relevant to transport. The NLTSF has been developed taking account of policies and strategies contained in the following strategy and policy documents, but not limited to:

- The United Nations Framework Concetion on Climate Change (1994)
- Department of Transport Moving South Africa (1998);
- National Freight Logistics Strategy (2005);
- National Spatial Development Perspective (2006);
- Road Infrastructure Strategic Framework for South Africa (2006);
- Public Trasport Strategy and Action Plan (2007);
- United Nations Convention on the Rights of Persons with Disability, 2007,
- Action Plan to guide the provision of accessible public transport systems in South Africa, (2009);
- A Guide to the National Planning Framework (2009);
- Implementation strategy to guide the provision of accessible public transport in South Africa (2009);
- National Land Transport Act (2009)
- National Climate Change Response Policy (2011);
- National Strategy for Sustainable Development (2011)
- Non-Motorised Transport (NMT) Policy (2012);
- Transnet Long-term Planning Framework (2012);
- National Household Travel Survey: StatsSA (2013);
- Spatial Planning and Land Use Management Act (2013);
- National Learner Transport Policy (2015);
- The Paris Agreement (2015);
- Integrated Urban Development Framework (2016);

- National Land Transport Amendment Bill (2016);
- National Road Safety Strategy (2016-2030);
- Rural Transport Strategy of South Africa (RTSSA) (2016);
- White Paper on the Rights of Persons with Disabilities, 2016;
- Road Freight Strategy for South Africa, Department of Transport (2017);
- Green Transport Strategy for South Africa (2018-2050);
- Medium-Term Strategic Framework (2019-2024);
- Economic Regulation of Transport Bill (2020);
- National Household Travel Survey: StatsSA (2020);
- Revised DOT Strategic Plan (2020/21-2024/25);
- Decade of Action for Road Safety (2021-2030);
- White Paper on National Transport Policy (2021);
- White Paper on National Rail Policy (2022);
- National Spatial Development Framework (2023);
- National Transport Master Plan (2050);

3 CURRENT REALITIES

This chapter defines current trends, the context and realities as well as the challenges and issues faced in transport. In order to guide the focus of the NLTSF, it was important to understand the current realities, challenges, and define the gaps to inform the way forward for the 2023-2028 period.

3.1 Background

An efficient, effective, accessible reliable and sustainable transport system is one of the most critical factors for the performance of the South African economy, its growth and the creation of the employment and wealth necessary to help overcome the significant socio-economic challenges.

Investment in all aspects of transport to increase capacity and improve operational and organisational efficiency has to be continuous and, in many cases, absorb a significant amount of public sector funds. All too often inadequate investment provision is made and insufficient attention is given to improving ongoing managerial and organisational inefficiencies.

The distances between population centres and the dependency on transport mean that there is a critical reliance on securing efficient, reliable and cost-effective networks. The transport industry is highlighted by the current administration as a key contributor to South Africa's competitiveness in global markets and plans were unveiled to invest billions of Rands to improve the country's roads, railways and ports.

However, South Africa faces a number of challenges in its transport industry as well as its spatial disposition that delays ambitions in meeting the aspirations outlined in the DoT Strategic Plan, the NDP and NATMAP 2050. This chapter explores these factors in creating a better understanding of where we are starting from in terms of:

- National transport trends that have occurred over the past decade demonstrating how transport policies in South Africa have an impact (positive/negative)
- The current realities in transport in South Africa
- The challenges facing the South African transport industry

Looking forward there is a need to view transport holistically as an integrated system and not in terms of each mode independently. The challenge is to unlock value in the wider economy through investing selectively and creatively in sustainable schemes that help to realise South Africa's potential as a globally competitive trading nation.

3.2 Key challenges

Against the background of the current realities, the following key challenges facing the South African transport industry have been summarised:

3.2.1 South Africa's spatial disposition

South Africa's spatial disposition is a direct consequence of its past inequalities. Almost three decades after democracy the country has a mixed picture - the witting creation of deeply divided communities characterised by social and economic inequality, segregated land use patterns, great disparities in levels of education, the inadequate and inefficient provision of transport infrastructure to serve the needs of all its people and inequitable access to labour and economic markets and services

According to the NHTS 2020; about half of the low-income households in South Africa had a monthly expenditure on public transport of five hundred rand (R500). The high cost of mobility and the constraint it places on the lower income earners limits their ability to access healthcare, education, and social and economic opportunities. Mobility has a profound effect on poverty where incidence of low mobility and unaffordable public transport would restrict entire households from economic opportunities.

The MTSF clearly states that the structure of urban and metropolitan areas, which are characterised by fragmented residential settlement patterns, underdeveloped business areas in townships and long travel times between home and work are some of the critical spatial challenges in South Africa. The NHTS shows that the average journey time for all modes of transport is one hour and the proportion of people travelling for over one hour has increased. In addition, over 50% of the population walks for more than 90 minutes to the closes the health care facility. This raises the cost of living, limits the scope for shift work and makes it difficult for the unemployed to seek work. It also increases service delivery costs and constrains business development. The physical remoteness and low population densities of both urban and rural areas impact the ability of transport to support national economic and social development objectives.

The challenge within the context of transport is to empower the transport industry to help reverse some of the negatives of spatial segregation, whilst dealing with the urban planning problems that caused it. Transport plays a fundamental and game-changing role in bringing about a more integrated society. Spatial integration is required to address spatial fragmentation and urban sprawl.

Government's approach is to develop through the District Development Model (DDM) where the focus is bringing economic development opportunities from a district point. A comprehensive plan that seeks to develop the whole district is put in place which takes all elements into account, including the safety of communities. The one plan is focused on integrated better-located at residential development, investment in public transport networks, support for economic development and job creation and stronger collaboration between municipalities, local business chambers and civil society stakeholders.

In summary, spatial distortion divides and/or prevents inclusive development and liveable communities, resulting in physical remoteness and low population densities, adversely affecting travel costs, in turn giving rise to poor accessibility. The lack of employment opportunities in rural areas is the main cause of migration to urban areas. The continuous spread of informal settlements on the periphery of the urban fibre is a big challenge to Urban Planners to achieve integrated planning. Urban Road networks have deteriorated due to immense potholes in urban areas and provincial roads. This led to poor public opinion on the capacity of the state to meet key service delivery challenges.

3.2.2 Transport impact on the environment

Section 24 of the Bill of Rights calls for Citizens rights to an environment that is not harmful to their health and well-being. Land-based transport must therefore be planned and implemented such that it minimises its negative impact on the environment. Additionally, Sections 9 and 10 of the Constitution outline equality and dignity, emphasising that land-based transport includes all groups of South African society, however, categorised. According to the White Paper on National Climate Change Response Policy (NCCRP) 2011, Greenhouse gas emissions have increased rapidly in recent years. Given the developing nature of the South African economy, it is expected that emissions will grow as development goals are pursued. The sectors that generate the most carbon dioxide emissions are production activities that use large quantities of coal or electricity and the transportation sector.

South Africa communicated its Nationally Determined Contribution (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC) with a mitigation target range for 2025 to be 398- 510 and for 2030 to 350-420 Metric tons of carbon dioxide equivalent (Mt CO_2-eq). Transport is one of the major sectors identified to bring significant change in ensuring that the NDC target is met. Any transport-related policies and measures should therefore aim for a transition to a low-carbon economy.

3.2.3 Integrated transport planning

Land use and transport planning have institutionally and historically been considered inter-dependently. Over the past few decades this has changed with more emphasis on integrating land use and transport planning. It is however seen that transportation follows development, responding to accessibility needs created by land use decisions outside of the f transport authority's control. At the same time, local planning authorities increasingly separated commercial, employment, social and residential areas, increasing the need for travel over longer distances.

South African cities are structurally fragmented and have many areas which lead to social and economic exclusion. This has resulted in long travel times and distances for many commuters situated in township areas. Current land use planning contributes further to urban sprawl since new housing developments are planned on land which is still on the periphery of the new municipal areas and far from urban centres, economic opportunities and transport networks.

The current reality however is that transport planning in South Africa is uncoordinated and occurs in modal and sectorial silos. There is also a lack of consistency between transport and land use planning practice. This means many transport projects that can derive increased economies of scale and efficiencies from integration are being implemented and planned in isolation. The disjointedness between transport and land use planning is, for example, demonstrated where spatial planning policy has resulted in low settlement density and or spatial segregation which are not supported by appropriate accessibility options or public transport provision, for example, where cheap land is bought on the outskirts of urban areas for mass low-cost housing purposes, without providing adequate accessibility and mobility options, thereby perpetuating marginalisation.

Zoned property, road and rail reserves are not adequately protected, resulting in illegal land invasion/occupation. For example, properties zoned for schools that are not developed are illegally occupied, resulting in the school being developed further away from the community, and learners have to travel further. Such fragmentation, results in higher transportation costs across the board, increasing subsidies, lack of opportunities to access employment, increased poverty and reduced economic productivity. Municipalities are mandated to prepare Public Transport Plans (PTPs) to address rationalisation of public transport services and Operating Licence Strategies (OLS) incorporating potential new routes. The Municipality could then provide a municipal public transport service or outsource the service to an approved operator, restricting the number of routes according to the Operating Licence Strategy, thereby preventing an oversupply of services, and potential violence and fatalities. A newly contracted public transport services will be a function of municipalities, and provinces if need be will enter into contracts with municipalities to perform such services on behalf of municipalities.

Whilst it is a legal requirement that all major cities prepare and implement Integrated Development Plans (IDPs) and Integrated Transport Plans (ITPs), a basic review suggests that very often plans are simply produced to fulfil statutory compliance with little action or follow through in terms of implementation. For that reason, it is necessary that the Provincial Land Transport Framework (PLTF) provide guidance on action plans to be considered in the development of IDPs and ITPs.

3.2.4 Urban transport and Smart Mobility

South Africa is experiencing rapid growth in urban areas mainly due to migration from rural areas to the cities. South Africa's population has grown from 40 million in 1994 to 59.39 million in 2021. 21 million people (about 40% of the national population) live in the five largest cities in South Africa. The large urban concentrations are the economic heart of the country. More than 57% of GVA (Growth Value Add - a measure of economic concentration, employment and productivity) is centred in these five cities (Tshwane, Ekurhuleni, Johannesburg, eThekwini and Cape Town), with Gauteng accounting for 35% total GVA.

The development of peripheral residential areas disadvantages urban dwellers resulting in long travel distances and inefficient public transport service. The uncontrolled development of informal settlements on the periphery of cities poses a huge challenge to integrated planning. Lack of understanding of the property market in the public sector create huge challenges in creating investment friendly environment in the development state.

The transport system is fragmented, inefficient and not coping well with rapid urbanisation. Effective, efficient and inclusive urban transport systems are a prerequisite for economic development and for social equity and cohesion. Maintaining mobility and accessibility by all modes in appropriate locations will ensure social connectivity and economic growth. As the transport system grows it is likely to add additional inefficiencies in transport costs resulting in severe economic constraints and eventually social breakdown. Urban Transport development is a key focus area for the National Land Transport Strategic Framework. The emphasis needs to be on building on the recent upswing in investment focusing on the initial roll-out of quality public transport to set out and implement a comprehensive sustainable urban transport strategy focused on appropriate public transport, smart mobility, and NMT development.

South Africa, similar to many other developing countries and emerging economies, is experiencing a rapid increase in demand for motorised travel, essentially following the same path as developed nations. Continued high rates of population growth, rapid urbanisation and the aspiration towards consumerism are causing transport needs and demand to expand.

Against the background of low-quality public transport options, the emerging middle class aspire to the use of private motor vehicles while many of the poor remain stranded. Attempting to meet all transport demand through a pro-private motor vehicle approach is massively costly, inequitable, and unsustainable and, as has been conclusively proven, impossible worldwide.

Cities throughout the developed world have moved through a 40-year phase of mass motorisation. Traffic speeds, which initially increased, have dropped significantly and consistently through most of this phase and the majority of cities have reached critical levels of peak traffic. Most governments now realise that solutions to improving urban transport conditions do not lie in providing for unabated motor vehicle growth, hence growing consideration of concepts like transport demand management (TDM).

The evidence is undisputable; attempting to cater for increased volumes of traffic whilst maintaining or increasing current average speeds of motorised traffic requires massive investments and guarantees ever-worsening emissions, fossil fuel dependence, spatial dislocation and severance whilst not offering any assurance of sustained speed improvements.

In metropolitan areas, only one-third of passengers are using formal bus and rail services, with the mini-bus taxi sector transporting two-thirds. The Government's strategy is to progressively upgrade and formalise most or all urban public transport operations (including mini-bus taxis) as currently implied by the DoT's Public Transport Strategy.

If all urban public transport was formalised to an enhanced quality on the basis of current spatial structures, the annual funding shortfall could total well over R20bn per annum, a yearly sum considering South Africa's fiscal constraints is probably excessive. Therefore, substantial increases in operational funding will need to be matched by major increases in productivity and cost recovery.

The success and financial feasibility of all planned Integrated Public Transport Networks (IPTN) interventions rely on increasing urban densities, mixed-use development and increasing the modal share of public transport among choice users. The range of strategies and measures to ensure these outcomes is fundamental to achieving better operational cost recovery in future systems. Without a doubt, substantial public transport investments are vital, yet this investment will not significantly improve the urban economy or public transport effectiveness unless equal attention is placed on spatial development densification.

3.2.5 Universal accessibility

One of the strategic objectives for Land Passenger Transport that are presented within the White Paper on National Transport Policy, 2021, is to: "To promote safe and secure, reliable and sustainable public transport that addresses user needs" and in line with the NLTA, is accessible to every passenger. Identified passenger groups include "commuters, learners, persons with disabilities, pensioners, elderly people, children, pregnant women, persons accompanying children, tourists and long-distance passengers".

Notwithstanding the policy intention, universal design of and universal access to Public Transport, is very poor across the entire range of modes. Unless the different functional areas in the NLTSF acknowledge their responsibility for universal access implementation, the problems with segregation in South African cities will remain. Nevertheless, the policy tools are now in place for the first time, to enable the situation to change.

Universal design and universal access are defined in the national White Paper on the Rights of Persons with Disabilities, 2016. To assist with implementation, Government Gazette 40174, 2016 requires universal access to be included in integrated transport planning, using a Travel Chain approach. The travel chain is explained in the Accessible Public Transport Strategy (DoT, 2009) and must be used in upgrading existing public transport as well as in new transport systems. Notably, the Consumer Protection Act, of 2008 and the Road Traffic Act amendment 2009, both require mainstream public transport services to be accessible, in line with the NLTA.

Currently, most metropolitan municipalities are at various stages of the initial implementation of accessible public transport. Government Gazette 45328, 2021 requires that service providers implement accessible transport through the development of a Universal Design Access Plan (UDAP), which includes reasonable accommodation. There are also different initiatives at the municipal level to invest in NMT infrastructure.

3.2.6 Rural transport

A central legacy of apartheid is the persistence of dense rural settlements with limited economic opportunities in the former "homeland" areas, which have particularly high rates of unemployment.

The remoteness from major economic hubs and low population densities often means that the provision of public transport infrastructure and services in remote areas is financially unviable. The result is the isolation of rural communities with limited mobility options, which in turn results in the inability to access economic opportunities in the formal labour market. This contributes to perpetuated poverty. The implementation of rural transport is hampered by a lack of prioritised funding and technical or managerial capacity to oversee the roll-out of projects at the district level. Rural Transport includes the following components:

- Rural Transport Infrastructure (RTI) – Includes all transport-related infrastructure, ranging from the proclaimed district or feeder roads, to village-level roads and non-motorised infrastructure such as tracks, trails, paths and footbridges, most of which are often not proclaimed or registered.
- Rural Transport Services (RTS) – Includes services provided by operators of all modes of motorised and non-motorised transport and private users (e.g. head loading, private vehicular transport, intermediate transport, animal-drawn carts, etc.).
- Integrated Public Transport Networks (IPTN) – Relates to the provision of improved universal accessibility and mobility by integrating public transport services between modes. Rural IPTN also aim to promote the integration of transport infrastructure among modes.

The government places the need to improve rural infrastructure and service centres as a key strategic priority in the MTSF. The use patterns of public transport have changed between 2013 and 2020, with general decreases in the percentage of households who used taxis (80.2%, to 67.6%) buses (19.5% to 16.6%) and trains (12.9% to 3.2%).

- Since 2013, there has been an increase in the percentage of workers who walked all the way to work. The increase was more significant in rural areas where it increased from 38.2% to 39.2%. This represents a 1%-point increase.
- One in five workers walked all the way to work in South Africa. The majority (39.2%) of those who walked all the way to work were from rural areas.
- The proportion of learners who walk all the way to their educational institution decreased from 64,1% in 2013 to 59.4% in 2020.

Compared to 2013, rural households are the only subgroup that have seen a significant decrease in access time to selected services, even though rural travellers still need more time than their urban and metropolitan counterparts. Over time, households living in rural areas had better access to public transport and had reduced travel times when compared to 2020.

3.2.7 Public Transport

The trends identified around travel modes and patterns from the NHTS for 2013 and 2020 and Statistics South Africa, 2020 show that:

- The majority (more than 60%) of public transport users, particularly in urban areas, travel by mini-bus taxis;
- The BRT systems and Gautrain are currently transporting less than 1% of the travelling population in their respective cities;
- In 2020, about 52.1% of the population lived within a five-minute walk to public transport but this is 4% lower than in 2003 showing a negative trend;
- The number of people living more than 15 minutes from a public transport stop has increased between 2003 and 2011 which implies accessibility has reduced in the past decade.

The problems with apartheid spatial planning have been described, and notably little improvement has been made over the last 30 years; in fact, the figures above suggest a worsening situation.

Additionally, the fragmented nature of institutional governance over public transport resulted in South Africa not achieving one urban transport system, but rather a fragmented transport system in urban areas. As a result, public transport in South Africa is inefficient and not sufficiently customer focused with poor levels of accessibility, affordability, reliability, predictability, comfort and safety, with the exception of Gautrain and BRT.

Currently, in South Africa, there is no transport legislation to regulate the deployment of new technological initiatives like Autonomous Vehicles (AVs), Electric Vehicles (Evs) etc. However, as part of the technological development in the transport industry the National Land Transport (NLT) Amendment Bill will provide provisions for the regulation on e-hailing services. The Competition Commission submitted that the regulatory framework for e-hailing and metered taxis should be uniform to create an even competitive environment. The Commission also noted that the NLT Amendment Bill does not impose any area restrictions for e-hailing services and this should be extended to metered taxis.

The scope of public transport encompasses sustainable forms of transport including non-motorised transport (NMT) in South Africa's urban and rural contexts. The lack of integration between Public Transport (PT) and NMT counteracts the full benefit that these efficient modes offer, including universal accessibility, support of economic growth and effective mass mobility. There is an expressed need for better linkage between both modes in a more focused and systematic way. This means NMT is now recognised and accepted nationally as a form of transport.

The majority (81.4%) of learners either walk (59.4%) or use public transport (22%) to access institutions of learning. These statistics demonstrate the role of public transport and NMT in being a significant mode of travel by learners (opposed to the use of the private car). The Minibus taxi industry is one of the dominant public mode of transport in RSA, with an increase from 9.8 million to 11.4 million (NHTS, 2020), hence the DoT in partnership with the National Empowerment Fund (NEF) has established Taxi Relief Fund System to assist qualifying taxi operators who were operating during the COVID-19 hard Lockdown.

PRASA recognises some fundamental issues affecting the delivery of rail service and, if these are successfully addressed, the level and quality of service that can be provided will be transformed, strengthening rail's role in the local transport network, such as:

- improving the levels of universal accessibility, safety, security, resilience, reliability and efficiency of the network;
- connecting current and new economic or growth nodes (including major airports, ports and industrial development zones);
- supporting the main economic development corridors;
- improving access to amenities and connectivity to marginalised communities;
- promoting better integration between land use planning and railway development to promote densification and sustainable development and to play to rail's strength in supporting high volumes of travel;
- developing rail as the high-volume backbone of each province's integrated transport network, thereby contributing to the development of a modern, integrated, high-quality, affordable and customer focused public transport system.

A variety of regulations already exist in the South African urban transport setting, including the registration of public vehicles and the Road Transport Quality System (RTQS) safety standards. One area that stands out, however, as needing more effective regulation is the midi-bus taxi industry. The roots of the taxi industry are in the informal sector, and it has continuously been a primary source of empowerment opportunities for historically disadvantaged segments of the population. Part of the legacy of the apartheid past is therefore an industry with no effective regulatory structure, yet one that also now carries the majority of urban mass transport trips in South Africa.

The Revised Taxi Recapitalisation Programme (RTRP) was implemented in 2019, it seeks to continue to form a key pillar of the national programme to improve public transport, focused on two pillars improving the safety of passengers using the taxi mode, and the transformation and empowerment of the Mini and Midibus taxi industry.

Current public transport planning also does not sufficiently integrate feeder services, and the move to a corridor approach will create even more need to do this properly. Very few customers make intermodal transfers, in part because the system is not planned or physically laid out on a basis that encourages or permits such transfers. Creating an integrated public transport network means that existing modes such as minibus taxis must be ungraded and integrated into the network, using current and new service delivery models.

In summary, whilst new public transport systems have been introduced and have been able to demonstrate success; existing public transport is not sufficient customer-focused and inefficient with poor levels of reliability, predictability, universal accessibility comfort and safety. It does not reflect world-class aspiration of the NDP 2030. The fragmented nature of institutional governance over public transport is also not helpful. The implementation of IPTNS has demonstrated that Quality Bus Services as well as BRT, and a better focus on walking and cycling, can start to make a difference.

3.2.8 Non-Motorised Transport

Non-Motorised Transport (NMT) is any means of transportation not supported by a motor, which is a fundamental enabler in lowering emissions in the transport sector. This includes cycling, walking, skateboarding, wheelchairs and making use of animal-drawn carts or hand-pushed trolleys. Most people use a mix of motorised transport and NMT to travel. NMT is a mode of transport in its own right and in many instances, it is either the only available mode of or transport and/or the most affordable one. The following statistics from the 2020 National Household Travel Survey (NHTS) (Statistics South Africa, 2020) are relevant to non-motorised travel:

- In South Africa 26.3% of people use walking as their main mode of commuting to work and 1.3% use cycling;
- In rural areas 39.2% of people walk to places of work, while the national percentage is 20,3% and this translates into a total of 2.7 million workers walking all the way to work. Across provinces, the highest percentage of workers who walk to work are in Gauteng (21%), and Kwa-Zulu Natal (14%).
- 12.3% of people with the lowest monthly income walk to work, but this has reduced from 42.4 % in 2013. This is significant and highlights the need to better understand the importance of and provision for NMT in South Africa.
- Non-motorised transport is of particular importance for travelling to school or other educational institutions. A significantly high number of commuters and Learners walk to work and school respectively. The 2020 household survey shows that 59.4% of Learners walk to school and 70.4% of Learners in rural areas walk to school.
- Walking as a main mode to access educational institutions is also prevalent at 69.9% using walking as the main mode of transport and in provinces such as the Free State and Limpopo walk to institutional institutions.

Transport is also a critical factor in urban spatial planning. The historical focus on providing and maintaining infrastructure to support the private car has led to unsustainable and inequitable outcomes. The spatial footprint of the private car is many times greater than that of public or NMT. If properly planned, cycling and pedestrian networks can act as a feeder to public transport. This approach is already being undertaken in cities implementing IPTNs.

Due to the bicycle being a low-cost form of mobility, it has the potential to aid in bringing about equity and greater accessibility for people who cannot afford public transportation or the purchasing of a motor vehicle. In many semi-rural areas in South Africa, people use bicycles as a key mode of transport to generate income by ferrying goods for various informal and small businesses. Cycling and walking aid in providing a minimum level of mobility that is required for economic and social participation.

Integration and maximisation of NMT will have a multitude of benefits for the transport system (socio-economic, environmental, safety, health, convenience, affordability, reducing congestion and transport relates emissions, etc.). Therefore, it is important that cities and municipalities not only provide mainstream NMT considerations in planning, and providing safe and fit-for-purpose NMT infrastructure but also develop programmes that will attract new cyclists and pedestrians.

3.2.9 Learner transport

In the past; the absence of a national policy on learner transport resulted in the fragmented provision of learner transport services administered by the Provincial Departments of Education and DOT. The first national learner transport policy was approved by Cabinet in 2015, which endeavours to *address the challenges of accessibility and safety of learners*[1].

Learner Transport is the joint responsibility of the DOT and the Department of Basic Education. Consequently, the amount of funding made available for learner transport varies and is generally insufficient to meet the existing need. The operationalization and management of learner transport have also taken different forms in various provinces.

Learners have difficulty accessing educational institutions due to the inadequacy of learner transport and insufficient schools in areas where they live. The ability of learners to access learner transport has remained a significant challenge. This is compounded by the long distances they have to travel to get to school, threats to safety and security and the cost of transport. The 2020 NHTS shows that walking remains the most commonly used form of transport among learners, with 10,1 million (59.4%) of learners walking to places of education and of those 73.3% walk up to 30 minutes. Between the years of 2 and 2020, the NHTS identified a decrease in walking to places of education. The provinces with a high proportion of learners who walked for longer than 60 minutes are KwaZulu-Natal (8.7%) and, to a lesser extent, the Eastern Cape (7.6%) and Limpopo (5.3%) Province.

[1] National Learner Transport Policy, 2015

The number of deaths of child pedestrians on the roads; those who get killed while walking long distances to and from schools; those that get killed in vehicles that are not roadworthy and those whose grades are affected by exhaustion from taking long walks to school is a major concern. The Taxi Recapitalisation Programme (TRP), the review report has recommended that Learner Transport vehicles be considered for scrapping as at the moment the scrapping process excludes learner transport vehicles. This step would assist in addressing the challenges of learner transport vehicles getting involved in accidents because they are too old and un-roadworthy.

A new National Policy on Learner transport was issued in 2015[2] to provide a uniform framework and an enabling environment for the government and other stakeholders to address learner transport challenges. The aim of the policy is to provide an institutional framework to facilitate the provision of learner transport in order to ensure that learner transport is rendered in an appropriate and coordinated manner. In this regard, it is recommended that a National Interdepartmental Committee (NIDC) and provincial joint planning committees will be established. The institutional arrangement will strengthen oversight and integrated reporting on the implementation of the Policy.

The target group for subsidised transport is learners who attend grades R to 12 and live in areas where they do not have access to public transport services and have to walk long distances to school.

3.2.10 Cross-Border Transport

South Africa's borders are critical points for facilitating the unimpeded movement of goods and people; however, there are currently severe bottlenecks in commercial supply chains and journeys of cross-border travellers. These capacity constraints cause excessive delays of goods which in turn increases the cost of freight. These delays also impact passenger transport. The role of rail in relieving some of the strain has not been realised due to the serious incapacity of the freight rail sector, despite national government policy to the contrary.

The NSDF identified the need to consolidate nodal development to support inter-development corridors and trade with Southern Africa Development Communities (SADC) which includes (1) a focus on SADC Corridors and Regional (2) improving efficiencies at border and port facilities on these routes to handle greater international and regional trade flow.

Funding is not adequate for the strategic projects identified at borders which could benefit the country and cross-border operations have limited productivity having a knock-on effect on supply chain management and the regional economy.

The performance of the cross-border transport system along the regional corridors depends to a large extent on the following factors:

- Quality and competitiveness of transport and logistics services;

[2] National Learner Transport Policy, 2015

- Capacity and condition of public infrastructure used by these services; and
- Domestic, bilateral, and multilateral policies and regulation of these services and trade.

The latter issue of policies and regulation is of particular importance in cross-border transport as it relates to border-crossing procedures for both import and export trade and transit shipments. In general, transport and logistics services are seldom of primary concern because this function is mostly the responsibility of the private sector. The exception occurs where the government is heavily involved in providing these services e.g. rail transport services, or there are significant constraints on market access. In terms of infrastructure, the problem is usually a poor condition, insufficient capacity or lack of physical integration. The latter is common at all border post, but can be addressed through "One Stop Border Post" (OSBP) initiatives. Currently, six priority Border Posts are being considered for the OSBP initiatives which are: Beitbridge border connecting South Africa and Zimbabwe; Lebombo connecting with Mozambique; Maseru and Ficksburg that connects with Lesotho; Oshoek connecting with Eswatini; and Kopfontein connects with Botswana.

Problems for commuters across borders have not been properly addressed, including cross-border travellers with disabilities. Facilities at border posts, including reasonable accommodation in passport and customer control, remain inadequate.

3.2.11 Freight Transport

Freight Logistics forms a very important element of the economic growth in the country, the SADC, the African Continent and the Global Village. The South African freight industry is dominated by strong competition between the mainland modes, road and rail. This problem is exacerbated by the distance of the strategic freight corridor between Durban and Gauteng being primarily road-focused. The result is a serious imbalance of 87% of the freight by weight moved by road, and only 13% moved by rail. This results in underutilised rail infrastructure and intermodal facilities with excessive pressure on road infrastructure to carry freight that could be on the rail network.

Freight movement by road has a significant impact on the national road network and results in high transport cost in the logistics value chain. This prevents South Africa from being competitive in the global market and attracting sufficient international investment in supporting economic growth.

South Africa's borders are critical points for facilitating the unimpeded movement of goods and people. However, there are currently bottlenecks in commercial supply chains and journeys of cross-border travellers. The capacity constraints, especially at border posts causes excessive delays of goods (and passengers), this in turn, increases the cost of freight particularly due to standing charges exerted on operators/customers. There are positive indications of progress towards increasing capacity with some busy crossings now operating 24 hours a day.

The slow pace migration of freight from road to rail creates pressure on the road environment to expand the width of roads, which in turn causes social divisions between communities on either side, and creates universal access problems. This is a particular barrier on provincial roads which are not motorways.

In summary, freight movement by road has a significant impact on the national road network, and results in high transport costs in the logistics value chain. This impacts South Africa's competitiveness in the global market and attracts sufficient international investment in supporting economic growth. All spheres should take equal responsibility for the reduction in overloading and safeguarding road infrastructure by enforcing axle loading and gross vehicle mass (GVM).

3.2.12 Transport Infrastructure

South Africa has missed a generation of capital investment in roads, rail, ports, electricity, water and sanitation, public transport and housing. To grow faster and in a more inclusive manner, the country needs a higher level of capital spending in general and public investment in particular[3]. The NDP calls for a gross fixed capital formation of about 30% of GDP by 2030 to see a sustained impact on growth and household services. The NDP calls for effective, reliable, economical and smooth-flowing transport corridors.

Roads and railways are intended to be facilitators of connectivity and mobility enablers of economic growth. However; roads particularly have become bottlenecks due to congestion and pavement damage by excess axle loads of trucks.

South Africa's total road network is about 750 000 km, the most extensive network of roads within a country on the continent. The DOT is responsible for overall policy development and road capacity improvement and maintenance is the responsibility of the South African National Roads Agency SOC Limited (SANRAL), the nine provinces and local governments.

SANRAL is responsible for the country's network of national roads, which cover around 21 403 km. There are about 273 621 km of provincial roads, and the municipal network, including metros and municipalities, totals around 323 057 km, according to the DOT. An estimated 131 919 km remains unproclaimed.

Around 16% of the national roads are toll roads, most of which are maintained by SANRAL, while the rest have been concessioned to private companies to develop, operate and maintain (National Freight Databank, 2023).

The implementation of road infrastructure in Provinces and Municipalities is generally constrained by the lack of a functional Road Asset Management System (RAMS), and engineering expertise for planning, management and implementation of projects.

[3] National Development Plan, 2011

Provinces are required to demonstrate road maintenance plans and budget applications based on RAMS. Municipalities are also required to motivate road projects through RAMS and Cooperative Governance and Traditional Affairs (COGTA) has the authority over it. SANRAL is currently assisting some provinces and municipalities with data collection and pavement management. However, there is a need for progressive data collection and subsequent planning, management and implementation of n road projects at provincial and municipal government.

Rail infrastructure is in poor condition and in urgent need of modernisation and its capacity is limited by an ageing infrastructure and rolling stock, theft and poor maintenance. Typical rail operations are slow, unreliable and delayed by inadequate handling facilities at intermodal hubs which further exacerbate this situation.

The road and rail infrastructure are generally under-maintained with a lack of strategic focus and prioritised funding, neither the road nor rail environment has dealt with the barriers created by planning and standards implemented in these two respective areas, which results in universal inaccessibility of NMT and rail services.

The NSDF identified the need to prioritise rail investment over the road for economic, ecological and efficiency reasons. While the need exists to maintain and strengthen National Development Corridors.

Pedestrian and cycling facilities are not mandatory infrastructure with new developments. There are retrofitting provisions through IPTN projects the cost of putting right the problems created by the implementation of non-aligned standards that do not support walking and cycling is not cost-effective and, in many cases, simply unaffordable.

In summary, rail and road infrastructure in particular have been neglected and under-maintained. This is in part due to the transport industry competing for funding from the fiscus with other government/public sector services and funding allocated to key priority areas, and also the outcome of a lack of aligned planning with associated institutional problems. To achieve the objectives of electromobility recharging infrastructure along the main transport corridors will be essential.

3.2.13 Transport Safety and Security

Road Safety

More than 12,500 people lost their lives on South African Roads in 2021. The country's fatality rate of 26 deaths per 100, 000 is among the highest in the world and contrasts sharply with a rate of around five deaths (5) per 100, 000 people. However, not all road users are at the same level of risk when using South African Roads. Pedestrians are the most vulnerable.

South Africa has committed to and is participating in the United Nation's campaign "Decade of Action for Road Safety 2021-2030". The key focus areas of the Strategy forming part of this campaign are the "4Es" - enforcement, education, engineering, and evaluation. This approach is recognised as the 'World's Best Practice[2]' in driving road safety improvements. Where thoroughly applied a decline in crashes and significant improvements in statistics are shown. For example, Sweden, France, and Australia have shown reductions of over 50% in crash rates.

Upon joining this initiative, the goal set by South Africa was to reduce road fatalities by 50% over the five-year period from 2011 to 2015. This has not been achieved with only a nominal reduction in fatalities over the period. Given that the application of the 4Es approach as adopted by the National Road Safety Strategy (NRSS) (2016-2030) has been internationally proven to result in significant improvements the only assumption that can be drawn is that it has not been effectively applied in South Africa.

Thus, road safety remains a key challenge faced by South African society and the DOT. The implementation of the highly digital and futuristic Administrative Adjudication of Road Traffic Offenses Act (AARTO) system that aims at automated road infringement 4IR technology which intends to transform the industry.

Railway Safety

The Railway Safety Regulator (RSR) is the designated authority regarding all Rail Safety incidents and provides support to the Police Services in the case of security-related incidents. The RSR's 2021/22 Annual State of Safety Report indicates that the number of operational incidents reported increased by 2%. This was from 2 024 occurrences reported during the 2020/21 reporting period to 2 060 in the 2021/22 reporting period. Since the year 2010 to 31 March 2022, 46 270 negative operational occurrences have been reported and recorded by the RSR. South Africa compares favourably with international data when it comes to rail safety. However, there is still a drive to improve these statistics.

Key issues regarding the safety of the general public are the non-adherence to safe driving practices at level crossings and the access of the rail reserve/crossing rail lines in uncontrolled areas by pedestrians.

The Railway Safety Bill once promulgated into an Act, seeks to improve the regulatory framework regulating railway safety in the Republic of South Africa (RSA) in order to improve the safety of passengers and freight. It further seeks to place the emphasis and focus on railway safety and to recognise the operator's role in managing and implementing safety measures, with the RSR promoting safety and ensuring compliance with such measures.

Transport Security

The security of people on the transport system is becoming a serious concern with the number of instances of direct crime such as hijackings, robberies, muggings, gender-based violence, sexual harassment, crimes against women and girls in public transport, and other public transport-related violence, road rage, industrial action, etc. A further concern is the disruption to transport operations and the closing of roads and rail routes due to industrial action and service delivery protests. This can be partially attributed to the high unemployment rate, in turn created by the lack of transformation in spatial planning

According to the RSR State of Safety Report (2021/22), there was a decrease in the number of recorded security-related incidents on rail – The number of theft of assets recorded in 2021/22 is 6% lower compared to the 2020/21 reporting period, but 51% higher since 2010/11. Malicious damage (vandalism) contributed a total of 17% (1 320 incidents) to the total security-related incidents recorded during the 2021/22 reporting period. The number of malicious damage incidents recorded in 2021/22 is 8% lower compared to the 2020/21 reporting period, but 8% higher since 2010/11. Personal safety-related incidents reported amounted to only 283 which is understated as not all incidents are reported.

3.2.14 Institutional arrangements

An effective well managed transport system includes coherent policies, unified urban and transport planning responsibilities, the sound structure of the public transport industry and appropriate regulatory and supervisory framework and transportation information management enabling transportation providers to make better decisions.

There is a general lack of implementation of existing regulations and policies with regulatory funding not being spent where required. The NDP recognise the need for government to play an active role in driving the efforts to improve infrastructure as opposed to being a coordinator.

The many layers of governance (across national, provincial and municipal spheres) are not conducive to integrated planning and implementation. Further, there is a general lack of proactive involvement and coordination between the public sector and private sector, labour, and other stakeholders, resulting in unnecessary delays in project development and service delivery.

The less than optimal management of public transport services for example exacerbate operational inefficiency and high cost/subsidy for public transport. Transport sector decision-making and the associated control over budgets is extremely fragmented. Planning responsibility lies primarily with municipalities. Commuter rail services are a national function managed by PRASA, provinces are responsible for the contracting of subsidised bus services. and the regulation of operating licences (mostly mini-bus taxis and tourism transport). Since the promulgation of the NLTA, the twelve (12) largest municipalities have been made responsible for implementing new Bus Rapid Transit (BRT) services.

No single institution has effective overall responsibility for achieving an integrated transport system; resulting in a tendency for investment decisions and service delivery to be driven by the interests of service suppliers rather than by an integrated, user-driven approach. A widely agreed policy intention since the 1996 White Paper on Transport Policy, confirmed by the NLTA, has been to make metropolitan and larger city governments the locus of responsibility for public transport, integrating with its land use planning responsibilities. However, apart from the transfer to these municipalities of conditional grants for implementing bus rapid transit projects, little progress has been made in assigning regulatory functions or expanding responsibilities in managing subsidised rail and bus contracts. The harsh reality is that not all Municipalities have the requisite capacity to plan and operate railways in a manner that enables a seamless integrated service that transverses municipal boundaries.

The National Rail Policy White Paper, (2022) acknowledges the importance of devolving Public Transport to the lowest level of government. For that reason, the National Rail Policy requires the development and approval of a Devolution Strategy for commuter rail to guide the assignment of commuter rail functions to the municipality sphere of government.

Central to the issue of devolution is the requisite capacity to deliver. It is, therefore, necessary that this matter be given focused attention through a framework between the DoT and SALGA aimed at ensuring that there is adequate capacity for cities to manage rail function within the broader ambit of an Integrated Transport Plan.

Similarly, law enforcement is fragmented between the three spheres of government, resulting in inconsistent application of the road traffic regulations, such as overload control, public transport operating licences, etc.

Making metropolitan and large city governments the locus of responsibility for urban transport including all public transport necessarily creates financial risks for these authorities. Thus, the assignment of responsibility needs to be accompanied by appropriate mechanisms to effectively manage such risks. Achieving better institutional alignment between provinces, municipalities and PRASA in a manner that makes metropolitan government the key locus for decision-making in line with the NLTA would facilitate better integration between different types of public transport, enabling optimal matching of transport types to demand patterns. However, improving institutional alignment will require addressing the special circumstances of Gauteng, which contains three adjacent metropolitan areas which need to coordinate their transport approaches.

The integration of functions into a dedicated sphere of government may determine an integrated transport system, operational efficiency, economies of scale, and increased funding.

The most substantial short-term obstacle to achieving the policy objectives of the transport system is the lack of institutional and management capacity, especially at the local level. The uneven capacity of local government is a major constraint to effective and efficient service delivery. Municipalities operate in varying socio-economic circumstances and diverse levels of capacity. These manifests itself in the realm of land use and transport planning, negotiating, tendering and contract management, and setting and promulgating regulations.

An opportunity remains in the NLTA to utilise the National Public Transport Regulator, and to increase the responsibilities of the Regulator on passenger issues. This would enable the DOT to play a coordination role in solving problems and enable the enforcement of standards where these were not properly introduced.

3.2.15 Funding

Current funding instruments available to the national, provincial and local transport authorities includes funds allocated through the Division of Revenue Act (DORA) comprising the Equitable share and Conditional Grants such as Provincial Road Maintenance Grant (PRMG), Public Transport Network Grant (PTNG), Public Transport Operations Grant (PTOG), and Municipal Infrastructure Grant (MIG). User pay fees are generated through toll fees, vehicle license fees, fuel levies, carbon tax from vehicle sales; private sector bulk services contributions, parking, cross-border fees, etc. The financial markets contribute to transport funding such as Foreign Direct Investment (FDI) mainly for Public Private Partnership (PPP) projects, issuing of bonds, loans, etc.

The institutional fragmentation in transport has also led to a multiplicity of authorities tasked with one or other elements of the total transport system, resulting in inefficiencies. Another challenge is that the different components of the system are optimising against their own internal objectives often at the expense of the total transport system objectives. This is in the main due to the absence of a system-level approach to investment in transport infrastructure. The South African Government should plan towards providing sustainable infrastructure and funding for electro-mobility and green energies to transform the transport land landscape away from a fuel-based system.

The transport vision calls for an integrated, efficient, reliable, and affordable, etc., transport system. This requires exorbitant levels of infrastructure and operational funding over a long period of time. The draft National Public Transport Subsidy Policy (NPTSP) once finalised, will address public transport subsidy issues, and contribute towards the realisation of sustainable transport. The subsidisation of public transport will be based on approved transport plans by municipal councils.

3.3 Summary of the current realities in the transport industry

The immediate challenges faced by the transport sector that are constraining policy objectives have defined the key priority areas or thrusts to be focused on in the next five years. The fundamental challenges to the progress and roll-out of the national strategies are:

- **Public transport** integration, safety, universal accessibility, and efficiency remains a constant challenge despite the amount of money on the IPTN program and subsidies; investment such as upgrading commuter rail rolling stock and Bus Rapid Transit or quality bus, without upgrading existing public transport within the integrated public transport system;

- Motorised private transport, the exorbitant amount spent on the private car, relative to the fraction of the population that the car service, continues to be unjustified;
- 87% of freight by weight is moved by road and 13% by rail reflecting a significant imbalance in the freight transport system; the cost of **freight logistics** is increasing where transport costs are the most signification component; the lack of ability to implement road-to-rail in line with government policy, coupled with cross-border operations (border control) limits productivity with a significant impact on the logistics value chain and the economy;
- South Africa's **road fatalities** and traffic accidents levels are among the worst in the world and show no significant reduced trend, indicating that the road safety strategy to date is not yielding effective results;
- With the exception of the national road network, the **road and rail infrastructure** are generally under-maintained and a lack of strategic management and maintenance system, and subsequently funding;
- The provision of **pedestrian and cycling facilities** is still not mandatory for new developments;
- Land use planning priorities and interventions to ensure increased universally accessible densification and targeted growth along core corridors are not happening at a fast-enough pace. Decision-making is not as yet properly integrated with urban transport plans, and there is no systematic focus on walking and cycling. A lack of strategy and programme implementation for transport **funding** for transport operations and infrastructure; and
- A lack of **institutional and management capacity** is one of the most substantial short-term obstacles in achieving the policy objectives for transport.

4 NLTSF VISION

The policy framework within which the NLTSF operates is set out in Section 3 and the challenges identified in Section 4 serve to construct and condition the overall land transport vision for the Department for Transport. In order to achieve this, some key overarching strategic intentions were identified.

South Africa's transport policy intentions are comprehensive and address the strategic drivers such as sustainability, economic development, job creation and poverty alleviation, inequality, etc. The transport Framework also demonstrates strategic intent, while the planning, funding and execution of transport plans and projects are relatively incongruent. The Framework emphasises customer focus, while the recent transport statistics indicate perpetual inefficiency and infrastructure degradation.

4.1 Land Transport Vision

The vision for land transport to improve transport services and infrastructure is often driven or influenced by other strategies as indicated in the Introduction and Chapter 3. The NLTSF will help to enable the implementation of those strategies. Inevitably, therefore, the vision does not prescribe specific outcomes, but is guiding principles which can be responsive to other strategies as they emerge.

The overall vision of the DOT in the context of the policy framework within which the NLTSF operates and current national imperatives are to create:

An integrated and efficient transport system supporting a thriving economy that promotes sustainable economic growth, supports a healthier lifestyle, provides safe and accessible mobility options, socially includes all communities and preserves the environment

The following are key strategic objectives over the next five years seeks to:

- A much-improved sustainable public transport system with better and safer access to amenities, more frequent and better-quality services and facilities to an agreed standard;
- A universally accessible transport system, using any mode of transport;
- Significant reduction in road fatalities;
- Greater mobility options for those who do not have a car;

- Safer and easier cycling and walking;
- Better infrastructure, links and interchange with other means of transport;
- An improved and better-maintained road and rail network;
- Improved journey time reliability on all modes;
- Different travel patterns and transport usage and, where appropriate, reduced need to travel by motor vehicles from having achieved an integrated land use and transport system;
- A transport system that is consistent with the real needs of people living in different parts of South Africa and with differing abilities to afford travel;
- A transport system that charges the traveller a fair reflection of the costs of making a journey;
- A transport system that supports focused funding of transport priorities;
- Developed sufficient institutional human capital to drive the vision of transport; and
- A transport response that supports rural transport development.

To achieve the bold vision for transport a number of objectives were developed. The objectives are aimed at supporting the wider vision of sustainability. The objectives aim to set an exciting new focus for transport and help demonstrate clearly the case for supporting and investing in land transport.

4.2 Department of Transport's position on sustainability and universally accessibility

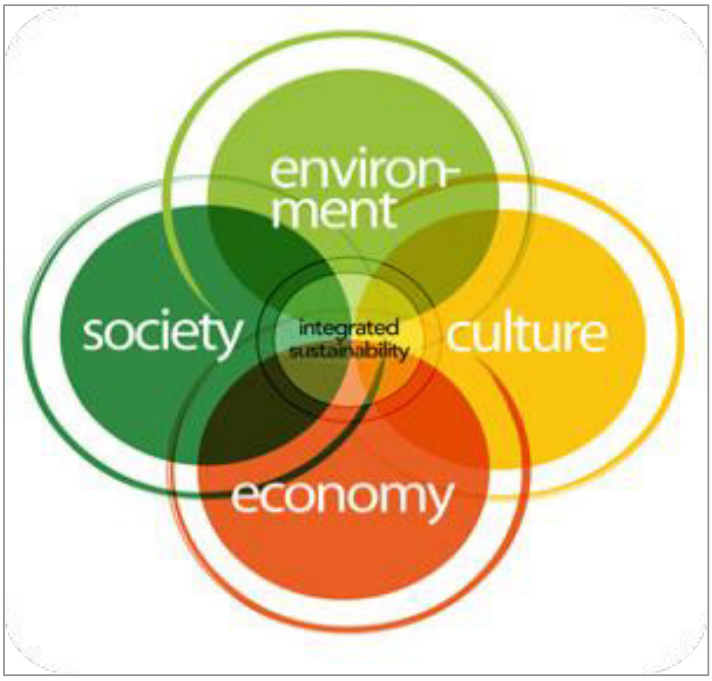
In general, sustainability encompasses a holistic consideration of economic, social, and environmental progress—usually referred to as sustainability dimensions with a long-term perspective. **Figure 2 below** illustrates the integration of the environment, society, culture, and economy in order to develop a sustainable transport system in South Africa.

Figure 2 Dimensions of sustainability as defined in the National Transport Forum (NTF)

The National Transport Forum (2014) defines sustainable transport as transport that:

- Meets the needs of the present generation without compromising the ability of future generations to meet their transport needs;
- Meets the basic access and development needs of individuals, companies and society;
- Is affordable, operates fairly and efficiently, offers a choice of transport mode, and supports a competitive economy, as well as balanced regional development;
- Is transport that is reliable, predictable and safe for all users; and
- Limits emissions and waste within the planet's ability to absorb them and uses renewable resources at or below their rates of generation.

Sustainable development applied to transport systems requires the promotion of linkages between environmental protection, economic efficiency and social progress. Under the environmental dimension, the objective consists of understanding the reciprocal influences of the physical environment and the practices of the industry and all aspects of the transport industry to address those environmental issues. Under the economic dimension, the objective consists of orienting progress in the sense of economic efficiency. Transport must therefore be cost-effective and capable of adapting to changing demands. Under the social dimension, the objective consists of upgrading standards of living and quality of life.



Sustainable transport is essentially the capacity to support the mobility needs of people, freight and information in a manner that is least damaging to the environment. The focus must strongly be on walking rather than taking public transport within reasonable walking distances. This then requires a substantial change to development as well as transport planning. Sustainable development applied to transport systems requires the promotion of linkages between environmental protection, economic efficiency, infrastructure and social progress. Under the environmental dimension, the objective consists of understanding the reciprocal influences of the physical environment and the practices of the industry and all aspects of the transport industry to address those environmental issues. Under the economic dimension, coupled with infrastructure; the objective consists of orienting progress in the sense of economic efficiency. Transport must therefore be cost-effective and capable of adapting to changing demands. Under the social dimension, the objective consists of upgrading standards of living and quality of life by providing decent and affordable NMT and public transport environments.

The Green Transport Strategy (GTS) (2018) is informed by the fundamental and substantive principles of sustainable development articulated in the National Strategy for Sustainable Development (NSSD), as approved by the Cabinet in 2011. The substantive principles are based on the following sustainable development principles that are already enshrined in South African law and that underscore a systems approach to achieving sustainable development:

- Natural resources must be used sustainably;
- Socio-economic systems are embedded in and dependent on ecosystems; and
- Basic human needs must be met to ensure that the resources necessary for long-term survival are not destroyed for short-term gain.

The principles of Sustainable Development can also be related to the following fundamental human rights that are guaranteed in the Constitution of the Republic of South Africa:

- Human dignity and social equity;
- Justice and fairness;
- Democratic governance;
- A healthy and safe environment.

In the context of the GTS, this creates the following imperatives -:

- reduce environmentally harmful emissions from the transport sector;
- reduce the impact of transport infrastructure on the environment;
- ensure integrated transport systems provide equitable access to economic opportunities for all South Africans and support economic growth and development; and;

- ensure that the provision of transport services and infrastructure includes using resources sustainably.

The DOT is equally determined to secure positive change through planning for and ensuring cohesive interaction of social, economic and environmental improvements. The approach accords with the NDP, the priorities of the MTSF and the NTF vision. This means working to five shared principles namely:

- Work to achieve an efficient, competitive, responsive and universally accessible economic infrastructure network;
- Enhancing vibrant, equitable and sustainable rural communities;
- Achieve sustainable human settlements and improved quality of household life;
- Promote a people-focuses responsive, accountable, effective and efficient local government; and
- Protect and enhance our environmental assets and natural resources.

Transport policies such as the GTS can contribute significantly to a sustainable future such as creating awareness campaigns for green energies and electro–mobility solutions, and by helping to promote healthy living and supporting a strong and prosperous economy. Transport has a significant impact on the social, economic and environmental fabric of the nation and the DoT aligns its vision to realise a dynamic, multi-modal sustainable transport system for South Africa.

4.3 NLTSF overarching goals

Transport is a catalyst for economic development, job creation, social development, and general quality of life. The transport portfolio requires greater attention in all spheres of Government and the private sector.

A number of objectives or overarching goals were classified to support the wider vision of sustainability described above. The objectives support each other, for example, promoting better integration between land use planning and transport planning to encourage densification will create the high volumes of travel required to justify certain large public transport investments. These overarching goals for transport are:

- District Development Model's (4.3.7)
- Integrate land use and transport planning (4.3.3)
- Promote social inclusion and accessibility (4.3.5)
- Improve transport safety and security (4.3.6)
- Reduce transport impact on the environment (4.3.2)
- Promote sustainable transport modes (4.3.4)

- Promote the introduction of green energies in transport (4.3.2)

4.3.1 Support economic development

Transport is a key enabler in any successful economy in that it provides the means of moving people and goods. An ineffective and inefficient transport system stifles economic growth in that access to opportunities may well be restricted and that mobility may be costly from a financial, social, and/or environmental perspective. As an example, congestion drives up fuel consumption, increases emissions and is extremely time time-consuming.

Improved access to employment and education also contributes to the country's long-term prosperity. Poor access is one of the major barriers facing the unemployed; more especially in rural South Africa.

The NLTSF aims to enable economic growth, development, and job creation by connecting current and new nodes as development corridors and by making better use of and maintaining the transport system, comprising:

- Economic development corridors;
- Regional economic competitiveness;
- Efficiency in transport operations;
- Upgrading and maintenance of transport infrastructure.

The benefits are:

- Reduced travelling costs;
- Reduced need for building vast car parks on valuable land in the city centres that could have otherwise been used as highly-priced office or retail space;
- Reduced reliance on imported fuels;
- Job creation;
- Increased property value in and around the core business areas and adjacent to public transport stations;
- Improved integration between various sectors;
- Community development and upliftment;
- Improved living standards; and
- Tourism.

4.3.2 Reduce the impact of transport on the environment

Transport has a significant role to play in adapting to the impacts of climate change. The NDP vision is that South Africa's transition to an environmentally sustainable, climate change resilient, low-carbon economy and just society will be well underway by 2030.

Rising concentrations of greenhouse gases are recognised to be causing global climate change. Transport, through the use of fossil fuels, is one of the top three sources that produce greenhouse gases and accounts for 13,3% of GHG emissions in South Africa according to the 2017 GHG Inventory Report for South Africa.

Reducing emissions from the transport sector is a key element of achieving a sustainable transport system. However, transport is a significant driver of economic growth and social well-being. So, given the growing demand for transport, the reduction of emissions poses a particular challenge.

Effective reduction of emissions requires a multifaceted approach which may incorporate both a reduction in the need to travel and the use of technologies some of which may already be available. An integrated planning approach is thus key to reducing emissions (as well as energy usage).

Emissions can be reduced by making smart choices, as individuals, about what, when and how to drive. The DOT has begun its implementation of the GTS in order to address the inherent effects that transportation has on the environment as well as its transport's contribution to climate change and/or air pollution. The key variables through which to influence pollution levels/air quality are:

- The over-reliance on petroleum-based fuels;
- Single car usage as the predominant form of travel;
- The number of trips and distance travelled;
- Land use (densification) and travel demand management
- Congestion and traffic management;
- Using public transport and NMT as a predominant mode of transport;
- Improving the fuel efficiency of vehicles and promoting the uptake of cleaner and more efficient vehicle technologies, such as electric vehicles; and
- Supporting the reduction of greenhouse gases and other emissions associated with transportation activities.

The Department is also cognisant that, while vehicle efficiency and low-carbon fuels have an important role to play in reducing transport emissions, building a resilient low-carbon transport system requires systemic changes in order to shift from the current situation of low-density human settlements in which the private car is the primary form of transport. Integrated transport planning that actively addresses the spatial planning implications of land use decisions is best achieved through cooperation between all affected departments in all spheres of Government.

4.3.3 Integrate land use and transport planning

Better integration between land use planning and transport planning offers by far the biggest impact to impact that transport has on the environment and sustainability. It can do so by encouraging densification and sustainable development, by creating local clusters of economic activity that require less mobility and by developing multi-modal logistic chains to cut wasteful and unnecessary trips. Some of the principles would include:

- Supporting compact community development and land use intensification that will support high volumes of travel required for public transport;
- Providing efficient land use and traffic and public transport law enforcement;
- Efficient transport information management to enable data-driven planning by developing a central land use/transportation data bank using GIS.

4.3.4 Promote sustainable transport modes

The DoT aims to encourage the change in transport by shifting to more energy-efficient modes or routes—such as shifting from road to rail; or shifting passengers from private vehicles to public transport and non-motorised modes.

Ensuring sustainable access – especially by public transport, walking and cycling – is an integral element of planning new services and facilities.

Further, investment in sustainable modes of transport such as new designs of public transport vehicles can be expensive, but the benefits are much greater and can help towards achieving long-term economic sustainability.

4.3.5 Promote social inclusion and accessibility

Transport plays a central role in our daily lives. Availability and accessibility of transport influence where people live and work, leisure options, and opportunities to socialise. The success of the Department's equality and social justice agenda depends to a significant degree on the effectiveness of the transport system. Good access to public transport is essential to increase the life chances of the most disadvantaged and people living in deprived communities.

Where services and facilities cannot be provided in the immediate locality, transport services can contribute to social justice by:

- Helping more people into jobs and creating better jobs and skills;
- Improving health and providing access to social services;
- Reducing air and noise pollution from transport;
- Developing strong and safe communities.

4.3.6 Improve transport safety and security

Perceptions of safety are an important factor in how people use the transport system. Feelings of vulnerability can encourage captive public transport to shift to the private car when they can afford it, and can deter car users from switching to public transport. A safe and secure public transport system can benefit society by:

- Reduced accident rates, particularly for vulnerable road users, as well as improved perceived safety for all modes of transport;
- Work to eliminate traffic-related fatalities, and address concerns of personal safety and security;
- Public transport operators to derive methods to improve security on vehicles and at stations; and
- Enable people of all ages and abilities to travel efficiently and safely.

4.3.7 District Development Model (DDM)

The District Development Model (DDM) is an operational model for improving Cooperative Governance aimed at building a capable, ethical Developmental State. It embodies an approach by which the three spheres of government and state entities work in unison in an impact-oriented way, and where there is higher performance and accountability for coherent service delivery and development outcomes. It is a method of government operating in unison focusing on the municipal district and metropolitan spaces as the impact areas of joint planning, budgeting and implementation.

This method refers to all three spheres of government, sector departments and state entities operating like a single unit in relation to achieving developmental objectives and outcomes in these district and metropolitan spaces over a multi-year period and over multi-term electoral cycles.

Although each sphere, sector or entity has its distinct constitutional powers, functions and responsibilities, they cooperate and undertake collaborative planning, budgeting and implementation processes converging efforts at the district/metropolitan level.

This joint work is expressed through the formulation and implementation of a "One Plan" which is a long-term strategic framework guiding investment and delivery in each district and metropolitan space.

4.3.8 Innovation in transport: Data-driven information technology

The convergence of new technology, innovation and social networking that created the sharing economy is shaping major changes in transportation. Across the globe progress is made with technology that will reshape the way we move in the future.

The following technologies have recently emerged and the challenge is to find ways to respond to them in a constructive, inclusive and positive manner and incorporate them into the integrated transport system:

- Autonomous Vehicle Technology (AVT);
- Electric Vehicle Technology (EVT);
- Electric fare collection system (EFCS) in public transport;
- Remote Piloted Aircraft System (RPAS);
- E- hailing services.

4.4 Reviewed functional areas for the NLTSF

The NLTSF was developed as a guiding reference to give strategic direction to transport planning at all spheres of government. Having consulted stakeholders widely, the 2017 NLTSF functional areas were retained with only one addition to the list being Universal Accessibility. The following functional areas were adopted:

- Integrated Land Use and Transport Planning
- Urban Transport and Smart Mobility
- Universal Accessibility
- Rural Transport
- Public Transport
- Non-Motorised Transport
- Learner Transport
- Freight Transport
- Transport Infrastructure
- Cross-Border Transport
- Transport Safety and Security

- Institutional Management
- Funding

5 THE STRATEGIC FRAMEWORK

The Framework describes what is required to realise the vision and overarching objectives for land transport in South Africa considering current challenges and what can be achieved over the next five years. The intent behind the approach of developing the framework is driven by the need for an appropriate affordable transport system that supports access to opportunities while considering sustainability, social aspects and the environment.

Sustainability, and the three key aspects of sustainability, namely the environment, the economy and society as a whole - has therefore been the underlying thread connecting this framework. The goal of sustainable transportation is to ensure that environmental; social and economic considerations are factored into decisions affecting transportation activity. For economic growth and social equity reasons, it is vital to establish efficient transport systems to meet growing demand as sustainably as possible. These would include a transport system that consumes less energy, reduce pollution, have a minimal impact on the environment and provide equity of access for people and goods[4].

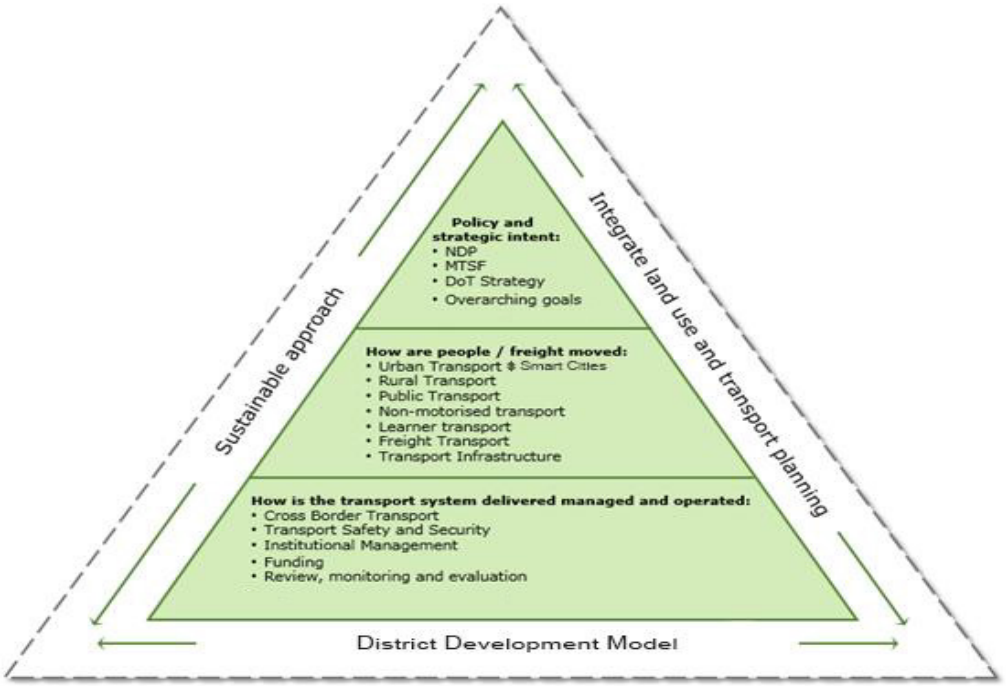


Figure 3 Land transport strategic philosophy

Figure 3 describes the philosophy in deriving the framework. The broader policy framework and intents informed the vision and key priorities for land transport in South Africa.

The NDP vision is that South Africa's transition to an environmentally sustainable, climate change resilient, low-carbon economy and just society will be well underway by 2030. As a follow on to NDP, the government developed the MTSF to help prioritise projects and programmes in South Africa that would work towards achieving the aspirations of the NDP.

This Chapter outlines the vision, strategic intent and key performance areas (KPA) for each key strategic element that were identified as the renewed focus of the NLTSF. The success in implementing the transport programmes and projects that emanate from the respective PLTFs and ITPs is reflected through the KPA defined in the NLTSF.

5.1 Integrated Land Use and Transport Planning

Vision

Transport infrastructure and operations form an integral part of land use planning and are designed, planned and managed in an integrated manner to prioritise densification, promote public transport over private transport, improve local accessibility and lower the carbon impact.

Strategic Intent

A key strategy of the NLTSF is to encourage efficient land and transport planning to enable better decision-making and positive outcomes. Transport projects can and should derive increased economies of scale and efficiencies from integration and coordinated planning

The DoT and Provincial Government do not have full control over land use; however, they can choose to spend resources in areas where local governments are focusing on effective land use planning. It will not be sufficient for transport planning authorities to present plans which show the potential for structural change. Planning guidelines require spatial development plans to be integrated with the ITP and the IPTN and that the implementation of these plans be closely monitored to ensure compliance.

Fundamental to long-term solutions will be the integration of public transport and land use planning to achieve a change in the spatial layout of the cities. This includes changing land use to shorten travel distances, creating bi-directional passenger flows throughout the day, and reducing the high differential between peak and off-peak demand. The implementation of plans and strategies to support the densification of the cities in specific nodal areas and along identified corridors will assist in reducing the costs of public transport.

While solutions are needed to address the access needs of low-income residents in poorly located, distant areas, transport subsidies should be applied in ways that help drive the restructuring of urban form rather than accommodate and subsidise further sprawl which will lead to demands for further increases in subsidies.

Objectives

The key objective of this strategic element is to ensure that macro transport sector planning is integrated and coordinated with all land use to facilitate multi-modalism on an ongoing basis. Transport's multidisciplinary nature necessitates a comprehensive, intermodal approach and integrated transport planning is therefore a positive way towards more sustainable transport systems.

Integrated transport planning considers transport system interdependencies, interactions between transport and land use, transport safety, traffic congestion, parking, travel demand management and accessibility. Collectively, integrated transport planning will help to identify and prioritise transport infrastructure and service improvements to meet community needs as well as government objectives.

The minimum requirements for the preparation of PLTFs and ITPs need to be updated with the necessary guiding principles around land use and transport integration. The principles will be designed to help authorities develop land use and transport plans in an integrated manner, prioritise investments and implement policies in each so that they work together to further the national objectives.

The overarching vision of the DoT's Public Transport Strategy and Action plan (2007 to 2020) was to implement a continuous and incremental upgrading from the current basic commuter service to an upgraded modal service and then an integrated rapid public transport network. This was positioned as three clear phases where the first phase aimed to stabilise the existing passenger transport service delivery environment as well as to recover from the accumulated neglect of decades of under-investment.

Key Performance Areas

1. All Planning Authorities to maintain and update a database of traffic and pedestrian counts; (ITS);
2. Update Minimum Requirements for the preparation of PLTFs and ITPs;
3. All Provinces to update PLTFs to be relevant in this planning period (2023 to 2028); and
4. All Municipalities to prepare and/or update Comprehensive, District, and Local Municipal ITPs incorporating Public Transport Plans comprising of IPTN, Rationalisation plan, Operating Licence Strategy and any Land Use Plans.

5.2 Urban transport and Smart Mobility

Vision

Promote and invest in appropriate and sustainable and integrated urban mobility which supports economic development and social inclusion.

Strategic Intent

The goal of urban transport and smart mobility is to ensure that public transport becomes the basis for providing effective access to job opportunities, education and social facilities, in a more tailor-made and personalised travel manner. The smart mobility concept intends to dramatically improve the quality of public transport targeted at the current public transport market while ensuring that structural upgrading attracts a steady increase in the market share. Smart mobility is meant to offer futuristic mobility options rather than transport, wherein travellers are able to plan their own personalized mobility experience in a more effective and efficient way irrespective of location. These will include public transport with real-time timetabling, route optimization, carsharing, mobility as a service (Maas), mobility on demand (MOD), autonomous transport systems, to ensure seamless travel and digital applications.

It is a well-accepted approach worldwide that efficient urban transportation implies putting effective public transport first. In South Africa, the transport policy focus has progressively shifted towards giving greater priority to public transport (and more recently to non-motorised transport) over the provision for accommodating private transport as evidenced in the NHTS (2020). This has resulted in a series of integrated quality public transport programmes and the planning and implementation of IPTNs. The success and financial feasibility of all planned IPTN interventions rely on increasing urban densities, mixed-use use development and increasing the modal share of public transport among choice users. The range of strategies and measures to ensure these outcomes are fundamental to achieving better operational cost recovery in future. Public transport investments are vital, yet this investment will not significantly improve the urban economy or public transport effectiveness unless equal attention is placed on spatial densification and universal accessibility.

Spatial integration in the urban context is key to reducing urban sprawl, integrating different communities (mixed income and mixed tenure), land use activities (mixed-use: commercial, retail, recreational, transport, residential, social services, etc.) an encourage the shift from a single motor car urban design concept to a new urban design concept based on public transport. Greater public and government awareness of transport's land use requirements will be promoted, and effective, coordinated land use and transport interventions will be initiated to counter unsustainable urban sprawl and unacceptably long travel distances.

The integration of public transport and land use planning to achieve change in the spatial layout of the cities is fundamental to achieving the long-term objectives of a sustainable transport system. This includes changing land use to shorten travel distances, creating bi-directional passenger flows throughout the day, and reducing the high differential between peak and off-peak demand. Strategies to support the densification of the cities in specific nodal areas and along identified corridors will assist in reducing the costs of public transport.

Commuter rail considerations must be fully integrated with urban development plans and be assessed as part of an integrated multi-modal transport and urban restructuring strategy.

Where quality public transport systems are combined with and supported by excellent walking and cycling linkages, a complete transport solution is provided. Beyond the core capital investment in infrastructure is focused on the main corridors for rail and IPTNs systems, the cost of providing feeding services to trunk lines are very expensive given the low urban densities and the necessary transition to transform MBT to be part of the IPTN suite of offerings, to put in place formal bus operations to replace informal and sub-economic mini-bus taxi operations. A major opportunity exists to significantly improve cycling and walking links to these primary public transport systems (NHTS,2020). The potential benefits to overall transport system effectiveness and urban functioning through much more comprehensive inclusion of NMT provision must form a central pillar of urban transport strategy.

In South Africa, the transport sector is the second largest contributor (after the energy sector) to carbon emissions. Actions to reduce the transport-related carbon emissions profile also support the urban development needs, namely promoting public transport over private car use, de-congesting roads through travel demand measures, shifting a greater proportion of freight onto rail, better spatial planning to limit urban sprawl, and investing in sustainable modes of transport such as NMT.

Objectives

- Provide an efficient urban transport system in all Metros that complements economic activity supplemented by appropriate systems such as an Intelligent Transport System (ITS), TDM, and Transport System Management (TSM) through a central Transport Management Centre.
- Promote the development of an urban land use restructuring programme as part of the Urban Renewal Strategy. A clear and unambiguous document setting out requirements in support of urban corridor development and densification/infilling will be developed and published. The transport sector in government will support and make inputs to the Urban Renewal Strategy by means of a three-pronged urban restructuring initiative aimed at (a) urban corridor development, (b) densification and infilling, and (c) rationalisation of transport and housing strategies.
- Support the implementation of corridor development and densification strategies and other aspects of IDPs that are effectively aligned with municipal transport plans. While solutions are needed to address the access needs of low-income residents in poorly located, distant areas, transport subsidies should be applied in ways that help drive the restructuring of urban form rather than accommodate and subsidise further sprawl which will lead to demands for further increases in subsidies.
- Provide greater priority to public transport and to non-motorised transport.
- Develop stronger institutional alignment between provinces, metros and PRASA in a manner that makes metropolitan government the key locus for decision-making in line with the NLTA to ensure better integration between different types or modes of public

transport, enabling optimal matching of transport modes and services to demand patterns.

- Develop actions to reduce the transport-related carbon emissions profile.

Key Performance Areas

1. Improved service quality and safety of public transport;
2. Improve access to main public transport nodes by improving walking links (20min or 1,5km), cycle networks and full cycle implementation programmes (within a radius of 5km) and prioritising NMT – Universal Accessibility; and
3. Undertake Household Travel Surveys every five years.

5.3 Universal Accessibility

Vision

Promote and invest in a national transport system which is universally accessible.

Strategic Intent

The National Development Plan requires an approach to the removal of barriers and promotion of equal participation for people with disabilities, as the Constitution requires. The National Land Transport Act identifies specific passenger categories, universal access passengers, which include people with disabilities; along with children, elderly people, pregnant women and people accompanying children. All these categories of passenger experience barriers to transport services and systems, and account for over 60% of the population. Due to the increase in violence on public transport systems in recent years, women and cyclists have been added. Because of this over 90% of the population qualifies as having an unmet access need.

Concerted action is required to address these transport problems, through the implementation of a Universal Design Access Plan or UDAP. Grant alignment is required, with conditions in all Departmental grants, regardless of their application, so that change can more swiftly be introduced.

The need for accessible transport systems was first identified in Moving South Africa, in 1999. Since then, the DOT has introduced a number of Acts, amendments to Acts and policy documents, particularly in the period before 2010. These have not been properly implemented and yet contain legal requirements. The use of a UDAP introduced a change-management approach with reporting against prescribed indicators, so that it is possible to measure the extent and pace of change.

The UDAP forms part of the strategic and operational plan of the new transport system and monitoring against prescribed indicators is carefully considered. Reporting on the plan by the municipal (or other) authority takes place once a year, and progress is reported to the Presidency. These indicators relate to the outcomes required in the White Paper on the Rights of Persons with Disabilities, 2015; which in turn is based on an international convention, the United National Convention on the Rights of Persons with Disabilities, 2006, which South Africa signed in full in 2007. Both documents require transport to be universally accessible so that everyone can use it, and so that it provides accessibility to other services and amenities. This approach is in line with the Constitution, rights-based and consumer protection legislation.

Spatial integration in an urban and rural context is required, but if it is not planned using universal design principles, it will not enable universal accessibility; as developed countries have found. A different approach is required. Nationally, the application of existing standards promoting universal access in the transport environment has led to the development of new requirements, National Technical Requirements (NTRs); which are based on research with affected groups. The regulations on published using NTRs will already be based on proven research, and have been developed with municipal (and provincial) support.

All modes of transport are affected by universal accessibility, which is a cross-cutting issue in transport networks. Thus, every sectoral transport policy must deal with universal accessibility, not public transport alone.

A universally planned, designed, constructed and operated public transport system will by its nature, ensure that everyone is included. It will enable them to access amenities, and enable participation in all that life can offer; throughout the person's life. This is an important part of social sustainability and has significant economic benefits for South Africa. An inclusive economy is one in which everyone participates, and provides a virtuous cycle, lifting some of the poorest people out of poverty, which in turn, lifts other people out of poverty.

Objectives

- Provide a universally accessible urban and rural transport system introduced incrementally, ensuring that everyone is able to use it, regardless of disability or universal access need.
- Promote the development of an urban land use restructuring programme as part of the Urban Renewal Strategy, which includes universal design principles in planning and design. The requirements in support of urban corridor development and densification/infilling will include universal accessibility and ensure that the transport system leads the way in the removal of barriers to access. The transport sector in government will support and make inputs to the Urban Renewal Strategy using a three-pronged urban restructuring initiative aimed at (a) urban corridor development that is universally planned and designed, (b) densification and infilling that includes modifications which meet the minimum standards and (c) rationalisation of transport

and housing strategies, so that both are universally designed, as required by national law and international commitment.

- Develop public transport systems that can support the implementation of universally planned and designed corridor development. Also, densification strategies and other aspects of IDPs are effectively aligned with municipal transport plans and are universally accessible. Where solutions are needed to address the access needs of low-income residents in poorly located, distant areas, specific services introduced, which enable stranded passengers to be reasonably accommodated, and which positively impact on eventual introduction of an integrated public transport network.
- Provide greater priority for universal design standards for public transport and non-motorised transport. This covers operations as well as planning construction and design. It includes the use of universally designed digital technology and other operational components such as customer care and a complaints system. Introduce an enforcement or compliance programme
- Develop stronger institutional alignment between provinces, metros and PRASA in a manner so that all forms of transport in a local public transport network are universally accessible, with integration between different types or modes of public transport, enabling optimal matching of transport modes and services to patterns of demand which everyone can use, throughout their lives.
- Develop actions to enable walking and cycling all the way or to a public transport stop, regardless of age or disability, in line with the right to freedom of movement.

Key Performance Areas

1. Improved universal accessibility of public transport networks across all modes of transport, in line with minimum standards and requirements; measured against indicators;
2. Compliance with minimum standards, the researched development of them and the publication of universal access regulations; for planning, design, construction and operation;
3. Undertake focused research with universal access passengers every year to report on implementation progress, and remedy complaints, as required by the NLTA.

5.4 Rural Transport

Vision

To provide safe, reliable, effective, incrementally universally accessible and fully integrated transport operations and infrastructure which will best meet the needs of freight and passenger customers, at improving levels of services and costs in a fashion which supports government strategies for economic and social development, whilst being environmentally and economically sustainable.

Strategic Intent

Lack of access and mobility in rural areas is one of the key drivers of migration into urban areas and impedes the social and economic development of rural communities. Increasing mobility and access to rural communities will unlock social and economic benefits and improve access to education, health and other social amenities.

The remoteness from major economic hubs and low population densities isolates rural communities from the mainstream economy which impacts the ability of transport to support national economic and social development objectives in these areas.

In rural areas, the most effective way of improving access to essential services is by improving links between key rural nodes and employment nodes. Improving the lower-order roads which link rural communities to the higher-order road network will make rural transport both more accessible and more affordable, by reducing operating costs for road-based providers like taxis and buses.

Improvement in rural access is a key requirement for achieving the Millennium Development Goals (MDGs) such as halving poverty, increasing access to education, reducing maternal mortality and improving child health[5].

The Department has developed the National Guidelines for IPTN plans for the district municipalities. The National Guidelines were developed to standardise the development of IPTNs. IPTNs will intensify the provision of public transport services and infrastructure. It promotes quality, coordinated and integrated public transport system.

Objectives

The strategic objectives are:

- To improve economic and social and universal access for rural communities;
- Improving access to essential services by improving links between key rural nodes and employment nodes or higher-order road networks;
- Promote quality public transport services within the District Municipalities;
- Ensure better connectivity & interface between rural and urban areas;

- To promote rural development that will improve access to opportunities,
- Alignment of rural transport strategies with national rural development initiatives;
- Provision of public transport facilities; and
- Development of Integrated Public Transport Network plans.

Key Performance Areas

1. Develop actions and measure the impact of rural transport interventions on safety and travel time.
2. Develop a strategic rural road network upgrade and maintenance plan with budgets for rural road network infrastructure upgrades and maintenance.
3. Establish the rural transport forum at the district level, including universal access.

5.5 Public transport

Vision

Ensure sustainable, equitable and uncongested mobility and accessibility "in liveable cities and districts through integrated public transport networks (IPTNs)" (Public Transport Strategy 2007), Ensure that passenger transport services are customer focused and "address user needs, including those commuters, children, people accompanying children, pensioners, older people, pregnant women, learners, people with disabilities, tourists and long-distance passengers" Public Transport Action Plan (2007).

Strategic Intent:

To promote a safe, reliable, effective, efficient, coordinated, accessible, affordable, integrated and environmentally friendly public transport system by developing norms and standards as well as regulations and legislation to guide the development of public transport for rural and urban passengers and to regulate inter-provincial public transport and tourism services.

The initial priority for Public Transport should be a radical improvement to planning, operations, infrastructure, and quality of service that are customer focused; and which meet the needs of all users; improved significantly for the current users and subsequently stimulate mode shift, especially from single occupancy cars. Public Transport improvements should focus on fleet upgrades, safety, security, reliability and efficiency, universal access, and complementary travel demand management measures such as High Occupancy Vehicles (HOV) lanes, reversible lanes, integrated ticketing and fare management, etc.

To monitor and evaluate the implementation of the Public Transport Strategy and the National Land Transport Act, the Public Transport Strategy and Action Plan seek to transform public transport service delivery. The strategic thrust is to stabilise the current passenger transport service delivery environment, enhance the institutional building blocks, fast-track service improvements, and incrementally enhance and expand the passenger transport system. The linkage between public transport and NMT should start from the initial phases of development planning and join with transport planning to avoid infrastructural disparities and costly retrofits at later stages.

The National Taxi Legotla, of September 2020, has identified the Minibus taxi (MBT) industry as having an incredible potential to become a paradigm for the genuine empowerment of MBT operators and workers. The MBT industry generates revenues of over R40 billion annually and uses more than 2.1 billion litres of fuel. With around 15 million commuter journeys daily to work, schools, and universities, as well as excursions to seek healthcare or recreation.

According to the NHTS 2020, Nationally, the main mode of transport that carries the largest share of workers is private cars (36, %), and taxis, which account for 28,1%. The estimated total number of workers' trips using public transport decreased significantly from 5,4 million in 2013 to 4,7 million in 2020. Taxis accounted for most public transport users.

There has been an increase in households who used a taxi (from 9,9 million in 2013 to 11,4 million in 2020). More households selected a taxi as their usual mode of travel in 2020 (61,8%) than in 2013 (41,6%).

To provide effective public transport systems, as dictated by South African policy intent, substantial investments into both capital and operational funding are required.

PRASA proposed a bold plan to transport and modernise passenger railways while improving integration between rail and other public transport modes to make it easier for passengers to use railway services as part of the wider integrated transport system. Commuter rail considerations must be fully integrated with urban development plans and be assessed as part of an integrated multi-modal transport strategy.

It is of critical importance to recognise the country’s fiscal affordability challenges and the productivity limits due to the low-density environment. Appropriate technical solutions must be proven to ensure the achievement of optimal social and economic returns.

The NLTA requires municipalities to provide transport that is accessible to everyone by meeting all their needs, including people with disabilities; in so far as is possible on mainstream transport. The entire Act requires the promotion of accessibility. Taken together, these two parts emphasise the need for municipalities to implement universal design in all parts of the public transport system.

Objectives

The objectives of the IPTNs are as follows:

- Place 85% of residents of the large cities within 1km walking distance of the IPTN;
- Link major origins and destinations (including airports, hospitals, recreational facilities, etc.);
- Reduce journey times to a level that is car-competitive (under 60 minutes for door-door commuter travel time);
- Implement 16-24-hour services by attaining peak frequencies for priority trunk road and rail corridors every five minutes, off-peak frequencies every 10-30minutes and hourly late-night services;
- Use of a hybrid service structure incorporating elements of both trunk-feeder services and direct services;
- Peak frequencies of 10 minutes and off-peak frequencies of 20-30 minutes;
- Quality infrastructure and vehicles which are universally designed to ensure excellent customer service through protection from the elements, pre-board fare collection, security, comfort, reliability, and universal accessibility in all aspects;
- Monitoring and control of operations through ITS;
- Integrated Ticketing and Fare Management System, which is universally accessible;
- Reinforce TOD with the IPTN.

The National Public Transport Strategy has three phases that should be addressed in the respective Planning Authorities' Public Transport Plans and implemented accordingly. The IPTN should include passenger rail where rail is the primary trunk network and all other modes are integrated with rail as one transport system. IPTN corridors should be studied in detail to determine the relevant mode technology (quality bus, BRT, LRT, etc.) to promote the mode that offers the best cost/service trade-off for a given corridor.

One of the five thrusts of the Implementation Strategy is the continuous upgrading of existing systems (modal upgrading). The public transport network grant is to provide for accelerated planning, construction and improvement of public and non-motorised transport infrastructure and services, where projects support an integrated network approach as defined in the Public Transport Strategy in the National Land Transport Act incorporating:

- integration between different public transport services, including non-motorised transport infrastructure;
- fare integration between different services, e.g. Single Ticketing System.
- marketing integration with unified branding; and
- institutional integration between the services.

One of the conditions of the PTOG is that designs and business plans detailing subsidised services will have to be approved by the Public Transport Integration Committee comprising the three spheres of Government to ensure alignment with IPTNs. A more rigorous review of projects and funding requirements over the project life-cycle should be developed that assesses the feasibility of all project applications. Applications should be built around a business case that articulates:

- Appropriate technical design built on a full options analysis;
- Full life-cycle costing that incorporates capital and operational requirements;
- Financial analysis of sources of income that details fare revenue and local income stream projections;
- Rationalisation of all public transport operations;
- Socio-economic analysis enabling assessment of benefits versus costs incurred; and
- Institutional, management and contractual arrangements for the transition and ongoing project management.

The Department is in a process of developing a devolution strategy for the future of the urban rail in South Africa in alignment with the Integrated Urban Development Framework (IUDF) and White Paper on National Rail Policy (2022). The IPTN must seek to rationalise public transport services to eliminate competition and redundancies and implement gross cost contracts for subsidised services.

Key Performance Areas

1. Improve Public Transport efficiencies following the objectives of the Public Transport Strategy through IPTN.
2. Increase commuting to work trips by public transport and walking.
3. Implementation of universal design and universal access, as well as a reasonable accommodation, in line with the gazetted frameworks.
4. Increase the proportion of households in rural areas within 1km of an hourly (weekday) public transport service.

5.6 Non-motorised transport

Vision

NMT is to become a desirable means of accessing opportunities and services and is a primary consideration within the context of land use and transportation planning, civil engineering, transport infrastructure provision and safety. Cycling or walking in and around communities must be accessible, safe and reliable for everyone, including school children, leisure cyclists and those commuting to wordily. For each commute, wherever the destination or purpose of the commute is, it must be possible for NMT to be the mode of choice.

Strategic Intent

NMT is an integral element of the overall transport system and is a mode of transport in its own right. Hence, NMT must be planned on the synthesis of system pricing just physical access ways but all the supportive elements to ensure equitable, convenient and safe use of the NMT network.

Walking is the ubiquitous mode of transport among learners and people on lower incomes and therefore emphasis should be placed on providing comprehensive NMT facilities. Inconsistencies and oversights within the regulatory frameworks will result in role-players not treating the NMT agenda with the gravity and emphasis it deserves. The starting point should therefore be to address policy and legislative gaps as well as the need for a national directive as well as guidelines and standards that would ensure consistent planning and designs that receive the necessary funding.

Inconsistencies and oversights within the regulatory frameworks will result in role-players not treating the NMT agenda with the gravity and emphasis it deserves. The starting point should therefore be to address policy and legislative gaps as well as the need for a national directive, guidelines and standards that would ensure consistent planning and designs that receive the necessary funding.

A major opportunity exists to significantly improve cycling and walking links to trunk routes. Where quality public transport systems are combined with and supported by excellent walking and cycling linkage, a complete transport solution is provided.

A lack of integration between public transport and NMT counteracts the full benefit that these efficient modes offer, including social accessibility, support of economic growth and effective mass mobility. There is an expressed vital need for better linkage between both modes in a more focused and systematic way. A wide range of coordinated activities and functions is required for successful NMT implementation and improvement programmes. Components include:

- Provision of unimpeded (no light poles, road signs, informal traders, etc.) minimum of 2m wide sidewalks and a minimum of 1.5m wide cycle lanes as a standard requirement for all municipal roads;

- Signage & way finding;
- Communication, travel planning and education;
- Provision of Universal access for pedestrians, cyclists, people with disabilities, elderly people, children, and women;
- Enforcement;
- Maintenance;
- Raising awareness and advocacy.

Objectives

Promote high-quality public transport networks where NMT is a basic provision in all transport planning and infrastructure projects.

The potential benefits to overall transport system effectiveness through a much more comprehensive inclusion of NMT provision for a central pillar to the transport strategy.

The linkage between public transport and NMT starts from the initial phases of development and transport planning to avoid infrastructural disparities and costly retrofits at later stages.

Key Performance Areas

1. Development of National guidelines and standards for non-motorised transport (pedestrians and cyclists) as a sub-sector of the transport system to ensure consistent planning and designs that receive the necessary funding;
2. Investment in safe NMT facilities for learners at schools and surrounding areas;
3. Number of bicycles distributed through the Shova Kalula programme;
4. Increase NMT modal share (walking and cycling) for educational and commuting trips.

5.7 Learner transport

Vision

A safe, reliable and integrated transport service that caters for the needs of learners. (National Learner Transport Policy 2015).

Strategic Intent

The National Learner Transport Policy was developed in collaboration with the Department of Basic Education (DBE) and other stakeholders and aims to address the challenges of accessibility and the safety of learners. The environment within and how learners accessed centres of learning experienced serious challenges, among others, no services at all, unsafe

and insecure methods that were used, uncoordinated services, unscrupulous operations and non-standardised methods.

The majority (83%) of learners use either NMT (63.4%) or public transport (20.1%) to access institutions of learning. According to the NHTS 2020, 63% of school-going learners walked to school. The average time for learners to walk to school is 29 minutes. Walking was the primary method used by learners to reach the educational, of the 17 million learners, 10,1 million walked all to school. These statistics demonstrate the role of public transport and NMT in being a significant mode of travel by learners. The DoT is committed to the provision of safe and reliable learner transport. In pursuit of the vision for the provision of learner transport, the Department seeks to prioritise the policies contained in the National Learner Transport policy and translate these into practical service delivery initiatives.

Objectives

Provide transport that allows learners to get to and from educational institutions safely, securely and affordably and improve the quality of life for learners and students. This access should be primarily through public or non-motorised transport that is safe, secure, convenient and affordable.

Intergovernmental coordination must ensure that adequate infrastructure is provided for learner transport. Learner transport infrastructure plans must be incorporated into the ITPs, and no learner transport is required where there is a public transport service.

Provincial DoTs must ensure that learner transport services are integrated intended an effective and efficient system. Provinces, in consultation with Local Government, must ensure that learner transport services are accessible to all learners, including learners with special needs, in both the urban and rural areas by addressing the following:

- Planning is fundamental to the success of learner transport provision through the establishment of a joint planning committee on learner transport with representatives of the provincial DOT rt, the provincial department of education and municipalities.
- Identification of learners who will be provided with subsidised services to feed into the planning process as well as the actual implementation of those plans to ensure that learners who qualify for subsidised learner transport services are provided with such services.
- Develop a learner transportation framework inclusive of a policy, operating standards, safety guidelines and a code of conduct for drivers and learners.
- Develop educational programmes aimed at empowering vulnerable learners.
- Work with communities to develop safe walking and cycling to school programmes and ensure that safety and security measures are taken while learners are being transported.

- Monitoring and evaluation of the learner policy objectives through an independent assessment undertaken every three years on the impact of programme implementation.

Key Performance Areas

1. Improve access to learner transport services;
2. Registration and licensing of learner transport operators and demarcation of learner transport vehicles;
3. Increase funding for learner transport.

5.8 Freight transport

Vision

An effective regulatory and institutional framework using international best practise systems, technology and efficient management to provide high standards of operational quality and minimal externalities in a sustainable road freight sector which provides efficient service to South African industry". (Road Freight Strategy 2017).

Strategic Intent

- Optimising the efficiency of road freight services to industry, and reducing the externalities of the mode in terms of accidents, pollution, congestion, infrastructure damage and anti-social activities.
- Improving the effectiveness of regulation and enforcement of quality standards and ensuring equity between road freight transport operators within a system of quality-regulated competition.
- Creating effective training and skills development options for all functions in the industry, to encourage professionalism in the management, operation and support of road freight operations, and to encourage increasing B-BBEE participation in the industry.
- Providing for effective liaison between all role players in the sector; all tiers of government, private sector operators and industrial users and promoting optimal intermodal coordination and logistical efficiency as well as improving the planning of road freight infrastructure provision and management and providing safe city use for residents.
- Promoting regional trade integration and improving cross-borderer transport efficiency to enhance national competitiveness.
- Proposing an effective fair rail road split.

The three modes of land freight transport are road, rail, and pipeline. However, the intermodal association include freight hubs, ports, harbours, and airports. Therefore, the strategic goals for the three modes of freight transport, whilst incorporating inter-modalism, are as follows:

Road: "An effective regulatory and institutional framework using international best practise systems, technology and efficient management to provide high standards of operational quality and minimal externalities in a sustainable road freight sector which provides efficient service to South African industry". (freight transport system, whilst acting responsibly to preserve the road infrastructure." (Road Freight Strategy 2017).

Rail: Rail is a major carrier of freight with a strong customer focus and high efficiency. It is competitive in both the bulk freight and finished goods sectors with good linkages to "the last mile" for local distribution.

Pipelines: Pipelines are an integral part of and a strong alternative to bulk liquid/gas transport as appropriate.

Hubs and Ports: Freight hubs, ports, and logistics parks are upgraded, developed and maintained, and strategically located to enhance economic growth and optimise efficiency.

Objectives

Freight movement has a significant impact on the national transport network and results in high transport costs in the logistics value chain. This constrains Southern Africa from being competitive in a global market and attracting sufficient international investment in supporting economic growth in the region. The primary objective is to reduce the cost of freight logistics and influence market forces to transform industry practice and behaviour while maintaining profitable operations.

Another objective in terms of freight transport is to address the competition between the mainland modes, road, rail, and pipeline and address the modal imbalance by facilitating the potential mode shift between modes, basically to address road congestion, road safety, and logistics cost.

Key Performance Areas

1. Improve heavy goods vehicle safety performance; roadworthiness; and self-regulation Road Transport Management Systems (RTMS) certification and compliance.
2. Reduction in overloading by enforcing limits on axle limits and gross vehicle mass.
3. Provision of alternative routes for the transport of hazardous materials.
4. Optimise road, rail and pipeline freight balance.
5. Separation of freight and commuter rail infrastructure to improve efficiencies in both sectors.

5.9 Transport infrastructure

Vision

Safe, reliable, effective, efficient and fully integrated transport operations and infrastructure which best meets the needs of freight and passenger customers at improving levels of service and cost in a fashion which supports government strategies for economic and social development whilst being environmentally and economically sustainable" (Road Infrastructure Strategic Framework for South Africa, (RISFSA) (2006).

Strategic Intent

The approach to passenger transport should shift priority from private to public transport across all income groups and within the latter sector, from the provision of primarily peak-period commuter services to a fully-fledged public transport system catering to a wide range of passengers.

Therefore, all spheres of Government will continue to develop, and maintain transport infrastructure for all modes including motorised and non-motorised modes, as well as intermodal facilities.

Objectives

It is critical that current road infrastructure funding mechanisms are assessed and any shortcomings identified. Further, although funding for the upgrading of the road network seems to be a problem, it can be stated that a lack of institutional capacity and corruption contributes to the backlog in road infrastructure provision through insufficient planning of road networks and projects. It is therefore important for the authorities to ensure that road infrastructure networks are given high priority like other services during the planning and budget allocation.

The infrastructure will use sustainable materials where practical and feasible. The development, management, and maintenance of transport infrastructure have great potential for skills development and to generate employment, whilst delivering basic services, improving safety, and enhancing access and mobility.

Authorities will maintain the asset management system to ensure strategic planning and prioritise funding for transport major infrastructure. All spheres of Government responsible for transport infrastructure will have functional infrastructure/asset management systems to plan, manage and maintain, and implement transport infrastructure incorporating motorised and non-motorised transport needs.

It is feasible to consolidate Road Asset Management System (RAMS) for regional networks for District and Local Municipalities and share professional resources over the region for planning, management and implementation; instead of each municipality pursuing its individual RAMS and professional expertise.

Provinces have a road maintenance funding programme from Treasury known as PRMG that is managed under the S'Hamba Sonke programme. Similarly, there should be a dedicated funding program for Municipalities.

Key Performance Areas

1. Provinces and Municipalities (and associated agencies) to operates RAMS (pavement, bridges and structures, stormwater drainage, road signs and road markings, etc.).
2. All transport infrastructure funding is to be aligned with professional engineering expertise in the Provinces and Municipalities (and associated agencies).
3. All Provinces and Municipalities (and associated agencies) to prepare a Strategic Road Network Plan.
4. Prioritise dedicated cycle lanes and sidewalks in all new projects and existing roads to cater for NMTs.

5.10 Cross-border transport

Vision

To facilitate seamless and integrated movement of people and goods, to reduce system costs as well as transit and turnaround times to enhance trade and economic development in the SADC transport system.

Strategic Intent

Moving freight and passengers across borders requires compliance with specific procedures which are mandated and supported by the relevant legislation of both countries sharing the border, consistent with the SADC Protocol on Transport. Policy and regulation are of particular importance in cross-border transport as it relates to border-crossing procedures for both import and export trade and transit shipments. The optimisation of freight and passenger movement assumes a corridor approach to ensure that all bottlenecks in the supply chain are addressed.

The efficient movement of passengers and freight through the transport system including road, rail, pipeline, and border posts should be facilitated through operational procedures integrated with infrastructure and relevant, contemporary technology.

Therefore, the DoT, Transnet, Cross-Border Road Transport Agency (CBRTA), Border Management Authority (BMA), RTMC and SANRAL with the support of the respective local Municipalities, road authorities, South African Revenue Services (SARS), etc., will ensure the facilitation of an efficient transport system by providing sufficient capacity, law enforcement, infrastructure, operations, etc.

Objectives

- The Cross-border transport system and operations to be efficient and streamlined to facilitate the legal movement of goods and people in the region, to complement the Free Trade Area in South, Central and East Africa, in association with the new BMA.
- Participate in mutually beneficial infrastructure projects to unlock long-term socio-economic benefits by partnering with fast-growing African economies with projected growth ranging between 3% and 10%.
- Optimise regional trade through Regional Spatial Development Initiatives (regional corridors)
- Improve levels of service for passengers and freight at border posts, including universal access.
- Reinforce the Spatial Development Initiatives through Road, Rail, border posts, and port infrastructure development.
- Harmonise road traffic enforcement regulations, road freight as well as passenger transport standards, and guidelines to ensure consistency for the regional travelling public, and seamless movement across borders. For example, vehicle fitness standards and roadworthy certification, permissible axle mass load and a gross vehicle mass, etc.
- Infrastructures at most border posts require significant investment to accommodate the growth of the movement in freight and passengers between countries. Multiple stakeholders are involved in sourcing, designing, constructing and operating the required infrastructure and clear policy guidelines and regulations are required to manage the investment efficiently.
- Traffic management strategies such as the use of intelligent transport systems (ITS) at border posts are beneficial for the accommodation of increased traffic volumes.
- Traffic data to be collected at border posts so that planning of facilities is matched to demand.
- Development of One Stop Border Posts is the ultimate scenario where an integrated border management approach facilitates information and facility sharing to eliminate duplication of processes.

Key Performance Area

1. Operational efficiency at border posts;
2. Investment in infrastructure upgrades and maintenance;
3. Harmonised Regional Transport regulations, guidelines, and standards.

5.11 Transport safety and security

Vision

Safe and efficient road transport, contributing to economic growth and development, through improved cooperation and compliance from road users, the business and NGO community and public and private sector interventions. [5]

Strategic Intent

In the SADC region, South Africa has the highest fatality per 100k population. South Africa also has the highest motorisation level of 190 vehicles per 1000 population (Setting the UN Decade of Action for Road Safety in Motion in the SADC Region, 2011). High proportions (about 40%) of road fatalities were pedestrians. These statistics are significantly higher relative to global benchmarks. Railway Safety and Security currently also has a poor record in South Africa (RSR Annual Report, 2014).

Therefore, significant effort is necessary to address transport safety and security in South Africa, hence the need to improve transport safety and security to reinforce liveable cities and communities by implementing the National Road Safety Strategy, addressing Railway Safety and security, and passenger, pedestrian, cyclist safety, and work zone safety (with an elevated emphasis on women, children, elderly people and people with disabilities) These also need to provide interventions to eliminate gender-based violence in transport. The target for 2030 is to reduce the number of fatalities by 50%. South Africa is not achieving its road safety objectives. The poor road safety record has detrimental socio-economic impacts.

Therefore, the strategic intent is to achieve a 50% reduction in incidents and deaths by 2030 with further annual decreases of 10%.

In alignment with South Africa's developmental approach, the National Development Plan 2030, seen largely as the country's strategy blueprint, sets national goals and objectives for the country. Chapter 10 of the NDP, in particular, classifies road crashes as a health issue and sets a target to "reduce injury, accidents and violence by 50% from 2010 levels"13. The NDP 2030 also outlines the following matters to be monitored and controlled including:[6]

- Roadworthiness of vehicles;
- Vehicle driver behaviour;
- Alcohol and substance abuse; and
- Weaknesses in law enforcement.

[6] National Road Safety Strategy, 2016-2030

Objectives

The implementation of the United Nations Decade of Action for Road Safety will enable the DoT to address road fatalities and remains one of the priority areas for the DoT. Their experience to date is that road safety campaigns must be conducted throughout the year through the 365 Days Road Safety Programme. The DoT will be more stringent in the application of regulation of road transport operations, and law enforcement on issues such as vehicle and driver fitness, speed, etc. The implementation of these measures will be prioritised by provincial and local authorities as well.

Railway Safety and Security currently also has a poor record in South Africa. Significant improvements to railway safety have the potential for a mode shift for passengers from road-based transport to rail. The safety and security on Gautrain is probably the standard to aspire to, at Grade crossings and on-board safety will receive continuous monitoring.

The National Road Traffic Regulations, (2000) should review the rules of the road to add duties of motorists towards pedestrians and cyclists. The duty should be on motorists to give way to pedestrians and cyclists at all times and they should take proper care when passing or overtaking cyclists. It should further be amended to create specific offences of colliding with or endangering pedestrians and cyclists with strict penalties for such offences (Department of Environmental Affairs, 2015).

Passenger, pedestrian, and cyclist safety, specifically in urban areas, will be enhanced through 24-hour monitoring by visible policing, and Central Communication Centres (CCTC). Such interventions may stimulate greater interest in walking, cycling, and public transport.

Construction work zone safety requires the stringent application of Occupational Health and Safety (OHS) procedures to ensure zero fatalities and injuries on construction projects. All spheres of Government and private sector implementing transport projects will adhere to OHS requirements to achieve zero incidents at work zones.

Law enforcement will be professional and consistent in implementing road traffic regulations and influencing driver behavioural change.

All spheres of government must take lead on Transport Safety and prepare MTEF Action Plans, with budgets and human resources to implement Transport Safety plans, with universal accessibility. These plans should be reflected in the respective ITPs and IDPs.

Transport Safety is a national priority and will be addressed with the similar passion, effort, and resources that were once committed to the HIV/AIDS pandemic in the recent past in South Africa.

The overriding objective is to reduce road crashes and their associated fatalities and injuries thereby realising the vision and meeting the strategic intent. The primary requirement is to ensure that all levels of Government are informed of, understand and are actively implementing the NRSS 2016-2030

Implementing the SA Road Safety Strategy 2016-2030 by all spheres of government as it has been developed and accepted remains the next key objective. This will require a multifaceted approach based on the five pillars identified within the DoA as key to successfully improving road safety. These pillars are:

- Road safety management;
- Safer roads and mobility;
- Safer vehicles;
- Safer road users;
- Post-crash Response.

Key Performance Areas

The integrated strategy on Road Safety must be addressed in the respective Transport Plans, and implemented through multi-sector efforts with private and public sectors, focusing on the highest risk factors through:

- Institutional
  - RTMC function and resources to take ownership of the Road Safety Strategy;
  - Increase funding (at least 10% of infrastructure spend);
  - All spheres of government to implement Transport Safety plans reflected in the respective ITPs and IDPs.
- Enforcement
  - Constant daily visibility of officers (DoT 365-day programme);
  - Independent oversight to address corruption and fraud;
  - Independent oversight and audit at licensing centres;
  - Investment in technology for officers such as in-vehicle real-time access to a comprehensive road transport offence register, breathalyser testing, video cameras, the newly re-engineered eNaTIS system that offers online vehicle renewal, online bookings for driver license enrolment and renewal, etc.
  - Moving violations including speed, seat belt compliance, baby seats, driver and vehicle licences, public transport operating licences, etc.
  - Vehicle roadworthiness by annual vehicle testing for all vehicles over three years old and six months for public transport and heavy goods vehicles;
  - Freight and passenger overload control;
  - Increase in the self-regulation program for heavy vehicle operators.

- Education
  - Road Safety programs in schools, tertiary education institutions and businesses.
  - Public relations to engage the general public and create continuous awareness.
- Engineering
  - Creating a safe environment for pedestrians and cyclists with dedicated sidewalks and cycle lanes is a mandatory requirement in all infrastructure development projects, and use standards that include universal design, as is the legal minimum requirement to make sure that road crossing is safe for everyone.
  - Improvement of the road environment through proactive Road Safety Audits on the strategic road network within each planning authority, and changing the standards against which audits are carried out so that universal accessibility is included.
  - Construction work zone safety application to aim for zero incidents at work zones.
- Evaluation
  - Comprehensive data collection and extensive research to address prevailing conditions, local challenges, root-cause analysis, relevant interventions and advancements, planning, and monitoring.
  - A project review system whereby changes/trials implemented can be evaluated - systems, engineering, communication, etc.
- Emergency Medical Assistance: Improving post-crash care
  - Incident Management Systems expanded beyond the National Road Network and incorporated into the Municipal Central Communications Centre/Disaster Management Centre.
  - Road Accident Fund has appropriate local and regional offices.
  - Post-crash counselling provided by hospitals.

The ultimate performance indicators are the reduction in crashes, injuries and fatalities in the transport system.

5.12 Institutional management

Institutional management is governed by three key aspects which are addressed in this section viz., Capacity to deliver, Intergovernmental relations and Transport information systems.

5.12.1 Capacity to deliver

Vision

A professional organisation with qualified transport professionals equipped and empowered to develop and manage an integrated transport system.

Strategic Intent

An effective public sector structure at all levels of transport planning, implementation and management that is adequately resourced and appropriately skilled to plan and deliver the requirements of the transport strategy within each level of Government.

Objectives

Institutional capacity across the sector is seen as a significant barrier to the effective and efficient implementation of transport management and improvement, even where financial resources are in abundance. Addressing the sector's capacity constraints will complement any accelerated funding and implementation plan.

The DoT, Provincial Departments and South African Local Government (SALGA) should assist municipalities with capacity building and establishing transport components to ensure that transport functions are implemented.

It is feasible to consolidate RAMS and Transport Models for regional networks for District and Local Municipalities and share professional expertise over the region for planning, management and implementation; instead of each municipality pursuing its individual Operational Systems and professional expertise. The DoT is in the process of implementing the new NLTIS to replace the outdated system. Thus, there is potential to share professional resources.

The provision of professional resources may be reinforced through funding approvals, where the Treasury and the DOT will endorse funding based on the availability of professional expertise; full-time employees or contracted professional staff.

Key Performance Areas

1. Number of professionally registered personnel in Civil Engineering, Traffic Engineering, Transport Economics, Town Planning, Urban Design, Transport Planning, Universal Access Auditors, and other unregistered professionals in areas such as Network operations management, Taxi industry negotiations.
2. Establishment and professional operation of the National Public Transport Regulator, Public Regulatory Entities, Transport Economic Regulator, and Transport Appeals Tribunal.
3. In collaboration with Provinces, SALGA and the DoT will seek to promote close working relationships with all transport functionaries across the three spheres.

5.12.2 Intergovernmental relations

Vision

Integrated Land Use, and Transport Planning through vertical and horizontal coordination within and between the various spheres of Government and its agencies.

Strategic Intent

Develop an integrated land use and transport system by promoting a holistic multi-modal approach towards integrated land use and transport planning and implementation through collaboration and consultation. The National Transport Forum will serve as the support vehicle for land transport planning coordination through vertical and horizontal integration, and the National Public Transport Regulator will provide oversight and enforcement.

Objectives

All three spheres of government have a key role in integrated land use and transport planning, coordination, implementation and maintenance of an integrated transport system for South Africa. Integrated transport planning and implementation need a greater effort in coordination and collaboration within and between government structures. Although the three spheres of Government and its agencies are autonomous, they are required to work together on decision-making and coordination of budgets, policies, activities, information sharing, and granting approvals, authorisation, exemption, licence, or permission for the implementation of projects.

The Intergovernmental Relations Framework Act (IGR) (Act 13 of 2005) provides a framework for the three spheres of Government and all organs of state to facilitate coordination in the implementation of policy and legislation, within the principle of cooperative governance set out in Chapter 3 of the Constitution. The Act makes provision for intergovernmental forums on the National, Provincial and Municipal levels.

Provinces must establish transport coordinating structures where transport matters are discussed to avoid fragmented transport planning and decision-making.

Regulation and control in the context of service delivery, spending of budgets, potential job creation, stimulating the economy, etc., can be bedtime-consuming mind, costly and counterproductive when addressing strategic planning and infrastructure development. For example, the approval of an occupational Health and Safety Plan by the Department of Labour could take up to six months to approval; and a Record of Decision for an Environmental Impact Assessment (EIA) could take up to twenty-four months by the Department of Forestry, Fisheries and Environmental.

Intergovernmental relations encompass all the complex and interdependent relations among various spheres of government as well as the coordination of public policies among national, provincial and local governments through policy alignment, reporting requirements, fiscal grants and transfers, the planning and budgetary process and informal knowledge sharing and communication among officials. Intergovernmental relations also refer to the fiscal and administrative processes by which spheres of government share revenues and other resources. These overall objectives are to be achieved by an intergovernmental system that ensures mutual consultation on policy and legislation, resolving disputes, coordinated strategic planning; and accountability for performance and expenditure in terms of legislation.

For example, addressing the upgrade, maintenance, or re-routing of a national road through a town, may be achieved through the principles of intergovernmental relations framework, where the local municipality and the road agency collaborate to address the project through the ITP, routine road maintenance programme, the weighted contribution of funding by proportioning through traffic and local traffic, etc.

Another example is the development and implementation of multidisciplinary projects that require approval, authorisation, exemption, licence, or permission from various departments in the three spheres of government. In the spirit of the Intergovernmental Relations Framework Act and the Infrastructure Development Act, the project steering committee should consist of persons representing the relevant departments and organs of the state affected by the project so that processes are addressed proactively and efficiently.

Thus, the ultimate objective is to achieve efficiency and expediency in the functioning of the Intergovernmental Relations Forums and Project Committees.

Key Performance Areas

The **National Transport Forum (NTF)** will embrace the vision of intergovernmental relations for Integrated land use and transport planning in South Africa; provide practical advice to all spheres of government in planning and implementation of integrated and sustainable transport projects; facilitate the development of technical standards and guidelines for projects and programmes; coordinate and share data, data collection, and research, share best practice, and share resources and capacity building, etc.

- Provinces and municipalities are required to submit an annual report to the NTF to be tabled the at Committee of Transport Officials (COTO) and also to the Minister and Members of the Executive Council (MINMEC)
- Proactive stakeholder engagement involving the public sector, private sector, trade unions, etc.

5.12.3 Transport Information System

Vision

Establishment of a functional land transport information system that informs integrated land use and transport planning, infrastructure development, and operations.

Strategic Intent

An informed transport authority, adequately resourced and skilled to plan and deliver the requirements of the five-year transport plan based on contemporary, reliable data and empirical analysis.

Objectives

To provide secure, reliable and universally accessible transport-related information. Before 2020, each transport authority will have an established legacy, resourced and functioning body that oversees the management of the various aspects of the transport system and its subsystems.

Key Performance Area

Technology is a necessary tool to enhance transport planning and management. The integrated transport system is dependent on updated data systems such as Natis, Operating Licence Administration System, RAMS, Transport Modelling, etc. Therefore, the three spheres of government will ensure a fully functional and updated Geographic Information Systems (GIS)-based Land Transport Information System, and National Freight Databank (NFD).

5.13 Funding

Vision

Fiscally innovative, and appropriately prioritised funding aligned with the objectives and deliverables of national policy and strategic priorities for an integrated land transport system that provides efficient, reliable, and affordable access and mobility for people and goods.

Strategic Intent

To ensure the provision of adequate funding for transport infrastructure, and operations for new development, management and maintenance of the transport system.

Objectives

There is a need for greater focus on the fact that relatively little is being done to manage the existing transport system. The transport profession continuously demands resources for the preservation of assets, safety and security, professional institutional capacity and infrastructure and operations management, and innovative implementation of TDM and TSM.

The paradox of affordable, accessible transport and an integrated transport system, is the high cost of sustained operations and well-maintained infrastructure. The DoT will encourage provinces and municipalities to reprioritise their budget and to ensure that adequate resources are available for the effective implementation of the mandate that the NLTSF. Thus, where possible, there should be an increase in funding for land transport based on the following investment categories:

- Annualised capital and operational requirements to maintain the current transport system and to provide basic improvements;
- Capital and operational investment to address the backlog progressively;
- Capital and operational investment for upgrading and expansion of the transport system;
- Ring-fence funding strategy for transport.

However, major projects require comprehensive appraisal and evaluation methodology which incorporates whole life assessment of investment, full costing approaches, and the inclusion of wider economic and social impacts based on empirical analysis. These evaluations should be conducted at an overall sub-subsector level and for all major projects and should provide a clear unconstrained indicator for funding priorities, where business plans are developed per project indicating the levels of subsidy, positive cash flow, debt, finance costs, transport pricing, etc.

Key Performance Areas

1. A life-cycle cost approach for management and preservation of assets, and proposed transport projects.
2. MTEF and DORA allocations for PTNG and PTOG.
3. Financial modelling for revenue-based projects, such as public transport projects.
4. Economic evaluation of proposed infrastructure projects, including life-cycled maintenance.

6 HOW WILL THE FRAMEWORK BE IMPLEMENTED?

Enabling the delivery of the NLTSF is very important. The Department is committed to the implementation and funding of the strategies and actions set out in this framework. The NLTSF in itself is a framework to guide the provincial and municipal transport plans. This section briefly provides the role of the various entities in preparing and implementing Transport Plans, aligned with the NLTSF.

The National Land Transport Act (NLTA) Section 34 (1) and (4) states the NLTSF "must guide land transport planning countrywide". It is within this context that the Framework was prepared. It is the role of the DOT to ensure the implementation of this Framework and annual reporting on the key performance areas.

The Framework is a synthesis of transport policy by the DOT. This was done by consulting widely to reach a consensus between stakeholders. The Department, therefore, expects all planning entities to prepare transport plans within the context of the policies and principles in this Framework. However, the Framework is not intended to prescribe the requirements of the respective transport plans.

The DoT has established the NTF as a coordinating structure for all transport-related matters and will assist the effectiveness of the NLTSF through all spheres of government. The Provinces and Municipalities through their Transport Coordinating Structures/ Transport Forums will be required to submit annual reports to the NTF on the NLTSF implementation progress. The NTF will provide an annual report to the Committee of Transport Officials (COTO) and the Minister and Members of the Executive Council (MINMEC) for information actioning.

6.1 Development of programmes

The mechanisms to deliver the Strategy and the Vision within the Framework are programmes and actions developed through the PLTFs and ITPs at provincial and municipal governments respectively.

The DOT has a direct role to play in implementing national strategy and components of the Framework and translating national strategy into programmes projects and activities and will support where appropriate the programme development at Provincial and Local levels. The DOT is as much reliant on influencing South African central institutions as on developing its programmes to deliver national strategies. It is therefore expected that programmes will need to be flexible and evolve with time.

The strategies selected need to be translated into programmes/projects. Once programmes have been developed, they will need to be prioritised using a common basis of assessment. The Common Basis Assessment should be used by all authorities to prioritise and make decisions on programme development to ensure that programmes help achieve the Vision of a coordinated transport system. In prioritising among strategies and in programme development it will be important to have a clear view of their real impacts and if the desired targets were achieved.

Translating strategies into programmes/projects requires decision criteria to test the relative costs, benefits and the extent to which the programmes/projects meet the national and local strategic objectives.

The development of the programmes will inevitably result in competing demands for scarce resources, both those of the Department and other key organisations, agencies and stakeholders. The guiding principle will be that the adopted programmes should provide overall value. These programmes will be developed and prioritised using the conventional transport assessment criteria of accessibility, economy, environment, safety and integration and the national strategic objectives and wider local objectives of the authority concerned reflected in the Common Basis Assessment. The criteria can help to determine the overall value and priority of projects in meeting the wider aims of the Department and the particular needs of local areas together with the guiding principles set out in the Strategy and the Vision in the Framework. Only those programmes/projects ranked very strongly should be considered for business case development or a feasibility study.

7 REVIEW, MONITORING AND EVALUATION

A practical approach is proposed which includes proper monitoring and review of the key performance indicators. The key performance areas are necessary to measure the effectiveness of the NLTSF, ensure accountability by the DoT and the planning authorities, and monitor value for money.

The purpose of transport indicators is to ensure a balanced view at the national, provincial and local levels of the critical role of transport services in reducing poverty, facilitating growth and contributing to the achievement of key development targets and sustainability. Chapter 4 which addresses the NLTSF vision; contains facts and trends, sets out the challenges, and presents some of the evidence available, which were considered in choosing the key performance Areas.

The Key Performance Areas in the NLTSF are intended to cascade into the PLTFs and the ITPs and subsequently escalate to the DoT annual monitoring and evaluation report on the performance of the Transport System.

Therefore, the DoT with the support of the Provinces and Municipalities will monitor and evaluate the key performance areas, and report progress on the KPAs in the annual report.

1Table 1 provides the KPAs and indicates the main implementation sphere (N = national, P = provincial and **Me** = Metros, **Mu** = municipal, **O** = other, (such as PRASA, SANRAL, C-BRTA) concerning rolling out the particular actions. Consultation may, however, involve other spheres of government, stakeholders or users. A **target** is defined as a specific, attainable, realistic, measurable, and timely objective.

The "✓✓" mark in Table 1 indicates which sphere has the lead in coordinating and monitoring role in cases where more than one government sphere is involved.

Strategic Element	KPA	Responsibility Matrix				
		N	P	Me	Mu	O
Integrated Land Use and Transport Planning	All Planning Authorities to maintain and update a database of traffic and pedestrian counts;	✓✓				
	Update Minimum Requirements for the preparation of PLTFs and ITPs;	✓✓				
	All Provinces to update PLTFs to be relevant in this planning period (2023 to 2028);	✓	✓✓			
	All Municipalities to prepare and/or update Comprehensive, District, and Local Municipal ITPs incorporating Public Transport Plans to comprise of IPTN, Rationalisation plan, Operating Licence Strategy and any Land Use Plans;	✓	✓	✓✓	✓✓	
Urban Transport and	Improved service quality and safety of public transport	✓	✓	✓✓		
	Improve access to main public transport nodes by improving walking links (20min or 1,5km), cycle networks and full cycle implementation programmes (within a radius of 5km) and prioritising NMT		✓✓	✓✓	✓	✓
	Undertake Household Travel Surveys every five years	✓✓	✓			
Universal Accessibility	Improved universal accessibility of public transport networks across all modes of transport, in line with minimum standards and requirements; measured against indicators	✓✓	✓			
	Compliance with minimum standards, the researched development of them and the publication of universal access regulations; for planning, design, construction and operation	✓✓	✓	✓	✓	✓
	Undertake focused research with universal access passengers every year to report on implementation progress, and remedy complaints, as required by the NLTA	✓✓	✓	✓	✓	✓
Rural Transport	Develop actions and measure the impact of rural transport interventions on safety and travel time	✓✓				
	Develop a strategic rural road network upgrade and maintenance plan with budgets for rural road network infrastructure upgrades and maintenance	✓	✓✓			
	Establish the rural transport forum at the district level	✓	✓✓			
Public Transport	Increase commuting to work trips by public transport and walking.	✓	✓	✓✓	✓	✓
	Implementation of universal design and universal access throughout the IPTN incrementally through an Up to Date UDAP, and annual reports	✓	✓✓		✓	

	Increase the proportion of households in rural areas within 1km of an hourly (weekday) public transport service.	✓	✓	✓✓	✓✓	✓
	Improve Public Transport efficiency following with objectives of the Public Transport Strategy through Integrated Rapid Public Transport Networks (IPTN).	✓	✓	✓✓	✓✓	✓
Non-Motorised Transport	Development of National guidelines and standards for non-motorised transport (pedestrians and cyclists) as a sub-sector of the transport system to ensure consistent planning and designs that receive the necessary funding	✓✓	✓			
	Investment in safe NMT facilities for learners at schools and surrounding areas		✓	✓✓	✓	
	Number of bicycles distributed through the Shova Kalula program		✓	✓✓	✓	
	Increase NMT modal share (walking and cycling) for educational and commuting trips	✓✓	✓	✓	✓	
Learner Transport	Improve access to learner transport services	✓✓	✓			
	Registration and licensing of learner transport operators and demarcation of learner transport vehicles.		✓✓	✓	✓	✓
	Increase funding for learner transport Universal Accessibility: Physically challenged/ Special needs	✓ ✓	✓✓ ✓✓			
Freight transport	Improve heavy goods vehicle safety performance; roadworthiness; and self-regulation (RTMS certification and compliance)	✓✓				✓
	Reduction in overloading by enforcing limits on axle limits and gross vehicle mass	✓✓				
	Provision of alternative routes for the transport of hazardous materials		✓✓	✓	✓	
	Optimise road, rail and pipeline freight balance	✓	✓✓			
	Separation of freight and commuter rail infrastructure to improve efficiencies in both sectors	✓✓	✓	✓	✓	✓

Transport infrastructure	Provinces and Municipalities (and associated agencies) to operate GIS-based Asset Management Systems (pavement, bridges and structures, stormwater drainage, road signs and road markings, etc.).		✓✓			
	All transport infrastructure funding to be aligned with professional engineering expertise in the Provinces and Municipalities (and associated agencies).	✓	✓✓	✓✓	✓	✓
	All Provinces and Municipalities (and associated agencies) to prepare a Strategic Road Network Plan.	✓	✓✓			
	Prioritise dedicated cycle lanes and sidewalks in all new projects and existing roads to cater for NMTs.	✓	✓	✓	✓	✓
Cross-border Transport	Operational efficiency at border posts	✓✓	✓	✓	✓	✓
	Investment in infrastructure upgrades and maintenance	✓✓	✓✓	✓	✓	✓
	Harmonised Regional Transport regulations, guidelines, and standards	✓✓	✓	✓	✓	✓
Transport safety and security	The integrated strategy on Road Safety must be addressed in the respective Transport Plans, and implemented through multi-sector effort with private and public sectors, focusing on the highest risk factors.	✓✓	✓	✓	✓	✓
Institutional Management: **Capacity to Deliver**	Number of professionally registered personnel in Civil Engineering, Traffic Engineering, Transport Economics, Town Planning, Urban Design, and Transport Planning, Universal Access Auditors, and other unregistered professionals in areas such as Network operations management, Taxi industry negotiations	✓✓	✓	✓	✓	
	Establishment and professional operation of the National Public Transport Regulator, Public	✓✓	✓	✓	✓	

Inter-Government Relations	Regulatory Entities, Transport Economic Regulator, and Transport Appeals Tribunal (TAT)					
	Provinces and municipalities are required to submit an annual report to the NTF to be tabled at the Committee of Transport Officials (COTO) and also to the Minister and Members of the Executive Council (MINMEC)	✓✓	✓	✓	✓	✓
	In collaboration with Provinces, SALGA and the DoT will seek to promote close working relationships with all transport functionaries across the three spheres.	✓✓	✓	✓	✓	
	Proactive stakeholder engagement involving the public sector, private sector, trade unions, etc.	✓✓	✓	✓	✓	✓
Transport Information Systems	Fully functional and updated GIS-based Land Transport Information System and NFD.	✓✓	✓	✓	✓	
Funding	A life-cycle cost approach for management and preservation of assets, and proposed transport projects	✓✓	✓	✓	✓	✓

Table 1 Key Performance Indicators

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