The Government of Lesotho

Lesotho
National Transport Sector Policy

Ministry of Public Works and Transport
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CONSULTANCY SERVICES TO PREPARE NATIONAL TRANSPORT SECTOR POLICY FOR THE KINGDOM OF LESOTHO

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TABLE OF CONTENTS

ABBREVIATIONS

4IR	4th Industrial Revolution	**MOLGCA**	Ministry of Local Government and Chieftainship Affairs
AADT	Annual Average Daily Traffic	**MOPWT**	Ministry of Public Works and Transport
ADT	Average Daily Traffic	**MT**	Motorised Transport
ADTT	Average Daily Truck Traffic	**NMT**	Non-Motorised Transport
AI	Artificial Intelligence	**NRSC**	National Road Safety Council
BNIT	Brazilian National Department of Transport Infrastructure	**NSDP**	National Strategic Development Plan
CAV	Connected and Autonomous Vehicles	**NSDP**	National Spatial Development Plan
CPI	Consumer Price Index	**NTB**	National Transport Board
CTMS	Corridor Trip Monitoring System	**NTDA**	National Transport Development Agency
DCA	Department of Civil Aviation	**NTF**	National Transport Fund
DTT	Department of Traffic and Transport	**NZTA**	New Zealand Transport Agency
E-WIM	Electronic Weigh-in-Motion	**ORTIA**	OR Tambo International Airport
HDI	Human Development Index	**PPP**	Public Private Partnership
HR	Human Resources	**PT**	Public Transport
ICAO	International Civil Aviation Organisation	**PTP**	Public Transport Plan
IOF	Internet of Things	**RADMS**	Road Accident Data Management System
ITP	Integrated Transport Plan	**RD**	Roads Directorate
ITS	Intelligent Transport Systems	**RF**	Road Fund
IWT	Inland Water Transport	**RIU**	Road Improvement Unit
JBCC	Joint Bilateral Commission on Cooperation	**RML**	Road Maintenance Levy
KPI	Key Performance Indicator	**RSA**	Republic of South Africa
LHDA	Lesotho Highlands Development Authority	**RSD**	Road Safety Department
LITIS	Lesotho Integrated Transport Information System	**SACU**	Southern African Customs Union
LMPS	Lesotho Mounted Police Service	**SADC**	Southern African Development Community
LNTSMP	Lesotho National Transport Sector Masterplan	**SARPS**	ICAO Standards and Recommended Practices
LOS	Level of Service	**SDF**	National Spatial Development Framework
LRMS	Lesotho Road Management System	**TICP**	Transport Infrastructure and Connectivity Project
LSPP	Land Survey and Physical Planning	**TIS**	Traffic Information System
LSPP	Department of Land Survey and Physical Planning	**TSP**	Transport Sector Policy
LTA	Singapore Land Transport Authority	**TTTFP**	EA-SA Transport and Transit Facilitation Programme
MASCON	Maseru Container Terminal	**UAV**	Unmanned Aerial Vehicles
MCBRTA	Multilateral Cross-Border Road Transport Agreement	**UN**	United Nations
MIA	Moshoeshoe I International Airport	**WHO**	World Health Organisation

LIST OF FIGURES

LIST OF TABLES

1. INTRODUCTION

This document outlines the new transport direction and policy for Lesotho from 2022 onwards and lays the basis for reforms over the coming decades and beyond.

It is partly an update of the 2006 Transport Sector Policy, supplemented with new policy directives and amendments to existing policy statements, and is aimed at incorporating and presenting a more fitting and sustainable response to the current needs and challenges within the transport sector. As the needs and challenges within the broader economy, as well as specifically in the transport sector change over time, regular review and the updating of policy is a necessity.

The mission of the 2022 Lesotho Transport Sector Policy is to establish an integrated, sustainable and inclusive transport system, cognizant of the requirements of Lesotho's international and regional network connectivity and the welfare of its citizens, as well as new technological developments that will inevitably transform the transport sector, its systems and users.

This policy document further serves to guide and inform stakeholders on the key directions of the new transport sub-sector policies, as well as their sub-policies, comprehensively addressing the required actions to be taken in realising their objectives in supporting a sustainable and resilient transport sector in Lesotho.

1.1 BACKGROUND AND RATIONALE

Lesotho is the only independent state in the world that lies The formulation of the updated Lesotho National Transport Sector Policy forms part of the bigger National Transport Sector Masterplan study. In order to adequately gauge the needs and challenges over the coming decades and to formulate a fitting response in this regard, a detailed analysis was conducted of the various transport sub-sectors, resulting in a Strategic Action Plan for the coming years. The necessity to support these required actions in the transport sector with policy was clear, thus prompting a review and update of the 2006 Transport Sector Policy (TSP).

This 2006 policy document is no longer adequate to support the changing 2020-2030 transport era. Some of the gaps were identified as follows:

- The policy was formulated mostly considering road transport as the main mode of transport.
- Multimodal transport and specifically a clear view on public transport, as well as financial matters, were not addressed adequately.
- Additionally, the significance of non-motorised transport was neglected.
- The policy did not consider or anticipate new trends and innovations in the transport sector such as Connected and Autonomous Vehicles (CAV), electrical and hydrogen powered vehicles and various technology applications as a whole. Currently, no guiding documentation is available to address these trends.
- Additional current overarching and cross-cutting issues within the sector were not considered in the previous policy. Neither was the impacts of COVID-19 on the transport sector envisaged at that point in time.

Transport is a key strategic driver for economic growth of the country, especially considering the landlocked position which Lesotho finds itself in. The significance of the transport sector also aligns with the National Strategic Development Plan (NSDP) objectives. The NSDP makes reference to the understanding "that transport infrastructure and services are critical elements towards achieving poverty reduction, gender equality, resilience to climate change impacts, low carbon emissions and sustainable development." This remains a crucial motivator to implement transport strategies that move Lesotho towards realising these goals.

The newly developed 2022 transport sector policy considers both current realities, as well as future scenarios in the transport sector, to promote an integrated multimodal transport system over the next 20 years.

1.2 TRANSPORT SECTOR COORDINATION AND ALIGNMENT

The transport sector is cross-cutting by nature and it is required that its standing within the context of the other sectors in Lesotho is understood. In essence, the transport sector supports all social and economic sectors. The NSDP II is a guiding reference in this regard.

The NSDP II articulates a comprehensively defined overarching framework for policy and strategic development planning for all Lesotho economic sectors, on both national and local spheres, and also serves as a framework for the Transport Sector as a whole. This 2022 policy not only supports the NSDP II, but needs to be implemented within the framework of future updates of the NSDP.

In terms of transport as a supporting factor within the defined productive sectors, the NSDP II emphasizes that whilst Key Priority Area I focuses on promoting inclusive and sustainable economic growth and private sector-led job creation, the role of the transport sector is to support these productive sectors:

- Agriculture
- Manufacturing
- Tourism & Creative Industries
- Technology & Innovation
- Mining.

1.3 LINKAGES TO OTHER RELEVANT POLICIES AND LEGISLATIVE DOCUMENTS

Due to the cross-cutting nature of the transport sector, it has to take into account several other policies, frameworks and legislative documents that relate to the transport sector. These include:

- The Constitution of Lesotho 1993
- The National Strategic Development Plan II 2019-2023
- The Public Financial Management and Accountability Act 2011
- The Finance (Road Fund) Regulations, 2012
- The Public Procurement Regulations, 2007
- The Local Government Act 1997
- The Local Government Service Act 2008
- The Roads Directorate Act 2010
- The Lesotho Highlands Development Authority Order 1986
- The Lesotho National Development Corporation Order 1990
- The Communications Act 2012
- The Environment Act 2008
- The Roads Act 1969
- The Road Transport Act 1981
- The Road Transport Regulations 1981
- The Road Traffic Act 1981
- The Road Traffic Regulations 1981
- The Aviation Act 2008
- The Air Navigation Regulations 1980
- The National Environmental Policy, 1998
- The Transport Sector Policy, 2006
- The National Decentralisation Policy, 2014
- The National Investment Policy, 2015
- The Public-Private Partnership Policy, 2017
- The Public Procurement Policy, 2018
- The SADC Protocol on Transport, Communications and Meteorology, 1996
- The SACU Agreement
- The COMESA-EAC-SADC Tripartite Multilateral Cross-Border Road Transport Agreement (MCBRTA).

1.4 CHALLENGES FACING THE TRANSPORT SECTOR

A number of issues and challenges in the transport sector are identified to improve the quality of transport infrastructure and services. For each transport sub-sector and cross-cutting element the following overarching challenges are listed in ***Table 1-1***. Chapter 2 discusses these challenges and issues in more detail, resulting in clear policy direction.

Table 1-1: *Challenges in the Transport Sector*

POLICY PRIORITY AREAS	CHALLENGES
Air Transport	• Department of Civil Aviation fulfils the role of regulator and service provider • Department of Civil Aviation's direct involvement in infrastructure provision • Inadequate funding in aviation subsector • Lack of integration between civil aviation policy and other transport and economic subsectors • Limited attention to air transport and poor airport facilities
Rail Transport	• Limited and unlikely potential for rail transport • The lack of a well-defined institutional rail transport framework • No rail expansion due to lack of economic activity and unfavourable topography • Uncertain future of rail developments in Lesotho, given the status of rail in neighbouring South Africa. Lesotho is highly dependent on the rail developments in South Africa, which has not seen significant improvement and is declining in profile. • The current state of the Maseru Container Terminal is not suitable to support growth in the rail sector • Lesotho is faced with a regional connectivity challenge, highly dependent on its link via the Maseru-Bloemfontein line
Inland Water Transport	• IWT is still marginalised at national level due to lack of a government institution that oversees all aspects of the development of the inland water transport subsector • Lack of safety in IWT sector • Lack of infrastructure to support the operation of ferry boats
Non-motorised Transport	• There is a lack of a clear and comprehensive legal, regulatory and institutional framework to guide the implementation and incorporation of the NMT subsector as a mode of transport • Lack of funding in the NMT subsector, resulting in a lack of adequate planning, design, construction, and maintenance of high-quality NMT infrastructure • Negative perception of the NMT subsector

POLICY PRIORITY AREAS	CHALLENGES
Road Infrastructure	• Updating of existing classification of roads • Updating of road infrastructure subsector legislation • Maintenance of existing roads • Rural access challenges • A lack of adequate public transport facilities and infrastructure • No proper overload control and enforcement in Lesotho • Currently, approximately 90% of the Class A and B roads have pavement conditions that are below minimum standards and 38% of these Class A and B roads are also operating at a below standard Level of Service (LOS)
Road Transport	• Harmonisation of the existing road transport legislation of Lesotho is needed to eliminate the duplication of mandates • There is presently no distinct legislation for public transport • The decentralisation of transport in Lesotho • The incorporation of regional agreements, model laws and regulations into the legislation of Lesotho should be considered • There is a high demand for public transport but a lack of co-ordinated public transport planning and management to ensure optimisation of the most appropriate public transport modes on routes
Road Traffic and other transport operational challenges	• Traffic volumes are pressurized with extreme high volumes of sedan vehicles operating as 4+1's, due to the cheap imports of second-hand vehicles • The transport system is limited to dependence on road transport • Public transport is mostly reliant on the taxi industry, with little government support to sustain needs for poor/special groups • The responsibility for the transport network is fragmented, with budgets across various Ministries and entities, making it very difficult to assess the transport function in a holistic and comprehensive manner. It complicates effective management • Limited and insufficient implementation oversight, and insufficient monitoring and prioritisation • Lack of interaction, coordination and involvement amongst transport sector role-players • A need for centralised planning and implementation, supported by sub-national participation and representation • Data accuracy and availability, including up-to-date financial and operational data, public transport demand and services data, accident statistics specific to roads and locations, complicate assessments and monitoring systems and data to monitor value for money assessment is a crucial gap
Financial challenges	• Fluctuating transport budget allocations and expenditures lead to ineffective financial management and sub-optimal transport development • The transport sector in general is underfunded, mainly as a result of competing priorities for limited resources • New transport infrastructure does not feature as a priority • Unsustainable reliance on donor funding for capital expenditure • Consolidated Fund allocations are unreliable to secure transport network development • Backlogs developed on annual fee increases for Roads Fund sources • Financial instability leads to poor management decision-making, inadequate performance, and oversight • Lack of scientific motivations for budget proposals • Sectoral priorities rely on an efficient transport network • Insufficient funding leads to major backlogs on the road maintenance programme and a much-reduced capital expansion • During economic downturn, budget allocations should not reduce • The Road Fund mandate is limited to the roads sub-sector • User pays principle not properly applied • Road Fund as a mechanism with its main sources of revenue not being exploited to its fullest potential to fund the transport sector • Charge levels for fuel levies, license fees and toll fees are too low compared to SACU countries as a benchmark., mainly due to irregular increases on an annual basis. A restructuring of the charge levels and categories is essential. • A potential imbalance exists in the comprehensive fuel pricing structure • Tolling is the most expensive system to raise funds when applied to the total road network, but at the border posts around Lesotho remain essential

Other cross-cutting challenges	• Undeveloped transport network, including all modes, especially in rural areas, which leads to the transport sector failing to support the other economic sectors • Fragmentation in the transport sector governance structures • Environmental issues relating to second-hand import vehicles and air quality standards • A lack of integration between land use and transport planning functions • Insufficient and not suitably qualified human capital capacities in the transport sector • Clear lack of a transport data digitalisation strategy for Lesotho • Need to consider the impact of electric vehicles and other technology impacts that test the resilience of the transport sector • Need to support Public-Private Partnerships • Clear challenge in road safety in Lesotho. The current state of road safety is not very well managed

1.5 BROAD POLICY GOAL AND OBJECTIVES

1.5.1 Policy Goal

The overarching goal for the Lesotho National Transport Policy 2022 is to support the Vision and Mission of the transport sector as a whole, resulting in sustainable, integrated and efficient transport services and infrastructure to facilitate the economic growth of Lesotho and improve the quality of life of its people.

1.5.2 Policy Objectives

In order to support the overall policy goal, the following broad objectives are summarised, based on which the sub-sector specific policy directions will be formulated:

Transport Infrastructure objectives

1. Ensuring the maintenance of the existing transport network
2. Providing safe NMT and public transport infrastructure
3. Providing rural access infrastructure
4. Ensuring adequate internal and external connectivity that is key in driving economic activity.

Transport Services objectives

5. Ensuring the safe operation of all modes of transport, resulting in the safety of transport users
6. Developing efficient and reliable public transport services
7. Creating a suitable operating environment for efficient freight transport services
8. Promoting inclusive transport services; ensuring accessibility to all road users.

Cross-cutting objectives

9. Securing a sufficient and sustainable funding environment for the transport sector
10. Ensuring responsible financial management and oversight measures
11. Ensuring continued efforts to strengthen capacity-building in the transport sector
12. Ensuring a preparedness for technology applications and smart transport in the sector
13. Increasing transport sector resilience
14. Promoting private sector involvement and investment in transport
15. Protecting the environment by improving vehicle operating standards
16. Ensuring adequate transport sector pricing and funding strategies
17. Develop internal transport funding sources optimally.

1.6 GUIDING PRINCIPLES FOR POLICY DEVELOPMENT

Policy principles are defined as the adopted framework/ basis of action needed to overcome identified challenges and achieve the stated goals/objectives. In other words, policy principles represent the guidelines that should govern the pursuit of the stated goals. They are the guiding philosophy for decisions within the sector.

The following are some principles that align with the overall Lesotho National Transport Sector Masterplan (LNTSMP) objectives, thus highlighting areas of importance that guide the formulation of the updated Transport Policy.

- **Coordination:** The importance of harmonisation in the transport sector is recognised. This includes specifically integration between land use planning, industrial development, environmental protection, climate change and energy provision.
- **Competition:** Transport infrastructure and services will be provided by private, public or public/private operators in a regime of open and transparent competition aimed at increasing efficiency and lowering operational costs.
- **Cost recovery:** Pricing of transport services should encourage the use of sustainable modes of transport, such as walking, cycling and public transport. Users should pay for the real cost of the services they use.
- **Efficiency:** Mobility – this is the most efficient means of moving a large number of people through high-quality, high-capacity public transport. Government should be mode neutral with a focus on measures that expand access to modes with the lowest life cycle costs.

Government should further encourage the most efficient means of goods movement.

- **Safety:** Improvement of safety for urban and rural transport is imperative. City and town streets need to be designed for all transport modes including pedestrians and cyclists. To accommodate NMT, the provision of systematic traffic calming and pedestrian and cycle infrastructure with physical separation is required.
- **Universal access:** The accessibility by all to use transport infrastructure and services, regardless of age or ability.
- **Environmental sustainability:** Considering long term environmental and social impacts is required. The introduction of green transport solutions (where feasible) needs to be driven. This especially applies to public transport and non-motorised transport.
- **Resilience:** Considering risks and how the sector responds to these – related to climate change, extreme weather and national disasters such as the COVID-19 pandemic and other drastic change-inducing developments in the sector, such as technological advancements. New approaches to planning embrace risk-based thinking and favour more robust infrastructure designs, whilst weighing efficiency against resilience.
- **Leveraging the private sector:** Considering a more active participation by the private sector in transport. Part of this is possible private sector investment, driven by adequate and well managed Public-Private Partnerships.
- **Accountability, transparency & service delivery:** Transport services are required to be customer oriented. Service providers are to ensure best use of the available infrastructure & resources. Critical also is to enable monitoring of service provision over time and to encourage open access to transport data, survey reports and the like.
- **Value for money:** Transport services are required to be affordable and provide the most useful and required service. The essence is to meet the needs of the users with the most frugal solution. The same applies to infrastructure provision.
- **Smart transport:** It is critical to acknowledge the role of technology in transport and to continue to utilise the possibilities this presents. This shall be at the core of planning, implementation and monitoring of all transport projects.

1.7 POLICY DEVELOPMENT PROCESS

A brief overview of the policy development process is provided. The updated Lesotho Transport Sector Policy 2022 was developed as part of the Lesotho National Transport Sector Masterplan and was therefore informed by the extensive assessments and analyses conducted as part of the Masterplan development, as well as by extensive stakeholder engagement during the course of the project.

The following steps are outlined as resulting in the formulation of the updated Transport Policy:

1. The status quo transport sector situation was assessed, including extensive stakeholder engagement
2. Background documentation was developed to inform the formulation of policy
3. Strategic direction was set to guide the policy development, including Vision and Mission statements and the overall policy goals and objectives
4. Subsector-specific challenges were identified and policy directions per subsector and crosscutting issue were defined
5. Transport Policy statements and implementation plan arrangements were drafted
6. Transport sector policy was finalised via stakeholder consultations.

1.8 OVERALL TRANSPORT SECTOR POLICY

The general statement of Transport Sector Policy is as follows:

Government will provide an enabling environment for efficient, cost-effective and safe transport within Lesotho, as well as connecting Lesotho regionally and internationally, to support the development of the various economic sectors and to meet the transport needs of the population in general, also taking into account the changing nature of the transport environment and its supporting mechanisms to ensure a resilient transport sector.

The main supporting sub-policies for implementation of the general policy statement are:

a) Establish an institutional structure for the transport sector that is suitable to manage the sector as a specialised function separated from non-aligned government functions, capable to be resilient in a changing and complex technological and financial environment; that will ensure focused and integrated transport development and eliminate functional fragmentation.

This policy statement refers to detailed policy statements for institutional reform (chapter 2.8.4.5 and chapter 3) and addresses more specifically the objectives and issues related to functional fragmentation and integration with cross-cutting government functions that affects transport; also addressing decentralisation versus centralisation, an integrated approach where attention to all transport modes are guaranteed and attended to with more optimal application of scarce human and financial resources.

b) Ensure suitable transport infrastructure development and maintenance for all transport modes at an acceptable standard that will support all national economic and social sectors in an effective way, underpinned by integrated forward planning and an embrace of new technology that is linked to and synchronized with the NSDP and its cycles.

It refers to individual policy statements for each separate mode of transport - road, rail air, inland water and non-motorised transport (chapter 2). It emphasises the role of government to attend to enabling and inclusive transport infrastructure development and maintenance, as compared to the role of private sector to mainly carry responsibility for transport operations. It also emphasises the importance of acceptable standards as departure point to eventually determine the funding and human capital management needs, within a framework of in-time forward planning, implementation and monitoring processes.

c) Establish a financial management environment for the transport sector that will ensure sustainability and effective financial accountability and oversight, self-reliance of sufficient funding sources to ensure transport development and maintenance at acceptable standards.

This policy statement refers to funding and investment policy statements for the transport sector (chapter 2.8.4), with emphasis on stability in the funding environment, more control over internal funding sources through eliminated fragmentation and independence as far as possible from the Consolidated Fund.

d) Introduce public transport as an equal priority and component of the total transport system that has been neglected in the past and has become an essential element to meet the needs of the communities in need of primary means of mobility.

This policy statement refers to detailed policy statements made for land-based public transport (chapter 2.7). A renewed attention to public transport is necessitated by increasing poverty amongst people within a more complex economic and social society, with symptomatic signs of congestion on the roads, little other alternatives to move from point A to B, an increasing unsafe world, and reducing income spending.

e) Secure cost-effective movement of goods to ensure the needs of Lesotho are met in terms of timely access and provision of consumer goods and services, by means of sustainable alternative modes of transport and a suitable quality transport network, with emphasis on alternative forms of goods transport that do not solely dependent on road transport.

The increasing role of road transport, against the backdrop of a diminishing role of rail and air transport, emphasises the strategic risk to the Lesotho economy and its people, in the case of events or crises that could make road transport impossible or not cost effective (e.g. unavailability of diesel fuel), either on a temporary or semi-permanent basis. Essentially, competition amongst modes is always a secure way to optimise cost efficiency of goods movement, thereby fighting affordability and rising inflation. This policy statement effectively also confirms the significant future role of rail and air transport in the Lesotho economy.

2. POLICY PRIORITY AREAS

2.1 STATUS OF THE TRANSPORT SECTOR

Lesotho has a multi-modal system for goods and passenger transport consisting of road, rail, air, inland water transport and intermediate means of transport, which serve a variety of purposes for different people. This chapter is aimed at a review of Lesotho's national transport system in the specific transport subsectors:

i. Air transport
ii. Rail transport
iii. Inland water transport (IWT)
iv. Non-motorised transport (NMT)
v. Road transport
vi. Land-based public transport
vii. Transport sector funding
viii. Other cross-cutting issues.

For each subsector, the following approach is used:

a) Transport subsector status
b) Identified issues
c) Policy directions within each subsector
d) Specific policy statements.

2.2 AIR TRANSPORT

2.2.1 Status

Lesotho's geographical location makes air transport vital for business, trade and tourism, as it provides a link for regional integration and connectivity with international markets. Additionally, it provides connectivity to rural areas where other modes of transport are insufficient or non-existent. Thus, the role of air transport in Lesotho can be stated to facilitate regional and international connectivity as well as local linkages to support especially business travel and the tourism and health sectors by providing a faster, more direct transport mode.

Traditionally, the overarching role of government was to provide all necessary air transport-related infrastructure and facilities and to regulate air traffic. The role of the private sector was and still is to provide air transport services, using the facilities provided by government. By exception, the public sector may provide air transport services for military, medical and other social purposes, and the private sector may provide its own private air transport-related facilities.

The Department of Civil Aviation (DCA) in the Ministry of Public Works and Transport is responsible for the administration of the subsector, including policy and planning, regulation and airport service provision. Currently, Moshoeshoe I International Airport (MIA) is the only international airport. Mokhotlong and Qacha's Nek airports serve as the two regional airports while several aerodromes are spread throughout the country. The deteriorated condition of most air transport-related infrastructure suggests a general lack of maintenance and in some instances, total neglect. Budget constraints, an inadequate management system and an overall lack of human capital are contributing factors to the deterioration of the infrastructure.

Airlink, a privately-owned South African registered airline, provides the only scheduled international air transport service between MIA and OR Tambo International Airport (ORTIA). Currently, there are no scheduled domestic air transport services. Non-scheduled domestic air transport services are provided by Lesotho Flying Doctors Service (Mission Aviation Fellowship), Mohahlaula airlines, MGC Aviation and the Lesotho Defence Force. Both domestic and international air transport services have declined as a result of the COVID-19 pandemic and the poor state of airport infrastructure.

2.2.2 Issues

2.2.2.1 DCA as a regulator and service provider

DCA serves as a regulator and service provider. The result has been weak administration of the legal and regulatory framework due to possible conflict of interest. Combining regulatory and service provision functions in one institution is problematic as it causes conflicting issues to be overlooked, especially with regard to civil aviation safety matters.

2.2.2.2 Lack of economies of scale

The low air traffic volumes complicate a sustainable private sector civil aviation industry given the lack of economies of scale. It is equally applicable to a suitable institutional framework within government to establish and sustain a DCA structure that is effective whilst the air traffic volumes are so low.

2.2.2.3 DCA's direct involvement in airport infrastructure provision

DCA is directly responsible for the provision and operation of airport infrastructure. By virtue of its monopolistic position, DCA tends to protect airport infrastructure and services from competition. It does not have any incentive to operate airport infrastructure efficiently and with sufficient flexibility to meet users' needs. In summary, the current institutional framework is not conducive to liberalisation and commercialisation as DCA lacks the independence in decision-making and therefore cannot easily attract private sector investment.

2.2.2.4 Inadequate funding

The lack of adequate and stable funding for the effective maintenance of air transport-related infrastructure at domestic and international airports is recognised, which is mainly linked to the issue around the lack of economies of scale as well as the general global and regional financial sustainability problems within civil aviation generally. This has resulted in substandard infrastructure that fails to meet the ICAO Standards and Recommended Practices (SARPs) for civil aviation safety.

In addition, policy implementation capacity is low due to a lack of resources, insufficient technical skills and the general marginalisation of the air transport subsector. It is evident that these key issues contribute to the dilapidated state of international and regional airports.

2.2.2.5 Lack of differentiation between roles of public and private sectors

The current differentiation of the roles of the private and public sectors in air transport is not clearly defined and managed. The private sector should be responsible for air transport service provision and the public sector should support this with adequate and necessary air transport-related infrastructure and regulatory controls.

2.2.2.6 Low air traffic volumes

The slow recovery post COVID-19 of air transport in the regional context has a direct impact on the air transport mode in Lesotho. There are lower air traffic volumes generally in the greater region, but also more pertinently to MIA since international routes are not connecting via this airport. The ripple effect is that the air transport in Lesotho is very limited, which in turn is further disrupted by deteriorated facilities and lack of funding. Due to the limited landing fees generated at MIA, funding requirements for air transport in Lesotho will have to be generated in alternative ways. Ultimately, it would be dependent on allocations from the Ministry of Finance, and accordingly become one competing subsector amongst many other sectors.

2.2.3 Policy Directions

The policy directions for air transport are:

1. It is confirmed that the responsibility of private sector to provide air transport services of any nature, with public sector/government to provide all necessary infrastructure and regulatory controls.
2. Air traffic control is essentially a regulatory function to be provided by government, but may be executed as a Public-Private Partnership arrangement to ensure both government regulatory oversight as well as private sector investment and operational functions.
3. Funding of air transport facilities should as far as possible be via overflight, landing and stopover fees and airport commercial activities. Should the revenues of these sources not be sufficient, additional Consolidated Fund allocations should be appropriated.
4. A first priority for funding should be to ensure regulatory controls that conform to international requirements. The second priority is to upgrade and maintain MIA to ICAO SARPs and to market Mokhotlong and Qacha's Nek airports once the required infrastructure is in place.
5. To establish a framework for the development of a vibrant and sustainable air transport service that is capable of harnessing both regional and domestic potential and fostering regional economic integration.
6. To facilitate the growth of safe, reliable and efficient air transport services that are geared towards meeting the growing transport needs of the Southern African economies in general and the Lesotho economy in particular.
7. To ensure that air transport realises its mandate as a catalyst for economic growth and poverty reduction by boosting tourism and promoting access to scarce socio-economic services amongst communities in remote areas of Lesotho.
8. To ensure that air transport assumes its appropriate role in an integrated transport system where the various modes of transport act in a complimentary manner to meet the development needs of the country in the most effective and efficient way.
9. To facilitate the provision of health services and medical response by means of air transport.
10. Consideration should be given to the implementation of new technologies to satisfy certain needs such as the transport by air of medical supplies via drones.

2.2.4 Policy Statements

The overall Air Transport Policy is stated as follows:

To provide a mode of transport that supports international tourism and business purposes, as well as local connectivity for specialised reasons such as health services, via a safe, reliable and efficient service that meets the needs of the economy and people of Lesotho according to ICAO Standards and Recommended Practices (SARPs) and other international agreements.

The specific subpolicies that support the above statement are:

a) Confirming the future development and sustaining of air transport as a mode in Lesotho, including the specific role of the public sector to provide all infrastructure and regulatory controls; and the role of private sector in the provision of the air transport services for Lesotho.

The role of the public sector is one of providing the infrastructure and regulatory environment to support the air transport subsector, whilst the private sector should lead the service provision thereof. Operation of domestic air transport services on a commercial basis should be encouraged.

b) Maintaining Moshoeshoe I International Airport and supporting its role in facilitating international and domestic air transport services in Lesotho.

Moshoeshoe I International Airport is the centre point for air transport in Lesotho and must be maintained to the appropriate international technical and safety standards, serving as a key international linkage for tourism and business travel, and also to be the base linkage point for all domestic air transport services within Lesotho.

Against the dwindling air traffic in Lesotho over the last few years, partly as a result of COVID-19 and reducing economic growth, a broadened perspective of the utilisation of air transport at MIA should be obtained, to possibly expand on commercialisation activities.

c) Ensuring adequate institutional arrangements and regulation in the air transport subsector

The Department of Civil Aviation will continue as the administrator and regulator (privatising this function is also an option) and service provision will lie within the private sector. All relevant legislation needs to be kept up to date. The operations of the three main Lesotho airports may be a suitable candidate for PPP agreements with current successful regional enterprises.

d) Investigate additional ways of funding to support the mode, above and beyond the current funding mechanisms.

Where the funding of air transport facilities is not adequately covered by landing fees and airport commercial activities, motivations for sufficient Consolidated Fund allocations is the main alternative to fund any future airport developments. It also emphasizes the need to promote increased air traffic to develop own internal funding sources. However, the role of air transport needs a capital injection to increase the current image of the mode.

e) Support the facilitation of UAVs and other new technology in the subsector to ensure more cost-effective mechanisms of accessibility to rural and remote communities.

The continuous advancements of technology allow for innovative application of service provision, also in the air transport subsector. The possibilities in this regard need to be carefully considered, especially the provision of health services to remote locations via UAVs. Other air transport modes that do not require an extensive landing field also need to be investigated.

2.3 RAIL TRANSPORT

2.3.1 Status

Rail transport remains the most cost-effective mode of transport for exports and imports of bulk commodities and containerised goods such as maize, cement, fuel and flour. The Maseru-Bloemfontein railway line is a strategic regional link which connects Lesotho to the South African ports of Durban, East London, Port Elizabeth and Cape Town and inland economic hubs and metropolitan centres such as Gauteng and Bloemfontein. The role of rail transport in Lesotho, therefore, should primarily be one of facilitating economic activity by the movement of large quantities of goods and passengers.

All functions, including policy, planning, regulation and operations, relating to Lesotho's rail transport system and inland port are the responsibility of the Ministry of Public Works and Transport. However, there is currently no specific department within the Ministry assuming this responsibility.

Lesotho's rail network consists of a 2.5km line from Maseru Bridge to Maseru Station and other sidings in the Maseru Industrial Area and Maseru Container Terminal (Mascon). Mascon is a large-scale freight hub in Maseru that is interlinked to both the rail and road transport networks. The terminal provides a customs clearing facility and has improved the movement of import and export goods. Currently, a private service provider, Katleho Logistics (Pty) Ltd, manages the facility under direct supervision of the Ministry of Public Works and Transport.

Lesotho's rail transport service is managed by Transnet Freight Rail, a South African state-owned company. The only freight rail transport service that is available on a regular basis is a freight line from Maseru rail station to Bloemfontein. Currently, no passenger transport services are provided.

2.3.2 Issues

2.3.2.1 Institutional arrangements

The lack of a well-defined institutional framework has contributed to the slow development of rail transport in Lesotho. This resulted in several of the infrastructure development projects proposed in TSP 2006 not being implemented.

2.3.2.2 Lack of economies of scale

In addition to the difficult geographic terrain of Lesotho generally, that makes the expansion of the rail transport network extremely difficult and expensive, the lack of economies of scale has contributed to the slow development of rail transport in Lesotho. This resulted in several of the infrastructure development projects proposed in TSP 2006 not being implemented.

Given the domination of road transport in Lesotho, and the technical physical terrain complexities for rail transport to be developed fully, the low rail traffic volumes create a problem for proper economies of scale, leading to rail transport as a mode that may not be competitive in Lesotho, unless the rail transport operator is a "subsidiary" operator of the South African operations. Nevertheless, the rail transport facilities within Lesotho would remain to be internal assets, but should be made available to external operators.

At present, it appears unlikely that there will be immediate developments at the Maseru Container Terminal (MASCON) due to inadequate technical and resource capacity. Arrangements with the service providers, Transnet Freight Rail and Katleho Logistics, are also not clear.

TSP 2006 anticipated several turnaround initiatives in the rail transport subsector that included, among others, a closer liaison of stakeholders, coordinated planning that would be aimed at integrating rail transport with other transport modes, encouraging private investment in the provision of upgraded rail transport facilities, and the creation of a dry or inland port for international rail freight. None of these initiatives has taken off due to lack of clarity on policy, the absence of a clearly defined institutional framework and poor funding.

2.3.2.3 No expansion due to lack of economic activity and unfavourable topography

The extension of the current rail transport infrastructure is severely constrained by topography-related high capital costs, low concentrations of the population to fully utilize capacity and the absence of industries that can produce enough volumes to utilize bulk freight capacity efficiently.
Loss of prospective rail transport customers due to charges levied at the rail head, uncertain and long transit times from South African ports to Maseru, and delays in local delivery due to shortage of rolling stock and dilapidated handling equipment, further contribute to the challenge.

2.3.2.4 Uncertain future of rail development in Lesotho

While the extension of the current rail transport infrastructure and the introduction of new rail transport services seem desirable, indications are that these may not be economically and financially viable in the short to medium-term. The extension of the current rail transport infrastructure to the rest of Lesotho is severely constrained by topography-related high capital costs and low concentrations of the population to fully utilise capacity. Additionally, the absence of industries that can produce sufficient volumes to utilize bulk freight capacity efficiently further hinders rail transport expansion.

2.3.2.5 Maseru Container Terminal

MASCON is currently operating with rudimentary equipment and limited capacity. This results in inefficiencies that have given rise to the increased use of road transport as an alternative and thus hampering the development and growth of the rail transport mode.

While MASCON needs to be operated as a commercially viable entity, it is unlikely that user charges on the present levels of traffic would make a significant contribution towards the capital costs of improving the facilities.

2.3.2.6 Current rail transport developments in South Africa

All the issues listed above may be attributed to the low economies of scale of rail movements in Lesotho and the minimal rail transport network. However, the general decline in the rail transport industry on a regional basis, mainly within South Africa, is also indirectly the reason for the current local situation. Unless a total turnaround in the regional profile takes place, there is little prospect for rail transport growth in Lesotho.

The Maseru-Bloemfontein railway line is not one of the primary corridors in the Transnet Freight Rail system since it is lightly trafficked and not in line with this organisation's commercialisation objectives. On the other hand, the Maseru-Bloemfontein line has a critical regional importance to Lesotho as it connects the country to ports and inland economic hubs in South Africa.

Further to this, increasing vandalism and cable theft in South Africa constantly hamper the development of rail transport, thus also affecting the Maseru-Bloemfontein railway line.

2.3.2.7 Current Regional Connectivity

A major challenge for rail transport development in Lesotho is the lack of regional connectivity to the current state of rail transport developments in South Africa and the overall regional development objectives. Without clear intervention in this regard, the growth of rail transport in Lesotho will be severely challenged.

The most desirable option for regional rail transport connectivity is to ensure a direct link to the Durban Harbour. Yet this option is severely constrained by the topography of Lesotho and will only be feasible if there is sufficient economic development potential to support such a project.

2.3.3 Policy Directions

The policy directions for rail transport are:

1. From a strategic point of view, it is important that Lesotho is not entirely dependent on road transport only, and that a rail transport connectivity should always be available as an alternative. For this reason, the current status quo must be maintained and preferably be expanded.
2. To facilitate the integration of Lesotho into the regional rail transport network in line with the international guidelines contained in the 2003 Almaty Programme of Action and the 1996 SADC Protocol on Transport, Communications and Meteorology.
3. To transform MASCON into a strategic mode interchange that is required for the effective integration of rail transport into Lesotho's transport system in general and Lesotho's road transport system in particular. MASCON may be executed as a Public-Private Partnership arrangement to ensure both government regulatory oversight as well as private sector investment and operational functions.
4. To improve service provision by creating an institutional framework whose responsibility will be to increase the contribution of rail transport to the economy

through the planning of the rail transport subsector physical developments, ensuring that the needs and requirements of rail transport users are addressed and coordinating service provision.

5. To restore the role of rail transport as a competitive, cost-effective, safe and efficient transport system that is less damaging to the road network and the environment and is an important driver of economic growth and development in the country.

2.3.4 Policy Statements

The overall Rail Transport Policy is stated as follows:

To ensure a safe, efficient, and effective rail transport mode that supports and facilitates economic growth by providing greater regional connectivity for the transport of goods and people.

The specific sub-policies that support the above statement are:

a) Improving the regional connectivity of rail transport to reduce the absolute reliance on road transport by recognising the strategic importance of the alternative rail transport mode.

There is a clear requirement to reduce the absolute reliance of goods transport on road transport only. The strategic importance of rail as an alternative mode needs to be highlighted. In order to realise this, the regional connectivity of Lesotho via rail transport needs to be improved. A key factor in this is the reviving and maintenance of the Maseru-Bloemfontein rail link.

A direct link with the Durban harbour would be most advantageous and will reduce the cost of imports drastically, but considering financial viability and the difficulty of the mountainous terrain in Lesotho, the direct financial feasibility of such corridor is highly questionable. However, the importance of an international through corridor linking Bloemfontein via Maseru to Durban may provide a massive economic development opportunity and will introduce rural economic development opportunities and cost-effective imports.

Nevertheless, the Maseru-Bloemfontein link is critical to maintain as an alternative to road transportation. The most optimal solution to the regional connectivity challenge needs to be identified and implemented, with emphasis also to an expanding rail network, potentially to the north-east of Maseru. Such an extension is vitally important to increase the economies of scale of the rail network.

b) Assign clear institutional responsibility of the management and coordination of the rail transport mode.

The institutional responsibility of the rail transport subsector needs to be retained within the Ministry of Public Works and Transport. At present, given the minute role of rail responsibilities, the low rail traffic and the small footprint of rail offering little economies of scale, a responsible line function/sub directorate should be retained to take care of all rail operations, as opposed to a specialised directorate in the Ministry.

c) Ensure investment into the Maseru Container Terminal and associated infrastructure to improve terminal processing of international rail freight transport.

To improve and maintain the MASCON terminal and dry port facilities to process international rail freight transport more efficiently. This links with an increased utilisation of the rail mode upon reviving the regional connectivity in this regard. Continuous evaluation of the capacity and processing requirements of the terminal needs to be conducted.

d) Investigate the feasibility of supporting local linkages of rail to new industrial development zones.

The possible extension of rail infrastructure to new industrial development zones must be investigated, whilst taking into consideration the policy statements in section 2.9.2 dealing with integrated land use and transportation planning.

2.4 INLAND WATER TRANSPORT

2.4.1 Status

Inland water transport (IWT) plays a vital role in providing connectivity to isolated communities to access social amenities and economic opportunities. A significant proportion of the communities in the highlands typically cross rivers for access to basic amenities and economic opportunities. Other forms of IWT include boats and ferries at the Katse, Mohale and other smaller dams across the country, primarily for leisure and fish farming ventures.

The Department of Traffic and Transport (DTT) in the Ministry of Public Works and Transport is responsible for the supply and operation of the low-capacity ferry boats, typically placed at strategic locations along the Malibamatso, Senqu and Senqunyane Rivers. Lesotho Highlands Development Authority (LHDA) has formulated a set of inland water transport regulations whose major objective is to promote safety and protect water quality and the environment. However, this move has not influenced the development of a legislative and regulatory framework for inland water transport at the national level.

2.4.2 Issues

2.4.2.1 Institutional arrangement

DTT has improved the coordination of the ferry boats programme as recommended in TSP 2006 by expanding the mandate of their administrator to include the monitoring of operations and the provision of ferry boat services,

where required. However, there is no control or oversight of private ferry boat operations. It is evident that IWT is still marginalised at national level due to lack of a legal entity or department that oversees all aspects of the development of this subsector.

2.4.2.2 Safety Issues

There is no formal registration system for ferry boats that operate in remote regions of the country. Similarly, there is no formal programme for regular inspections for vessel safety ratings and inspections. Incidents due to unsafe vessels or operations may occur, which may result in injuries or fatalities of passengers and operators.

Current operations are mostly performed by single operator row boats. Alternative methods should be considered, such as cabled pontoon ferries at those locations with adequate traffic. These could be operated manually or via motorised mechanisms.

2.4.2.3 Infrastructure to improve safety and accessibility

There is a need for infrastructure, such as concrete stairs and steel hand rails, to provide improved accessibility to the ferries at the place of landing, as well as secured cabled pontoon facilities. Additionally, when it comes to access to these services, they are generally not well positioned or connected to provide accessibility to other transport modes, such as air strips and roads.

Also, there are no general facilities provided at the places of landing, including adequate storage and maintenance facilities of the equipment.

2.4.3 Policy Directions

The policy directions for IWT are:

1. To ensure that the IWT subsector, as a provider of affordable transport, grows into a powerful tool in poverty alleviation with the ability to promote access to scarce socio-economic services amongst communities in the remote areas of Lesotho and amongst those in peri-urban areas where there is a concentration of poor households.
2. To mainstream IWT infrastructure and services in the Ministry of Public Works and Transport's social agenda and amongst programmes of the Ministry of Local Government and Chieftainship Affairs and local authorities as a critical and affordable strategy for poverty intervention amongst local communities.
3. To improve the subsector's contribution to the economy by setting up standards and comprehensive planning for, and implementation of IWT infrastructure and services and therefore improving the safety of pedestrians, lowering pedestrian deaths, promoting safe travel amongst rural and urban communities, and reducing traffic congestion on urban roads.
4. To improve the quality and dependability of IWT infrastructure and services as a strategy to improve the integration of various modes of transport in the country.
5. To improve IWT infrastructure provision and ferry sites for the storage of equipment.
6. To facilitate IWT infrastructure provision related to improved accessibility to ferries, such as concrete stairs and steel hand rails.

2.4.4 Policy Statements

The overall IWT Policy is stated as follows:

To provide safe, efficient, economical, and environmentally sustainable inland water transport facilities and services.

The specific subpolicies that support the above statement are:

a) Developing and implementing an inland water transport policy and legislation.

Specific water transport legislation does not exist. There is a need to develop appropriate policy and legislation to ensure that water transport is conducted in a safe and efficient manner. The concern of safety regarding access and operation of the service needs to be addressed, as well as possible environmental impact.

b) Assign clear institutional responsibility of the management and coordination of the inland water transport mode.

IWT is still marginalised at national level due to lack of a legal entity or department that oversees all aspects of the development of the inland water transport subsector. This relates specially to supporting infrastructure provision and the control and oversight of private ferry boat operations.

c) Create institutional capacity for decentralised ferry boat operations.

Ferry boat operations and related infrastructure will be decentralised to local government. The Ministry of Local Government and Chieftainship Affairs should ensure that the transfer is followed by the necessary institutional capacity.

d) Provide river crossings of major rivers at strategic locations where preferred bridge crossings are not present, as a means of more safe access across rivers. Alternatively, pontoon facilities should be provided.

The current method of river crossings is not considered to be safe to users of these services, although it remains essential to provide access to inaccessible areas. More safe infrastructure needs to be put in place by the Ministry to ensure the safe access and operation of the services, such as pedestrian bridge crossings or pontoon services with

secured concrete anchor points and steel cables to support ferry crossings. Accordingly, the possibilities of pontoon ferries need to be considered as a more stable and reliable and safe crossing mechanism, whilst continuing preference to bridge crossings remains to be investigated where these bridge crossings may be feasible.

e) Facilitate the commercial operation of ferries across rivers and lakes.

Investigate anew the possibility of contracting the provision of ferry boat operations out to the private sector, to be implemented under the new legislation. Pontoon services may offer PPP opportunities to the local population.

2.5 NON-MOTORISED TRANSPORT

The term "Intermediate Means of Transport (IMT)" was previously used to describe modes of transport other than road, rail, air and inland water transport that supports the formal sector of the economy. The term covered both non-motorised transport and unconventional motorised transport and included:

- Walking and head porterage (carrying goods on the head by pedestrians) as the main means of individual transport for many of the poorest section of society
- Riding of bicycles, horses, ponies and donkeys (and the use of animal drawn carts)
- Use of motorised vehicles that are smaller than the conventional motor vehicle, including normal motorcycles, three and four-wheeled motorcycles (motor tri-cycles and quad-cycles) and motorised agricultural machinery adapted to be used for transport (usually two wheeled ploughing machines fitted with a trailer)
- Any other innovative, inexpensive design facilitating low-cost transport.

Reference is no longer made to "Intermediate Means of Transport", but rather only to non-motorised transport (NMT). All other unconventional types of motorised transport fall under road transport directly.

2.5.1 Status

Lesotho's NMT consists of walking, cycling, riding animals, and using animal-drawn carts to access social amenities and economic opportunities. NMT is best suited for short distances involving little exertion. However, due to lack of alternatives and in some cases, affordability, long distances are also performed using NMT. NMT positions itself as an affordable, convenient, and environmentally friendly alternative, offering health benefits and reductions in greenhouse gas emissions to the majority of the population.

NMT is an extremely important transport mode and plays a vital role in the overall transport needs of the population. This is often overlooked, leading to a lack of integrated planning and foresight when it comes to including NMT strategically in the wider transport sector.

Rural, peri-urban and urban areas are characterised by different forms of NMT. Walking, ridden animals and animal drawn carts are more common in rural and peri-urban areas whilst cycling and walking are popular in urban areas.

The Ministry of Public Works and Transport is responsible for policy and strategy formulation as well as the development of standards for access roads and footbridges. As custodian of several town planning policies and legislation, the Ministry of Local Government and Chieftainship Affairs fulfils a crucial role in the development of NMT in rural and urban areas.

Several institutions are involved in the implementation process. As NMT is closely linked to the road transport subsector, the responsibility of NMT infrastructure provision also follows the institution responsible for road infrastructure provision. The Roads Directorate is responsible for the provision of NMT infrastructure along the national road transport network whilst Maseru City Council and district councils are responsible for NMT infrastructure within their respective jurisdictions. NMT services across the country are provided by citizens themselves.

2.5.2 Issues

2.5.2.1 Institutional, Legal and Regulatory Issues

There is a lack of a clear and comprehensive legal, regulatory and institutional framework that outlines the responsibilities for the planning and implementation of NMT infrastructure, defining NMT infrastructure standards and specifying control mechanisms for ensuring compliance. There is also no legal framework for guiding the integration of NMT with other modes of transport, in particular public transport.

2.5.2.2 Lack of Funding

Closely related to the institutional, legal and regulatory issues, the absence of an institutional home for NMT has resulted in the lack of a standing budget for this transport mode. The lack of funding has resulted in difficulties in attracting and retaining the crucial technical skills required for the planning, designing, construction and maintenance of high-quality NMT infrastructure.

2.5.2.3 Neglected state of the subsector

There is a lack of education and awareness about the importance and benefits of NMT as a transport mode. The strategic importance of NMT as a critical mode of promoting access to economic opportunities and social amenities is not widely appreciated.

2.5.3 Policy Directions

The policy directions for NMT are:

1. To ensure that the NMT subsector, as a provider of affordable transport, grows into a powerful tool in poverty alleviation, with the ability to promote access to scarce socio-economic services amongst communities in remote areas of Lesotho and amongst those in peri-urban areas where there is a concentration of poor households.
2. To mainstream NMT infrastructure and services in the Ministry of Public Works and Transport's social agenda and amongst programmes of the Ministry of Local Government and Chieftainship Affairs and local authorities as a critical and affordable strategy for poverty intervention amongst local communities.
3. To improve the subsector's contribution to the economy by setting up standards and comprehensive planning for, and implementation and maintenance of NMT infrastructure and services and therefore improving the safety of pedestrians, lowering pedestrian deaths, promoting safe travel amongst rural and urban communities and reducing traffic congestion on urban roads.
4. To improve the quality and dependability of NMT infrastructure and services as a strategy to improve the integration of various modes of transport in the country.
5. To drive the formalisation of adequate NMT walkways and infrastructure through the establishment of NMT plans.
6. To improve universal access through eliminating and reducing physical barriers through the application of design principles to ensure transport infrastructure and services are accessible to and as all-inclusive to as many people as possible, especially those with special physical and mental needs.
7. To embrace the opportunities offered through new technologies in NMT, especially electrified forms of NMT for individual personal travel.

2.5.4 Policy Statements

The overall NMT Policy is stated as follows:

To facilitate transport planning that integrates the non-motorised transport mode and to provide appropriate non-motorised transport infrastructure to suit the need of the population.

The specific subpolicies that support the above statement are:

a) Assign clear institutional responsibility for the management and coordination of the non-motorised transport mode.

Several institutions are responsible for the provision of NMT infrastructure within different application scenarios. The clear coordination and institutional responsibility for this mode has to be allocated.

b) Mainstream the inclusion of non-motorised transport infrastructure in any new infrastructure planning projects.

It is vital that the provision of NMT infrastructure is incorporated in any new infrastructure planning projects. In a country where NMT plays such a critical role, it is an absolute necessity to adequately include this mode more holistically and to mainstream the provision of appropriate NMT infrastructure as a norm, especially including infrastructure design principles aimed at improving accessibility for people with special physical and mental needs. A critical part of this is the appropriate update of the Roads and Bridges design standards to more fully incorporate NMT.

c) Prepare non-motorised transport strategies or plans for the specific urban and rural contexts.

In order to appropriately accommodate non-motorised transport in future planning, it is a necessity to understand the specific requirements and needs within different contexts and to then provide specific implementation goals. This will be done via the individual preparation of NMT Plans for the Maseru City context as well as typical rural application context.

2.6 ROAD TRANSPORT SUBSECTOR

The road transport subsector consists of three components as follows:

- Road transport infrastructure, being the infrastructure provided to support/enable road transport, including paved and unpaved roads, bridges, footbridges, and public transport ranks and stops
- Road transport operations, being the movement of people and goods, including private and public transport and freight
- Road traffic, being safety, security, order, discipline including dealing with vehicle standards/ roadworthiness, licensing, registration, traffic operations and control.

Each of the above three categories of road transport presents its own challenges and unique circumstances that require specialised management and funding arrangements.

Road-based public transport is discussed in a separate section (as opposed to being discussed under road transport directly) to highlight the importance of public transport in Lesotho.

2.6.1 Road Transport Infrastructure

The Roads Act 1969 is the principal legal instrument governing roads, and this is supplemented by the Local Government Act of 1997 dealing with urban roads, and the SADC Protocol on Transport, Communications and Meteorology 1996. The Protocol provides mainly for regional harmonization of standards and objectives, especially for the regional trunk road network. The Roads Act provides for the definition of

roads, the classification and gazetting of roads, the provision of road servitudes and the acquisition of land for the purposes of road building, as well as for maintenance and construction of roads.

The road infrastructure consists of four classes of roads as follows:

- **Class A road** – primary or trunk roads, providing linkage between major towns, district centres and border posts. These routes are designed for mobility of motorised transport and are of national and international importance, providing key economic corridors within Lesotho and linkage to South Africa. All these roads are of economic importance for tourism and the following Class A roads provide an economic corridor to other sectors as follows:
  - A1 – Mining, Manufacture and Agriculture
  - A2 – Agriculture
  - A8 – Mining.
- **Class B road** – secondary or district roads, providing additional linkage between adjacent districts and local centres to the primary road transport network. These routes are also designed for mobility.
- **Class A and B roads** provide a high degree of mobility for longer trips and higher design speeds, terrain permitting.
- **Class C road** – tertiary of sub-district roads providing additional connections within districts and accessing secondary or primary roads. The roads accommodate shorter trips with a degree of mobility whilst also providing access to abutting properties, so an intermediate design speed (terrain permitting), is applicable.
- **Class D road** – access roads to one or more villages or settlements – primary function is to provide access and relatively short trips, so a low design speed is applicable to these roads.
- **Rural Access** – Class D roads and infrastructure for non-motorised transport (NMT) including bridles, footpaths, and footbridges.

2.6.1.1 Status

2.6.1.1.1 Road Transport Network

The total road transport network length, as of the base year 2020, is 6 792km and has the following surfacing types and extent:

- 1 736 km paved
- 3 694 km gravel
- 1 280 km earth
- 82 km track.

Since 2020, parts of the A4 and B16 were upgraded from gravel to paved, resulting in the paved length of the road network increasing to 1 877 km and the gravel network reducing to 3 552 km, by the end of 2022.

Furthermore, approximately 15% of the gravel road network carry more than 300 vehicles per day, which is typically the threshold when surfacing a road is more economically viable over a 20 years horizon than maintaining a gravel road, at the resultant rate of gravel loss. It should also be noted that approximately 40% of the earth and gravel roads have grades exceeding 6%, which means these roads will be prone to erosion.

Table 2-1: Length of roads per Surfacing Type and Class (2020)

CLASS	Total (Km)	% Of Network	Paved		Gravel		Earth		Track	
			Km	%	Km	%	Km	%	Km	%
A	1517.9	22%	1174.1	77%	330	22%	13.8	1%	0	0%
B	1414.0	21%	472.0	33%	858.4	61%	74.3	5%	9.3	1%
C	593.5	9%	80.8	14%	394.6	66%	106.5	18%	11.6	2%
D	3267.0	48%	9.2	0%	2111.1	65%	1085.5	33%	61.2	2%
	6792.4	**100%**	**1736.1**	26%	**3694.1**	54%	**1280.1**	19%	**82.1**	1%

As seen in ***Table 2-1***, almost half the road network is made up of Class D, access roads and less than 10% of the road network consists of Class C, connector roads. This is largely due to the topography of Lesotho which constrains the ability for consistent development across the country. Rather development is concentrated in the flatter areas and then sparse, low density rural settlements in the rural areas.

It can also be seen that 77% of the Primary A roads are paved, as of 2020 and this will have increased to 83% by the end of 2022. Approximately two thirds of the Class B, C and D roads are gravel. However, the Class C and D roads also comprise of a fair amount of earth roads, being 18% and 33% respectively, which could in many instances be providing access more for NMT than motorised transport.

Table 2-2: Length of Roads per Surfacing Type and Zoning (2020)

ZONING	Total (Km)	% of Network	Paved		Gravel		Earth		Track	
			km	%	km	%	km	%	km	%
Urban	915.6	13%	520.2	57%	366.1	40%	13.8	3%	0.0	0%
Peri-urban	161.2	2%	109.8	68%	47.9	30%	74.3	2%	0.0	1%
Rural	5715.6	84%	1106.1	19%	3280.1	57%	106.5	22%	82.1	2%
	6792.4	100%	**1736.1**	26%	**3694.1**	54%	**1280.1**	19%	**82.1**	1%

As seen in ***Table 2-2***, the bulk of the road network is rural (84%), which comprises mainly unpaved roads with only 19% being paved. The urban and peri-urban roads, however, have more paved roads than unpaved.

Table 2-3: Length of Road per Surface Type and District

DISTRICT	Pop Total	Road Length	Paved	Gravel	Earth/Track	Capita/Km
Berea	262 020	633.8	176.0	359.7	98.1	0.0024
Botha-Bothe	118 176	500.1	116.8	228.8	154.5	0.0042
Leribe	338 672	876.0	305.7	487.2	83.1	0.0026
Mafeteng	178 124	710.5	180.0	423.0	107.5	0.0040
Maseru	520 758	1056.9	415.0	463.5	178.4	0.0020
Mohale's Hoek	165 716	714.0	115.8	449.8	148.4	0.0043
Mokhotlong	100 736	530.2	124.1	187.7	218.4	0.0053
Qacha 's Nek	76 211	487.7	79.1	345.3	63.3	0.0064
Quthing	115 422	642.7	135.4	365.7	141.6	0.0056
Thaba-Tseka	133 639	626.2	88.2	383.4	154.6	0.0047
	2 009 474	**6778.1**	**1736.1**	**3694.1**	**1347.9**	**0.0034**

As shown in ***Table 2-3***, the largest road network is situated in the Maseru District, followed by the Leribe District. Whilst 26% of the overall Lesotho road network is paved, approximately 40% of the roads in Maseru District are paved. Furthermore, the western districts (Maseru, Leribe and Berea) have a more extensive road network in proportion to the district's population than the other districts, with the Qacha's Nek District having the least network or highest Capita / km of road network.

Table 2-4: Length of Road per Surface Type and Authority

AUTHORITY	Total (Km)	% Of Network	Paved		Gravel		Earth		Track	
			Km	%	Km	%	Km	%	Km	%
Roads Directorate	2494.3	37%	1413.3	57%	984.6	39%	87	3%	9.4	0%
Dept. Rural Roads	3028.7	45%	53.5	2%	1894.7	63%	1007.8	33%	72.7	2%
Maseru	741.5	11%	125.5	17%	463.5	63%	152.5	21%	0	0%
Local Government	528.0	8%	143.8	27%	351.3	67%	32.9	6%	0	0%
	6792.5	**100%**	**1736.1**	26%	**3694.1**	54%	**1280.2**	19%	**82.1**	1%

Table 2-4 provides an indication of the road network composition managed by the respective road agencies, where it is evident that the bulk of the road network managed by the Roads Directorate are paved roads whereas the other three road agencies are mainly managing gravel and earth roads.

Table 2-5: Road Condition Rating per Roads Agency

	Excellent	Good	Fair	Poor	Very Poor
Roads Directorate					
Paved	8%	6%	41%	33%	12%
Unpaved	0%	2%	14%	31%	53%
Department Rural Roads					
Paved	0%	39%	16%	2%	43%
Unpaved	0%	6%	10%	15%	69%
Maseru					
Paved	0%	1%	62%	32%	4%
Unpaved	0%	7%	17%	28%	47%
Local Government					
Paved	2%	7%	40%	42%	8%
Unpaved	0%	6%	9%	28%	57%

As shown in ***Table 2-5***, most of the paved roads managed by the Roads Directorate, which are the Class A and rural Class B roads are in fair to poor condition, whereas high mobility roads are required to be in excellent condition. The balance of the Class C and D roads under the other roads agencies have a condition classification of good to poor, where the minimum required standard is fair. Therefore, approximately half the Class C and D paved roads meet the minimum standards.

Most of the gravel roads are of poor to very poor condition, which is below the minimum standards for all road classes.

It should be noted that earth roads were excluded from the last visual assessment survey in 2019, so above information on unpaved road condition relates mainly to the gravel roads.

2.6.1.1.2 Rural Access

As seen in ***Table 2-6***, approximately 27% of the Lesotho population are more than one hour's drive from the nearest hospital. In Mokhotlong and Thaba-Tseka Districts, approximately half their population is greater than an hour's drive from a hospital. The greatest portion of the Lesotho population that is greater than an hour's drive from a hospital is in fact located in the Maseru District, accounting for approximately 7% of the total country's population.

Table 2-6: Population greater than one hour's drive to a hospital, per district

DISTRICT	District Population	Population >1hr from Hospital	Portion of District	Portion of Total Population
Botha-Bothe	117 776	16 933	14%	0.8%
Leribe	337 410	61 579	18%	3.1%
Berea	261 590	50 583	19%	2.5%
Maseru	520 553	139 434	27%	6.9%
Mafeteng	178 121	39 007	22%	1.9%
Mohale's Hoek	165 302	62 359	38%	3.1%
Quthing	115 422	36 596	32%	1.8%
Qacha's Nek	74 547	21 783	29%	1.1%
Mokhotlong	100 442	51 476	51%	2.6%
Thaba-Tseka	135 656	68 158	50%	3.4%
	2 006 819	**547 908**		**27.3%**

As shown in ***Table 2-7***, approximately 10% of the Lesotho population is situated more than 2km from any road, which in a mountainous area could be the equivalent to a one hour walk. The greatest population with poor access are situated in the Thaba-Tseka District, followed by the Mohale's Hoek and Maseru Districts.

Table 2-7: Population per District situated more then 2km from any Road

DISTRICT	Population / District	Population > 2km from Road	Portion of District	Portion of Total Population
Botha-Bothe	117 776	2 502	2%	0.1%
Leribe	337 410	14 438	4%	0.7%
Berea	261 590	11 518	4%	0.6%
Maseru	520 553	30 201	6%	1.5%
Mafeteng	178 121	14 296	8%	0.7%
Mohale's Hoek	165 302	36 770	22%	1.8%
Quthing	115 422	13 421	12%	0.7%
Qacha's Nek	74 547	13 461	18%	0.7%
Mokhotlong	100 442	29 098	29%	1.4%
Thaba-Tseka	135 656	45 004	33%	2.2%
	2 006 819	**210 709**		**10.5%**

2.6.1.1.3 Bridges and Footbridges

The Roads Directorate has already undertaken numerous efforts to address the access challenge through the Transport Infrastructure and Connectivity Project (TICP). Component 1 of the TICP project is improving access of the rural population to agricultural and job markets and social services in targeted isolated areas of Lesotho through the construction of approximately 41 footbridges in communities located in areas that are cut off from road access, especially in the heavy rain season when river water levels increase.

As the systematic provision of pedestrian bridges is observed, the need for IWT declines. Of the 41 footbridges identified, 22 have already been built and a further 11 are under construction.

Table 2-8: Bridge Construction Programme

BRIDGE CONSTRUCTION	STATUS
Senqu & Senqunyane Bridges	Complete
Mohlapiso Bridge	Complete
Koma-Koma Bridge	Complete
Bethele Bridge	Under Construction
Tebellong Bridge	Planned
Makhaleng Bridge	Planned

2.6.1.2 Issues

2.6.1.2.1 Updating of existing classification and jurisdiction of roads

TSP 2006 identifies the need for updating the existing classification of roads and applying the updated classification to all roads. A clear distinction between the national road transport network and the local road transport network with associated mandates should further be considered.

2.6.1.2.2 Updating of road transport infrastructure sub-sector legislation

All road transport infrastructure subsector legislation needs to be reviewed and updated to incorporate the principles contained in the policy statements related to road transport infrastructure. This review should include a review of the Roads Act 1969. The current implementation of policy via legislation needs to be adequately realised.

2.6.1.2.3 Maintenance of existing roads

The average condition of the paved roads has dropped from 63% in 2013 to 51% in 2019, where most of the paved roads are Class A and B roads, which should have a minimum condition rating of 85%. For Class C and D roads, a condition rating of 50% is acceptable, so on average these paved roads are just acceptable within the minimum standard. The economic consequences of neglecting road maintenance have an economic cost on road users, in the form of increased road user costs.

98% of the unpaved roads are rated as poor to very poor, where many roads are becoming unusable and will soon have to be abandoned or re-constructed. Furthermore,

approximately 15% of the unpaved roads are carrying more than 300 vehicles per day, which would typically economically justify paving these roads versus substantial gravel road maintenance, due to high traffic volumes.

Lesotho's road transport network deteriorates systematically and according to the Lesotho Road Management Systems Report 2019/2020, it will cost approximately M 7 billion, to remove the road condition service level backlog. At the current rate of investment for the existing road transport network maintenance, the overall network condition will deteriorate from fair to poor over the next 10 years. An investment of approximately M1 billion per annum for 10 years will be necessary to improve the existing road transport network condition from fair to good.

2.6.1.2.4 Rural Access

Due to the terrain and linkage with South Africa, economic development and population densification is largely concentrated on the western boundary of Lesotho. The rural population is spread around the rest of Lesotho at a very low density. Furthermore, the terrain limits the safe travel speeds on roads, even paved and therefore increases travel times, resulting in approximately 27% of the population being more than an hour's drive from a hospital. Additional road transport infrastructure can improve this situation slightly but will not eradicate the problem. Furthermore, approximately 10% of the rural community are more than 2km, which can be equivalent to an hour's walking time in mountainous terrain, from the nearest access road.

These conditions make a rural community both vulnerable and limits their opportunities for economic growth due to poor access to facilities such as markets, schools, and social facilities.

Another obstacle to rural accessibility is a lack of crossings over rivers at key locations. There is a footbridge programme addressing this, but additional locations for footbridges at key locations linking access roads and serving higher population densities, have been identified.

2.6.1.2.5 Provision of roadside furniture

The current provision of road signs, markings, information boards and other roadside furniture is required to provide a safe operating environment for road transport and to adequately support the function of the specific class of road under consideration. The implementation thereof in Lesotho needs to be revisited. This includes aspects of routine road maintenance such as road barriers maintenance, cleaning of drainage structures and layby infrastructure.

2.6.1.2.6 Lack of access to secondary economic facilities as part of road transport infrastructure provision

Road design should actively pursue secondary economic activities by means of adjacent land use allocations integrated within the road reserves. This includes tourism areas, filling stations, rest stops and health facilities. Along with this goes the intentional provision of signage and access infrastructure.

2.6.1.2.7 Overload Control

Current overload control is not enforced due to the dilapidated condition of existing weighing stations. This has a negative effect on the longevity of the road transport network and maintenance requirements. Part of the challenge is the high-cost implication of providing extensive overload control infrastructure. The utilisation of weigh-in motion technology therefore needs to be considered as a far more viable option to overload control.

2.6.1.3 Policy Directions

The policy directions for road transport infrastructure are:

1. **Review design standards**
   - Gravel roads – there are design guidelines for the low volume roads but these guidelines should be made more specific to the Lesotho environment, particularly taking the mountainous terrain into consideration. These guidelines should also address the accommodation of a modal mix between motorised transport and NMT
   - Paved roads – the current guidelines are generally more suited to a flat terrain and need to be made more specific to the mountainous Lesotho environment. Often the standards are not practical or feasible in the mountainous terrain, such as spacing of passing lanes on windy roads. Furthermore, accommodating NMT in a safe manner whilst still ensuring high mobility of high order roads, needs to be addressed in these guidelines
   - Stormwater design guidelines also need to be reviewed to be more practical and feasible in the Lesotho environment, to avoid over -design whilst still ensuring good management of stormwater and considering the effects of climate change.
2. **Maintenance and protecting of assets**
   - All Class A and B roads need to be maintained to ensure a standard of excellent
   - All Class C and D roads need to be maintained to ensure a standard of fair or better
   - Preserve the road transport network by routine and periodic maintenance as predicted by the LRMS.
3. **Road Transport Network Upgrade**
   - Gravel roads with ADT greater than 300 vehicles per day should be considered for upgrade to paved, considering the economic indicators in the feasibility stage, with priority being given to the gravel roads with grades steeper than 6%
   - A maintenance and upgrade programme should be developed to be rolled out over 10 to 20 years, based on various prioritisation criteria including the LRMS indicators but also considering routes that will unlock and increase economic growth and considering the Traffic Demand Model
   - Planning of road transport network upgrades and additional access roads should be undertaken in conjunction with the planning and provision of footbridges at key locations to promote rural access and connectivity.

4. **Overload control.** Electronic weigh-in motion (e-WIM) needs to be considered and technology needs to be considered and maintained. A network of e-WIM in Lesotho needs to be prepared and be accessible in the transport database.

2.6.1.4 Policy Statements

The overall Road Infrastructure Policy is stated as follows:

Managing through the restructured institutional framework the road infrastructure to ensure that existing roads and access routes are comprehensively and regularly maintained as a first priority of available budget allocations, are rehabilitated when required, and are upgraded and extended in an efficient manner, to meet the needs of the economy and the population.

The specific subpolicies that support the above statement are:

a) Ensuring that the classification and function of the road network is in line with the requirements to support other economic subsectors

A review of the current functional classification of the road network needs be done to ensure that the road network adequately support other economic subsectors. An example of this would be the necessity of connectivity roads to be classified as a Class A road which requires certain standards of compliance.

b) Ensuring that the quality and standards of roads in Lesotho are well suited to the prevailing conditions.

In line with the review of the functional classification of the road network, the quality and required standards of the road network must be re-evaluated. This relates to the standards for the design of roads, especially in the mountainous regions, since current standards do not adequately cover this area of road design in Lesotho and are more suited for the design of roads in the lowlands.

The road design standards need to be kept up to date and be implemented during road construction and maintenance.

c) Periodic revisions of Road Network planning with a redefinition of development priorities of road infrastructure, including maintenance and rehabilitation of the existing road network, as well as new developments to add or increase road capacities as a second priority next to maintaining the existing network.

Road network planning will be part of the ITP to be synchronized with the NSDP, with ad hoc revisions on an annual or bi-annual basis as part of the annual budget processes. Clear development priorities for road infrastructure must be reviewed on a continuous basis in order to facilitate the supporting role of road infrastructure to the other sectors. Recognised planning tools should be applied, supported by standard road network surveys and other technical and market surveys that are associated with road network planning as a standard procedure.

The prioritisation exercise needs to consider the following:

- Maintenance efforts that are aimed at protecting the past investment into road assets
- The role of national connectivity within the greater region to facilitate economic support
- Rural accessibility to underpin the economic development goals
- The social needs within society, such as access to schools and clinics.

d) Prepare an adequate overload control strategy that is best suited to the operating environment of Lesotho, considering also advances in technology to ensure a frugal solution (weigh-in-motion).

Prepare and implement an overload control strategy that is aimed at protecting the road infrastructure assets in the most frugal manner. The current advancements of Weigh-in-Motion technology allow for an enforceable overload control option that is not necessarily linked to a static scale. This possibility needs to be investigated and if feasible, needs to be enforced by legislation.

2.6.2 Road Transport

2.6.2.1 Status

From *Table 2-9* it is evident that the highest traffi c volumes occur in Maseru City and the highest trafficked corridors are the A1 from Maseru City to Butha-Buthe and on the A2 from Maseru City to Mohale's Hoek. Generally, the freight volumes on all corridors are 5 - 10% and public transport is 30% to 40%.

It should be noted that in Maseru City, public transport volumes are high, ranging from 4000 to 11,600 vehicles per day and a percentage of 30% to 42% of the ADT, which is largely attributed to 4+1s being the primary public transport service.

It can also be seen that the capacity LOS of the key corridors in *Table 2-9* range from B to F, but on average are operating at LOS D. In an urban environment, a LOS D, which is a high density but stable flow, is considered acceptable. However, for high order rural roads, Class A and B, a LOS B, which is a stable flow with unaffected speed, is the minimum standard.

Therefore, most of these primary roads are operating at a sub-standard LOS, with certain parts of Maseru City being at a LOS F, described as breakdown flow.

Table 2-9: Traffic Volumes and Level of Service on Key Primary Roads

Road	Location	ADT	ADTT	% Heavies	PT	%PT	LOS
A1	Maseru City	27561	237	0.9%	11582	42.0%	F
	TY	8155	302	3.7%	1921	23.6%	D
	Leribe	7099	284	4.0%	2203	31.0%	D
	Butha-Buthe	4621	183	4.0%	1492	32.3%	C
	Oxbow	1016	92	9.1%	463	45.6%	E
	Mokhotlong	1311	89	6.8%	468	35.7%	C
A2	Maseru City	13317	344	2.6%	4000	30.0%	E
	Airport	5651	216	3.8%	2336	41.3%	C
	Morija	5091	179	3.5%	1844	36.2%	C
	Mafeteng	5448	157	2.9%	2680	49.2%	C
	Mohale's Hoek	4204	158	3.8%	878	20.9%	C
	Quthing	2801	64	2.3%	1158	41.3%	C
A4	Mt. Moorosi	1419	85	6.0%	606	42.7%	C
	Mphaki	606	27	4.5%	240	39.6%	D
	Whitehill	664	25	3.8%	293	44.1%	B
	Qacha's Nek	571	24	4.2%	178	31.2%	B
A3	St. Michaels	4928	355	7.2%	1358	27.6%	D
	Molimo Nthuse	1522	151	9.9%	425	27.9%	C
	Mantsonjane	610	65	10.7%	200	32.8%	E
	Thaba Tseka	953	39	4.1%	282	29.6%	B
A8	Leribe	7147	172	2.4%	2428	34.0%	D
	Lejone	1188	66	5.6%	529	44.5%	B
	Katse Dam	848	36	4.2%	174	20.5%	D
A31	Mokhotlong	911	63	6.9%	401	44.0%	B
	Sani Pass	425	53	12.5%	102	24.0%	B

It should be noted that in most instances, besides Maseru City, Morija, Mafeteng, Mohale's Hoek and Thaba Tseka, the LOS on these Class A Roads has been slightly or substantially reduced due to the terrain.

Table 2-10 provides an overview of the LOS of the road networks managed by each Road Agency, where the following can be concluded:

- Most of the Roads Directorate's paved network is operating at a sub-standard LOS, but the paved network generally has an acceptable LOS
- Generally, the paved and unpaved roads managed by the other roads agencies have an acceptable LOS, which is largely attributed to the roads being lower order and therefore traffic volumes on these roads are lower.

Table 2-10: Level of Service on Road per Road Agency

	LOS A	LOS B	LOS C	LOS D	LOS E	LOS F	Unknown
Roads Directorate							
Paved	7%	37%	28%	18%	10%	1%	0%
Unpaved	22%	75%	2%	0%	0%	0%	0%
Department Rural Roads							
Paved	35%	48%	14%	0%	0%	0%	3%
Unpaved	29%	5%	0%	0%	0%	0%	66%
Maseru							
Paved	61%	20%	0%	5%	12%	1%	1%
Unpaved	47%	2%	1%	1%	0%	0%	49%
Local Government							
Paved	52%	23%	14%	1%	1%	0%	9%
Unpaved	45%	4%	1%	1%	0%	0%	50%

2.6.2.2 Issues

2.6.2.2.1 Road transport legislation, need for harmonisation

Consideration should be given for the harmonisation of the existing road transport legislation of Lesotho to eliminate the duplication of mandates exercised by the respective national and local authorities responsible for the planning, regulation, control, and administration of road transport.

The legislation should further be aligned with the subsectoral policies contained in the Transport Sector Policy, 2006, and the arrangements contained in regional agreements, such as the SADC Protocol on Transport, Communications and Meteorology, 1996. The road transport legislation pre-dates these regional arrangements.

2.6.2.2.2 Decentralisation of transport

According to the National Decentralisation Policy, 2014, rural and urban settlements will be re-organised to facilitate cost-effective delivery of basic services for human well-being like optimal land use and transport.

In terms of the Local Government Act, 1997, the regulation, control and administration of roads and traffic have been assigned to local authorities. Consideration should be given for the assignment of the regulation, control and administration of transport, in particular public transport, to local authorities.

2.6.2.2.3 Domestication of road transport regional agreements, model laws, regulations

The incorporation of regional agreements, model laws and regulations, such as the Corridor Trip Monitoring System (CTMS) developed under the EA-SA Transport and Transit Facilitation Programme (TTTFP), into the legislation of Lesotho should be considered. The road transport legislation pre-dates these regional arrangements.

2.6.2.2.4 Primary and Secondary Corridor Capacity

Currently, approximately 90% of the Class A and B roads have pavement conditions that are below minimum standards and 38% of these Class A and B roads are also operating at a below standard LOS. This is due to the following:

- Insufficient infrastructure investment in terms of maintenance and capacity upgrades
- High truck traffic, which applies high loads to the pavement structure and adversely affects lane capacity, particularly in mountainous terrain
- An inefficient public transport service, where low-capacity public transport vehicles are operating on high passenger demand corridors.

2.6.2.2.5 Integrated data-based decision-making systems

There is a need to allow for more in-depth decision-making processes in the subsector, facilitated by greater insights into currently available data as well as proper systems to integrate the data across various ministries and sectors, studies and initiatives. This is to apply best practice approaches towards transport planning.

This links with the discussion around Road Traffic Information Systems under section 2.6.2.4, Road Traffic, as well as the Data Digitalisation strategy discussion in section 2.9.3.4.

2.6.2.3 Policy Directions

The policy directions for Road Transport are:

1. Traffic Demand Management
   - To facilitate the identification of demand management solutions, such as modal shift from trucks to rail and from low capacity to high-capacity public transport modes
2. Infrastructure Capacity Improvements
   - To identify primary and secondary corridors for widening and passing lanes for capacity improvement, along with rehabilitation for road condition improvement
   - Apply prioritisation criteria, such as prioritising economic corridors
3. To ensure that decision-making in the sector is underpinned by the appropriate transport data.

2.6.2.4 Policy Statements

The overall Road Transport Policy is stated as follows:

To administer the road transport subsector in such a manner as to ensure data driven decision making to facilitate the optimal movement of passengers and goods.

The specific subpolicies that support the above statement are:

a) Utilising a scientific, data-driven approach to decision-making within the road transport subsector.

To put in place mechanisms and structures that allow the strategic decision-making in Lesotho to be underpinned by a scientific, data-driven approach. Transport planning and the changes in demand when it comes to the movement of passengers and goods must be adequately motivated and supported by the available data.

b) Ensuring that appropriate and adequate recurring transport surveys and data collection procedures are in place to support the decision-making process and data management approach in the transport sector.

To facilitate the data-driven decision-making in the sector, appropriate and adequate recurring transport surveys and data collections procedures must be in place.

c) Providing passenger and freight transport services to remote and other areas where commercial road transport service providers are not present.

In recognising the needs of the rural communities, provision of road transport services to these communities are required and have to be provided, especially where commercial road transport service providers are not present, and their operation is not economically feasible.

d) Ensuring that road freight transport is appropriately regulated, in context of rail freight transport and the requirements for regional freight linkages.

The way in which road freight transport is regulated needs to be continuously aligned within the greater regional connectivity changes. As regional rail freight connectivity improves, the road freight transport strategy and regulation need to adapt to this.

2.6.3 Road Traffic

2.6.3.1 Status

Additional to the road transport infrastructure and road transport discussion, road traffic is also dealt with separately. Road traffic specifically relates to the safety, security, order and discipline of traffic movements, including vehicle standards and roadworthiness, licensing and registration, traffic operations and traffic control.

The administration of the Road Traffic Act 1981 and the Road Transport Act 1981 is carried out by the Department of Traffic and Transport (DTT) in the Ministry of Public Works and Transport. The DTT, headed by the Commissioner of Traffic and Transport, supports the Road Transport Board, which is tasked with the control of road transport, and has a division responsible for motor vehicle registration, licensing and driver licensing. Enforcement of the Road Traffic Act 1981 is done mainly by the traffic police, while the enforcement of the Road Transport Act 1981 is done principally by the transport inspectors of DTT.

Lesotho is faced with an influx of vehicles and this increased road traffic needs to be accommodated accordingly. The following aspects of road traffic in Lesotho, are briefly discussed:

a) **Safety of vehicles:**
The safety of vehicles deals with the fitness of vehicles and equipment, safety standards of vehicles, roadworthiness, loads on vehicles (overload control), as well as abnormal and hazardous loads.

Recently, an increase in imported second-hand vehicles has been observed in Lesotho. These vehicles often function as "4+1" taxis. There is a clear correlation between the increase in road accidents and the simultaneous importation of second-hand vehicles from overseas markets. This in turn indicates that the vehicle standards and the control of roadworthiness is not handled sufficiently.

Overload control is equally important since overloaded trucks are becoming inherently more unsafe. Currently, Lesotho does not have a specific policy relating to vehicle load management. The Lesotho Road Management System (LRMS) proposes a strategy, vision and policy statement for vehicle load management, which are adequate. Weigh-in motion overload control should be the preferred method.

b) **Classification of vehicles:**
Vehicle classes in Lesotho are well-defined. The LRMS utilises eight different vehicle classes in the Traffic Information System (TIS) utilised for traffic counts and captures all vehicle registrations and related information on the Lesotho Integrated Transport Information System (LITIS).

c) **Licensing & testing:**
Licensing and testing are aimed at the training and testing of drivers, issuing of driving licences, registration records, driving schools, driving instructors, certificate of roadworthiness and public motor vehicle permits.

The One Stop Shop Facility for Vehicle Registration and Driver Licencing at Ha-Foso, Maseru City, is one of the Ministry's mandates to improve service delivery. The construction of the facility started during NSDP I and was operationalised in 2020 with the aim of simplifying processes related to vehicle registration and licensing and decreasing time and costs involved.

d) **Traffic operations:**
Traffic operations inter alia deals with traffic signs, rules of the road, speed limits, driving signals, driving hours and pedestrian movements.

The way in which these aspects of traffic operation are dealt with have a significant impact on road safety in the country. Part of what corroborates this challenge is inadequate institutional capacity in road traffic management, inadequate traffic law enforcement practices, a high number of vehicles, unsafe road infrastructure, unsafe road user behaviour and low road safety audit skills.

Also, traffic congestion is most notably felt in the urban areas, mostly in Maseru City. This is mostly due to the increasing levels of traffic, yet is worsened by the inadequate management of this traffic.

Only Maseru City has traffic control signals due to high levels of traffic. By law, traffic control signals are a competence of local authorities and very often these signals are dysfunctional, one of the reasons why traffic congestion and road accidents are common. Collisions with both traffic and street lights, and with road signs are also common in urban areas, while the vandalization of traffic lights by livestock herders is known to compromise road safety in rural areas. Local authorities have constantly been underfunded to effectively maintain traffic installations.

e) **Traffic control:**
The aspect of traffic control deals with law enforcement, road traffic control, policing, prosecution, regional cross-border control and the appointment of traffic officers.

The enforcement of the Road Traffic Act 1981 is mainly done by the Royal Lesotho Mounted Police. The lack of dedicated traffic courts hinders timeous adjudication of traffic offences.

The enactment of the Road Traffic Bill by the Parliament is still a huge gap in the enforcement of road safety interventions such as speeding enforcement and enforcement of driving under the influence of alcohol. It will also address other issues of outdated legislation, which is currently hindering effective prosecution.

f) **Road incident management systems:**
Currently, no clear road incident management systems are in place in Lesotho. This severely impacts road safety in the country. Post-crash emergency response is not well established in Lesotho.

g) **Road traffic information systems:**
National road traffic information systems are aimed at supporting and enforcing the national road traffic quality systems. The Lesotho Integrated Transport Information System (LITIS) is a computerised vehicle registration database which contains all the road traffic information ranging from individual vehicles (private and public), the owners and the number of vehicles countrywide. This system is also meant to provide an integrated record management system for revenue collection, driver licencing and vehicle inspection. Currently, the LRMS implements a Traffic Information System (TIS) that is solely aimed at the storing and analysis of annual traffic count information.

As discussed under section 2.9.3.4, there is great opportunity and need to implement wider data digitalisation within the transport sector. This would include the accessibility of all transport-related data, including licensing and registration, traffic offences, incidents, etc. in one place and useful across various planning and implementing agencies.

2.6.3.2 Issues

2.6.3.2.1 Review of current legislation

TSP 2006 identifies the need for the review of the Road Traffic Act and Road Traffic Regulations, 1981, to enhance road traffic law compliance and safety and to ensure the use of roadworthy vehicles especially for public transport.

Also, the enactment of the Road Traffic Bill by the Parliament is still a huge gap and needs to be facilitated.

2.6.3.2.2 Road Safety challenges

As discussed in more detail under section 2.9.7.4, road safety is a major concern in Lesotho.

The major contributors of this are:

- Weak road safety management
- Poor infrastructure conditions
- Unsafe vehicle operating conditions
- Inadequate enforcement measures.

2.6.3.2.3 Licensing and regulation of vehicles

This issue specifically applies to the importation of second-hand vehicles, but the control and regulation of the vehicle licensing management system in general need to be carefully considered to ensure a sustainable and safe number of vehicles operating on Lesotho's roads.

2.6.3.2.4 Vehicle load management policy

Currently, Lesotho does not have a specific policy relating to vehicle load management. It is clear that this is required to protect the road transport infrastructure assets, as well as to ensure safe vehicle operation.

2.6.3.3 Policy Directions

The policy directions for road traffic are:

1. To ensure the safe operating environment for road traffic by ensuring adequate signage, signal control, speed limits and the enforcement of safe driver behaviour
2. To update the existing legislation regarding road traffic and to ensure the enactment of the Road Traffic Bill
3. To adequately manage the importation of second-hand vehicles and their licensing and registration
4. To ensure the development and implementation of a vehicle load management policy.

2.6.3.4 Policy Statements

The overall Road Traffic Policy is stated as follows:

To ensure that the aspects of road traffic relating to the safety, security, order and discipline of the movements of vehicles are adequately considered, including vehicle standards and roadworthiness, licensing and registration, traffic operations and traffic control.

The specific subpolicies that support the above statement are:

a) Integrating the vehicle registration and driver licensing facility into a wider data digitalisation strategy.

The overall data digitalisation strategy within the transport sector will include all information relating to vehicle registration and licensing.

b) Create a safe operating environment for road traffic by ensuring vehicle roadworthiness, adequate signage, signal control, speed limits and the enforcement of safe driver behaviour.

The safe road traffic operations will be ensured by creating a road environment where the adequate and correct road

signage and markings are present, and the enforcement of the rules of the road is done.

c) *Regulate imported second-hand vehicles by setting in place strict standards and regulations regarding import vehicle age and emissions control.*

The importation and operation of the second-hand sedan vehicles, especially in Maseru, has to be regulated in order to protect safe traffic operating conditions.

2.7 LAND-BASED PUBLIC TRANSPORT

2.7.1 Status

Land-based public transport is an extremely significant component of the daily travel habits and patterns of the people of Lesotho. Quality land-based public transport is critical for the sustainable development of the overall transport sector. Public transport supports a large number of other sectors in the country yet is neglected in many ways. The role of public transport is to facilitate a safe and reliable service that offers most of the people of Lesotho an affordable means of travel.

Quality public transport is underpinned by infrastructure provision and maintenance, as well as well-regulated service provision. There are vast differences between public transport services in the rural versus urban context. This is partly due to the terrain challenges in the rural areas, which are mostly mountainous, as well as the lack of economic opportunities in the rural environment. It is clear that different public transport modes need to be considered in different application environments and that modal integration and the role of different public transport modes are dependent on factors such as location, demand, distance to be travelled and travel time implications.

The current regulation of public transport operations is not well managed and not enforced and one of the major shortfalls of this subsector is that there is no clear policy guiding the development of this significant and major component of daily travel in Lesotho.

2.7.1.1 Public Transport Facilities Status

There are approximately twenty-five public transport ranks in Lesotho, most of which are formal ranks and serve busses, minibus taxis or 4+1s or a combination thereof. Ten of these ranks are situated in central Maseru City, where two groups of five ranks are situated within one block.

Approximately half of these ranks are paved and the other half are gravel. The gravel ranks become muddy and unpleasant for passengers when it rains. Very few ranks have any benches, shelters, or queuing/loading platforms for passengers. Most of the paved ranks are in severely poor condition, requiring major repairs or a resurfacing. Most of the ranks do not have any ablution facilities for the drivers and passengers, which is a health hazard. Basic characteristics of these ranks are provided in ***Table 2-11***.

Several ranks, particularly in Maseru City, appear to be very busy and have insufficient capacity for the public transport vehicles. A detailed rank survey should be undertaken to better understand the peak and off-peak hour loading and holding requirements of the rank. It would also be possible to determine from the survey whether the rank has insufficient capacity or due to disorganised operations and traffic flow, the rank is not operating at optimum capacity.

Table 2-11: Public Transport Ranks in Lesotho

Rank Name	Rank Type	Rank Id	Modes Served	Size	Surface Type & Condition	Shelters & Benches	Ablutions	Offices / Shops
Maseru City	Formal	RK01	Bus, Minibus and 4+1	Medium	Paved, good	✓	✓	✓
Maseru City	Informal	RK02	Bus, Minibus and 4+1	Large	Paved, good	✓	✓	✓
Maseru City	Formal	RK03	Minibus	Large	Paved, poor			✓
Maseru City	Formal	RK04	Bus and Minibus	Large	Paved, poor			✓
Maseru City	Formal	RK05	4+1	Small	Gravel			
Maseru City	Formal	RK06	4+1	Small	Gravel			
Maseru City	Formal	RK07	4+1	Small	Gravel		✓	✓
Maseru City	Formal	RK08	Minibus	Medium	Paved, poor		✓	✓
Maseru City	Formal	RK09	Minibus	Medium	Paved, poor			✓
Maseru City	Formal	RK10	4+1	Medium	Gravel			✓
Thaba Tseka	Formal	RK11	Bus, Minibus and 4+1	Large	Gravel		✓	✓
Thaba Tseka	Informal	RK12	Minibus	Large	Gravel			
Mantshonyane	Formal	RK13	Bus and Minibus	Large	Gravel		✓	✓
Mapholaneng	Informal	RK14	Minibus and 4+1	Medium	Paved, poor			✓
Mokhotlong	Formal	RK15	Minibus	Medium	Gravel			✓
Mokhotlong	Informal	RK16	4+1	Medium	Gravel			
Mokhotlong	Formal	RK17	Bus and Minibus	Medium	Paved, poor	✓	✓	✓
Teyateyaneng	Formal	RK18	Bus and Minibus	Large	Gravel			✓
Maputsoe	Formal	RK19	Bus, Minibus and 4+1	Large	Paved, poor			✓
Hlotse	Formal	RK20	Bus, Minibus and 4+1	Large	Gravel			✓
Botha buthe	Formal	RK21	Bus, Minibus and 4+1	Large	Paved, poor			✓
Pitseng Leribe	Informal	RK22	Minibus and 4+1	Medium	Paved, poor			✓
Mohale's Hoek	Formal	RK23	Bus, Minibus and 4+1	Large	Paved, poor			✓
Mafeteng	Formal	RK24	Bus and Minibus	Large	Gravel			✓
Quthing	Formal	RK25	Bus, Minibus and 4+1	Large	Gravel			✓

The A1, A2, A3 and A8 are high public transport routes and therefore require suitable stop locations for passengers to embark and disembark. The type of public transport stops along these routes are generally as follows:

- **A1: Maseru City to Oxbow and A8:** Hlotse to Katse Dam – public transport vehicles stop at safe locations, with laybys and a safe waiting area for passengers. However, generally there is no public transport signage, benches, and shelters at these locations. Furthermore, there are only narrow shoulders/verges leading to these public transport stops.
- **A2: Maseru City to Mafeteng** – whilst laybys are provided, they are often at unsafe stopping locations and there is no safe location of waiting passengers and there also is no public transport signage or benches and shelters. Furthermore, there are only narrow shoulders/verges leading to these public transport stops.

2.7.1.2 Public Transport Services Status

The current public transport services are mostly privately operated and owned and as can be seen in ***Table 2-12***, in Maseru City, public transport volumes are high, ranging from 4000 to 11,600 and a percentage of 30% to 42%, which is largely attributed to 4+1s being the primary public transport service.

The proliferation of the 4+1 taxis in the urban context has created significant congestion impacts, especially in Maseru City. Without adequate management of this, current infrastructure and quality of travel will continue to deteriorate.

Table 2-12: Traffic Volumes and Level of Service on Key Primary Roads

Road	Location	ADT	ADTT	% Heavies	PT	%PT	LOS
A1	Maseru City	27561	237	0.9%	11582	42.0%	F
	TY	8155	302	3.7%	1921	23.6%	D
	Leribe	7099	284	4.0%	2203	31.0%	D
	Botha-Buthe	4621	183	4.0%	1492	32.3%	C
	Oxbow	1016	92	9.1%	463	45.6%	E
	Mokhotlong	1311	89	6.8%	468	35.7%	C
A2	Maseru City	13317	344	2.6%	4000	30.0%	E
	Airport	5651	216	3.8%	2336	41.3%	C
	Morija	5091	179	3.5%	1844	36.2%	C
	Mafeteng	5448	157	2.9%	2680	49.2%	C
	Mohale's Hoek	4204	158	3.8%	878	20.9%	C
	Quthing	2801	64	2.3%	1158	41.3%	C
A4	Mt. Moorosi	1419	85	6.0%	606	42.7%	C
	Mphaki	606	27	4.5%	240	39.6%	D
	Whitehill	664	25	3.8%	293	44.1%	B
	Qacha's Nek	571	24	4.2%	178	31.2%	B
A3	St. Michaels	4928	355	7.2%	1358	27.6%	D
	Molimo Nthuse	1522	151	9.9%	425	27.9%	C
	Mantsonjane	610	65	10.7%	200	32.8%	E
	Thaba Tseka	953	39	4.1%	282	29.6%	B
A8	Leribe	7147	172	2.4%	2428	34.0%	D
	Lejone	1188	66	5.6%	529	44.5%	B
	Katse Dam	848	36	4.2%	174	20.5%	D
A31	Mokhotlong	911	63	6.9%	401	44.0%	B
	Sani Pass	425	53	12.5%	102	24.0%	B

2.7.2 Issues

2.7.2.1 Public Transport Facilities

Land-based public transport is a vital mode of transport for poverty alleviation and for traffic demand management, to reduce the demand for road transport infrastructure upgrades and maintenance and to reduce the negative environmental impact of motorised transport.

For public transport to function efficiently, the public transport service needs to be well planned and managed and public transport ranks need to be efficient, safe and comfortable for public transport service providers and users.

Whilst there is at least one public transport rank at each major town and there are 10 in Maseru City, most of the ranks are below standard for the following reasons:

- No ablution facilities, creating an unhygienic environment
- Due to lack of shelters, passengers must wait and queue in the rain.
- Many ranks are unpaved and most of the paved ranks are not maintained and in poor condition. This creates unpleasant conditions for passengers who generally have to wait and queue in the rain, where often there is no shelters and in muddy conditions.
- Most of the ranks have no organised layout and designated areas for vehicles to load, holding areas, raised passenger waiting and queueing areas etc. This creates inefficient operations, limiting the ranks' capacity and creating unsafe traffic conditions due to conflicting movements between pedestrians and vehicles and the lack of separation of the two modes.

Furthermore, there are high public transport volumes on key primary corridors, including the A1, A2, A3 and A8, where public transport vehicles will need to stop en route to enable passengers to embark or disembark. Whilst these primary roads are designed for mobility and pedestrian activity on these routes should be discouraged, pedestrian activity cannot be avoided, due to public transport. Currently, public transport stops are not always situated in safe stopping locations and there is insufficient provision for passengers/pedestrians in the form of safe waiting locations, benches and shelter and suitably wide and off set sidewalks leading to/from the stops. This is creating a road safety issue, with potential for accidents involving cars/trucks and pedestrians.

2.7.2.2 Public Transport Services

Public transport service provision and modal integration: There is a high demand for land-based public transport but a lack of a co-ordinated public transport planning and management, to ensure optimisation of the most appropriate public transport modes on routes. Furthermore, public transport modes and services are competing on the same routes from Maseru City, from the same and different public transport ranks, that are all closely located to each other. It is critical to understand that there is better public transport mode application along clearly defined corridors – city wide and regionally. This is currently not the case in Lesotho. These corridors need to be clearly identified to allow for optimal modal allocation along specific routes.

Additionally, it is necessary to consider that the urban and rural challenges are different and that the public transport service provision therefore needs to be approached differently in these opposing operating environments. Without proper integration and understanding, the public transport mode will not reach its optimal potential.

Congestion in Maseru City: The centralisation of the ten public transport ranks in the centre of Maseru City adds to the traffic congestion as well as providing a poor service to users, where in some parts of Maseru City there is a surplus of public transport services and other areas a shortage of public transport services, resulting in pedestrians electing to walk over using public transport or favouring the more convenient 4+1s over the minibuses and busses.

Public transport facilities are also operating inefficiently due to a lack of a formalised rank layout to separate modes and appropriate high and low frequency loading lanes and holding areas, based on peak and off-peak demand, per route and mode.

No distinctive legislation for public road transport: The existing road transport legislation in Lesotho does not distinguish between public and other transport. Consideration should be given for such distinction.

Licensing and regulation of imported second-hand vehicles: There is a clear link between the increased importation of second-hand vehicles and an increase in congestion and road safety related issues. It is also clear that the "4+1" taxi fulfils the role of a public transport vehicle, but is poorly regulated and controlled. Legislation is therefore required for the adequate management of imported second-hand vehicles.

2.7.3 Policy Directions

The policy directions for land-based public transport are:

1. **Public transport service**
   - A public transport study should be undertaken to determine the passenger demand at all public transport ranks, per route and a public transport plan (PTP) should be developed to provide an optimised, co-ordinated, multi-modal public transport service.
   - Suitable inter-modal transfer sites should be identified around Maseru City to decentralise public transport and relieve congestion.
   - Inter-modal transfer sites should be identified at Hlotse and Mafeteng to enable public transport modal changes from high demand to low demand and to provide an optimised long distance public transport service.
2. **Provision of public transport infrastructure**
   - Based on the outcome of the PTP plan, a Public Transport Facilities study should be undertaken to determine how these facilities, in terms of location, layout and modal service offering can be optimised to meet the outcomes of the PTP and where new PT Facilities may be required.
   - Short term interventions to improve conditions at public transport facilities should be undertaken, such as the provision of suitable and sufficient ablution facilities and the paving of all ranks.

2.7.4 Policy Statements

The overall policy statement for Land-Based Public Transport is stated as follows:

Establish public transport as a new transport system priority and thereby providing a supporting environment for the movement of people via public transport in Lesotho by ensuring that enabling facilities and other infrastructure is in place and that public transport operations are well regulated by government.

The specific sub policies that support the above statement are:

a) Establish legislation that supports the overall vision for public transport in Lesotho to be an enabling mode of transport that plays a significantly important role in the movement of people in Lesotho.

Currently, no legislation exists that underpins and enables the public transport subsector in its significant contribution to the movement of people in Lesotho. Legislation needs to be adjusted to allow for public transport to be distinguished from other road transport and that budget allocation to this item is accordingly secured.

b) Ensure that public transport facilities and infrastructure required for safe and efficient as well as inclusive operation of public transport are present and well maintained.

The role of government is to provide the enabling infrastructure for the safe and efficient operation of public transport services, as well as the inclusion of design principles that create accessible public transport for people with special physical or mental needs. The provision of this infrastructure is the point of departure for an impactful public transport system in Lesotho. Part of this process is to develop acceptable standards for various public transport facility categories to serve as the basis for development priorities.

c) *For government to regulate the mostly private sector-led public transport operations in a manner that creates a safe and efficient operating environment.*

Broadly speaking, the role of the public sector is to provide the infrastructure and regulatory environment that in turn supports and facilitates the private sector in their economic and operational needs. In turn, the specific role of government in the Transport Sector will include economic regulatory elements (such as permit issuing and regulation, capital subsidies and more) and technical regulation elements (such as vehicle and driver fitness testing and more).

d) *Establish public transport corridors along which increased public transport activity and modal application can occur.*

Public transport operates most efficiently along clearly defined corridors – usually city-wide congested corridors, as well as regionally. This allows for optimal modal application and transport planning thus needs to clearly identify and integrate adequate public transport corridors in Lesotho. Detailed business cases can be developed for application along such corridors.

e) *Regulate the increasingly unsafe and environmentally unfriendly operation of the imported second-hand sedan vehicles in Lesotho.*

The current rate of importation of second-hand sedan vehicles is not sustainable and has already caused significant issues in Lesotho. A clear directive needs to be established to set a limit to the age of imported vehicles, as well as other factors such as emission standards control mechanisms. Increasingly, developed countries are moving away from internal combustion engine vehicles, with the emergence of electric vehicles a very prominent trend. This has resulted in developing countries, and Africa specifically, experiencing a sharp increase in imported second-hand vehicles.

The current and future permits for imported second-hand sedan vehicles for public transport purposes need to have a timeframe of expiry, after which additional sedan taxis will only be licensed on an ad hoc basis as required from a modal integration perspective.

2.8 TRANSPORT SECTOR FUNDING AND INVESTMENT

2.8.1 Status

Apart from the usual status of long-term inadequate funding for transport generally speaking, the analysis of the transport sector fiscal profile indicates various management concerns, including oversight issues, inadequate HR and system capacity, shortage of qualified and experienced human capital, skills development gaps and outdated legislation issues within transport subsectors. Notable is institutional fragmentation over a number of government institutions as one major reason, affecting the transport sector in terms of sectoral management and development issues. Details of these issues are listed in the next subsection.

The total transport budget fluctuates erratically from year to year. The figure below illustrates the position - recurring expenditures fluctuated between M83 million and M239 million between 2015 and 2018, with M115 million in 2019/20. It is indicative of financial instability either in terms of available budget or the capacity to spend the allowed budget. Infrastructure spending is lumpy and project specific and is in need for stability to ensure long-term financial security for investment in maintenance and new infrastructure developments. The total MPWT capital budget prior to COVID-19 was M843 million, half of which was funded from loans. It represents only 16% of the total national capital budget and illustrates the low priority of transport within the national context.

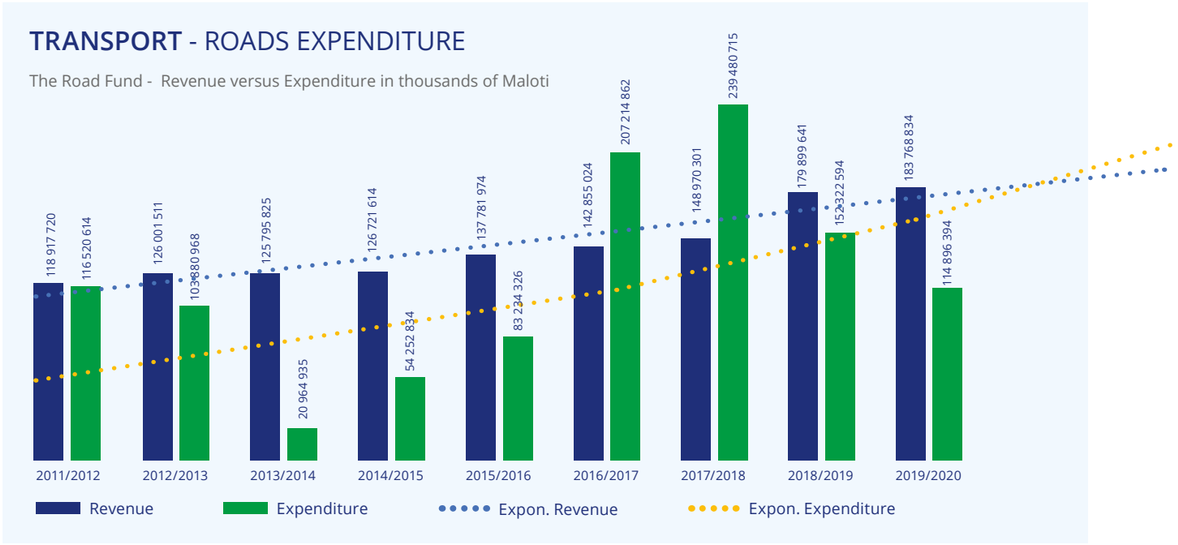


Figure 2-1: Road Fund Revenues versus expenditure 2011/12 to 2019/20

The sources of funding for the transport sector comprise mainly of allocations from the national Consolidated Fund (parliamentary appropriations) and to a lesser extent also transport sector internal funding sources such as the fuel levy, license fees and toll fees, all of which are funds transferred to the Road Fund. Immediately prior to COVID-19, the total internal funding sources contributed to about M184 million p.a., increasing at about 5% p.a. over the last few years, of which 85% is contributed through the three main sources and with the fuel levy representing about 46% of the total. Donor funding is ad hoc and is dwindling.

Administratively speaking, the three sources are considered to be effective funding mechanisms and there is no reason to deviate from this strategy to obtain funding. Internal restructuring is, however, essential in terms of the structure and level of the fees, its management oversight composition and the annual increase strategies. Based on a comparison with other benchmarked SACU countries, all sources of revenues have the capacity to be increased. As an example, the fuel levy allocated to roads has the capacity to be increased four-fold should all current levies be allocated to the road transport budget.

National fiscus constraints is, however, a given reality, linked to a large number of competing priorities, many of which will not be satisfied. However, transport as one competitor received notable inadequate and reducing allocations, which is not justified especially against a notable steady rise in transport activities and related revenues, which is indicative of increased road traffic generally which is between 3,4% and 4,3% p.a.

The COVID-19 pandemic had a serious effect on traffic volumes, yet of a short-term nature, but the "new normal" situation for the future is still not fully settled. At the same time the emergence of new technologies, especially electric driven vehicles, which may also affect the financial affairs and the way in which transport should be managed.

Evidently, the inadequate funding profile with real growth in transport activities shows ignorance of the user-pays-principle not reverting back to the consumed resources, i.e., transport infrastructure. At the same time, none of the other modes of transport generates any notable internal revenue stream from user charges. Little, if any, opportunities exist for private sector participation through either PPP processes or otherwise. General consensus, given the status of the road transport network specifically, is that the transport sector does not support the other national economic and social sectors the way it should. The main issue is therefore the low priority for transport when budget decisions are made.

2.8.2 Issues

2.8.2.1 Instability of and insufficient transport budget allocations

i. Fluctuating and erratic transport budget allocations and expenditures, leading to sub-optimal sector planning, management and implementation programmes.
ii. Current transport funding sources are insufficient to provide for all transport needs.
iii. The transport sector is underfunded within all subsectors because of:
    a. Unavoidable competing priorities for limited resources
    b. Low priority for voted funding from the Consolidated Fund
    c. Investment objectives are unclear and misaligned
    d. Ignorance of NSDP objectives and the role of transport in the economy
    e. Policy statements may not always be linked to financial sustainability, leading to inadequate budget allocation for transport investment
    f. Unavailability of well-structured, accurate, readily available data to support and substantiate motivating arguments
    g. The Road Fund is insufficient, with backlogs on road maintenance
    h. Capital programmes are second priority and inadequately funded through the Consolidated Fund and often completely reliant on donor funding
    i. There is a backlog on fee increases for Road Fund revenue sources.
iv. The effectiveness of the private sector industry to construct and maintain roads is at risk and capacity development is inhibited.
v. The economic sectors cannot always rely on an acceptable transport network, with tourism industry, agriculture, mining, and social needs the most affected, with negative overall impacts on the economy, contributing to a GDP decline.

2.8.2.2 Capacity and efficiency of current funding sources

i. The transport sector is dependent on three main funding sources with various limitations:
    a. Road Fund, sourced via the road maintenance levy, toll and licence fees, aimed at road transport subsector expenditures only and prioritizing maintenance. The capacity of each source varies to a limited extent, and are relatively stable. The Road Fund has the capacity, but not the mandate to increase fund raising, including potential to fund also other transport sector needs.
    b. Consolidated Fund and donor funding for all capital and other transport subsector funding. Allocations fluctuate severely and are less reliable, excluding the standard recurring expenditures.
ii. A basic underlying problem is either unclarity or ignorance of the basic principle relating to the use of a road to be the consumption of a scarce resource by the user, linked to the application of the user-pays principle and associated charge mechanisms.
iii. In terms of the funding for road transport, government should recognize that a road transport network and the use of that by all road users, mainly private sector traffic, is similar to the use of water and electricity. The pricing and charging to users of roads should be similar. Therefore, the total revenues received from the fuel levy, license fees and toll fees should cover the total expenditures on the road transport network. This is the true reality of the user-pays principle.

iv. Fuel levies, licence fees and tolling as major Road Fund sources:
   a. Apart from allocations from the Consolidated Fund, these sources represent 99% of total funding from internal funding sources and are considered cost-effective but not fully exploited, with irregular increases not keeping pace with inflation, yet, there is ample room to increase fee levels.
   b. Lesotho's general charge levels for licence and toll fees are much lower than those of all other SACU countries. The level of the Road Maintenance Levy (RML) is even more conservative on the charge portion dedicated to road transport.
   c. A potential imbalance is reflected by the comprehensive fuel pricing structure, with unrealistic low allocations to the RML, relative to allocations for other purposes. Effectively, the logic underlying the user-pays principle is not applied.
   d. The licence fee system reflects some structural weaknesses and is in need of restructuring.
   e. Tolling is generally considered as an expensive system to raise funds. Tolling at the border posts, however, remains essential, subject to review.
   f. High toll increases should not be applied to local registered vehicles.
v. Other Road Fund sources (eight individual charges) represent combined less than 1% of the total funding source and serve mainly to pay for administrative functions.

2.8.2.3 Continued negative economic growth prospects – the emergence of a "new normal" economic and transport profile following COVID-19.

i. Implications from continued negative economic growth prospects, together with the associated emergence of a "new normal" economic and transport sector profile, as well as the systematic long-term emergence of electric vehicles:
   - A general regional economic down-turn is observed.
   - Aggravating and longer-term COVID-19 and HIV/Aids as well as TB impacts on the economy and subsequently the transport sector
   - Reduced general tax, SACU, and fuel levy revenues.

ii. Impacts on transport:
   - Changed mobility trends and habits
   - Reduced traffic, less pressure on transport network
   - Restructured private and public transport
   - Changed modal split
   - Reduced revenues from internal revenue sources.

2.8.2.4 Institutional issues derived from the prevailing fiscal analysis

i. Inadequate management and operational capacity and new technology require new approaches, the occurrence of a high "brain-drain" in the transport sector and outdated legislation, policies and strategies to address the changed environment.
ii. Financial responsibilities associated with the road transport subsector, are fragmented with budgets across various Ministries and implementation entities, thereby complicating effective management, oversight and accountability, "siloed" budgeting, expenditure and revenue collections.
iii. Fragmentation also leads to anomalies and discrepancies on data accuracy and availability between different financial year Budget Books, complicating and obscuring a comprehensive overarching picture of the transport function.

2.8.2.5 Decentralisation Issues

i. Currently there is a high focus on decentralisation policies in the public sector country-wide, which is focussed on a move away from centralised governance. The issue is however the current available capacities (human capital and funding) on decentralised levels to accept and execute responsibilities in an effective and sustainable manner.
ii. The objective is therefore to support the decentralisation policies, but on a responsible manner by ensuring that all programs executed on a national or centralised basis include a parallel program to develop human capital effectively, initiated on the central levels and systematically as and when these capacities are developed and sustainable to deploy the capacities to decentralised levels.
iii. The development process must however not be on a top-down approach only, but parallel to that also a bottom-up approach. Effectively it means that the mechanism to develop capacities (funding and human capital) must be formulated in a standardised manner with recognised rules and principles to be sustainable on all levels, and then to apply the standard mechanism nation-wide. Such a standardised system should not be considered and "centralised" mechanism, but rather a "nation-wide standard system". For example, as capacities are developed within the standardised mechanism, human capital must also be sourced (nominated) by ALL levels of governments to participate in the development process. This will ensure a top-down and a bottom-up approach. Effectively all capacities are deployed on all levels of government at the same time.
iv. The same principle applies when financial resources are exploited (developed). Any nationally accumulated funding (such as fuel levies and tolls and license fees) should be "deployed" (applied) on all levels – as an example for both national and local roads. This approach is referred to as a sustainable and responsible decentralisation policy, to be applied within the transport sector as well.

To conclude: The current fragmented transport governance structures responsible for the financial management and implementation of transport projects, reflect:
   a) Implementation functions that are spread over several institutions
   b) The policy on decision-making regarding the level of fuel taxes and levies resides with more than one Ministry (including energy, finance and transport), which complicates integrated revenue management
   c) The implication is that the transport function is not seen as a strategic and catalytic enabler of the economy and this is low on the GOL priority list.

2.8.3 Policy Directions

The main or overarching objective for the transport function from a financial point of view is to establish a financial environment that will ensure:
- A sustainable and stable funding basis that is sufficient to provide for an acceptable transport network standard
- Effective financial management and oversight
- Self-sufficiency in the development of transport funding sources.

Specific policy directions for transport sector funding and investment are:
1. To ensure funding patterns that will secure continuous stability for the sector by means of: -
   a. Smooth and stable budget allocations, eliminating annual budget fluctuations
   b. A secured environment to develop human and industry capacities for permanent and secured transport sector capacities
   c. Synchronised budget processes, aligned with NSDP objectives and cycles
   d. Automatic fee increases, legislated to be linked to the CPI.
   e. Well-motivated budget requests through substantiated, accurate and well-presented data and arguments
   f. During economic downturn, budget allocations should not reduce or increase to the same relative extent
   g. The recognition of road usage to imply consumption of scarce resources and application of the user-pays principle and associated charge mechanisms
   h. Transport investments to be recognized as a priority for support to other economic sectors and as a platform for private sector investment
   i. The identification and exploitation of private sector funding (PPPs), where feasible.
2. Transport sector funding should systematically be restructured to be less dependent on the Consolidated Fund, by means of increased funding from internal Road Fund sources. This implies an increased allocation of fuel sales charges to the Road Fund (without increased fuel prices to road users), increased (normalised) toll and licence fees, and automatic annual fee increases replacing ad hoc processes that are politically sensitive. Effectively, treating the funding of the road transport subsector similar to water and electricity users (user-pays practices).

2.8.4 Policy Statements

The overall policy statement for transport sector funding and investment is stated as follows:

Establish a financial management environment for the transport sector on a national basis that will ensure sustainability and effective financial accountability and oversight, self-reliance of sufficient funding sources to ensure transport development and maintenance at acceptable standards.

The following statements present specific policies that have to be considered to support the overall transport sector funding and investment policy statement.

2.8.4.1 Cross-cutting policies related to funding and investment in the transport sector

Policy Statements:

a) Stability in the funding environment is essential for an effective and optimised transport sector.

Fluctuations in budget allocations and expenditure patterns should be eliminated as far as practically possible to counter-act instable planning and implementation processes, given the long-term nature of most transport programmes. It is essential to optimise expensive, specialized and scarce human capital and other technical capacities – also in the private sector – to develop and maintain the transport system effectively.

b) Application of the user pays principle is key to the development and exploitation of internal transport sector funding sources.

The use of all transport facilities (including roads, airports, railways and public transfer facilities) is equivalent to the consumers of other public goods and facilities such as water and electricity. These "collective economic commodity/assets" usually require ring-fenced management or institutional structures in the form of water or electricity commissions. The same approach is also applicable to the transport network as a "collective economic commodity/asset." Accordingly, within this framework, users or consumers of transport facilities are to be charged through similar mechanisms as the consumers of water and electricity, which in turn provides the majority of funding for the transport sector. The current fuel levy is the perfect mechanism for transport, but its charge level to be reserved to channel the funds to the provider, needs to be corrected.

c) Fundamental to the responsibility for funding, is the self-reliance on own internal transport sector funding sources and - as far as possible - independency from the Consolidated Fund and donor funding.

As for the provision of water and electricity, which is paid and funded via user charges, the users of transport facilities should be charged on a similar basis. These internal transport charges should be the main internal funding source for the development of transport infrastructure. It relates to both

the user pays principle and recognition of transport facilities to be considered consumer goods/assets that deteriorate (being consumed) relative to a combination of the extent of use (demand) and the impacts of natural elements (rain, temperatures, etc).

Allocations from the Consolidated Fund should be the exception rather than the main funding source. The latter should be applied for strategic reasons where the extent of traffic cannot carry the costs and are deemed essential for strategic and safety reasons such as international air traffic and river crossings.

d) Revenues from internal transport funding sources are available for allocation to all transport needs (national, district, rural and local), in both urban and rural areas; and also for all modes of transport.

Most charge mechanisms for the use of transport facilities disregard any jurisdiction boundaries and classification of transport facilities. It is particularly applicable to charges such as fuel levies, licence and toll fees which – together - represent the majority of internal transport revenues. All licensed road traffic (as one source), driven through fuel energy (another source) use national, district and urban roads. Traffic entering via border crossings also use any type and classification of road.

As such, all revenues generated through these charges should in principle pay for the "consumption" of these facilities. Some exceptions such as landings at airports/air strips and river crossings may be place-bound and such revenues may be localised for funding of its expenditures.

2.8.4.2 Policies related to the determination and approval of transport budget requirements

Policy Statements:

a) The extent of transport funding (budget requirements) and priorities for transport investment programmes are primarily driven by the National Strategic Development Plan (NSDP), of which the Integrated Transport Plan (ITP) is an integral part; and accordingly to be synchronized within the same planning, consultation and approval time cycles.

As an integral part of the NSDP, the ITP should be reviewed periodically (usually every 5 years) and should reflect the total budget requirements for the full cycle period. The approval of this plan is therefore the key for a stable funding regime to eliminate ineffective fluctuations.

The ITP preparations (all surveys and detailed planning activities) should start 3 years prior to the planned date for submission of the NSDP, and should be completed in draft subject to the IDP consultation processes. Specialized transport sector consultation may be necessary.

b) The budget requirement as reflected by the approved Integrated Transport Plan should remain stable in relative terms for the cycle period concerned, but subject to annual inflation increases and adjustments for abnormal and extra-ordinary events.

On an annual basis, minor ITP and budget adjustments may be required and allowed based on prevailing interim circumstances, but should not deviate much from the basic plan, except for unusual circumstances such as the emergence of COVID-19 and natural disasters.

c) The establishment and continuous monitoring of a transport sector and macro-economic data base and the determination of the new normal transport sector profile, serve as basis for ITP formulation and its annual planning review. Database establishment and upkeep is a recurring necessity.

The planning procedure is a continuous and on-going recurring process which requires a transport sector-related macro-economic data base as well as extensive transport data including a Road Management System with all its supporting survey procedures, the application of the HDM-4 model, financial modelling and the update of transport costs and prices. Without an extensive database and recognized planning tools, transport improvements cannot be motivated with confidence and sound arguments.

2.8.4.3 Policies related to internal transport funding sources and pricing of transport charges

Policy Statements:

a) The current Road Fund is elevated to a Transport Fund to be all-inclusive for all transport infrastructure development. Its revenue sources comprise mainly of the current Road Fund sources: the fuel levy (established parallel to fuel tax), licence fees and toll fees, all of which should be supplemented by allocations from the Consolidated Fund as required and donor funding on an incidental basis.

In addition to the Consolidated Fund allocations, donor funding, private sector/PPP investments, other minor sources are considered supplementary and incidental revenues to boost the Transport Fund.

A systematic medium term restructuring process (maximum 5-years) is proposed to allow for the transformation of the current funding dispensation where the Consolidated Fund is the main revenue source for the Road Fund, to the proposed dispensation where the Transport Fund is the dominant funding source, with less reliance of the Consolidated Fund.

b) The funding formula as basis for the composition of the Transport Fund comprises the share of each individual source as a percentage of the total funding requirement for a particular financial year. The level of fees for each source are relatively fixed for the planning cycle period (within a particular range), in a balanced ratio (to be determined within each ITP cycle period) to fund the total transport budget as per the approved ITP.

Given the transformation process that will take some time to be executed in full, the funding shortfall not provided through the funding formula need to be supplemented by the Consolidated Fund. The charge level for each funding source is amended and increased systematically based on revised analysis of prevailing charge levels and structural fee compositions as reflected in the main report, where the regional SACU price structures are used as competitive basis and comparable benchmark. These pricing structures need to be monitored annually to ensure the prevailing annual pricing structure of Lesotho is realistic, benchmarked against the regional profile and economic circumstances.

The ultimate aim is that the funding formula should eventually be the only source of funding for the total transport sector. It may be an ambitious target, but needs to be pursued seriously to apply the user pays principle as far as possible.

c) Increases in charge levels are to be effected as automatic annual increases, legislated equal to the official CPI; with comprehensively reviewed fee level targets as part of the ITP planning reviews; with ceiling levels balanced against new development targets and its budget requirements.

One important reason for the backlog in current charge levels is that automatic increases are not applied and any fee increase needs to be approved through administrative processes that are complex and sensitive and avoided because of its sensitivity and effort. The result is a serious backlog and incompatible pricing out of balance with the regional pricing benchmarks, curbing optimal transport network development.

d) In collaboration with the Ministry of Finance and the Department of Energy a dedicated programme is followed to establish a new main transport funding source to add to and/or replace the fuel levy systematically once electric vehicles start to influence revenue sources negatively as less fuel is sold in future years.

Electrification, and therefore less fuel sales and revenues from the fuel levy are imminent world-wide and will spill over to the Southern Africa region at some point. This may not be considered a short-term issue, but timely attention is essential to counter potential sudden changes which may impact on funding sources and destabilise the implementation programmes.

e) Private sector investment potential through PPP-programmes remains important and active initiatives in this regard should be part of the annual development programmes.

Opportunities for PPPs in the transport sector are limited. Traditionally, toll roads present one PPP-opportunity, but it remains an expensive form of generating revenues and are not favoured politically given serious associated road user resistance. However, a toll mechanism without any toll gates needs to be investigated, but would require a contractual arrangement to dedicate fuel levies within a local or district area to be reserved for a particular toll facility.

Another potential PPP arrangement could be where private sector participates within the proposed Transport Development Agency in the form of specialised human capital participation in the executive structures, as well as providing and operating construction equipment as a permanent source for infrastructure programmes to be added to tendered projects.

2.8.4.4 Policies related to transport budget expenditures, motivations and priorities

Policy Statements:

a) Principle approval of the longer-term investment budget for the transport sector is vested in the Parliamentary approval of the NSDP, which contains the ITP and its proposed investment strategy (projects and individual costs) and implementation programme. The 5-year cycle is however confirmed by the annual Parliamentary budget approvals for a particular financial year, but within the framework of the approved NSDP and ITP.

Although the new transport financial policies do not deviate or contradict the normal national fiscal procedures and processes, a renewed emphasis is placed on the role and status of the NSDP and the importance of the ITP as an integral part of the NSDP, which is not supposed to be a forgotten book on the shelf, but an active guidance to a five-year development cycle. The emphasis is placed on the national economic development principles, approved by Parliament which includes the longer-term transport development and funding proposals.

Obviously, some extra-ordinary events may occur but then these events will be managed as and when they occur. Other than that, the guidance of the NSDP needs to be adhered to and it should not be distracted by incidental ad hoc political demands, often short-term in nature, that contradict the medium to long term strategic development motivations approved by Parliament.

b) Transport budget expenditure priorities are confirmed to be:
- *1st priority: transport infrastructure maintenance to protect historic investments*
- *2nd priority: rural infrastructure development and public transport projects*
- *3rd priority: new mobility and capacity provision.*

The five-year transport development programme (reflected by the approved ITP) serves as guiding tool for priorities within the annual implementation programme. This programme needs to be compiled with specific longer-term

priorities in mind, which in turn is also guided by national socio-economic priorities defined by the NSDP. Budget allocations on an annual basis may deviate from the intended 5-year forecasts and as such the annual priorities still need to adhere to specific priority guidelines, as reflected in the policy statement.

A specific priority item is a percentage of Transport Fund to be secured for human capital development (bursaries for tertiary qualifications, internal tutoring and student internships, temporary holiday employment programmes, etc.). This item is considered to be a recurring budget item, which in turn is classified as part of the maintenance priority, as it "maintains" or secures human capital capacities.

c) *Once the destabilised impacts of COVID-19 are phased out and traffic and travel demand has normalised, a "new normal" demand pattern is researched with associated financial impacts. Until then, the funding ceiling level for the current budget review period is pitched at the actual expenditures immediately prior to the pandemic.*

This policy approach is derived from the fact that the COVID-19 impacts had severe consequences for the total national budget allocations and the ability of the usual national funding sources in general.

2.8.4.5 Institutional policies related to funding and investment in the transport sector

Policy Statements:

a) *Institutional restructuring within the transport sector is essential to provide for the effective implementation of the investment strategy, comprising the following components:*
   - *The Department of Transport as the national governing department*
   - *A National Transport Board (NTB), restructured from the current Road Fund Board, to ensure all-inclusive interaction, collaboration and decision-making on all transport infrastructure developments; funded through the*
   - *National Transport Fund (NTF), restructured from the existing Road Fund but serving as a financial mechanism rather than acting as a functional directorate or institution; and*
   - *The National Transport Development Agency (NTDA), reporting to – and acting as the executing agency of the NTB; using approved funds via the NTF*
   - *Capacity building within the NTDA to identify and oversee the implementation of policy outcomes.*

The proposed new funding and investment policy framework requires inevitably amendments to the institutional framework for the transport sector, including the evolvement of the Roads Fund into a Transport Fund, as well as the restructuring of the intended Roads Agency to a more comprehensive National Transport Development Agency. This proposed restructuring is, however, limited to the provision and maintenance of transport infrastructure and excludes any transport operational function such as traffic management and control, public transport operations or air traffic control, which remains as directorates within the Department of Transport.

Current institutional structures such as the Road Fund and the intended Roads Agency are already paving the way for the recognition of a more specialised approach towards the transport sector to be managed similar to water and electricity as collective economic commodities.

Key to the institutional restructuring and integration within the umbrella approach is effective interaction, collaboration and all-inclusive representation between all government structures parallel to the Department of Transport, which should be facilitated through the proposed National Transport Board.

2.9 OVERARCHING AND CROSS-CUTTING TRANSPORT ISSUES

In addition to the Policy Priority Areas discussed in this Chapter, the overarching and cross-cutting transport issues that need to be taken into account during the update and formulation of transport sector policy statements are considered.

The various aspects that are covered in this section are:
- Environmental considerations
- Land use and integrated transport planning
- Enabling industry, skills and human development
- Transport data management
- Transport sector resilience
- International transport
- Private sector participation
- Road safety.

2.9.1 Environmental Considerations

2.9.1.1 Status

Transport plays a vital role in the national economy, yet can also have adverse effects on both the biophysical, environmental and socio-economic environments. In particular, transport in Lesotho requires an adequate framework within which these impacts can be monitored and managed appropriately. The current environmental impacts are poorly managed and enforced, especially considering aspects of air pollution emissions and fuel efficiency.

Internationally, high emphasis is placed on carbon emissions, including emissions from combustion engine driven vehicles and the trend is moving towards an increased utilisation of electric vehicles, as well as alternative fuel vehicles, mostly driven by the environmentally negative impact of internal combustion engines. It is with this trend in mind that the preparedness for the emergence of electric and alternative fuel vehicles is discussed in the context of environmental considerations in Lesotho.

2.9.1.2 Issues

2.9.1.2.1 Importation of second-hand vehicles

A severe concern within the transport sector lies with the increased importation of second-hand vehicles for the use as "4+1" taxis. These are very poorly regulated and the associated standards for importing these vehicles are lacking. This increasingly results in vehicles that drive and operate on the Lesotho roads in unroadworthy conditions or below internationally accepted norms. Additionally exacerbating the problem is the fact that developed countries are increasing their vehicle standards and this creates a market for exporting their substandard vehicles to countries with more relaxed regulation.

Major concerns regarding their environmental impact are the poor fuel efficiency of these older vehicles as well as the associated lack in emissions regulation.

2.9.1.2.2 Air quality standards

Despite undertakings made in various policies to institute studies, establish air quality standards and monitor trends in ambient air quality, very little progress has been seen in pollution control over the years. Consideration needs to be given to the formulation of a transport emissions control policy.

Determinants of emissions in the transport sector are:
- The size of the national vehicle fleet
- The composition of the national vehicle fleet
- The age of the national vehicle fleet
- Vehicle operating conditions
- Fossil fuel consumption.

2.9.1.2.3 Traffic conditions and travel environment

Lesotho faces vehicle operating conditions that further intensify the environmental impact of the road transport subsector. These include:
- Rugged terrain which results in very long-distance solutions, especially in the mountainous region
- Inadequate provision of land for the expansion of the road transport infrastructure, particularly in urban areas
- Poorly maintained road transport infrastructure where, in 2019, 45% of the paved and 81% of the gravel roads were in poor or very poor condition
- A high prevalence of poorly maintained gravel roads and access tracks in informal settlements in peri-urban areas
- Traffic congestions that are created by a rapid increase in the national vehicle fleet in recent years in the face of a limited road transport infrastructure network
- Failure to maintain the required standard of road widths and lanes due to terrain conditions and land availability limitations
- Poorly enforced loading regulations
- The dominance of poorly maintained ELVs in the national vehicle fleet
- The dominance of low-capacity passenger vehicles in the national vehicle fleet.

2.9.1.2.4 Preparedness for the emergence of electric and alternative fuel vehicles

The current world-wide programme for electric vehicles to replace combustion engine vehicles is driven by strong international low-carbon mobility technologies and motives, with strong indications of similar regional sentiments, which will also find its way to Lesotho. These developments may happen rather sooner than later and the impact of this on Lesotho is highly dependent on developments in South Africa.

Currently, all Lesotho road vehicles rely entirely on fossil fuel energy, which in turn is the basis for the fuel revenues. Globally, the technology developments are moving systematically over to electric driven vehicles, which will slowly but surely decrease the sales of traditional fuel with a negative impact on the revenues received from that source.

Events and issues related to the emergence of electric vehicles and the expected systematic phasing out of low cost imported, high carbon emission (HCE), second-hand vehicles, include:
i. The global agenda on renewable energy and the elimination of HCE will inevitably lead to systematic local and regional replacement of HCE fleets
ii. Electricity generation from renewable sources for application on electric vehicles will become a future priority, necessitating early precautions
iii. Lesotho's dependence on South African vehicle manufacturing may lead to the unexpected emergence of electric vehicles, which may be sooner than expected
iv. Less revenues will be generated from the fuel levy
v. The current HCE fleet will age systematically, but may be replaced with second-hand electric vehicles, but only once a second-hand market for electric vehicles manages to emerge
vi. New advanced technologies emerge continuously, requiring pro-active strategies to adapt and be exploited when necessary
vii. The parallel impacts on habits for private transport and the composition of public transport.

Additionally, the emergence of other alternative fuel vehicles needs to be considered. The impacts of these are very much similar to those listed for electric vehicles above. Some examples of alternative fuel vehicles are:
- Hydrogen
- Natural gas
- Biofuel
- Fuel-cell electric
- Hybrid-electric.

2.9.1.3 Policy Directions

The policy directions for environmental considerations are:
1. To improve the planning and decision-making processes regarding environmental aspects of the transport sector activities and services

2. To ensure guidance in promoting ecologically sustainable transport in Lesotho
3. To raise awareness towards mainstreaming environmental safeguards
4. Ensuring a transport environment where vehicle operating standards are well regulated, especially concerning imported second-hand vehicles
5. To facilitate alignment with the regional environmental protocols and treaties
6. To ensure timeous preparation for an ultimate electric vehicle population
7. To allow additional or alternative funding sources to be developed to counter reduced revenues from fuel levies.

2.9.1.4 Policy Statements

The overall Environmental Policy is stated as follows:

Ensuring that the overall transport sector planning, implementation, operation and maintenance of transport infrastructure is underpinned by environmentally sustainable principles.

The specific sub policies that support the above statement are:

a) Formulation of a transport emissions control policy

In order to drive solutions to the air quality challenges in Lesotho, government will formulate a transport emissions control policy that is fitting to the Lesotho economy. It should address, amongst others:

- policies that are favourable for the careful planning and investment in infrastructure development to promote fuel efficiency;
- policies and control measures, including establishing and incorporating ambient air quality standards and monitoring requirements, for the minimization of air pollutant emissions from the transport sector; and
- policies for the effective and sustainable growth of a healthy national vehicle fleet with minimal air pollutant emissions.

b) Establishment of an air quality control unit within the Department of Environment

The air quality control unit will fulfil the following role in implementing the transport emissions control policy:

- To act as a focal and regulatory institution for air pollution control in the country;
- To collect air pollution data in the country and establish air quality standards;
- To initiate a legislative framework for ambient air quality standards in the country and compliance requirements thereof;
- To apply air quality modelling or assessment techniques in selected spots where the continuous monitoring of ambient concentrations would not be justified;
- To conduct mobile air quality testing activities along transport routes;
- To monitor compliance of all activities in the country with air quality standards; and
- To take appropriate action against any source of high ambient air concentrations or non-compliance.

c) Ensure that the vehicle operating standards are well regulated and enforced.

The roadworthiness and adequate vehicle operating standards, in line with the transport emissions control policy, will adequately be enforced by the Department of Traffic and Transport.

d) Align the environmentally sustainable transport management approach in Lesotho with the relevant national and international policies, regulations and agreements.

Ensure that the continuous adherence to the relevant national and international policies, regulations and agreements is considered, including the Environment Act of 2008 and the Design Standard for Roads and Bridges, Guidelines for Environmental Control, August 1998 Volume 9 and any other regulations.

2.9.2 Land Use and Integrated Transport Planning

2.9.2.1 Status

The current state of integration between the broader land use planning functions and the transport-specific planning functions is not clearly defined in Lesotho. The Department of Land Survey and Physical Planning (LSPP) takes responsibility for the broader land use planning whilst the Roads Directorate (RD) maintains the responsibility for the physical transport planning function.

The question is whether the current interaction efforts are effective – or that it exists at all - amongst current government institutions to ensure proper land use and transportation planning. A dedicated and well capacitated national transport directorate for all modes is essential to be responsible to ensure central national transport planning, with entrenched responsibilities to interact with land use planning and economic development nation-wide. The planning structures need to counter-act fragmentation in all respects.

2.9.2.2 Issues

2.9.2.2.1 Lack of integration between land use and transport planning

Since transport planning is largely land based, it is critical that institutions that have a mandate to formulate and implement land use plans are not only put in place but are given the necessary authority, through a legal framework, that will make them effective.

As it currently stands, there is a serious gap with integrating these functions in Lesotho. Land use planning needs to take into account the transport-specific needs more carefully and also enable future developments by considering the requirements. The rationalisation of land use, town and settlement plans is a dire necessity in Lesotho as a precondition for effective transport integration. Thus, it is clear that there is a significant link that needs to be established between the land use planning and transport planning functions in order to combat the persistent and inadequate coordination and working in "silos" among Government Ministries and other sectors.

2.9.2.2.2 Spatial Development Framework

The NSDP II identifies a clear need for the development of the National Urban Policy (UP) and the National Spatial Development Framework (SDF). The absence of these documents indicates the lack of forward planning in the overall scheme. An SDF typically provides a structure for the future development and regeneration of an identified geographical area. Urban policy promotes transformative, productive, inclusive and resilient urban development for the long term.

The development of these documents will allow government to deliver infrastructure and services in a sustainable and cost-effective manner. Transport and travel are an essential and costly component of life for individuals, households, business and government, and so transport efficiency is an important consideration in the development and updating of an SDF.

2.9.2.3 Policy Directions

The policy directions for land use and transport planning are:

1. To facilitate the integration of the land use and transport planning functions in Lesotho, thus enabling synergy in their efforts
2. To enable the effective land use and transport planning that is required to underpin many of the objectives in the broader transport sector policy
3. To ensure the development of the National Urban Policy as well as the National Spatial Development Framework for Lesotho
4. To allow for densification of land use along transport corridors, thus allowing for more effective and efficient transport structures, considering also the necessity to address and counteract road reserve encroachment.
5. To ensure that effective transport institutional structures are created to facilitate the integrated planning objectives with proper interaction with other government organisations.

2.9.2.4 Policy Statements

The overall Land Use and Integrated Transport Policy is stated as follows:

To ensure the wider interaction and consultation between land use planning and transport planning units in government, allowing for a more integrated approach to providing transport infrastructure and services.

The specific sub-policies that support the above statement are:

a) Establish regulations that secure the interaction and consultation among the respective transport and land use planning units.

The central planning unit within the Department of Transport will have continuous interaction with land use planners on all levels of government. The Department of Land Survey and Physical Planning (LSPP) will have a seat on the newly established Transport Board in order to integrate the planning aspects between land use and transport.

b) Develop a National Spatial Development Framework and a National Urban Policy for Lesotho.

As identified in the National Spatial Development Plan II, the need for the development of a National Urban Policy and the National Spatial Development Framework was highlighted. With the current urbanisation rate, these frameworks will be important in guiding the spatial distribution of human and other resources, as well as the use and consumption of land.

c) Ensure that the National Integrated Transport Plan follows the same update cycle as the National Strategic Development Plan.

In order to allow for synergy between the different strategic planning instruments and plans, the update of the National Integrated Transport Plan will follow the same update cycle as the National Strategic Development Plan.

2.9.3 Enabling Industry, Skills and Human Development

2.9.3.1 Status

Key Priority Area II in the NSDP II refers to "Strengthening Human Capital". It is thus recognised that the concern of current lacking human capital and the required development of this capital in Lesotho is of dire importance. Lesotho's current Human Development Index (HDI) puts the country in the low human development category, which also indicates the necessity of overall human development.

When considering the transport sector in specific, the same concern is present and requires addressing. The development of qualified and sufficient human expertise and capacities is currently a serious inhibiting factor in the transport governance framework – on all levels of government.

2.9.3.2 Issues

2.9.3.2.1 Insufficient and not suitably qualified human capacities in the transport sector

What is required, is a dedicated and strong human development programme that will provide more and better qualified capacities, starting on national level and eventually filtering down to sub-national levels.

Thus also, a serious problem is the reported shortage of suitably qualified personnel to execute some transport-related functions locally. For some functions such as registering a vehicle or roadworthiness testing, this is not an issue, with local personnel and facilities present that are suitable and accessible to local communities. Other functions that require more specialized expertise, such as road and traffic engineers, financial experts and economists, are more complex, with most local authorities lacking these qualified personnel.

Human development programmes are needed, with the intent to develop scarce resources within the transport sector, to deploy these resources country-wide amongst all national and sub-national government agencies as part of a long-term decentralisation policy.

The capacity building initiatives are required not only for the public sector, but also for the private sector, enabling private industry to play their part.

2.9.3.3 Policy Directions

The policy directions for enabling industry and human development are:

1. To facilitate the development of human capital in Lesotho in general by focusing on the objectives of NSDP II Key Priority Area II
2. Enabling the development of the necessary human capacities within the transport public sector, at all levels of government, starting at national level
3. Generate private industry growth and development by facilitating an enabling environment for industry development.

2.9.3.4 Policy Statements

The overall Enabling Industry, Skills and Human Development Policy is stated as follows:

To assess the current human capital skills in the public and private transport sectors and establish clear intervention strategies for upskilling the human capacities, thus protecting the human capital in Lesotho and ensuring continuity in the development efforts of the country.

The specific sub policies that support the above statement are:

a) Conduct a concise skills audit within the Transport Sector in Lesotho

Before the development of strategic programmes for building capacity in the public and private transport sectors can commence, a definitive skills audit will be performed by a qualified external party to identify the existing shortfalls within the institutional structures and skill sets in the transport sector.

b) Develop a skills and human development strategy

The establishment of an adequate human development strategy could be facilitated via a PPP project. Capacity building within the transport public and private sectors is aimed at human capital, management structures, methodologies, entrepreneurial and leadership skills and equipment required to plan, fund and implement through construction and maintenance of the road transport network (Implementation of Construction Industry Regulatory Policy). Strategies are primarily aimed at securing the acute shortage of well qualified, and experienced resources to manage the road transport function; and can include bursary schemes and internships for qualified technicians and engineers, financial and transport economic students to be deployed both within the Roads Agency and private sector construction companies, extended to both centralised and decentralised locations where rural feeder road projects are implemented. Developed capacities are to be deployed when such projects are implemented. In addition, apart from the permanent capacities to be developed, employment of rural personnel on a temporary basis to take part in feeder road projects should also be supplemented with skills development programmes at labourer level.

2.9.4 Transport Data Management

2.9.4.1 Status

During the review of currently available data in Lesotho, it became evident that the availability of transport-related data is highly fragmented and that data sharing mechanisms are not very well managed in the context of the transport sector in Lesotho. Collection of data was done on a manual basis and was often obtained from individuals within the various subsector institutions. It includes all transport-related data, technical and financial and economic-related data.

The emergence of progressively evolving transport systems is driven by the increasing availability of transport related data. It is recognised that the effective sharing and use of this data is an imperative in facilitating this progressive change within the transport sector and that the definition of specific policy is an enabler in this regard.

Additionally, the emergence of the 4th Industrial Revolution (4IR) has an effect on the way automation and data exchange mechanisms are utilised. Essentially, Industry 4.0 increases operational efficiency. Cyber-physical systems, Internet of Things (IoT), cloud computing, cognitive computing and artificial intelligence all fall within the sphere of 4IR and the future impacts of these need to be considered.

Thus, in the context of Lesotho, the opportunity is there to "leapfrog" the development process by making use of technologies and digitalisation strategies that are already present in developed countries, thus arriving at better solutions faster.

2.9.4.2 Issues

2.9.4.2.1 Centralised sharing and collaboration of high-quality transport data

A severe shortcoming within the transport sector is the sharing and collaboration of the available mobility-related data.

A number of benefits can be observed from data sharing, which are important motivators for implementing such measures in Lesotho:

- **Economy-wide impacts**
  - Transition to sustainable systems
  - Economic value creation
  - Domestic innovation and technology capabilities
- **Mobility system**
  - Optimised use of assets and infrastructure
  - Adaptive mobility system to real time needs
  - Better supply and demand management
- **Data sharing participants**
  - Improved product/service
  - Direct value gains.

2.9.4.2.2 Digitising vs Digitalisation

When it comes to managing transport data in a collaborative manner that provides benefit to all involved stakeholders, there is a need for distinction between digitising and digitalisation of data.

Digitising is the mere process of transferring data into a digital format, whereas digitalisation is the use of digital technologies to enhance corporate processes, to change a business model and provide new revenues and value-producing opportunities. Digitisation relates to information whereas digitalisation relates to a process.

It is thus vital that the transformation that has to occur within the transport sector regarding data management and use is done in the context of digitalisation and not just digitising. It is one thing to obtain data in a digital format but another to put in place the technologies and associated data structures and systems to support real change in this regard.

Within Lesotho, there is currently no move towards a digitalised approach to collaborative data sharing.

2.9.4.3 Policy Directions

The policy directions for transport data are:

1. To promote the establishment of adequate data sharing and collaboration practices in Lesotho that will allow various stakeholders to reap the associated benefits of such an enabling environment.
2. To ensure the readiness for and implementation of digitalisation strategies within the transport sector of Lesotho by utilising the associated digital technologies in the best manner, thus paving the way for Industry 4.0 application in the most appropriate manner for Lesotho.

2.9.4.4 Policy Statements

The overall Transport Data Management Policy is stated as follows:

To provide clear guidance on the development of data management and utilisation within the transport sector, especially considering the establishment of data digitalisation mechanisms and the advancements in data generation and sharing techniques.

The specific subpolicies that support the above statement are:

a) Develop a National Transport Data Digitalisation and Management Strategy.

To utilise the advancements in technology and the possibilities of increasingly data driven decision making processes, a national Transport Data Digitalisation and Management Strategy needs to be formulated. The relevance of interacting between various sectors and role players needs to be established when it comes to sharing data across disciplines and professions and how these can benefit of this. Three levels of significance are envisioned when it comes to data digitalisation: Operational efficiencies, management/ planning opportunities and monitoring capabilities.

b) Establish a Transport Data Centre based on the outcomes of the National Data Digitalisation and Management Strategy.

Along with the formulation of the data digitalisation strategy, the establishment of a Transport Data Centre will be investigated and the appropriate strategy will be formulated.

2.9.5 Transport Sector Resilience

2.9.5.1 Status

As is evident from the current fragmentation of the transport sector in Lesotho, adaptability to change and disruptions is not at an advanced stage. Without adequate forward planning, considering especially the onset of new technologies, negative climate impacts, the emergence of electric and alternative fuel vehicles and other unforeseen factors such as the COVID-19 pandemic, the way the transport sector is able to respond is currently severely hampered.

Resilience is typically defined as a system that has the capability to recover from a disruption to an operational level similar to prior to the disruption in a timely manner. The longer and deeper the impact of the disruptions on operations, the

less resilient the system becomes. Disruptions can range from anthropocentric to natural, from local to global.

A balance needs to be struck between the efficiency and resilience of a system. Any system geared more towards efficiency will by default become less resilient. The level of resilience needs to be carefully considered, especially in an environment where the drive towards higher efficiency and optimal levels of performance is prevalent, neglecting to consider the impacts and consequences of unforeseen events.

2.9.5.2 Issues

2.9.5.2.1 Transport impacts resulting from COVID-19

Transport impacts resulting from the COVID-19 pandemic have led to a "new normal" profile, which has still not stabilised and is not clear yet as to its permanency, emphasising flexibility in the future management approach. This should include a review of how the transport sector should be governed and structured, including the extent to which transport activities should be regulated. A flexible approach may have to be adopted for some time.

2.9.5.2.2 Transport impacts resulting from climate change

Climate change is projected to increase the frequency and intensity of some extreme weather events. Climate change is likely to damage transport infrastructure through higher temperatures, more severe storms and flooding, and higher storm surges, affecting the reliability and capacity of transport systems.

It is important to understand how future climate might affect in the coming decades the current investments made into transport infrastructure.

2.9.5.2.3 Transport impacts resulting from the emergence of electric and alternative fuel vehicles

As discussed in more detail in section 2.9.1, the emergence of electric and other alternative fuel vehicles will have an impact on the transport environment in Lesotho. The reality of this occurring could be more imminent than anticipated, meaning that the resilience towards this in general in the transport sector needs to be evaluated.

Impacts would inter alia be most prominent in the generation of revenue from the current fuel levy, as well as the impacts of electricity generation required for electric vehicles. An important factor to consider is the reliance of Lesotho on developments in this regard in South Africa.

2.9.5.2.4 Transport impacts resulting from emerging technologies and 4th Industrial Revolution

Emerging technologies in the transport sector are ever increasing and the impacts thereof cannot be ignored. Enhancements in the sphere of technology are a necessity to allow the future of technology development to progress. A disruptive technology is one that plans to enhance or replace an existing technology, rendering it obsolete. The disruption that occurs is designed to succeed the current technology to provide better efficiency, workability and performance to the system in which it is implemented.

What has been observed in the past years is that the rate at which this progression occurs, is near exponential. If adequate forward planning is not incorporated into policy at the right time, it is very likely that decision-makers will continue to lag behind the rapidly progressing developments in the technology sphere, also impacting the transport sector.

It is clear that the emerging technologies can and are having an immense impact on the way the transport sector is being shaped. The drive towards innovation and increasing efficiency in the systems, technologies and processes that form society is fuelled by increasing opportunities presented by the advancement of technology development.

Some emerging technologies that the Lesotho transport sector needs to consider and be prepared for include:

- Artificial Intelligence (AI)
- Internet of Things (IoT)
- Automated technologies for all sizes of vehicles ranging from small personalised vehicles to mass transport vehicles
- Immersive interfaces
- Advanced materials
- Big Data.

There are some areas of application of these emerging technologies (as discussed by the European Bank for Reconstruction and Development):

1. Traffic management using Intelligent Transport Systems (ITS)
2. Personal travel planning and public transport
3. Autonomous and connected vehicles for mobility
4. Unmanned aerial vehicles/drones for monitoring.

Within the Lesotho context with its mountainous terrain, automated aircraft may become a real practical solution to deliver emergency medical aid and to transport people by means of gyrocopters, high-capacity drones and small electric helicopters. It could eliminate air strips that require high infrastructure and maintenance investments. These new technologies come along with their unique challenges, which need to be adequately integrated and addressed in the policy approach relating to transport sector resilience. It is necessary to integrate the new policy approaches for these new technologies without stifling future innovation and progress.

2.9.5.3 Policy Directions

The policy directions for transport sector resilience are:

1. To enable a forward-thinking approach to change within the transport sector in Lesotho.
2. To ensure the adaptability of the governing structures within the sector.

3. To ensure that the balance between efficiency and resilience is adequately defined and implemented in various areas of the transport sector.
4. To adequately prepare for the possible challenges that come along with disruptive technologies, including data sharing and security.

2.9.5.4 Policy Statements

The overall Transport Sector Resilience Policy is stated as follows:

To embrace a manner of management and planning within the transport sector governance that by default facilitates a resilient and forward-thinking approach to the eventualities and realities of change and disruption in the sector.

The specific subpolicies that support the above statement are:

a) Establish a clear directive within the Ministry of Public Works and Transport that is aimed at preparedness for change and disruption, fostering an embedded resilient manner of management and planning.

A clear stance will be taken by government to ensure a preparedness to change and a resilient approach to transport planning. This will show itself in the institutional restructuring processes outlined in Chapter 3 of this document.

b) Develop a strategic plan for the emergence of electric vehicles.

The following aspect will be considered during the formulation of a strategic plan to deal with the emergence of electric vehicles and their impact on the Lesotho transport sector:

i. The strategic plan is a coordinated joint action plan amongst various government departments (including Transport), comprising three components:
ii. Formulation of alternative funding source for Roads Fund – as alternative to reduced fuel levy charges, to operate in parallel to current fuel levy system (and other charges on fuel sales).
iii. Strategic plan for providing electrical infrastructure at fuel pumps
iv. Accelerated programme for development of additional renewable energy to include solar, hydro and wind sources, as well as electrified energy storage technologies.
v. RSA consultation to establish the nature and expected RSA timeline
vi. Establish Lesotho timeline, national fleet composition and forecasted changes on energy consumption, fuel sales and fuel levy revenues; and traffic, public transport, and modal split changes.

c) Maintain continuous insights into the current international developments and trends to stay abreast of the possibly disruptive technologies and changes that might affect the transport sector.

In order to incorporate the newest international trends and developments into the forward planning of the transport sector, cognisance will be given to the newest possibly disruptive technologies. This, however, will be viewed through the lens of the local application environment, being aware that the solutions and incorporation of newest trends and technologies should always be applicable in the current environment and present a frugal approach.

2.9.6 International Transport

2.9.6.1 Status

International transport in Lesotho is mainly facilitated by means of road-based cross-border transport, for both passenger and freight. The utilisation of air transport and rail transport is very limited in nature as already discussed in section 2.2 and 2.2.4. The limited use of rail transport is reserved for the transport of goods – only cross-border at Maseru and linking to the Maseru Container Terminal. International transport by air is mostly reserved for passenger travel to and from Moshoeshoe I International Airport in Maseru.

Lesotho is connected to South Africa's well developed regional network by means of 11 border posts through which a significant daily movement of passenger commuter travel is facilitated, mostly at Maseru Border Post. Lesotho and South Africa have formed a Joint Bilateral Commission on Cooperation (JBCC) to oversee the development of cross-border transport within the parameters of the SADC Protocol on Transport, Communications and Meteorology, 1996, as well as the Southern African Customs Union (SACU) MoU. However, most passengers travelling across the borders of Lesotho disembark from Lesotho operated vehicles at the border and after having cleared border formalities, embark on foreign owned vehicles for the onward journey. The process is reversed for the return journey.

Lesotho additionally entered into the Multilateral Cross-Border Road Transport Agreement (MCBRTA), which provides several governing principles regarding cross-border transport.

2.9.6.2 Issues

2.9.6.2.1 Cross-border international public transport operations

One of the challenges experienced at the main border posts between Lesotho and South Africa is the movement and activity of public transport to and from the border. A significant number of the daily cross-border passenger trips, especially at Maseru Border Post, are linked to public transport services that operate on either side of the border post. In the case that full cross-border services will not be permitted and fully functional under the SADC Protocol on Transport, Communications and Meteorology, 1996, and the SACU MoU arrangements, it is imperative that the manner in which cross-border public transport operations are regulated

needs to improve. This is to reduce unnecessary congestion, confusion, unsafe stopping locations and the lack of facilities to accommodate the stopping of public transport vehicles on both sides of the border post, thus improving the overall efficiency of the border post operations.

2.9.6.2.2 Cross-border scholar transport

A specific cross-border passenger movement concern is the movement of scholars on a daily basis. A lack of facilities such as ablution and public transport stops is observed at Maseru Border Post especially. The inclusion of safe traffic management measures needs to be incorporated in the future planning for the border post.

2.9.6.2.3 Facilities

As indicated, a major concern for cross-border traffic is the availability of safe and maintained infrastructure to support the movement of people cross-border and to allow for an overall increased efficiency of the traffic flow and clearance experience of the border post.

2.9.6.2.4 Cross border goods movements

Due to the increasing reliance of heavy goods movement on road transport, the facilitation of cross-border truck transport is increasingly causing delays at border posts. The most optimal solution to this is to transfer a portion of heavy goods movement to rail transport.

2.9.6.3 Policy Directions

The policy directions for international transport are:

1. To facilitate the optimised movement of cross-border international transport
2. To revive the rail transport mode for increased efficiency of heavy goods movement
3. To ensure that the movement of daily cross-border commuters is adequately accommodated and that the required facilities are in place for public transport vehicles as well as commuters.

2.9.6.4 Policy Statements

The overall International Transport Policy is stated as follows:

Enable the timely, safe and well-managed international movement of passengers and goods by air, rail and road-based transport modes, with focus on the facilitation of public transport commuter passengers across land borders.

The specific subpolicies that support the above statement are:

a) Establish bounds within which average delay at land-based border posts is acceptable for various different modes, monitor these delays and define strategies to reduce the delay if found to be unacceptable.

Government commits to improving the operating conditions and efficiency of key border posts. A major element of this is to maintain the time taken to traverse the border points within certain delay bounds. These delay bounds will be established and monitored. Where adherence to these cannot be maintained for a specific mode, measures of improvement will be identified and implemented.

b) Establish public transport laybys and other rest facilities to ensure that public transport vehicle movements on either side of the border do not negatively impact the traffic flow and operations of the border post itself.

Since the major border posts experience a large movement of cross border daily commuter traffic that is facilitated by public transport on either side of the border post, it is imperative that the traffic flow implications of these increased public transport volumes are adequately considered in planning. Government will investigate the need for additional infrastructure at key border posts, such as laybys and ablution facilities, to accommodate this movement. This will also address the cross-border scholar transport.

c) Ensure that the international agreements and protocols that underpin the cross-border transport movement at Lesotho border posts are adhered to and expanded on.

The formed Joint Bilateral Commission on Cooperation (JBCC) to oversee the development of cross-border transport within the parameters of the SADC Protocol on Transport, Communications and Meteorology, 1996, as well as the Southern African Customs Union (SACU) MoU will be revisited and adherence to the agreements will be established. The same applies to any other international agreements and treaties regarding international cross-border transport.

2.9.7 Private Sector Participation

2.9.7.1 Status

The participation of the private sector in addressing transport challenges in Lesotho is of great importance. Whilst the public sector should be responsible to create an environment that enables economic growth and ensures that this growth is translated into broadly based socio-economic development, the private sector can play a vital role in realising this growth. It includes a role for private sector to participate in operational activities within transport as well as financial investments into the transport system.

Currently, transport services are generally provided by private sector entrepreneurs, using infrastructure and facilities provided mainly by the public sector. Opportunity exists to integrate the involvement of the private sector more holistically.

The Public-Private Partnership Policy, 2017, aims to increase capacity to mobilise Public-Private Partnerships (PPPs) aimed at developing new and rehabilitating existing infrastructure to increase access to services and markets and strengthening

linkages between rural and urban markets. A PPP can be an effective financing and management instrument, yet currently there is no legislation to support the PPP Policy and concerns have been expressed regarding the alignment of the Policy to transport infrastructure projects specifically.

The need for increased and improved communication between all role players has been previously identified in order to achieve the objectives of good administration of the transport sector. The interactions with the private sector entrepreneurs, role players and stakeholders have however not been formalised.

There is thus an opportunity to create an environment where private sector involvement is not only facilitated but investment is also made into enabling the private sector through development programmes and initiatives. A number of potential opportunities for PPPs may exist and are very much needed to facilitate critical aspects of development and implementation in the transport sector such as regional connectivity integration and infrastructure development. It is, however, a challenge to identify these opportunities and to invite interest from the private sector to participate in these opportunities. Some initial PPP opportunities to be explored include:

- Public transport corridors in urban areas
- Toll roads with a new road corridor parallel to existing roads where congestion and long travel times prevail
- Involvement of current external airport companies to operate the three main airports in Lesotho
- Two development corridors where provision for adjacent land use is provided for commercial activities (secondary economic spin-offs): Firstly, a northern corridor from Maseru City to the northern main centres and its industrial areas; and secondly, the establishment of a long-term west-east international corridor that links Bloemfontein via Maseru City eastwards towards KwaZulu-Natal and the Durban harbour. The latter corridor would be similar to the Eswatini corridor that links with the Maputo harbour. Such corridors are essential to unlock new economic development in a country.
- Skills development strategies whereby internal private sector capacity (scarce and expensive human capital) is incorporated (contracted) within national transport planning institutions as recurring capacities to enhance the current public sector human capital capacities. This is a recipe applied by many other countries and is important to ensure continuity in planning responsibilities and to eliminate interruptions as a result of staff turnovers.
- Ferry crossings that are developed in a more secured platoon strategy with cables over rivers to be operated manually or mechanically by private sector operators on contract.

2.9.7.2 Issues

2.9.7.2.1 Update of Public-Private Partnership Policy, 2017

In practice PPP-arrangements within the transport sector requires an environment and structures that not only make it **possible** for private sector participation, but that is **attractive** for private sector to become involved in areas that are traditionally public-sector terrain. Often this means adding a profit margin or a premium to charge levels for users of facilities, with its own associated implications, some negative (higher fees to users) and some positive (increased productivity and service delivery).

To expect from private sector to invest (capital investment only) means a form of return must be guaranteed to the investor on a long-term basis. This requirement in turn means that funding arrangements should be guaranteed, which in turn is complicated in a funding environment where "promises" of future allocations from the Consolidated Fund is evident, unless a toll system or another user-pay mechanism is introduced. Internal funding independence and reliance on own funding sources therefore is essential.
The most obvious opportunities for transport related PPP projects are vested in toll roads, the management and operation of public facilities, including any type of transport infrastructure such as toll roads, airport facilities and even public transport transfer facilities. A potential viable PPP-opportunity is participation/presence in a structure such as a Roads Agency or a Centralized Planning Directorate for Transport, where scarce and specialized human capital capacity is essential.

2.9.7.2.2 No legislation supporting PPP policy

There is no legislation that supports the PPP Policy. Consideration should be given for the development of such legislation. The manner in which the Roads Directorate is working with the Procurement Unit in PPP projects in not clear in the Roads Directorate Act. Most of the required expertise in developing PPP contracts and related expertise are located within the Roads Directorate. The Roads Directorate Act does not specify a clear operational procedure for the Procurement Unit and the Roads Directorate to work together to identify, plan, implement and monitor PPPs. Consideration should be given to address this shortcoming.

2.9.7.2.3 Development within the private sector

The development of small and medium enterprises, as well as the informal sector, would enable an increased involvement of the private sector in Lesotho. The NSDP II emphasises private sector development and prioritising people centred development. It re-enforces the Government's commitment to bring further development to the people of Lesotho by empowering them to participate fully in the development process. The achievement of this was presented within 4 Key Priority Areas. Achievement of these strategic goals is only possible if the economy is supported by macro-economic stability - a pre-condition for inclusive economic growth and private sector development. Inclusive economic growth is only attained when sustainable jobs are created.

There is a clear need for realising these development goals in Lesotho.

2.9.7.3 Policy Directions

The policy directions for private sector participation are:

1. Appropriate structures and mechanisms within the transport sector to make PPPs attractive and possible for private sector to participate and invest.
2. To enable private sector participation in Lesotho's development programmes.
3. To realise and support impactful PPP opportunities to assist government in their development objectives.
4. To drive the PPP process by enabling adequate PPP Policy that is supported by legislation.
5. Centralized ITP processes to contain compulsory, active strategies as a standard agenda to identify potential candidate PPP projects.

2.9.7.4 Policy Statements

The overall Policy is stated as follows:

Encourage the participation of the private sector in the transport environment with regard to development and implementation partnerships by creating Public-Private Partnership (PPP) opportunities that are both feasible for private sector involvement and impactful in the development of Lesotho's transport sector

The specific sub-policies that support the above statement are:

a) To motivate the update of the PPP policy as an all-inclusive guiding policy that covers all aspects of Public-Private Partnerships in the transport sector, and to motivate the formulation of legislation to support this PPP policy.

Government will ensure that the adequacy and relevance of the PPP policy is applicable to all sectors that are affected, especially in this context, the transport sector and the development of infrastructure projects specifically. The formulation of national legislation will be motivated to underpin this PPP policy and ensure its appropriate implementation.

b) To implement PPP projects in Lesotho that are feasible and uplift the transport sector and economy at large.

The current existing opportunities that present themselves with regard to PPP policy will be evaluated and the implementation thereof will be facilitated based on economic feasibility.

c) To continuously identify possible PPP projects, essentially making their realistic incorporation part of overall planning.

The continuous identification of possible PPP projects will be part of the overall transport planning and management process.

2.9.8 Road Safety

2.9.8.1 Status

The WHO Global Status Report on Road Safety 2018 ranks Lesotho at number 154 out of 175 participating countries regarding road safety in terms of its death rate of 28.9 per 100 000 population, based on 2016 crash data. This ranking implies that Lesotho falls within 15% of the poorest performing countries relative risk of dying during a road crash. The WHO reports the global average for road fatalities is 18 per 100 000 population, which is significantly lower compared to Lesotho's 28.9 per 100 000 population.

The highlighted statistics demonstrate the seriousness of road safety in Lesotho. The trend in road crashes, injuries and fatalities is a concern to the Government of Lesotho. It recognises that road accidents have now become a major public health issue and the victims are usually the poor and vulnerable road users. Similar concerns and remarks are also expressed in national policy and strategic documents such as the National Strategic Development Plan II and Lesotho Road Safety Strategic Plan (2020 – 2030).

The Lesotho Road Safety Strategic Plan (2020 – 2030) provides a set of interventions/actions the Government of Lesotho through the National Road Safety Council commits to undertake over a ten-year period in order to reverse the current distressing trends in road crashes that have continued to claim the lives of Basotho. The strategy is aligned with best practices in road safety management, i.e., a "Safe System" approach to road safety which promotes a more holistic approach to the problem and recognises that road safety interventions cannot hope to perfect human use of the transport system, but can protect human use. In the Lesotho context and Africa at large, a safe system approach to road traffic management would infer adopting a modern and effective model for sustainable improvement in road safety from lessons learnt in other parts of the world.

Prior to the establishment of the National Road Safety Council (NRSC) in 2018, RSD was effectively the lead agency for road safety in Lesotho and provided equipment and support to the traffic police and other stakeholders. NRSC is currently the lead road safety agency and is mandated by law to oversee the implementation of the Road Safety Strategy and deliver and monitor annual progress on the national road safety targets and provide strategic guidance on road safety issues throughout the country. The Council reports directly to the Minister of Transport, with the Road Safety Department in the Ministry of Public Works and Transport, as its secretariat. The implementing agencies in road safety are accountable to the NRSC for the delivery of road safety targets.

The overall coordination of road safety activities rests with the secretariat, the Road Safety Department in the Ministry of Public Works and Transport (Roads Directorate), Road Fund, Lesotho Mounted Police Service (LMPS) and the Ministry of Health.

2.9.8.2 Issues

The current issues observed in the road safety sector are summarised below:

2.9.8.2.1 Weak road safety environment

i. **Lack of capacity in the road safety sector:** There is a general lack of capacity and institutional strength in the road safety sector. There is a need to capacitate the institutions in the road safety sector through appropriate training of the current human capital base and the attraction of more technical skills.
   Although the formation of the NRSC is backed by legislation, it remains an advisory body without any real implementation authority. The implementation remains with its secretariat, the RSD, which does not have any legal backing to empower its implementation efforts.
ii. **Funding and Resource Allocation:** There is no dedicated funding for RSD and NRSC. The department relies on annual allocations from the Road Fund, which are typically inadequate to finance the programmes outlined in the Lesotho Road Safety Strategic Plan (2020 – 2030). Furthermore, most infrastructure projects do not have ringfenced funding allocation dedicated to improving road safety efforts.
iii. **Systems and procedures:** The absence of reliable road accident data and analytical tools makes it difficult to analyse and track the impact of interventions and strategies to improve road safety. Without such data, it makes it difficult for the authorities to make informed, data-driven decisions.
iv. **Legislation:** The enactment of the Road Traffic Bill by the Parliament is still a huge gap in the enforcement of road safety interventions such as speeding enforcement and enforcement of driving under the influence of alcohol.

2.9.8.2.2 Impact of road conditions on road crashes

The condition of roads and related infrastructure is an important contributory factor to road crashes in Lesotho, most of the casualties being pedestrians. The general condition of the road transport network worsened over the last 5 years due to a decline in expenditure on routine and preventative maintenance.

2.9.8.2.3 Inadequate enforcement measures

The current enforcement of road safety strategies and interventions is inadequate due to limited resources to implement the reforms in enforcement and road safety in general. Widespread corruption has also been a contributory factor to the inadequate enforcement efforts.

2.9.8.3 Policy Directions

The policy directions for road safety are:

1. To raise the status of road safety to achieve the desired road safety improvements.
2. To promote the awareness of the various aspects of road safety, the social and economic implications of road crashes and actions to reduce the trend of increasing crashes as laid out in the Lesotho Road Safety Strategic Plan (2020 – 2030). This includes road safety education and training.
3. To strengthen the legal, institutional and financial environment to achieve the desired improvement of road safety.
4. To develop a Road Safety Information Database, Road incident Management Systems and post-crash emergency response
5. To ensure higher standards for road infrastructure and vehicles to support the safety of all road users.

2.9.8.4 Policy Statements

The overall Road Safety Policy is stated as follows:

To promote awareness of the various aspects of road safety, the social and economic implications of road crashes and actions to reduce the trend of increasing road crashes, as laid out in the Lesotho Road Safety Strategic Plan (2020 – 2030)

The specific sub-policies that support the above statement are:

a) Implement the Lesotho Road Safety Strategic Plan.

For the National Road Safety Council (NRSC), in close collaboration with its secretariat RSD, to continue to implement the National Road Safety Strategy via the rollout of effective strategies and to deliver and monitor annual progress on the national road safety targets and provide strategic guidance on road safety issues throughout the country.

b) Strengthening and enabling the legal, institutional and financial environment for Road Safety.

The Government commits to take the required action and measures to further strengthen the required legal, institutional, and financial environment for road safety. In addition, a platform for effective coordination of various stakeholders will be instituted. The government is also cognisant of the political will required to implement the necessary road safety reforms that will allow the NRSC to fully execute its mandate as the lead agency in road safety. The Government will review the funding mechanism and formula for road safety initiatives.

c) Establish a Road Safety Information Database.

Government, through the Road Safety Department, is working to improve the quality of crash investigation and of data collection, processing, analysis, and reporting through the development of a road accident data management system (RADMS). It is envisaged that a GPS□enabled smartphone application will be used by trained citizens and traffic police to report crashes in real-time. With such a database and data collection system, it will be possible to align the reporting of road safety statistics with international reporting standards by organisations such as the United Nations (UN) and World Health Organisation (WHO).

In addition, the Department of Traffic and Transport has embarked on the Lesotho Integrated Transport Information System (LITIS), which is a computerised vehicle registration database that contains all the road traffic information, ranging from individual vehicles (private and public), the owners and the number of vehicles countrywide. This system is also meant to provide an integrated record management system for revenue collection, driver licensing and vehicle inspection.

d) Ensure safer road infrastructure, especially for vulnerable road user.

The design and construction of all road facilities (rural and urban) will consider the needs of non-motorised transport and the vulnerable and physically challenged in an appropriate manner. Through the Roads Directorate, government will continue to disseminate best practices to town planners, architects, engineers, and other built environment specialists. The Roads Directorate in coordination with other road infrastructure implementing agencies will aim to establish a safe and efficient transport system framework.

e) Implement a Road Incident Management System and Post-crash emergency response.

The deployment of an incident management system is vital for prudent and innovative measures to be employed to deal with crashes timeously and efficiently to ensure the road network continues to operate optimally. In addition, the importance of post-crash emergency response in reducing the extent of injuries and the number of fatalities cannot be overstated.

Government will therefore strive to implement road accident management systems, which would include the provision of the rescue operation and administration of first aid at the crash scene and the transport of the victim from the crash scene to nearby hospitals and healthcare facilities. For this reason, coordination between several stakeholders such as the Ministry of Public Works and Transport, the Ministry of Health, LMPS and NGOs will be key in the implementation of such systems.

f) Conduct Road Safety Education and Training.

Road safety knowledge and awareness will be promoted and disseminated amongst the population through education, training and publicity campaigns. Road safety education will also focus on primary, secondary and tertiary students. The Road Safety Department will continue to conduct road safety publicity campaigns, with the intention of propagating good road safety practices in Lesotho. Government will encourage all professionals associated with road design, road construction, road network management, traffic management and law enforcement to attain adequate knowledge of road safety issues and provide the necessary platforms and resources required to fulfil this need.

3. INSTITUTIONAL REFORM IN THE TRANSPORT SECTOR

3.1 STATUS

Comparing the structures of the different organisations in the planning, provision and maintenance of transport infrastructure and service provision, is not particularly useful because apart from the Ministry of Public Works and Transport implementing agencies, all other organisations have different core mandates and their structure is aligned to their basis.

Structures for technical sections for most of the institutions, except the LHDA, seem to be technically lacking in key expertise that is required. They seem not to have acquired the human capital to fulfil their specific mandates. They have in turn had to substitute ideal professionally registered technical professionals and in particular engineers with technicians and technologists. This allows the institutions to function but the level of decision-making is affected by the technical capability of the key resources.

Secondly, it is recommended that the transport sector invest in the requisite qualifications and experience and develop mentorship programs and long-term staff development programs supported by localization plans and mentorship and professional affiliation to develop the capacity required over time.

The Engineering Needs and Numbers Study has shown that there is a need to develop Engineering capacity in Lesotho to serve the sector as the numbers do not correspond to the existing sector needs. Also, the specialization that is required is also unavailable in the local market in the numbers that are required.

Although the lead organisations have legal mandates over the standards, quality and planning of transport infrastructure and services, the organisations do not have the capacity to extend themselves to their roles outside their own organizations. There is no oversight over the plans of other institutions like Trade to anticipate when the projects will be complete and to what standard.

There is a need to an integrated land use transport plan that will be accessible to stakeholders. There needs to be a dashboard so that at any time the stakeholders can see when and where developments will take place.

Even members of the public do not know which institution to approach when there are faults or because of the fragmented assignment of responsibilities of the sector. There is no accountability so after I have reported when my issue will be addressed.

The services in the roads sub-sector are largely provided by the private sector, with the government limiting its services to areas that are unattractive to commercial operations.

The government sets out the legal and regulatory framework for road transport through the MoPWT. This institution also retains control over the utilisation of road infrastructure, even in urban areas, through licensing and permits, with the Road Transport Board (RTB) assisting by allocating public transport routes and setting appropriate fares. The MoPWT also liaises with the Cross-Border Transport Agency of the South African Department of Transport to facilitate cross-border road transport (both freight and passengers) in accordance with regional agreements.

In response to the policy directions in studies under the RRMP, ITP and TICP projects, the Ministry has reorganised the Department, initially to merge the Civil Works Section, the Department of Rural Roads and the Roads Branch to form the Roads Directorate.

The ideal structure is a road authority where all the role players for transport infrastructure and service provision are housed in one Ministry and one Road Agency, alternatively an Agency responsible for the development of all transport infrastructure. The transport policies have been seeking to integrate transport infrastructure with transport service provision.

The rationale for reform in the transport sector documented in the “Policy Paper on the Reform of the Roads Sub-Sector” (MoPWT, 2005) is cited as follows:

a) Inadequate funding for roads maintenance and construction
b) Fragmentation in responsibilities for road construction and maintenance – responsibility shared by four agencies and coordination in planning to produce a comprehensive road management plan had not been achieved. In comparison with other countries, one single entity was able to be custodian of the entire national road network
c) Duplication of roles
d) Lack of accountability for resources
e) Recruitment and Management Constraints
f) Inadequate implementation capacity.

The Roads Directorate has been able to reduce its force account units and now contracts out all maintenance work. The MoLGCA, however, has force account units using equipment-based methods for maintenance. It is interesting to note that the RD’s equipment-based road construction unit, the Road Improvement Unit (RIU) was phased out due to lack of accountability.

The Engineering Needs and Numbers study conducted in Lesotho also highlighted the same skills gap in the sector to meet the needs. It raises underdevelopment of certain cadres in the Engineering profession coupled with misplacement of skills. Although the study distinguishes the role and importance of the value derived from having layered levels of Skills in Engineering, i.e., having Engineers supported by Technologists and then Technicians, the Lesotho Construction Industry does not recognise and differentiate these.

During interviews with the transport organisations, it became evident that there were issues of misplacement. For example, where an Engineer was required, there was a Technologist in their place. Similarly, where a Technologist was required, there were technicians. There was also a lack of awareness of the specific engineering field that was required for some tasks. For example, where there was a need for a Traffic Engineer, there was a Motor Mechanic Technician or Electrician conducting the task. The designation and assignment of roles to the wrong skill set extends to clerical staff as well. This mismatch was created by the transfer of staff from the former Department of Rural Roads and Roads Branch, which resulted in ineffective structures and an inability to perform on the Road Agency Mandate.

The reform process was further aimed at improving efficiency. The reform included the setting up of institutions and developing policies to guide the sector and conducting studies aimed at improving the data and management of the sector. Some of the success factors have been the formation of the Road Fund and the Roads Directorate and the setting up the Road Safety Council. However, there is still fragmentation in the number of agencies responsible for transport. The initial structure for the Roads Authority was meant to combine all the roads agencies in one structure.

Other issues still constraining the industry are the management structures for the DCA, the DTT and the RSD. The recommendation being consistently made for these Departments is that they need to be structured as more autonomous agencies. There is a recommendation for each to form an Authority or parastatal for better management and governance of their mandate. However, if each forms a separate authority there may be issues with the financial sustainability of these new organisations. Rather, the World Bank in 2010 indicated that in larger countries, there was a need to have separate entities for the transport sector, whereas in smaller countries the transport sector could be managed effectively by a single entity with clear responsibilities that is adequately and appropriately skilled. These entities should have effective management information systems, funding for its activities and a customer/road transport user accountability and communication strategy.

In addition, when considering the role of the MoLGCA, the decentralisation was an effort to ensure the participation of the community in the planning and participation of their own projects. For the structures to be effective for road construction and maintenance, there is a need to have a fully-fledged engineering team in each district. It would therefore appear to be more ideal to ensure that the planning for road works is still done at community level, however, the implementation should be coordinated through a road agency envisaged to incorporate planning and implementation of national roads with urban and rural roads.

The transport and traffic functions should not be separated from the infrastructure upon which they rely. They need to be augmented with engineering skills to maximize the use of the information systems under development in better planning the infrastructure.

The analysis of the transport sector using the IDR tool indicated that there were still areas where the main transport sector agencies needed to be developed for institutional efficiency. These are business planning, securing of funds, stakeholder participation, human capital gaps, monitoring and evaluation, communication strategies and the management of information systems. At governance level, there is a need for a supportive government and political environment to sustain the strides made in the sector for effective and efficient service delivery.

There is an opportunity to learn from and document and share best practices for the sector. One example is the LHDA, which seems to be effective in delivering on its mandate and is structured to optimise efficiency. This is because it is structured to maximise project management. It is also well resourced in terms of human capital skills. The RSD is a leader in stakeholder participation and communication with stakeholders. The DCA has expertise in working on risk assessment and accreditation issues to ensure quality. The RF has successfully been collecting revenue and has an efficient structure. The RSD reliance on data and statistical information needs to be duplicated. With the combined strength of the sector, an ideal structure may be devised.

Following the recommendations of the World Bank and in line with the policy direction of the transport sector, which has been to integrate land use transport planning with the structures that exist, are not ideal in themselves. Strengthening the existing structures would not result in the integrated planning envisaged and an integrated national transport master plan. Rather, a Lesotho National Transport Development Agency following on from the recommendations of the ITPDS would incorporate the mandates of all the sub-sectors. Since Lesotho is a small country with a relatively small road network and vehicle numbers, a fully autonomous NTDA under the Ministry of Public Works and Transport would be well poised to meet the need for the industry. The structure would be similar to the New Zealand Transport Agency (NZTA), the Singapore Land Transport Authority (LTA) or the Brazilian National Department of Transport Infrastructure (BNIT). These are all examples of institutions with mandates for Transport Infrastructure and Service Provision. They handle the modes road, rail and water transport and work nationally in urban and rural areas.

3.2 ROAD TRANSPORT INSTITUTIONAL REFORM PHASES

The following phases of progression are listed to enable institutional reform of the road transport subsector towards the establishment of a National Transport Development Agency:

3.2.1 Phase 1

- *The exclusive mandate for the management and infrastructure provision of the national road network to be given to the Roads Directorate. The Ministry of Public Works and Transport, through its Department of Transport to be responsible exclusively for planning, policy development and regulation of road transport.*
- *All road infrastructure provision functions within the Ministry of Local Government and Chieftainship Affairs to migrate to the Roads Directorate.*
- *The exclusive mandate for the management and infrastructure provision of the local road network to be given to the local authorities. The Roads Directorate to act as sole implementing agent on behalf of local authorities for infrastructure provision where local authorities lack capacity.*
- *Transport services provision to be commercialised.*

3.2.2 Phase 2

- *The Roads Directorate, the Road Safety Department and the Department of Traffic to be integrated and established as one independent road transport agency of the Department of Transport to be housed in a separate office building.*

3.3 RAIL TRANSPORT INSTITUTIONAL REFORM

There is no legal and institutional framework for the rail transport subsector.

Services and infrastructure provision have to be separated from regulation and commercialised. The establishment of a department within the Ministry of Public Works and Transport is required to be responsible for planning, policy development and regulation of rail transport.

3.4 NMT INSTITUTIONAL REFORM

There is no legal and institutional framework for NMT within the transport sector.

Services and infrastructure provision have to be separated from regulation and commercialised. The establishment of a department within the Ministry of Public Works and Transport is required to be responsible for planning, policy development and regulation of NMT.

3.5 AIR TRANSPORT INSTITUTIONAL REFORM

The Aviation Act 2008 (Act No 9 of 2008) consolidates and amends the laws relating to aviation and repeals the Aviation Offences Act 1975 and the Aviation Act 1975.

The Department of Civil Aviation acts as administrator and safety regulator in the air transport sub-sector.

Services and infrastructure provision have to be separated from regulation and commercialised.

3.6 OVERARCHING INSTITUTIONAL REFORM INTEGRATED WITH FINANCIAL REFORM

The policy matters related to institutional reform for individual transport sub-sectors as reflected in section 3.1 – 3.5 above, cannot be considered in isolation from the policy matters related to transport sector funding and investment as outlined in section 2.8. As a result, a process is required for overarching institutional reform integrated with financial reform. This integrated reform process concerns **an integrated institutional and financial reform programme, including capacity building within the Lesotho transport sector**. The foundation of the programme is also based on the principles contained in the Transport Sector Investment Strategy (TSIS) as part of the LNTMP.

The primary goal of this process is the **implementation of a comprehensive framework to restructure the transport sector in terms of both the funding environment and the institutional framework, including organisation structures and human capital requirements, and secondly, a programme on capacity development for suitable and qualified human capital in the transport sector.**

The requirements for financial reform are contained in the Transport Sector Investment Strategy (TSIS) that was formulated against the background of a general negative profile of the transport system, particularly in terms of being underfunded, typifying a low afforded priority relative to other government sectors, including below par fee levels of internal funding sources. A consequence of inadequate funding is erratic and fluctuating budget allocations, which in turn leads to instability in the sector.

The current transport sector is furthermore characterised by a fragmented institutional framework, reflecting non-integrated transport management functions and responsibilities spread over a number of government departments and agencies, complicating effective functional management. Furthermore, misaligned perceptions about transport not being recognised as an extremely specialised function similar to water and electricity, which requires a more focused institutional structure. Apart from the fragmented management structures, another serious

constraint is the inefficiency and lack of capacity of suitable human capital to manage the sector properly. It relates to numbers, qualifications and experience.

The overarching implication of the above spills over to a general picture of neglected conditions and capacities of transport infrastructure and services for all modes of transport nation-wide. The national economy is furthermore subjected to a risky one-mode dominance - road transport – that is subjected to ineffective network development and maintenance. In general, the status of the transport system in Lesotho is such that it is **failing its main mandate to support the Lesotho economy the way it should**. The result is costly and inefficient mobility to people and goods in Lesotho, which spills over to high inflationary conditions, contributing to below par GDP and economic growth.

The above emphasises the importance of a renewed investment strategy (the proposed TSIS) for the future development of the transport system in Lesotho. It also underlines the objectives set in the National Strategic Development Plan (NSDP II (2018/19 - 2022/23), articulating overarching policy and strategic development planning for all economic sectors, including transport. The NSDP defines four strategic goals, of which KPA III specifically deals with "Building Enabling Infrastructure" including transport **in support of all other productive sectors.** The nature of the supportive role of transport emphasises the necessity of a basic quality infrastructure network (the required "minimum transport network").

Given the LNTMP conclusion that the transport system is failing, this important mandate to support all other sectors and, ultimately, also failing to sustain the economy in general, **the starting point rectifying this situation is to restructure both the financial and institutional framework for the transport sector.** A suitable financial and institutional framework, executed by means of qualified and experienced human capital, is the foundation for all other transport governance functions to be successful.

In short, to address the negative profile of the transport sector as summarised above and to allow the transport system to support the national economy effectively, a reform process is necessary to review the institutional and financial framework for the transport sector, based inter alia on the broad-based conceptual principles and strategies as contained in the TSIS. It is about reform of the management structures for the transport sector, with the main focus on restructured funding sources and systems and the human capital capacities and accordingly, also the institutional structures within which these combined resources are organised.

In terms of financial restructuring, it includes the optimal application of the user-pays principle; self-sufficiency of internal funding, preferably less dependency on the Consolidated Fund as far as possible, and finally the ability and capacity to manage the entire transport system efficiently, technically and financially.

The latter principle implies a more focused and specialised Department of Transport, transformed to be fully integrated in terms of all transport related functions, incorporating infrastructure and operational services on a nation-wide basis. Institutional reform also implies a human capital development process to ensure qualified and experienced staff deployed on a decentralised basis, supported by nation-wide transport planning and funding and development programmes with proper oversight attention. Key to the restructured Department of Transport is the establishment of a specialised Transport Infrastructure Development Agency as a separate entity that is divorced from political and usual public sector governance red tape, to allow focused and specialised transport infrastructure development. Alternative options for this Development Agency may be defined: firstly, as a Roads Development Agency only, as against an Agency for all-inclusive transport infrastructure. It may also be advanced to a further level where it is not limited to infrastructure development, but also some operational responsibilities also. This option means that the Department of Transport will therefore mainly be concerned with the regulatory responsibilities, apart from the financial oversight and administrative responsibilities.

Alternative organizational structures may therefore be defined based on the forms-follow-functions principle.

The intended institutional and financial reform process therefore consists of four main parts with the following main objectives:

- **Part I: Implementation of the Restructured Investment Strategy**, focusing on the optimal funding of the transport sector and supported by mechanisms to oversee the responsible application of the available funding (expenditures).
- **Part II: Implementation of the Restructured Institutional Framework**, focusing on organizational restructuring by means of an integrated Department of Transport and defined supporting structures and powers, responsible for all transport related functions under one umbrella, eliminating fragmentation; and secondly, the development of sufficient, qualified human capital that will systematically be deployed on a decentralised basis.
- **Part III: Legislating all components of the Restructuring Process.** This objective is in support of – and to be carried out concurrently - and in synchronisation with the other two objectives; focusing on all legislative and regulatory instruments required to enable and legitimise the restructuring process.
- **Part IV: Capacity Building and Technical Support to National Transport Planning Directorate.** Insufficient technical expertise and capacity is considered one of the main reasons for the transport sector failing in its mandate to support the economy. The objective of Part IV is to address this issue by means of an internal capacity building process focusing on two programmes: firstly, a bursary scheme and internship programme, and secondly, secondment of technical support to the Department of Transport.

Part I: Implementation of the Restructured Investment Strategy

The first specific objective is to implement a restructured investment strategy, within the following framework:

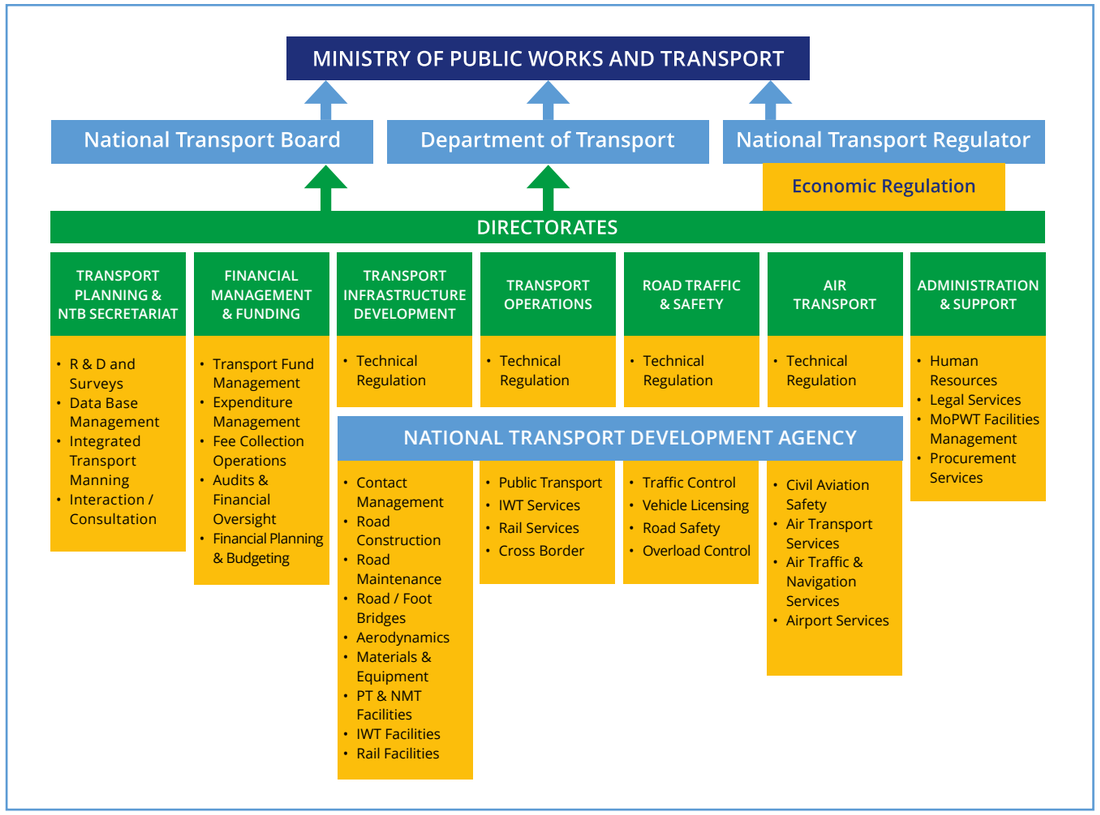
i. The investment strategy is based on a Funding Formula **to fund all transport needs comprehensively on all levels of government for all modes of transport**, comprising:
   a) The **fuel levy, licence fees and border tolls** as primary user-pay funding sources, developed to be the dominant funding mechanism, supported by other user-pay mechanisms including project-based toll systems in exceptional cases, such as tunnels.
   b) **Consolidated Fund allocations** would remain the fall-back source but should reduce systematically over time as the internal sources are developed.
   c) **Donor funding and PPP-funding support** are important to be pursued actively, but expected to remain ad hoc and therefore unreliable, and not to be considered as a dependable source as a given departure point.
   d) **Loan funding via private sector transport industry** should be introduced to assist funding requirements, allowing private industry loan schemes to be negotiated during years of insufficient budget allocations and, ultimately, to stabilise the private sector.
   e) The **fee levels** for internal sources are to be increased automatically on an annual basis and linked to the CPI, based on fee levels originally determined through a negotiated consensus approach amongst all relevant stakeholders represented in a restructured institutional framework.

ii. The **total funding requirement** is determined and period-ically reviewed for all transport infrastructure requirements by means of a National Integrated Transport Plan (NITP) process, formulated through a well-represented negotiated decision-making process and synchronised as part of the NSDP cycle.

iii. The objectives of the **Funding Formula** are to **stabilize budget allocations and eliminate erratic fluctuations in funding** through agreed (approved) charge levels, synchronized with the NSDP cycle. Accordingly, the total funding value, and the individual sources' fee levels are relatively **fixed for a review period but subject to the usual automatic annual inflation fee adjustments.**

iv. The implementation process for Part I requires each of the above items (a) to (e) to be **executed through a series of actions in a coordinated manner**, synchronised with the **legislative requirements (Task III)**; and the necessary **consultation processes** with all affected role players (to be defined); and ultimately, handed over to permanent staff to administer.

Part II: Implementation of the Restructured Institutional Framework



The second specific objective concerns a restructured institutional framework, which is a requisite for the Restructured Investment Strategy. These two objectives can, however, be implemented concurrently:

i. The main **components** of the Restructured Institutional Framework comprise: -
   a) The **Department of Transport (DOT)**, separated from Public Works, with main responsibilities to include all existing functions and the Roads Directorate transferred from Public Works;
   b) **A Transport Development Board (TDB)**, serving as a consultation and decision-making body with wide representation, advising the Minister; overseeing a newly established -
   c) **Transport Infrastructure Development Agency (TIDA)**, responsible for all transport infrastructure nation-wide, not only roads. As an alternative the proposed TDA may be arranged in a more advanced structure to include not only ***infrastructure development***, but also ***operational responsibilities***. In the advanced form, the institution is transformed to a Transport Development Agency (TDA) and accordingly it may also perform operations such as providing ferry services across rivers, in addition to the provision of ferry crossing infrastructure.
   d) **The National Transport Fund (NTF)** to serve as a **comprehensive fund for the entire transport sector**, all modes, infrastructure, traffic and operations, and for all levels of government. Note that (b), (c) and (d) are established as an elevated and restructured Road Fund and Board, all of which need new and amended legislation.
   e) Within the DOT, a well-resourced and restructured **Transport Planning Directorate** is developed, acting as an **intergovernmental secretariat** for the TDB
   f) A technical **Strategic Transport Planning Committee (STPC)** adding representation from all transport authorities on local and rural levels to support interaction and inputs for transport planning on a national scale; and to fulfil important coordination and decentralised transport planning nationwide.
   g) As a potential further advanced organisational structure, an independent **Economic Transport Regulator** may be introduced. This option will replace transport regulatory functions performed by respective directorates within the DOT.

ii. **Responsibilities** of the **Transport Planning Directorate**, supported by a **National Strategic Transport Planning Committee (STPC)**, include:
   a) To serve as an intergovernmental secretariat to the TDB with a primary responsibility to **research, interact, consult, develop, review and implement the 5-year NITP**;
   b) To facilitate, on a technical level, consultation and interaction with all stakeholders on all levels (national, local, rural) on comprehensive transport needs and priorities;
   c) To submit to the Board any transport-related matter to be considered for approval;
   d) To develop and maintain the Central Transport Data Base;
   e) To coordinate and oversee projects being implemented;
   f) To monitor and assess financial and technical implementation progress.
   g) To facilitate the transport sector human capital development programme.

iii. In performing the restructuring process, due consideration should be given to the national policy on **decentralisation**:
   a) The national decentralisation policy is focussed on a move away from centralised government. In terms of the transport sector, a supporting objective is to give due consideration to a sustainable and responsible decentralisation approach as part of implementing transport programmes.
   b) In terms of decentralisation within the transport sector, the objective is also to ensure that the current available capacities (human capital and funding) is systematically enhanced and deployed on decentralised levels, incorporating a concurrent top-down and bottom-up approach.

iv. The Part II implementation process requires that **powers and responsibilities** are defined, that the necessary **consultation and interaction processes** are followed and that the **human capital requirements** and ultimately, the **budget implications**, are determined and processed.

Part III: Legislating all components of the Restructuring Process

As the third specific objective of the implementation programme, both Parts I and II of the restructuring process require new or amended legislation, as well as internal directives formulated for inter-departmental restructuring:

i. Legislating the establishment of Institutions:
   a) Department of Transport (restructured);
   b) Transport Development Board (new);
   c) Transport Infrastructure Development Agency (new);
   d) National Transport Fund (new, with decommissioning of Road Fund and Road Fund Board);
   e) Transport Planning Directorate (restructuring of the current planning directorate);
   f) Strategic Transport Planning Committee (new).

ii. Legislating Powers and Responsibilities for each of the above structures, including duties and mandates, where relevant.

iii. Regulatory requirements/Directives to ensure:
   a) Coordination, interaction and consultation;
   b) Development of 5-year NITP, with supporting transport plans on local/rural level;
   c) Conformation with the NSDP and its cycles;
   d) Specifications to determine priorities;
   e) Approval processes;
   f) Development and maintenance of Central Transport Data Base;
   g) Coordinate and oversight of projects being implemented;

   h) Monitoring and assessment of financial and technical implementation progress;
   i) Facilitate the transport sector human capital development programme;
   j) Conformation to decentralisation policies;
   k) Programmes for human capital development.

iv. All new legislation and amendments to existing legislation and all associated regulations need to be drafted through prescribed consultation and deliberation activities and adopted through the normal approval processes.

Part IV: Capacity Building and Technical Support to Transport Planning Directorate

The fourth specific objective is focused on capacity building of human capital specifically.

The Department of Transport, through its directorate responsible for national transport planning (NTPD) has a critical role to play in ensuring that the Policy Directives and the Action Plan as outlined in the 2023 National Transport Master Plan are implemented. However, in the institutional and sector capacity review it was recognised that the necessary capacity and skillset were lacking. The Ministry appears to be technically lacking in key expertise, and more so the necessary human capital capacities that are required to enable them to fulfil their specific mandates. The same situation is evident on local and rural level, and more so. The same issue presents itself to ensure that the Transport Master Plan can be implemented successfully.

Hence it is essential that the transport sector invests in the requisite capacities, qualifications and experience of human capital specializing in transport, including programmes such as a bursary scheme and internship programme, and the secondment of technical support to the Department of Transport. The "vehicle" that may be used to facilitate this programme is the National Transport Planning Directorate (NTPD).

It is proposed that the NTPD be staffed with the necessary expertise as the basis for a long-term development process, to be sourced from three areas:

i. Firstly, some current internal staff members that are already mandated to the planning responsibilities. It may also include personnel seconded from other government entities, also on local and rural level.
ii. Secondly, a number of specialists are contracted from private sector to become part of the planning and implementation monitoring team.
iii. Thirdly, the proposed bursary and internship programme will systematically deliver qualified junior experts in need of more experience through a mentorship programme and during holiday periods and for a period after completion of studies, before being deployed on a decentralised basis. At the same time, they will earn some much-needed income during holidays.

Accordingly, the above staff compliment will provide the necessary capacity for the NTPD, which is ultimately responsible to implement the Action Plan, of which the formulation of the NITP and local ITP's is the point of departure.

The comprehensive programme therefore entails the development of key expertise though long-term staff development programmes as well as mentorship programmes. In particular, it is suggested that mentoring programmes are provided through initial secondment and contracting of expertise to the Ministry. It will be a specific requirement that knowledge transfer is provided in the short to medium term, in multi-disciplinary technical areas that include the following:

- General transport planning expertise, with exposure to national strategic transport planning and on the local micro level, district transport plans, city transport masterplans). The planning process is nation-wide on both national level and decentralised local and rural levels and in cities.
- Transport Demand Modelling (with experience in PTV Visum, to enable further development and training of the national transport demand model).
- Traffic engineering
- Transport economics
- Financial planning and modelling
- Land use planning
- PPP expertise
- Contract management
- Legal expertise
- Road safety engineering
- Environmental expertise in the transport sector.

Some of personnel to be recruited or contracted may have experience in more than one of the above requirements, whilst some may be on an ad hoc basis and others on a permanent basis as the need presents itself.

4. IMPLEMENTATION AND MONITORING

The preceding sections of this policy presented the details of the transport sector status quo and the current challenges that the sector faces, as well as the policies that aim to address these challenges such that the overall vision for the transport sector is achieved.

As is relevant for the implementation of any successful strategy or plan, there is a necessity to monitor and evaluate the implementation of proposed policies and strategies to ensure the continued relevance and adjust the strategy as necessary. This section thus presents the overarching policy implementation, monitoring and evaluation strategy.

4.1 IMPLEMENTATION

As a separate document, the Strategic Action Plan will guide the implementation of a large number of project-specific actions to be undertaken over the coming 20 years, prioritised according to a timeline, referenced to the relevant implementing agency and linked to the Strategic Funding Plan. It is the responsibility of each respective implementing agency to monitor and evaluate the successful implementation of project actions and their linkage to the Transport Policy 2022.

Currently, the Ministry of Public Works and Transport, as key role player in the transport sector, comprises the following departments with associated responsibilities:

- The Roads Directorate is responsible for primary roads connecting district towns and border posts, the secondary roads which connect the main villages centres with the primary roads and transit across a number of constituencies.
- The Department of Civil Aviation (DCA) is responsible for the regulation and promotion of civil aviation, development of infrastructure and licencing of air transport.
- The Road Safety Department (RSD), leading the Road Safety Initiatives.
- The Department of Traffic and Transport (DTT), which is responsible for overseeing the efficient operations of the road traffic and transport systems.
- The Planning Units, which are responsible for the strategic planning of the Ministries.

Other Ministries and stakeholders with associated responsibilities in the implementation of this policy are:

- The Road Fund under the Ministry of Finance is responsible for financing, at least, road maintenance and rehabilitation.
- The Ministry of Local Government and Chieftainship Affairs (MoLGCA) is responsible for the management of the road network within the local government electoral division and urban roads in other towns.
- The Maseru City Council under MoLGC is responsible for the road network within the Maseru City Council jurisdiction.
- The Lesotho Highlands Development Authority (LHDA) under the Ministry of Water constructs roads and bridges for the purpose of facilitating the implementation of the Lesotho Highlands Water Project and hands these roads and bridges over to the Roads Directorate (RD) for future maintenance and management.
- The Ministry of Tourism assists with the construction of access routes to tourism destinations.

4.2 MONITORING AND EVALUATION

The primary responsibility for monitoring the progress and success of implementing the Lesotho National Transport Sector Policy lies with the Ministry of Public Works and Transport, although secondary responsibility in this regard lies with every individual Government department and agency that is impacted by the policies in this document.

The aim of this section is to provide some performance measurement parameters and guidance which will have to be detailed and applied within the Ministry itself. The periodic review and re-evaluation of the monitoring strategy and Key Performance Indicators (KPIs) needs to be undertaken and the approach adjusted as required. The *below table* provides some overall categories within which KPI measurement and evaluation should be performed.

***Table 4-1:** Key Performance Indicator Categories*

KEY PERFORMANCE INDICATOR CATEGORIES	
No.	**Main Category**
1	Transport Network/Infrastructure (relating to the physical and overall aspects of the transport network)
2	Cross-border operations (relating to all border traffic to South Africa)
3	Transportation of goods (relating to the transportation of goods, in all forms and modes)
4	Transportation of Passengers/Public Transportation (relating to the movement of people within the transportation system, using various modes)
5	Road Safety (relating to the degree of road safety for various modes and users)
6	Environmental Impact (relating to the environmental impact of the transportation system)
7	Technology adoption (relating to the level of technology adoption/ new, smart, green technologies)
8	Law Enforcement (relating to the enforcement of road regulations, especially also linking to road safety and infrastructure longevity)
9	Financial Sustainability (relating to the fiscal matters of the transportation system and the importance of sustainable interventions and practices)
10	Transport Policy (relating to the regulatory aspects of the transportation system and the importance of adequately defined transport policy)

Table 4-2 presents an indicative set of Key Performance Indicators (KPIs) that can be utilised as a point of departure to track the successful implementation of policy and to identify the data needs that are required for the monitoring strategy.

***Table 4-2:** Preliminary proposed set of KPIs*

KEY PERFORMANCE INDICATOR PRELIMINARY SET OF INDICATORS		
No.	**Main Category**	**Potential preliminary indicators**
1	**Transport Network/ Infrastructure**	**1.1 Paved & Gravel kilometres** • Road kilometres that are paved vs gravel to show the change in development over the years. **1.2 Infrastructure conditions** • Public transport and pedestrian facility conditions ranked according to a scale. Road conditions ranked according to a conditional scale. **1.3 Overall congestion index** • Indicating hotspots of congestion on a national level. **1.4 Vehicle ownership** • Number of cars per 1000 inhabitants.
2	**Cross-border operations**	**2.1 Measure of efficiency** • Average waiting time/delay as a measure of user satisfaction and operational efficiency
3	**Transportation of goods**	**3.1 Average percentage of overloaded trucks** • Percentage of the truck fleet that is overloaded as well as the efficiency of the weigh-in stations. **3.2 Increased regional rail connectivity** • Proportion of goods transported via the regional rail connectivity.
4	**Transportation of Passengers/ Public Transportation**	**4.1 Public transport trip share** • Share of all trips by public transport modes/transit. **4.2 Access to public transport** • Percentage of the population that has access to public transport services within a certain distance of walking (TBD). Ease of access for disabled people needs to be captured. Availability of learner transport is also important. **4.3 Average travel times** • A measure of the average travel time for typical work and education trips. **4.4 Average travel cost** • Index of relative household transport costs. Also, the percentage of households spending more than 20% of disposable income on public transport. **4.5 User satisfaction for public transport** • A subjective measure of user satisfaction of the general public transport experience. **4.6 Intermodal connectivity/integration** • A measure of the ease of transitioning between modes of travel by indicating intermodal facilities and services. Also, an indication of multimodality/different mode options. **4.7 Average daily distance travelled** • Average total distance travelled per person per day.

KEY PERFORMANCE INDICATOR PRELIMINARY SET OF INDICATORS		
No.	**Main Category**	**Potential preliminary indicators**
5	Road Safety	**5.1 Number of road traffic fatalities per vehicle type** • Vehicle type specific traffic fatalities per 100 000 inhabitants. **5.2 Number of road traffic pedestrian fatalities** • Pedestrian fatalities per 100 000 inhabitants. **5.3 Regulation of 4+1 import vehicles** • Monitoring the annual import of second-hand LDVs that contribute to pollution and safety problems.
6	Environmental Impact	**6.1 Emissions of air pollutants from road transport** • Air pollutant emissions (mass unit) per capita **6.2 Air Quality** • Concentrations (µg/m3) of air pollutant emissions.
7	Technology adoption	**7.1 Strategic ITS and data digitalisation document** • Regular evaluation of ITS and the updating of a strategic document. • Measurement of integrated data digitalisation in Lesotho
8	Law Enforcement	**8.1 Unroadworthy vehicles** • Indicating vehicle testing facilities and actions towards increasing overall vehicle roadworthiness **8.2 Number of traffic violations** • Violations by type and location
9	Financial Sustainability	**9.1 Annual expenditure target for transport infrastructure and operations** • A measure of the successful funding mechanisms within the transportation system
10	Transport Policy	**10.1 A measure of successfully developed and implemented policy statements in light of the above preliminary indicators.**

The above Key Performance Indicators should be treated as an indicative set of evaluation criteria that can be used by the Ministry to track the rate and success of implementation of the Lesotho National Transport Sector Policy.

It is recommended that a data dashboard is developed that will present at a glance the primary and key data components linking to the set of KPIs. A periodic review of the performance monitoring system needs to be undertaken.