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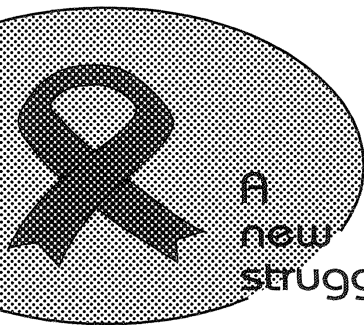
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NELSPRUIT, 22 APRIL 2014

No. 2283

We all have the power to prevent AIDS

AIDS
affects
us all



A
new
struggle

Prevention is the cure

**AIDS
HELPLINE**

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DEPARTMENT OF HEALTH

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GENERAL NOTICE

NOTICE 126 OF 2014

MPUMALANGA PROVINCIAL GOVERNMENT

DEPARTMENT OF PUBLIC WORKS, ROADS AND TRANSPORT

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

I, Dikeledi Gladys Mahlangu, MEC for Public Works, Roads and Transport hereby give notice that I have, in terms of section 35 of the National Land Transport Act, 2009 (Act No.5 of 2009), prepared the draft Mpumalanga Provincial Land Transport Framework which is attached hereto. Members of the Public and specifically role players in the Transport sector are invited to submit comments on the draft Mpumalanga Provincial Land Transport Framework, before or on 14th March 2014, in writing (either written representations or electronically) to the following address:

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the dpwrt

Department:
Public Works, Roads and Transport
MPUMALANGA PROVINCE

Mpumalanga Provincial Land Transport Framework Update Final Draft (2013 -2018)



EXPANDED PUBLIC WORKS PROGRAMME



MPUMALANGA
A Pioneering Spirit

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PREAMBLE

Mpumalanga Province is one of nine constituent provinces of the Republic of South Africa constituted in terms of Chapter 6, Section 103 (1) (h) of the Constitution of South Africa (Act 108 of 1996). In 2012, the Mpumalanga Provincial Department of Public Works, Roads and Transport appointed Mugazi Consulting – as part of a consortium consisting of Mugazi, Gwarajena TRD and CSIR: Built Environment to update the Provincial Land Transport Framework.

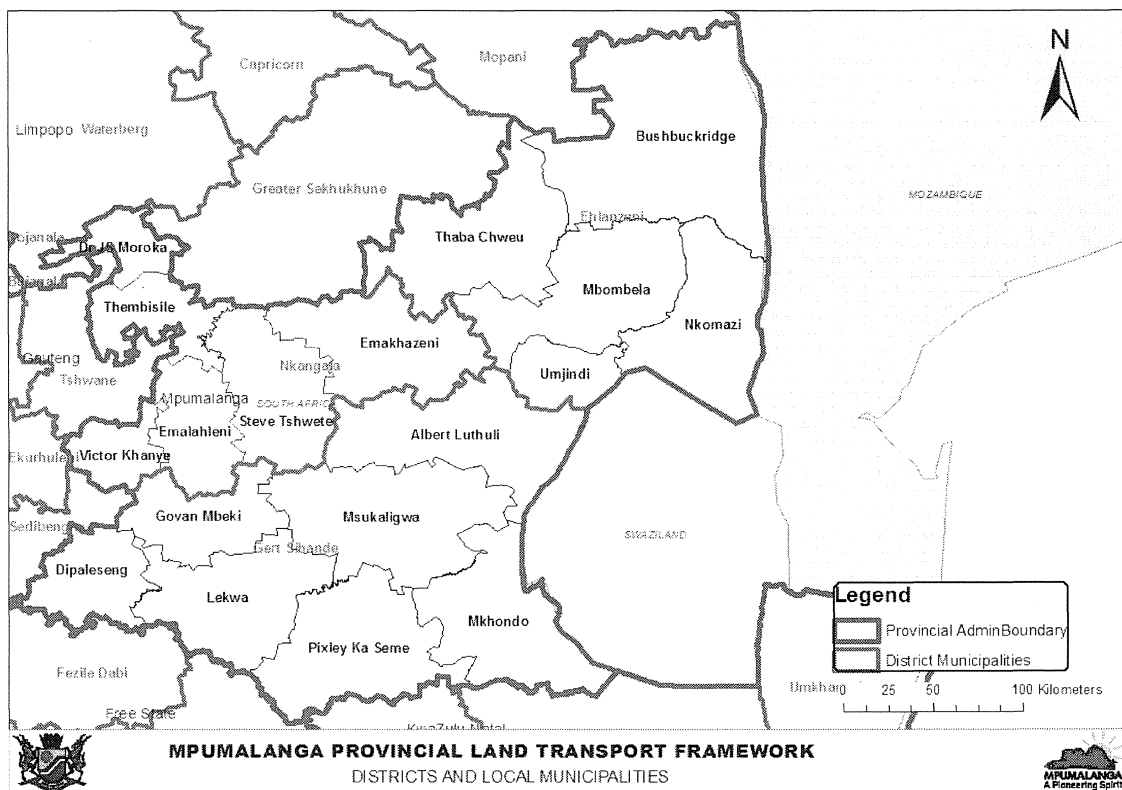


Figure 0.1: Locality map

In terms of the National Land Transport Act, (Act No. 5 of 2009) (NLTA, 2009), each Provincial Government must prepare a Provincial Land Transport Framework (PLTF) covering a period of five years, which must be published in the Provincial Gazette. Given that the PLTF is a framework that sets the agenda, principles, standards and norms for transport in the Province, it is imperative that it be robust to facilitate its adoption and unfettered use by district and local municipalities. In this regard, it has taken on board issues raised, for example, in the Provincial Economic Growth and Development Path (2011) (a guide to socio-economic development of the province), which identified, as crucial levers, spatial development initiatives designed to encourage business location along key strategic transport development corridors. It has also taken into account national transport policies

0-1 | MPLTF (2013-2018): Preamble

and frameworks, such as the National Land Transport Strategic Framework (2006-2011) and the National Transport Master Plan (NATMAP, 2010). It has also taken into account overarching national plans such as the National Development Plan and the Growth Path. Thus, the 2013-2018 MPLTF has taken cognisance of a wide cross-section of issues that are material to the socio-economic development trajectory of Mpumalanga.

While the 2006 PLTF was intended to be used as a base document – a departure point, much of the document has been overtaken by events such that its use as a base document was severely curtailed. Extensive data collection was thus undertaken. The methodology that was employed in the development of the MPLTF is as prescribed in the NLTA (2009) and the DOT guidelines (2011).

The primary aims of the MPLTF are to:

- Ensure national transportation planning objectives and policies are implemented across the province.
- Enumerate objectives and policies that provide direction to sustainable transportation development in the province.
- Assist in coordinating and integrating transport in the province, and
- Serve as the basis for the preparation and implementation of all manner of transport plans, programs and projects.

Thus strategic *raison d'être* for the MPLTF relates to:

- Providing guidance on the nature (type), extent and location of transportation services that the people of Mpumalanga need and deserve and the infrastructure necessary to service it.
- Succinctly providing guidance on the scale, form and design of transportation which is appropriate for Mpumalanga
- Responding to and ensuring coordination of the spatial implications of other development policies and strategies.
- Providing support and a firm foundation for the Provincial Economic Growth and Development Path, and
- Functioning as a service delivery tool as opposed to an information depository and archive.

Furthermore, the intention of the MPLTF is to ensure that the Province also monitors and evaluates planning interventions between the different spheres of government. The MPLTF

also promotes the spirit of intergovernmental relations which is supported by the Intergovernmental Relations Framework Act (Act No. 13 of 2005), which encourages holistic articulation of the transportation agenda across all spheres of government through integrated planning.

Given the need to be inclusive, consultation with respect to the development of the MPLTF is imperative – it is indeed the fulcrum that holds the MPLTF firmament together. It is also in the same spirit that it becomes incumbent upon the Member of the Executive Council (MEC) to endorse the MPLTF as a robust framework to be employed by all transport planning authorities in the Province. The Mpumalanga Provincial Land Transport Framework consists of the following chapters:

- **Chapter 0: Preamble**
- **Chapter 1: Process and Consultation**
- **Chapter 2: Transport Vision, Policy and Objectives**
- **Chapter 3: Status Quo of Transport in the Province**
- **Chapter 4: Integrated Transport Plans**
- **Chapter 5: Integrated Development Framework**
- **Chapter 6: Public Transport Strategy**
- **Chapter 7: Non-Motorised and Environmentally Sustainable Transport**
- **Chapter 8: Transport Infrastructure Strategy**
- **Chapter 9: Transportation Management Strategy**
- **Chapter 10: Tourism Transport**
- **Chapter 11: HIV/AIDS in the Transport Sector**
- **Chapter 12: Funding Strategy and Implementation Program**
- **Chapter 13: Monitoring and Evaluation, and**
- **Chapter 14: Coordination Structures and Measures, Liaison and Conflict Resolution**

The province is an amalgam of three district municipalities, which are in turn, made up of several municipalities as follows:

- **Ehlanzeni District Municipality**
 - Umjindi Local Municipality
 - Bushbuckridge Local Municipality
 - Thaba Chweu Local Municipality
 - Mbombela Local Municipality, and
 - Nkomazi Local Municipality.
- **Nkangala District Municipality**
 - Emalahleni Local Municipality
 - Thembisile Hani Local Municipality
 - Emakhazeni Local Municipality
 - Dr JS Moroka Local Municipality
 - Steve Tshwete Local Municipality, and
 - Victor Khanye Local Municipality.

- **Gert Sibande District Municipality**
 - Albert Luthuli Local Municipality
 - Dipaleseng Local Municipality
 - Govan Mbeki Local Municipality
 - Lekwa Local Municipality
 - Mkhonto Local Municipality
 - Msukaligwa Local Municipality, and
 - Pixley ka Seme Local Municipality.

This current update of the Mpumalanga Provincial Land Transport Framework represents a holistic picture of the socio-economic and transport dynamics of the province taking into account significant changes over the last five years. It outlines a comprehensive program of transport improvements to meet the developmental challenges facing Mpumalanga.

Executive Summary

The Mpumalanga Provincial Land Transport Framework (MPLTF) is a strategic document designed to integrate and inform all transport and land-use related provincial decision making with a view to ensuring that transport investments support the socio-economic agenda of the province. It is also intended to guide district-wide and local integrated transportation planning. The MPLTF seeks to achieve this within a broadly defined integrated development framework that takes cognisance of the complex intertwining relationship between the transport sector on the one hand, and society, the economy, the built and natural environments, on the other. Thus, as an overarching framework, it must be employed as a reference point for all decision-making processes in respect of provincial transport planning and implementation. Not surprisingly, multi-stakeholder consultation has been the centerpiece of development.

The MPLTF (2013-2018) has been prepared in accordance with the published regulations for generating a PLTF by the Department of Transport's (DOT, 2011) – "Minimum Requirements for the Preparation of Provincial Land Transport Frameworks". In terms of the National Land Transport Act, (Act No. 5 of 2009) (NLTA, 2009), Mpumalanga must prepare a Provincial Land Transport Framework (MPLTF) covering a period of five years, which must be published in the Provincial Gazette. Given that the MPLTF is a framework that sets the agenda, principles, standards and norms for transport in the Province, it certainly needs to be robust to facilitate its adoption and unfettered use by district and local municipalities. The MPLTF is crafted as a practical framework that strategically influences the spatial structuring of the province as well as:

- Provide a firm foundation for and support Mpumalanga's growth and development vision
- Function as a service delivery tool as opposed to an information depository and archive, and
- Operate as a tool that will succinctly guide short and long-term sustainable interventions.

The MPLTF therefore seeks to strike a balance between the interaction of transport and society. In this regard, it will be imperative for the MPLTF to:

- Ensure national transportation planning objectives and policies are implemented across the province.
- Enumerate objectives and policies that provide direction to sustainable transportation development in the province.
- Assist in coordinating and integrating transport in the province, and
- Serve as the basis for the preparation and implementation of all manner of transport plans, programs and projects.

Exsum-1 | MPLTF (2013-2018): Executive Summary

Thus strategic raison d'être for the MPLTF relates to:

- Providing guidance on the nature (type), extent and location of transportation services that the people of Mpumalanga need and deserve and the infrastructure necessary to service it.
- Succinctly providing guidance on the scale, form and design of transportation which is appropriate for Mpumalanga
- Responding to and ensuring coordination of the spatial implications of other development policies and strategies.
- Providing a firm foundation and support for the Provincial Economic Growth and Development Path, and
- Functioning as a service delivery tool as opposed to an information depository and archive.

As indicated above, the approach followed in undertaking the updating of the MPLTF was guided by the NLTA (2009) and 2011 DOT guidelines. It is important to note here that the use of the 2006 PLTF as a base document was severely curtailed because much of it has been overtaken by events. Given the need to be inclusive, consultation with respect to the development of the MPLTF was imperative – it is indeed the fulcrum that holds a pro-poor and sustainable MPLTF firmament together. In addition, the 2013-2018 MPLTF has taken cognizance of a wide cross-section of issues that are material to the socio-economic development trajectory of Mpumalanga. The MPLTF will be endorsed by the Member of the Executive Council (MEC) for Transport as a robust framework to direct transport development in the province once all the consultation processes are completed. The MPLTF consists of fourteen chapters that are briefly discussed hereunder as follows:

Chapter 0: Preamble

The preamble provides an overview of the strategic intent of the PLTF.

Chapter 1: Process and Consultation

Chapter 1 summarizes the consultation and participation processes undertaken to meet minimum requirements as prescribed by legislation. This included monthly project steering committee meetings, interviews and discussions with officials and experts, stakeholder workshops including transport forums, capacity building and training workshops, presentations and engagement with MDPWRT management.

Exsum-2 | MPLTF (2013-2018): Executive Summary

Chapter 2: Transport Vision, Policy and Objectives

The transport vision and mission of the Province is guided by the national transport vision and policy context as enumerated above which locates Mpumalanga as a developmental arm of Government. The vision for transport for Mpumalanga is:

“...An integrated transport system that promotes socio-economic development for Mpumalanga planned with the community...”

Its mission is anchored on ***providing the public with a safe, accessible, affordable, efficient and effective transport system through well managed transportation infrastructure and services in support of Mpumalanga’s socio-economic development trajectory.***

Clearly, the vision for Transport for Mpumalanga revolves around developing a demand-responsive, sustainable and balanced transport system that allows the basic access needs to be met safely and in a manner consistent with human and ecosystems health, is affordable, operates efficiently, offers choice of transportation modes, and supports a vibrant economy.

In order to make steady progress towards achieving the above outcomes, the key policy levers and intervention options during the five year strategic cycle of 2013 to 2018 will revolve around:

- Improving transportation infrastructure within the ambit of the Provincial Transportation Infrastructure Master Plan
- Providing integrated, accessible and affordable public transport services
- Adequately funding and implementing the NMT value chain
- Ensuring a reliable provincial freight logistics system
- Developing tourism transport to strengthen tourism receipts, and
- Building capacity to implement the MPLTF in terms of funding, human resources and strengthening transport institutions

Chapter 3: Status Quo of Transport in the Province

Chapter 3 paints a picture of the existing situation with regard to the entire transportation system in Mpumalanga taking into account the current socio-economic circumstances. At close to 72% of the total population, Mpumalanga has a preponderance of youth in its demographic profile raising questions of dependency, affordability and subsidization of the transportation system. In addition, because the population is sparsely distributed with upwards of 61% living in non-urban areas of the province presents transportation delivery and coverage challenges. The paved road network, which was described as in a fair (58% - VCI) condition in 2009, carries relatively low traffic volumes as 93% of paved roads carry less than 5 000 vehicles per day and 84% of unpaved roads carry less than 250 vehicles per day. Because the unpaved road network was

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considered to be a relatively poor condition in 2009 (48% - VGI), maintenance and construction backlogs have increased. Other challenges facing the transport sector in Mpumalanga include:

Challenge		Description
1	Information Systems	Some systems & the associated data are outdated
		Some documents such as CPTRs not comprehensive
2	Land Use	Competition between land uses for forestry, mining and agriculture
		No downstream value added to primary products
3	Operations: Passengers	No rail commuter services & medium distance rail services
		Inadequate access to motorized transport modes
		Inadequate access to NMT modes & lack of NMT infrastructure
4	Operations: Freight	No cargo handling facilities at Kruger Mpumalanga International Airport
		Bottlenecks occur due to border crossings & slow infrastructure expansion
		Interneccine modal competition (e.g. road versus rail)
5	Transportation Infrastructure	Poor infrastructure, which leads to high transport costs
		Under-utilisation of transportation infrastructure especially railway lines, sidings & facilities
		Capacity constraints, e.g. the Overvaal tunnel constraining coal transport by rail
		Implementation capacity constraints
6	Financial	General severe funding constraints
		Lack of funds to address the needs of the coal haulage network
		Lack of funds to address the NMT implementation value chain
7	Legal	Mpumalanga does not have a Road Act (currently being drafted)
8	Institutional	Uncertainty with respect to responsibility (e.g. ownership & responsibility of roads)
		Moribund transport forums
		Lack of capacity e.g. lack of transport functions at local municipality level
9	Energy	Continued reliance on fossil fuels for locomotion & the attendant carbon footprint
		Availability of coal to ensure long term power generation
10	Environment	Environmental concerns w.r.t. mining (conform to Biodiversity Conservation Plan)
		Increased emissions from the transport sector & the implication on the carbon footprint

Chapter 4: Integrated Transport Plans

Chapter 4 provides a matrix of the various types and classifications of transport plans to be prepared by the three constituent districts and their local municipalities including their sequencing, which ensures that they feed into and enrich each other. However, while the three district municipalities have existing integrated transport plans (ITPs) (albeit not recently updated), except for Mbombela, the other local municipalities have not had ITPs developed for their jurisdictions largely because of capacity challenges. Transport forums which are both a reservoir of information and a sounding board of transportation issues have not, by and large, been functioning. Transport planning and implementation especially in local authorities has thus been haphazard. The updating and development of ITPs for district and local municipalities respectively within the ambit of an overarching framework provided by the MPLTF are therefore

Exsum-4 | MPLTF (2013-2018): Executive Summary

long overdue. The main intervention option relates to capacity building and institutional strengthening across the three spheres of government in the province, and in particular:

- Facilitating the establishment of transport functions in all local municipalities
- Strengthening these transport units by providing adequate funding and personnel to undertake activities especially regulatory requirements such as ITPs
- Widening the scope of transport forums to include all modes and ensure that they function properly by streamlining their administration, and
- Generating and agreeing on an ITP updating calendar to ensure MPLTF updates are robust and realistic, and therefore bankable.

Chapter 5: Integrated Development Framework

Land use and transportation integration form the backbone of an efficient settlement pattern. It not only ensures the cost-effective operation of the province's transportation system, but it also has the potential to rationalize settlement patterns given that settlements tend to concentrate along major transportation routes. In addition, better land use and transportation integration can lead to shorter commuter distances and less onerous access to socio-economic opportunities. Mpumalanga enjoys a comparative advantage in four major sectors, namely, agriculture (especially forestry and plantations), mining (including quarrying), manufacturing/industry (e.g. electricity generation, petro-chemicals, iron and steel, wood and paper products, food industry), and tourism. Because transport is a derived demand, it necessarily must service these sectors. While these land uses are relatively well served by the transportation system making use of the major corridors, developing rural communities are not as well served and are relatively disconnected from these major activity nodes. Policy levers and intervention options revolve around:

- Smart strategic investment and economic choices based on consolidating and further development of economic concentration areas and hubs and their linkages, and
- Balanced spatial development as a way to reduce regional spatial differences and generating strategies to stimulate growth and development in lagging areas.

Chapter 6: Public Transport Strategy

Public transport services in Mpumalanga will be designed to operate at improving levels of service for its users. This implies that public transport infrastructure, its management systems, and day-to-day operations will need to be designed, delivered and governed by a set of key principles aimed at improving user experiences. However, in order to achieve this, it is important to acknowledge and understand the nature of the gap between the current situation and the desired outcomes. This chapter identifies a principled path that the province needs to take in order to continuously transform public transport for the better.

Specific critical deficiencies identified in the province's public transport system can be summarised strategically as follows:

- Strategic disconnect between development and public transport
- Public transport is delivered in terms of fragmented projects as opposed to a consolidated programme of action, and
- Inappropriate or inadequate public transport management systems.

In order to reverse this situation, three levels of corrective measures need to be adopted by the province, namely, intra-organisational interventions, inter-organisational interventions and programme management implementation.

Chapter 7: Non-Motorised and Environmentally Sustainable Transport

The challenge of transport policies for Mpumalanga is to achieve a ***much better level of general mobility and accessibility, at a much lower cost***. Non-motorized transport (NMT) modes readily provide such an option. NMT includes all forms of movement that are human powered which do not rely on engines or motors for movement, including walking, cycling, rickshaws, wheelchairs, animal-drawn carts and recreational activities such as equestrian, rollerblades, skates and scooters. NMT modes can be used as a collector mode. NMT modes together with public transport can play a significant role in providing a ***sustainable alternative to the private motor vehicle***, in reducing overall carbon emissions, improving air quality, reducing congestion and moving towards meeting the targets set by the Kyoto Protocol. IMTs require supporting infrastructure for their manufacture, supply and repair, which widens employment-generating opportunities for small enterprises and, nowhere is it more apparent than in rural areas. NMT policy levers and intervention options include:

- Focusing on and providing comprehensive NMT infrastructure and services in two corridors, namely, Moloto Development Corridor and Mbombela-Phalaborwa Corridor as well as the University of Mpumalanga (influencing tomorrow's leaders today):
- Providing formal pedestrian and cycling lanes in engineering designs for new and existing transport infrastructure upgrades, eliminating the need for future retrofitting, which is decidedly more expensive. Providing for NMTs should be entrenched as a standard requirement for all road upgrades and new construction)
- Providing high quality pedestrian and cycle links between taxi ranks and other transport interchanges as well as key destination points
- Mainstreaming the Shova Kalula National Bicycle Partnership Program by increasing funding and strengthening the institutional arrangement for distribution, including spares and repairs
- Undertaking an assessment of the IMT demonstration projects that have been implemented across the province with a view to finding innovative ways to mainstream them

- Strengthening educational outcomes by improving scholar transport through the innovative deployment of a combination of NMTs and public transport, and
- Developing NMT master plans for municipalities.

With regard to climate change and sustainable transport, the vision for a low-carbon transport system for Mpumalanga hinges on ensuring dense but green and mixed land uses, modern, high quality links characterised by good integration, high quality alternatives to individual car-use, especially efficient public transport and good NMT infrastructure and its proper integration, and lastly, efficient, inter-modal freight transport and smart urban logistics

Chapter 8: Transport Infrastructure Strategy

Transport infrastructure is one of the key economic levers in the province. The aim of the transport infrastructure strategy is to ensure that existing infrastructure is properly utilized, while addressing backlogs that create transport network bottlenecks. In line with constitutional competencies, at a provincial level, most of the transport infrastructure relates to roads and for municipalities the infrastructure resources are split between roads and public transport. For the province emphasis will be placed on reduced deterioration of the existing road network through a focused road network maintenance programme. To this end, the province will seek to partner with the private sector as well as State Owned Enterprises in the province to ensure that the road network in the province facilitates sustained economic growth. Furthermore, through dedicated law enforcement, the province will ensure that the rate of overloaded heavy vehicles is reduced. The province is also supportive of increased modal shift of long distance freight from road to rail. To this end, the province will work closely with Transnet in respect of its capital investment programme.

A key constraint, especially within municipalities in the province, remains the lack of technical skills to drive infrastructure programmes. This has previously led to interventions by national government through programmes such as Project Consolidate and the Siyenza Manje, in which technically skilled professionals were temporarily hired to assist municipalities in respect of overall engineering service delivery. Through the provincial transport forum, the province will monitor the technical capacity situation in municipalities to ensure that municipalities without capacity are assisted. Infrastructure planning and implementation need to respond to current and future socio-economic activities (demand).

Chapter 9: Transportation Management Strategy

The government of Mpumalanga has a pressing need to accelerate sustainable socio-economic development by, amongst other things, rolling out on a mass scale physical, social and economic infrastructure. Road infrastructure is important for accessibility and mobility of goods and people. Roads construction and maintenance can also create large numbers of local jobs.

However, Mpumalanga's transportation demand management system operates in an environment of relatively poor infrastructure and facilities. There are also serious concerns around land-use and the environment; congestion, safety and security; freight transport intermodalism (little or no coordination, integration and synergy between various transport modes, resulting in a slow and cost-ineffective movement of passengers and goods). The transportation system is inadequately linked to developing communities and their economic development needs; the movement of hazardous substances is not properly regulated; and the full participation of all key freight stakeholders is lacking. These challenges have been exacerbated by low levels of investment in infrastructure over the years; supply driven strategies that do not respond to customer needs and demands; and management challenges because of capacity and skills shortages. In this regard, transportation demand management intervention areas include:

- Spatial location of facilities to reduce the need to travel e.g. by relocating businesses closer to places of employment or vice versa, and by applying information technology to allow workers to work from home – logging-on to servers at the workplace and communicating via email and teleconferencing i.e. telecommuting.
- Championing non-motorized travel, including bicycling and walking
- Instituting flexible work schedules, which allow employees to shift their work start and end times (and thus travel times) to less congested times of the day

Chapter 10: Tourism Transport

Mpumalanga which shares international borders with Mozambique and Swaziland has a wide variety of tourism destinations including the world famous Kruger National Park. Mpumalanga's competitive edge in tourism lies in its natural and cultural diversity. By definition, tourism relates to activities of persons travelling to and staying in places outside their usual environment for leisure, business or other reasons. Existence of adequate transport infrastructure and services is therefore a prerequisite for developing a vibrant tourism industry. However, developing communities especially rural and township dwellers are still left out of the mainstream of the tourism economy – an industry that has the ability to create jobs and often characterized by low capital requirements in terms of starting businesses.

In terms of policy levers and intervention options, the following need to be pursued:

- Consultatively developing appropriate standards for conveying tourists.
- Providing proper infrastructure in the form of roads and bridges (including signage) not only to facilitate the movement of freight and passengers destined for tourism attractions but also to promote tourism.
- Developing a tourism transport master plan within the ambit of the provincial infrastructure master plan, and
- Identifying and promoting tourism projects in developing communities in urban and rural areas.

Exsum-8 | MPLTF (2013-2018): Executive Summary

Chapter 11: HIV/AIDS in the Transport Sector

Chapter 11 highlights the strong link that exists between HIV/AIDS and the transport sector in the context of the Mpumalanga province. Road transport is a key sector for Mpumalanga – the greater majority of the province’s passengers and freight are transported by road. The South African Medical Research Council studies suggest that mobility increases **vulnerability** to HIV/AIDS to those who are mobile, their partners at home and sexual partners along the transport corridor. However, the impact of HIV/AIDS on the transport sector has not received as much attention as other sectors e.g. education, agriculture, health, etc. While **mobile populations** are almost always likely to indulge in illicit sex, poor communities have an even stronger motive to engage in HIV/AIDS threatening activities both for monetary gain and for status symbolism. Policy options and intervention levers include:

- Developing an HIV/AIDS and transport strategy for the province, including identifying, profiling and mapping high risk corridors.
- Generating and implementing a strategy for targeting formal and informal truck stop hotspots for treatment including the provision of wellness programs
- Introducing transport corridor awareness campaigns about HIV/Aids
- Encouraged truck companies to introduce a no hitch-hiking passenger (females) pick up policy
- Establishing public/private partnerships among key stakeholders e.g. MCLI and Road Freight Association to undertake joint activities such as HIV/AIDS campaigns, and
- Establishing formal truck stops complete with proper facilities and step up law enforcement.

Chapter 12: Funding Strategy and Implementation Program

Chapter 12 explores **funding and implementation options** available in transforming the MPLTF into a reality, including the establishment of Provincial Infrastructure Funding Committee. Emphasis on partnership and collaboration in implementing projects is crucial e.g. PPP taking into account that the government cannot alone be expected to provide and fund the whole gamut of MPLTF projects. Policy levers and intervention options revolve around:

- Assessing the advisability of establishing a roads agency for the province
- Exploring the advisability of allocating weighbridge funds to municipalities for use in funding road infrastructure, and
- Investigate the advisability of re-negotiating the service level agreement between the province and its constituent municipalities to allow municipalities to begin to fulfill their unfunded mandates

Chapter 13: Monitoring and Evaluation

Exsum-9 | MPLTF (2013-2018): Executive Summary

Measurement of performance, or performance monitoring, is a requirement of the National Land Transport Act (2009). Performance measurement is also required from transport planning authorities at the local sphere of government through the Municipal Systems Act (2000). In addition, the notion of sustainable transport to support sustainable development intuitively demands such measurements. Problems that have been experienced in Mpumalanga are a manifestation of a failure in service delivery, which in part, has resulted from capacity challenges in terms of funding and manpower – a failure in terms of monitoring and evaluating service delivery. This chapter underlines the importance of putting in place a **monitoring and evaluation framework** for gauging progress in implementing the MPLTF in terms of sustainable transportation development during the MPLTF term. The monitoring and evaluation framework has to take into account the following:

Intervention options revolve around:

- Funding of municipalities for the establishment of transport units by the province.
- Seconding officials to assist municipalities to effectively discharge their transport planning and implementation obligations
- Structuring forums such that there is indeed feedback loops – informing the forum as to what would have been implemented, and
- Building capacity to collect the required data by supporting and building on existing capacities and enhancing existing institutional arrangements in the various municipalities and this could strengthen the reliability of data and sustainability of data collection practices.

The measuring instruments, the indicators need to be derived from the following sustainability goals, namely, economic, social, environmental and good governance.

Chapter 14: Coordination Structures and Measures, Liaison and Conflict Resolution

Coordination requires a champion to pull the strings together and get things going. Because such a champion does not exist, coordination has essentially been curtailed. Coordination also requires institutions or individuals who act as point persons. However, because local municipalities do not even have a transport function and transport forums are moribund, coordination has taken a back seat. Chapter 14 summarizes **existing structures for inter-governmental, bilateral as well as transport stakeholders and forum management systems**. Areas for strengthening and improving institutional systems and governance responsiveness are discussed. Interventions include:

- Positioning transport forums as an IDP working group
- Broadening the terms of reference of transport forums to include all modes, and
- Re-drawing the terms of reference of transport forums to ensure sustained interest from stakeholders

- Providing mechanisms to assist municipalities that have no capacity to carry out their planning responsibilities, and
- Expand the terms of reference of the provincial freight forum to include other modes and ensure its efficiency as an integrative platform.

Concluding Remarks

This current update of the Mpumalanga Provincial Land Transport Framework (2013-2018) represents a holistic picture of the socio-economic and transport dynamics of the province taking into account not only significant changes over the last five years, but also peering into the future. It outlines a comprehensive program of strategic transport improvements to meet the developmental challenges facing Mpumalanga.

Once the PLTF document is adopted by the Province, and approved accordingly by other spheres of government, the 2013 to 2018 ***MPLTF becomes a living tool through which transport related interventions*** in Mpumalanga will be undertaken. Necessarily, it becomes a reference point for all decision-making processes in respect of provincial transport planning and implementation.

Acronyms and Abbreviations

AADT	Average Annual Daily Traffic
AIDS	Acquired Immunodeficiency Syndrome
CBD	Central Business District
CCT	Clean Coal Technology
CITP	Comprehensive Integrated Transport Plan
COGTA	Cooperative Governance & Traditional Affairs
COLTO	Committee of Land Transport Officials
COSATU	Congress of South African Trade Unions
DCIA	Delmas Cargo International Airport
DITP	District Integrated Transport Plan
DPWRT	Department of Public Works, Roads & Transport
DRDLR	Department of Rural Development & Land Reform
DOT	Department of Transport
ERBDC	Ermelo-Richards Bay-Durban Corridor
HAZMAT	Hazardous Materials
HIV	Human Immunodeficiency Virus
IMS	Information Management System
IRMA	Integrated Rural Mobility & Access
IRTPN	Integrated Rapid Public Transport Network
ITS	Intelligent Transport Systems
JEC	Johannesburg-eMalahleni Corridor
JSSC	Johannesburg-Secunda-Swaziland Corridor
KMIA	Kruger Mpumalanga International Airport
KPI	Key Performance Indicators
LITP	Local Integrated Transport Plan
LMEFSC	Limpopo-Ermelo-Free State Corridor
MCLI	Maputo Corridor Logistics Initiative
MDC	Maputo Development Corridor
MDPWRT	Mpumalanga Department of Public Works, Roads & Transport
MEC	Member of the Executive Council

MFLF	Mpumalanga Freight Logistics Forum
MGDS	Mpumalanga Growth & Development Strategy
MIG	Municipal Infrastructure Grant
MIIU	Municipal Infrastructure Investment Unit
Min-Com	Political Structure chaired by the Minister of Transport
MPGP	Mpumalanga Provincial Growth Path
MPLTF	Mpumalanga Provincial Land Transport Framework
MRDC	Moloto Rail Development Corridor
NAFCOC	National Federated Chambers of Commerce
NATMAP	National Transport master Plan
NLTA	National Land Transport Act (2009)
NLTSF	National Land Transport Strategic Framework
NMT	Non-motorized Transport
OLB	Operating Licensing Board
PMU	Project Management Unit
PRASA	Passenger rail Agency of South Africa
PWD	Persons with Disabilities
RAMS	Road Asset Management System
RISFSA	Road Infrastructure Strategic Framework of South Africa
SAA	South African Airways
SADC	Southern African Development Community
SANRAL	South African Roads Agency Limited
SC	Steering Committee
SDI	Spatial Development Initiative
SMME	Small, Medium & Micro Enterprises
TDM	Travel Demand Management
TFCA	Trans-frontier Conservation Area
Trans-MEC	Political Structure chaired by MEC
TSM	Transport Systems Management
VCI	Visual Condition Index
VGI	Visual Gravel Index

Chapter 1

1. MPLTF PROCESS AND CONSULTATION

1.1 Introduction

2.1.1. Rationale for a PLTF

The Mpumalanga Provincial Land Transport Framework (MPLTF) is a strategic document designed to integrate and inform all transport and land-use related provincial decision making with a view to ensuring that transport investments support the socio-economic agenda of the province. It is also intended to guide district-wide and local integrated transportation planning. The MPLTF seeks to achieve this within a broadly defined integrated development framework that takes cognisance of the complex intertwining relationship between the transport sector on the one hand, and society, the economy, the built and natural environments, on the other. Thus, as an overarching framework, and once approved, it must be employed as a reference point for all decision-making processes in respect of provincial transport planning and implementation. Not surprisingly, multi-stakeholder consultation has been the centrepiece of the development process.

The development of the MPLTF by the Mpumalanga Department of Public Works, Roads and Transport (MDPWRT) was heavily influenced by the need to generate a practical and implementable Provincial Land Transport Framework that provides clear and agreed-upon guidelines to provincial transport stakeholders on the intended transportation development trajectory over the next five years (commencing in the 2012/13 financial year until the 2017/18 financial year). Elements of a longer term vision for transport for sustainable development in the province in line with the broader developmental agenda have also been articulated.

1.2 Process and Consultation

In view of the fact that stakeholder consultation and participation to ensure consensus and buy-in are considered crucial for the development of a robust, pro-poor and sustainable Provincial Land Transport Framework, the development process was deliberately crafted in such a way as to be participative and consultative. In this regard (and as illustrated in Figure 1.1 below), various platforms were employed as follows:

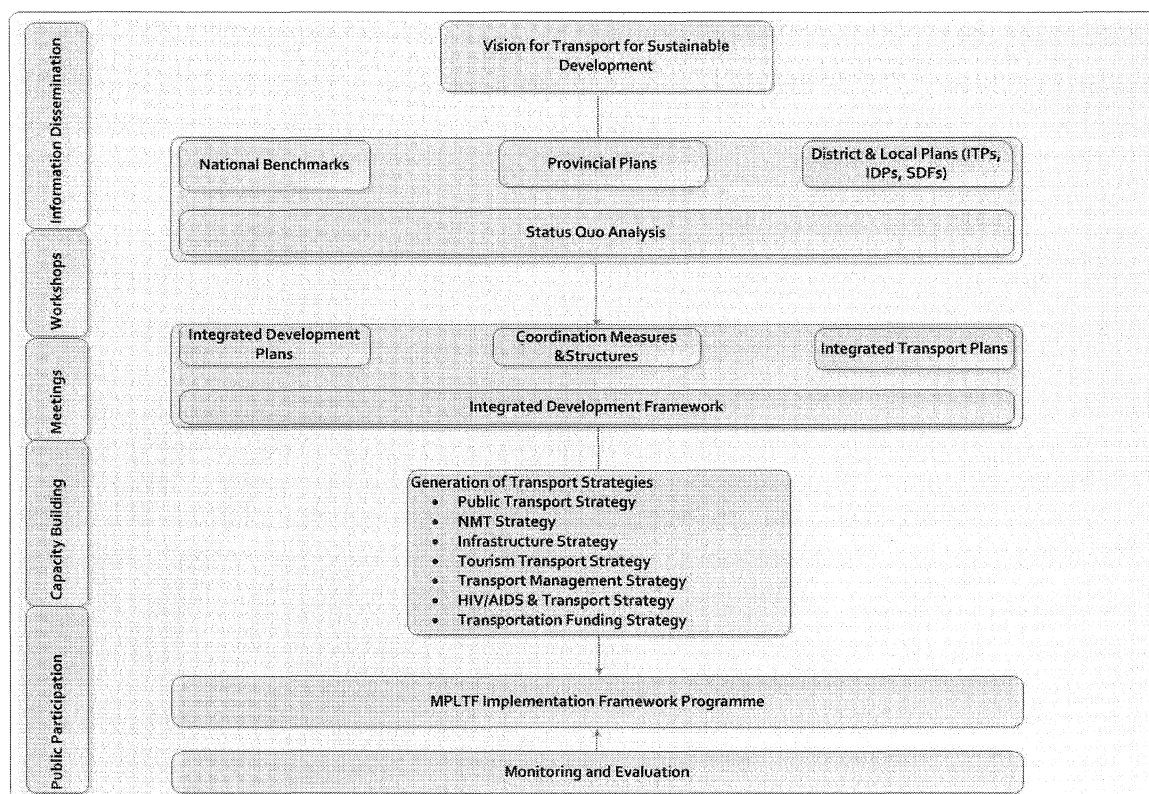


Figure 1.1: MPLTF Updating Process Flow

1.2.1 Steering Committee Meetings

Seven Steering Committee (SC) meetings (one every month for the duration of the project) were held in the three district capitals of the province to steer the project in the right direction. The SC was made up of representatives of various institutions, including:

- Government (Public Works, Roads and Transport; Economic Development, Finance and Tourism; Agriculture; Human Settlements)
- District and local municipalities
- Organised labour (COSATU)
- Organised business (National Federated Chambers of Commerce – [NAFCOC])
- Not-for-profit organisations (Maputo Development Corridor Logistics Initiative [MCLI])

1.2.2 Interviews

Interviews, using checklists, were undertaken with selected national, provincial and district officials responsible for transport planning as well as experts in the field.

1.2.3 Transport Forum

The Mpumalanga Draft Provincial Land Transport Framework was also presented to and discussed at District Transport Forums. Transport forums are not-for-profit organisations

representing a cross-section of interests that were established primarily to encourage dialogue in the transportation sector in the district with a view to influencing the direction of transport development in the districts and province.

1.2.4 Stakeholders' Workshop

A stakeholders' workshop which was held in October 2012 was intended to be both a validation workshop as well as a platform to discuss how the transport sector could effectively support the province's development trajectory. In this regard, the delegates were divided into commissions that deliberated on and developed strategic positions that were further discussed in the plenary session, and final resolutions agreed upon. These positions were then incorporated into the PLTF.

1.2.5 Provincial Officials

The Draft Mpumalanga Provincial Land Transport Framework was also presented to and discussed at length with senior management of the Department of Public Works, Roads and Transport. Their comments have also been incorporated into PLTF.

1.2.6 Draft Final PLTF

Inputs from the various institutions and roll players were collated and consolidated into the Draft Final Mpumalanga Provincial Land Transport Framework.

Chapter 2

2. TRANSPORT VISION, POLICY AND OBJECTIVES

2.1 Introduction

2.1.1 National Vision for Transport

The national vision for transport is as follows:

“...Transport, the Heartbeat of Economic Growth and Social Development...”

The national mission for transport is to:

“...Lead the development of efficient integrated transport systems by creating a framework of sustainable policies and regulators and implementable models to support government strategies for economic, social and international development...”

National transport objectives in support of the foregoing vision and mission include:

- Support the goals of the reconstruction and development programme for meeting basic needs, developing human resources, and democratizing decision-making
- Enable customers requiring transport for people and goods to access the transport system in ways which will best satisfy the chosen criteria
- Improve the safety, reliability, quality and speed of transporting goods and people
- Improve South Africa's competitiveness and its transport infrastructure and operations through greater effectiveness and efficiency to better meet the needs of different customer groups, both locally and globally
- Invest in infrastructure for transport systems in ways which satisfy social, economic or strategic investment criteria, and
- Achieve the above objectives in a manner that is economically and environmentally sustainable, and minimizes negative side effects.

National values that act as a fulcrum to lift and support the vision firmament include:

- Maintain fairness and equity in all operations
- Strive for quality and affordable transport for all
- Stimulate innovation in the transport sector

2-1 | MPLTF (2013-2018): Transport Vision Policy & Objectives

- Ensure transparency, accountability and monitoring for all operations, and
- Ensure sustainability, financial affordability, accessibility as well as the upholding of the Batho Pele principles.

2.1.2. White Paper on National Transport Policy

The 1996 White Paper on Transport Policy for South Africa developed an overarching framework which sets out the tone, agenda, principles, norms and standards for the development of transport policies, strategies and plans for South Africa. The updated MPLTF takes cognizance of and is aligned to the white paper, given that provinces are compelled to align with national Government's policies and strategies.

2.1.3 National Land Transport Act

The following are the principles for land transport as set out in Chapter 1 – General Provisions, Section 9 of the National Land Transport Act (Act No. 5 of 2009):

- Give higher priority to public transport (vis-a-vis private transport) through, amongst others:
 - Developing transport corridors punctuated by development nodes
 - Planning and implementing public transport to meet customer needs relating to, for example, access, affordability, effectiveness, cost-efficiency, coordination and integration,
 - Assisting currently marginalized users with subsidies, including the needs of special categories of passengers
 - Selecting and supporting appropriate modes of transport
- Promote economic, financial, technical and environmental sustainability through investment in infrastructure and operations
- Use scarce resources optimally
- Integrate land transport with land-use and economic planning and development
- Apply the principles of user charging or cost recovery from direct users where appropriate
- Promote safety and effective law enforcement
- Promote the coordination of institutional functions
- Promote the participation of all interested parties in transport planning
- Promote compatible computerized land transport information systems, and
- Minimize harmful effects on the environment.

2.2. Provincial Transport Vision, Objectives and Policies

2.2.1 Developmental Role of the Provincial Government

In seeking to articulate the province's transportation vision, policies and objectives, it is important to conceptualise the role of the Mpumalanga administration as developmental in nature (particularly given that transport is a derived demand that is intended to marshal the socio-economic opportunities of the province.

In this regard, as a developmental arm of Government, Mpumalanga will seek to:

2-2 | MPLTF (2013-2018): Transport Vision Policy & Objectives

- Strengthen local-level planning, partnership formation and project conceptualization and implementation
- Facilitate social capital formation, skills development, creation of effective local demand and access to information required for effective decision-making
- Invest in local value addition
- Support the establishment of enterprises, including cooperatives and other forms of collective ownerships by, for example, strengthening their financial viability and overall sustainability
- Facilitate access to natural resources, especially land and water, and
- Facilitate the development of a service delivery model that is not based on a *catch-up development philosophy* but which is essentially hinged on the endgame – the visible outcomes of current planning processes, i.e. the improvement of the livelihoods of communities in Mpumalanga.

2.2.2 White Paper on Provincial Transport Policy

The Mpumalanga White Paper on Provincial Transport Policy is premised on national policies with the following strategic goals:

- Provide adequate transportation infrastructure to facilitate and stimulate socio-economic development
- Ensure sustainable provincial funding for the transportation function
- Strengthen the institutional framework for managing transportation
- Prioritize effective and efficient public transport development, and
- Improve traffic management and safety.

2.2.3 Vision for Transport for Sustainable Development in Mpumalanga

The transport vision and mission of the Province is guided by the national transport vision and policy context as enumerated above which locates Mpumalanga as a developmental arm of Government. The vision for transport for Mpumalanga is:

“...An integrated transport system that promotes socio-economic development for Mpumalanga planned with the community...”

Its mission is anchored on ***providing the public with a safe, accessible, affordable, efficient and effective transport system through well managed transportation infrastructure and services in support of Mpumalanga’s socio-economic development trajectory.***

Clearly, the vision for Transport for Mpumalanga revolves around developing a demand-responsive, sustainable and balanced transport system that allows the basic access needs to be met safely and in a manner consistent with human and ecosystems health, is affordable, operates efficiently, offers choice of transportation modes, and supports a vibrant economy (refer to a diagrammatic representation in Figure 2.1 below). This is undergirded by provincial core values, namely, service excellence, innovation, accountability, integrity,

2-3 | MPLTF (2013-2018): Transport Vision Policy & Objectives

diversity, team work, best practice, loyalty and value for money. It also resonates well with the five provincial strategic outcome-oriented goals enumerated hereunder:

- Prudent management of resources
- Adequate provision, management and maintenance of transportation infrastructure
- Ensuring effective transportation operations management
- Effective and efficient implementation of the EPWP2 in the province, and
- Continually improving governance, systems and procedures.

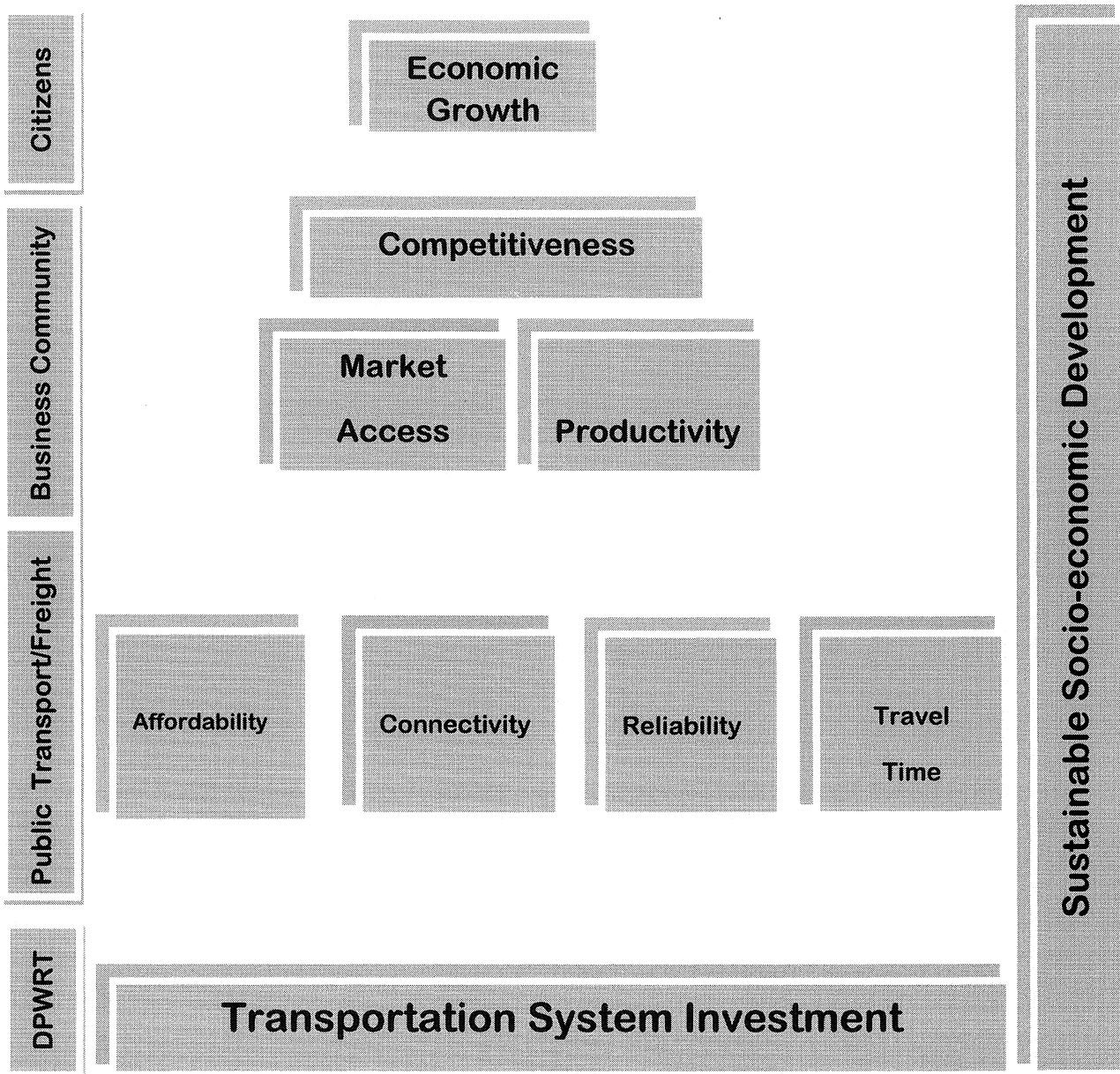


Figure 2.1: Transport development in support of sustainable socio-economic development

In order to make steady progress towards achieving the above strategic outcome oriented goals, the key policy levers and intervention options during the five year strategic cycle of 2013 to 2018 will revolve around:

Improved road infrastructure through:

- Upgrading of transportation infrastructure to enhance mobility, accessibility and safety as well as stimulating socio-economic growth, and
- Development including sustainable management of the coal haulage network

2-5 | MPLTF (2013-2018): Transport Vision Policy & Objectives

- Routine road maintenance of road infrastructure, and
- Alleviation of poverty through EPWP infrastructure projects.

Integrated, accessible and affordable public transport services through:

- Integrating transportation and land use planning
- Prioritizing public transport including the implementation of urban and rural Integrated Rapid Public Transport Networks (IRPTNs), so as to ensure access to reliable and affordable transport services
- Planning and implementation of non-motorized transport programs, and
- Supporting PRASA to implement the Passenger Rail Master Plan.

Facilitation of a reliable provincial freight logistics system through:

- Implementation of the Provincial Freight Logistics Strategy (PFLS) in consultation with all freight transport stakeholders
- Implementation of demonstration projects focusing on rural/second economy freight logistics, and
- Supporting the development of Delmas Cargo International Airport (DCIA)

Development of international gateways to improve freight logistics and strengthen tourism receipts through:

- Completing the development of the Mpumalanga Aviation Strategy
- Improvement of services and provision of intermodal facilities at KMIA, and
- Rebranding of the two gateway airports to stimulate, broaden and anchor economic activity as well as increase passenger numbers.

Adequately resourcing the provincial transportation function to fulfill its mandate through, for example:

- Undertaking a feasibility study to assess the advisability of establishing a Roads Agency for the province
- Assessing the need for setting up a Provincial Transport Funding Committee, and
- Overhauling the Provincial Land Transport Framework.

Chapter 3

3. STATUS QUO OF TRANSPORT IN MPUMALANGA

3.1 Location of Mpumalanga

Mpumalanga is located in the north eastern part of South Africa, and is bordered by Mozambique to the east and Swaziland to the south. Mpumalanga also shares common borders with the provinces of Limpopo, Gauteng, Free State and KwaZulu-Natal. Mpumalanga Province consists of three district municipalities and 18 local municipalities. This chapter paints a picture of the existing situation with regard to the entire transportation system in Mpumalanga taking into account the current socio-economic circumstances.

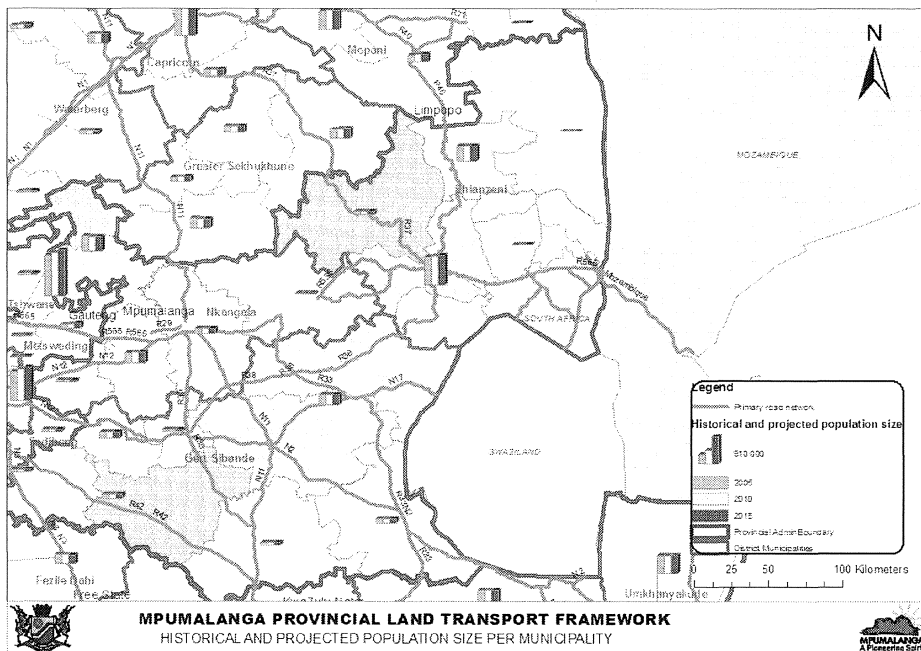


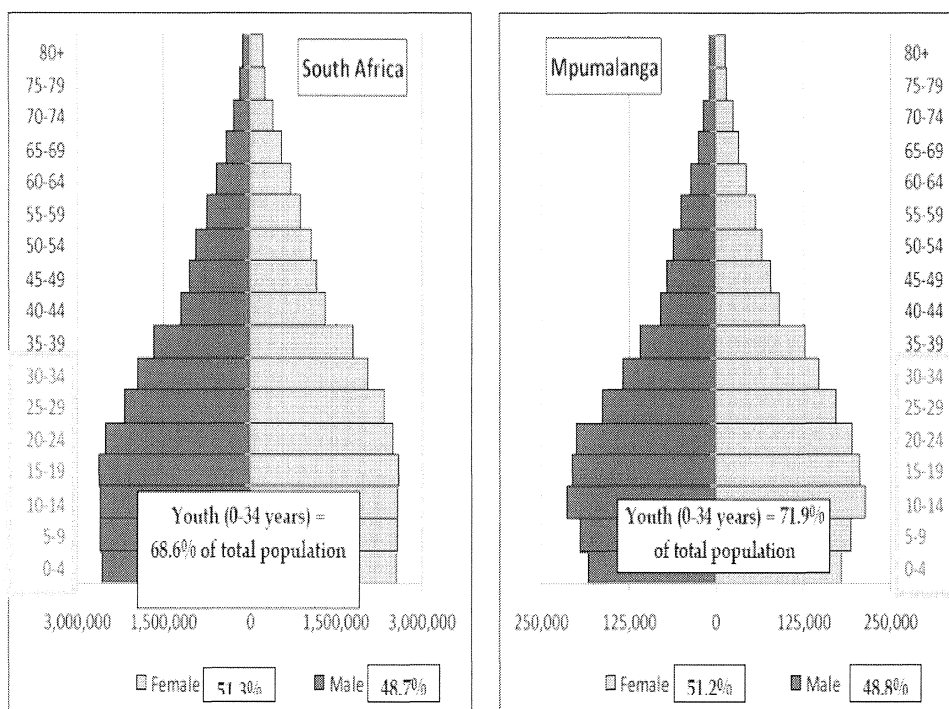
Figure 3.1: Population Distribution

3-1 | MPLTF (2013-2018): Status Quo of Transport in Mpumalanga

3.2 Population Dynamics and Implications for Transportation

Ehlanzeni District boasts the highest population (43.7%), followed by Nkangala District (29.7%) with Gert Sibande Region (26.6%) taking the rear. These figures partly explain why the Integrated Rapid Public Transport Network and the Moloto Rail Development Corridor have been proposed in Ehlanzeni and Nkangala districts respectively. At close to 72% of the total population (refer to Figure 3.1 above depicting population distribution), Mpumalanga has a preponderance of youth in its demographic profile raising questions of dependency, affordability and subsidization of the transportation system. In addition, because the population is sparsely distributed with upwards of 61% living in non-urban areas of the province, transportation delivery and coverage challenges are amplified. While transportation related access and mobility needs and infrastructure backlogs in rural and peri-urban communities are significant, the need for scientific study to inform priorities cannot be over-emphasized.

Figure 3.2: Mpumalanga population dynamics



Source: Mpumalanga Provincial Government: Department of Finance: Budget Estimate of Provincial Revenue & Expenditure 2011

Over the years, and increasingly so in the last couple of years, there has been a steady population drift (migration) to major towns in the province especially to Mbombela and eMalahleni, which inflates the service delivery backlogs in the receiving town without necessarily reducing the backlogs in the villages where the migrants hail from.

3-2 | MPLTF (2013-2018): Status Quo of Transport in Mpumalanga

3.3 Transportation Infrastructure

Provincial connectivity: Provincial inter-connectivity is provided by road and rail networks including municipal road networks. In some rural areas, connectivity has been enhanced by DPWRT's Integrated Rural Mobility and Access (IRMA) program infrastructure including low level bridges, paths, and pedestrian bridges. The extent of the road network in Mpumalanga is shown in Table 3.1 below.

Table 3.1: Provincial Paved Road Network Length (with Coal Haul Roads) (Sep: 2011)

Region	Road type	Non-coal haul roads (km)	Coal haul roads (km)	All roads (km)
Ehlanzeni	<i>Paved roads</i>	1,564.90	0.00	1,564.90
	<i>Unpaved roads</i>	1,652.67	0.00	1,652.67
	<i>Ehlanzeni Total</i>	3,217.57	0.00	3,217.57
Gert Sibande	<i>Paved roads</i>	1,409.46	510.97	1,920.43
	<i>Unpaved roads</i>	4,956.22	79.33	5,035.55
	<i>Gert Sibande Total</i>	6,365.68	590.30	6,365.68
Nkangala	<i>Paved roads</i>	1,105.78	704.58	1,810.36
	<i>Unpaved roads</i>	1,773.98	68.18	1,842.16
	<i>Nkangala Total</i>	2,879.76	772.76	2,947.94
TOTAL	<i>Paved roads</i>	4,080.13	1,215.56	5,295.69
	<i>Unpaved roads</i>	8,382.87	147.51	8,530.38
	TOTAL	12,463.00	1,363.06	13,826.07

Source: Road Infrastructure Plan 2012/13: DPWRT

The total road network length of Mpumalanga, as investigated in the RAMS Study (2011) comprises 13 826.07 km, of which 5 296.69 km (38.3 %) is paved and 8 530.38 km (61.7 %) is unpaved. Coal routes constitute about 10% of the total network.

3-3 | MPLTF (2013-2018): Status Quo of Transport in Mpumalanga

Road infrastructure usage: Road usage as reflected by traffic counts in Mpumalanga is growing faster than population growth mostly due to higher vehicle ownership, economic activity and growth, more government services and an expanding road network. The number of vehicles registered in the province has been steadily increasing – as of at 30 June 2011, the number of registered vehicles was 421 000 compared to 7.1 million in South Africa (i.e. 5.9%). The total number of vehicles in the three years from 2008 to 2010, increased by about 6% annually, whilst the growth rate of the number of buses and trucks was 8.3% on average in the same period. Traffic congestion is largely the scourge of the main urban nodes especially Mbombela and eMalahleni. Ring roads around major cities or towns may be required in the not too distant future in part because the by-pass around Mbombela has demonstrated its efficacy.

Road infrastructure condition: Apart from a quantitative growth in transport infrastructure needs, there is also a concomitant qualitative growth in service level needs. Where road users were previously “content” to utilize gravel roads, they now demand surfaced roads. Where they were “content” to travel at 40 km/h, they now want to travel at 80 km/h or faster. This phenomenon is not unique to South Africa, but due to the ever-increasing levels of technology and other social benchmarks, people naturally raise their expectations regarding use and utility value of different goods and services.

The paved road network, which was described as in a fair condition in 2009 with visual condition index (VCI) of 58%, carries relatively low traffic volumes as 93% of paved roads carry less than 5 000 vehicles per day and 84% of unpaved roads carry less than 250 vehicles per day. Because the unpaved road network was considered to be in a relatively poor condition in 2009 with a visual gravel (VGI) index of 48%, maintenance and construction backlogs have increased.

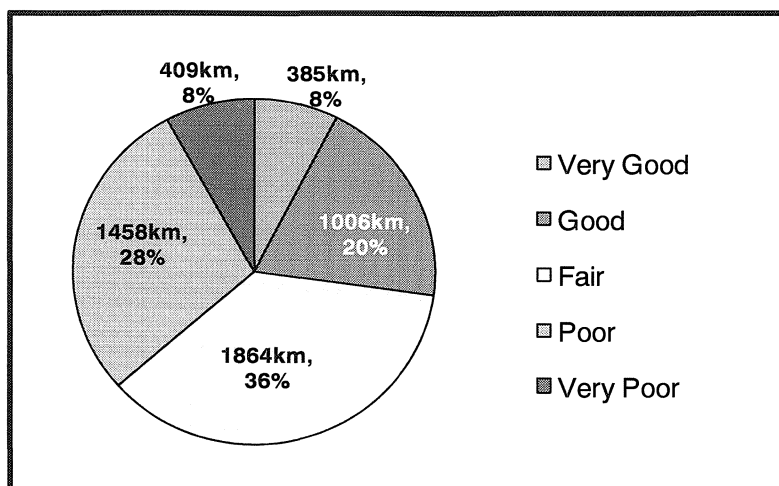


Figure 3.3: VCI distribution for paved roads

3-4 | MPLTF (2013-2018): Status Quo of Transport in Mpumalanga

Coal haulage by roads: Coal haulage by road has increased by about 400% since 2004 on major routes connecting mines from just south of the N4 corridor to the power stations near Amersfoort and Standerton. It is anticipated that more than 100 new coal mines are likely to open in the next five years, and the need for a well-defined and appropriately designed coal haulage grid in the coal rich areas south of the N4 corridor is of utmost importance. Apart from growth in demand from within Mpumalanga, there is also a considerable amount of traffic that passes through the province. Finally, tourism traffic to or through the Province suggests that a broader population than that of the province itself needs to be served.

Coal haul roads comprise 24% of the paved provincial roads in Mpumalanga, but carry a staggering 46% of the traffic volumes. Due to the heavy traffic loads, a high demand for maintenance and rehabilitation on these roads is therefore a necessity. According to the latest visual assessments of 2009, 39% of the paved coal haul roads are in a “*poor to very poor*” condition. These roads impose excessive road user costs and place a large burden on future financial needs for maintenance, rehabilitation and road user costs. The proportion “*poor to very poor*” road is much higher than the 10% recommended by Road Infrastructure Strategic Framework for South Africa (RISFSA).

Road infrastructure preventative maintenance menu includes the following:

- In order to delay the deterioration of road network under a constrained funding scenario, preventive maintenance should be intensified.
- The backlog of ‘*poor and very poor paved roads*’ should be reduced to 10%. This is achievable over a 10-year period with funding of approximately R1 200 million per annum for rehabilitation and preventive maintenance of paved roads
- Unpaved roads carrying more than 500 vehicles per day should be upgraded to paved standards.
- All unpaved roads carrying more than 100, but less than 500 vehicles per day should be re-gravelled.
- In the long term, the allocation of funding towards the paved road network should receive preference because it carries 85% of vehicle km driven in Mpumalanga, and
- The large proportion of roads in a ‘*fair*’ condition is also a concern as these roads have the short-term potential to deteriorate into the ‘*poor*’ category, if appropriate preventive measures are not put in place. The next level of repair is rehabilitation at a cost five to ten times more than the cost of preventive maintenance.

3-5 | MPLTF (2013-2018): Status Quo of Transport in Mpumalanga

3.4 Transport Infrastructure Management Systems

Mpumalanga boasts a variety of transportation infrastructure management systems such as Bridge Management System, Road Asset Management System, Geographical Information Systems, Road Inventory System, Pavement Management System, Gravel Road Management System, Traffic Management System and Maintenance Management System. Appropriate and quality information is the key to successful planning. In this regard, MDPWRT's data requirements include bridge data, traffic data, road inventory and maps, and road condition data. What is of interest and has implications for sustainability is the fact that all the data are stored in the servers of the consultants that maintain the various systems. Only elements of the systems data are installed on personal computers of officials.

3.5 Transport Services

Overall, walking is by far the largest mode for movement in the province – particularly in rural and peri-urban areas. Despite this, walking is not adequately catered for in the provincial road network and this can be seen as a contributor to the high pedestrian involvement in accidents. Although there is no commuter rail service, public transport in the form of buses (a significant number of these run unscheduled services competing fiercely with minibus taxis), minibus taxis and other paratransit modes such as bakkies and 4+1 sedans. Long distance transport services are offered by coaches between Mbombela and other major urban centres such as Johannesburg, Maputo and Durban on a daily basis.

Mpumalanga has upwards of 12 000 registered taxis, 7 000 of which were the result of the recapitalization exercise. Generally, taxis ply overtraded routes especially the local routes where competition between illegal and registered taxis is stiff. Coordination and regulation of the taxi industry is inadequate which often leads to unhealthy competition. Profitability of the taxi industry is compromised by the fare structures which are heavily influenced by affordability considerations of the mainly captive market as well as the continually increasing fuel prices. The bus industry provides subsidized services to scholars although there is little scope to involve emerging enterprises. Because the industry is lax on timetables, and in sometimes even disregards them, some bus services are essentially operating like taxis, except that they are subsidized and therefore cheaper – inadvertently squeezing even further the profitability margins of the taxi industry. Save for long distance services, Mpumalanga does not have commuter rail services.

3-6 | MPLTF (2013-2018): Status Quo of Transport in Mpumalanga

Mpumalanga has upwards of 450 buses (owned and operated by emerging operators) with a capacity of more than 55 passengers plying mostly rural routes and largely as subcontractors for subsidized scholar transport services. Emerging bus operators employ upwards of 650 persons, 500 of whom, are drivers. These buses, 60% of which are 13-18 years old, ferry upwards of 60 000 scholars (subsidised) every year. Because profit margins are very tight, emerging small bus operators are unable recapitalize their fleet with a view to providing a higher level of service as well as grow as an industry. The need for the industry to be afforded access to subsidized routes and regular training (fleet management, business scoping, cooperativization, etc.) cannot be over-emphasized.

3.5 Summary of Major Provincial Land Transportation Challenges

Table 3.2 below provides a list of main challenges in the transportation sector in Mpumalanga.

Table 3.2: Challenges facing the transport sector in Mpumalanga

Challenge		Description
1	Information Systems	Some systems & the associated data are outdated
		Some documents such as CPTRs not comprehensive
2	Land Use	Competition between land uses for forestry, mining and agriculture
		No downstream value added to primary products
3	Operations: Passengers	No rail commuter services & medium distance rail services
		Inadequate access to motorized transport modes
		Inadequate access to NMT modes & lack of NMT infrastructure
4	Operations: Freight	No cargo handling facilities at Kruger Mpumalanga International Airport
		Bottlenecks occur due to border crossings & slow infrastructure expansion
		Interneccine modal competition (e.g. road versus rail)
5	Transportation Infrastructure	Poor infrastructure, which leads to high transport costs
		Under-utilisation of transportation infrastructure especially railway lines, sidings & facilities
		Capacity constraints, e.g. the Overvaal tunnel constraining coal transport by rail
		Implementation capacity constraints
6	Financial	General severe funding constraints
		Lack of funds to address the needs of the coal haulage network
		Lack of funds to address the NMT implementation value chain
7	Legal	Mpumalanga does not have a Road Act (currently being drafted)
8	Institutional	Uncertainty with respect to responsibility (e.g. ownership & responsibility of roads)
		Moribund transport forums
		Lack of capacity e.g. lack of transport functions at local municipality level
9	Energy	Continued reliance on fossil fuels for locomotion & the attendant carbon footprint
		Availability of coal to ensure long term power generation

3-7 | MPLTF (2013-2018): Status Quo of Transport in Mpumalanga

10	Environment	Environmental concerns w.r.t. mining (conform to Biodiversity Conservation Plan)
		Increased emissions from the transport sector & the implication on the carbon footprint

3.4 Policy Levers and Intervention Options

Table 3.3 enumerates policy levers and interventions options for the province.

Table 3.3: Policy levers and intervention options

Goal	Policy Objective & Strategic Pathway
An efficient, accessible & integrated multimodal public transport system managed by capacitated and equipped municipal authorities	Upgrades to arterial & local roads on a needs basis
	Road Improvements on key trunk routes – road widening, road extensions & upgrading intersections/interchanges (widening or reconfiguring to reduce bottlenecks), lay-byes, etc.
	Improve access to socio-economic opportunities by implementing integrated public transport networks & innovative ways of improving public transport services in rural areas
	Increase user satisfaction of public transport facilities by 25% by 2017
	Development & implementation of the Provincial Airlift Strategy for Kruger International Airport (KIA) as well as the Delmas Cargo International Airport in collaboration with all stakeholders in the aviation sector
A well maintained, preserved & sustainable transport system	Adopt the score card – e.g. infrastructure barometer as a reporting tool
	Improve efficiency & widen development benefits through the promotion of & investing in development corridors including rail corridors
	Develop a regional rail system along the Moloto Corridor (between Siyabuswa & Tshwane).
	Developing a regional rail system along the N12 Corridor (Johannesburg-Delmas-Ogies-eMalahleni), N4 Corridor (Pretoria-eMalahleni-Middelburg-Mbombela (Nelspruit)- Kaapumuiden) & regional high service levels, focusing on the passenger)
	Develop secondary modal transfer facilities allowing transfer between bus, minibus, rail, taxi & car at Acornhoek, Hazyview (or Swalala), Siyabuswa, Bethal & Standerton
	Improving rural transport services by: <ul style="list-style-type: none"> • Developing an innovative rural public transport system & implementing pilot projects, and • Ensuring bakkies are recognized as public transport modes complete with a battery of safety measures.

3-8 | MPLTF (2013-2018): Status Quo of Transport in Mpumalanga

<i>A sustainable transport system</i>	Ensure a 10% modal shift from private to public transport in Mbombela & eMalahleni CBDs by 2017.
<i>A safe sustainable & integrated transport system</i>	Reduce the number of fatalities on Mpumalanga's roads by 50% by 2017.
	Ensure the implementation of an inter-modal transit-oriented development agenda

Chapter 4

4. INTEGRATED TRANSPORT PLANS

4.1 Strategic Intent

The purpose of this chapter of the MPLTF is to list all the planning authorities in Mpumalanga, with their classification, and the types of plans to be prepared by them.

The types of plans to be prepared by a planning authority were stipulated in 2007 under regulations prepared under the National Land Transport Transition Act. In terms of these Regulations, there are three types of plans that a planning authority can produce, namely:

- **Type 1:** Comprehensive Integrated Transport Plan (CITP). Planning Authorities required to prepare a comprehensive integrated transport plan are the selected 12 cities identified by the National Department of Transport for the purpose. The cities are Cape Town, Tshwane, Johannesburg, Ekurhuleni, eThekweni, Nelson Mandela Bay, Buffalo City, Msunduzi, Mbombela, Polokwane, Rustenburg, and Mangaung.
- **Type 2:** District Integrated Transport Plan (DITP). These are plans to be prepared by all district municipalities. The regulations stipulate that in the case where a local municipality has prepared a CITP, the CITP must be incorporated as part of the DITP.
- **Type 3:** Local Integrated Transport Plan (LITP). These are plans to be prepared by all other municipalities not preparing the above plans.

In terms of the Act, the MEC may consider assisting a planning authority to carry out the required planning, partly or wholly, where such a planning authority has insufficient capacity to do so. The capacity of each planning authority must be assessed through formal

4-1 | MPFTF (2013-2018): Integrated Transport Plans

discussions with planning authorities. Following the determination of the capacity of a planning authority to undertake planning, its status must be formally documented and published in the provincial gazette.

4.2 Municipal Classifications in Respect of the Preparation of Plans in Mpumalanga

The list of municipalities and the plans they need to prepare is provided in Table 4.1 below. Mbombela Municipality will prepare a CITP, all the district municipalities will prepare DITPs, and the rest of the municipalities will prepare LITPs. The classification presented in Table 4.1 must be published in the Provincial Gazette by the MEC no later than 31 March of any particular year. The classification is subject to annual review.

Table 4.1: List of municipalities and the plans to be prepared

Municipality	Type of Plan Required		
	Type 1: Comprehensive ITP	Type 2: District ITP	Type 3: Local ITP
Ehlanzeni District Municipality		X	
Mbombela Local Municipality	X		
Bushbuckridge Local Municipality			X
Nkomazi Local Municipality			X
Thaba Chweu Local Municipality			X
Umjindi Local Municipality			X
Gert Sibande District Municipality		X	
Albert Luthuli Local Municipality			X
Dipaleseng Local Municipality			X
Govan Mbeki Local Municipality			X
Lekwa Local Municipality			X
Mkhonto Local Municipality			X
Msukaligwa Local Municipality			X
Pixley ka Seme Local Municipality			X
Nkangala District Municipality		X	
Emalahleni Local Municipality			X
Emakhazeni Local Municipality			X

4-2 | MPFTF (2013-2018): Integrated Transport Plans

Municipality	Type of Plan Required		
	Type 1: Comprehensive ITP	Type 2: District ITP	Type 3: Local ITP
Thembisile Hani Local Municipality			X
Dr JS Moroka Local Municipality			X
Steve Tshwete Local Municipality			X
Victor Khanye Local Municipality			X

4.3 Program for the Preparation of Plans

A programme for the preparation of the integrated transport plans and their coordination with the Provincial Land Transport Framework is presented in Figure 4.1. In terms of this sequence:

- The MPLTF will be prepared and adopted every 5 years, and adopted by the month of July.
- The MPLTF will be updated every two years after its initial adoption, implying up to two MPLTF updates every five years.
- The preparation of the DITPs, CITPs and LITPs must be undertaken in parallel. The District Municipalities must work in conjunction with local municipalities to finalise the local municipalities ITPs. Following the preparation of local municipality ITPs the district must then finalise their ITPs.
- Following the adoption of the MPLTF, the District Municipalities must prepare their DITPs updated

Following the adoption of the MPLTF, the sequence must be published by the MEC in the Provincial Gazette no later than 31 March of a particular year.

4-3 | MPFTF (2013-2018): Integrated Transport Plans

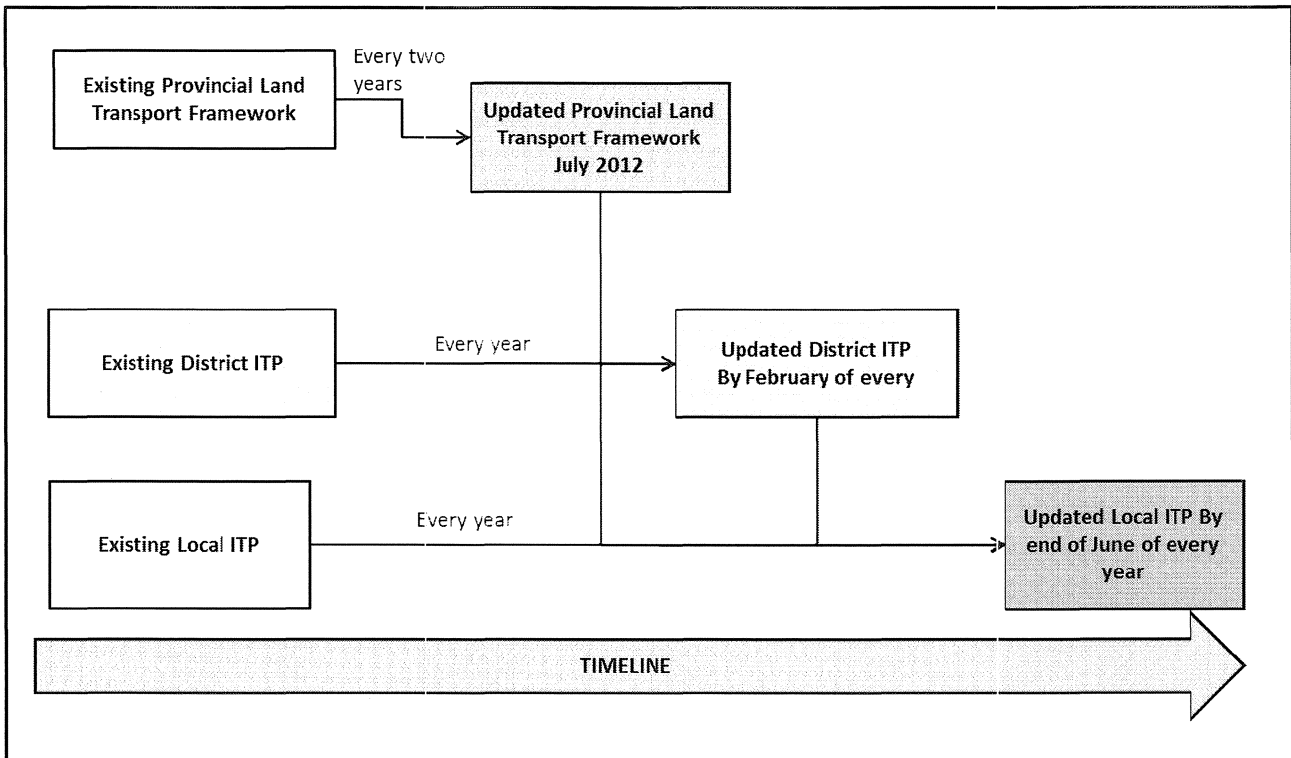


Figure 4.1: Coordination of transport plans

4.4 Current State of Transport Plans in the Municipalities

The status of transport plans in the municipalities is summarised in Table 4.2. For each municipality, the table shows whether the municipality ever had a transport plan, the year in which the plan was published, as well as an indication whether there municipality is developing or updating a transport plan.

It is apparent from Table 4.2 that the vast majority of the municipalities do not have a transport plan in place, and indications are that they are not in the process of developing the plans. It is therefore imperative that the province should provide some assistance to these municipalities to develop the plans. It is recommended that the province should adopt the following interventions:

- Establish reasons why the municipalities are not developing transport plans. This should be achieved through the provincial transport forum or one-on-one engagements with the relevant municipalities.

4-4 | MPFTF (2013-2018): Integrated Transport Plans

- Following this, the province should establish the nature of assistance required from the province, and
- After establishing the nature of assistance required, the province should then develop a plan for assisting the municipalities to compile the integrated transport plans.

Table 4.2: The status of transport plans in municipalities

Municipality	Status of transport planning process		
	Have an integrated transport plan	Date of last transport plan	Currently updating the plan
Ehlanzeni District Municipality	Yes	2008	No
Mbombela Local Municipality	Yes	2007	No
Bushbuckridge Local Municipality	No	-	No
Nkomazi Local Municipality	No	-	No
Thaba Chweu Local Municipality	No	-	No
Umjindi Local Municipality	No	-	No
Gert Sibande District Municipality	Yes	2008	No
Albert Luthuli Local Municipality	No	-	No
Dipaleseng Local Municipality	No	-	No
Govan Mbeki Local Municipality	No	-	No
Lekwa Local Municipality	No	-	No
Mkhonto Local Municipality	No	-	No
Msukaligwa Local Municipality	No	-	No
Pixley ka Seme Local Municipality	No	-	No
Nkangala District Municipality	Yes	2008	Yes
Emalahleni Local Municipality	No	-	No
Emakhazeni Local Municipality	No	-	No
Thembisile Hani Local Municipality	No	-	No
Dr JS Moroka Local Municipality	No	-	No
Steve Tshwete Local Municipality	No	-	No
Victor Khanye Local Municipality	No	-	No

4-5 | MPFTF (2013-2018): Integrated Transport Plans

4.5 Policy Levers and Intervention Options

Without integrated transport plans, as is the case in many municipalities in the province, transport service delivery will deteriorate. It is imperative that the province ensures, through transport forum engagements, that the municipalities are assisted to develop and implement their integrated transport plans. To this end the province will:

- Engage municipalities through the provincial transport forum
- Through discussions with the municipalities develop a schedule for formulating integrated transport plans for all the municipalities in the next two years, and
- Ensure that the integrated transport plans are adequately reflective of national and provincial transport policies.

Chapter 5

5. INTEGRATED DEVELOPMENT PLANNING FRAMEWORKS IN THE PROVINCE

5.1 Linking Land Use and Transport Planning

Mpumalanga is a land locked province located in the north eastern part of South Africa, and is bordered by Mozambique to the east and Swaziland to the south. Mpumalanga also shares common borders with the provinces of Limpopo, Gauteng, Free State and KwaZulu-Natal. Its physical characteristics present constraints and development opportunities particularly with regard to competitiveness and regional integration and cooperation.

Mpumalanga is South Africa's second-smallest province by area, after Gauteng (about 76 000 km², equivalent to ~ 6% of South Africa's total land area. From a national perspective, Mpumalanga enjoys a comparative advantage in four major sectors, namely, agriculture (including forestry), mining (including quarrying), manufacturing and tourism. Because transport is a derived demand, it necessarily must service these sectors. While these land uses are relatively well served by the transportation system making use of the major corridors enumerated elsewhere in this chapter (which require significant investment), developing rural communities are not as well served and are relatively disconnected from these major activity corridors.

Land use and transportation integration form the backbone of an efficient settlement pattern. It not only ensures the cost-effective operation of the province's transportation system, but it also has the potential to rationalize settlement patterns as settlements tend to cluster along major transportation routes and around nodes punctuating those corridors. In addition, land use and transportation integration leads to shorter commuter distances and a better two-way use of transport infrastructure. It also has the effect of reducing the province's carbon footprint.

5-1 | MPLTF (2013-2018): Integrated Development Planning Frameworks in the Province

5.2 Spatial Growth and Development Nodes

In terms of gross value-add (GVA), the major contributors to the economy of Mpumalanga are manufacturing (18.8%), followed by mining (17.7%) and trailed by community and government services (17.6%) (Statssa, 2010) (refer to Figure 5.1 for the total gross value-add for Mpumalanga below). While agriculture contributes a mere 3.3% (similar to agriculture’s contribution to the national GDP), it employs significantly number people than some sectors with a higher contribution. It is also important to note that while tourism contributes only 3%, its labour absorptive capacities are akin to the agricultural sector’s and entry requirements for new entrepreneurs are relatively less onerous.

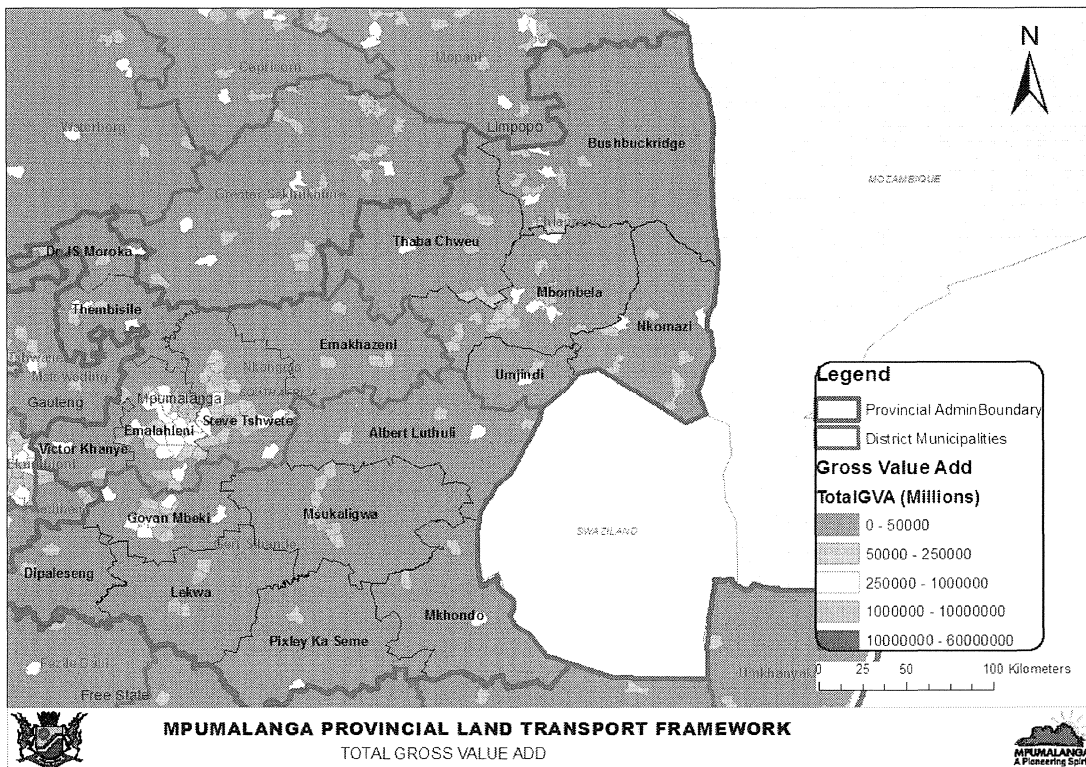


Figure 5.1: Gross Value Add for Mpumalanga

Mining: Mining activities dominate the land-use patterns (especially in Gert Sibande and Nkangala District Municipalities). Mining (coal, sand, clay, gold, silver, ferrochrome, granite, chromite, manganese and vanadium) and quarrying contributes ~ 19% of national GDP. Mpumalanga is South Africa’s coal mining hub (accounting for ~ 80% of national coal production). About 29% of coal production is for exports (mainly to Europe) while the rest (~ 173 million tonnes per year) goes to local markets (especially Eskom which uses it for energy production [power generation]). Other local coal demand sectors include the petrochemical industry, steel industry, mining industry, cement industry, metallurgical industry and merchants. With the ongoing investment in Clean Coal Technologies (CCTs), coal mining is likely to

5-2 | MPLTF (2013-2018): Integrated Development Planning Frameworks in the Province

continue into the future (it might even overtake oil as the most abundant energy source). The likelihood is that new mines and power stations could be established in the future.

Agriculture and forestry: Agricultural activity inclusive of the forestry sector is widespread across the province and it employs a significant section of the province's labour force. In the forestry sub-sector, Mpumalanga has a total plantation area of ~ 525 000 ha (which translates to ~ 40% of South Africa's total plantation area). About 76% of the forestry plantation is privately owned (mainly by Mondi and Sappi). Sappi's major mill (Ngodwana, where pulp and paper are produced) is located close to Mbombela, while Mondi's main manufacturing facility is in Piet Retief. Plantation, both softwood (pine) and hardwood (eucalyptus and wattle) contributes ~ 39% of South Africa's total plantation area. The fact that the province only accounts for 13% of wood products companies is testament to the reality that most of the wood is processed outside Mpumalanga, which has an implication on freight transport. The need to ensure more value-add to the province's forestry products cannot be over-emphasized as this tends not only to increase employment through downstream linkages, but also possibly reduces the impact on roads by reducing the bulk that has to be exported from the province. As indicated in Table 5.1, Mpumalanga produces a wide variety of agricultural products which compete favourably on a national scale.

Table 5.1: Mpumalanga's contribution to national agricultural production

Agricultural activity	Mpumalanga's contribution to national (South African) agricultural production
Grain crops	24% of national maize production; highest producer of yellow maize in the country
Oilseeds	50% of South Africa's soyabean (& soyabean products)
Dry beans	Mpumalanga is the highest producer of dry beans in the country (~ 41% of the country total).
Sugarcane	Mpumalanga is South Africa's second highest producer of sugarcane
Tobacco	Second highest producer in the country
Non-edible animal products	Mpumalanga is an important sheep-farming area in South Africa
Fruits	Mpumalanga produces a wide variety of fruits

NATMAP, 2010

Nodal development: The Mpumalanga Growth and Development Strategy (MGDS) 2004-2014 (Office of the Premier, 2007) identified four strong urban nodes, namely, Mbombela, eMalahleni Middelburg and Secunda. In addition to these towns, Ermelo can legitimately be added as the fifth urban centre around which economic activities are concentrated and central place functions gravitate. Because of their connectivity to Gauteng, Maputo and Richards Bay, and proximity to the province's main transport corridor (the Maputo Development Corridor), the nodes are projected to grow in significance, economic activity and spatial influence.

5-3 | MPLTF (2013-2018): Integrated Development Planning Frameworks in the Province

Corridor development: The province has three major corridors and five sub-corridors as follows:

- Maputo Development Corridor (MDC) from Gauteng Province (South Africa's economic hub) to the port city of Maputo in Mozambique
- Moloto Rail Development Corridor (MRDC)
- Mbombela-Phalaborwa Development Corridor, along the R40
- Johannesburg-eMalahleni Corridor (JEC) (along the N12)
- Johannesburg-Secunda-Swaziland Corridor (JSSC) (along the N17)
- Middelburg-eMalahleni Development Corridor
- Ermelo-Richards Bay-Durban Corridor (ERBDC) (along the N2)
- Limpopo-Middelburg-Ermelo-Free State Corridor (LMEFSC) (along the N1)

Existing urban centres and resource bases in Mpumalanga have encouraged the clustering of industries which has the effect of strengthening economies of scale and strengthening of economic linkages, it creates freight traffic pressure on a select few transport corridors.

Manufacturing: Manufacturing activities in Nkangala District Municipality revolve around iron and steel manufacturing in Witbank (Emalahleni Local Municipality) and Middelburg (Steve Tshwete Local Municipality). Interestingly, no iron ore is produced within the Nkangala district and all the iron ore is mined and shipped from Limpopo and elsewhere, notably, by rail and road. Mpumalanga produces ~ 90% of South African carbon steel, specifically by Mittal Steel and Highveld Steel. Manufacturing also includes petro-chemicals, electricity generation, wood and wood products, paper and paper products and the food industry).

District economic drivers: The economy of Nkangala is driven by mining, electricity, finance, transport and construction. On the other hand, the economy of Gert Sibande is mainly underpinned by manufacturing, agriculture, mining and electricity as well as trade. At 31 846 km², Gert Sibande District Municipality is at spatially the largest of the three constituent districts of Mpumalanga covering 40% of the province's land mass. Ehlanzeni District Municipality is predominately rural with a variety of economic activities (tourism, manufacturing, finance, transport, community and government services and construction) clustered around urban nodes. Generally, local authorities face challenges relating to land ownership because most developable land is either under the authority of traditional leaders or belongs to private individuals. Planning for development is thus often a slow and arduous process as negotiations are often interminable.

Developing rural and second economy environments: Owing to its predominantly rural nature with scattered settlements, Mpumalanga has a dispersed spatial structure, which as indicated elsewhere impacts on the economics of providing transportation. Population densities vary from very high (urban areas) to very low (small settlements and rural areas). Most people are located in settlements adjacent to urban nodes where they experience backlogs in service delivery. These backlogs especially in water and sanitation and electricity are also

5-4 | MPLTF (2013-2018): Integrated Development Planning Frameworks in the Province

commonplace in sparsely populated rural areas. It is ironic that Mpumalanga has severe electricity backlogs especially amongst households on farms, given the leading role that the province plays in the generation of electricity. It will be crucial to integrate these developing rural and peri-urban areas into the overall provincial transportation network and, by extension, into the economic mainstream.

5.3 Policy Levers and Intervention Options

Table 5.2 below summarizes some policy levers and intervention options.

Table 5.2: Policy levers and intervention options

Goal	Policy Objective & Strategic Pathway
An efficient, integrated land use & transport planning system & framework	Incorporate & integrate the MPLTF into the various IDPs & up-scale
	Review & update ITPs for the three district Municipalities with PLTF policy & programme guidelines primarily & secondarily for the preparation of ITPs for all local Municipalities in the Province
	Update the Draft Provincial Spatial Development Framework to be in sync with the MPLTF
	Define clear roles for land transport modes in the province including rail e.g. Lothair-Swaziland-Maputo-Rail link to facilitate integration
	Establish manufacturing industrial hubs/zones in all district & local municipalities to crowd-in investments
	Prioritize SDF projects that entrench spatial reorganization especially favouring densification of corridors, transit orientated development, etc.
	Utilize the concept of “urban edge line” in managing & containing urban sprawl & premature urbanisation for all major centres in the province
	Development of a Regional Airport in Gert Sibande District Municipality
	Develop & implement fresh produce agro-value chain industry in applicable districts e.g. Fresh Produce Market in Gert Sibande District
Effective branding & promotion of integrated tourism routes	The efficient “branding” of the major provincial & district corridors through appropriate signage in order to attract more tourist traffic throughout the province & district municipalities (establishment of “Theme Routes”).
	Develop an integrated Transport & Tourism Strategy for the Province
A sustainable spatial structure	Smart investment & economic choices based on identifying areas with economic potential & supporting their development
	Balanced spatial development as a way to reduce regional spatial differences & extremes of either skewed poverty or development creating a spatially socio-economic & infrastructure divided province
	Smart investment & economic choices based on identifying areas with economic potential & supporting their development
	Identifying economic poverty concentration areas & devising strategies to stimulate growth & development in such areas.
	Smart strategic investment & economic choices based on consolidating & further development of economic concentration areas & hubs & their linkages
	Balanced spatial development as a way to reduce regional spatial differences & generating strategies to stimulate growth & development in lagging areas

5-5 | MPLTF (2013-2018): Integrated Development Planning Frameworks in the Province

CHAPTER 6

6. PUBLIC TRANSPORT STRATEGY

6.1 Strategic Intent

Public transport services in Mpumalanga Province will be designed to operate at improving levels of service for its users. This implies that public transport infrastructure, its management systems, and day-to-day operations will need to be designed, delivered and governed by a set of key principles aimed at improving user experiences. However, in order to achieve this, it is important to acknowledge and understand the nature of the gap between the current situation and the desired outcomes. This chapter identifies a principled path that the province needs to undergo in order to continuously transform public transport for the better.

6.2 Public Transport Deficiencies

Many of the public transport deficiencies in Mpumalanga Province are a microcosm of public transport deficiencies in South Africa. Specific critical deficiencies identified in the province's public transport system can be summarised strategically as follows:

- **Absence of a compelling vision:** Many of the municipalities in the province have no vision and action plan for public transport. This is partly illustrated by the absence of integrated transport plans in these municipalities.
- **Anti-change inertia:** This is demonstrated by lack of implementation of progressive policies already formulated. Since the formulation of the White Paper on National

Transport Policy, public transport is still offered as a fragmented service as opposed to an integrated service as envisaged in policy. In official documents, for example, buses, minibus taxis and train services are still described as if they are supposed to be separate competing modes as opposed to being part of an integrated service.

- **Strategic disconnect between development and public transport:** Majority of households in the province have no access to private means of transport, and are therefore fully reliant on public transport. This implies that if public transport works effectively and efficiently, a large proportion of the population will benefit, resulting in improved economic productivity and social cohesion. Given the reliance of the majority of the population on public transport implies that public transport offers opportunities to as a catalyst and conduit to channel development programmes that include job creation, skills development, and infrastructure-led growth. However, strategic programmes such as the Provincial Growth and Development Strategy fail to explicitly connect Mpumalanga's growth to investment in public transport programmes.
- **Public transport is delivered in terms of fragmented projects as opposed to a consolidated programme of action:** The budgeting process reflected in strategic documents identifies isolated public transport projects that are not guided by a specific programme. This is partly caused by the way in which public transport problems are identified and defined by planning authorities. Often problems are seen in their symptomatic as opposed to causal context.
- **Inappropriate or inadequate public transport management systems:** In some municipalities, operating licences backlogs of more than two years are being reported. This in turn results in increased number of illegal public transport operators.

6.3 Corrective Measures for Public Transport Deficiencies

It is important to ensure that corrective measures adopted address causes as opposed to symptoms of the strategic problems identified. Symptoms are identifiable in that, even when addressed, the problem has other ways of manifesting itself, and on the other hand, addressing causes will ensure that the problem itself is uprooted. In this respect, there are three levels of corrective measures that need to be adopted: (i) Intra-organisational interventions, (ii) Inter-organisational interventions, (iii) Programme management implementation. These are described as follows:

- **Organisational Interventions**

- **Effective transport forums:** The provincial transport forum must be made to function effectively. This will ensure that the function of the provincial sphere stipulated in the National Land Transport Act of “co-ordination between municipalities with a view to ensuring the effective and efficient execution of land transport in the province” is achieved. To this end the forum must be formally constituted with a founding statement and appropriate governance guidelines. All the critical stakeholders must be formally invited to participate in the forum, and the proceedings of the meetings must be formally recorded.
 - **Capacity building:** The implementation of the Land Transport Act requires provinces and municipalities to have sufficient technical capacity. The province must institute a formal technical capacity building programme which must include public transport. With regard to public transport such a programme must include project management of public transport projects, monitoring and evaluation of public transport services, public transport planning, public transport financing, and public transport regulation.
 - **Information and data management:** Much of the public transport information for the province is available from multitude of different sources in different levels of detail and accuracy, for example, information relating to the taxi recapitalisation programme and vehicle scrapping programme. It is essential for the province to have a public transport information management system, which could form part of a larger transport information management system for the province. This will improve monitoring capabilities of the province as well as overall accountability.
- **Network planning interventions**
 - **Defining and designing a public transport network for the province:** The practice of treating different public transport modes in isolation should be stopped. The province must carry out an exercise of defining and designing a public transport network for the province. The different modes of transport will therefore be defined in terms of their strategic role in the network. A strategy for transitioning from a disintegrated network to a functionally integrated network must thereafter be formulated (refer to Figure 6:1 Strategic Public Transport Corridors below).
 - **Infrastructure programme management**
 - **Priority upgrading of public transport routes:** Given that the majority of the province’s population relies on public transport, roads on which public transport is provided should receive priority in road upgrade programmes.
 - **Streamline public transport funding through a Public Transport Infrastructure Master Plan:** The financing of public transport infrastructure

projects should be informed by a provincial public transport infrastructure delivery programme, as opposed to being addressed as isolated projects. To this end, the province must formulate a public transport infrastructure master plan that is supportive of efficient and effective public transport services.

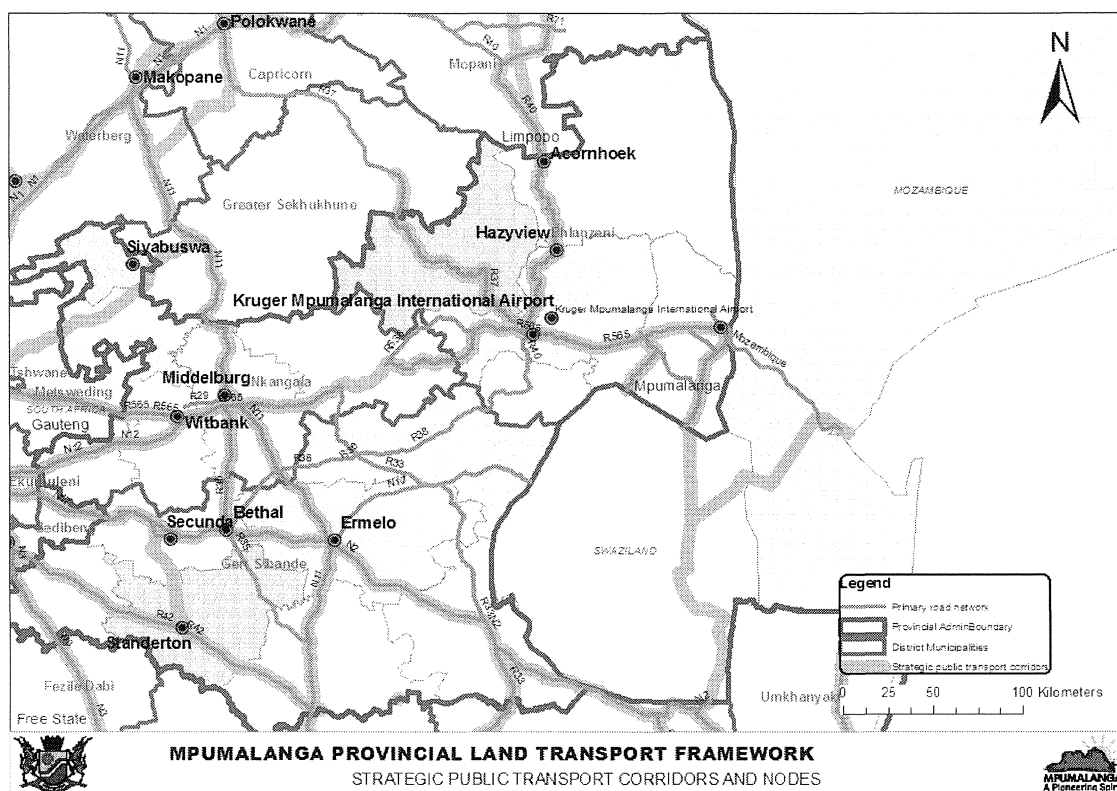


Figure 6.1: Strategic Public Transport Corridors

- **Management Systems Interventions**

- Operating license functions of the province need to be adequately resourced in order to deal adequately with prevailing volumes of applications.
- A public transport information management system would allow for continuous monitoring of public transport performance indicators in the province.
- A properly designed and implemented intelligent transport system for public transport, inclusive of integrated ticketing, will improve the efficiency with which customers are served. The systems must comply with national norms and standards.

- **Regulatory Interventions**

- Provincial Regulatory Entity must receive intra-provincial applications for granting, renewal, amendment or transfer of permits or operating licences in line with the requirements of the National Land Transport Act regulations. It is the responsibility of the province to ensure that the office of the public transport regulatory entity is fully functional and able to carry out duties prescribed in the regulations.
- Applications for the granting, renewal, amendment or transfer of interprovincial public transport services must be lodged by applicants to the National Public Transport Regulator. The province will receive notification on any application that has either a trip start or end in the province. The Provincial Regulatory Entity will be required to indicate whether it is in favour or not in favour of the application. The province must provide necessary resources to facilitate carrying out of these duties in line with the National Land Transport Act regulations.
- The province is responsible for land transport law enforcement within its areas of jurisdiction, including public transport. The province may enter into agreement with one or more municipal traffic law enforcement entities on land transport law enforcement strategies within the province. The province must ensure that land transport law enforcement agencies are fully resourced equipped to address their mandate.

- **Implementation of Capital Projects**

- The province will support the implementation of the Integrated Public Transport Network in Mbombela municipality (refer to Figure 6:1 below).
- The province will develop guidelines to guide the implementation of Integrated Public Transport Networks that are inclusive of rural transport needs and special needs passengers. This will be implemented through pilot projects in Nkangala and Gert Sibande districts.
- The province will continue to support the implementation of the Moloto development corridor

- **Operations**

- The province will continue to administer transport subsidies on behalf of the National Department of Transport.
- Subsidised public transport contracts will be monitored to ensure value for money for the tax payer.

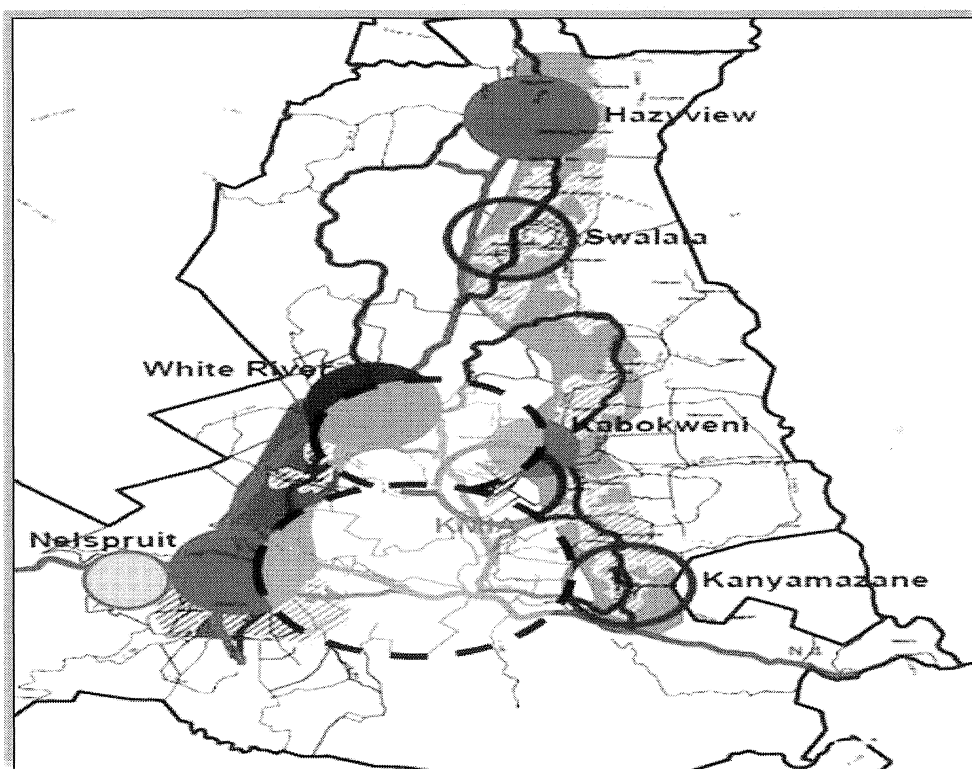


Figure 6.2: Proposed Configuration of the Mbombela IRPTN

Chapter 7

7. NON-MOTORIZED AND SUSTAINABLE TRANSPORT

7.1 Scope of Non-Motorized Transport

7.1.1 Ownership and usage

The challenge of transport policies for Mpumalanga is to achieve a much better level of general mobility and accessibility, at a much lower cost. Non-motorized transport (NMT) modes readily provide such an option. NMT modes such as wheelbarrows, hand and animal-drawn carts and donkeys, are economically sustainable (low-cost in terms of their purchase price and maintenance, provide flexible mobility, are responsive to changing demands and require low user charges), environmentally sustainable (often energy efficient and produce minimal air and noise pollution), and socially sustainable (improve physical access to jobs and amenities for developing communities and offer entrepreneurial and income-generating possibilities). NMT modes can be used to satisfy social (visiting relatives, funerals, weddings, church, rituals), functional (education, medical, shopping, leisure) and work-related demands (agriculture, employment, self-employment). Because of their versatility, NMT modes can be used as a collector mode feeding into minibus taxis or buses.

7.1.2 Building and maintaining the NMT value chain

Mpumalanga has over the years been providing bicycles to learners in rural areas within the ambit of the Shova Kalula – a national bicycle partnership program. This commitment to building the critical mass required for sustained ownership and use of bicycles has not been matched with the development of the requisite institutional arrangements that guarantee sustainability. The model for institutional arrangements for this program still needs to be fine-tuned. DPWRT has also been providing carts to ferry goods and water bowsers to rural communities. Currently, many employers, educational institutions, shopping facilities and other public places do not make provision for cycle storage or shower facilities – amenities that could persuade weekday commuters to switch from the convenience of using an automobile. In addition, the department has been providing local circulation infrastructure such as low level bridges, paths and access roads to improve access to socio-economic opportunities. However, auxiliary services for NMT modes are often not located in developing urban communities, let alone in rural locations. Yet these communities are generally the target beneficiaries of NMT initiatives. Furthermore, spare parts and accessories for bicycles are rated as imported luxury items and punitively taxed, rendering them expensive. The need to lobby for the revisiting of this tariff and tax regime cannot be over-emphasized.

7.1.3 Status of NMT in Mpumalanga

Automobile ownership and usage are often associated with status of individuals. This combined with the convenience of car usage weighs up against individuals choosing to switch to NMT modes. So, without significant promotional efforts, NMTs face an uphill task to attract users. To make matters complex, NMT modes such as cycling and walking are generally associated with either recreation or poverty. Perceptions relating to accident fatalities arguably present the greatest obstacle for the successful implementation of NMT in Mpumalanga especially in urban areas. In practically all urban environments, footpaths are often incomplete, non-existent or of poor quality, forcing pedestrians to compete with motorized vehicles on the street – a competition heavily staked in favour of automobiles. Footpaths are also often cluttered with disorganised street furniture and services and pedestrians and cyclists certainly find it difficult to cross wide roads and busy intersections. Road surfaces are often strewn with debris (stones and litter) which present obstacles for cyclists and wheelchair users. In rural areas, infrastructure is mostly inadequate limiting accessibility.

Chapter 7 therefore seeks to promote NMT ownership and usage as an affordable and environmentally sustainable mode with a view to improving equitable access to socio-economic opportunities in Mpumalanga.

7.2 Creating Conditions for NMT Ownership and Usage in Mpumalanga

7.2.1 Key success factors

The three main pillars determining critical mass in terms of ownership and usage of NMT modes relate to (a) strengthening community involvement in project implementation given that to ensure project success, meaningful participation of beneficiary communities has become a *sine qua non* in development practice (and also because of the scarcity of resources, the value-for-money concept demands drawing on local knowledge, insights and inputs to the planning and implementation process) (b) building and maintaining a NMT value chain, particularly anchoring NMT promotion on ensuring the availability of spare parts, accessories and after-sale service, and (c) providing adequate funding streams and capacity building of beneficiary communities. Table 7.1 enumerates conditions for creating a critical mass for NMT ownership and usage.

Variable	Measures
Socio-psychological	<ul style="list-style-type: none"> <input type="checkbox"/> Skills [riding, simple repairs] training targeting women & children <input type="checkbox"/> Technical improvements [targeting design, load-carrying capability, robust frames for heavily built riders, etc.] <input type="checkbox"/> Encouragement strategies [company policies, information & activities supporting bicycle commuting, e.g. contests endorsed by riding clubs, private organizations, employers] <input type="checkbox"/> Awareness programs through advertising & publicity [print media, electronic media, etc.] <input type="checkbox"/> Community workshops [peer influencing, role modelling, targeting the affluent & opinion makers] <input type="checkbox"/> Education & enforcement [extramural school activities, community mobilization, visibility of

	<i>traffic law enforcement, educational programs on traffic laws targeted at schools, drivers, the elderly & the youth & involving videotapes, pictorial books, etc., cycling training, wearing helmets, bicycle repairs, infrastructure provision, etc.]</i>
Socio-economic	<input type="checkbox"/> Community funding schemes <input type="checkbox"/> Negotiation for preferential treatment from the banks <input type="checkbox"/> Discounted interest rates <input type="checkbox"/> Stokvel / burial society financing options <input type="checkbox"/> Procurement of women-specific technologies e.g. bicycles
Infrastructural	<input type="checkbox"/> Provision of continuous cycle tracks by way of community-based labour intensive methods <input type="checkbox"/> Roadway/lane & intersection improvements <input type="checkbox"/> Labour-based maintenance & repair of cycle tracks <input type="checkbox"/> Maintenance of infrastructure to improve its condition, which in turn, influences the size of the load that can be carried <input type="checkbox"/> Provision of multimodal connections <input type="checkbox"/> Provision of bicycle parking & showers at destinations <input type="checkbox"/> Carefully designing entrances & exits <input type="checkbox"/> Setting up obstacles at bicycle entrances to prevent automobiles from entering
Auxiliary services	<input type="checkbox"/> Identifying, constituting & nurturing SMMEs both in construction & maintenance of infrastructure as well as service provision <input type="checkbox"/> Setting up local bicycle/NMT manufacturing plants <input type="checkbox"/> Setting up local assembly plants <input type="checkbox"/> Increasing local content in manufacturing <input type="checkbox"/> Community-based maintenance workshops <input type="checkbox"/> Network of distributors of bicycles, spares and accessories

Source: Mashiri [1999]

7.3 Mainstreaming NMTs: Integration with Strategic Projects

NMT programs will be on-ramped onto strategic transportation projects either proposed or currently being implemented across the province with a view to mainstreaming NMT:

- **Integrated Rapid Public Transport Network:** The proposed implementation of IRPTN in Mbombela will introduce new focal points, generating extensive activity and pedestrian movement. Routes feeding the station precincts will be made safe and secure and supporting infrastructure beyond the station precincts will be provided to ensure commuters experience a convenient, secure and seamless journey at their points of interchange. NMT parking facilities will be provided at major stations on the network.

Box 7.3: Integrated rapid public transport network: Linkage with NMTs

NMT modes particularly walking & cycling will be employed as collector modes for the IRPTN in Mbombela. Improvements will entail providing appropriate infrastructure integrated into the IRPTN plans as follows:

- Identification of a network of NMT route facilities such as sidewalks, cycle paths & lanes.
- Lighting to improve security on neighbourhood routes & at the public transport stops & interchanges.
- Signage, route markers & information kiosks
- Landscaping & street furniture
- Pedestrian crossings & intersection treatments
- Bicycle parking/storage
- Traffic calming.

- ***Moloto Rail Development Corridor:*** Identify and upgrade a network of routes to and provide parking at major stations.
- ***New and existing road infrastructure upgrades:*** Include formal pedestrian and cycling infrastructure as a standard requirement for all engineering designs for road upgrades and new construction, eliminating the need for future retrofitting, which is relatively expensive.
- ***Major taxi/bus terminals:*** Provide high quality pedestrian and cycle links between taxi ranks and other transport interchanges as well as key destination points
- ***Shova Kalula:*** Provide cycle infrastructure through the IRMA program in rural areas where bicycles have been distributed and widen bicycle distribution to include other areas with a view to reaching the critical mass required to entrench cycling
- ***Influencing tomorrow's leaders today:*** Plan for and provide infrastructure and bicycles to cater for the anticipated NMT movements between student residences and the University of Mpumalanga.
- ***NMT and Job Creation:*** NMTs present a variety of employment opportunities for individuals and small businesses, including construction and maintenance of designated lanes and footpaths, the supply of spare parts, maintenance and repair of NMTs and security at cycle storage areas. In addition it is likely that informal businesses will benefit from an increase in passing trade from NMT users.

7.4 Policy Levers Strategic Intervention Options

7.4.1 Intervention targeting

Acceptable walking and cycling distances vary from 1-2 km and 3-5km respectively. However, it is acknowledged that many commuters and learners walk or cycle far greater distances due to a variety of reasons chief of which are affordability considerations and the spatial dispersion of socio-economic opportunities. While NMT interventions need to be mainstreamed in the long run, in the intervening period, the following groups will initially be targeted for interventions:

- Learners / scholars at school and tertiary education institutions
- Employers – encourage staff to convert to cycling by providing facilities (showers, lockers, cycle parking) and incentives such as advance credit to purchase bicycles
- SMMEs such as waste re-claimers and vegetable vendors with their recycling trolleys
- Leisure and recreational cyclists with potential to become weekday commuters
- Communities located in remote and inaccessible areas of Mpumalanga
- Persons with disabilities (PWD) and the elderly

7.4.2 Intervention options

Other interventions to address constraints and mainstream NMT include (refer to Annexure A for an elaborate list of interventions):

- ***Development and implementation of a Provincial NMT Master Plan***
- ***Walking bus and safe routes to school program:*** Safe cycling and walking routes to school will be identified and pilot walking bus projects will be undertaken in Mbombela and eMalahleni

- **Capacity building and training:** Shova Kalula bicycle owners will be trained on riding, servicing and repairing their bicycles. More bicycles will be distributed. Awareness raising workshops about the benefits of implementing NMTs involving officials, political and traditional leaders, the community and other stakeholders including consultants will be undertaken.
- **Safety and security:** Safety and security audits will be undertaken on the Bushbuckridge-Mbombela corridor with a view to implementing proposals generated.
- **Gender mainstreaming:** Gender issues will be mainstreamed in NMT provision programs
- **Parking and storage:** Cycle parking for staff and visitors and associated facilities (lockers, showers, etc.) will be a planning requirement for any new commercial development proposal. Secure cycle storage at destination points such as schools, sports grounds, work places, community facilities and interchange points will be provided.
- **Spatial and development planning:** Generate planning requirements for developer contributions towards cycle paths where development proposals are located in close proximity to planned and existing cycle/walkways.
- **NMT promotion:** Provincial cycling events will be undertaken every year
- **Promote the cost savings of NMT:** Encourage employers to offer employees incentives to use NMT for work commutes and meetings by providing allowances for cycle mileage
- **Infrastructure development:** Universal access principles will be employed in the development of infrastructure and 'secure by design' standards (lighting, sight lines, signage, passive surveillance, etc.) will be adopted.
- **Demonstration projects:** Three towns (one in each district) will be identified and demonstration projects involving the whole NMT value chain implemented.

7.5 Crafting a Sustainable Development Agenda

Climate change and environmental sustainability have become priorities on the global agenda. NMT together with public transport have a major role to play in providing a sustainable alternative to the private automobile in reducing overall carbon emissions, improving air quality, reducing congestion and moving towards meeting the targets set by the Kyoto Protocol. Investment in public transport such as the IRPTN and NMT projects as enumerated elsewhere will be thus be a priority in the plan period, including:

- Employing spatial planning and human settlement development to encourage the use of NMT modes and public transport
- Supporting mixed and clustered pedestrian oriented land uses which present active frontages at street level in order to support accessibility and reduce trip times from origin to local amenities (a la new urbanism concepts), and
- Reducing distances for cyclists and pedestrians by increasing road and path connectivity as well as link to public transport nodes.

Chapter 8

8. TRANSPORT INFRASTRUCTURE STRATEGY

8.1 Strategic Direction for Infrastructure Provision

Transport infrastructure is one of the key economic levers in the province. The aim of the transport infrastructure strategy is to ensure that existing infrastructure is utilised as best as possible, while addressing backlogs that create transport network bottlenecks.

In line with constitutional competencies, at a provincial level, most of the transport infrastructure relates to roads and for municipalities the infrastructure resources are split between roads and public transport. For the province emphasis will be placed on reduced deterioration of the existing road network through a focused road network maintenance programme (refer to Figure 8.1: Mpumalanga Primary Road Network). To this end, the province will seek to partner with the private sector as well as State Owned Enterprises in the province to ensure that the road network in the province facilitates sustained economic growth. Furthermore, through dedicated law enforcement, the province will ensure that the rate of overloaded heavy vehicles is reduced. The province is also supportive of increased modal shift of long distance freight from road to rail. To this end, the province will work closely with Transnet in respect of its capital investment programme.

A key constraint, especially within municipalities in the province, remains the lack of technical skills to drive infrastructure programmes. This has previously led to interventions by national government through programmes such as Project Consolidate and the Siyenza Manje, in which technically skilled professionals were temporarily hired to assist municipalities in respect of overall engineering service delivery. Through the provincial transport forum, the province will monitor the technical capacity situation in municipalities to ensure that municipalities without capacity are assisted.

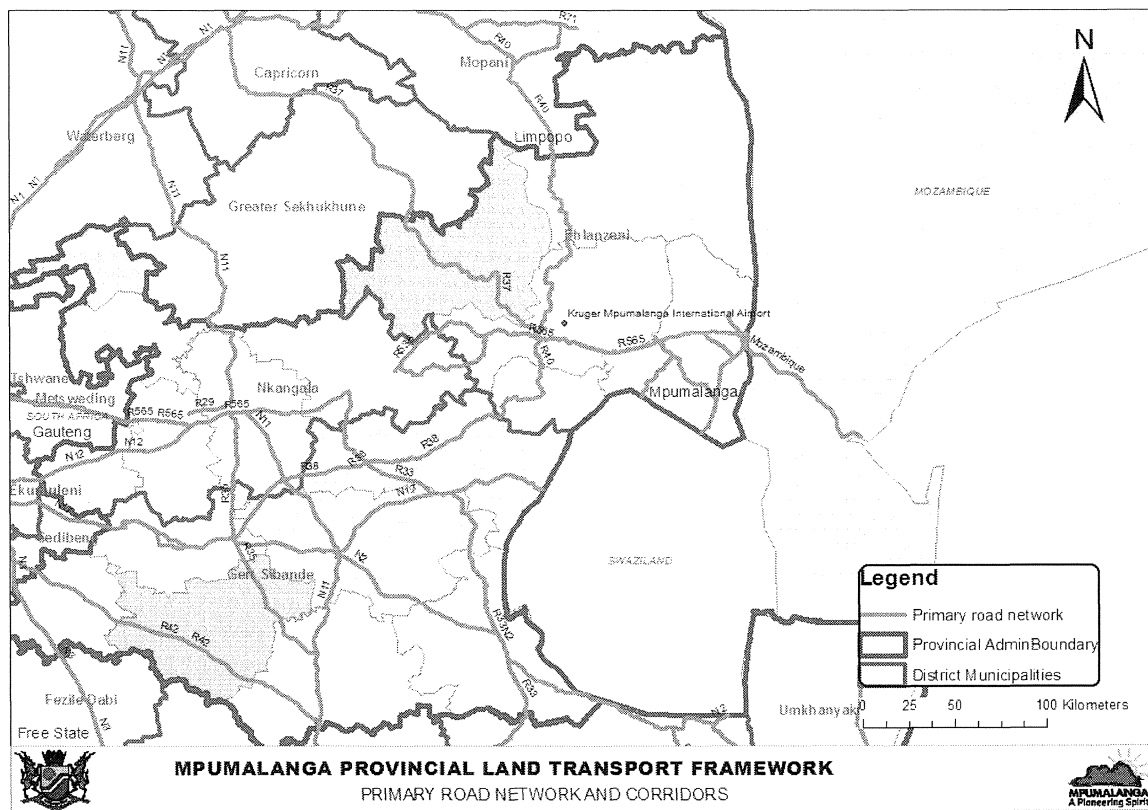


Figure 8.1: Mpumalanga Primary Road Network

The province will also support the use of infrastructure development as a job creation catalyst. To this end, the province will support transport infrastructure programmes with high labour absorption capacity. The province will continue to support the Siyatentela programme, which is mainly used in respect of using routine maintenance using Extended Public Works Programme principles. The number of beneficiaries will be consistently increased and the number of working days per beneficiary also increased.

The vast proportion of the province is rural. The province will therefore support the explicit development of rural transport infrastructure through the provision and maintenance of access roads linked to key rural nodes.

In order to improve safety for pedestrians and other non-motorised modes of transport, the province will invest in non-motorised transport infrastructure in both urban and rural areas. In the rural areas care will be taken to ensure that the infrastructure is responsive to the needs of both passenger and freight transport.

Investment in public transport infrastructure will receive priority. Roads that are used for public transport services will be prioritised for upgrades and overall maintenance. Public transport

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infrastructure will be supportive of efficient and reliable public transport services. To this end public transport infrastructure will be designed and implemented in a manner that is supportive of public transport as an integrated service as opposed to isolated modes. More emphasis will be placed on the provision and upgrade of inter-modal facilities, including improved location and coordination of road and rail based long distance services. However, the provision of public transport infrastructure will be led by public transport service design and not vice versa.

8.2 Provincial Transport Infrastructure Projects

This section of the chapter provides a strategic assessment of the transport infrastructure requirement and interventions for the province, and selected municipal projects and programmes that have a provincial significance.

8.2.1 Road Infrastructure

Mpumalanga Province has a 13, 819.07km road network under its jurisdiction, of which 5,289.15 is paved and 8,529.92 is unpaved. The province's road network operation is characterised by significant movements of heavy goods vehicles carrying coal and other goods. The road network used for long hauling of coal, referred to as coal-haul roads carrying amounts to 1,640km, most of which (1,417km) is paved. On a rating scale that includes Very good, Good, Fair, Poor and Very Poor, the province's overall paved network rates as Fair, implying that without proper maintenance the network will move towards the Poor status and therefore likely to require rehabilitation if not resealed within a short period of time. The coal-haul network is however already in the Poor status. Overall, 751km of the network is rated Very Poor, thus requiring rehabilitation.

The estimated immediate budget requirements from coal-haul roads are summarised as follows:

- R165 million is needed to reseat 211km of paved roads.
- R2,6 billion is needed for light and heavy rehabilitation on 432 km of paved road where the network has deteriorated beyond preventative maintenance requirements.
- R17 million is required for the regravelling of 33 km of unpaved roads.
- R774 million is required for upgrading 83km of unpaved roads to surfaced standards.

The estimated immediate budget requirements for non-coal haul roads in the province are summarized as follows:

- R382 million is required to reseal 706km of paved roads.
- R6,7 billion is required for light and heavy rehabilitation of 1,012 km of paved road where deterioration is beyond preventive maintenance level.
- R569 million is required to regravell 1,417 km of unpaved roads.
- R8,791 required to upgrade 1,571km of unpaved roads to surfaced standards.
- R250 million is required to repair the unpaved shoulders on the entire paved road network.

The province has implemented a Road Network Asset Management System (RTMS) to monitor and manage the road network. The province will continue to annually update the status of the provincial road network using the RTMS, and implement the recommendations of the RTMS through appropriate resource allocations.

The province will encourage and guide municipalities to develop appropriate Road Network Management Systems for their paved and unpaved road networks. These will be implemented through the integrated transport planning process. The systems will be standardised as much as possible across all the municipalities.

8.2.2 Public Transport Infrastructure

The province embraced the principles of the 2007 National Public Transport Strategy, especially in the urban areas. The strategy seeks to implement integrated network based public transport services supported by appropriate infrastructure. The corridors identified as implementation catalyst, from which networks will branch are:

- ***Moloto Rail Development Corridor:*** Moloto rail corridor is the largest passenger transport project planned for implementation in the province. The corridor links the former Kwa-Ndebelele homeland area with the City of Tshwane, through which some 650 state subsidised daily buses carrying over 45 000 commuters, mainly between their homes and work places in Tshwane. A feasibility study, which was accepted for implementation by the provincial cabinet, showed that a rail-based solution for the corridor was technically and economically viable. The capital costs for the project were estimated in 2006 at R10 billion.

- N4-Maputo corridor in respect of investing in tourism support
- N12-eMalahleni corridor in respect of investing in tourism support
- Richards Bay-Johannesburg (N17/N2)
- R23 from Volksrust to Balfour
- Ermelo to Oeshoek corridor
- R35 between Bethal and N4
- R40 from Barberton via Nelspruit to Hazyview
- Loop connecting White River to Kabokweni and Kanyamazane
- R570 from Malelane to the Jeppes Reef border gate into Swaziland
- R571 from Komatipoort to Mananga border gate into Swaziland
- R570 Malelane to Schoemansdal
- D2943 Schoemansdal to Driekoppies
- R571 Komatipoort-Tonga/Kamaqhekeza-Sibange-Mananga
- Tonga-Kamhushwa –Malelane
- Thulamahashe, Dwarsloop, Bushbuckridge
- Mkhulu to Hazyview
- Accornhoel to Thulamashe
- Mhluzi to Middelburg
- R580 Nelson Mandela Corridor (Embalenhle to Secunda)
- Embalenhle to Sasol
- Hlalanikahle
- R544 between Witbank and Kriel
- R40 to White River
- Kabokweni to Nelspruit
- Msogwaba-Kanyamazane to Nelspruit
- N4 to Matsulu
- D2296 to KaNyamazane
- Nyongane-Legogote to Nelspruit.

Every effort will be made to ensure that appropriate infrastructure is provided in these corridors to ensure that public transport services are efficient, reliable and safe.

8.2.3 Other Significant Projects

The province will continue to work with relevant stakeholders for the establishment of a one border post with Mozambique and Swaziland. Furthermore, the province will undertake detailed studies to establish the feasibility of the Delmas cargo terminal as well as Komatipoort Logistics Hub.

Chapter 9

9. MPUMALANGA TRANSPORTATION MANAGEMENT STRATEGY

9.1 Sketching the Existing Situation

Building higher provincial growth and development levels needs to be supported by a sustainable transport demand management strategy and planning framework that is aligned and coordinated across and within all spheres of government and non-governmental sectors. Mpumalanga has a pressing need to accelerate sustainable socio-economic development by, amongst others, rolling out on a mass scale physical, social and economic infrastructure. Road infrastructure is important for accessibility and mobility of goods and people. Road construction and maintenance can also create significant numbers of local jobs. However, Mpumalanga's transportation demand management system operates in an environment of relatively poor infrastructure and services. There are also serious concerns around land-use and the environment; congestion, safety and security; freight transport intermodalism (little or no coordination, integration and synergy between various transport modes, resulting in a slow and cost-ineffective movement of passengers and goods). The transportation system is inadequately linked to developing rural and peri-urban communities and their economic development needs; the movement of hazardous substances is not properly regulated; and the full participation of all key freight stakeholders is lacking. These challenges have been exacerbated by low levels of investment in infrastructure over the years; supply driven strategies that ineffectively respond to customer needs and demands; and management challenges because of capacity and skills shortages.

9.2 Travel Demand Management

Travel Demand Management (TDM) is defined as any action or set of actions aimed at reducing the impact of travel by influencing people's travel behaviour. Examples of this may include a shift away from the single occupant vehicle use, or avoiding driving during peak traffic hours (City of Colorado Springs, 2001: Intermodal Transport Plan, pg.65). These techniques, strategies and programmes lead to a reduction in the need for road-based travel and are generally implemented to counter the following:

- Congestion of roads (demand for travel exceeding capacity)
- Under-utilisation of existing transport infrastructure and services
- Over-use or dependency of one particular mode of road based transport

9-1 | MPLTF (2013-2018): Mpumalanga Transportation Management Strategy

- Inappropriate expenditure on infrastructure not conducive to meeting the objectives of TDM
- Lack of new and innovative infrastructure and traffic control elements required for a forward compatible and progressive transport solution
- Vehicles travelling on inappropriate roads to avoid congestion or delays (rat-running)
- Environmental quality reduction based on vehicle emissions associated with congestion and longer travel times, and
- The absence of an understanding of what measures will have the most cost effective and efficient impact on the transport network.

While significant elements of TDM are visible in the province, there is evidence to suggest that a lot more can be done and to good effect.

9.2.1 Intelligent Transport Systems

Intelligent Transport Systems (ITS) can simply be described as transport systems that apply information, communication and control technologies to improve the operation of transport networks. The various ITS tools are based on three core features that help operators and travellers make better and more coordinated decisions. These three core functions are information, communications and integration. ITS includes both technical and institutional components. Hence the need to ensure that the relevant parties and structures involved work together in a coordinated manner and agree on the building blocks for ITS. The objective of transport system management (TSM) is to optimise the existing transportation infrastructure by initiating certain construction, operational and institutional actions to improve the functioning of the system. Minor upgrades to intersections, signalization, climbing lanes, road signs, pavement management, paint marking and road study maintenance are some examples of TSM. TSM are low cost, short-term to medium term improvements to the existing transportation system to accommodate travel demand. As indicated elsewhere, more needs to be done to optimize the transportation system especially given that there is a massive shortfall in terms of what the provincial transportation system requires and what has historically been committed to the sector.

9.2.2 Transportation Demand: The Infrastructure Dimension

With the power generation and mining industries playing such important roles in the Mpumalanga economy, upgrading and preserving the road and rail network that feeds them are vital elements of the transportation and logistics sector. While the estimated cost for rehabilitation and reconstruction of the coal-haulage network is in the region of R6-billion, the provincial government has only set aside about R500-million and Eskom (which hauls most of the coal on these roads) has committed to providing only R1-billion over three years. A significant funding shortfall thus exists between the network's requirements and what has been committed to date. Clearly, the need for other actors to join the initiative to widen the resource base and engender sustainability cannot be over-emphasized.

Some of South Africa's most strategically important infrastructure is located in Mpumalanga province. Liquid fuel pipelines, power stations and key road connections make Mpumalanga an

important part of South Africa’s communications and power network. The Maputo Development Corridor is Africa’s most advanced spatial development initiative (SDI) comprising road and rail infrastructure, border posts, and port and terminal facilities. Run by the Maputo Corridor Logistics Initiative (MCLI), the corridor runs from just outside Pretoria in Gauteng, through eMalahleni, Middelburg and Nelspruit in Mpumalanga, and onto Maputo in Mozambique. The corridor has been credited with facilitating business including the improvement of the property markets in such places as Nelspruit and Komatipoort.

The N4 highway runs east-west through the province and is the main arterial and backbone of the Maputo Corridor (refer to Figure 9.1 depicting road and rail corridors in Mpumalanga). The R36 is a major north-south route, passing through Ermelo and connecting Mpumalanga with Limpopo in the north, via Middelburg and KwaZulu-Natal in the south, via Volksrust. The N17 runs east out of Johannesburg to Bethal. Roads take a heavy pounding in the parts of Mpumalanga that have the highest volumes of mining and industrial activity. MDPWRT annual allocations for transportation infrastructure in the province are historically inadequate. The need for a sustainable funding model cannot be over-emphasized.

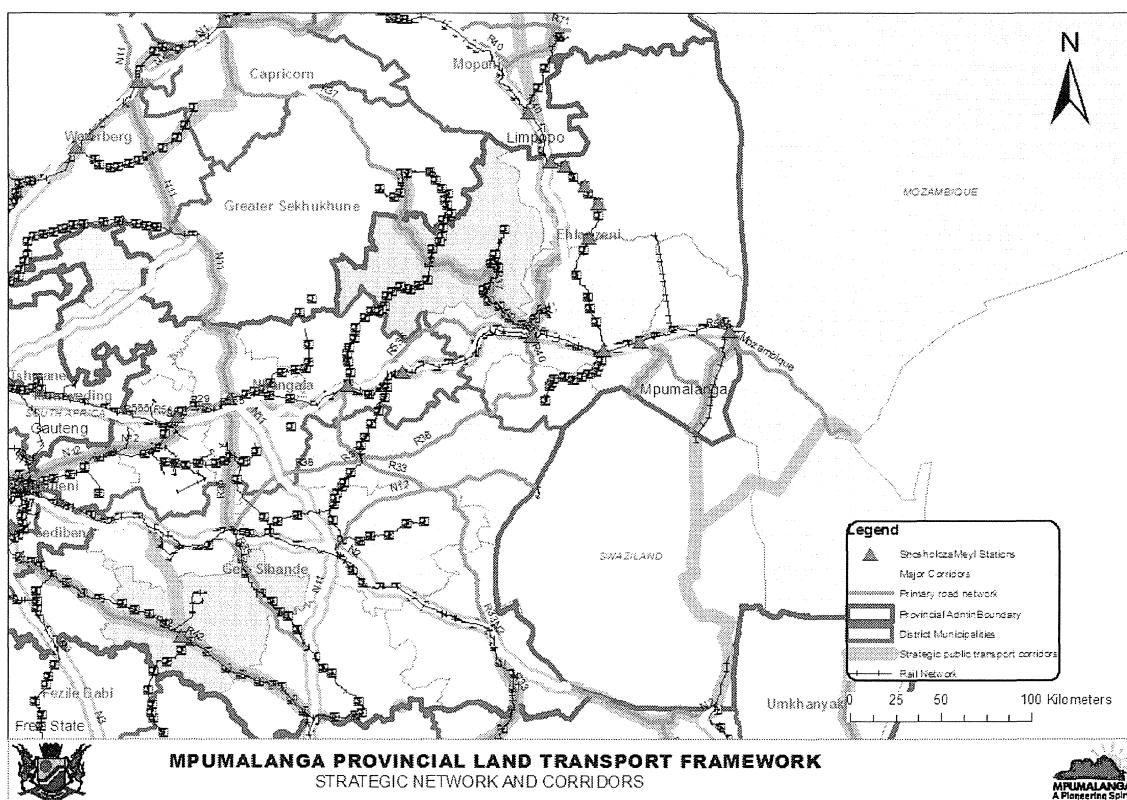


Figure 9.1: Road and Rail Corridors in Mpumalanga

MDPWRT has been upgrading gravel roads to hard surfaces, providing better mobility and access in rural communities (culverts, sidewalks, bus shelters and the provision of bicycles and animal-drawn carts) and scholar transport. British Airways flies six times a week from

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Johannesburg into Kruger Mpumalanga International Airport (KMIA). Middelburg Aerodrome is one of the larger alternate airports in the province, boasting a 1.9km runway that can accommodate a 737. Many game lodges have airstrips and helipads. SA Red Cross Air Mercy Service operates out of the old Nelspruit airport just south of the city.

9.2.3 Freight Transport in Mpumalanga

The demand for freight transport in Mpumalanga is very high due to the presence of industries depending on the supply of high volumes of bulk commodities such as for the generation of electricity and the manufacturing of paper. The other major contributors to the movement of freight include export of coal, timber, iron ore, manganese and nickel. Some of the biggest trucking fleets in the country operate in this province. A significant number of these trucks are often overloaded. The need to generate a robust strategy based on more effectively operated weigh stations and visible law enforcement and undergirded by extensive stakeholder consultation cannot be over-emphasized. It is important to note that upgrading of the Gauteng-Maputo line will significantly increase the line's ability to carry freight. This will also allow much of the freight pressure on the N4 to move to the rail line.

About 4 150 km of the paved road links (or 54% of the total paved road network) has an average annual daily traffic (AADT) of less than 2 000 vehicles / day. About 570 km of road links (or 7% of the paved road network) has an AADT of more than 10 000 vehicles / day. Most of the road sections with the high traffic levels are located on the N4, the R40, R544 and the N12 (NATMAP, 2008).

The two main freight transport infrastructure corridors in the province are the *Maputo Development Corridor* (MDC) that runs from Gauteng province to the port city of Maputo in Mozambique and the *coal haulage routes* mainly within the Gert Sibande and Nkangala districts. The MDC acts largely as a trade route from Gauteng (South Africa's economic hub) to the port of Maputo (which in turn links to international markets). This same route also serves commuters between Gauteng province and Mpumalanga, and Mozambique. It also supports the tourism industry by conveying tourists from Gauteng Province to Mpumalanga and as far as Mozambique.

The dominant loads are break bulk, comprising bags or sacks of unknown commodity. In terms of traffic volumes, it is worth noting that a significant number of trucks on the road are empty, either going to collect a load or returning from dropping a load. Over a four year period between 2006 and 2010, traffic volumes increased significantly on some routes whilst decreasing on others as indicated in Table 9.1 below:

Table 9.1: Traffic volumes by routes in Mpumalanga

Route	Section	2006	2010	% Change
N11	Ermelo - Hendrina	178,200	384,960	54%
N11	Middelburg - Groblersdal	142,200	237,120	40%
N11	Volksrust - Ermelo	554,100	205,440	-170%
N17	Leandra - Secunda	176,400	396,480	56%
N17	Lochiel - Oshoek	104,400	77,440	-35%
N2	Ermelo - Piet Rietif	20,400	268,480	92%
N4	Komatipoort - Lebombo	168,780	151,040	-12%
N4	Middelburg - Nelspruit	51,750	329,600	84%
N4	Mbombela - Komatipoort	132,600	691,520	81%
N4	eMalahleni - Pretoria	388,800	296,000	-31%
R23	Standerton - Volksrust	157,500	114,240	-38%
R33	Piet Retief - Comondale	211,500	197,760	-7%
R33	Warburton - Amsterdam	89,700	145,920	39%
R36	Carolina - Watervalboven	504,000	133,120	-279%
R36	Ohrigstad - Lydenburg	52,500	90,880	42%
R37	Sabie - Lydenburg	99,750	100,480	1%
R38	Barberton - Kaapmuiden	74,400	113,280	34%
R38	Badplass - Barberton	230,400	255,360	10%
R38	Carolina - Hendrina	36,600	60,480	39%
R39	Standerton - Bethal			340,800
	Standerton - Margenzon		246,080	
R40	Barberton - Mbombela	143,100	234,880	39%
R50	Leandra - Standerton	65,700	449,920	85%
R537	Sabie - Mbombela	130,200	110,400	-18%
R540	Belfast - Lydenburg	121,200	106,560	-14%
R545	Ogies - Bethal	177,900	269,120	34%
R570	Jeppes Reef - Malelane	18,000	197,440	91%
R571	Komatipoort - Mananga	35,550	187,200	81%

Source: Mpumalanga Freight Databank, 2011

Neither TRAC N4 Information Management System (IMS) nor district municipalities in the province have any form of IMS specifically for HAZMAT (hazardous materials) incidents – a major concern that needs urgent resolution.

9.2.4 Overloading

Although the number of weighed vehicles has continued to increase (albeit at varying annual rates), the rate of increase of overloaded vehicles has remained constant during the same period, which shows that the proportion of overloaded vehicles has decreased, relative to the number of weighed vehicles. DPWRT has various weighing facilities in operation on provincial and some municipal roads. Several of them are operated by TRAC for the N4 toll road from Witbank to the Lebombo border post in South Africa and from Ressaano Garcia to Maputo on the

Mozambican side of the border. The control of overloading on the N4 toll road is handled by the toll concessionaire TRAC.

9.2.5 Rail Freight Transportation in Mpumalanga

Transnet and the Passenger Rail Agency of South Africa (PRASA) control South Africa's rail network. The Mpumalanga rail system covers a distance of 2 233 km. As such, the province generates the most rail freight traffic in South Africa and plays an important strategic role in the national economy. The Pretoria-Maputo and Johannesburg-Durban are the two most important lines. The Moloto Rail Development Corridor project is set to expand the rail system of the province. Products that are transported within and outside of the province include coal, fuel and chemicals, timber, iron and chrome ore, fruit, maize, animal feed, wholesale and retail goods, steel, building supplies, fertilizer and consumer goods. On the Mpumalanga to Richards Bay line, minerals, grain and fuel are transported (refer to Table 9.2 for a summary of rail freight). In addition to freight transportation, the rail network is also used for commuter services. The Shosholoza Meyl offers passenger rail services between Johannesburg and Komatipoort with several rail stations between (e.g. at Middelberg, Pretoria, Malelane and Nelspruit). Mpumalanga's game reserves are linked to Gauteng and KwaZulu-Natal by more luxurious tourist trains. Over the past few years, government has invested ~ R884 million towards the remodelling and refurbishment of commuter-rail stations, while the private sector invested ~ R1.6 billion into more than 120 precinct (land and properties adjacent to and surrounding commuter-rail stations) development projects. Since 2000, Port of Maputo's throughput has grown at an average annual rate of ~ 14%. Annual throughput is projected to increase to 18 million tonnes by 2018. No doubt, the impact of freight on the road infrastructure network is high due to the prominence of bulk commodities (coal, timber, iron ore, manganese and nickel) industries. The Mpumalanga Freight Logistic Forum (MFLF) is a platform established to discuss this and many other freight logistics issues in the province.

Table 9.2: Summary of rail freight in Mpumalanga

Mpumalanga Rail Freight Summary					
Section	Total traffic over route	Traffic generated from Stations on route	Traffic received at Stations on route	Intrastate traffic	Transit traffic
Richards Bay Coal line to coast	67,346,867	64,216,248	11,247	2,809	2,347,773
Union – Vooruitsig – Durban	17,055,558	(499,097)	7,366,102	450	9,189,909
Pretoria - Komatipoort	13,208,640	6,760,650	1,361,449	849,893	4,236,468
Welgedag – eMalahleni	12,593,104	4,632,747	24,496	6,309,044	1,623,694
Richards Bay Coal line from coast	6,379,605	6,173,061	55,858	60,246	90,440
Phalaborwa – Richards Bay	4,905,116	(145,202)	(9,210)	-	4,749,444
Durban – Vooruitsig – Union	4,378,792	7,094	503	-	4,372,220
Associated branches	4,133,179	1,398,945	263,134	2,471,100	-
Machadodorp – Ermelo (both ways)	3,393,932	3,321,849	515	70,567	1,000

9-6 | MPLTF (2013-2018): Mpumalanga Transportation Management Strategy

Witbank – Welgedag	2,417,501	582,287	569,162	134,540	1,131,512
Komatipoort-Pretoria	1,143,627	8,102,574	362,987	2,186,053	782,013
Ermelo – Springs	1,078,756	950,908	120,286	7,622	-
Springs – Ermelo	688,657	524,517	163,399	741	-
Richards Bay - Phalaborwa	353,619	-	-	-	353,619
TOTAL	149,366,953	96,670,880	10,299,138	12,093,065	28,878,092

Mpumalanga Freight Transport Plan, 2012

9.2.6 Challenges for Rail Freight Transportation in Mpumalanga

Over the years, a significant portion of freight transport has moved from rail to road transport (e.g. mining and forestry related freight transport). This has put tremendous pressure on the road network leading to early pavement failure. At an average age of 30 years, most paved roads in Mpumalanga are at the end of their design life – which means that maintenance issues should be high up on the agenda – in fact, the greater part of the budget should be reserved for maintenance.

One of the reasons for bottlenecks and delays experienced by rail freighters is because of shortage of rolling stock and limited service to Maputo, which limits rail capacity. The Over Vaal tunnel limits the capacity of the Coal link mainline. Infrastructure / service gaps in the rail sector also affect the Coal link line which is in need of upgrading and expansion and the absence of a direct road link from Richards Bay to the hinterland limits the promotion of general cargo through this port. In Mpumalanga there is intense modal competition for cargo such as fuels, timber, coal, sugar and aluminum. However there is a general shift to road haulage for some of these commodities due to deficiencies in rail services, costs, and railway policy regarding minimum shipments. There is an under-utilisation of railway stations, sidings and facilities in the province. Some sections of the rail network are in poor condition or have been vandalized, e.g. the Bethal-Morgenzon-Volksrust line where some sections of the rail line have been removed.

Mpumalanga as a province displays strong east-west mobility corridors, but weak north-south mobility which limits accessibility and penetration. The other critical challenges associated with road freight transport in Mpumalanga include the following:

- Absence of binding road freight route system that will force operators to adhere to certain routes
- Poor road pricing system where heavy loads do not seem to compensate for the damage caused
- Inadequate road transport quality system and inspection of vehicle conditions
- Driving extended hours by heavy vehicle drivers for long distances and absence of truck stops on certain routes
- Absence of a provincial policy for the transportation of hazardous and dangerous substances exacerbated by a complex national framework that is difficult to follow, and
- Absence of “live” freight statistics regularly up-dated to provide comprehensive and complete picture of the freight situation on a regular basis for planning purposes.

9-7 | MPLTF (2013-2018): Mpumalanga Transportation Management Strategy

Air Cargo: The province only has one international airport, the Kruger Mpumalanga International Airport (KMIA), which is also the only airport that receives scheduled flights. The single international airport, KMIA, currently lacks cargo handling facilities and only offers express freight handling through SAA Airlink and Transit Group. With regards to air freight, the key challenges emanate from the low cargo movement from KMIA to other destinations in the country and abroad. This situation is exacerbated by the proximity of the Nkangala and Gert Sibande activities to OR International Airport. Facilities for handling cargo at KMIA reflect the current levels of demand and therefore supply of such facilities at the expense of potential future demand. With the opening of the planned Delmas Cargo Airport, the situation at KMIA could worsen.

9.3 Policy Levers & Interventions

Table 9.3 below enumerates policy levers and intervention options for the province.

Table 9.3: Policy Levers & Intervention Options

Goal	Policy Objective & Direction Pathway
<i>A robust, flexible, adaptive, efficient, effective & sustainable travel demand management strategy</i>	Transfer the successful N4 toll road network model to other roads in the overall network. Tolling needs to be on the network rather than on a specific route – to circumvent the migration of the problems particularly to roads ill-equipped to support such heavy traffic
	Implement single occupant vehicle restraint measures especially in relatively congested urban areas such as Mbombela & eMalahleni
	Institute flexible work schedules, which allow employees to shift their work start & end times (& thus travel times) to less congested times of the day
	Spatially locate facilities to reduce the need to travel e.g. by relocating businesses closer to places of employment or vice versa, & by applying information technology to allow workers to work from home – logging-on to servers at the workplace & communicating via email & teleconferencing i.e. telecommuting.
	An optimum traffic signal plan for traffic signals controlled intersections needs to be prepared for major urban centres in Mpumalanga
<i>Develop provincial incident management plans for all national, toll & provincial roads & corridors in the province in line with the National Road Traffic Act (Act 93 of 1996)</i>	Incident plans for the road network need to be coordinated at a provincial level and executed on a corridor-basis making use of the provincial integrated strategy to manage incidents, monitor & inspect the transportation of dangerous goods
<i>Overloading control management & enforcement systems</i>	Need to effectively deal with issues of overloading especially in the Emalahleni, Govan Mbeki, & Steve Tshwete coal corridor routes
<i>Developing a sustainable healthy & competitive provincial rail versus road freight policy & strategy</i>	Integrate the operations of Transnet with those of other transport modes to strengthen intermodalism
<i>Restoring rail infrastructure & reverting rail-friendly cargo</i>	Support Transnet Master Infrastructure Rehabilitating & Sustainability Turn-around Strategy and Master Plan to reverse current Mpumalanga Province rail system bottlenecks which has been negatively affected by old-age or wear and tear (Investment

9-8 | MPLTF (2013-2018): Mpumalanga Transportation Management Strategy

<i>(which is currently transported via road) back to rail.</i>	targeted at rolling stock and upgrading the existing infrastructure) by 2017. Mpumalanga rail development plan should tap into Transnet's planned the R300 billion investment plan including the implementation of a strategy to revitalise and develop branch lines.
<i>Facilitate greater regional integration & competitiveness for the Province</i>	Develop a Infrastructure Master Plan for Upgrading Lebombo / Resano Garcia Border Post facilities to cope with the +150 000 daily people passing through the post (One-Stop Border Post) Explore the advisability of establishing a Border Management Agency Create a formalized public-private partnership (PPP) bringing together the three countries, (South Africa, Swaziland & Mozambique) to ensure that the policies that have been agreed upon & signed-off (particularly at Head of State level) can be implemented Need to harmonize legislation at regional level (i.e. SADC level) Development of a Provincial Rail Master Plan complete with a commuter rail development strategy
<i>Development of truck stops for better trip planning, logistics, safety & security of road based trucking industry</i>	Establish new truck stops are Ngodwana and Carolina Establish Truck stops along the Nkangala-Gert Sibande-Ermelo corridor

Chapter 10

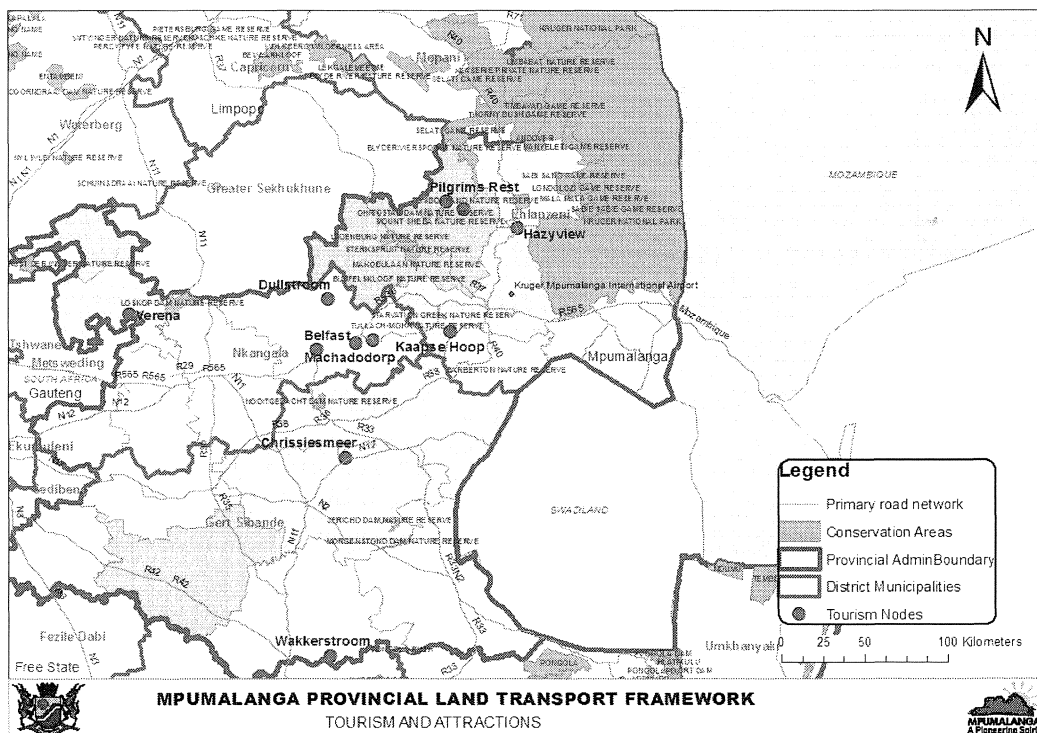
10. TOURISM TRANSPORT

10.1 Tourism in Mpumalanga

Mpumalanga’s competitive edge in tourism lies in its natural and cultural diversity (e.g. Kruger National Park), as well as its proven ability to host major international events. Rural Mpumalanga, in particular, has a lot to offer for tourism through its bio-diversity (both fauna and flora), varied and impressive scenery, the demand for shopping and entertainment, as well as its diverse traditional cultures. However, recent global developments in tourism increasingly indicate that the success of destinations in future will not lie in resources, but in how these resources are managed and transport plays a significant role.

By definition, tourism relates to activities of persons travelling to and staying in places outside their usual environment for leisure, business or other reasons (refer to Figure 10.1 for tourism routes in the province).

Figure 10.1: Tourism routes in Mpumalanga



The existence of adequate transport infrastructure is a prerequisite for developing the tourism industry, with more pressure on road infrastructure. Blockages in this sector will necessarily stifle growth of tourism, and consequently its economic impact.

Conceptually, transport and tourism are inter-dependent, and that tourism is both a partner and a customer for transport and vice versa. Transport plays and could play a vital role in unleashing the tourism potential especially of rural tourism.

10.2 Mainstreaming Tourism Benefits

In terms of tourism development in the province, the majority of developing communities in rural and urban areas are still left out of the mainstream of the tourism economy – an industry that has ability to create jobs and often is characterized by low capital requirements in terms of starting businesses. Even with its rich cultural and natural resources, rural Mpumalanga still finds itself at the periphery of the broader tourism economy.

The transportation sector offers diverse modes for transporting tourists and freight destined for tourism nodes. Aside of the services offered by tour operators in car hire and coach operations, the sector can potentially offer a range of motorized to non-motorized transport modes, running the gamut from buses, *bakkies*, animal-drawn vehicles, minibus taxis, trucks, passenger trains to bicycles. This diversity of transport modes is in itself an opportunity for development (will give visitors a wide choice) should be maintained and improved upon to give tourists unique travel experiences. Of equal importance will be the need to regulate these modes and ensure that they are safe and convenient for travellers.

Improvement of transport infrastructure and services will create access to and linkages between anchor tourism projects such as the Trans-Frontier Conservation Areas (TFCAs) to ensure seamless access. Accessibility of such mega tourism projects is also crucial in order to attract the necessary investment. In addition, investing in transport infrastructure, which links major tourism projects to people's daily activities, facilitates patronage from locals, strengthening multiplier effects such as job creation, forward and backward linkages in local economies and improved living standards.

10.3 Intervention Levers

The province should play a greater role in creating an environment in which the tourism industry can grow using transport as a central driver. Intervention options include:

- ***Understanding tourism and transport:***

- Develop a Tourism Transportation Master Plan that will guide districts and local municipalities to develop detailed Tourism Transport Plans (taking into account the provincial transport infrastructure master plan)
- **Mainstreaming tourism benefits:**
 - The multiplier effect of tourism and its ability to provide linkages to other sectors present an opportunity for the broader rural development agenda for the province. In this regard, communities in rural and township areas need to be made aware of how they can contribute to tourism development and reap the benefits of the ever-growing industry.
 - Identify and promote tourism projects in developing communities in urban and rural areas
 - Areas along rivers and dams, water transport offers an opportunity for local people. Presently, many of the water-based sports including canoeing, yachting, skiing, white water rafting and fishing are driven by the industry without necessarily benefiting host communities. These include SMMEs in this sector need to be encouraged and supported through private-public-partnerships. Communities need to be assisted to form transport cooperatives in order to be actively involved.
- **Integrate tourism development efforts:**
 - Encourage greater integration between private and public sectors in the tourism industry
- **Tourism transport standards development:**
 - Consultatively develop appropriate standards for conveying tourists.
- **Tourism transport infrastructure development:**
 - Invest significantly in tourism routes to strengthen their brands by improved infrastructure including signage
 - Strength business and entertainment tourism through the provision of adequate transport infrastructure and services such as upgrading the main Mozambique (Komatipoort) and Swaziland (Oshoek) borders into 24-hour one-stop border posts and improving public transport
 - Align transport infrastructure network investment with major tourism destinations (tourism assets)
 - Undertake an inventory of tourism road signage with a view to facilitating the movement of freight and passengers destined for tourism attractions
 - Provide adequate transport infrastructure including roads, foot-bridges, rail tracks, signage, parking areas, resting places and fences to control movement of animals through partnerships to improve safety and security in the tourism industry, and
 - Ensure that tourism infrastructure is accessible by vulnerable groups including persons with disabilities and the elderly.
- **Tourism transportation services development:**
 - Develop an Aviation Corridor Plan linking other tourism destinations with Mpumalanga tourism nodes including improving the level of service of KMIA through marketing and training as well as providing intermodal infrastructure. It will be crucial to integrate the airport with the surrounding communities (employment opportunities and SMME development) by providing

opportunities to turn KMIA into a development node, which could later transform into an *aerotropolis*.

- Mainstream diverse modes offered by the transportation industry in Mpumalanga into the tourism industry, including involving the minibus taxi industry, especially after peak hours.
- ***Transformation of the tourism industry:***
 - The transport industry, as one of the key services to tourism, faces the challenges of transformation to include ownership and participation of the historically disadvantaged. Mpumalanga must establish tourism enterprises and promote investment, which are considered key drivers of broad-based economic benefits.
 - Given the multiplier effect of tourism and its ability to provide linkages to other sectors to impact the broader rural development agenda, communities must be made aware of how they can contribute to tourism development and reap the benefits of the tourism industry.
- ***Regional Integration and Growing Tourism Receipts:***
 - In order for Mpumalanga to sustain the growing numbers of visitors from the SADC and other regions, there is a need for a well-developed cross-border transport infrastructure, effective and efficient ports of entry, sufficient rest stops and other infrastructure that will enhance the tourism experience.

Chapter 11

11. HIV/AIDS AND THE TRANSPORT SECTOR

11.1 Scope of the Challenge

South Africa has the world's largest number of people living with HIV/AIDS, estimated at 5.6 million in 2010. At 36.7% (up from 35.1% in 2010) Mpumalanga recorded the second highest prevalence rate in the country and Gert Sibande District Municipality recorded the highest ever infection rate at 46.1% (DOH, 2012). HIV/AIDS impacts negatively on basic human security elements including survival, safety, opportunity, dignity and autonomy. Its socio-economic costs include the regular need for healthcare, funerals, transport to healthcare facilities, and the impacts on social networks, for example, increases in child labour, exploitation, prostitution and sexual abuse. Across Mpumalanga, the impact of HIV/AIDS is evident in every sector, not least of which is transportation. And yet, the impact of HIV/AIDS on the transport sector has not received adequate attention in the province. Thus the transport sector in Mpumalanga needs to recognise its role as a catalyst for the spread of HIV/AIDS and necessarily focus on two key areas of concern:

- Areas of transport activity such as transport corridors, stopping places and terminal points that demonstrate increased levels of promiscuous sexual contact (Medical Research Council [South Africa] studies suggest that mobility increases vulnerability to HIV/AIDS to those who are mobile, their partners at home and sexual partners along transport corridors, and
- The assembly of workers in temporary camps for infrastructure construction and maintenance activities – an environment characterized by the absence of normal social networks to regulate behaviour which encourages sexual activity between non-regular partners.

Clearly communities living along transport corridors and areas of intense transport operations risk contracting HIV/AIDS due to their regular interaction with highly mobile individuals and groups. Interaction between these individuals and groups constitutes the main axis of HIV/AIDS transmission. However, both South Africa and regional economic communities such as the Southern African Development Community (SADC) have been promoting corridors as instruments for crowding in investments to realise growth and development objectives. And yet, as indicated above, corridor development entails intensive interaction of mobile populations and local communities along the corridors thereby increasing the risk of transmitting the pandemic. Mpumalanga's many corridors could

legitimately be described in varying degrees as genuine risk areas (refer to Figure 11.1 below for a map showing such corridors in the province).

11.2 Factors Contributing to Risk and Locus of Interventions

Having established the strong linkage between mobility and HIV/AIDS vulnerability, major truck routes (corridors) and borders have been identified as environments of elevated HIV/AIDS vulnerability (refer to Figure 11.1 below depicting corridors in the province).

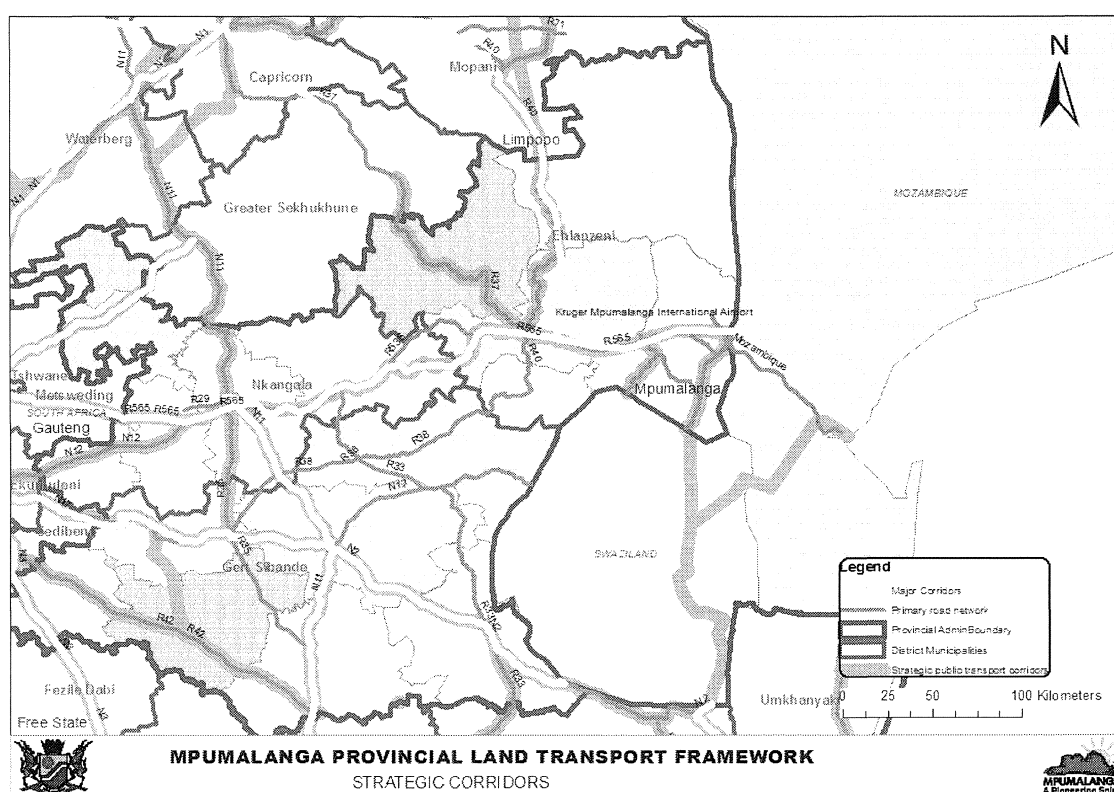


Figure 11.1: Mpumalanga transport corridors as major risk areas

Given the dominance of the road sector (for example, the greater majority of the province’s passengers and freight are transported by road) and given that the impact of the pandemic is not only confined to corridors, but spreads to surrounding townships and rural areas as well, the transport-community interface presents an legitimate area of intervention in the HIV/AIDS prevention-care continuum. This disposition and/or predisposition to risk is often underpinned by factors such as poverty, urbanisation, the absence of normal social networks to regulate behaviour which encourages relatively high risk social behaviour, lack of access to knowledge and medical facilities, unemployment, migration and the general social environment around truck stops.

11.3 Policy and Strategic Intervention Options

The need for a multi-sectoral approach to mitigate the spread and impact of HIV/AIDS is universally acknowledged. In addition, because migration transcends national and international boundaries, interventions require a provincial and/or a regional approach. In practical terms, it means the following for Mpumalanga:

- **Understanding the magnitude of the problem in Mpumalanga:**
 - Develop an HIV/AIDS and transport strategy for the province, including identifying, profiling and mapping high risk corridors.
- **Intervention focus:**
 - Intervention focus will be on transport sector workers, migrant populations, commercial sex workers and communities living along selected transport corridors and border posts.
 - Establish formal truck stops complete with adequate facilities as well as target formal and informal truck stop hotspots for treatment including the provision of wellness programs
- **Capacity building:**
 - Build the capacity of existing healthcare and community institutions that serve transport and sex workers, and affected communities to ensure better service delivery and sustainability
 - Encourage through dialogue with truck companies to introduce a no hitch-hiking passenger (females) pick up policy and step up law enforcement
- **Stakeholder involvement:**
 - Contribute to an integrated, sector-wide approach and continue networking and joint action, involving stakeholders with different perspectives and capacities guided by a collaborative agenda that addresses the needs of the most vulnerable with a view to addressing the increased exposure to HIV/AIDS
 - Explore the roles that minibus taxis could play in the fight against HIV/AIDS, for example, HIV/AIDS awareness messages and slogans could be spread on minibus body paintwork
 - Articulate specific roles that community-based institutions could play within the context of transport interventions in order to raise awareness and promote behavioural change, and the mainstreaming of these issues within transport policies and planning
 - Establish community-public-private-partnerships among key stakeholders e.g. MCLI and Road Freight Association could undertake joint activities with MDPWRT such as HIV/AIDS campaigns
- **Extending the IRMA program:**
 - Because persons living with HIV/AIDS need regular contact with healthcare professionals, the availability and affordability of transport services is crucial in lessening impact. It will thus be crucial to extend the IRMA program focusing on both infrastructure provision and innovative provision of transport services.
 - Introducing transport technologies that reduce the burden of domestic activities (such as water and firewood collection) – such technologies include

animal-drawn carts and improved water storage facilities. Their introduction would enable rural inhabitants, particularly women, extra time to engage in paid employment or to care for members of the household living with HIV/AIDS, and

- Providing rural clinics with motorcycles to improve their access to better-equipped hospitals, for instance to transport blood samples that need to be tested or deliver medical supplies.
- **Monitoring and evaluation:**
 - Undertake an assessment designed to develop, test, refine and package a standard participatory methodology (which is simple and effective) to enable planners to evaluate HIV/AIDS risk (including a modified behavioural surveillance survey for outcome assessment), identifying prevention opportunities and designing grounded, coordinated provincial prevention initiatives.

The overall development objective of these intervention options is to increase access to HIV/AIDS prevention, treatment and care programs with the emphasis on vulnerable groups (refer to Annexure A for a costed list of strategic interventions).

Chapter 12

12. FUNDING STRATEGY AND IMPLEMENTATION PROGRAM

12.1 Importance of Adequate Funding

Funding plays a pivotal role in terms of implementing the MPLTF particularly in respect of the demands emanating from the NLTA (2009). It is also important to note that in terms of the South African Constitution (1996), functions devolved to other spheres of government need to be accompanied by appropriate levels of funding to enable the function to be performed. For that reason, unfunded mandates especially at the local authority level have a negative impact on service delivery levels as they are unlikely to be implemented.

The Constitution provides for the allocation of the appropriate level of funding:

“Clause 227 (1) local government and each province:

- a) is entitled to an equitable share of revenue nationally to enable it provide basic services and perform the functions allocated to it, and*
- b) may receive other allocations from national government revenue, either conditionally or unconditionally”*

In general, funding sources for the transportation sector in South Africa are severely limited especially in the provincial sphere of government (and its constituent municipalities). Provincial governments receive annual grant transfers from national treasury. In terms of existing legislation, Provinces have very limited opportunities to raise funds from other sources. Although taxation is a fundamental source for transportation, only a limited portion actually benefits the transport sector. This adversely affects the ability of the Provinces to effectively discharge their responsibility in terms of transportation service delivery. Planning authorities in the province are faced with demands for transportation infrastructure and services that far exceed available resources.

12.2 Current Budget & Prospects for Sustainable Funding

In the 2012/2013 financial budget cycle, DPWRT was allocated a total budget amounting to R3 billion 510 million and 977 thousand to effectively implement all its mandates including:

- Maintenance of government buildings and road infrastructure
- Provision of wood and coal for hospital boilers
- Provision of integrated transport infrastructure, and
- Provision of Scholar Transport.

While the current budget appears significant, if disaggregated by different road and transport streams such as the roads sector, transport services, this budget allocation is decidedly insufficient. This perspective is bolstered by a budget scenarios and funding requirements analysis conducted and presented in the "Needs Analysis for Mpumalanga Road Network 2010 Report" which indicate the following striking facts and realities, namely that:

- The immediate need for paved roads is R4 385 million (±R4 billion).
- R662 million is needed for reseals: In total 1,175 km of paved roads should be resealed as a preventative measure to deter further deterioration.
- R3 723 million is needed for light and heavy rehabilitation: This relates to 765 km of road where the roughness and/or structural cracking have developed beyond preventive maintenance and hence structural repair is needed to improve the functional levels.
- The immediate need for unpaved roads is R7 161 million (±R7 billion).
- R413 million is needed for re-gravelling: In total 1 082 km of unpaved roads require replacement of the gravel wearing material. The road user costs on gravel roads with no wearing course material are quite excessive.
- R6 748 million is needed for the upgrading of unpaved roads to surfaced standards. These 1 616 km of road carry typically more than 200 vehicles per day.

The need to explore and develop other sustainable funding streams to cover the gapping shortfall in the transport and roads budget allocations cannot be over-emphasised.

11.3 Scope for a Funding Strategy for the MPLTF

Given the centrality of funding in reducing infrastructure backlogs in the province and thereby heightening service delivery, it will also be crucial to generate a provincial funding strategy. A MPLTF financing strategy should necessarily be simple to administer, easy to enforce and acceptable to road users. The objective of such a financing strategy would be to secure sufficient funding for the development of an effective transportation system that efficiently supports the socio-economic activities of the province. Such a funding strategy could have the following elements:

- A structured approach to ensure that the preservation, upgrading and expansion of the province's transport infrastructure will be included in national and international development initiatives
- Introduction of private sector financing initiatives, and
- Introduction of balanced road user tariffs.

Other funding avenues for the MPLTF should include:

- Joint funding among Government Departments:
 - Departments of Public Works, Roads and Transport and Rural Development and Land Reform (DRDLR) should collaborate on rural roads
 - Departments of Public Works, Roads and Transport, Cooperative Governance and Traditional Affairs (COGTA), and Human Settlements (DHS) should coordinate land use developments and collaborate in providing the resultant transport infrastructure
 - Departments of Public Works, Roads and Transport and Public Works (DPW) should collaborate on the extended public works program (EPWP)
 - Departments of Public Works, Roads and Transport and Education (DOE) should collaborate on the location of educational institutions as well as address the subsidisation of learners, especially those outside this benefit loop
 - Departments of Public Works, Roads and Transport and Social Development (DSD) should address the subsidisation of the elderly and persons with disabilities.
 - Departments of Public Works, Roads and Transport and Tourism should collaborate on tourism transport
- Municipal Infrastructure Grant (MIG): District municipalities and their constituent municipalities should motivate for funding from the COGTA through their various funding initiatives one of which is MIG funding, especially for flagship projects such as inter-modal facilities, non-motorised transport projects, rural access roads and paratransit projects.

- The three district municipalities should engage with the private sector to develop transport facilities, specifically inter-modal facilities, and seek to secure bridging funds from the Municipal Infrastructure Investment Unit (MIIU). For the municipalities to qualify for funding from the MIIU, they would need to prepare and apply a policy on public-private partnerships.
- Law enforcement must aggressively deal with parking and speeding violations by issuing appropriate fines – revenue streams that need to be marshalled for the transport sector in the province
- State-owned enterprises such as Transnet, South African National Roads Agency Limited (SANRAL) and the Development Bank of Southern Africa (DBSA) will also be expected to contribute to financing some aspects of the MPLTF, and
- Other sources of funding projects could include public/private/partnerships, community/public/private/partnerships, franchising, development and donor funding.

The funding strategy should involve the following steps:

- Generate a summary of provincial transport planning and implementation projects complete with the respective budgets
- Generate a portfolio of municipal transport projects derived from their ITPs needing funding from the province
- Provide a table indicating target dates, milestones, and development periods for the projects referred to above
- Provide a summary of financial programs in table format
- Generate a financial programme showing expected sources of revenue and estimates of expenditure arising from the preparation, implementation and operation of the various transport strategies in the plan period (five years).
- Budgets must be aligned to government budget cycles e.g. Medium-Term Expenditure Framework, and should include funding sources and expenditure relating to:
 - Preparation of the MPLTF and ITPs in the province
 - Subsidies for road-based public transport falling within the responsibility of the province, and a summary of subsidies shown in integrated transport plans
 - Monitoring of public transport contracts
 - Provincial roads and other infrastructure
 - Assistance to special categories of passengers
 - Provision and maintenance of infrastructure and facilities, and
 - Institutional arrangements.

The MPLTF 2013-2018 implementation program is enumerated in table format in Annexure A.

Chapter 13

13 MONITORING & EVALUATION

13.1 Rationale for Monitoring and Evaluation

Monitoring of transport in the province, which is in the form of measuring and reporting on strategic Key Performance Indicators (KPIs) serves two main purposes, namely:

- Measure progress in respect of transport policy, and
- Improve levels of accountability to the tax payer in respect of transport service delivery.

In order to perform effective monitoring, this function should be appropriately resourced. The function will also require effective communication with key stakeholders in order to continuously obtain information and data that would otherwise be difficult for the province to acquire on its own. The data and information used to fulfil this function must be credible, consistent and verifiable. It is also imperative for the performance score cards of provincial government officials are reflective of these KPIs.

This chapter lists the transport system KPIs that must be measured on a continuous basis in the province, including their respective targets. The KPIs are informed by the set of national KPIs contained in the National Land Transport Strategic Framework. In addition, the transport vision for the province is used to formulate province specific KPIs. Due to the lack of appropriate or recent data, many of the KPIs are only listed with targets and not their recent values.

13.2 Provincial Key Performance Indicators

The list of KPIs is provided in Table 8.1 below, together with explanations of what they measure. No data relating these KPIs are available since the previous MPLTF. Future update of the MPLTF must provide measurements for all the KPIs.

Table 13.1: Provincial Key Performance Indicators

Key policy area	Customer-based KPI	Target
Promotion of public transport usage	Average one-way travel time to work by public transport	Maximum of 1 hour
	Percentage of motorised transport users using public transport to work	80%
	Average age of subsidised bus and commuter rail coach fleet	<ul style="list-style-type: none"> No vehicle more than 15 years is permitted unless rebuilt or rehabilitated. No vehicle with chassis of more than 27 years even if rebuilt or rehabilitated.
Promotion of access to public transport	Percentage of people in rural areas living within 2 km of access to regular public transport services.	Minimum of 80% of people in rural areas
	Percentage of households spending more than 10% of disposable income on public transport	No household to spend more than 10% of disposable income on public transport
Traffic safety	Number of road traffic fatalities	Reduce road fatalities 10% year on year
	Number of road traffic pedestrian fatalities	Reduce pedestrian fatalities 15% year on year

Key policy area	Customer-based KPI	Target
Public transport: Taxi recapitalisation	Percentage of minibus-taxi fleet recapitalised	<ul style="list-style-type: none"> • Reduce to zero vehicles older than 15 years to enter the market. • Reduce to zero vehicles older than 15 years old operating as minibus taxis.
Public transport: Bus restructuring	Percentage of subsidised bus services operating in terms of tendered or negotiated contracts	100% of buses
Freight	Percentage of overloaded trucks on road network	Less than 5% of trucks overloaded
Job creation	Number of jobs created through transport capital projects including maintenance	1,000 new jobs annually from transport capital projects

In terms of the National Land Transport Act (2009), the province must publish an annual transport report. The above KPIs must be published annually in the provincial annual report. In addition to these KPIs, the annual report should include indicators on the transport carbon footprint as well as backlogs relating to administrative work of the Provincial Transport Regulatory Entity.

Chapter 14

14. COORDINATION STRUCTURES AND MEASURES, LIAISON AND CONFLICT RESOLUTION

14.1 Championing Coordination

Coordination often needs a champion in the form of an institution or an individual to pull the strings together, get things going and maintaining the momentum until the initiative gathers its own steam. Because such a champion does not exist, coordination while not entirely curtailed has essentially been hamstrung. In addition, given that local municipalities do not even have a transport function and that transport forums are largely moribund, coordination intentions play second fiddle to efforts associated with maintaining the status quo. Chapter 14 summarizes existing structures for inter-governmental coordination and inflexion points for liaison and collaboration.

14.2 Roles and Responsibilities of Different Spheres of Government

Focusing on policy and strategic planning, including substantive regulation, and reducing government's direct involvement in operations and the provision of infrastructure, as indicated by Section 156(4) of the constitution, the primary responsibility for the execution of land transport functions rests with the municipal sphere of government, which includes transport authorities that are established to undertake municipal transport functions. Subject to the constitution, the roles of the three spheres of government in relation to land transport are as follows (NLTA, 2009) – which, by extension, also speak to coordination, liaison and conflict resolution:

The national sphere of government is responsible for:

- Policy and strategy formulation
- Overall strategic transport planning and coordination in the national sphere
- Preparing the NLTSF in terms of Section 43
- Coordinating between provinces and to addressing arrangements between the three spheres of government and public entities
- Allocating functions to the most appropriate sphere of government by promoting legislation and promoting or concluding agreements, as appropriate
- Liaising with other government departments in the national sphere with portfolios that impact on transport issues and bringing together key players

14-1 | MPLTF (2013-2018): Coordination Structures & Measures, Liaison & Conflict Resolution

- Assisting provinces that lack capacity or resources and to see that gaps left by them are filled
- Intervening where provinces fail to perform their functions, subject to Section 100 of the constitution
- Coordinating transport relations between South Africa and other countries (in this regard, Mozambique and Swaziland), and
- Implementing international agreements.

The provincial sphere of government is responsible for:

- More detailed provincial policy and strategy formulation
- More detailed transport planning and coordination in the provincial sphere
- Preparing the PLTF in terms of Section 44
- Coordinating between municipalities and transport authorities
- Promoting provincial legislation and municipal by-laws
- Promoting and/or concluding agreements, as appropriate, in the provincial sphere
- Liaising with other government departments in the provincial sphere with portfolios that impact on transport issues and bringing together key players, and
- Assisting transport authorities and municipalities that lack capacity or resources, and ensuring that gaps left by those authorities are filled, subject to Section 139 of the Constitution.

The municipal sphere of government is responsible for municipal transport functions including municipal public transport in their areas of jurisdiction, which involves primary responsibility to:

- Where appropriate, plan, implement and manage modally integrated public transport networks and travel corridors, including operational planning, and
- Integrate municipal transport planning with land use planning.

Institutional structures to coordinate national and provincial government:

Two institutional structures exist to coordinate national and provincial governments, one for politicians and the other for bureaucrats, namely: MINCOM and COLTO respectively. MINCOM, a committee chaired by the Minister of Transport and made up of nine MECs (including the Mpumalanga MEC for Public Works, Roads and Transport) supported by heads of departments of the respective national and provincial departments is a platform for discussing and consulting on national and provincial transport issues. COLTO, the Committee of Land Transport Officials comprising of the designated representative officials of the national and provincial departments of transport, is also a coordinating structure. In addition, Trans-MEC is a political structure chaired by the MEC for Public Works, Roads and Transport and includes political representatives (including executive mayors) from Nkangala, Gert Sibande and Ehlanzeni district municipalities. Its functions are to:

- Coordinate transport policy – the MEC will provide direction with feedback from councillors

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- Disseminate information and policy direction from national to local spheres of government, and
- Facilitate devolution and delegation of transport functions to the local sphere of government.

In addition, each provincial transport department encourages the formation of transport forums at the provincial and local authority levels. These transport forums, when functioning effectively, provide a platform and a conduit for communication with stakeholders on substantive transport issues.

Measures to ensure coordination between the province and planning authorities:

The following institutional arrangements exist:

- Explore the possibility of establishing a **Project Management Unit (PMU)** by the Department to enhance technical capacity and expertise within the Department.
- Devise methods to strengthen the Transport Forum

Liaison mechanisms and structures proposed for inter-provincial long-distance Services:

The objective should be to coordinate and communicate some aspects relating to matters dealing with inter-provincial long-distance and short-distance public transport services.

While the Mpumalanga Operating Licensing Board is still legally dispensing all manner of operating licenses, processes to transform the industry beginning with the institutional framework – Regulatory Entity have been put into place and are gathering momentum. Meetings on a regular basis serve to discuss operating licenses management issues with a view to streamlining the process flow and iron out angularities (and reduce conflicts, misunderstanding, etc.). The following constitute requirements for ensuring coordination of inter-provincial long-distance and short distance transport services:

- Dialogue between Mpumalanga and other affected provinces facilitated by the DOT
- Formalization and implementation of communication and coordination structures between the Mpumalanga Province's Operating License Board (OLB) (Regulatory Entity) and counter parts in adjacent provinces.
- Engage in formal agreements with adjacent provinces.

Measures to resolve possible conflicts between provincial transport and land use planning:

Because Mpumalanga has a scattered and dispersed settlement pattern, such a land use pattern does not support the development of a cost-effective and efficient transportation network particularly with regard to attaining sufficient thresholds. To begin to redress this from a transportation network perspective, it is imperative to encourage settlement

consolidation and densification through selective investment of transportation infrastructure and services. Such an approach needs to be supported by the national and provincial transportation network in terms of serving key settlement growth points, instead of a scatter gun approach. For example, because of the significant passenger volumes in the Mbombela-Hazyview-Bushbuckridge corridor, it is vital that this thoroughfare be singled out as a priority transportation investment destination (including densification through incentivizing human settlements developments). In the same vein, the provincial economy is largely dependent on the tourism, manufacturing, mining and agricultural industries. Necessarily, these industries need to be supported by the existing and future transportation network. It will also be important to ensure that communities living in scattered deep rural areas that may be relatively unproductive also need to be provided with appropriate services to allow them to access socio-economic opportunities in areas with higher potential.

14.3 Policy Levers and Intervention Options

Table 14.1 below enumerates some policy levers and intervention options.

Goal	Policy Objective & Strategic Pathways
Strengthening & improving institutional systems & governance responsiveness	• Position transport forums as an IDP working group by 2016
	• Broaden the terms of reference of transport forums to include all modes
	• Re-draw the terms of reference of transport forums to ensure sustained interest from stakeholders
	• Provide mechanisms to assist municipalities that have no capacity to carry out their planning responsibilities by 2016
	• Expand the terms of reference of the provincial freight forum to include other modes & ensure its efficiency as an integrative platform by 2016.
	• Conduct a study to explore the advisability of establishing a Project Management Unit (PMU) by the Department to enhance technical capacity & expertise within the DPWRT
Capacity Building & Training	• Conduct district roads shows on Transport Planning & Management
	• Request DOT to second transport officials to assist in building capacity in the province
	• Train all district officials on the NLTA (2009)

References

1. Constitution of the Republic of South Africa (Act 108 of 1996)
2. Department of Health: National Antenatal Sentinel HIV & Syphilis Prevalence Survey (2011)
3. Department of Transport: Public Transport Action Plan 2007-2020 (2007)
4. Department of Transport Guidelines for Developing a PLTF (2011)
5. Ehlanzeni District Municipality Roads Master Plan (March 2009)
6. Ehlanzeni District Municipality Spatial Development Framework (June 2010)
7. Ehlanzeni District Municipality (2007). Draft Spatial Development Framework
8. Ehlanzeni District: Mbombela Local Municipality (2011/12). Integrated Development Plan
9. Ehlanzeni District Municipality Local Economic Development Strategy (2009)
10. Ehlanzeni District Municipality Integrated Development Plan (2011/2012)
11. Ehlanzeni District Municipality (2008). Integrated Development Plan. Nelspruit.
12. Ehlanzeni District Municipality Comprehensive Integrated Transport Plan (2008)
13. Ehlanzeni District Municipality Current Public Transport Record (2007)
14. Ehlanzeni District: Mbombela Current Public Transport Record (2006)
15. Ehlanzeni District: Bushbuckridge Local Municipality (2011/12). Draft Integrated Development Plan
16. Ehlanzeni District: Nkomazi Local Municipality (2011/12). Draft Integrated Development Plan. Malelane.
17. Ehlanzeni District: Umjindi Local Municipality (2011/12). Draft Integrated Development Plan. Barberton.
18. Ehlanzeni District: Thaba Chweu Local Municipality (2011/12). Draft Integrated Development Plan.
19. Gert Sibande District Municipality Integrated Development Plan (2012/2013)
20. Gert Sibande District Spatial Development Framework (May 2009)
21. Gert Sibande District Current Public Transport Record (2007/2008)
22. Gert Sibande District Risk Disaster Management Policy Framework (2010)
23. Gert Sibande District Responsible Tourism Sector Plan (2011)
24. Gert Sibande Integrated Rural and Agricultural Development Strategy (March 2012)
25. Gert Sibande District: Mkhondo Dam Nature Reserve Settlement Agreement (undated)
26. Gert Sibande District: Mdala Nature Reserve Settlement Agreement (undated)
27. Intergovernmental Relations Framework Act (Act No. 13 of 2005)
28. Mpumalanga Department of Public Works Roads & Transport Annual Report (2011/2012)
29. MDPWRT: Mpumalanga Freight Transport Plan (2012)
30. MDPWRT: RAMS Study (2011)
31. MDPWRT: Needs Analysis for Mpumalanga Road Network 2010 Report (2010)
32. Mpumalanga Department of Roads and Transport (May 2009)
33. Mpumalanga Provincial Scholar Transport Policy (undated)
34. Mpumalanga Department of Roads & Transport: Updated Provincial Land Transport Framework (2006)
35. Mpumalanga Growth and Development Strategy (2004 to 2014), Office of the Premier (2007)
36. Mpumalanga Provincial Economic Growth and Development Path (2011)
37. Mpumalanga Province: NATMAP (2008)
38. MDPWRT: Road Asset Management System Needs Analysis for the Mpumalanga Road Network 2011: Paved and Unpaved (Inclusive of both Coal and Non-Coal Haul Roads (February 2012)
39. MPWRT: Mpumalanga Business Plan on the Up-scaling of EPWP in the Road Sector 2012/13 (March 2012)
40. Mpumalanga Department of Public Works, Roads and Transport 2012-2013 Operations Plan (May 2012)
41. Mpumalanga Department of Public Works, Roads and Transport Roads Infrastructure Plan 2012/2013 (September 2011)

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42. Mpumalanga Provincial Government (2005). Mpumalanga Integrated Spatial Framework. Nelspruit.
 43. Mpumalanga Road Infrastructure Project List 2012/13 (2012)
 44. National Treasury: Medium Term Strategic Framework (MTSF) 2009 -2014
 45. National Land Transport Act, (Act No. 5 of 2009) (NLTA, 2009)
 46. National Land Transport Strategic Framework (2006-2011)
 47. Nkangala District Tourism Development and Branding Strategy (2008)
 48. Nkangala District Integrated Development Plan (2012/2013)
 49. Nkangala District LED Strategy (2008)
 50. Nkangala District: Transport Corridor Development of eMalaheni and Steve Tshwete Area Study Scope of Work (2012)
 51. Nkangala District: Development of Rank Facility Management Plan for the Nkangala District Municipality Scope of Work (2012)
 52. Nkangala District: Community Accessibility Study by Means of Non-Motorised Transport (2012)
 53. Land Claims Process and Options PowerPoint Presentation (undated)
 54. People and Parks/Land Claims Process and Relationship Building PowerPoint Presentation (2012)
 55. Statistics South Africa (2007). Community Survey. Pretoria.
 56. The Presidency. National Spatial Development Perspective (1996).
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