

# Comprehensive Integrated Transport Plan

# Polokwane Local Municipality 2023-2028



**Prepared for:** Polokwane Local Municipality

### Address:

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# List Of Abbreviations

Abbreviation	Description	
ABT	Account Based Ticketing	
ACSA Airports Company South Africa		
AFC	Automated Fare Collection	
AM	Ante Merīdiem, meaning is "before noon"	
Autopax Autopax Passenger Services (Pty) Ltd.		
BMX Bicycle Motor Cross		
BOP	Bus Operation Plan	
BRT	Bus Rapid Transport	
CA	Contracting Authority	
CAF	Contracting Authority function	
CBD	Central Business District	
CBTA	Cross Border Transport Agency	
CDM	Capricorn District Municipality	
CITP	Comprehensive Integrated Transport Plan	
	Polokwane Local Municipality	
СОТО	Committee of Transport Officials	
CPTR	Current Public Transport Record	
CRR	Capital Replacement Reserve	
DC	Development Corridors	
DORA   The Division of Revenue Act No. 4 of 2020		
EGDP	Economic Growth and Development Plan	
FAR Floor Area Ratio		
FDA Functional Development Areas		
FELLDTA	Federated Local and Long-Distance Taxi Association	
GAAL Gateway Airports Authority Limited		
GNT	Great North Transport	
HOV	High-Occupancy Vehicle	
ΙΑΤΑ	International Air Transport Association	
ICAO	International Civil Aviation Organization	
IDP	Integrated Development Plan	
IFM Integrated Fare Management		
IPC Intermodal Planning Committee		
IRPTN	Integrated Rapid Public Transport Networks	
IRPTS	Integrated Rapid Public Transit System	
IRT	Integrated Rapid Transport	
ITP Integrated Transport Plan		
IUDF Integrated Urban Development Framework		
IUDG	Integrated Urban Development Grant	



Abbreviation	Abbreviation Description	
KFW German state-owned investment and development bank,		
Frankfurt		
LDoPW Limpopo Province Department of Public Works		
LDTCS Limpopo Province Department of Transport and Communi		
LPRE Limpopo Provincial Regulatory Entity		
LSDFP Local Spatial Development Framework Plan		
LSM	Living Standards Measure	
LUMS	Development of the Land Use Management System	
LPTF	Limpopo Provincial Land Transport Framework	
MBT	Minibus Taxi	
MEC	Member of the Executive Committee	
MFMA	Municipal Finance Management Act of 2003	
MIG	Municipal Infrastructure Grant	
MLTF	Municipal Land Transport Fund	
MSA	Municipal Systems Act, 32 of 2000	
MTREF	Medium Term Revenue and Expenditure Framework	
NATMAP	The National Transport Master Plan, 2050	
NDoT	National Department of Transport	
NDPG	Neighbourhood Development Partnership Grant	
NFLS National Freight Logistics Strategy		
NHTS	National Household Travel Survey	
NLTA National Land Transport Act 2009, (Act No. 5 of 2009		
NLTSF National Land Transport Strategic Framework 2007		
NMT Non-motorised Transport		
NRMF National Road Maintenance Fund		
OLAS Operating Licences Administration System		
OLP Operating License Plan		
OLS Operating Licensing Strategy		
PA	Planning Regular Authority	
PFMA Public Finance Municipal Act		
PIA Polokwane International Airport		
PIPTS	Polokwane Integrated Public Transport System	
PIRPTS	Polokwane Integrated Rapid Public Transport System	
PLM	Polokwane Local Municipality	
PLTF Provincial Land Transport Framework		
PM	Post Merīdiem, meaning is "after midday"	
PMA	Polokwane Municipality Airport	
PMS	Pavement Management System	
PPP	Public-Private Partnerships	
PRASA	Passenger Rail Agency of South Africa	
PRE	Planning Regular Entity	
PRMG Provincial Road Maintenance Grant		



Abbreviation Description		
PTMS	Public Transport Management System	
PTNG Public Transport Network Grant		
PTO Public Transport Operators		
PTOG Public Transport Operations Grant		
PTP Public Transport Plan		
PWSCN	The term Passenger with Special Categories of Need	
RAF	Road Accident Fund	
RAL	Roads Agency Limpopo	
RAT PLAN	Rationalisation Plan	
RFS	Road Freight Strategy for South Africa, 2011	
RMP	Road Master Plan	
RNMS	Road Network Management Strategy	
RSR	Railway Safety Regulator	
RTMC	Road Traffic Management Corporation	
RTQS	Road Transport Quality System	
SAA	South African Airways	
SACAA	South African Civil Aviation Authority	
SADC	Southern African Development Community	
SALGA South African Local Government Association		
SANRAL South Africa National Roads Agency Limited SOC LTD		
SANTACO South African National Taxi Council		
SCRTC SANTACO Capricorn Regional Taxi Council		
SDBIP	Service Delivery and Budget Implementation Plan	
SDF Spatial Development Plan		
SMME	SMME Small Medium and Micro Enterprises	
SNP Special Needs Passengers		
SPLUMA	Spatial Planning and Land Use Management Act, 16 of 2013	
ТА	Taxi Association	
TCC	Traffic Control Centre	
TCH	Transaction Clearing House	
TDM Transportation Demand Management		
TFR Transnet Freight Rail		
TIS Transport Infrastructure Strategy		
TOD	Transit Orientated Development	
TOP	Technical Operational Plan	
TR	Transport Records	
TSM	Transport System Management	
UDAP	Universal Design Access Plan	
URMP	Urban Realm and Movement Plan for Polokwane Local Municipality	
VOC Vehicle Operating Company		
WIM Weigh-In-Motion		



# List Of Hyperlinks

Link	Description	
<u>A-1</u>	Economic Growth Research Report	
<u>A-2</u>	Economic Growth Development Plan	
<u>A-3</u>	Economic Growth Implementation Plan	
<u>B-1</u>	Polokwane Spatial Development Framework 2010	
<u>B-2.1</u>	Polokwane Spatial Development Framework 2021, Inception Report	
<u>B-2.2</u>	Polokwane Spatial Development Framework 2021, Policy Synthesis	
<u>B-2.3</u>	Polokwane Spatial Development Framework 2021, Status Quo	
<u>C</u>	Polokwane Urban Renewal Strategy and CBD Development Plan	
D-1Technical Operational Plan, 2018D-2.1Technical Operational Plan, 2020		
		<u>D-2.2</u>
<u>D-3</u>	Bus Operational Plan, 2020	
D-4 Polokwane Municipality Leeto La Polokwane Operational By-law – Fare Struct		
	Phase 1(A) as a Flagship Project for Polokwane 7 April 2021	
<u>D-5</u>	Polokwane Municipality Leeto La Polokwane Operational By-law, 7 April 2021	
<u>E-1</u>	Polokwane Road Master Plan 2013	
<u>E-2</u>	Declaration Amendment of National Road N1 Section 27, 23 March 2018	
<u>E-3</u>	Leeto La Polokwane Universal Design Access Plan (UDAP), July 2020	
<u>E-4</u>	Polokwane Municipality Non-motorised Master Plan NMT	
<u>E-5</u>	5 Polokwane Municipality Truck Inn Facility	



#### EXECUTIVE SUMMARY

This Comprehensive Integrated Transport Plan has been prepared for Polokwane Local Municipality in terms of Section 36(1) of the National Land Transport Act 2009, (Act No. 5 of 2009) (NLTA).

The National Land Transport Act No. 5 of 2009 requires all planning authorities to prepare Transport Plans in their jurisdiction for the period of 5 years and must be updated annually. The CITP must be submitted to the Limpopo Department of Transport and Community Safety (LDTCS) Member of the Executive Committee (MEC) for approval. The planning authority (Polokwane Municipality) must also submit its CITP to the National Minister of Transport for approval of the commuter rail and civil aviation component.

#### The content of the Polokwane Municipality CITP is based on:

"MINIMUM REQUIREMENTS FOR THE PREPARATION OF INTEGRATED TRANSPORT PLANS, published on 28 November 2014 by the Minister of Transport, in consultation with the MECs, hereby in terms of section 36(1) and (2) of the National Land Transport Act, 2009 (Act No. 5 of 2009)".

#### a) INTRODUCTION (CHAPTER 1)

The CITP covers the Polokwane Municipality Area.

It is the economic hub of Limpopo Province and is strategically located to be the administrative and economic capital of the province. It is situated at the crossroads of important national and provincial roads which radiate out into the hinterland providing good access to other towns. There is a definite opportunity for Polokwane to become a logistics hub and freight interchange within the region, also given its proximity to the neighbouring countries of Botswana, Zimbabwe, Mozambique and Swaziland. Three of the four Spatial Development Initiatives pass through Polokwane, which repeat the city's strategic location and its importance as far as the economy of the province is concerned.

Polokwane Municipality is made up of 45 wards and 7 clusters of settlements:

- i) City
- ii) Seshego
- iii) Mankweng
- iv) Sebayeng/Dikgale
- v) Molepo/Chuene/Maja
- vi) Moletjie
- vii) Aganang

<u>Note:</u> The urban edge needs to be refined as part of the 2010 PLM-SDF, that is in the process to be updated.



The various input items provided for the PLM-CITP will be relevant for the period from July 2023 to June 2028.

Section 15 of the NLTA provides that the City must establish an Intermodal Planning Committee (IPC) consisting of prescribed officials and representatives of operators. The functions of the committee are to co-ordinate public transport between the modes. The relevant committee was, however, not in place when this CITP was prepared.

The PLM-CITP preparation included consultation and participation of interested and affected parties required for the preparation of the IDP in terms of Chapter 4 and Section 29(1)(b) of the Local Government: Municipal Systems Act 2000 (Act No 32 of 2000).

The PLM-CITP is a specific sector plan that feeds into the Integrated Development Plan and ultimately form part of the Provincial Land Transport Framework.

#### b) TRANSPORT VISION AND OBJECTIVES (CHAPTER 2)

The aim of integrated transport planning and spatial planning is to identify existing resources and apply relevant measures and guidelines to promote access to resources and infrastructure to all spheres of the community to establish an integrated environment.

Resources such as public transport facilities and infrastructure of economic activity should be upgraded and made accessible to the benefit of the larger community to stimulate economic growth and economic development.

The Polokwane Local Municipality CITP 2023 to 2028 vision is:

"To provide a safe, reliable, efficient, effective and integrated transport system for both passengers and freight that will enhance the quality of life for all".

#### The objectives of the PLM-CITP are the following:

- i) To provide for and manage future transport demand.
- ii) To provide a more balanced integrated transport system.
- iii) The promotion of public transport, integrated with other modes of transport.
- iv) To relate to and be complemented by the Spatial Development Plan (SDP).
- v) To support economic development strategies and long-term environmental management strategies.

Key strategies were identified for the following objectives of the PLM-CITP are the following:

- i) Maintain the transport system.
- ii) Reduce public transport service backlogs.
- iii) Safeguard and improve the utilisation of resources.



- iv) Expansion of the transport system.
- v) Reduce infrastructure backlog.
- vi) Safety.
- vii) Create job opportunities.

#### c) SUMMARY OF THE TRANSPORT REGISTER (CHAPTER 3)

This chapter spells out the status quo of transport in PLM. It includes the entire transport system taking into consideration all local modes of transport such as rail, rapid public transport system, bus, mini-taxi and metered taxi transport. The following subsections are relevant:

- i) Demographic and socio-economic.
- ii) General overview of the transportation system.
- iii) Description of the regular daily transportation system.
- iv) Description of other public transport services and modes of transport.
- v) Description of institutional and organisational make-up of public transport industry.
- vi) Roads and traffic.
- vii) Freight transport.
- viii) Financial information.

#### d) SPATIAL DEVELOPMENT FRAMEWORK (CHAPTER 4)

IDPs encapsulate all aspects of development planning and service delivery in municipalities. The SDF forms an essential component of the PLM-IDP, reflecting geographically the municipality's strategy for delivering infrastructure and services sustainably and cost-effectively.

Transport and travel are essential and costly components of life for individuals, households, businesses and the government, and so transport efficiency is an important consideration in the development and updating of the SDF. The SDF is aligned with the PLM-CITP area, and in turn, the SDF is taken up in the PLM-CITP, clearly showing existing and intended transport corridors and nodes, and areas earmarked for mixed land use and densification in support of public transport.

The SDF included in the PLM-CITP gives explicit effect to section 38 of the NLTA, which empowers the planning authority to manage any change or intensification of land use which deviates from that specified in the SDF.

In terms of Spatial Planning and Land Use Management Act 16 of 2013 (SPLUMA), it is required to regularly review and update the Municipalities SDFs. *The* reviewing process of the 2010 PLM-SDF *was, however, not completed and adopted by PLM, when the 2023/2028 PLM-CITP was concluded during June 2023. Chapter 4 of the PLM-CITP was, however, updated with the available approved information* as part of the reviewing process of the 2010



PLM-SDF, dated January 2021. *Chapter 4 of the PLM-CITP should therefore be reviewed as soon as practically possible after* the reviewing process of the 2010 PLM-SDF *will be completed.* 

The PLM jurisdictional area was smaller as compared to its current status when the last PLM-SDF was conducted in 2010. A portion of the "de-established Aganang Local Municipal" has been incorporated as part of PLM since 2016. The portion allocated to PLM was located north-west of and abutting to the then PLM border. The "de-established Aganang Local Municipality" was effectively divided into 2 parts and the southern component was incorporated into PLM.

The reviewed PLM-CITP was updated, with specific reference to Chapter 4 of the PLM-CITP, with the available approved information as part of the reviewing process of the 2010 PLM-SDF, dated January 2021.

The fundamental purposes which the SDF process is intended to achieve are as follows:

- i) Represent the spatial development vision statement of the PLM through integration and trade-off of all relevant sector policies and plans.
- ii) Guide the PLM in taking decisions or exercising any discretion relating to spatial planning and land use management systems, and to address historic spatial imbalances in development.
- iii) Provide information to the public and private sector in relation to investment areas, identify long term risks of particular spatial patterns of growth and development and provide mitigation measures.
- iv) Provide direction for strategic developments, infrastructure investment, taking cognisance of any environmental management instrument.

The SDF focuses not only on the transport system but also on the land use patterns that generate the demand for transport as contemplated in Section 25(e) of the Municipal Systems Act (Act 32, 2000).

In terms of Section 21 of the SPLUMA Act 16, the content of municipal SDFs must, amongst others, give effect to the development principles and applicable norms and standards set out in Chapter 2 of the Act.

The requirements are underpinned by development principles set out in SPLUMA and include:

- i) Spatial justice.
- ii) Spatial sustainability.
- iii) Efficiency.
- iv) Resilience.
- v) Good administration.



Integrated transport and land use planning strategies need to achieve transport provision that includes the urban perspective by means of:

- i) Concentrating residential development along public transport corridors.
- ii) The current density policy of the PLM should be implemented.
- iii) Creating a high density of trip-attracting activities in central areas well served by public transport.
- iv) Create new developments that are accessible to public transport from a wider regional perspective for rail, road and air infrastructure.
- v) Improvement and development of public transport amenities e.g., taxi- bus and railway facilities.
- vi) Accommodate and provide road freight transport infrastructure and amenities.

#### e) TRANSPORT NEEDS ASSESSMENT (CHAPTER 5)

This chapter determines and describes the transport-related issues, problems and needs of the municipality and its residents based on the following:

- i) Assessment of issues, problems, trends and performance standards revealed by the Transport Register.
- ii) Processes of public participation and stakeholder feedback aimed at identifying the needs of the community present and future transport demand estimation, determined by extrapolation from current trends, modelling, and/or other estimations (see the Guidelines in this regard).
- iii) The upgrading and maintenance needs of all roads and public transport facilities for which the planning authority is responsible must be identified.
- iv) The identified need for new roads and facilities.

The transport needs assessment is addressed by means of the following subsections as part of this chapter of the report:

- i) Modal split.
- ii) Public transport
- iii) Measures to promote public transport.
- iv) The needs of learners and persons with special needs.
- v) Non-motorised transport.
- vi) Private transport.
- vii) Travel demand estimation.
- viii) Transport and technology.



The investigation into the transport needs assessment for Polokwane has had the following important findings:

- <u>Walking</u>: Walking (29.8%) is the most important mode of transport for work-related trips in PLM. This finding underlines the importance of proper NMT planning in PLM. The dominance of this mode is highlighted when the educational trips are considered. Walking accounts for 86,8% of school trips in Polokwane. Chapter 10 addresses NMT strategies for PLM.
- Public Transport: When combining taxis and bus trips, 40.6% of work-related trips is public transport trips. Public transport received significant attention with the current IRPTS projects done and what is still underway. Chapter 6 will provide a more detailed discussion on the public transport operations strategy.
- iii) <u>Integration of NMT and PT Planning</u>: The integration between the said modes is required. **Chapters 6** and **10** will provide more detail in this regard.
- iv) <u>Hybrid/Electric Bus Technology</u>: This is a relatively new technology for South Africa and the initial start-up cost is very high although this technology provides an opportunity for future PT interventions.

#### f) PUBLIC TRANSPORT PLAN (CHAPTER 6)

The PLM-PTP is based on all relevant data and information available, including the TR, the Subsidy Information System, the Operating Licensing Administration System (OLAS), business plans submitted to DoT in support of applications for PITS grant funding and other funding, and existing contract documents. Based on the STAATSKOERANT, 28 NOVEMBER 2014 No. 38256.

The focus of the PLM-PTP is to integrate the public transport network, services and modes. The plan provides the basis for rationalising and restructuring the public transport system, designing contracts for contracted services and awarding operating licences to noncontracted services.

The PTP encompasses and incorporates plans referred to in the 2007 Public Transport Strategy and Action Plan as "Integrated Rapid Public Transport Network Plans" (IRPTNs). The refer-to plan for the high-quality networks of rapid bus rapid transit (BRT) corridors was prepared by Polokwane Municipality in 2014 by means of implementing "catalytic" projects.

PLM has prepared operational and business plans which were submitted annually to the DoT and National Treasury seeking funding for the "IRPTN", based on the required guidelines on the format and contents of these submissions been circulated to the relevant municipalities. The public transport network plan that was developed is incorporated in the PTP and synchronised with the overall CITP process.



An Operating License Plan (OLP) was prepared as a separate document as part of this Public Transport Plan.

The OLP guides the National Public Transport Regulator (NPTR) and the relevant regulating entities in the award of operating licences for contracted and non-contracted services within the jurisdictional and functional area, in concurrency with affected municipalities.

Based on the requirements of the NLTA no. 5 of 2009 and the related NLTA Regulations, the PLM sets conditions for the granting of OLs by the NPTR and regulating entities. These conditions consist of general conditions applicable to all transactions as well as conditions specific to public transport services. These services include minibus taxis services, private bus services, learner services, staff services, long-distance public transport services, metered taxis services, charter services, tourist services, special events and major special events, courtesy services and Tuk-tuk services on which public transport services applications for OLs are transacted. When the city rejects an application, the granting authority must comply.

In order to enforce and ensure compliance with the conditions on the OL law enforcement strategies, including institutional arrangements, the interrelationship with traffic law enforcement, the setting of targets and measuring performance remain ongoing.

The OLP forms part of the Public Transport Plan (PTP) and the 2023/2024 PLM-CITP. On approval of the CITP and in terms of Section 36 (6) of the NLTA, the planning authority will make its integrated transport plan available to the NPTR and the LPRE and make recommendations to them relevant to applications for new operating licences in the prescribed manner.

Buses and taxis need to be incorporated as part of Polokwane Municipality Integrated Rapid Public Transport System (IRPTS).

The CDM recently completed the CDM-IPTN in collaboration with the NDOT. It is important that all future network designs as part of the PIRPTS should be integrated with the CDM-IPTN and vice versa.

A model of providing scheduled taxi services is contained as part of the guidelines provided as per the document prepared for Taxi Operating Companies (TOC) planning and preparations processes as part of the CITP. The taxi industry needs to be consulted about the last-mentioned and it is currently only a concept document. The OLP contains the following Chapters:

- i) Introduction
- ii) Operating Licenses
- iii) Operating Licences for non-regular modes of transport.
- iv) Conditions for evaluation of operating licences.



- v) Operating Licences administration system.
- vi) Enforcement strategies.
- vii) Conclusion

The PLM Assistant Manager: Public Transport Regulation and Compliance is a dedicated position to administrate and facilitate the processes and activities between PLM, the Operators and LPRE or NPTR.

#### g) TRANSPORT INFRASTRUCTURE STRATEGY (CHAPTER 7)

Polokwane Local Municipality's (PLM) Transport Infrastructure Strategy (TIS) deals with the development and maintenance of all transport infrastructure, including the following:

- i) Major roads.
- ii) Public Transport (PT) facilities.
- iii) Bus Rapid Transport (BRT) networks.
- iv) Dedicated lanes for PT.
- v) Depots.
- vi) Freight corridor measures.
- vii) Non-motorised Transport (NMT) infrastructure.
- viii) Rail infrastructure.

**Table EX-1** below shows all new transport infrastructure projects planned as per 2023/2024 PLM-IDP. **Table EX-2** below shows all existing infrastructure projects planned as per 2023/2024 PLM-IDP.



TABLE EX-1: 2023/2024 PLM-IDP NEW/UPGRADED TRANSPORT INFRASTRUCTURE PLANNING			
Name of Proposal, Project or	Summary of Proposal, Project or Programme	Financial Implications over Three Years	
Programme		Total CAPEX	Funding Source(s)
Public Safety	Procurement of Buses, Office Cleaning Equipment and Alcohol Testers, Upgrading of City and Traffic License Centre, Installation of Traffic Lights CBD	R14 696 498	CRR
	Upgrading of Stormwater in Various Areas	R60 378 994	
Transport Services – Roads &	Road Upgrading and Construction	R313 287 847	
Stormwater	Non-motorised Traffic Construction	R5 522 300	
	Bridge Construction	R8 695 652	
Transport Operations – Integrated	Public Transport Facility Upgrade	R86 317 469	PTNG
(IPRTS) – Transport and Facilities	Bus Depot Construction and Upgrades	R127 963 127	
	Total	R616 861 887	



TABLE EX-2: 2023/2024 PLM-IDP EXISTING INFRASTRUCTURE PLANNING				
Name of Proposal, Project or Programme	Summary of Proposal Project or Programme	Financial Implications over Three Years		
	Summary of Proposal, Project of Programme	Total CAPEX	Funding Source(s)	
Corporate and Shared Services	Construction and Upgrading of Mankweng (Traffic and Licensing Testing Centre) and Ladanna (Fire and Traffic Training Centre, Logistics Offices, Control Centre)	R4 100 337	CRR	
Transport Services – Roads & Stormwater	Building Construction, Greening and Boreholes	R7 565 218		
	Rehabilitation of Roads	R33 482 591	CRR, NDPG & IUDG	
	Traffic Lights and Signage	R2 028 075		
Transport Operations – Integrated Rapid Public Transport System (IRPTS) – Transport and Facilities	Upgrade, Construction and Rehabilitation of Roads	R114 347 826	PTNG	
	Environmental and OHS Management	R12 429 985	FING	
	Total	R173 954 032		



The following are relevant:

- i) PLM will have to carefully balance new transport infrastructure projects with the maintenance of existing infrastructure.
- ii) The lack of an RNMS for PLM has resulted in the deterioration of many roads and other transport infrastructure, some of which are beyond repair.
- iii) The RNMS thus will be a critical programme for PLM, without which a dwindling transport budget for new infrastructure will continue.
- iv) The Committee of Transport Officials (COTO) has developed technical manuals, norms and guidelines to guide planning, design, construction and management of roads and infrastructure related to roads. Road Authorities should comply to these manuals. The manual can be downloaded from the SANRAL website for free (https://www.nra.co.za/manuals-policies-technical-specification. The COTO documents have full legal standing.

#### h) TRAVEL DEMAND MANAGEMENT (CHAPTER 8)

The objective of travel demand management (TDM) is to manage congestion by reducing the demand for car use in peak periods, especially single-occupancy car use. TDM also aims to bring about environmental improvements through reduced car use. TDM measures are primarily aimed at changing the behaviour of the users of the transport system.

The TDM strategy set out appropriate measures aimed at managing travel demand. These include measures such as high-occupancy vehicle lanes, park and ride facilities, and employer-based car trip reduction programmes, such as telecommuting, teleconferencing, lift-clubs (ridesharing), financial incentives for public transport use in lieu of free parking for employees, etc. Other measures discouraging car use such as tolls, levies and parking charges or limitations on parking availability may be considered.

The key components of Travel Demand Management (TDM) strategies include the following components:

- i) Intelligent Transport Systems.
- ii) Reduction of vehicle trips.
- iii) Promotion of public transport.
- iv) Congestion reduction.

The aim of **Chapter 8** this PLM CITP is restricted to identify TDM measures that can be developed further and implemented, particularly in areas within the municipality where they are most needed. The chapter does not attempt to develop a comprehensive TDM system for Polokwane Local Municipality which would require a significant investment of funds and time.



It is important that higher income groups should be introduced to Leeto LA Polokwane in order to increase the ridership of the system.

Specific TDM measures for PLM include:

- i) TDM measures for public transport.
- ii) TDM measures for transport infrastructure maintenance.
- iii) TDM measures in low-income residential areas.

Although public transport aspects are addressed in Chapter 6 of this CITP, it is also necessary to emphasise which TDM measures can be introduced to improve public transport utilisation in Polokwane, namely:

- i) Development of public transport facilities along the following corridors:
  - ✓ Seshego/Moletjie environs to Polokwane.
  - ✓ Mankweng environs to Polokwane.
  - ✓ Lebowakgomo environs to Polokwane as part of the Dilokong Corridor.
- ii) Develop intermodal public transport facilities at the strategic nodal points.
- iii) Establish a transport hub in the city of Polokwane.
- iv) Further develop a public transport distribution system in the city of Polokwane.
- v) Implement low capital improvements at public transport ranks (e.g. lighting, street furniture, passenger information, etc.).

The above-mentioned public transport TDM measures should incorporate Transit Orientated Development where practical possible. The Institute for Transit and Development Policy defines Transit Orientated Development (TOD), as integrating urban places designed to bring people, activities, buildings, and public space together, with easy walking and cycling connection between them and near-excellent transit service to the rest of the city. It means inclusive access for all to local and citywide opportunities and resources by the most efficient and healthful combination of mobility modes, at the lowest financial and environmental cost, and with the highest resilience to disruptive events. Inclusive TOD is a necessary foundation for long-term sustainability, equity, shared prosperity, and civil peace in cities.

#### i) FREIGHT LOGISTICS STRATEGY (CHAPTER 9)

The freight logistic strategy addresses the following aspects:

- i) Legislative and policy requirements.
- ii) Situational analysis of freight aspects.
- iii) Polokwane freight profile.
- iv) Freight vehicle management and overload control (logistics strategies.)



- v) Dangerous goods movement.
- vi) Conclusion.

The freight section of the 2021 to 2026 PLM-IDP can be summarised into the four objectives:

- Developing Polokwane as a logistics hub this will take advantage of the municipality's positioning to facilitate trade within the province and between South Africa and the neighbouring SADC countries.
- ii) Developing a freight intermodal this will support the municipal's objective as a logistic hub by facilitating modal integration between air and rail long-distance freight and road freight for short-distance distribution.
- iii) Growing rail freight capacity and developing air freight capacity through the Polokwane airport – this will help reduce the stress on road infrastructure and help support the municipality's agricultural sector which produces time-sensitive commodities.
- iv) Construction of a truck inn this will provide a dedicated resting area for drivers and help limit damage to the city's public service infrastructure.

Freight Vehicle Management and Overload Control for Polokwane contains the following:

- i) Policies.
- ii) Overload Control Strategy.
- iii) Static weighbridges.
- iv) Screening points.
- v) Checkpoints.

The Road Freight Strategy for South Africa, undertaken by the NDoT in 2011, deals extensively with overload control.

One of the important findings was that the development of transport corridors could be made more effective if planning and budgeting for major projects were carried out under the auspices of the same authority. The report recommends that planning and execution of road maintenance should be based on priorities co-ordinated with industry needs rather than the capacities of provincial and local budgets.

The proposed solution is to reorganise the responsibility for roads as follows:

- i) Expand SANRAL's road network, enabling it to manage all main freight routes, including those currently in the secondary and tertiary road categories where there is inadequate provincial or local capacity.
- ii) Give provinces greater capacity to manage roads, mainly by reclassifying to their authority the major roads currently falling under municipalities.
- iii) Municipalities should be managing only the local and urban roads after the process of reclassification and reassignment of resources.



Planning of the regular enforcement activities would take place on a provincial level. The overload control inspectorate will also be the custodian of a national overload enforcement database. The overload control inspectorate should be constituted under the RTMC.

Based on the above, the following aspects require further investigation:

- i) Development of intermodal freight logistics hub at PIA.
- ii) The development of the truck inn/s in PLM.
- iii) Implementation of an overload control strategy for PLM.
- iv) Development of a dangerous goods movement (Hazmat) strategy for PLM.

#### j) NON-MOTORISED TRANSPORT (NMT) PLANNING (CHAPTER 10)

This chapter is a critical element of the 2023/2028 PLM-CITP because a high percentage of the PLM population use NMT. It is well-documented that at least 87% of PLM residents walk to school and 30% walk to work. Non-motorised Transport (NMT) is an essential mode of transportation in PLM-NMT and also serve as a critical feeder to public transport modes. NMT planning is governed by the National Land Transport Act (NLTA) of 2009, specifically Section 11, which directs the municipal sphere of government to, amongst others, develop appropriate methods of transport that cater for the broader community in a sustainable and environmentally friendly manner.

The 2014 PLM-NMT Master Plan identified six elements that frame the overall problem statement that beleaguer the city of Polokwane. These are as follows:

- i) **Element 1,** Socio-economic upliftment.
- ii) **Element 2,** Enhancing accessibility.
- iii) **Element 3,** Ensuring the protection of the environment.
- iv) Element 4, Promoting safer living environments.
- v) **Element 5,** Promotion of integration.
- vi) **Element 6,** Enhancing the quality of life.

Measures were identified for the following objectives to promote PLM-NMT:

- i) Safety
- ii) Continuity
- iii) Comfort
- iv) Attractiveness
- v) Directness

The following key points should be noted concerning the PLM-NMT:

- i) PLM remains significantly dependent on NMT facilities.
- ii) At least 70% of trips undertaken by PLM residents are of the NMT variety.



- iii) Only 0.3% of PLM residents use bicycles for travel.
- iv) The 2013 PLM-CITP and 2014 PLM-NMT Master Plan made extensive recommendations and identified priority projects for NMT. Chapter 10 provides a summary of the status of the projects.
- v) Limited facilities and/or institutions have any form of NMT provision, and these are almost exclusively in the CBD of PLM.
- vi) Poverty remains rife in PLM.
- vii) The environment remains a concern due to the high number of motorised transport users and the pollution resulting thereof.
- viii) The safety of NMT users on the existing few and rudimentary NMT facilities is a challenge.
- ix) Integration of NMT and public transport facilities within PLM is improved.

The following are recommended:

- i) A continuous review and update of the 2014 NMT Master Plan should be prioritised.
- ii) The 2023/2024 PLM-IDP should be aligned with the 2023/2028 PLM-CITP and the MTREF updated to reflect the prioritised projects summarised in this document and informed by the 2014 NMT Master Plan.
- iii) The Shova Kalula bicycle initiative should be championed by PLM and funding sourced from the various government agencies promoting this programme so that the roll-out of bicycles, especially to learners, can commence.
- iv) The IRPTS and related infrastructure, planning and the NMT should continue to be aligned.
- v) The locality and relevance of the NMT Park should be reviewed.
- vi) Campaigns should be run encouraging the users of motorised vehicles, as well as nonmotorised vehicles, to use bicycles more.
- vii) Campaigns should be run encouraging the users of motorised vehicles, to use public transport rather than their own vehicles.

PLM is beset with many challenges which include unemployment, socio-economic issues and the effects of Covid-19. NMT should not be ignored or treated nonchalantly; strong and well-functioning and well-being people and communities are the building blocks for a sustainable society. Effective NMT planning will go a long way in assisting PLM residents and communities to function more efficiently, sustainably and happily.

#### k) FUNDING STRATEGY AND SUMMARY OF PROPOSALS AND PROGRAMMES (CHAPTER 11)

This chapter contains the following:

- i) Funding strategy and summarising sources of income and funding constraints.
- ii) Summary of all the proposals, projects and programmes for this CITP.



- iii) Prioritisation of these proposals, projects and programmes and the allocation of funds to them, depending on budgetary constraints.
- iv) Description of the budget and programme for the five year period of this CITP.

PLM has various transport projects, some of which are already in their implementation phases, for both capital and operational initiatives. The following funding sources are relevant:

- i) Own revenue as per PLM Integrated Development Plan (IDP).
- ii) South Africa National Roads Agency (SANRAL).
- iii) Roads Agency Limpopo (RAL).
- iv) Other government departments, parastatals and institutions.

PLM receives a share of DORA which it then manages in terms of the Municipal Finance Management Act of 2003 (MFMA). The transport sector's share of this funding is further administered by the Municipal Land Transport Fund (MLTF).

The MLTF is a fund that has been established in terms of Section 27 (1) of the National Land Transport Act of 2009 (NLTA).

Sections 27 and 28 of the NLTA require PLM to "receive, raise, invest and spend money" through an MLTF for transport-related functions. Section 27 of the NLTA provides that PLM must administer the MLTF and use it to defray the cost of the functions of the Municipality in terms of the NLTA or its CITP. The MLTF must also be used to cover any other expenditure that will promote the objectives of the NLTA in the municipality's area.

The sources of DORA funding for transport that PLM has access to currently are:

- i) Integrated Urban Development Grant (IUDG).
- ii) Public Transport Network Grant (PTNG).
- iii) Neighbourhood Development Partnership Grant (NDPG).

PLM also allocates funding from non-DORA sources, such as Capital Replacement Reserve (CRR). The current approved detailed operating costs for the transport sector from PLMs approved MTREF budget, as per 2023/2024 approved IDP, are shown below in **Table Ex-3**.





TABLE EX-3: 2023/2024 PLM IDP MTREF SUMMARY RELATED TO TRANSPORT SECTOR						
Financial	al Sector			Total IDP Budget over 3	% of Total IDP	
Year				Years	Budget	
	Corporate	Transport	Roads and	Public		
	Services	Services	Stormwater	Safety		
2023/2024	-	R114,329,685	R155,511,230	R5,061,960	R797,238,843	34%
2024/2025	R2,459,276	R115,940,177	R113,685,038	R5,376,891	R708,494,827	34%
2025/2026	R1,641,061	R110,788,545	R161,764,409	R4,257,647	R760,270,789	37%
TOTAL	R4,100,337	R341,058,407	R430,960,677	R14,696,498	R2,266,004,459	35%

#### The following can be noted from Table Ex-3:

- a) The amounts exclude 15 % VAT, although the final summary of the 2023/2024 PLM-IDP includes 15% VAT.
- b) The percentage of 2023/24 PLM-IDP budget allocated to the Transport Sector, is almost 20% less compared to the 2021/2022 PLM-IDP

**Table Ex-4** below shows how these sources of funding will be applied to cover the total cost of each proposal, project and programme. **Table Ex-4** also summarises the proposals, projects and programmes from the IDP for this CITP, together with the financial implications of each, including subsidies and operational costs.



TABLE EX-4: PLM IDP DETAILED TRANSPORT BUDGET ALLOCATIONS				
Name of Proposal, Project or	Summary of Proposal Project or Programme	Financial Implications Over Three Years		
Programme	Summary of Proposal, Project of Programme	Total CAPEX	Funding Source(s)	
	Construction and Upgrading of Mankweng (Traffic and Licensing			
Corporate and Shared Services	Testing Centre) and Ladanna (Fire and Traffic Training Centre,	R4 100 337	CRR	
	Logistics Offices, Control Centre)			
	Procurement of Buses, Office Cleaning Equipment and Alcohol			
Public Safety	Testers, Upgrading of City and Traffic License Centre,	R14 696 498	CRR	
	Installation of Traffic Lights CBD			
	Construction and Upgrading of Stormwater in various areas	R60 378 994		
	Road Upgrading and Construction	R313 287 847		
Transmert Comisson Doods and	Building Construction, Greening and Boreholes	R7 565 218		
Stormwater	Rehabilitation of Roads	R33 482 591	CRR, NDPG & IUDG	
Stoffiwater	Traffic Lights and Signage	R2 028 075		
	Non-motorised Traffic Construction	R5 522 300		
	Bridge Construction	R8 695 652		
-	Public Transport Facility Upgrade	R86 317 469		
Transport Operations – Integrated Rapid Public Transport System (IRPTS) – Transport and Facilities	Upgrading, Construction and Rehabilitation of Roads	R114 347 826	DTNO	
	Bus Depot Construction and Upgrades	R127 963 127	PING	
	Environmental and OHS Management	R12 429 985		
	TOTAL	R790 815 919	CRR, NDPG, IUDG & PTNG	



TABLE EX-5: MTREF FUNDING ALLOCATION PER GRANT SOURCE			
Name of Proposal, Project or Programme	Budget 2023/24 (R)	Budget 2024/25 (R)	Budget 2025/26 (R)
PTNG	R114 329 685	R115 940 177	R110 788 545
NDPG	R27 972 173	R17 391 304	R17 391 304
IUDG	R111 587 569	R85 181 644	R112 593 638
CRR	R21 013 448	R18 948 257	R37 678 175
TOTAL	R274 902 875	R237 461 382	R278 451 662
The total amount is R790 815 91			nt is R790 815 919

Table Ex-5 below shows the funds allocation per grant source.

The following funding for public transport from PLM directly is relevant:

Based on the Provinsiale Koerant, Buitengewoon 7 April 2021, "Premier's Notices 1 of 2021, POLOKWANE MUNICIPALITY LEETO LA POLOKWANE OPERATIONAL BY-LAW FARE STRUCTURE FOR PHASE 1(A) AS A FLAGSHIP PROJECT FOR POLOKWANE. Notice is given that the Municipal Manager of Polokwane Local Municipality hereby publishes, in terms of the provisions of Section 4(1)(c) & 21 of the Local Government: Municipal Systems Act 32 of 2000, read with Section 152 of the Constitution of the Republic of South Africa, 1996, the Fare Structure under the By-law set forth hereunder, which shall take effect on the date of publication of this notice.

The Fare Structure was recently reviewed as part of the 2023/2024 PLM-IDP. The following rates were adopted:

- a) Seshego R13.00 per passenger.
- b) Westernburg R8.00 per passenger.
- c) Flora Park R8.00 per passenger.

That Council approved the initial issuance of the Leeto La Polokwane Traveller's Card for R45.00 and a charge of R60.00 for re-issuance of the Leeto La Polokwane Traveller's Card".

In addition, PLM have budgeted for the Esilux (Pty) Ltd (Vehicle Operating Company) an amount of R2.2m per month which amounts to R26.4m annually to provide transport service for Leeto LA Polokwane Phase 1a. As per the PLM IDP of 2023 (Chapter 11.24.5), this budget will be sourced from "Own Revenue" and "Equitable Share" and any balance directly from bus users.

**Table Ex-6** below shows a list of newly identified 2023/2028 PLM-CITP related projects that should be incorporated where relevant as part of the IDP reviews.





TABLE EX-6: ADDITIONAL PROJECTS IDENTIFIED PROJECTS AS PART OF 2023-2028 PLM-CITP TO BE PART OF FUTURE IDP'S			
Project Number	Project Description	Funding Source	
1.	Annual population and update of a consolidated balanced scorecard to measure the progress concerning the objectives and key strategies related to transport in terms of the PLM-	To be determined	
2.	Annual updating of PLM CITP.	To be determined	
3.	Annual updating of PLM Roads Master Plan.	To be determined	
4.	Annual updating of PLM Non-motorised Plan.	To be determined	
5.	Annual review of the PIRPTS Strategy that includes an update of budget requirements.	To be determined	
6.	Develop and maintain PLM Road Network Management System for proactive maintenance of roads.	To be determined	
7.	Plan, design and construct an interchange link from Landdros Maré Street (south-western direction) to the N1 bypass (south-eastern direction), on the northern side of Polokwane.	To be determined	
8.	Plan, design and construct an additional interchange on the N1 bypass, north of the interchange with Road R81, to link heavy vehicle traffic with industrial areas on the northern side of PLM (north of railway crossing in Veldspaat Street).	To be determined	
9.	Plan, design and construct a section of Road R71 as part of the interchange with the N1 bypass (between Dalmada and N1 bypass interchange).	To be determined	
10.	<ul> <li>Implementation of projects related to the Operating License Plan for Polokwane such as ring-fencing of OLs and TAs members:</li> <li>a) Determine and implement a process to comment on OLs applications received from LPRE.</li> <li>b) The Assistant Manager: Public Transport Regulation and Compliance is responsible for the administration related to the processes and activities between PLM, the Operators and LPRE or NPTR.</li> <li>c) Ring-fencing of OLs and TAs members.</li> <li>d) Token system for public transport facilities and the implementation that includes by-laws.</li> <li>e) Metered taxi strategy.</li> <li>f) Guidelines for recommendations pertaining to long- distance public transport service OLs.</li> </ul>	To be determined	





TABLE EX-6: ADDITIONAL PROJECTS IDENTIFIED PROJECTS AS PART OF 2023-2028 PLM-CITP TO BE PART OF FUTURE IDP'S			
Project Number	Project Description	Funding Source	
	<ul> <li>g) PLM should explore the possibility of Tuk-Tuks services, define the areas where the service will be sustainable and collaborate with the taxi industry as part of the development of the MTS.</li> <li>h) Real-time operational strategy for OLAS for the Limpopo Province. (14 days buffer in order to allow for administrative processes)</li> </ul>		
	Public Transport Facility Operational Agreements between Operators and PLM if the facility belongs to PLM. The property owner should be included if the facility does not belong to PLM.		
11.	Plan, design and construct a truck inn facility for PLM.	To be determined	
12.	Plan, design and construct non-motorised transport projects (schools and identified routes) as per NMT Master Plan.	To be determined	
13.	Plan, design and construct a bridge in Veldspaat Street to cross the railway line.	To be determined	
14.	PLM household/travel demand survey. (In process)	To be determined	
15.	Development of Emergence Policy or Public Transport (Covid or another pandemic).	To be determined	
16.	Establish and maintain an Intermodal Planning Committee (Transport Forum) to comply with NLTA (Section 15)	To be determined	
17.	Automated Fare Collection System, a pilot project for the incorporation of Non-Leeto La Polokwane Public Transport System vehicles such as private taxis related to affected routes.	To be determined	
18.	Development of freight hub/industrial zone in Polokwane International Airport.	To be determined	
19.	Allocate site for the construction of the NMT Park.	To be determined	
20.	Planning and design of the public transport ring route including laybys for safe commuter pickup and drop-off.	To be determined	
21.	Sheltering of existing public transport stops and construction of new ones.	To be determined	
22.	Investigate the inclusion of Matlala Road as part of PIRTS in the medium to long term.	To be determined	



TABLE EX-6: ADDITIONAL PROJECTS IDENTIFIED PROJECTS AS PART OF 2023-2028 PLM-CITP TO BE PART OF FUTURE IDP'S			
Project	Broject Description	Funding	
Number		Source	
23.	FELLTA House Paul Kruger Street, the relevant property	To be	
	should be expropriated from the existing private owners since	determined	
	it contributes from time to time to conflict and violence between		
	long-distance operators		

The budgeting of the CITP considered the following seven elements which inform the Key Strategies (see more detail as part of section 2.5):

- a) Maintain the transport system.
- b) Reduce public transport service backlogs.
- c) Safeguard and improve the utilisation of resources.
- d) Expansion of the transport system.
- e) Reduce infrastructure backlog.
- f) Safety.
- g) Create job opportunities.

A balance of all the above Key Strategies will ensure the viability and economic betterment of the greater community of PLM.

#### I) STAKEHOLDER CONSULTATION (CHAPTER 12)

The preparation of a transport plan or transport programme must include the consultation and participation of interested and affected parties required for the preparation of integrated development plans in terms of Chapter 4 and section 29(1)(b) of the Municipal Systems Act or replacing legislation. There must also be compliance with the Promotion of Administrative Justice Act 3 of 2000.

The public participation process must provide for adequate advertising and presentation of the draft CITP and allow all stakeholders an adequate opportunity to make representations or objections. The authority must consider all representations and objections received and revise the draft CITP if necessary, before finalising it.






## 1 INTRODUCTION

Polokwane as a fast-growing city implies that transport becomes the backbone of the economy of the municipality. The Comprehensive Integrated Transport Plan (CITP) is reviewed to align with the Urban Development Strategy objectives and the transport needs of the Polokwane Municipality.

This Comprehensive Integrated Transport Plan has been prepared for Polokwane Local Municipality in terms of Section 36(1) of the National Land Transport Act 2009, (Act No. 5 of 2009) (NLTA).

The National Land Transport Act No. 5 of 2009 requires all planning authorities to prepare transport plans in their jurisdiction for the period of 5 years that must be updated annually. The CITP must be submitted to the Limpopo Department of Transport and Community Safety (LDTCS) Member of the Executive Committee (MEC) for approval. The Planning Authority (Polokwane Municipality) must also submit its CITP to the National Minister of Transport for approval of the commuter rail and civil aviation component.

Uku Joint Venture was appointed as Service Providers to review/overhaul the Polokwane Comprehensive Integrated Transport Plan (CITP). The overhauling of a plan every fifth year means that every aspect of the plan must be re-examined to see if it is still up to date, revised and updated where necessary, and relevant new aspects must be added. A new transport register must be prepared every five years, ahead of the new five-year ITP, and this needs to be reflected in Chapter 3 of the reviewed CITP.

Revisions to the municipality's Spatial Development Framework must be reflected. Stakeholder engagement must be carried out, and the needs assessment updated accordingly. The Public Transport Plan must be revised to plan for any new contracts that will be issued over the next five years and to reflect the sequencing of any proposed restructuring of the network.

The new CITP reflects progress made in the previous five years with the implementation of the various strategies and programmes and update all strategies and programmes for the next five years. The list of projects, programmes and budgets in Chapter 11 must be completely revised for the next five-year period of the new plan, and a detailed budget and programme prepared for the following year.

One of the main objectives in terms of the reviewed CITP is to assist the Polokwane Municipality to define their future goals, investments and designs to prepare for future needs to move people and goods from origins to destinations.

The Cabinet approved the National Public Transport Strategy in January 2007. The Strategy has two thrusts: Accelerated Modal Upgrading and Integrated Rapid Public Transport Networks (IRPTNs). Modal upgrading focuses on improving the quality of the public transport



fleet and its current operations. The introduction of IRPTNs focuses on implementing highquality networks of car-competitive services, namely Rapid Rail and Bus Rapid Transit systems, in major cities. It should be noted that IRPTNs are not separate from CITPs, and the public transport plan form an integral part of the CITP of the relevant planning authority. Municipalities listed in Schedule 1 of the Act are typically those that are targeted for this type of support.

Polokwane Municipality has commenced to roll out the Polokwane Integrated Rapid Public Transport System (PIRPTS).

#### The content of the Polokwane Municipality CITP is based on:

"MINIMUM REQUIREMENTS FOR THE PREPARATION OF INTEGRATED TRANSPORT PLANS, published on 28 November 2014 by the Minister of Transport, in consultation with the MECs, hereby in terms of section 36(1) and (2) of the National Land Transport Act, 2009 (Act No. 5 of 2009)".

The following chapters will be relevant:

- a) **Chapter 1:** Introduction.
- b) **Chapter 2:** Transport Vision and Objectives.
- c) **Chapter 3:** Summary of the Transport Register.
- d) Chapter 4: Spatial Development Framework.
- e) **Chapter 5:** Transport Needs Assessment.
- f) **Chapter 6:** Public Transport Plan.
- g) **Chapter 7:** Transport Infrastructure Strategy.
- h) Chapter 8: Travel Demand Management.
- i) **Chapter 9:** Freight Logistics Strategy.
- j) **Chapter 10:** Non-motorised Transport Planning.
- k) Chapter 11: Funding Strategy and Summary of Proposals and Programmes.
- I) Chapter 12: Stakeholder Consultation.

**Figure 1.1** illustrates the relationship between all the above-mentioned chapters as part of the 2023/2028 PLM-CITP.







Table 1.1 contains a summary of Transport Statutory Plans prepared for PLM to date.

TABLE 1.1: STATUTORY PLANS PREP MUNICIPA	TABLE 1.1: STATUTORY PLANS PREPARED TO DATE FOR POLOKWANE MUNICIPALITY							
Plan Abbreviation Year								
Current Public Transport Record prepared by CDM	CPTR	2003, Namela						
Operating Licensing Strategy	OLS	2007, Siyazi Consultants						
Rationalisation Plan	Rat Plan	2007, Siyazi Consultants						
Public Transport Plan	PTP	2007, Siyazi Consultants						
Integrated Transport Plan	ITP	2007, Siyazi Consultants						
2010 Transportation Management Priority	Not Relevant	2007, Siyazi						
Statement by the Polokwane Municipality								
Comprehensive Integrated Transport Plan	CITP	May 2013, ITS						
Polokwane Local Municipality								
Operational Plan for the Implementation of the	IRPTS	June 2018, ITS						
Integrated Rapid Transit System Polokwane Local								
Municipality								
Leeto La Polokwane Phase 1a Bus Operation Plan	BOSP	August 2020, ITS						
Leeto La Polokwane Technical Operational Plan	TOP	May 2020, ITS						
(TOP) Update								

The CITP, therefore, forms an important component of PLM (planning authority's) Integrated Development Plan as specified in the Local Government Municipal Systems Act (Act 32 of 2009).

The subsequent sections of this chapter will elaborate on:

- a) The area covered by the PLM-CITP.
- b) The entity responsible for preparing the PLM-CITP.
- c) Requirements made by the Limpopo Province MEC of Transport and Community Safety.
- d) Status of the PLM-CITP and the relevant period.
- e) Institutional and organisational arrangements.
- f) Liaison and communication mechanisms.

#### 1.1 Area Covered by the PLM-CITP

The CITP covers the Polokwane Municipality Area. **Polokwane**, meaning "Place of Safety" in Sotho, is the capital city of the Limpopo Province, Polokwane and is South Africa's largest urban centre north of Gauteng. Polokwane Municipality comprises a total area of  $\pm$  **504 000 Ha** and is in the central part of the Limpopo Province. Polokwane Municipality is located within the Capricorn District Municipality (CDM) in the Limpopo Province and accounts for 3% of the province's total surface area of  $\pm$ 124 000 km<sup>2</sup>. In terms of its physical composition, Polokwane Municipality is **23%** urbanised and **71%** still rural. The remaining area **(6%)** comprises smallholdings and institutional, industrial and recreational land.



It is the economic hub of Limpopo Province and is strategically located to be the administrative and economic capital of the province. It is situated at the crossroads of important national and provincial roads which radiate out into the hinterland, providing good access to other towns. There is a definite opportunity for Polokwane to become a logistics hub and freight interchange within the region, also given its proximity to the neighbouring countries of Botswana, Zimbabwe, Mozambique and Swaziland. Three of the four Spatial Development Initiatives pass through Polokwane, which accentuate the city's strategic location and its importance as far as the economy of the province is concerned.

The municipal spatial pattern reflects that of the historic apartheid city model characterised by segregated settlement. At the centre of the area is the Polokwane economic hub, which comprises the CBD, industrial area, and range of social services and well established formal urban areas servicing the more affluent residents of Polokwane. Situated on the outskirts in several clusters are less formal settlement areas which are experiencing an enormous influx from rural-urban migration trends. These areas are in dire need of upgraded services and infrastructure, both social and engineering, and are struggling to cope with the informal influx of more people who want access to improved quality and standard of living. Polokwane Municipality is made up of forty-five (45) wards.

#### The main 7 clusters of settlements are:

- a) City
- b) Seshego
- c) Mankweng
- d) Sebayeng/Dikgale
- e) Molepo/Chuene/Maja
- f) Moletjie
- g) Aganang

Figure 1.2 provides the geographical presentation of the relevant clusters in PLM.







The following are relevant in terms of the clusters:

- a) **Seshego:** located west of the CBD. It is nearest to the economic core of all settlement areas and thus has the best access to the formal economy of Polokwane.
- b) **Mankweng:** located 30km to the east of the city. It constitutes a large area and is mixed formal and informal. It accommodates the University of Limpopo and is a long-established settlement area.
- c) **Sebayeng/Dikgale**: located 30 km to the north-east of the city centre and is less formal and newer than Mankweng. The area is experiencing an influx and is growing at a rapid rate.
- d) Molepo/Chuene/Maja: is located 20km to the south and comprises an informal settlement area with limited services and infrastructure. The settlement area sits on the fringe of the rural hinterland and is hence surrounded by a vast clustering of rural/semirural areas.
- e) **Moletjie:** It is about 32 km north-east of the city of Polokwane and comprises an informal settlement area with very limited services and infrastructure. The settlement area sits on the fringe of the rural hinterland and is hence surrounded by a vast clustering of rural/semi-rural areas.
- f) Aganang: is situated 45 km west of Polokwane. It is a rural cluster and has 4 traditional authorities namely Moletši, Matlala, Maraba and Mashashane. The area has been lately incorporated into PLM and is now serving as the seventh cluster area for Polokwane. The area is purely rural and has no township; it has potential for agriculture and tourism.

Polokwane City is the vibrant capital of Limpopo Province, situated on the Great North Road to Zimbabwe. It is the largest municipality in Limpopo Province that serves as the capital of Limpopo with a major economic centre. Its proximity to the neighbouring countries of Botswana, Zimbabwe, Mozambique and Swaziland, as well as its convenient distance from the Kruger National Park and Magoebaskloof, makes it a perfect gateway to Africa and an attractive tourist destination in itself.

An updated urban edge should be defined as part of the reviewing process of the 2010-PLM SDF that is in the process.

## **1.2** Entity Responsible for the Preparation of the PLM-CITP

Polokwane Municipality is the Planning Authority responsible for the preparation of the PLM-CITP.

# 1.3 Requirements Made by the Limpopo Province MEC of Transport and Community Safety

The National Land Transport Strategic Framework (NLTSF) provides the policy and overarching transport strategy for the country. Planning initiatives of the NDoT are taken up and reflected in the NLTSF where appropriate and where these have been approved.



Planning initiatives include, but are not limited to:

- a) The National Transport Master Plan, 2010.
- b) The National Public Transport Strategy and Action Plan, 2007.
- c) The National Rail Plan, 2006 and National Strategic Plan, 2012.
- d) The National Freight Logistics Strategy, 2006.
- e) The National Transport Master Plan (NATMAP), 2050.
- f) Rural Transport Strategy for South Africa (Nov 2003).
- g) South Africa's Implementation of the 2030 Agenda for Sustainable Development.
- h) National Land Transport Strategic Framework (2017-2022).
- i) Rural Transport Strategy for South Africa (Dec 2007).

Each province must prepare a Provincial Land Transport Framework (PLTF) for a five-year period in terms of Section 35 of the NLTA. The primary objectives of the PLTF are:

- a) To provide a transport framework as an overall guide to transport planning within the province, guided by the NLTSF.
- b) Summarise all the ITPs in the province.
- c) Include the planning of intraprovincial and interprovincial long-distance services.
- d) Integrated Transport Plans (ITPs) have to be prepared by all municipalities.

The Limpopo Provincial Land Transport Framework was prepared in 2015 and is incorporated as part of the PLM-CITP.

## Other important Acts related to the PLM-CITP are:

- a) Northern Province Interim Passenger Transport Act (2000).
- b) The National Rail Plan, 2006, and National Strategic Plan, 2012.
- c) The National Freight Logistics Strategy, 2006.
- d) Limpopo Development Plan, 2015-2019.
- e) Green Transport Strategy for South Africa, 2018-2050.
- f) National Rail Transport Policy, August 2015.
- g) The National Freight Logistics Strategy, 2007.
- h) Municipal Systems, Act 32 of 2000.
- i) Municipal Structures, Act 117 of 1998.
- j) Public Finance Management Act 56 of 2003.

## 1.4 Status of the PLM-CITP and Relevant Period

The various input items provided for the PLM-CITP will be relevant for the period from July 2023 to June 2028. The previous CITP was developed for the period 2012 to 2017.



<u>Note:</u> The Covid-19 pandemic delayed the completion of the PLM-CITP due to the following reasons:

- a) Various levels of lockdown and related regulations.
- b) Availability of key role-players and impact on consultation.
- c) Impact on surveys conducted and the traffic and public transport changes.

#### **1.5** Institutional and Organisational Arrangements

Based on **Clause 31** of the NLTA the following are relevant:

"Land transport planning must be integrated with the land development and land use planning processes, and the integrated transport plans required by this Act are designed to give structure to the function of municipal planning mentioned in Part B of Schedule 4 to the Constitution and must be accommodated in and form an essential part of integrated development plans, with due regard to legislation applicable to local government, and its integrated transport plan must form the transport component of the integrated development plan of the municipality."

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

- a) Where appropriate, plan, implement and manage modally integrated public transport networks and travel corridors, including operational planning. (PLM-Directorate Roads and Transportation Services (see **Figure 1.3** for organogram).
- b) To integrate municipal transport planning with land use planning. (Land use and spatial development)
- c) It is important to take note of the Provincial Gazette dated 13 April 2021, volume 28 number 3153:

#### PREMIER'S NOTICE 2 OF 2021

## LOCAL GOVERNMENT NOTICE POLOKWANE LOCAL MUNICIPALITY

#### POLOKWANE MUNICIPALITY LEETO LA POLOKWANE OPERATIONAL BYLAW

Notice is given that the Municipal Manager of Polokwane Local Municipality hereby publishes, in terms of the provisions of **Section 13 & 21** of the Local Government: Municipal Systems Act 32 of 2000, read with **Section 162** of the Constitution of the Republic of South Africa, 1996, the by-law set forth hereunder.

The said by-law hereto attached shall take effect on the date of publication of this Notice.

#### CITY OF POLOKWANE

#### LEETO LA POLOKWANE OPERATIONAL BY-LAWS Preamble

Whereas the Polokwane Local Municipality is responsible for the functions of Municipal Public Transport, Traffic, Parking and Municipal roads in terms of Parts B of Schedules 4 and 5 of the Constitution of the Republic of South Africa, 1996, read with section 11(1)(c) of the National



#### Land Transport Act, 2009 (Act No. 5 of 2009);

The Municipality is empowered by that legislation as well as in section 80A of the National Road Traffic Act, 1996 (Act No. 93 of 1996) and Chapter 2 Section 11(1) (c) (ii) of the National Land Transport Act, 2009 (Act No. 5 of 2009); to develop and promulgate the Municipal By-laws and conclude agreements in the Municipal sphere.

#### APPLICATION AND PURPOSE OF THESE BY-LAWS:

- 1) These by-laws apply to the geographical area of jurisdiction of the municipality.
- 2) The purpose of these by-laws is
  - a) To promote the safety of passengers making use of Leeto La Polokwane.
  - b) To provide a regulatory framework for Leeto La Polokwane in the municipality, subject to and in addition to the Act.
  - c) To give effect to national, provincial and municipal policy on non-motorised transport and accessible transport in the municipal area.
  - d) To promote such transport and to protect and promote the safety of pedestrians, joggers, cyclists, scholars, students and special categories of persons.
  - e) To promote training and awareness of NMT issues by means of, but not confined to, recreational parks, simulated road traffic situations, awareness campaigns, training of persons to cycle safely and by other similar methods.
- 3) Should a provision of the National Road Traffic Regulations that is referred to in these bylaws be amended, the concomitant provision of these by-laws will continue to apply unless in conflict with those regulations.
- 4) These by-laws must be read with the Municipality's Street Trading By-laws Promulgated under *Notice 185 in Provincial Gazette no. 2771 of 2016 page 31.*





**Table 1.2** illustrates the functions of various non-Polokwane Municipality institutions providing transport services in Polokwane.

	TABLE 1.2: TRANSPORT	INSTITUTIONS RELATED TO POLOKWANE MUNICIPALITY
Item	Institution	Description of function
1.	Institution National Department of Transport (NDoT)	<ul> <li>Description of function</li> <li>The national sphere of government is responsible for the following: <ul> <li>a) Policy and strategy formulation.</li> <li>b) Overall strategic transport planning and co-ordination in the national sphere and preparing the NLTSF in terms of Section 34.</li> <li>c) Co-ordination between provinces and addressing arrangements between the three spheres of government and public entities.</li> <li>d) Allocating functions to the most appropriate sphere of government by promoting legislation and promoting or concluding agreements, as appropriate.</li> <li>e) Liaising with other government departments in the national sphere with portfolios that impact transport issues and bring together key players.</li> <li>f) Assisting provinces that lack capacity or resources and seeing that gaps left by them are filled.</li> <li>g) Intervening where provinces fail to perform their functions, subject to section 100 of the Constitution.</li> <li>h) Co-ordinating transport relations between the republic and other countries and implementing international agreements.</li> <li>i) Performing the other functions of the Minister in terms of the Act.</li> </ul></li></ul>
		RELEVANT TO POLOKWANE MUNICIPALITY
		<ul> <li>a) Airports Company South Africa (ACSA).</li> <li>b) Cross Border Transport Agency (CBTA).</li> <li>c) Passenger Rail Agency of South Africa (PRASA).</li> <li>d) Road Accident Fund (RAF).</li> <li>e) Road Traffic Management Corporation (RTMC).</li> <li>f) South African Civil Aviation Authority (SACAA).</li> <li>g) South African National Roads Agency SOC LTD (SANRAL).</li> </ul>
2.	Limpopo Province Department of Transport and Community Safety	<ul> <li>a) Limpopo Provincial Government through the office of the MEC of Transport and Community Safety is responsible for co-ordinating the full spectrum of transport planning initiatives taking place in the province.</li> <li>b) Detailed transport planning and co-ordination in the provincial sphere and preparing the PLTF in terms of Section 35.</li> </ul>



		MUNICIPALITY
ltem	Institution	Description of function
Item		<ul> <li>c) Assist transport authorities and municipalities that lack capacity or resources and to see that gaps left by those authorities are filled, subject to Section 139 of the constitution.</li> <li>d) In terms of the National Land Transport Act 5 of 2009, Operating Licensing Boards were dissolved and replaced by Limpopo Provincial Regulatory Entity (LPRE). Municipal Regulatory Entities can also perform the function initially performed by the Operating Licensing Boards.</li> <li>e) Bus subsidies and contracts.</li> <li>f) Taxi services.</li> <li>g) Road traffic and safety.</li> </ul> PUBLIC ENTITIES RELATED TO NDOT THAT ARE RELEVANT TO POLOKWANE Gateway Airports Authority Limited (GAAL) is a schedule 3D provincial government business enterprise of the Limpopo Department of Transport and Community Safety established in March 1995 in terms of the Companies Act, 1973 (Act 61 of 1973) (Act 71 of 2008). The initial responsibility of GAAL as established by the provincial government was to manage three airports in the province; however, GAAL is currently only managing Polokwane International Airport (PIA), which is licensed for
3.	Limpopo Province Department of Public Works (LPDoPW)	respective destinations. This <b>provincial</b> sphere of government is responsible for the following:
		<ul> <li>a) Provincial policy and strategy formulation.</li> <li>b) Co-ordinate between municipalities and transport authorities, promote provincial legislation and municipal by-laws and promote or conclude agreements, as appropriate, in the provincial sphere.</li> <li>c) Liaise with other government departments in the provincial sphere with portfolios that impact on transport issues and bring together key players.</li> <li>d) Perform the other functions of the MEC in terms of this NLTA.</li> </ul>



	TABLE 1.2: TRANSPORT	INSTITUTIONS RELATED TO POLOKWANE				
		MUNICIPALITY				
Item	Institution	Description of function				
		PUBLIC ENTITIES RELATED TO LPDOPW THAT IS				
		RELEVANT TO POLOKWANE				
		Roads Agency Limpopo (RAL) is a statutory body				
		established under an Act of Parliament of the Limpopo				
	Province Roads Agency Proprietary Limited and Provincial					
	Roads Amendment Act 03 of 2001. The agency, being a					
		public company, has also been registered in terms of the				
		Companies Act No. 61 of 1973. Its registered name is the				
		Roads Agency Limpopo (SOC) Ltd. Its primary functions				
	are the planning, designing, construction, maintenance and					
		control of the provincial road network. It owns and manages				
		all the provincial roads.				
		Post 21 May 2014, the road's function, which includes RAL,				
		has been transferred from the Department of Transport to				
		the Department of Public Works.				
4.	Capricorn District Municipality	a) Co-ordinated planning.				
		b) Projects.				

#### 1.6 Liaison and Communication Mechanisms

The PLM-CITP followed a consultative process with the affected and interested stakeholders. The PLM-CITP is undertaken by the Polokwane Municipality Directorate Roads and Transport in consultation with all internal planning divisions in the city, to ensure the integration of transport and land use. Other stakeholders such as Transport Operators, the Passenger Rail Agency of South Africa (PRASA), Commuters, Business Community, Capricorn District Municipality and Limpopo Department of Transport and Community Safety form part of the project and were consulted as part of the project. As part of the PLM-CITP process, individual consultations with the relevant parties were held. Section 15 of the NLTA provides that the city must establish an Intermodal Planning Committee (IPC) consisting of prescribed officials and representatives of operators. The functions of the committee are to co-ordinate public transport between the modes. The relevant Committee was, however, not in place when this CITP was prepared.

Although the PLM has no direct control over, MBT and PTOG funded bus service operations, it is imperative for PLM to strengthen the partnerships with these organisations and other key decision makers, to achieve an improved IRPTS system. Therefore, the IPC needs to be in place to liaise with the bus industry, taxi industry and important decision makers to consult in terms of planning, funding, implementation and operation of the IRPTS system.

The PLM-CITP preparation included consultation and participation of interested and affected parties required for the preparation of the IDP in terms of Chapter 4 and section 29(1)(b) of the Local Government: Municipal Systems Act 2000 (Act No 32 of 2000). The PLM-CITP is



a specific sector plan that feeds into the Integrated Development Plan and ultimately form part of the Provincial Land Transport Framework.





# CHAPTER 2

Transport Vision & Objectives



# 2 TRANSPORT VISION AND OBJECTIVES

Chapter 2 contains the following concerning the PLM-CITP transport visions and objectives:

- a) Vision statement.
- b) Goals of Polokwane PLM-CITP.
- c) Objectives of Polokwane PLM-CITP.
- d) Balanced scorecard.
- e) Key strategies.

#### 2.1 Vision Statement

The PLM-CITP vision statement encompasses the national, provincial and local policy frameworks and sets out the ideal outcome because of the goals and objectives set by the PLM-CITP vision as outlined in **Section 2.1.3**.

The following are vision statements obtained from various policy documents and legislation relevant to transport from a National and Limpopo Province perspective.

#### 2.1.1 National Transport-related Visions

#### a) National Department of Transport

The vision for the National Department of Transport is:

"Transport, the Heartbeat of South Africa's economic growth and social development"

## b) White Paper on National Transport Policy

The White Paper on National Transport Policy published in August 1996, describes the transport policies of the national government and the vision for South African transport as set out in the White Paper as follows:

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



#### 2.1.2 Limpopo Province Transport-related Visions

#### a) The Limpopo Provincial Land Transport Framework (LPTF)

The vision for the LPTF prepared for 2015 to 2019 is:

"A pioneering and leading department at the epicentre of socio-economic development"

#### b) Capricorn District Municipality (CDM)

The vision for the CDM is:

*"Capricorn District, the home of excellence and the opportunities for a better life"* 

#### 2.1.3 Polokwane Municipality

#### a) Overarching Vision

Based on the PLM IDP, the long-term vision is to be:

"The ultimate in innovation and sustainable development"

#### b) Mission Statement

The mission statement based on the PLM IDP is:

"Provision of cost-effective services which promote socio-economic development, a safe and healthy environment through good governance and active community participation"

Based on the approved PLM-CITP for the period 2012 to 2017 vision for the CITP was:

"To provide a safe, reliable, efficient, effective and integrated transport system for both passengers and freight that will enhance the quality of life for all"



The above vision was consequently maintained as part of the PLM -CITP 2023 to 2028 vision.

#### 2.2 Goal of the Polokwane CITP

The aim of integrated transport planning and spatial planning is to identify existing resources and apply relevant measures and guidelines to promote access to resources and infrastructure to all spheres of the community to establish an integrated environment.

Resources such as public transport facilities and infrastructure of economic activity should be upgraded and made accessible to the benefit of the larger community to stimulate economic growth and economic development.

#### 2.3 Objectives of the Polokwane CITP

The objectives of the PLM-CITP are the following:

- a) To provide for and manage future transport demand.
- b) To provide a more balanced integrated transport system.
- c) The promotion of public transport, integrated with other modes of transport.
- d) To relate to and complement the Spatial Development Plan (SDP).
- e) To support economic development strategies and long-term environmental management strategies.

#### 2.4 Balanced Scorecard

The balanced scorecard provides a prescriptive framework for a two to five-year period that must be tailored to adapt to the PLM's changing circumstances. It contains a vertical and horizontal system of interlinked strategic objectives and targets that on one hand, collectively describes the strategy, vision and priorities of the organisation and, on the other, measures the performance of the strategy by means of the objectives and their linked targets (as well as indicators) and approved portions of the budget.

**Table 2.1** provides typical line items for a balanced scorecard in terms of the PLM-CITP objectives, key strategies and the measurement thereof. It is recommended that projects objectives be measured in terms of the key strategies on a bi-annually as part of a dedicated project. It deserves to be mentioned that a balanced scorecard system is already in use a part of evaluated projects as part of the PLM IDP.



# 2.5 Key Strategies

T.	ABLE 2.1: PLM-	CIT	P OBJECTIVES, KEY STRAT	EG	ES AND THE MEASUREMENT
			THEREOF		
	Objectives		Key Strategy		Measurement
1)	Maintain the	a)	Blade and re-gravel gravel roads.	a)	Length of gravel roads.
	Transport System.	b)	Maintain existing surfaced roads.	b)	Length of surfaced roads.
		c)	Repaint road markings.	c)	Length of road markings.
		d)	Replace traffic signs.	d)	Number of traffic signs.
		e)	Repair traffic signals.	e)	Number of traffic signals.
		f)	Repair potholes.	f)	Number of potholes.
		g)	Maintain public transport facilities.	g)	Number of facilities with maintenance contracts.
2)	Reduce Public	a)	Determine the need for public	a)	% Capacity utilisation.
	Transport Service		transport services.	b)	Subsidy spending per capita.
	Backlogs.	b)	Improve efficiency by eliminating	c)	Taxi facilities.
			duplication.	d)	Bus facilities.
		c)	Expand service capacity.	e)	Dedicated lanes.
		d)	Maintain and expand PIRPTS.	f)	Etc.
		e)	Provide public transport		
			infrastructure.		
		f)	Corridor development.		
3)	Safeguard and	a)	Implement freight overloading	a)	% Completion.
	Improve the		project.	b)	Average % utilisation of bus fleet.
	Utilisation of	b)	Prepare and implement OLP.	c)	Average % utilisation of taxi fleet.
	Resources.	c)	Prepare public transport charter.	d)	Completion date.
		d)	Implement facility management	e)	Number of facility management
			agreements at public transport		agreements.
			facilities.		
4)	Expansion of the	a)	Further development of the	a)	Expand western ring road.
	Transport System.		western ring route to improve	b)	Roll out of other Phases of the IRPTS.
			mobility.	c)	Extent of infrastructure provision.
		b)	IRPTS improvements to		
			regenerate the inner city.		
5)	Reduce	a)	Built new roads that impact the	a)	Km new roads built.
	Infrastructure		backlogs focused in the city		
	Backlog.		Strategies zone of choice.		
6)	Safety.	a)	Road safety programmes.	a)	Marketing.
		b)	Community safety forums.	b)	Training.
		c)	Public safety at public transport	c)	Number of accidents.
			facilities.	d)	Number of fatalities.
				e)	Public transport ridership increase.
7)	Create Job	a)	Develop and implement transport	a)	Number of permanent jobs created.
	Opportunities.		and public transport systems and	b)	Number of temporary jobs created.
1			infrastructure.		

# **Table 2.1** provides PLM-CITP objectives, key strategies and the measurement thereof.







## **3 TRANSPORT REGISTER**

This chapter spells out the status quo of transport in PLM. It includes the entire transport system taking into consideration all local modes of transport such as rail, rapid public transport system, bus, mini-taxi and metered taxi transport. The following subsections are relevant:

- a) Demographic and socio-economic.
- b) General overview of the transportation system.
- c) Description of the regular daily transportation system.
- d) Description of other public transport services and modes of transport.
- e) Description of Institutional and organisational make-up of public transport industry.
- f) Roads and traffic.
- g) Freight transport.
- h) Financial information.

#### 3.1 Demographic and Socio-economic Overview

Polokwane, meaning "Place of Safety" in Sotho, is the capital city of the Limpopo Province.

The municipality comprises a total area of  $\pm$  **504 000 Ha** and is in the central part of the Limpopo Province. It is located within the CDM in the Limpopo Province and accounts for 3% of the province's total surface area of  $\pm$ 124 000 km<sup>2</sup>. In terms of its physical composition, Polokwane Municipality is **23%** urban and **71%** still rural. The remaining area **(6%)** comprises smallholdings and institutional, industrial and recreational land.

An updated urban edge should be determined as part of the process to review the 2010-PLM SDF.

It is the economic hub of Limpopo Province and is strategically located to be the administrative and economic capital of the Limpopo Province. It is situated at the crossroads of important national and provincial roads which radiate out into the hinterland providing good access to other towns.

Polokwane is ideally located to be a logistics hub and freight interchange within the region, also given its proximity to the neighbouring countries of Botswana, Zimbabwe, Mozambique and Swaziland. Three of the four Provincial Spatial Development Initiatives pass through PLM, which accentuates the city's strategic location and its importance as far as the economy of the Limpopo Province is concerned.

The municipal spatial pattern reflects that of the historic apartheid city model characterised by segregated settlements. At the centre of the area is the Polokwane economic hub, which comprises the CBD, industrial area and range of social services and well established formal urban areas servicing the more affluent residents of Polokwane.



Situated on the outskirts in several clusters are less formal settlement areas which are experiencing an enormous influx from rural to urban migration trends. These areas are in dire need of upgraded services and infrastructure, both social and engineering, and are struggling to cope with the informal influx of more people who want access to improved quality and standard of living. Polokwane Municipality is made up of forty-five (**45**) wards.

#### The main 7 clusters of settlements are:

- a) City, that includes the CBD.
- b) **Seshego** is located west of the CBD. It is nearest to the economic core of all settlement areas and thus has the best access to the formal economy of Polokwane.
- c) **Mankweng** is located 30km to the east of the city. It constitutes a large area and is mixed formal and informal. It accommodates the University of Limpopo and is a long-established settlement area.
- d) **Sebayeng/Dikgale** is located 30 km to the north-east of the city centre and is less formal and newer than Mankweng. The area is experiencing an influx and is growing at a rapid rate.
- e) **Molepo/Chuene/Maja** is situated 20km to the south and comprises an informal settlement area, with limited services and infrastructure. The settlement area sits on the fringe of the rural hinterland and is hence surrounded by a vast clustering of rural/semi-rural areas.
- f) Moletjie is about 32 km north-east of the city of Polokwane and comprises an informal settlement area, with very limited services and infrastructure. The settlement area sits on the fringe of the rural hinterland and is hence surrounded by a vast clustering of rural/semi-rural areas.
- g) Aganang is situated 45 km west of Polokwane CBD. It is a rural cluster and has 4 traditional authorities namely Moletši, Matlala, Maraba and Mashashane. The area has been lately incorporated into PLM and is now serving as the seventh cluster area for Polokwane. The area is purely rural and has no township; it has potential for agriculture and tourism.

A specific characteristic of Polokwane's demographic profile is the high-density Seshego and Moletjie corridor north-west of the CBD. **Figure 1.2** provides the geographical presentation of the relevant clusters in PLM.

Figure B-2.1 in Appendix B presents the locality of the relevant clusters in the PLM area combined while Figures B-2.2 to Figure B-2.9 in Appendix B present each cluster individually.

Figure 3.1 provides the PLM jurisdiction in relation to Limpopo Province.





## FIGURE 3.1: PLM JURISDICTION IN RELATION TO LIMPOPO PROVINCE

**Table 3.1** provides a summary of the demographic characteristics of PLM. Typical relevant elements are:

- a) Demographics and households.
- b) Land cover change.
- c) Dwelling framework 2018.
- d) Social facilities.



# TABLE 3.1: SUMMARY OF DEMOGRAPHIC CHARACTERISTICS OF PLM

District municipality:	Capiricorn DM				
Local municipality	Polokwane LM				
Number of ward(s) affected:	45				
Area of area assessed:	505 400	hectares			
Demographics and households					
	1996	2001	2011		
Total Population	532 376	618 947	728 598		
Population density (persons/ha)	0.85	1.22	1.44		
Total households	104 416	159 976	202 929		
Household density (households/ha)	0.17	0.32	0.40		
Ave household size	5.10	3.87	3.59		
Total income in the area (per month)	2 234 337 369	431 904 550	1 325 045 393		
Income per capita (per month)	4 197	698	1 819		
Ave household income (per month)	21 525	5 455	6 523		
Land Cover Change			Dwelling Frame 2018		
Ŭ	Extent of cover	Extent of cover	, i i i i i i i i i i i i i i i i i i i		
Land cover category	1990 (ha)	2014 (ha)	Dwelling units	215 423	
Cultivated commercial fields	11 447	6 534	Businesses Unit	2 967	
Cultivated commercial pivot	1 725	3 112	Special dwelling inst	5 224	
Cultivated orchard and vines	2 648	433	Service Units	1 335	
Sugarcane			Recreation Units	939	
Subsistence farming	75 019	71 432	Other units	7 188	
Forests & Plantations	459	333	Vacant units	16 772	
Mining	2 317	1 115			
Urban built-up	899	1 049	Social Facilities		
Urban commercial	389	491	Facility	Number in area	
Urban industrial	417	533	Primary schools	251	
Urban residential	1 374	2 230	Secondary school	164	
Urban townships	781	2 062	Intermediate school	0	
Urban informal	2	55	Combined school	15	
Rural villages	26 167	35 408	Public health	53	
Urban sports and golf	256	267	Private health	1	
School and sports grounds	314	415	SAPS stations	7	
Small holdings	12 895	12 915	Lower courts	4	
ance.					

Spatial Challenges and Opportunities Report, 2<sup>nd</sup> Draft.

Figure 3.2 provides population distribution in the PLM in terms of people.





**Figure 3.3** provides the spatial distribution of household density (dwelling units/ha) in the PLM area.





## FIGURE 3.3: SPATIAL DISTRIBUTION OF HOUSEHOLD DENSITY (DWELLING UNITS/HA) IN THE PLM AREA

Reference:

Polokwane Local Municipality. Review of Spatial Development Framework January 2020. Spatial Challenges and Opportunities Report, 2<sup>nd</sup> Draft.

**Table 3.2** provides the average household size per population group from 1995 to 2017**Table 3.3** provides the anticipated long term population trends from the years 2006 to 2035for PLM.

TABLE 3.2: AVERAGE HOUSEHOLD SIZE PER POPULATION GROUP							
Population Group	1995	2000	2005	2010	2015	2016	2017
Black	4.0	3.8	3.7	3.7	3.6	3.6	3.6
Coloured	4.2	4.1	4.2	4.3	4.4	4.4	4.5
Asian	4.4	4.4	4.3	4.2	4.1	4.1	4.1
White	3.6	3.6	3.6	3.5	3.5	3.5	3.5
Average Household Size	4.0	3.8	3.7	3.7	3.6	3.6	3.6
Source: Quantec 2019		•	•	•	•	•	•



TABLE 3.3:ANTICIPATED LONG-TERM POPULATION TRENDS FROM YEARS 2006TO 2035 FOR THE PLM						
Year	2018	2019	2020	2025	2030	2035
Quantec forecast	643 221	650 347	657 473	693 104	728 736	764 367
0 0 1 0010						

Source: Quantec 2019

Figure 3.4 provides the population by age group category and gender for PLM.



Source: Quantec 2015

The Living Standards Measure (LSM) segments the consumer market into ten (10) universally accepted groups by analysing the type of household assets people have access to. This is a measure of the relative wealth of a household with class ten (10) indicating the highest living standard and class 1 indicating the lowest standard of living.

From the assessment, it is evident that the PLM core urban area accounts for the highest earners while rural and traditional authority areas are shown to accommodate the lowest income earners. Having regard to the alignment of the primary transportation corridor (N1 National Road and railway), it is evident the higher income groups cluster around or near the corridor, underlining the economic importance of the conduits along which people and goods are moved.

Figure 3.5 provides the neighbourhood LSM index for the PLM area.





Fable 3.4 provid	es employment a	ind unemployment i	nformation for the PLM area.
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TABLE 3.4:	EMPLOY	MENT A		MPLOYM		ORMATIC		PLM
Employment status	1995	2000	2005	2010	2015	2016	2017	Average pa%
Employed - Formal and Informal	96 651	112 599	128 714	149 184	173 740	174 865	179 479	3.90%
Employed - Formal - Total	80 060	92 783	98 140	105 588	123 251	127 681	129 615	2.81%
Employed - Formal - Skilled	21 325	23 525	26 079	29 346	34 966	36 432	36 624	3.26%
Employed - Formal - Semi-skilled	35 948	41 526	46 292	48 986	57 085	59 351	60 476	3.10%
Employed - Formal – Low-skilled	22 787	27 732	25 769	27 256	31 200	31 898	32 515	1.94%
Employed - Informal	16 591	19 816	30 574	43 596	50 489	47 184	49 864	9.12%
Unemployed	21 834	29 025	52 375	52 253	62 501	66 787	71 641	10.37%
Unemployment rate	18.4	20.5	28.9	25.9	26.5	27.6	28.5	2.49%
Source: Quantec 2019								



#### 3.2 General Overview of Transportation System

The following are relevant:

- a) Modal split between private, public transport (by mode) and non-motorised transport modes for work, education and other trips made during a typical weekday morning peak period.
- b) Levels of dissatisfaction with the different aspects of the transport system and different modes of transport in the area, including travel times, costs, availability and accessibility, safety and the reliability of public transport services.
- c) Average travel time to work and education, travel time for public transport trips to work, walking times to public transport by mode, and percentage of households spending more than 10% of income on public transport.
- d) Describe the main transport problems in the municipality towards which the policies, strategies and projects in the 5-year PLM-CITP will be addressed.

## 3.2.1 Modal Split between Private, Public Transport (by mode) and Non-motorised Transport Modes for Work, Education and Other Trips Made during a Typical Weekday Morning Peak Period.

The best information available concerning the modal split is the 2013 PLM-CITP since no household survey has been conducted since 2013 for PLM. According to the 2013 PLM-CITP for Polokwane, there are 81 583 estimated work trips made in the municipality each day. Of these trips, 13.3% are made by bus, 27.3% by taxi, 27.3% by car and around 29.8% of people walk to work. These splits differ by area in Polokwane Municipality. The modal work split for the areas are summarised as follows:

- a) In terms of Seshego/Moletjie, the highest percentage of motorised trips to work are by taxi, followed by car and then bus.
- b) In terms of PLM Central, the highest percentage of work trips is by car, followed by taxi and then bus.
- c) In terms of PLM East, a higher percentage of work trips are by bus, followed by taxi and then car.
- d) In terms of PLM West, most work trips are by taxi, followed by car and then bus.
- e) Most work trips are by walking, followed by car and then taxi when considering the entire municipal area.

The above-mentioned patterns were assumed to be still relevant.

The Uku Joint Venture conducted a questionnaire at various public transport facilities in the PLM during 2020. The purpose of the questionnaire was to determine a profile of the public transport users in PLM in order to understand the public transport user's needs.



The sample size of the questionnaire was 541 persons. Detailed information concerning the questionnaire is contained in **Table A-2.1** in **Appendix A-2**.

Figure 3.6 provides information related to:

- a) Purpose of the trip of the interviewee?
- b) How does the interviewee travel from origin to destination?
- c) What type of transport does the interviewee prefer?







3.2.2 Levels of Dissatisfaction with the Different Aspects of the Transport System and Different Modes of Transport in the Area, Including Travel Times, Costs, Availability and Accessibility.

**Figure 3.7** provides the public transport level of dissatisfaction and affordability of public transportation in PLM.







3.2.3 Average Travel Time to Work and Education, Travel Time for Public Transport Trips to Work and Walking Times to Public Transport by Mode.



Figure 3.8 provides the average travel time to and from public transport facilities in PLM.



# 3.2.4 Main Transport Problems in the Municipality towards which the Policies, Strategies and Projects in the 5-year PLM-CITP will be Addressed.

**Table 3.5** provides identified main problems experienced with public transport facilities according to questionnaire done at public transport facilities. **Table A-2.1 (J)** in **Appendix A-2. Table 3.6** provides identified main problems identified as part of the consultation with relevant stakeholders.

TABLE 3.	TABLE 3.5:       PUBLIC TRANSPORT PROBLEMS IDENTIFIED AS PART OF						
QUE	ESTIONNAIRE DONE AT PUBLIC TRANSPORT FACILITIES						
ltem	Description						
1.	No amenities at ranks.						
2.	No good passenger care at ranks.						
3.	Driver and passengers not wearing masks during Covid-19.						
4.	No hawker facilities.						
5.	Poor maintenance at taxi ranks.						
6.	Taxi ranks are not safe.						
7.	Long waiting times at ranks.						
8.	Overloading.						
9.	No ablutions at village taxi ranks.						
10.	Taxi drivers do not obey speed limits.						

TABLE 3.6: TR	TABLE 3.6:         TRANSPORT PROBLEMS IDENTIFIED AS PART OF CONSULTATION							
	WITH RELEVANT STAKEHOLDERS							
ltem	Description							
Thabo Mbeki	Facility has been vandalised and the fence needs repair, no lights, no							
Street Bus	information signs and no road markings.							
Terminus								
Seshego Hostel	Informal bus pick-up point, no loading bay, no shelter, no lights and							
Bus Rank	not paved.							
Thabo Mbeki	Gravel area, no washing bay and no lights and fence.							
Street Bus								
Holding Area								
Silicon Street Bus	Gravel and no lights.							
Stop								
	a) Covid restrictions were undermined ("Drivers and passengers not							
	wearing masks").							
	b) Taxi fare is expensive.							
Taxi Ranking	c) No ablutions at the village taxi ranks.							
Facilities	d) No amenities at ranks.							
	e) Passengers not feeling safe at ranks.							
	f) No hawkers' facilities at most ranks for informal traders.							
	g) Overloading.							



TABLE 3.6: TR	ANSPORT PROBLEMS IDENTIFIED AS PART OF CONSULTATION
WITH RELEVANT STAKEHOLDERS	
Item	Description
	h) Long waiting times at ranks.
	i) Polokwane taxi rank knocks off earlier at 19:00.
	j) Poor maintenance of taxi ranks.
	k) No good passenger care at ranks.
	<ol> <li>Taxi drivers do not obey speed limits.</li> </ol>
	m) Under supply of taxis in some areas.
	n) Unroadworthy vehicles.
	a) No dedicated loading points for metered taxis.
	b) Utilise paid metered points for parking.
Metered Taxi	c) No affordable public car wash.
	d) Old fleet.
	e) As stakeholders, they are not considered.

## 3.3 Description of the Regular, Daily Public Transport System

A summary of the following transport register is provided:

- a) Passenger rail infrastructure, rolling stock, and line capacity and utilisation.
- b) Road-based public transport (namely Bus Rapid Transit (BRT), bus and minibus-taxi) infrastructure.
- c) Road-based routes per mode and per major operator or TA.
- d) Summary and analysis of the fare systems (structure, levels, fare collection systems and concessions) of different services in the area.
- e) Passenger rail service capacity and capacity utilisation per line in the peak period.
- f) Road-based public transport service capacity and capacity utilisation per route in the peak period.
- g) Summary of area-to-area movements based on cordon counts.
- h) Analysis of conditions of transport infrastructure, facilities and rolling stock.

The subsequent subsections will elaborate on the above-mentioned.

#### 3.3.1 Passenger Rail Infrastructure, Rolling Stock and Line Capacity and Utilisation.

The rail network in Limpopo is shown in **Figure 3.9**, while **Figure 3.10** provides the locality of the Polokwane Railway Station and the photographic images of the railway station.





Source: Limpopo Provincial Land Transport Framework 2015 to 2019




Based on the LPTF, the following are relevant in terms of rail:

There are several main lines in Limpopo and several branch lines. Three main rail yards handle freight commodities in the province, namely: Phalaborwa (dispatches 154 trains per day), Polokwane (10 to 12 trains per direction per day) and Thabazimbi.

At present, no commuter rail transport services are operated in the Limpopo province except a mainline service provided along the N1 route towards Zimbabwe. Both long-distance intercity passenger and commuter services are provided.

The Passenger Rail Agency (PRASA) operates the Shosholoza Meyl long-distance passenger service between Johannesburg and Musina via Polokwane. It is an economy class service (sitter accommodation) that operates three times per week in each direction.

The train leaves Johannesburg Station on month end Friday evenings at 19:00 and arrives at Polokwane station at 03:50 in the morning. It departs at 04:30 for Musina and arrives there



at 11:15. The train to Johannesburg leaves Musina on Sunday afternoons at 15:25 and arrives at Polokwane at 21:48. It then departs for Johannesburg at 22:35 and arrives there at 05:44.

There are no intermodal transfer facilities for passengers who need to transfer between rail, bus or taxi in PLM. The distance by foot, from the railway station to both the Hospital Street Bus Rank and the Pick 'n Pay Taxi Rank is 1 km. Given the lack of transfer facilities and the inconvenient arrival and departure times, the service is not very popular and most passengers prefer to travel by bus.

**Figures B 5.10, Appendix B** indicates the Limpopo railway network and main stations and **Figure 3.11** indicates the PLM railway network and the locations of the stations. The route only has a single track; hence trains must pass each other at bypass lines provided at specific locations. Due to the limited service and the alignment of the route, the system does not serve short distance daily commuters.

The following information was obtained from sources other than LPTF:

The train leaves Johannesburg Station on month end Friday evenings at 19:00 and arrives at Polokwane station at 03:50 in the morning. It departs at 04:30 for Musina and arrives there at 11:15. The train to Johannesburg leaves Musina on Sunday afternoons at 15:25 and arrives at Polokwane at 21:48. It then departs for Johannesburg at 22:35 and arrives there at 05:44.

Figure 3.12 provides information related to the Shosholoza Meyl passenger train service.











# 3.3.2 Road-based Public Transport (namely Bus Rapid Transit (BRT), Bus and Minibus-taxi) Infrastructure.

The following public transport is relevant:

- a) Polokwane Integrated Public Transport System (IRPTS).
- b) Bus.
- c) Taxi.
- 3.3.2.1 Polokwane Integrated Public Transport System (Leeto la Polokwane).

This section summarises the TOP for Leeto La Polokwane Phase 1a (also referred to as the go-live phase). Phase 1a of Leeto La Polokwane includes direct service, connecting Seshego with the Polokwane CBD. Complementary services then serve parts of the town



with high connectivity needs including Home Affairs and government buildings to Flora Park and Westenburg. 12m buses will be used on the trunk routes between Seshego and the CBD while 9m midibuses will be used on the complementary routes between Flora Park and Westenburg and the CBD.

The Phase 1a infrastructure includes 1 trunk station, 1 control centre, 1 depot and 1 layover facility as illustrated in **Figure 3.13**.

# Concerning Leeto La Polokwane, the following are relevant:

- a) PLM is the Contracting Authority (CA).
- b) Esilux (Pty) Ltd) Vehicle is the Operating Company (VOC).
- c) Esinix (Pty) Ltd Value Chain Company.

# The following are discussed in detail as part of the Polokwane Phase 1a TOP:

- a) Phase 1a, trunk routes.
- b) Phase 1a, complementary routes.
- c) Phase 1a, fleet requirements.
- d) Station configuration, for Phase 1a.
- e) Kerbside stops, during Phase 1a:
  - i) Seshego stops.
  - ii) Flora Park stops.
  - iii) Westenburg stops.
- f) Transit Mall during Phase 1a:
  - i) Parking and deliveries along General Joubert Transit Mall.
- g) Depot.
- h) Layover facility.
- i) Control centre.
- j) Intelligent Transport Systems:
  - i) Automated Fare Collection (AFC).
  - ii) Public Transport Management System (PTMS).

**Figure 3.14** contains a collage of pictures related to Leeto La Polokwane Phase 1a infrastructure and activities, while the geographical presentation of Phase 1 and 2 routes are contained in **Figure B-4.1 to B-4.28 in Appendix B-4**.



**Appendix B-6** contains extractions from the 2023/2024 PLM-IDP that provides the status quo related to:

# *"10.8 SYSTEM ELEMENTS OF THE LEETO LA POLOKWANE INTEGRATED PUBLIC TRANSPORT SYSTEM.*

- 10.8.1 Universal Access (UA).
- 10.8.2 Non-Motorized Transport (NMT).
- 10.8.3 Industry Transition.
- 10.8.4 Transport Planning and Operations.
- 10.8.5 Intelligent Transport System Modelling.
- 10.8.6 Marketing and Communications.
- 10.8.7 Business and Finance.
- 10.8.8 Leeto Infrastructure.

# 10.9 CONSTRUCTION OF THE BUS DEPOT AT SESHEGO.

# 10.10 GENERAL JOUBERT STREET BUS STATION PRECINCT.

- 10.11 SESHEGO TRUNK ROUTE.
- 10.11.1 Painting of the Leeto la Polokwane bus dedicated lanes in the CBD.
- 10.11.2 Leeto Daytime Layover Facility.
- 10.11.3 Leeto La Polokwane Control Centre.
- 10.11.4 Leeto La Polokwane (LLP).
- 10.11.5 Phase 1A of Leeto la Polokwane.
- 10.11.6 Benefits of Leeto La Polokwane.

# 10.12 LEETO LA POLOKWANE TURNAROUND STRATEGY.

- 10.12.1 Ridership on Leeto la Polokwane Bus Service.
- 10.12.2 Challenges for Leeto La Polokwane Phase 1A Operations.
- 10.12.3 Bus Stop Coverage.
- 10.12.4 Route Alignment Coverage.
- 10.12.5 Flora Park (F1) Route.
- 10.12.6 Westenburg (F4A) Route.
- 10.12.7 Seshego (TE4) Route.
- 10.12.8 Seshego (TEB) Route.

# 10.13 MODAL COMPETITION.

- 10.13.1 Information Dissemination.
- 10.13.2 Insufficient Human Resources.
- 10.13.3 POSSIBLE Strategies to Address Identified Challenges."













FIGURE 3.14: COLLAGE OF PICTURES RELATED TO LEETO LA POLOKWANE INFRASTRUCTURE AND ACTIVITIES (CONT.)

# 3.3.2.2 Bus and Taxi Facilities.

Figure 3.14 provides bus and taxi facilities locations in PLM (see **Figure B-3.12** in **Appendix B** for more detail).

**Table 3.7** contains a summary of the bus and taxi facilities in the PLM area per cluster. **Appendix A-1** contains detailed information on public transport facilities in the PLM Area. A total of 16 formal Taxi Rank Facilities and 74 informal Taxi Rank Facilities were registered in Polokwane, while a total of 21 formal Bus Rank Facilities and 3 formal Bus rank facilities were registered in Polokwane.

TABLE 3.7:       SUMMARY OF BUS AND TAXI FACILITIES IN THE PLM AREA PER         OLUSTED       OLUSTED				
Cluster Name	Facility Name	Туре	Location	Facility Type
Aganang Cluster	Mohlonong Taxi Rank	Informal	Mashashane	Taxi Facilities
Aganang Cluster	Kalkspruit Taxi Rank	Informal	Kalkspruit Opposite Maraba- Mashashane Co- Operatives	Taxi Facilities
Aganang Cluster	Tibanefontein Taxi Rank	Informal	Tibanefontein	Taxi Facilities
Aganang Cluster	Ipopeng Taxi Rank	Informal	Setumong next to Bakone Primary school	Taxi Facilities
Aganang Cluster	Tibane Taxi Rank	Informal	Matlala	Taxi Facilities



TABLE 3.7:       SUMMARY OF BUS AND TAXI FACILITIES IN THE PLM AREA PER         CLUSTER				
Cluster Name	Facility Name	Туре	Location	Facility Type
Aganang Cluster	Knobel Hospital	Informal	Knobel Hospital	Taxi Facilities
Aganang Cluster	Rametloana Taxi Rank	Informal	Rametloana	Taxi Facilities
City Cluster	Thabo Mbeki Str Bus Terminus	Formal	Thabo Mbeki Street	Bus Facilities
City Cluster	Silicon Str Bus Rank	Formal	At Silicon Street	Bus Facilities
City Cluster	Westenburg Taxi Rank	Informal	At Ben Harris Street	Taxi Facilities
City Cluster	RSA Holding Area	Informal	On Dahl Street	Taxi Facilities
City Cluster	Holding Area 1	Formal	Cnr Devenish, Buite Street & Nelson Mandela Drive	Taxi Facilities
City Cluster	Penina Park	Informal	Penina Park	Taxi Facilities
City Cluster	Cnr Boshoff & Gardinia (Flora Park)	Informal	Cnr Boshoff & Gardinia (Flora Park)	Taxi Facilities
City Cluster	Bendor - Multisave	Informal	Bendor - Multisave	Taxi Facilities
City Cluster	Checkers Taxi Rank	Formal	At Biccard Street	Taxi Facilities
City Cluster	Shoprite Museum	Informal	Thabo Mbeki opposite Osmo City	Taxi Facilities
City Cluster	Meropa Casino	Informal	Meropa Casino	Taxi Facilities
City Cluster	Mall of the North	Formal	Within Mall of the North	Taxi Facilities
City Cluster	Silicon Str Taxi Rank	Formal	At Silicon Street	Taxi Facilities
City Cluster	Jazz Taxi Rank	Informal	At Bok Street	Taxi Facilities
City Cluster	PnP Taxi Rank 1	Formal	Between Pres Paul Kruger & Church Street	Taxi Facilities
City Cluster	PnP Taxi Rank 2	Formal	Cnr Pres Paul Kruger, Devenish & Church Street	Taxi Facilities
City Cluster	Oriental Plaza Taxi Rank	Formal	Cnr Excelsior & Church Street	Taxi Facilities
City Cluster	FELLDTA Taxi Rank	Informal	On 87 Pres Paul Kruger Street	Taxi Facilities
City Cluster	Spar City Centre Taxi Rank	Formal	Cnr Dahl, Rissik & Bok Street	Taxi Facilities
City Cluster	Holding Area 2	Informal	Cnr Devenish, Buite & Rissik Street	Taxi Facilities
City Cluster	Holding Area 3	Informal	Cnr Buite & Rissik Street	Taxi Facilities
City Cluster	Library Gardens	Informal	Cnr Schoeman & Grobler Street	Taxi Facilities



TABLE 3.7: SUMMARY OF BUS AND TAXI FACILITIES IN THE PLM AREA PER CLUSTER				
Cluster Name	Facility Name	Туре	Location	Facility Type
City Cluster	Polokwane (Westenburg) Taxi Rank	Informal	Between Market and Church Street next to Sales House	Taxi Facilities
City Cluster	Pick n Pay Rank (Taxi Centre Parking)	Informal	Polokwane, Church Street	Taxi Facilities
Dikgale/ Sebayeng Cluster	Sekgopye	Informal	Sekgopye	Taxi Facilities
Dikgale/ Sebayeng Cluster	Dikgale	Informal	Dikgale	Taxi Facilities
Mankweng Cluster	Mankweng Hospital 1	Formal	Opposite the Hospital	Taxi Facilities
Mankweng Cluster	Mankweng Hospital 2	Informal	Across the Hospital Road	Taxi Facilities
Mankweng Cluster	Mankweng/Turfloop Plaza	Formal	At Mankweng Plaza	Taxi Facilities
Mankweng Cluster	Mankweng Sasol	Formal	Mothapo, Cnr R71	Taxi Facilities
Mankweng Cluster	Mentz	Informal	Mentz	Taxi Facilities
Molepo/ Chuene/Maja Cluster	Thokgwaneng Taxi Rank	Informal	Thokgwaneng Taxi Rank	Taxi Facilities
Molepo/ Chuene/Maja Cluster	Molatela Mathobole	Informal	Molatela Mathobole	Taxi Facilities
Molepo/ Chuene/Maja Cluster	Maja Feke Village	Informal	GA-MAJA	Taxi Facilities
Molepo/ Chuene/Maja Cluster	Ralishikinya Mothowabogobe	Informal	Ralishikinya Mothowabogobe	Taxi Facilities
Molepo/ Chuene/Maja Cluster	Boshega	Informal	Boshega	Taxi Facilities
Molepo/ Chuene/Maja Cluster	Boyne Taxi Rank	Formal	Cnr R71 & Road to St Engenas ZCC	Taxi Facilities
Molepo/ Chuene/Maja Cluster	Molepo - Dihlophaneng	Informal	Molepo - Dihlophaneng	Taxi Facilities



TABLE 3.7: SUMMARY OF BUS AND TAXI FACILITIES IN THE PLM AREA PER CLUSTER				
Cluster Name	Facility Name	Туре	Location	Facility Type
Molepo/ Chuene/Maja Cluster	Molepo Chiefskraal	Informal	Molepo Chiefskraal	Taxi Facilities
Molepo/ Chuene/Maja Cluster	Mothibaskraal Taxi Rank	Formal	Mothibaskraal (Nobody) Along Tzaneen Road	Taxi Facilities
Molepo/ Chuene/Maja Cluster	Polokwane Smelter	Informal	Polokwane Smelter	Taxi Facilities
Molepo/ Chuene/Maja Cluster	Mothapo Taxi Rank	Informal	Mothapo Village	Taxi Facilities
Moletjie Cluster	Chebeng	Informal	Chebeng	Taxi Facilities
Moletjie Cluster	Ga-Kobo	Informal	Ga-Kobo	Taxi Facilities
Moletjie Cluster	Ga-Ramakgapola	Informal	Ga-Ramakgapola	Taxi Facilities
Moletjie Cluster	Ga-Piet	Informal	Ga-Piet	Taxi Facilities
Moletjie Cluster	Ga-Ramphele	Informal	Ga-Ramphele	Taxi Facilities
Moletjie Cluster	Ralema	Informal	Ralema	Taxi Facilities
Moletjie Cluster	Makgodu	Informal	Makgodu	Taxi Facilities
Seshego Cluster	Cnr Nelson Mandela & Vermikuliet	Informal	Cnr Nelson Mandela & Vermikuliet	Taxi Facilities
Seshego Cluster	Seshego Zone 5	Informal	Seshego Zone 5, along Helen Joseph Street	Taxi Facilities
Seshego Cluster	Cnr Seshego & Dendron Road	Informal	Seshego Taxi Rank	Taxi Facilities
Seshego Cluster	Seshego Taxi Rank	Formal	Cnr New Era Drive & 131st Avenue	Taxi Facilities
Seshego Cluster	Seshego (Nelson Mandela & Chris Hani)	Informal	Seshego (Nelson Mandela & Chris Hani)	Taxi Facilities
Seshego Cluster	Seshego Zone 3	Informal	Cnr New Era	Taxi Facilities
Seshego Cluster	Mmotong Shopping Complex Taxi Rank	Informal	Mmotong Shopping Complex Taxi Rank	Taxi Facilities



TABLE 3.7:         SUMMARY OF BUS AND TAXI FACILITIES IN THE PLM AREA PER				
		CLUSTER		
Cluster Name	Facility Name	Туре	Location	Facility Type
Seshego Cluster	Seshego (Ditlou Drive & Oliver Tambo)	Informal	Seshego (Ditlou Drive & Oliver Tambo)	Taxi Facilities
Seshego Cluster	Seshego Luthuli 9L	Informal	Seshego Luthuli 9L	Taxi Facilities
Seshego Cluster	Seshego Circle Taxi Rank	Informal	Seshego Circle Taxi Rank	Taxi Facilities
Seshego Cluster	Seshego Circle BP Taxi Rank	Informal	Seshego Circle BP Taxi Rank	Taxi Facilities
Aganang Cluster	N11 Limburg Winkel Taxi Rank	Formal	N11 Limburg Winkel Taxi Rank	Taxi Facilities
Mankweng Cluster	Vikking	Informal	Vikking	Taxi Facilities
Mankweng Cluster	Peter Mokaba (Makanye Wholesaler)	Informal	Peter Mokaba (Makanye Wholesaler)	Taxi Facilities
Mankweng Cluster	Mankweng C Taxi Holding Area	Informal	Cnr Road D611 & D844)	Taxi Facilities
Mankweng Cluster	Mankweng Taxi Rank	Formal	Paledi Mall Circle	Taxi Facilities
Molepo/ Chuene/Maja Cluster	Phomolong	Informal	Phomolong	Taxi Facilities
Molepo/ Chuene/Maja Cluster	Nobody-Mothapo	Informal	Cnr Road R71 & D3985)	Taxi Facilities
Molepo/ Chuene/Maja Cluster	Mankgaile	Informal	Road D4020	Taxi Facilities
Molepo/ Chuene/Maja Cluster	Tsebela Taxi Rank	Informal	Cnr Road D400 & D4032	Taxi Facilities







# 3.3.3 Road-based Routes per Mode and per Major Operator or Taxi Association.

**Table 3.8** contains a summary of the number of vehicles per TA as obtained from the relevant TAs, while **Table 3.9** contains a summary of the number of buses per bus company as obtained from the bus operators during 2021.

TABLE 3.8: NUMBER OF VEHICLES FROM TAXI ASSOCIATIONS				
	Type of operations			
Taxi Association	Local	Local & Long- distance	Long- distance	Total No. of Taxis in Operation
Bahlaloga TA	94			94
Bakone TA	143			143
Dikgale Local TA (related to Mankweng TA)	44			44
Flora park-Pietersburg TA	35			35
Ikageng TA	98			98
Machaka Ramokgopa TA	91			91
MAMA (Mashashane Maraba) TA	128			128
Mamphaka Local TA (related to Mankweng TA)	38			38
Masealama Local TA (related to Mankweng TA)	33			33
Moletjie TA	315			315
MOLLDTA (Molepo Local & Long-distance TA)		110		110
Mothapo Local TA (related to Mankweng TA)	88			88
Mothiba Makotopong Local (related to Mankweng TA)	31			31
Mphebatho Local & Long-distance TA		40		40
Peace TA	34			34
Polokwane Long-distance TA			23	23
Polokwane Burgersfort TA			90	90
Polokwane Local & Long-distance TA		38		38
Polokwane Tembisa Long-distance TA			58	58
RE GONA Local & Long-distance TA		18		18
RSA TA			37	37
Sekgopye Local Taxi (related to Mankweng TA)	54			54
Seshego Polokwane TA	478			478
Westenburg TA	19			19
Grand Total	1723	206	208	2137



TABLE 3.9:NUMBER OF BUSES PER BUS OPERATOR AS OBTAINED FROM BUSCOMPANIES				
		Type of operations		
Bus Company	Local	Local & Long- distance	Total No. of Buses in Operation	
GNT Seshego	Local	-	83 (73 GNT and 10	
			Kopano, Subcontract)	
Madodi	Local	-	25	
Kopano		Local & Long	43	
Bahwaduba	Local	-	29	

# 3.3.4 Vehicle Movements in and out of Taxi Ranks.

Data were collected on in and out movements of taxi ranks for a 13-hour period from 05:30 to 18:30 from 19 to 29 October 2020 and 12 to 19 November 2020. From this base data, the maximum utilisation of the rank, the peak for drop-off, the peak for loading as well as the total number of vehicles in and out of the rank were determined.

**Table 3.10** provides a summary of the rank utilisation surveys that were conducted. Detailed rank utilisation information is further contained in **Appendix A-4**.

TABLE 3.10: SUMMARY OF ROUTE UTILISATION SURVEYS CONDUCTED AT						
Facility	Total Pass	Total Taxi Capacity	Total taxi Trips	Unique Taxi Trips	Average Occupatio n per Vehicle	Average No. of Trips per Taxi
87 Paul Kruger Taxi Rank	487	513	29	28	17.7	1.0
Boyne Taxi Rank	1065	1238	78	63	15.9	1.2
BP Holding Area	362	390	23	22	17.0	1.0
Checkers Taxi Rank Hans Van Rensburg	615	831	53	51	15.7	1.0
Church Street	12269	18040	1169	681	15.4	1.7
City Centre	916	972	56	54	17.4	1.0
Indian Centre	626	645	41	41	15.7	1.0
Jorrisen Street	1074	1072	73	45	14.7	1.6
Library Garden	1079	1167	76	73	15.4	1.0
Magombo Rd	364	466	29	23	16.1	1.3
Makotopong	74	74	5	5	14.8	1.0
Mankweng Hospital Rank	2367	2914	189	157	15.4	1.2
Mall of the North	8400	9675	622	491	15.6	1.3
Mamphaka	1037	1265	81	76	15.6	1.1
Mankweng Plaza	12832	16443	1093	844	15.0	1.3
Mantheding	153	165	11	11	15.0	1.0



TABLE 3.10: SUMMARY OF ROUTE UTILISATION SURVEYS CONDUCTED AT TAXI FACILITIES IN POLOKWANE						
Facility	Total Pass	Total Taxi Capacity	Total taxi Trips	Unique Taxi Trips	Average Occupatio n per Vehicle	Average No. of Trips per Taxi
Marobala Local Taxi Rank	162	165	11	11	15.0	1.0
Mashashane Mohlonong	1400	1782	117	101	15.2	1.2
Pick n Pay Taxi Rank	11995	12566	795	647	15.8	1.2
Polokwane To Bochum	1058	1285	83	71	15.5	1.2
Paul Kruger and Devenish Street	1868	1979	119	119	16.6	1.0
Sebora Mashashane	134	200	13	11	15.4	1.2
Sekgopye	718	808	51	51	15.8	1.0
Seshego Taxi Rank	3994	5840	387	314	15.1	1.2
Total	65049	80495	5204	3990	15.5	1.3

3.3.5 Summary and Analysis of the Fare Systems (Structure, Levels, Fare Collection Systems and Concessions) of Different Services in the Area.

# 3.3.5.1 Leeto La Polokwane.

Based on the Provinsiale Koerant, Buitengewoon 7 April 2021, "Premier's Notices 1 of 2021, POLOKWANE MUNICIPALITY LEETO LA POLOKWANE OPERATIONAL BY-LAW FARE STRUCTURE FOR PHASE 1(A) AS A FLAGSHIP PROJECT FOR POLOKWANE. Notice is given that the Municipal Manager of Polokwane Local Municipality hereby publishes, in terms of the provisions of Section 4(1)(c) & 21 of the Local Government: Municipal Systems Act 32 of 2000, read with Section 152 of the Constitution of the Republic of South Africa, 1996, the Fare Structure under the By-Law set forth hereunder, which shall take effect on the date of publication of this notice:

- 1. That Council commits to cover/subsidise the Public Transport Operation for Leeto La Polokwane at R32m per annum, Council approves the fare as follows:
  - 1.1. Seshego R10.00 per passenger.
  - 1.2. Westernburg R6.00 per passenger.
  - 1.3. Flora Park R6.00 per passenger.
- That Council approves the initial issuance of the Leeto La Polokwane Traveller's Card for free and a charge of R35.00 for re-issuance of the Leeto La Polokwane Traveller's Card"



The fare structure was recently reviewed as part of the 2023/2024 PLM-IDP. The following rates were adopted:

- a) Seshego R13.00 per passenger.
- b) Westernburg R8.00 per passenger.
- c) Flora Park R8.00 per passenger.

That Council approves the initial issuance of the Leeto La Polokwane Traveller's Card for R45.00 and a charge of R60.00 for re-issuance of the Leeto La Polokwane Traveller's Card".

In addition, PLM have budgeted for the Esilux (Pty) Ltd (Vehicle Operating Company) an amount of R2.2m per month which amounts to R26.4m annually to provide transport service for Leeto LA Polokwane Phase 1a. As per the PLM IDP of 2023 (Chapter 11.24.5), this budget will be sourced from "Own Revenue" and "Equitable Share" and any balance directly from bus users.

# 3.3.5.2 <u>Taxi Industry.</u>

Taxi routes have been obtained from the taxi associations as well as the LPRE. For most routes, the routes provided and used by the taxi associations have differences in terms of routes as registered by the LPRE during 2021. Taxi routes with an **A** and **B Point** in Polokwane are described in Appendices while the geographical presentation of the routes is contained in **Figures B-3.1.1** to **B-3.7.2** in **Appendix B**:

a)	Polokwane-Seshego Taxi Association	Info from TA	Figure B-3.1.1
		Info from LPRE	Figure B-3.1.2
b)	Moletjie Taxi Association	Info from TA	Figure B-3.2.1
		Info from LPRE	Figure B-3.2.2
c)	Flora Park Taxi Association	Info from TA	Figure B-3.3.1
		Info from LPRE	Figure B-3.3.2
d)	Westenburg Taxi Association	Info from TA	Figure B-3.4.1
		Info from LPRE	Figure B-3.4.2
e)	Mankweng Taxi Association	Info from TA	Figure B-3.5.1
		Info from LPRE	Figure B-3.5.2
f)	Boyne Taxi Association	Info from TA	Figure B-3.6
g)	Molepo Taxi Association	Info from TA	Figure B-3.7.1
		Info from LPRE	Figure B-3.7.2



Information on taxi routes and fares for local taxis as obtained from the various **taxi associations** is indicated in **Appendix A-3.** Information on taxi routes and fares for local taxis as obtained from the route utilisation survey is indicated in **Table A-3.4**.

# 3.3.5.3 Bus Industry

Bus routes have been obtained from the LPRE with the permission of the relevant bus companies during 2021. Taxi routes with an **A** and **B Point** in Polokwane are described in Appendices while the geographical presentation of the routes is contained in **Figures B-3.8** to **B-3.11** in **Appendix B**:

a)	Great North Transport	Info from LPRE	Figure B-3.8
b)	Kopano	Info from LPRE	Figure B-3.9
c)	Madodi	Info from LPRE	Figure B-3.10
d)	Bahwaduba	Info from LPRE	Figure B-3.11

Information on bus timetables for local bus operations was obtained from the various bus companies during 2021 and are indicated in **Appendix A-3.5** to **A-3.8**. Information on bus routes for local buses is indicated in **Special Appendix B** 

#### 3.3.6 Passenger Rail Service Capacity and Capacity Utilisation per Line in the Peak Period.

Not relevant for PLM-CITP since there are no rail commuter services in PLM.

# 3.3.7 Road-based Public Transport Service Capacity and Capacity Utilisation per Route in the Peak Period.

Route utilisation surveys were conducted for TAs not related to Leeto La Polokwane Phase 1a at the taxi rank facilities mentioned in **Table A-1.1** to **A-1.5** in **Appendix A-1** from 19 to 29 October 2020 and 12 to 19 November 2020.

Detailed information is available as part of studies that were conducted for the Leeto Phase 1a affected taxi associations, namely:

- a) Seshego Polokwane TA.
- b) Florapark-Pieterburg TA.
- c) Westenburg TA.

 Table A-4.1 and A-4.2 of Appendix A-4 respectively provide summaries of route utilisation results for taxis and metered taxis.

**Appendix A-5, Tables A-5.1 to A-5.3** provide summaries of the list of operators and their status in terms of vehicle ownership and status of OLs for TAs as well as Leeto La Polokwane Phase 1a affected by TAs (operators) during 2019. Tables **A-5.4** to **A-5.22** provide the vehicle



ownership and status of OLs for all TAs based on information collected from the LPRE during 2021, including the affected TAs:

- Table A-5.1: Signed off ring-fenced members and OLs for Seshego-Polokwane TA. a) (August 2019) Table A-5.2: Signed off ring-fenced members and OLs for Flora Park-Pietersburg b) TA. (July 2019) C) Table A-5.3: Signed off ring-fenced members and OLs for Westenburg TA (July 2019) Table A-5.4: Bakone TA. d) Table A-5.5: Polokwane Local and Long-distance TA e) Table A-5.6: RSA TA. f) g) Table A-5.7: Bahlaloga TA. h) Table A-5.8: Polokwane Tembisa Long and Local Distance TA. Table A-5.9: Mphebatho Local and Long-distance TA. i) Table A-5.10: Molepo Local and Long-distance TA. i) Moletjie TA. k) **Table A-5.11**: I) Table A-5.12: Mashashane Maraba TA. m) Table A-5.13: Machaka-Ramokgopa TA. n) Table A-5.14: Ikageng TA. o) **Table A-5.15**: Flora Park-Pietersburg TA. p) Table A-5.16: Mankweng TA. Table A-5.17: Pietersburg-Burgersfort TA. q) Pietersburg-Germiston TA. Table A-5.18: r) Table A-5.19: Pietersburg United Local & Long-distance TA. s) Table A-5.20: Regona Local and Long-distance TA. t) u) Table A-5.21: Seshego-Polokwane TA
- v) **Table A-5.22:** United Zebediela TA

**Tables 3.11.1** to **3.11.3** contain summaries of the number of ring-fenced members that were signed off between the relevant TAs and PLM during 2020 members respectively for:

- a) Seshego-Polokwane TA.
- b) Flora Park-Pietersburg TA.
- c) Westenburg TA.



TABLE 3.11.1: SUMMARY OF NUMBER OF RING-FENCED MEMBERS AND OLS FORSESHEGO – POLOKWANE TA SIGNED OFF IN 2020			
Number of Records	597		
Number of Members	301		
Number of OL	523		
Number of OL with Vehicles	511		
Number of OL without Vehicles	12		
Number of Vehicles without OL	51		
Number of Vehicles no OL	21		

TABLE 3.11.2: SUMMARY NUMBER OF RING-FENCED MEMBERS AND OLS FORFLORA PARK - PIETERSBURG TA SIGNED OFF IN 2020							
Number of Records	82						
Number of Members	52						
Number of OL	65						
Number of OL with Vehicles	58						
Number of OL without Vehicles	7						
Number of Vehicles without OL   9							
Number of Vehicles no OL 7							

TABLE 3.11.3: SUMMARY NUMBER OF RING-FENCED MEMBERS AND OLS FORWESTENBURG TA SIGNED OFF IN 2020							
Number of Records	30						
Number of Members	15						
Number of OL	30						
Number of OL with Vehicles	29						
Number of OL without Vehicles	1						
Number of Vehicles without OL	0						
No vehicles No OL	0						

A list of the relevant TA members that were compensated as part of Leeto La Polokwane Phase 1a is presented in **Table A-5.23** in **Appendix A-5**.

# 3.3.8 Summary of Area-to-area Movements based on Cordon Counts.

**Table 3.12** contains 12-hour traffic volumes that were conducted on 25 June 2020 from theCBD towards major internal corridors routes.



TABLE 3	TABLE 3.12: 12-HOUR TRAFFIC VOLUMES PER MODE ON INTERNAL CORRIDORSROUTES IN PLM (BOTH DIRECTIONS)										
Route	Corridor	Count location	Liç vehi	ght cles	Та	xis	Bu	ses	He: vehi	avy cles	TOTAL
Nelson Mandela Drive	Polokwane - Seshego - Moletjie	North of Vermikuliet Street	21699	82%	3495	13%	284	1%	934	4%	26412
Polokwane Drive	Polokwane - Seshego - Moletjie	West of Dendron Road	8368	80%	1652	16%	64	1%	348	3%	10432
Matlala Road	Polokwane - Matlala	East of Ben Harris Street	7872	76%	1872	18%	97	1%	538	5%	10379

**Tables 3.13.1** and **3.13.2** contain respectively the AM and PM peaks hour traffic volumes that were conducted on 25 June 2020 from the CBD towards major internal corridors routes.

TABLE 3.13.1: AM PEAK PERIODS TRAFFIC VOLUMES PER MODE ON INTERNAL CORRIDORS ROUTES IN PLM (BOTH DIRECTIONS)											
Route	Corridor	Count location	Lig vehi	ght cles	Та	xis	Bu	ses	He: vehi	avy cles	TOTAL
Nelson Mandela Drive	Polokwane - Seshego - Moletjie	North of Vermikuliet Street	1764	77%	415	18%	30	1%	79	3%	2288
Polokwane Drive	Polokwane - Seshego - Moletjie	West of Dendron Road	961	81%	179	15%	16	1%	28	2%	1184
Matlala Road	Polokwane - Matlala	East of Ben Harris Street	943	76%	265	21%	4	0%	32	3%	1244

TABLE 3.13.2: PM PEAK PERIODS TRAFFIC VOLUMES PER MODE ON INTERNAL CORRIDORS ROUTES IN PLM (BOTH DIRECTIONS)											
Route	Corridor	Count location	Liq vehi	ght icles	Та	xis	Bu	ses	Hea vehi	avy cles	TOTAL
Nelson Mandela Drive	Polokwane - Seshego - Moletjie	North of Vermikuliet Street	2465	82%	436	14%	40	1%	79	3%	3020
Polokwane Drive	Polokwane - Seshego - Moletjie	West of Dendron Road	1387	90%	128	8%	9	1%	14	1%	1538
Matlala Road	Polokwane - Matlala	East of Ben Harris Street	905	73%	261	21%	19	2%	50	4%	1235

Appendix A-9 contains detailed information related to Table 3.13A and 3.13B above.

# 3.3.9 Regional Traffic

**Table 3.14** contains classified traffic counts including light vehicles, heavy vehicles, taxis and buses were conducted on all the regional corridors. The relevant traffic counts were conducted on 23 and 30 July 2021 between 06:00 to 18:00 for both directions.



	TABLE 3.14: 12-HOUR CLASSIFIED TRAFFIC COUNTS FOR REGIONAL											
			CO	RRIDC	ORS IN	PLM						
Route	Corridor	Count	Lig	jht alac	Taxis		Buses		Heavy		TOTAL	
		Location	veni	cies		r			venicles			
N1*	Polokwane/	South of N1	14953	79%	413	2%	87	0%	3591	19%	19044	
	Mokopane	bypass	14000	1070	410	270	01	070	0001	1070	10044	
R101*	Polokwane/	South of N1	7164	78%	294	10/	110	1%	1516	170/	0174	
	Mokopane	bypass	/104		504	770			1010	1770	5174	
D71	Polokwane/	East of N1	1753/ 96%	1005	09/	145	10/	022	10/	20206		
<u>к</u> / і	Tzaneen	bypass	17554	34 00%	00%	1000	570	145	1 70	032	470 2	20390
D07	Polokwane/	South of N1	0020	050/	700	60/	90	10/	000	00/	44550	
K37	Lebowakgomo	bypass	9030	65%	132	0%	80	1%	906	0%	11558	
D04	Polokwane/	East of N1	5010	010/	550	00/	102	20/	C1E	00/	CEOE	
ROI	Giyani	bypass	5510	0170	559	070	103	270	015	9%	0393	
	Bolokwono/	North of										
R521		Polokwane	6795	78%	887	10%	89	1%	956	11%	8727	
	Dendron	Drive										

\* N1 and R101: 14 hours traffic counts from 06:00 to 20:00

Appendix A-9 contains detailed information related to Table 3.14 above.

# **3.3.10** Analysis of the Condition of Transport Infrastructure, Facilities

**Appendix A-10** contains the condition of public transport infrastructure and facilities. **Figure 3.16** provides information obtained from the Company Park Point that provides paid parking collection services for PLM.







Welcome - Le amogetswe - Welkom Important Notice:

This Parking will become a Paid Parking with effect from 15 August 2019. The Parking will be Managed by Park Point on behalf of the City of Polokwane. Please Adhere to the Rules and Tariffs as set out Below.

> Fees Applicable – Ditefelo - Kostes Betaalbaar 8:00am to 5:00pm

Monday to Friday Saturday 8:00am to 1:00pm Sunday and Public Holidays No Charge

Failure to pay your parking tariff will result to your vehicle being clamped and towed

# Tariffs – Tefelo - Tariewe

•	1 - 2 hours:	R8.00
	2 - 3 hours:	R16.00
	3 - 4 hours:	R24.00
	4 - 5 hours:	R30.00
	5 - 6 hours:	R36.00
	6 - 7 hours:	R40.00
	7 - 8 hours:	R46.00
	8 - 9 hours:	R52.00
	9 + hours:	Clamping

Lost Ticket – Go timetsa tekete - Verlore Kaart No Ticket – Go hloka tekete - Geen Kaart

R60.00 R60.00

#### **Disclaimer - Vrywaring – Maikarabelo**

All vehicles are parked at the parkers own risk. Gare na maikarabelo godimo ga tshenyo ya dikoloi Alle voertuie word op eie risiko parker.

FIGURE 3.16: INFORMATION OBTAINED FROM "PARK POINT"



#### Welcome - Le amogetswe - Welkom

Important Notice: This Parking will become a Paid Parking with effect from 15 August 2019. The Parking will be Managed by Park Point on behalf of the City of Polokwane. Please Adhere to the Rules and Tariffs as set out. All Vehicles parked at the identified parking bays are subject to the rules and regulations and are required to pay the Fees as set per the Tariff Boards. Lost Tickets will be charged as per Lost Ticket Tariff. Monthly Parking: Please enquire with our parking marshals or Main Office at Civic Centre. Park Point's mission is to provide a positive parking experience while maintaining the parking system and enforcing, in a fair and equitable manner, the parking regulations in the parking bays. Customer service is

our main priority and the employees of Park Point are held to a high standard of professionalism when assisting the citizens and all visitors to this Parking area.

# FIGURE 3.16: INFORMATION OBTAINED FROM "PARK POINT" FOR PLM (CONT.)

**Figure B-5.1** in **Appendix B-5** provides the locality of traffic signals for the full PLM area, while **Figure 3.17** and **Figure B-5.2** and **3** in **Appendix B-5** provides the traffic signals locality around the PLM central area.





# 3.4 Description of other Public Transport Services and Modes of Transport

This section provides a summary of the location and size of operations where available, infrastructure and/or any contractual arrangements for:

- a) Metered taxis.
- b) E-hailing services.
- c) Long-distance and cross-border transport.
- d) Transport for learners.
- e) Non-motorised transport.

# 3.4.1 Metered Taxis.

Interviews were held with the metered industry to understand the operations and requirements of the metered taxi operators, the extent of services and the fares per route.



#### The following key findings are relevant:

- a) Polokwane Metered TA does not exist anymore.
- b) Capricorn Metered TA has 130 taxis (vehicles) with 126 owners.
- c) Metered taxis are operating 24-hours a day.
- d) Insufficient metered taxi facilities are provided, subsequently, metered taxis stop all over town.
- e) The fee structure and utilisation for the metered taxis are not formalised.
- f) No metered taxi OLs have been issued by LPRE.

Refer to Tables A-1.2 and A-1.5 for the list of facilities for metered taxis in Polokwane.

Metered taxis are not supposed to operate on specific routes but operate on a specific demand at a specific rate per kilometre. Metered taxi services and fares for the Capricorn Metered Taxi Associations are reflected in **Table A-3.3**, **Appendix A-3**.

# 3.4.2 E-hailing

It has been almost 10 years since e-hailing has been introduced in South Africa but in the Polokwane Local Municipality, the e-hailing services were launched in the 2018 season. Taxify has launched operations in Polokwane during 2021 and is the first ride-hailing service to connect passengers around Polokwane and neighbouring places from the city centre.

E-hailing is a process of booking or requesting a ride via smartphone. Price, distance, estimated time and directions are calculated by mobile application and can be paid via electronic funds transfer which makes it safe and reliable. Payment is made with cash or card, although passengers paying by card will often receive benefits such as discount codes.

Once a driver has accepted the ride, passengers will be able to see their driver's personal information and vehicle details e.g. (name, photo, car make and model, and registration number) and will be able to track the driver making his or her way towards them in real-time.

# 3.4.3 Long-distance and Cross-border Transport.

The following long-distance/cross-border bus services were identified:

- a) South African Greyhound.
- b) City Liner.
- c) SA Roadlink.
- d) City to City.
- e) Translux.
- f) Intercape.



**Table 3.15** provides a summary of the key information for the relevant long-distance and cross-border bus services.



TABLE 3.15:	SUMMARY OF THE KE	Y INFORMATION FOR THE REL	EVANT LONG-DISTANCE	AND CROSS BORDER BUS SERVICES
Bus Company	Status	Type of Service	Loading Points	Photo
South African Greyhound	After 37 years in the industry, Greyhound sadly announced on the 3rd of February 2021 that they will cease services on the 14th of February 2021.	Greyhound was one of the first coach operators to begin services in South Africa. Their extensive route network covers all the major cities in South Africa including Johannesburg, Cape Town, Durban, Port Elizabeth, East London and Pretoria. They also operate to Harare, Bulawayo in Zimbabwe and Maputo in Mozambique.	Not Relevant.	GREYHOUND Burndurer
City Liner	Citi Liner also ceased services on the 14th of February 2021.	Citi Liner is a South African coach company that offered both domestic services and selected regional services to Mozambique and Zimbabwe. It, along with City to City and SA Roadlink, is known for often offering the cheapest bus tickets. Their buses are basic but comfortable.	Not Relevant.	TURER CONTRACTOR
SA Roadlink	SA Roadlink went into liquidation in February 2015 after stopping services in mid- 2014. They had been struggling financially for many years.	SA Roadlink bus used to offer super luxury bus trips through a network of cities within South Africa and its neighbouring countries.	Not Relevant	
City to City	Active	City to City buses offer semi-luxury, no-frills domestic and regional coach trips. They service a large network of stops across Southern Africa including South Africa, Zimbabwe, Malawi, Mozambique, Swaziland, Lesotho and Zambia.	Polokwane Bus Rank	



TABLE 3.15:	SUMMARY OF THE KE	EY INFORMATION FOR THE REL	EV	ANT LONG-DISTANCE	AND CROSS BORDER BUS SERVICES
Bus Company	Status	Type of Service		Loading Points	Photo
Translux	Active	Translux buses offer luxury coach		Polokwane Station	
		trips on its large network of stops			
		throughout South Africa and its			ALL BER MALE MANY
		neighbouring countries. The Translux			TransLux
		bus offers daily stops at 100			
		destinations in South Africa and other			
		major cities in Zambia, Mozambique			
		and Malawi.			
Intercape	Active	The Intercape is South Africa's largest	a)	Polokwane at the City	
		intercity coach company which is		Square	
		privately owned and has an	b)	Polokwane Limpopo Mall	
		extensive network across Southern	c)	Polokwane Savannah	
		African cities between which bus		Mall	
		bookings can be made. It is serviced			and the second sec
		by its approximately 150 buses. It is			INTERCIPTune -
		known for its safety record, which has			
		been enhanced through the			
		implementation of its own speed limit			
		of 95km/h through its route network,			
		which is monitored 24 hours a day			
		through a satellite tracking system.			
Autopax Passenger S	Services:	•			
a) Translux and Cit	y to City are brand names use	ed for luxury coach operations of Autopax	Pas	senger Services (Pty) Ltd. Au	topax in turn is a wholly-owned subsidiary of PRASA
(the Passenger I	Rail Agency of South Africa), v	which is owned by the South African gove	rnme	ent. Autopax is a member of t	the Southern African Bus Operators Association.

b) Corporate agents: Shoprite, Checkers, Checkers Hyper and Computicket are corporate agents of Translux.



Long-distance bus routes and fares are included in Table A-3.10, Appendix A-3.

**Table 3.16.1** provides the names of the long-distance TAs that provide services inPolokwane. The long-distance taxi routes are listed in **Table A-3.9** of **Appendix A-3.** 

TABLE 3.16.1: LONG-DISTANCE TAS OPERATING IN PLM
Taxi Association
MOLLDTA (Molepo Local & Long-distance TA)
Mphebatho Local & Long-distance TA
Polokwane Long-distance TA
Polokwane Burgersfort TA
Polokwane Long & Local Distance TA
Polokwane Tembisa Long-distance TA
REGONA Local & Long-distance TA
RSA TA

# 3.4.4 Learner Transport

**Table 3.16.2** provides a summary of contracted scholar transport services and routes with the provider in the PLM Area as obtained from the Limpopo Department of Education.

**Table 3.16.3** provides a summary of contracted scholar transport services and routes with the provider for the Capricorn North District in the PLM Area as obtained from the Limpopo Department of Education.



	TABLE 3.16.2: SCHOLAR TRANSPORT CONTRACTED SERVICES AND ROUTES WITHIN PLM								
No	Circuit	Route	Company	School					
		Number							
1	Pietersburg	L/CS/S 23	Maela Distributors and Project	Papkuil Primary					
2	Pietersburg	L/CS/S 21	Mokatemone Construction JV Bokamoso	Mohlakaneng Sec and Moruleng Sec					
3	Pietersburg	L/CS/S 22	Thandisenzeni & Bheki Pael Transport	Bokamoso Sec and Masedibu Secondary					
4	Maraba	L/CS/S 03	Maruamaso Transport Service	Ngwanasehlakwana Secondary					
5	Maraba	L/CS/S 04	MW Dima Transport	George Moragula Secondary					
6	Maraba	L/L/S 161	PJ Thwala Luxury Tours	Mmanare Secondary					
7	Maraba	L/L/S 25	Selahle Tours	Mmaphuthi Secondary					
8	Maraba	L/L/S 124	Nyabekile Enterprise (Pty) Ltd	Mmaphuthi Secondary					
9	Maraba	L/C/S 49	Shabback Bus Enterprise	Sekgopetjane Secondary					
10	Seshego	L/CS/S 27	Oni and Pozi Trading	Khaiso Sec, M.E Makgato Sec					
11	Lebopo	L/CS/S 01	N.C.H	Maphefo Primary					
12	Lebopo	L/CS/S 34A	Kabati Trading & Project	Molepo Primary					
13	Lebopo	L/C/S 34B	Kabati Trading & Project	Molepo Primary					
14	Kgakotlou	L/L/S 99	Mogapu Construction and Projects	Mothimako Sec					
15	Kgakotlou	L/C/S 06	Samema Tours	Makotopong Primary					
16	Kgakotlou	L/L/S 100	Zaloe Trading Ent	Phomolong Sec					
17	Kgakotlou	L/C/S 98	Samema Tours	Mananga Primary					

Source: Limpopo Province Department of Education 2021



TABLE 3.1	TABLE 3.16.3: SCHOLAR TRANSPORT CONTRACTED SERVICES FOR CAPRICORN NORTH DISTRICT ROUTES UNDER PLM										
Circuit	Schools	Route number	Company								
Bahlaloga	Nare Secondary school	L/CN/S 2003	Kabati Trading & Projects								
Bakani	Mamolone Secondary	L/CN/S 35	Bokamoso & Tumelo Consultation								
Dakom	Manioope Secondary	L/P/S 115	K J Badimo Transport								
Bakoni	Mafifing Secondary	L/CN/S 09	NCH Transport								
Bakoni	Welgelen/Borume Primary	L/P/S 173	PJ Thwala Lux Tours								
Koloti	Mokgoba Primary school	L/P/S 138	Mmamolatelo pty (ltd)								
Koloti	Phalatlou Secondary	L/P/S 131	Midnight Star Trading 92								
Koloti	Nthema/Kabela Secondary	L/P/S 130	Kgahlodi Catering and Projects								
Koloti	Mahlabela	L/P/S 111	KJ Badimo Transport								
Koloti	Moshidl Secondary	L/P/S 110	Power rush trading 151								
Moloto	Mochedi Secondary	L/P/S 116	Hlako Mohafe								
Moloto	Bosakgo Sec & Pelabela Primary	L/CN/S 03	Malefo Transport								
Vlakfontein	Nkgopoleng Bakone Secondary	L/CN/S 34	NCH Transport								
Vlakfontein	Nkgopoleng Bakone Secondary	L/CN/S 05	JPS Tours Transport & Dlulabaphi Trading								
Vlakfontein	Mamone/Tshukutswe	L/CN/S 08	Kabati Trading and Projects								

Source: Limpopo Province Department of Education 2021



# 3.4.5 Non-motorised Transport.

**Chapter 10** of the PLM-CITP contains detailed information related to the PLM-NMT Master plan that was completed in 2014.

**Figure 3.18** provides a copy of the latest NMT Master Plan for PLM and indicates the following concerning NMT routes:

- a) Identified for design.
- b) Design completed.
- c) IRPTS related projects completed.
- d) KFW projects completed.
- e) NDPG projects completed.
- f) NDPG projects under construction.





FIGURE 3.18: COPY OF LATEST NMT MASTER PLAN OF PLM



# 3.4.6 Air Transport.

As part of the 2010 Soccer World Cup in South Africa, the Polokwane International Airport was upgraded not only for local flights but also to meet international standards. Upgrades included a maintenance centre, trade fair centre, aviation academy, new Gateway Airports Authority Limited (GAAL) administrative offices and a cargo hub.

There are two airports in Polokwane namely; Polokwane International Airport (PIA) and Polokwane Municipality Airport (PMA). The PIA is used for commercial purposes.

**Figure 3.19** provides photos while **Table 3.17** provides technical information of the relevant Airports.




	AIR SITE			
CATEGORY	PIA	РМА		
ICAO Code	FAPI	FAPI		
IATA Code	PTG	PTG		
Usage	Civilian airport	Civilian airport		
Runways	Paved, not lighted	Paved, lighted		
Dimensions	2 560 X 45 metre, 2 320 X 45 metre	2 200 X 25 metre		
Customs	Yes	No		
Elevation	1 242 metre (MSL)	1 327 metre (MSL)		
Latitude:	S 23°50'43'	S 23°55'33'		
Longitude:	E 029°27'30'	E 029°29'03'		
	PIA, GAAL	N/A		
Contact	info@gaal.co.za	N/A		
	+27 (15) 288 0122	N/A		
ICAO CODE	International Civil Aviation Organization (ICAO) airport location indicator.	N/A		
IATA CODE	International Air Transport Association (IATA) identifier.	N/A		
AIRPORT USAGE	Civ.: Civil airport, open for public use (including joint use).	N/A		
	Mil.: Military airport, not open for public use.	N/A		
	Priv.: Private Airport, not open for public use.	N/A		
CUSTOMS	No: Customs service not available.	N/A		
	Identification of the surface of the longest runway available: (3 000mx4m).	N/A		
	Paved: Tar (hard surface) runway.	N/A		
RUNWAY	Unpaved: Unpaved (soft surface) runway (only lighter aircraft).	N/A		
	E0523 Paved: Tar (hard surface) runway (1 760 X 45 metre).	N/A		
	E05 Paved: Tar (hard surface) runway (1 300 X 45 metre).	N/A		
	Paved: Concrete (hard surface) Taxiway.	N/A		
	A1 (Eco) Tar Hard Surface (500 x 45 metre).	N/A		
ΤΑΧΙ WAY	C1 Tar Hard Surface (700 x 45 metre). C2 Tar Hard Surface (900 x 45 metre).	N/A		
	D1(200 x 45 metre), D2(95 x 45 metre), D3(700 x 10 metre), and D4(700 x 45 metre) Tar Hard Surface Delta Taxiway.	N/A		
APRONS	Main Apron (200 x 160 metre) Paved: Concrete (hard surface) Apron.	N/A		
THRESHOLD	Paved: Concrete (hard surface) Threshold 23 (45 x 10 metre).	N/A		
PARAMETER FENCE	Length of the Concrete Fence 23km inside and 27km outside.	N/A		
	A1 8 Hangers (30 x 18m).	N/A		
	B1 4 Hangers (30 x 18m).	N/A		



TAB	LE 3.17: TECHNICAL INFORMATION RELATED	TO THE PIA	
CATECODY	AIR SITE		
CATEGORY	PIA	РМА	
	C1 8 Hangers (30 x 18m).	N/A	
	Blue Hangers Workshop for repairs and maintenance of aircraft.	N/A	
LIGHTING	Approach lights not working due to cable theft.	N/A	
TOWER/AIR TRAFFIC CONTROL	Aviation systems (ILS) equipment working and in good condition. Windsock in good condition.	N/A	
FIRE AND RESCUE	Aircraft fire training simulation in good condition. Only one fire rescue truck in good working condition, others need repairs.	N/A	
GENERAL AVIATION MAINTENANCE	ENERAL AVIATION AINTENANCE		
POWER PLANTS REPAIRS	All power substations are working except 13 and 14 due to cable theft.	N/A	
ACCESS CONTROL	Access control systems in good working condition.	N/A	
AV & JET FUEL	Fuel tank not working.	N/A	
LAND SITE			
ADMINISTRATION OFFICE	Administration office block, operational and in good condition.	N/A	
POLICE SUB- STATION	Police Substation building needs maintenance.	N/A	
TERMINAL BUILDING	The structure is still in good condition.	N/A	
CAR HIRE SERVICES	Car hire service is available.	N/A	
AVIATION SCHOOL	School closed, building maintenance and repair required.	N/A	
FUEL FARM	Fuel farm no longer working, requires maintenance.	N/A	

Sources: www.flights.com, www.ourairports.com/airports/FAPP

SA Airlink has a scheduled flight service between Johannesburg (OR Tambo) and Polokwane under the management of Gateway Airport Authority Ltd (GAAL). The service is code-shared with South African Airways (SAA) as the marketing carrier and SA Airlink as the operating carrier. The following number of flights are provided by SA Airlink:

- a) Monday to Fridays: 3 flights a day
- b) Saturdays: 2 flights a day
- c) Sundays: 2 flights

**Tables 3.18.1** and **3.18.2** respectively provide summaries of the aircraft and passengermovements at the Polokwane International Airport between 2014 to 2020.



TABLE 3.18.1:         SUMMARY OF THE AIRCRAFT MOVEMENTS AT THE PIA FROM 2014										
TO 2020										
Туре	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020				
Domestic Schedule	2425	2222	1810	2220	1784	1704				
Domestic Non-scheduled	3312	3818	3703	2900	2366	2377				
Regional Non-scheduled	562	562	338	475	480	397				
International Non-scheduled	898	898	950	900	555	586				
Total	7197	7500	6801	6495	5185	5064				

TABLE 3.18.2: SUMMARY OF THE PASSENGER MOVEMENTS AT THE PIA FROM2014 TO 2020										
Туре	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020				
Domestic Schedule	57879	42963	56671	50412	51577	49335				
Domestic Non-scheduled	4771	5010	4451	4296	3683	4767				
Regional Non-scheduled	1183	1080	1329	1294	1142	849				
International Non-scheduled	1671	1505	1184	1380	1139	1020				
Total	65504	50558	63635	57382	57541	55971				

## 3.5 Description of Institutional and Organisational Make-up of Public Transport Industry

Table 3.19 provides a summary of other road-based public transport operators in PLM.

TA	TABLE 3.19: ROAD-BASED PUBLIC TRANSPORT OPERATORS IN PLM								
Number	Mode of Transport	Organisation	Representative						
1.	IRPTS	Esilux (Pty) Ltd	Mr Harris						
2.	Taxi	SANTACO Capricorn Region and affiliated Taxi Associations	Mr Mosoma						
3.	Taxi	NTA Capricorn District and affiliated Taxi Associations	Mr Kgasago						
4.	Metered Taxi	Capricorn Metered TA	Mr Semenya						
5.	Bus	Great North Transport	Ms Matlou						
6.	Bus	Bahwaduba Bus Service	Mr Boshoff						
7.	Bus	Madodi Bus Services	Mr Moloto						
8.	Bus	Kopane Bus Services CC	Mr Moloto						
9.	Bus	Small Bus Operators Association	To be confirmed						

Concerning Leeto La Polokwane, the following are relevant:

- a) PLM is the Contracting Authority (CA).
- b) Esilux (Pty) Ltd) Vehicle is the Operating Company (VOC).
- c) Esinix (Pty) Ltd Value Chain Company.



#### 3.6 Roads and Traffic

The information related to this section of the report is preliminary derived from the PLM Road Master Plan prepared and approved in 2013. The RMP contains the following details:

#### a) Data Considerations

- i) Traffic volumes.
- ii) Road classification.
- iii) Public transport routes.

#### b) Status Quo

- i) Road infrastructure.
- ii) Conditional assessment.
- iii) Pavement Management System (Network Strategic Level Assessment).

#### c) Strategic Infrastructure

- i) IRT (BRT Phasing).
- ii) Phase 1a: Fluorspar to Seshego.
- iii) Phase 1b: Polokwane CBD to Fluorspar.
- iv) Phase 2: Seshego to Moletjie.
- v) Phase 3: Polokwane CBD to Mankweng.
- vi) Phase 4: Moletjie To North West Settlements.

#### d) Rural Infrastructure Development

- i) Moletjie.
- ii) Seshego.
- iii) Mankweng.
- iv) Koloti Rural Settlements.

#### e) Traffic Forecast of Future Land Development

- i) Introduction.
- ii) Design year of the master plan.
- iii) Model development.
- iv) Development trends in Polokwane.
- v) Future development areas for Polokwane.
- vi) Population growth for Polokwane.
- vii) Trip generation.
- viii) Traffic zones.



- ix) Expected trip generation in Polokwane.
- x) Traffic implications on the road network of Polokwane.
- f) N1 Western Bypass Economic Assessment
- g) Cost Determination and Cost Estimation
- h) Project Prioritisation

#### 3.6.1 Road Network in Central Polokwane Area.

Figure 3.20 indicates the functional road classification PLM roads in the PLM Central Area.

The following tables contain typical traffic counts related to the internal network:

- a) **Table 3.20.1:** Summary of 12-hour traffic volumes per mode for R101 north (near the intersection of Landdros Maré Street (R101) and Gerald Avenue) conducted on 28 May 2021
- b) **Table 3.20.2:** Summary of 12-hour traffic volumes per mode for Witklip Street (Dendron, R521) near the intersection with Asbes Street conducted on 09 April 2021
- c) **Table 3.20.3:** Summary of 12-hour traffic volumes per mode for Veldspaat Street 05 February 2021

# TABLE 3.20.1: SUMMARY OF 12-HOUR TRAFFIC VOLUMES PER MODE FOR R101NORTH (NEAR INTERSECTION OF LANDDROS MARÉ STREET (R101) AND GERALDAVE) ON 28 MAY 2021

Road	AM Peaks			PM Peaks			Total for 12 Hours		
Direction	Light Vehicles	Heavy Vehicles	Total Vehicles	Light Vehicles	Heavy Vehicles	Total Vehicles	Light Vehicles	Heavy Vehicles	Total Vehicles
Southbound to Makhado	212	53	265	639	41	680	4500	509	5009
Northbound to Polokwane	636	35	671	353	49	402	4496	450	4946
Total	848	88	936	992	90	1082	8996	959	9955



#### TABLE 3.20.2: SUMMARY OF 12 HOUR TRAFFIC VOLUMES PER MODE FOR WITKLIP STREET (DENDRON ROAD, R521) NEAR INTERSECTION WITH ASBES **STREET ON 09 APRIL 2021** Road AM Peaks PM Peaks Total for 12 Hours Direction Light Heavy Total Light Heavy Total Light Heavy Total Vehicles Vehicles Vehicles Vehicles Vehicles Vehicles Vehicles Vehicles Vehicles Southbound 558 61 619 1145 35 1180 8668 642 9310 to Dendron Northbound to 1390 67 1457 643 52 695 8309 710 9019 Polokwane 1948 128 2076 1788 87 1875 16977 1352 18329 Total

### TABLE 3.20.3: SUMMARY OF 12 HOUR TRAFFIC VOLUMES PER MODE FOR VELDSPAAT STREET, NEAR INTERSECTION WITH ALOES STREET ON 05 FEBRUARY 2021

Road		AM Peaks		PM Peaks			Total for 12 Hours				
Direction	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total		
	Vehicles	Vehicles	Vehicles								
Eastbound	766	20	795	510	68	795	5800	578	6468		
to R101	700	25	755	010	00	700	0000	575	0400		
Westbound	515	51	566	785	18	566	6585	608	7103		
to Thornhill	515	51	500	700	40	500	0000	000	1130		
Total	1281	80	1361	1304	116	1361	12475	1186	13661		







#### 3.6.2 PLM Road Network

**Figure 3.21** indicates the functional classification of Non-PLM roads, rail and public transport infrastructure within PLM.

Classified traffic counts including light vehicles, heavy vehicles, taxis and buses were conducted on external corridors to PLM, including the N1 south to Mokopane; N1 north to Makhado; R71 to Tzaneen; R37 to Lebowakgomo; R81 to Giyani and R521 to Dendron/Alldays. The 12-hour manual traffic counts were conducted on 25 June, 23 and 30 July 2021 from 06:00 to 18:00 and for the N1 and the R101 from 06:00 to 20:00. **Table 3.19** as part of **Section 3.3.9** provides a summary of the PLM long-distance corridors.

While the N1, R37, R81 and R521 serve predominantly long-distance destinations, the R71 serves local destinations such as Mankweng and Moria as well as long-distance destinations such as Modjadjiskloof and Tzaneen.

The percentage of light vehicles are the highest on all the regional corridors, varying between 78% and 86%. Taxis make up between 2 and 10%, with the lowest percentage on the N1 and the highest percentage on the R521 towards Dendron. Despite buses making up only 1 to 2% on all the routes, bus volumes on the R71 between Polokwane and Mankweng are as high as 145 over a 12-hour period between 06:00 and 18:00.

**Appendix B-7** contains extractions from the 2023/2024 PLM-IDP that provides the status quo related to:

#### *"10.14 ROADS AND STORMWATER*

- 10.14.1 Introduction to Roads and Storm water.
- 10.14.2 Classification of Roads.
- 10.14.3 Leeto La Polokwane Infrastructure.
- 10.14.4 Challenges faced by the Municipality in providing Roads.

#### 10.15 ROADS BACKLOG.

- 10.15.1 Municipal Roads Current Status Quo.
- 10.15.2 Potholes Repairs in the City CBD.

#### 10.16 PUBLIC TRANSPORT INFRASTRUCTURE DEVELOPMENT

- 10.16.1 Construction of low-level bridges for 2021/2022 Financial Year.
- 10.16.2 Areas where low level bridges were constructed and completed.



#### 10.17 REPAIRS ON STORM WATER DRAINS

- 10.17.1 Challenges for Storm Water Infrastructure Maintenance.
- 10.17.2 Interventions for Storm Water Infrastructure Maintenance.

#### 10.18 Rehabilitation of City CBD Roads (Road Concession CBD)

- 10.18.1 Rehabilitation of City CBD Roads.
- 10.18.2 Personnel for Roads and Storm Water.

#### 10.19 Grading of rural roads Status Quo Per Cluster

- 10.19.1 Grading of Roads Status Quo.
- 10.19.2 Challenges for Rural Roads Grading.
- 10.19.3 Roads SBU Fleet analysis.
- 10.19.4 Incomplete Provincial D-Roads (Bermuda Roads).
- 10.19.5 Overview summary achievement of Public Transport Infrastructure Development."







#### 3.6.3 Regional Traffic

The road numbers, as well as the road ownership for the PLM road network, is indicated in **Figure B-5.5 Appendix B-5.** The surfacing type for the PLM road network is indicated in **Figure B-5.6, Appendix B-5** 

#### 3.7 Freight Transport

The freight section of the 2021 to 2026 PLM-IDP can be summarised into the three objectives:

- a) Developing Polokwane as a logistics hub this will take advantage of the municipality's positioning to facilitate trade within the province and between South Africa and the neighbouring SADC countries.
- b) Developing a freight intermodal this will support the municipal's objective as a logistic hub by facilitating modal integration between air and rail long-distance freight and road freight for short-distance distribution.
- c) Growing rail freight capacity and developing air freight capacity through the Polokwane International Airport – this will help reduce the stress on road infrastructure and help support the municipality's agricultural sector which produces time-sensitive commodities.
- d) Construction of a truck inn this will provide a dedicated resting area for drivers and help limit damage to the city's public service infrastructure.

The following figures provide an understanding of the Provincial Freight Transport based on the Limpopo Provincial Land Transport Framework (2015 to 2019):

- a) **Figure 3.22:** Limpopo Development Framework Nodal Hierarchy.
- b) **Figure 3.23:** Limpopo Freight Transport Network.











A high-level freight demand foresting exercise was conducted to estimate the freight potential for the CDM. The freight growth was derived from the annual freight growth estimates of the Annual State of Logistics Survey. **Table 3.21** provides information on estimated cargo volumes as well as the actual volumes observed for the year 2016.

TABLE 3.21:         ESTIMATED CARGO VOLUMES FOR CAPRICORN DM (2005 TO 2016)								
Municipalities	Ilities District Freight District Freight Transported Transported (2005) (2008) (GDP trend (tonnes) tonnes)		District Freight Transported (2011) (GDP trend tonnes)	District Freight Transported (2016) (GDP trend tonnes)				
Blouberg								
Agriculture	226,365	416,557	427,388	446,232				
Forestry & Logging	110,639	203,599	208,892	218,102				
Mining	165,147	303,903	311,804	325,552				
Manufacturing	297,008	546,553	560,764	585,488				
Aganang								
Agriculture	35,071	64,537	66,215	69,135				
Forestry & Logging	1,702	3,132	3,214	3,355				
Mining	55,509	102,147	104,803	109,424				
Manufacturing	500,434	920,898	944,841	986,500				
Molemole								
Agriculture	649,862	1,195,875	1,226,968	1,281,066				
Forestry & Logging	161,454	297,107	304,832	318,272				
Mining	189,836	349,336	358,419	374,222				
Manufacturing	1,394,038	2,565,308	2,632,006	2,748,053				
Polokwane								
Agriculture	2,336,006	4,298,716	4,410,483	4,604,945				
Forestry & Logging	565,616	1,040,845	1,067,907	1,114,992				
Mining	552,645	1,016,976	1,043,417	1,089,423				
Manufacturing	6,201,202	11,411,444	11,708,142	12,224,365				
Lepelle-Nkumpi								
Agriculture	808,751	1,488,262	1,526,957	1,594,282				
Forestry & Logging	68,159	125,425	128,686	134,360				
Mining	167,854	308,886	316,917	330,890				
Manufacturing	716,929	1,319,293	1,353,594	1,413,276				
Capricorn DM Totals	15,204,227	27,978,800	28,706,249	29,971,936				
Limpopo Totals	61,406,410	113,000,000	115,938,000	121,049,820				

The subsequent sections elaborate on the following:

- a) Road freight.
- b) Rail freight.
- c) Air freight.

#### 3.7.1 Road Freight

This section provides a description of the main freight traffic routes in the municipality and describe problems caused by or inhibiting freight movement. It includes routes identified for



travel by vehicles transporting abnormal loads and dangerous goods and state measures that are in place to deal with overloading.

#### 3.7.1.1 <u>Main Freight Traffic Routes in PLM.</u>

Polokwane is the largest town on the N1 transport corridor between Gauteng and the SADC countries to the north including Zimbabwe, Zambia, Malawi, the DRC and Tanzania. Most of the freight imported from and exported to the above countries is transported by road.

There are three types of freight and dangerous goods movement in PLM:

- a) Bypass/through freight and dangerous goods traffic:
  - i) The origin or destination is not PLM.
  - ii) The most prominent external routes for this traffic are:
    - ✓ Road N1 south of PLM, from Gauteng.
    - ✓ Road N1 north of PLM, from Makhado, Zimbabwe and Africa.
    - ✓ Road N1 bypass east of PLM.
    - ✓ Road R101 south of PLM, from Gauteng.
    - ✓ Road R37 south of PLM; from Burgersfort, Mpumalanga and Mozambique.
    - ✓ Road R71 east of PLM, from Tzaneen.
    - Road R81 east of PLM, from Giyani.
    - ✓ Road R521 South of PLM, from Vivo, Alldays, Botswana, Zimbabwe and Africa.
  - iii) Freight and dangerous traffic from the north to the south and vice versa from Road N1 respectively to Roads R37, R71 and R81 (vice versa) can make use of the N1 bypass, and therefore do not have to travel through central Polokwane.
  - iv) Other freight and dangerous goods related through traffic have to make use of internal PLM routes (roads).
  - v) **Figure 3.24** demonstrates the PLM freight and dangerous goods road network in PLM.
- b) External to internal and vice-versa freight and dangerous goods traffic to PLM:
  - i) This traffic is generated when PLM is serving as an origin or destination.
  - ii) This traffic makes use of the non-central roads as far as possible, but a large percentage makes use of the central routes.



- iii) Typical freight includes courier services, construction material, manufacturing material, delivery of vehicles, transport of mining material and goods (Polokwane Smelter), petroleum, chemicals, etc.
- iv) Polokwane serves as a distribution node for a number of well-established brands in South Africa for the Limpopo Province.
- v) The traffic will make use of the PLM Freight and Dangerous Goods Road Network, as indicated in **Figure 3.24**, where possible but needs to divert on local streets in order to reach their destinations.
- c) Internal freight and dangerous goods traffic within the borders of PLM:
  - i) This traffic will not exit the borders of PLM.
  - ii) The traffic is mostly related to the delivery of freight and dangerous goods from distribution depots to sale points.
  - iii) The traffic will make use of PLM Freight and Dangerous Goods Road Network, as indicated in Figure 3.24, where possible, but needs to divert on local streets in order to reach their destinations.

The PLM Freight and Dangerous Goods Road Network as indicated in **Figure 3.24** also provides SANRAL Counting Stations locations:

- a) Road N1 south of Polokwane (Station 3545).
- b) Road R101 (Station 1415).
- c) Road R37 (Station 1370).
- d) Road R81 (Station 1369).
- e) Road N1 north of Polokwane (Station 2082).
- f) Road R521 (Station 1368).

**Table 3.22** provides the relevant counting information for the relevant stations.







TABLE 3.22: SANRAL COUNTING STATION DATA									
			Counting St	ation					
	1	2	3	4	5	6	7		
Counting Station No.	3545	1415	1463	1370	1369	2082	1368		
Road Number	N1 South	R101	R37	R71	R81	N1 North	R521		
Description	Pietersburg WIM	Zebetiela_R101_VP10	Between Lebowakgomo & Polokwane	Between Polokwane and Moria	Between Polokwane and Munnik	Capricorn Plaza	Between Polokwane and Mogwadi (Dendron)		
Year	2019	2019	2019	2019	2019	2019	2019		
Total Number of Vehicles (counted)	5479110	2385327	3957076	8117342	2397529	2840107	2849212		
Total Number of Heavy Vehicles (counted)	1057468	200367	348223	487468	311503	565512	306853		
Percentage of Data Available	97.8%	94.3%	94.3%	100.0%	100.0%	99.9%	100.0%		
Total Number of Vehicles (projected)	5594762	2528493	4112306	8117875	2397529	2843441	2850448		
Total Number of Heavy Vehicles (projected)	1080461	212087	362365	487468	311503	566079	306853		
Average Daily Traffic (ADT)	15328	6927	11267	22241	6569	7769	8760		
Average Daily Truck Traffic (ADTT)	2960	581	993	1336	853	1547	841		
Percentage Trucks	19.30%	8.40%	8.80%	6.00%	13.00%	19.90%	10.80%		
Percentage Night Traffic (20:00 - 06:00)	20.10%	13.10%	11.00%	11.70%	14.60%	19.10%	11.90%		
Truck Split % (Short:Medium:Long)	25:16:59	46:19:35	47:17:36	71:21:8*	33:22:45	25:16:59*	38:18:44		
Total Trucks: Short	740	267	467	949	281.49	387	320		
Total Trucks: Medium	474	110	169	281	187.66	248	151		
Total Trucks: Long	1746	174	357	107	383.85	913	370		



#### 3.7.1.2 <u>Problems caused by inhibiting freight movements.</u>

Based on a study conducted by "Arrive Alive" during January 2021 concerning truck stops and road safety, the following was observed:

- a) There is a high rate of road crashes and one of the factors that have been identified as contributing to this problem is fatigue. This includes truckers, especially with the long distances they have to travel transporting goods.
- b) There is a need for convenient, safe and comfortable truck stops on all major road freight routes around South Africa.
- c) Research on drowsiness/driver tiredness amongst truck drivers:
  - In South Africa, a research study has been conducted by Nelisiwe Magubane & Mala Ramanna from the Interdisciplinary Accident Research Centre of KwaZulu -Natal on the topic "Truck Drivers and Road Crashes in South Africa".
  - ii) This study concluded amongst other findings:
    - ✓ Main problems experienced by truck drivers: 39% fatigue-related.
    - ✓ Main causes of road crashes: 41% fatigue-related.
- d) The recommendations from this research include the following:
  - There should be government legislation that forces drivers to stop between 11 PM and 5 AM for compulsory rest. Most drivers sleep for ±4hrs per 24hr.
  - ii) Companies should allow drivers more family time. This will not only stop the use of prostitutes but also de-stress drivers.
  - iii) More safe and clean truck stops are needed. Alternatively, along the route, there should be lay-bys constructed with stadium lights and security so that drivers can sleep in relative safety.
  - Trucks should be fitted with communication devices, e.g. two-way radios.
     This can act as a mechanism to warn other drivers of possible hijacking situations or as a tool to ensure the safety of the truck and driver.
  - v) Almost all truck drivers are interested in participating in any government road safety strategy that will improve and promote their skills.
  - vi) Drivers need to attend regular driver training courses to improve their skills as well as stop complacency. Further, there should be relevant training courses for truck drivers who carry specialised/dangerous goods e.g. chemicals.



Concerning PLM the following key issues were identified:

- a) The Polokwane CBD is currently inundated with parked trucks specifically during the night.
- b) The trucks within the CBD result in a crime spike in the area.
- c) Truck driver fatigue contributes to a high rate of road accidents.
- d) Safety of truck drivers when overnighting or taking a break.
- e) Healthy and sanitary facilities for truck drivers.

**Figures 3.25** demonstrates where trucks are parked in the CBD specifically during the night.



3.7.1.3 Routes for abnormal loads and dangerous goods.

See **Figure 3.24** as part of Section 3.7.1.1 which provides the PLM Freight and Dangerous Goods Road Network.

The following existing substantial truck inns are relevant:

- a) Shell Ultra City on the N1 and the R101 on the southern side of Polokwane (see **Figures 3.26.1** and **3.26.2** below).
- b) Viva Filling Station located along the entrance to Polokwane from the south on the N1 (see **Figure 3.27**) adjacent to the Limpopo Tourism Board.





FIGURE 3.26.1: LOCATION OF SHELL ULTRA CITY N1 EAST TRUCK INN



FIGURE 3.26.2: LOCATION OF SHELL ULTRA CITY N1 WEST TRUCK INN





#### 3.7.1.4 Overload control.

Figure B-5.16 in Appendix B-5 provides information on the 12-hour volumes of heavy vehicles around PLM.

The locations of all weighbridges in the Limpopo Province are indicated in Figure 3.28 and Figure B-5.4, Appendix B-5. There are eight weighbridges in the Limpopo Province as indicated in Table 3.23. The Polokwane weighbridge was implemented to prevent heavy vehicles from bypassing the Zebediela weighbridge on the N1 by diverting onto the R101 between Polokwane and Mokopane.

Although only one of the eight weighbridges, namely the one on the R101, is located within the Polokwane Municipal area, all the Limpopo weighbridges contribute to preventing damage to Polokwane roads as all the other routes pass directly or indirectly through the PLM area.

	TABLE 3.23: WEIGHBRIDGES IN LIMPOPO:								
Nr	Route	Weighbridge	Location						
1.	N1	Mantsole	Between Bela-Bela and Tshwane.						
2.	N1	Zebediela	At Mokopane.						
3.	N1	Beitbridge	At Beitbridge border post.						
4.	N11/R33	Rathoke	Between Mokopane and Marble Hall.						
5.	N11	Groblersbrug	At Groblersbrug border post.						
6.	N1	Mampakuil	North of Polokwane.						
7.	R526	Mooketsi	Between Polokwane and Giyani.						
8.	R101	Polokwane	2 km south of the N1 bypass intersection.						





**Table 3.24** contains a list of the identified new weighbridges that should be prioritised in the Limpopo Province based on the 2011 NDoT Freight Strategy and confirmed as part of the LPTF and NATMAP 50.

TABL	TABLE 3.24:         ADDITIONAL WEIGHBRIDGES REQUIRED IN LIMPOPO PROVINCE							
Nr	Route	Route Description						
1.	N1	Zimbabwe-Musina-Polokwane-Gauteng						
2	N11	Botswana-Groblersbrug-Mokopane-Roedtan-Mpumalanga-						
۷.		Middelburg						
3.	R71/R81	Polokwane-Tzaneen-Phalaborwa						
4.	R526/R36	Tzaneen-Mpumalanga-Ohrigstad-Lydenburg						
5.	R40	Phalaborwa-Hoedspruit-Mpumalanga-Hazyview						
6.	R37	Polokwane-Mpumalanga-Burgersfort						

Should the National Department of Transport develop the above weighbridge infrastructure, three of those listed will benefit Polokwane because of improved overloading law enforcement. The route affecting Polokwane include the N1, R71 and R37 which all contribute to the number of heavy vehicles on municipal roads through Polokwane. The NDoT policy indicates that municipalities should not develop or manage weighbridges; the municipality does not have to implement weighbridge infrastructure itself. **Tables 3.25.1** and **3.25.2** provide the Limpopo weighbridge statistics for the years 2018 and 2019 as provided by SANRAL, while **Tables 3.26.1** and **3.26.2** provide the Limpopo weighbridge statistics for the years 2019 and 2020 as provided by the LDTCS.



TABLE 3.25.1:         LIMPOPO WEIGHBRIDGE FOR SANRAL STATISTICS FOR 2018									
Data	Mantsole (N1)	Zebediela (N1)	Beitbridge (N1)	Polokwan e (R101)	Totals				
Vehicles screened	1,312,720	668,949	347,559	60,518	2,389,746				
Vehicles weighed	252,698	141,154	144,138	48,820	586,810				
Vehicles overloaded	141,052	30,672	30,176	9,688	111,429				
% Overloaded (of total weighed)	55.81%	22%	20.93%	19.84%	19%				
Vehicles prosecuted for overloading (above the grace)	5,315	1,899	2,954	2,193	12,361				
Vehicles in tolerance (2 % and 5 %)	135,737	28,773	27,222	7,495	199,227				
Number of vehicles impounded (Kept at w/bridge to rectify load)	5,315	1,899	2,954	2,193	12,361				
Number of vehicles inspected per day	691	387	395	134	1607				
Number of hours weighbridge operated as a % of total hours in a year	99%	99%	99%	99%	99%				
RTQS offences prosecuted	0	161	562	219	942				
% of overloaded vehicles charged	3.76%	6.19%	9.78%	22.60%	10.58%				

TABLE 3.25.2:         LIMPOPO WEIGHBRIDGE FOR SANRAL STATISTICS FOR 2019					
Data	Mantsole (N1)	Zebediela (N1)	Beitbridge (N1)	Polokwan e (R101)	Totals
Vehicles screened	1,291,806	618,024	298,706	52,111	2,260,647
Vehicles weighed	276,599	161,659	178,681	53,688	670,627
Vehicles overloaded	69,380	33,562	38,799	9,514	151,255
% Overloaded (of total weighed)	25.08%	20.76%	21.71%	17.72%	16%
Vehicles prosecuted for overloading (above the grace)	4,419	1,655	3,072	1,671	10,817
Vehicles in tolerance (2 % and 5 %)	64,961	31,907	35,727	7,843	140,438
Number of vehicles impounded (Kept at w/bridge to rectify load)	4,419	1,655	3,072	1,671	10,817
Number of vehicles inspected per day	757	445	489	147	1838
Number of hours weighbridge operated as a % of total hours in a year	99%	99%	99%	99%	99%
RTQS offences prosecuted	0	705	509	352	1,566
% of overloaded vehicles charged	1.59%	1.02%	1.71%	3.11%	1.61%



TABLE 3.26.1: PROVINCIAL TRAFFIC CONTROL CENTRES STATISTICS FOR         2018					
Name Of Institution	Vehicles Weighed	Vehicles Charged	No: Hours Operated		
Mooketsi TCC	54 943	484	6 432		
Rathoke TCC	24 265	236	3 640		
Groblersbrug TCC	33 610	548	4 390		
Mampakuil TCC	46 360	723	4 170		
Total	159 178	1 991	18 632		

TABLE 3.26.2: PROVINCIAL TRAFFIC CONTROL CENTRES STATISTICS FOR2019						
Name Of Institution	Vehicles Weighed	Vehicles Charged	No: Hours Operated			
Mooketsi TCC	63 442	501	8 592			
Rathoke TCC	42 582	805	6 142			
Groblersbrug TCC	41 958	665	5 733			
Mampakuil TCC	55 116	911	5 480			
Total	203 098	2 882	25 947			

Apart from the weighbridges, SANRAL also has permanent counting stations at various locations on national and provincial roads. Statistics for the period 2016 to 2019, from counting stations located within the PLM area, are included in **Table 3.27** that demonstrated the growth in annual average daily truck traffic.



	TABLE 3.27: GROWTH IN ANNUAL AVERAGE DAILY TRUCK TRAFFIC													
GROWTH IN THE ANNUAL AVERAGE DAILY TRUCK TRAFFIC ON ROADS WITH SANRAL COUNTING STATIONS														
ROUTE		A	т			AD	TT			% HEAVY	VEHICLES		AVG	AVG
AND COUNTING STATION	2016	2017	2018	2019	2016	2017	2018	2019	2016	2017	2018	2019	ANNUAL GROWTH (TOTAL)	ANNUAL GROWTH HEAVY'S
N1 (3545)	16504	15049	15287	15328	2906	2847	2982	2960	17.60%	18.90%	19.50%	19.30%	-2%	1%
N1 (2082)	7762	8015	8399	8582	1547	1552	1653	1669	19.90%	19.40%	19.70%	19.40%	3%	3%
R101 (1415)	7939	8037	7061	6927	724	718	635	581	9.10%	8.90%	9.00%	8.40%	-3%	-7%
R81 (1369)	6325	6425	6534	6369	958	874	886	853	15.10%	13.60%	13.60%	13.00%	0%	-4%
R71 (1370)	19928	20740	21671	22241	1085	1154	1352	1336	5.40%	5.60%	6.20%	6.00%	4%	7%
R37 (1463)	10819	11089	11200	11267	918	918	1047	993	8.50%	8.30%	9.30%	8.80%	1%	3%
R521 (1368)	7540	7617	7817	8760	964	924	931	841	12.80%	12.10%	11.90%	10.80%	5%	-4%
AVERAGE: 1.23% -0.19%							-0.19%							



More detailed information related to the relevant SANRAL counting stations are included in the following tables in **Appendix A-7** while **Figure B-5.11** in **Appendix B-5** provides the locations of the SANRAL counting stations:

- a) N1 Pietersburg II (3545)
- b) N1 Capricorn Plaza 1 (2082)
- c) Zebetiela R101 (1415)
- d) R81 Polokwane (1369)
- e) R71 Polokwane (1370)
- f) R37 Polokwane (1463)
- g) R521 Polokwane (1368)

Table A-7.2 Table A-7.3 Table A-7.4 Table A-7.5 Table A-7.6

Table A-7.1

Table A-7.7

#### 3.7.2 Air Freight

The geographical locations of the airports are depicted in Figure 3.29 below.



Source: Limpopo Freight Databank

It is important to note that there are 2 airports are located within the Polokwane area, namely:

- a) Polokwane International Airport (PIA).
- b) Polokwane Municipal Airport (PMA).



The PIA is meant to provide essential logistical options to the mining, agricultural, tourism and forestry clusters as proposed by the LPGDS. There are currently no cargo facilities at the airport. There are, however, four blocks of hangars, with four hangars in each block, each offering floor space of 540m<sup>2</sup>. Most of these are unoccupied and there is a plan to convert several of these into cargo handling facilities (Limpopo Freight Databank).

See **Section 3.4.5** for more detail concerning the PIA and PMA.

#### 3.7.3 Rail Freight

The Pretoria–Beit Bridge rail link has been a busy general freight route for both international and domestic traffic for many years. This link has become even more important seeing that it serves two continuous rail routes within Zimbabwe. This rail line passes through Polokwane. Strategically, from a freight perspective, the Hoedspruit to Beit Bridge link is an important link between Polokwane, KwaZulu Natal and the border. In addition to transit traffic, this link also transports citrus fruit from along the route.

The Pretoria–Polokwane–Beit Bridge line carries general freight for domestic use and freight that is destined for neighbouring countries in Africa. This 579 km section of the mainline from Pretoria to Beit Bridge is part of the route which falls within the borders of Limpopo and passes through Polokwane en route to the border. The rail freight transported on this mainline past the Polokwane Station in the direction of Beit Bridge per annum is indicated in could not be obtained as part of the data collection.

Figure 3.30 contains a copy of the rail network for the Limpopo Province.





Source: Limpopo Rail Freight Databank

Based on the LPTF, the following rail schedules are indicated for the Limpopo Province in **Tables 3.28.1** to **3.28.5**:

- a) Fruit Schedule (transported seasonally).
- b) Fluorspar Schedule.
- c) Containers Schedule.
- d) SALFA Schedule.
- e) Fuel Schedule.

TABLE 3.28.1: RAILWAY SCHEDULES FOR FRUIT					
Route Description	No. of Trips per Week	Weekdays			
Tzaneen to Durban	2 Trips	Sunday and Thursday			
Bela-Bela to Durban	1 Trip	Tuesday			
Polokwane to Bela-Bela	3 Trips	Monday, Tuesday and Friday			

TABLE 3.28.2: RAILWAY SCHEDULES FOR FLUORSPAR					
Route Description         No. of Trips per Week         Week Days					
Pienaars River to Durban	3 Trips	Monday, Wednesday and Friday			
Hoedspruit to Musina	3 Trips	Monday, Wednesday and Friday			



TABLE 3.28.3: RAILWAY SCHEDULES FOR CONTAINERS				
Route Description	No. of Trips per Week	Weekdays		
Not available	1 Per Week	Monday to Friday		

TABLE 3.28.4: RAILWAY SCHEDULES FOR SALFA				
Route DescriptionNo. of Trips per WeekWeekdays				
Zambia to Hoedspruit 3 Trips		Monday, Wednesday and Friday		

TABLE 3.28.5: RAILWAY SCHEDULES FOR FUEL TRANSPORT:				
Route Description	No. of Trips per Week	Weekdays		
Sasolburg to Mokopane	1 Trip	1 Trip per week		

In conclusion, the following is important and related to the impact on road network due to lack of rail:

It should be noted that it is not only overloaded trucks that damage roads. The exponential relationship between axle loads and stresses in road pavement layers means that even trucks that are within the legal limit, cause a great deal of damage to roads due to the high number. This exponential relationship is indicated by **Figure 3.31**.



Source: NDoT Road Freight Strategy: 2011

**Table 3.32** below illustrates how a road designed for 1,8 mil E80's (equivalent 80 kN axle loads), carrying 3000 tonnes of freight per day, which could have been transported by one daily freight train will have to be reconstructed within 12 to 13 years. If the trucks carrying the freight are overloaded by 20%, the road will only last 5 to 6 years. More detail on road-based freight and overload control measures are provided in **Chapter 9** of the CITP.



<b>TABLE 3.29</b> :	COMPARISON B	ETWEEN RAIL AND	ROAD FREIGH	IT TRANSPORT
Mode of Transport	No. of truck trips to transport 3000 tonne (35 ton, 6 axle trucks)	No. of light passenger vehicles to exert the same no. of E80's	Equivalent 80kN axle loads (E80's)	Life of a road designed for 1,8 mil E80's
Rail	1 train with 50 wagons (60- tonne payload)	N/A	N/A	N/A
Road (trucks loaded within legal limits)	86 trucks (35-tonne payload)	6,2 million	390	12 to 13 years
Road (trucks 20% overloaded)	72 trucks (42 tonnes per truck)	13 million	840	5 to 6 years

The best way of managing the high cost of road maintenance and reconstruction is to move as much as possible freight to rail. While this is not always feasible for short trips, due to the cost of transferring freight back to the road for delivery at end-users, it becomes more and more feasible for long haul trips as is the case for much of the road freight from and through Polokwane.

#### 3.8 Financial Information

Chapter 12 of the 2023/2028 PLM-CITP contains detailed information:

- a) Sources of income and expenditure by PLM on all transport services and infrastructure within its area.
- b) Annual expenditure by state-owned entities in the ITP area on infrastructure and operational subsidies should also be included (SANRAL, Province, PTIS grants, etc.).







## 4 SPATIAL DEVELOPMENT FRAMEWORK (SDF)

IDPs encapsulate all aspects of development planning and service delivery in municipalities. The SDF forms an essential component of the PLM-IDP, reflecting geographically the municipality's strategy for delivering infrastructure and services sustainably and costeffectively.

Transport and travel are essential and costly components of life for individuals, households, businesses and the government, and so transport efficiency is an important consideration in the development and updating of the SDF. The SDF is aligned with the PLM-CITP area, and in turn, the SDF is taken up in the PLM-CITP, clearly showing existing and intended transport corridors and nodes and areas earmarked for mixed land use and densification in support of public transport.

The PLM-SDF indicates the municipal land use strategies that will be used to discourage urban sprawl and the dispersal of activities making them dependent on travel by car. The PLM-CITP indicates the specific measures proposed in the SDF to support public transport and to ensure that transport services may be carried out sustainably and cost-effectively.

The SDF so included in the CITP gives explicit effect to Section 38 of the NLTA, which empowers the planning authority to manage any change or intensification of land use which deviates from that specified in the SDF.

In terms of the Spatial Planning and Land Use Management Act 16 of 2013 (SPLUMA), it is required to regularly review and update the municipalities' SDF. The reviewing process of the 2010 PLM-SDF was, however, not completed and adopted by PLM when the 2023/2028 PLM-CITP was concluded during June 2023. Chapter 4 of the PLM-CITP was, however, updated with the available approved information as part of the reviewing process of the 2010-PLM-SDF, dated January 2021. Chapter 4 of the PLM-CITP should therefore be updated as part of the annually required PLM-CITP updates, as soon as practically possible after the reviewing process of the 2010 PLM-SDF will be completed.

The PLM jurisdictional area was larger as compared to its current status when the last PLM-SDF was conducted in 2010. A portion of the "de-established Aganang Local Municipal" has been incorporated as part of PLM since 2016. The portion allocated to PLM was located north-west of and abutting to the then PLM border. The "de-established Aganang Local Municipality" was effectively divided into 2 parts and the southern component was incorporated into PLM.

The reviewed PLM-CITP was updated, with specific reference to Chapter 4 of the PLM-CITP, with the available approved information as part of the reviewing process of the 2010 PLM-SDF, dated January 2021.



The aims of the SDF are not all exclusively related to the SDF; some are also relevant to the development planning of the local government in general. The fundamental purposes which the SDF process is intended to achieve, are as follows:

- a) Represent the spatial development vision statement of the PLM through integration and trade-off of all relevant sector policies and plans.
- b) Guide the PLM in taking decisions or exercising any discretion relating to spatial planning and land use management systems, and to address historic spatial imbalances in development.
- c) Provide information to the public and private sector in relation to investment areas, identify long term risks of particular spatial patterns of growth and development and provide mitigation measures.
- d) Provide direction for strategic developments, infrastructure investment, taking cognisance of any environmental management instrument.

The SDF focuses not only on the transport system but also on the land use patterns that generate the demand for transport as contemplated in Section 25(e) of the Municipal Systems Act (Act 32, 2000).

In terms of Section 21 of the SPLUMA Act 16, the content of municipal SDFs must:

- a) give effect to the development principles and applicable norms and standards set out in Chapter 2 of the Act.
- b) include a written and spatial representation of a five-year spatial development plan for the spatial form of the municipality.
- c) include a longer-term spatial development vision statement for the municipal area which indicates a desired spatial growth and development pattern for the next 10 to 20 years.
- d) identify current and future significant structuring and restructuring elements of the spatial form of the municipality, including development corridors, activity spines and economic nodes where public and private investment will be prioritised and facilitated.
- e) include population growth estimates for the next five years.
- f) include estimates of the demand for housing units across different socio-economic categories and the planned location and density of future housing developments.
- g) include estimates of economic activity and employment trends and locations in the municipal area for the next five years.
- h) identify, quantify and provide location requirements of engineering infrastructure and services provision for existing and future development needs for the next five years.
- i) identify the designated areas where a national or provincial inclusionary housing policy may be applicable.
- j) include a strategic assessment of the environmental pressures and opportunities within the municipal area, including the spatial location of environmental sensitivities, high potential agricultural land and coastal access strips, where applicable.
- k) identify the designation of areas in the municipality where incremental upgrading approaches to development and regulation will be applicable.



- I) identify the designation of areas in which
  - i) more detailed local plans must be developed.
  - ii) shortened land use development procedures may be applicable and land use schemes may be so amended.
- m) provide the spatial expression of the coordination, alignment and integration of sectoral policies of all municipal departments.
- n) determine a capital expenditure framework for the municipality's development programmes, depicted spatially.
- o) determine the purpose, desired impact and structure of the land use management scheme to apply in that municipal area.
- p) include an implementation plan comprising of
  - i) sectoral requirements, including budgets and resources for implementation.
  - ii) necessary amendments to a land use scheme.
  - iii) specification of institutional arrangements necessary for implementation.
  - iv) specification of implementation targets, including dates and monitoring indicators.
  - v) specification, where necessary, of any arrangements for partnerships in the implementation process.

The requirements are underpinned by development principles set out in SPLUMA and include:

- a) Spatial justice.
- b) Spatial sustainability.
- c) Efficiency.
- d) Resilience.
- e) Good administration.

#### 4.1 Acts and Policies on all Levels of Government

South African legislation is largely enabling in nature. It, therefore, does not prescribe to municipalities but creates the necessary legal environment within which development and planning can take place. Recognising local government as one of the three spheres of government has placed a specific emphasis on intergovernmental relations. The implication is that the municipality is primarily responsible to do its own planning while considering the interest and demands of the communities and stakeholders within its jurisdiction. This happens within a reciprocal consideration of the planning done in neighbouring municipalities and the other spheres of government.

A number of acts and policies from national and provincial governments deal with spatial and physical development. The relevant directives/principles related to legislation and policies in terms of the SDFs are contained as part of **Table 4.1**.



TABLE 4.1: DIRECTIVES/PRINCIPLES FROM THE LEGISLATION AND POLICIES				
Deleverationaliste	RELATED TO SDFS			
Relevant Legislation	Relevant Principles/Directives			
constitution of the Republic	a) Section 24: Everyone has the right to an environment which is not			
The Constitution is the supreme	narmful to their nealth or weil-being.			
law of the land. The Bill of	D) Section 26 (1): Everyone has the right to have access to adequate boundary and the section.			
Pights enshrings the rights of all	nousing.			
people in our country and	C) Section 152 spells out the objectives of local government as insuring			
affirms the democratic values of	access to at least basic services and facilitating economic			
human dignity, equality, and	development within a framework of financial sustainability.			
freedom.				
Municipal Systems Act. 2000	a) It must give effect to the Chapter 1 Principles of the Development			
(Act 32 of 2000)	Facilitation Act, 1995.			
In terms of the Act and the Local	b) Set out objectives that reflect the desired spatial form of the city,			
Government Municipal Planning	town or region.			
and Performance Management	c) Contain strategies and policies regarding the manner in which the			
Regulations, 2001 all	objectives will be achieved.			
municipalities must prepare a	d) Set out basic guidelines for a land use management system in the			
Spatial Development Framework	municipality.			
(SDF) as a core component of	e) Set out the Capital Investment Framework for the municipality's			
the Integrated Development	development programmes.			
Plan (IDP).	<li>f) Contain a strategic assessment of the environmental impact of the SDF.</li>			
	g) Identify programmes and projects for the development of land.			
	h) Provide a visual representation of the desired spatial form of the city,			
	town, or rural area indicating the following:			
	i) where public and private development and infrastructure			
	investment should take place.			
	ii) desired or undesired utilisation of space in particular areas.			
	III) urban edge.			
	iv) areas where strategic interventions are required.			
	<ul> <li>v) alreas where priority spending is required.</li> <li>vi) alignment with the SDE of neighbouring municipalities.</li> </ul>			
Development	a) Promote the integration of social economic institutional and physical			
Eacilitation Act	aspects of land development			
1995	b) Promote integrated land development in rural and urban areas in			
This act is the most significant	support of each other.			
Act defining principles to guide	c) Promote the availability of residential and employment opportunities			
planning and development.	in close proximity to or integrated with each other.			
However, this Act will be	d) Optimise the use of existing resources relating to agriculture, land,			
replaced by a national spatial	minerals, bulk infrastructure, roads, transportation, and social			
planning act. Parts of this act	facilities.			
were declared unconstitutional	e) Promote a diverse combination of land uses, also at the level of			
insofar as it relates to land	individual stands or subdivisions of land.			
development and land use rights	f) Discourage the phenomenon of urban sprawl in urban areas and			
changes.	contribute to the development of more compact towns and cities.			
	g) Contribute to the correction of historically distorted spatial patterns of			
	settlement.			
National Environmental	a) Development must be socially, environmentally and economically			
Management Act, 1998 (Act	sustainable.			
107 of 1998)				


TABLE 4.1: DIRECTIVES	S/PRINCIPLES FROM THE LEGISLATION AND POLICIES RELATED TO SDFS
Establishes principles for	b) Equal access to environmental resources, benefits and services to
decision-making on matters	meet basic human needs.
affecting the environment.	c) The utmost caution should be used when permission for new
	developments is granted.
National Housing Act, 1997	a) Prioritise the housing needs of the poor.
(Act no. 107 of 1997) and	b) Provide as wide a choice of housing and tenure options as is
National Housing Code	reasonably possible.
To provide for the facilitation of a	c) Be economically, fiscally, socially and financially affordable and
development process and to lay	d) Be based on integrated development planning
down general principles	<ul> <li>consider and address the impact on the environment</li> </ul>
applicable to housing	<ul> <li>f) Socially and economically viable communities</li> </ul>
development	(a) Safe and healthy living conditions
	<ul> <li>b) Racial, social, economic and physical integration in urban and rural</li> </ul>
	areas.
	i) The effective functioning of the housing market and level plaving
	fields.
	i) Higher densities and the economic utilisation of land and services.
	k) Community and recreational facilities in residential areas.
The National Land Transport	Based on <b>Clause 31</b> of the NLTA the following are relevant:
Act, 2009 (Act 5 of 2009)	
To provide further the process of	"Land transport planning must be integrated with the land development and
transformation and restructuring	land use planning processes, and the integrated transport plans required
the national land transport	by this Act are designed to give structure to the function of municipal
system initiated by the National	planning mentioned in Part B of Schedule 4 to the Constitution and must
Land Transport Transition Act,	be accommodated in and form an essential part of integrated development
2000 (Act No. 22 of 2000); and	plans, with due regard to legislation applicable to local government, and its
to provide for matters connected	integrated transport plan must form the transport component of the
therewith.	integrated development plan of the municipality."
Spatial Planning and Land	a) According to SPLUMA municipalities must:
Use Management Act, 2013	i) Encourages substantive compliance to principles of sustainable
(Act 16 of 2013)	development.
SPLUMA is the national	ii) Provide legislative frameworks for local development
planning law which provides a	regulations and procedures.
single planning system for South	b) Key principles of SPLUMA include:
Africa's fragmented planning	i) Spatial justice.
legislations.	ii) Spatial sustainability.
	iii) Efficiency.
	iv) Spatial resilience.
	v) Good administrations.



#### 4.2 Basic Structures in the Municipality

#### 4.2.1 Demographic Structure

The PLM is centrally located in the Limpopo Province, the most northern province in South Africa. The municipality forms part of the CDM that also includes the local municipalities of Blouberg, Molemole and Lepele Nkumpi. PLM shares municipal borders with the following municipalities:

- a) Blouberg and Molemole Local Municipalities to the north (part of the CDM).
- b) Lepele Nkumpi Local Municipality to the south (part of the CDM).
- c) Mogalakwena Local Municipality to the west (part of the Waterberg District Municipality).
- d) The Greater Tzaneen Local municipality to the east (part of the Mopani District Municipality).

**Table 4.2** provides a summary of demographic-related information for PLM with reference to the available approved information as part of the reviewing process of the 2010 PLM-SDF, dated January 2021.



### TABLE 4.2: DEMOGRAPHIC-RELATED INFORMATION FOR PLM

The Municipality					
District municipality:	Capiricorn DM				
Local municipality	Polokwane LM				
Number of ward(s) affected:	45				
Area of area assessed:	505 400	hectares			
Demographics and households					
	1996	2001	2011		
Total Population	532 376	618 947	728 598		
Population density (persons/ha)	0.85	1.22	1.44		
Total households	104 416	159 976	202 929		
Household density (households/ha)	0.17	0.32	0.40		
Ave household size	5.10	3.87	3.59		
Total income in the area (per month)	2 234 337 369	431 904 550	1 325 045 393		
Income per capita (per month)	4 197	698	1 819		
Ave household income (per month)	21 525	5 455	6 5 2 3		
	21 020	0 100	0 020		
Land Cover Change			Dwelling Frame 2019		
Lana oover onange	Extent of covor	Extent of covor	Divening Frame 2010		
Land aquar astagary	1000 (ba)	2014 (ba)	Dwelling unite	215 122	
Cultivated commercial fields	1990 (IIA)	2014 (IIA)	Dweining units	210 423	
Cultivated commercial fields	11 447	0 534	Businesses Unit	2 967	
Cultivated commercial pivot	1 725	3 112	Special dwelling inst	5 224	
Cultivated orchard and vines	2 648	433	Service Units	1 335	
Sugarcane			Recreation Units	939	
Subsistence farming	75 019	71 432	Other units	7 188	
Forests & Plantations	459	333	Vacant units	16 772	
Mining	2 317	1 115			
Urban built-up	899	1 049	Social Facilities		
Urban commercial	389	491	Facility	Number in area	
Urban industrial	417	533	Primary schools	251	
Urban residential	1 374	2 230	Secondary school	164	
Urban townships	781	2 062	Intermediate school	0	
Urban informal	2	55	Combined school	15	
Rural villages	26 167	35 408	Public health	53	
Urban sports and golf	256	267	Private health	1	
School and sports grounds	314	415	SAPS stations	7	
Small holdings	12 895	12 915	Lower courts	4	
Access to services					
	Full	Intermediate	Basic	Below Basic	None
Water 1996	25.63%	24.72%	28.51%	8.06%	13.08%
Water 2001	18.05%	33.65%	13.66%	23 19%	11 45%
Water 2011	30.44%	39.43%	18 44%	7 45%	4 24%
Sanitation 1006	22 /5%	0.00%	0.00%	65.02%	12 53%
Sanitation 2001	22.40/0	0.00%	7.60%	17 84%	13.86%
Sanitation 2001	29.10/0	0.03%	7.0370	50 40%	2 0 2 9/
Peruse removal 1996	10 200/	0.33%	2 200/	65 870/	11 26%
Refuse removel 2001	19.02%	0.11%	∠.∠8%	61 040	7 400/
Refuse removal 2001	28.39%	1.45%	1.10%	61.94%	1.12%
Refuse removal 2011	38.97%	0.66%	0.97%	54.65%	4.75%
	E.P.				
EL ( 1 % 4000	Full access	No access	Total		
Electricity 1996	38.36%	61.64%	100%		
Electricity 2001	61.76%	38.24%	100%		
Electricity 2011	84.97%	15.03%	100%		

#### Source:

Polokwane Local Municipality Approved information as part of the reviewing process of the 2010-PLM-SDF, dated January 2021.

#### 4.2.2 Settlement Structure

PLM is the economic hub of Limpopo Province and is strategically located to be the administrative and economic capital of the province. It is situated at the crossroads of important national and provincial roads which radiate out into the hinterland providing good access to other towns. There is a definite opportunity for Polokwane to become a logistics hub and freight interchange within the region, also given its proximity to the neighbouring countries of Botswana, Zimbabwe, Mozambique and Swaziland. Three of the four Provincial



Spatial Development Initiatives pass through Polokwane, which accentuates the city's strategic location and its importance as far as the economy of the province is concerned.

The municipal spatial pattern reflects that of the historic apartheid city model characterised by segregated settlement. At the centre of the area is the Polokwane economic hub, which comprises the CBD, industrial area and range of social services and well-established formal urban areas servicing the more affluent residents of Polokwane. **Figure 4.2** contains the land use structure around the CBD of PLM.

Situated on the outskirts in several clusters are less formal settlement areas which are experiencing an enormous influx from rural-urban migration trends. These areas are in dire need of upgraded services and infrastructure, both social and engineering, and are struggling to cope with the informal influx of more people who want access to improved quality and standard of living.

The following are relevant in terms of the clusters (see Figure 4.1):

- a) **Seshego:** located west of the CBD. It is nearest to the economic core of all settlement areas and thus has the best access to the formal economy of Polokwane.
- b) **Mankweng:** located 30km to the east of the city. It constitutes a large area and is mixed formal and informal. It accommodates the University of Limpopo and is a long-established settlement area.
- c) **Sebayeng**: located 30 km to the north-east of the city centre and is less formal and newer than Mankweng. The area is experiencing an influx and is growing at a rapid rate.
- d) Molepo/Chuene/Maja: is located 20km to the south and comprises an informal settlement area, with limited services and infrastructure. The settlement area sits on the fringe of the rural hinterland and is hence surrounded by a vast clustering of rural / semirural areas.
- e) Moletjie: It is about 32 km northeast of the city of Polokwane and comprises an informal settlement area, with very limited services and infrastructure. The settlement area sits on the fringe of the rural hinterland and is hence surrounded by a vast clustering of rural/semi-rural areas.
- f) Aganang: is situated 45 km west of Polokwane. It is a rural Cluster and has 4 traditional authorities namely Moletši, Matlala, Maraba and Mashashane. The area has been incorporated into PLM lately and is now serving as the seventh cluster area for Polokwane. The area is purely rural and has no township; it has potential for agriculture and tourism.

<u>Note:</u> The urban edge needs to be refined as part of the 2010 PLM-SDF, that is in the process to be updated.











#### 4.2.3 Economic Structure

The following economic sectors are important for the Polokwane local economy and have an impact on future growth and transport infrastructure development:

- a) **Agriculture.**
- b) Urban development in the different settlements and villages are critical to the survival of this area. The municipality is administered in two (2) focus areas and three (3) development areas.

The following Development Corridors (DCs) and Functional Development Areas (FDAs) are relevant.



**Table 4.3** contains a summary of the relevant functional development areas in PLM, while

 **Figure 4.3** provides the information on a Map.

TABLE 4.3: SUMM	IARY OF FUNCTIONAL DEVELOPMENT AREAS IN PLM						
Public Transport	Corridor alongside Nelson Mandela Drive.						
Integration Corridor, F1.							
Southern Gateway	This corridor (N1 south, along the western entrance to PLM) is						
Development Corridor,	an excellent example of positive spin-offs from this kind of						
F2.	forward planning of a development corridor, given recent development.						
	The continued consideration of appropriate land uses is essential for the long-term sustainability of this corridor and with a view to not jeopardising the other initiative in the SDF plan.						



TABLE 4.3: SUM	MARY OF FUNCTIONAL DEVELOPMENT AREAS IN PLM
Eastern Gateway	The functional development area was previously called the
Development Corridor,	Eastern Corridor or Private Transport Corridor and involved the
F3.	Thabo Mbeki and Grobler Streets one-way pair, stretching from
	Biccard Street to the Savannah Mall.
Northern Gateway	The corridor starts at Landdros Maré Street extension on the
Development Corridor,	northern border of the CBD and traverses the industrial area
F4.	(Pietersburg Extensions 3 and 12), running past the Polokwane
	International Airport and includes part of Annandale.
Outer Eastern Link, F5.	It is part of the Tshwane/Gauteng – Polokwane – Mankweng –
	Tzaneen Development Corridor (DC1) that plays a major role in
	integrating the Polokwane CBD and Mankweng clusters with one
	another.
	The development area starts where the Eastern Gateway
	Development Corridor (F4) ends and runs to the area near the
	Boyne and Ga-Mokwane villages on the eastern border of the
	PLM Area.

### The following are relevant in terms of the economic structure of PLM:

- a) **Land use** plays a particularly important role in estimating transportation movement, based on estimating travel patterns of residents and visitors. It is necessary to assign trip-generating land uses and trip attractors to separate transport zones.
- b) **Physical and geographic barriers** features, such as mountains, rivers and wetlands, impact transport planning by directing traffic to certain routes.
- c) The promotion of **eco-tourism** including living cultural villages.
- d) Industrial development holds great economic potential for Polokwane.
- e) Mobility is characterised by the transport means available both motorised and nonmotorised - for people to transport themselves and their goods, and for services to be provided. The transport fleet is typically privately owned and operated on a subsidiary scheme.
- f) The **socio-economic characteristics** will help to estimate travel demand, homogenous groups are likely to experience similar travel patterns.
- g) Scholar and educational land uses are widely available in the municipality.





Source: 2013 PLM-CITP



## 4.2.4 PLM, 2030 Economic Growth and Development Plan (EGDP)

The PLM Council has adopted a 20-year EGDP in the 2013/14 financial year which seeks to provide a holistic way forward with regards to the future development of the city. The aim of the 2030 PLM-EGDP is to inspire and inform future strategic planning and orientation of the city of Polokwane towards inclusive, quality and prosperous development in line with the city's vision of becoming a Smart City.

The following are identified development goals and objectives of the PLM-EGDP that is closely related to the compilation of the PLM-SDF:

- a) Become a Smart City by 2030.
- b) Reduce service delivery backlogs, replace and upgrade ageing infrastructure and increase water capacity over the next 5 years.
- c) Finalise key projects.
- d) Make use of Polokwane's strategic location to attract investment.
- e) Implementation of the PIPTS.
- f) More active participation and proactive planning in local government.
- g) Maximise and utilise the local economic comparative advantages, especially in the tertiary sector.
- h) Build safer and more resilient communities.
- i) Social capacity building.
- j) Creation of decent employment opportunities.
- k) Improved quality and availability of health care.
- I) To adopt a value chain approach to development.

The main objective of the EGDP as highlighted is to assist the city of Polokwane to achieve real and sustainable economic growth and development, as well as transforming and aligning to become a Smart City within the next 20 years. Therefore, the plan has set out specific goals and implementable projects to attain the city's vision. Smart cities concept is a forward-looking approach into, Economy, People, Governance, Mobility, Environment and Space.

#### The plan has identified four (4) main clusters that guide the PLM in realising the vision:

- a) **Physical Cluster:** To attract significant investment for the development of proper infrastructure in Polokwane and thereby create a physical environment that is conducive to attracting and maintaining business activity in PLM.
- b) **Economic Cluster:** The creation of local economies which are capable of sustaining Polokwane livelihoods and the creation of favorable investment opportunities and attraction of large businesses.
- c) **Institutional Cluster:** To promote public and private participation and accountability as well as an integrated and transparent approach to governance and performance monitoring.
- d) **Social Cluster:** To increase the quality of communities' lives by providing sufficient social stimulation, assistance and creating livable cities.



The four clusters influence one another and failure to promote growth and development in one would lead to failure in another. Integrative interventions would furthermore ensure that holistic planning takes place.

The 2010 PLM-SDF must embrace the above-identified development goals and contextual strategies identified in the 2030 PLM-EGDP and ensure the synergy and alignment of the two.

### 4.3 Basic Principles of the Polokwane SDF 2010

The 2010 PLM-SDF developed principles for local economic development intervention zones:

- a) **Principle 1:** Focus on sustainable development through the protection of natural and cultural resources.
- b) **Principle 2:** Concentrate investment opportunities in the existing spatial concentration of economic activity that has the potential for expansion of economic activities.
- c) **Principle 3:** Stimulate emerging and poverty concentrations with the potential of economic development in their spatial and socio-economic content.
- d) **Principle 4:** Concentration of investment in people rather than places in areas spatially fragmented with low development potential.

The 2010 PLM-SDF proposed several interventions. The performance of the municipality in this regard is summarised in **Table 4.4.** 

TABLE 4.4: SUMM	ARY OF PERFORMANCE OF PLM IN	TERMS OF PROPOSED SDF								
INTERVENTIONS REQUIRED AS PART OF THE 2010 SDF										
Intervention Zone	Priority Intervention	Status & Comment								
Municipal Wide Level.	Development of the Land Use	Process is currently								
	Management System (LUMS).	underway.								
Local Level: City.	Compilation of Local Spatial	Being considered as part of								
	Development Framework Plan	the Integrated Urban								
	(LSDFP) for PLM.	Development								
		Framework (IUDF) process.								
	Densification & subdivision	Completed and implemented.								
	strategies for the proclaimed									
	townships and farms within the									
	Town Planning Scheme Area.									
	Urban Renewal Strategy for	Completed.								
	Polokwane CBD.									
	Office Development Policy.	Outstanding.								
	Revision of the CBD Development	Completed and implemented.								
	Plan (to encourage more F.A.R).									



TABLE 4.4: SUMM	SUMMARY OF PERFORMANCE OF PLM IN TERMS OF PROPOSED SDF									
INTER	VENTIONS REQUIRED AS PART OF	THE 2010 SDF								
	Precinct Plan for the Transportation	Outstanding.								
	Hub.									
	Compilation of Dwelling office study	Outstanding.								
	between Thabo Mbeki and Grobler									
	Streets.									
Local Level:	Compilation of an LSDFP for	Completed and implemented.								
Mankweng.	Mankweng, Nobody-Badimong									
	Tenure Upgrading of R293	Outstanding.								
	Townships.									
	Formalisation of R293 Townships.	Outstanding.								
	Revitalisation and expansion of	Outstanding.								
	existing nodes.									
Local Level:	Compilation of an LSDFP for	Completed and implemented.								
Sebayeng.	Sebayeng/Dikgale area.									
	Tenure Upgrading of R293	Outstanding.								
	Townships.									
	Formalisation of R293 Townships.	Outstanding.								
	Revitalisation and expansion of	Outstanding.								
	existing nodes.									

## 4.3.1 Implications for the SDF

The following are relevant:

- a) The reviewing process of the 2010 PLM-SDF must pay closer attention to existing economic activities and social infrastructure such as universities and how these are restructuring the spatial form of areas where they are located. The updated PLM-SDF must also incorporate the expansion of the municipality through the incorporation of large portions of Aganang that took place through municipal demarcation in 2016.
- b) The PLM has developed precinct plans that define specifically the development character of specific areas and provide in-depth knowledge in terms of socio-economic data of those areas.
- c) The PLM-SDF needs to pay close attention to the various Sector and Master Plans that have been produced by different city departments to ensure that there is a clear synergy between resources and the desired urban form.
- d) It is important that the finalised interventions, as per the 2010 PLM- SDF, are taken on board to ensure consistency in the planning process. Outstanding interventions must be given due consideration in the SDF so that progress is realised and additional insights garnered around these intervention areas.

It is important to look at transport principles upon which the PLM-SDF is based in order to understand what the SDF wants to achieve in terms of transport-related principles. The



following section is copied from the 2010 PLM-SDF, paragraph 7.1.1 and must be the interrelationship between the SDF and the ITP:

### Macro level:

#### SPATIAL DEVELOPMENT PRINCIPLES FOR THE URBAN FRAMEWORK PLAN:

- a) Capitalising on the location of Polokwane situated on the Great North Road and Gateway to Africa.
- b) Enhance Polokwane as the Capital of the Limpopo Province.
- c) Enhancement of sustainable development which involves:
  - i) The protection, sustainable use, and management of the environment.
  - ii) Proper land use management.
  - iii) The cost-effective provision of services.
  - iv) The enhancement of the principle of compact cities theory through the planning of quality and efficient urban spaces.
- d) The curbing of urban sprawl through the delineation of an urban edge.
- e) The promotion of urban integration and urban infilling.
- f) The enhancement of intra-urban linkages along mixed land use corridors and nodes to reduce the need for people to travel over long distances.
- g) Encouragement of densification in identified areas.
- h) Creating quality, well balanced urban environments, which are convenient, attractive, and safe.
- i) Enhancement of the image and legibility of urban areas.
- j) Conservation, development and management of a functional open space system.

#### Micro level:

- a) Given that historically there is limited consideration towards sustainable transport and the urban realm, the opportunities for improvement are considerable.
- b) The economic catalysts for the regeneration of the CBD include the PIRPTS project and fundamentally the encouragement of quality goods and services to the city centre within easy access of offices and public transport.
- c) A strategic catalyst for encouraging healthy and sustainable travel is the development of pedestrian and cycling networks that provide good continuity and amenity.
- d) The PIRPTS brings more opportunities to provide equitable, safe, and attractive transport and encourages socio-economic development. The transfer facilities should become features that contribute positively to the urban landscape.
- e) The integration of transport services with land use management becomes a central issue to ensure that proper transport services are provided where people live and conduct business activities and that proper land use rights and densities are promoted to make transport more effective and efficient.



#### 4.4 Integration of Settlement/Settlement Clusters into the Urban System

The integration of settlements/settlement clusters into the urban system is important to ensure sustainable growth and development in the area. Integration could be enhanced through administrative/management processes, socio-cultural, economic as well as physical integration.

The Seshego Precinct Plan is developed and funded by National Treasury's Neighbourhood *Development Partnership Grant* whose primary focus is to stimulate and accelerate investment in poor, underserved residential neighbourhoods by providing technical assistance and capital grant financing for municipal projects that have either a distinct private sector element or an intention to achieve this as part of the New Urban Strategy.

The programme looks at the Seshego, Mankweng and Sebayeng Precincts with the aim of achieving spatial transformation that will address the past spatial injustices that currently exist in these areas. The purpose of the Seshego Urban Hub Precinct Plan is therefore to develop the Seshego neighbourhood according to the proposed programmes on neighbourhood development developed by the municipality in its business plan in 2010.

#### The Seshego Urban Hub Precinct Plan is developed according to the following principles:

- a) **Principle 1:** Respecting the existing urban structure.
- b) **Principle 2:** Completing the urban form/structure.
- c) **Principle 3:** Establishing a hierarchy of movement.
- d) **Principle 4:** Create urban block variety.
- e) **Principle 5:** Ensuring a walkable node.
- f) **Principle 6:** Determining the impact zones.
- g) **Principle 7:** Advocating responsive built form.
- h) **Principle 8:** Defining public space and network of space.
- i) **Principle 9:** Optimising a mix of uses.

It is from these principles that the precinct plan should find a position within the SDF by looking at the programmes or projects to be identified in the SDF and then be registered in the Municipal Service Delivery and Budget Implementation Plan (SDBIP) for future planning and accessing the grant. The SDF therefore should reflect the plans in the Precinct Plan and how they will interact with the general development of the municipality.

The Seshego Precinct Plan is currently under review, particularly to:

- a) Extend the precinct's boundary.
- b) Incorporate a new industrial township and incorporate the PIRPTS routes.

The four most important commuter transport corridors from Polokwane CBD are indicated in **Table 4.5.** 



TABLE 4.5: MAJOR COMMUTER TRANSPORT CORRIDORS								
Corridor	Corridor Length							
Seshego, Perskebult (Nelson Mandela/Polokwane Drive and Matlala Road.	10 to 20 km							
Mankweng, Turfloop, Boyne (Roads R71 and R81)	20 to 40 km							
Lebowakgomo (Road R37)	40 to 60 km							
Mokopane (Road N1)	60 km +							

Figure 4.4 below represents the relative distances between the major centres.





#### 4.4.1 Transportation Linkages

Good accessibility is important to ensure the mobility of people, resources and economic interaction. It also enhances the prospects for the efficient prioritisation and utilisation of public transport infrastructure. The priorities for the upgrading of roads should be a function of the order of the settlements in the hierarchy situated on, or in proximity, of the roads.

Priority should be given to collector roads within settlement (which should be identified through the process of formalisation). The road network should make provision for proper public and transport infrastructure to serve the rural communities.

#### 4.4.2 Economic Linkages

The concept of sustainable development is closely linked to the availability of job opportunities in proximity to where the population is concentrated. This is also an important point of departure if PLM wants to address the mismatch of where people must live and work.

The municipality should, as part of its developmental role, draw up strategies to enhance local economic development. These strategies should take cognisance of the spatial guidelines provided in the SDF when allocating projects to certain areas. The direct guidelines emanating from the SDF proposals include inter alia:

- a) The concentration of economic activity and job creation projects in or in the proximity of higher-order settlements/settlement clusters and on development corridors. Land should be allocated for these purposes during the formalisation of settlements.
- b) Capitalising on the comparative advantages the region has to offer. This includes wholesale and trade, finance and business services, community services and transport and communication.
- c) The upgrading of infrastructure to support local economic development in strategic localities.
- d) The establishment of core areas for rural settlements/clusters. Economic activity and social infrastructure should enhance their attraction as nodal points in PLM.

#### 4.5 Transport Implications of the SDF

Integrated transport and land use planning strategies need to achieve transport provision that includes the urban perspective by means of:

- a) Concentrating residential development along public transport corridors.
- b) The current density policy of the PLM should be implemented.
- c) Creating a high density of trip-attracting activities in central areas well served by public transport.
- d) Create new developments that are accessible to public transport from a wider regional perspective for rail, road and air infrastructure.



- e) Improvement and development of public transport amenities e.g., taxi, bus and railway facilities.
- f) Accommodate and provide road freight transport infrastructure and amenities.

The 2023/2028 PLM-CITP should determine and describe the transport-related issues, problems and needs of the municipality and its residents based on the following, in order to complement the spatial planning process:

- a) Assessment of issues, problems, trends and performance standards revealed by the Transport Register.
- b) Processes of public participation and stakeholder feedback aimed at identifying the needs of the community present and future transport demand estimation, determined by extrapolation from current trends, modelling, and/or other estimations.
- c) The upgrading and maintenance needs of all roads and public transport facilities for which the planning authority is responsible must be identified.
- d) The need for new roads and facilities must also be identified. This should include reference to any pavement management system (PMS) and other infrastructure management systems which may be employed by the authority.

The transport needs assessment should be addressed by means:

- a) Modal split.
- b) Measures to promote public transport.
- c) The needs of learners and persons with disabilities.
- d) Non-motorised transport.
- e) Private transport.
- f) Travel demand estimation.
- g) Transport and technology.

The Overall Network Design is described and sets out the high-level view of the future system for rail and road-based services, contracted and non-contracted in **Chapter 7** of the 2023/2028 PLM-CITP. This is particularly important when the planning authority is proposing to restructure the system - the contracted and/or STAATSKOERANT, 28 NOVEMBER 2014 No. 38256 **21.** This gazette is also available free online at non-contracted services - for the purposes of creating the type of quality corridors envisaged in the national Public Transport Strategy.

Further phases of the PIRPTS should be planned in detail and implemented to support the Leeto LA Polokwane Phase 1a. PLM should encourage developers to conduct development property along IRPTS routes by means of increasing the density related to the properties.



#### 4.6 Conclusion

Transport and land use is live and many things can still change as far as the spatial growth of Polokwane Municipality is concerned. This needs to be addressed as part of the annual update of the PLM-CITP.

The following typical conclusions are transport-related observations linked to the SDF and future growth patterns in Polokwane Municipality:

- a) All the various villages and settlements in the Polokwane Local Municipal area need to be linked to each other and Polokwane CBD by public transport. Currently, and in the near future, this will be done primarily by the PIRPTS which consist of all modes of transport. It is thus important that ranking facilities for these operations are to be constructed to a formal standard in all the villages and settlements.
- b) With future growth expected in all these nodes, Leeto La Polokwane Phase 1a should be expanded in future to provide more scheduled commuter services between nodes.
- c) The completed IRPTS will in the future provide a network of public transport routes and feeder routes throughout the PLM and surrounding areas.
- d) The impact of already implemented non-motorised transport infrastructure provides a clear demonstration of the benefits and should still be prioritised as part of the PLM-CITP. Non-motorised transport initiatives in all the settlements and villages are thus very important.
- e) **Integrated Land Use and TOD's;** Land use planning plays a critical role in the effectiveness of public transport. Various land uses, such as housing or residential areas, economic activity in business, employment, shopping or industrial centres as well as educational, social and recreational uses, tend to be the generators of travel:
  - Improving station and stop integration with surrounding land-use, using TOD principles and improving accessibility/connectivity to high origin and destination points.
  - ii) Provide park and ride as well as kiss and ride options to support the use of especially the IRPTS.
  - iii) Ensure that the residential development have higher densities, mixed development, access to public transport system with a good network of walking and cycling.







# 5 TRANSPORT NEEDS ASSESSMENT

This chapter determines and describes the transport-related issues, problems and needs of the municipality and its residents based on the following:

- a) Assessment of issues, problems, trends and performance standards revealed by the Transport Register.
- b) Processes of public participation and stakeholder feedback aimed at identifying the needs of the community present and future transport demand estimation, determined by extrapolation from current trends, modelling, and/or other estimations (see the Guidelines in this regard).
- c) The upgrading and maintenance needs of all roads and public transport facilities for which the planning authority is responsible must be identified.
- d) The need for new roads and facilities identified.

The transport needs assessment will be addressed by means of the following subsections as part of this Chapter of the report:

- a) Modal split.
- b) Public transport
- c) Measures to promote public transport.
- d) The needs of learners and persons with special needs.
- e) Non-motorised transport.
- f) Private Transport.
- g) Freight transport.
- h) Travel demand estimation.
- i) Transport and technology.

## 5.1 Modal Split

To determine the transport needs it is required to develop an understanding of the modal split between modes, with a specific focus on work trips and educational trips. The modal split for work and educational institution trips is regarded as the most significant. The following information was utilised:

- a) 2020 NHTS that provides information only on a provincial level.
- b) 2010 NHTS that provides a breakdown for PLM.

The regions or "home areas" in which PLM was divided for the purpose of the 2010 NHTS are as indicated in **Figure 5.1** 







The subsequent section elaborates on:

- a) Modal split for trips to work.
- b) Modal split for trips to places of education.

### 5.1.1 Modal Split for Trips to Work

**Table 5.1** contains workers' disability status, geographic location, household income quintile and province by main mode of travel to work by province in South Africa, as obtained from the 2020 NHTS for South Africa per province. The 2020 NHTS did, however, not provide information per local municipality.



## TABLE 5.1: WORKERS' DISABILITY STATUS, GEOGRAPHIC LOCATION, HOUSEHOLD INCOME QUINTILE AND PROVINCE BY MAIN MODE OF TRAVEL TO WORK

		Mode of travel								
		Pu	blic trans	port	Private t	ransport	Walking			
Indicator		Train	Bus	Тахі	driver	passenger	way	Other	RSA	
Marken	Number	151	777	3 753	4 810	997	2 704	159	13 350	
vvorker	Per cent	1,1	5,8	28,1	36,0	7,5	20,3	1,2	100,0	
Dischlad werker	Number	*	23	67	68	27	92	7	285	
Disabled worker	Per cent	*	7,9	23,6	23,9	9,3	32,4	2,3	100,0	
Province										
Western Cane	Number	45	131	407	927	196	281	20	2 008	
western Cape	Per cent	2,2	6,5	20,3	46,2	9,8	14,0	1,0	100,0	
Eastern Cano	Number	3	22	236	326	87	297	9	982	
Eastern Cape	Per cent	0,3	2,3	24	33,2	8,9	30,3	1,0	100,0	
Northern Cone	Number	*	13	34	107	28	102	5	289	
Northern Cape	Per cent	*	4,5	11,6	37,0	9,8	35,4	1,7	100,0	
Eroo State	Number	*	41	130	203	35	209	9	628	
Fiee State	Per cent	*	6,6	20,7	32,4	5,6	33,2	1,5	100,0	
KwaZulu Natal	Number	22	115	637	654	177	387	16	2 008	
Kwazulu-Natal	Per cent	1,1	5,7	31,7	32,6	8,8	19,3	0,8	100,0	
N I a with 10/ a a f	Number	1	36	201	231	51	226	26	772	
North West	Per cent	0,1	4,7	26,1	29,9	6,6	29,3	3,4	100,0	
Gauteng	Number	80	153	1 700	1 812	280	570	46	4 641	
	Per cent	1,7	3,3	36,6	39,0	6,0	12,3	1,0	100,0	
Maumalanza	Number	*	186	164	275	70	247	14	954	
wpumalanga	Per cent	*	19,5	17,2	28,8	7,3	25,9	1,4	100,0	
Limmono	Number	*	79	245	273	73	384	14	1 068	
Сітроро	Per cent	*	7,4	22,9	25,6	6,8	35,9	1,3	100,0	
BCA	Number	151	777	3 753	4 810	997	2 704	159	13 350	
RSA	Per cent	1,1	5,8	28,1	36,0	7,5	20,3	1,2	100,0	
Geographic location										
Linhan	Number	149	457	3 074	4 225	781	1 516	117	10 318	
Ulball	Per cent	1,4	4,4	29,8	40,9	7,6	14,7	1,1	100,0	
Bural	Number	*	320	679	585	217	1 187	42	3 032	
Ruidi	Per cent	*	10,6	22,4	19,3	7,1	39,2	1,4	100,0	
Household income o	uintiles									
Quintile 1	Number	38	149	822	1 805	254	435	43	3 546	
(lowest income quintile)	Per cent	1.1	4.2	23.2	50.9	7.2	12.3	1.2	100.0	
	Number	23	114	578	364	113	624	29	1 844	
Quintile 2	Per cent	12	6.2	31.4	19.7	6.1	33.8	1.5	100.0	
	Number	27	153	733	314	149	754	38	2 169	
Quintile 3	Per cent	1.2	7	33.8	14.5	6.9	34.8	1.8	100.0	
	Number	37	211	919	486	204	590	25	2 472	
Quintile 4	Per cent	1.5	8.5	37.2	19.6	83	23.9	1.0	100.0	
Quintile 5	Number	26	150	700	1 842	277	301	24	3 319	
(highest income	Dor cont	20	4 5	04.4	EE E	2.7	0.4	0.7	100.0	
quintile)	Per cent	0,8	4,5	21,1	55,5	8,3	9,1	U,7	100,0	

The totals used to calculate percentages excluded unspecified cases. The numbers differ from the official employment statistics as a less sophisticated series of questions were used to establish work status. \* Unweighted numbers of 3 and below per cell are too small to provide reliable estimates

Percentages calculated within the mode of travel.

Source: 2020 NHTS

From Table 5.1 it is possible to note that, nationally, the main mode of transport carrying the largest share of workers is private cars with the workers being the driver (36%), and taxis,



which account for 28,1%. Slightly more than one in five workers walked all the way (20,3%), 7,5% travelled by private car as a passenger and another 5,8% travelled by bus.

This pattern holds in most provinces except in Limpopo, where the dominant transport mode was walking all the way (35,9%).

TABLE 5.2: MODAL SPLIT FOR WORK TRIPS IN PLM BASED ON 2010 NHTS										
MAIN MODE TO WORK (% of trips)										
Home Area	No. of Trips	Bus	Taxi	Car	Walk	Other	TOTAL			
Seshego/Moletjie	23 064	14.7%	55.1%	16.6%	12.9%	0.8%	100%			
Polokwane Central	14 605		6.3%	82.9%	7.9%	3.0%	100%			
Polokwane East	24 890	19.5%	14.1%	11.6%	52.3%	2.4%	100%			
Polokwane West	19 024	13.6%	26.7%	20.2%	37.7%	1.9%	100%			
TOTAL PLM	81 583	13.3%	27.3%	27.7%	29.8%	1.9%	100%			

Table 5.2. indicates the modal split for trips to work in PLM based on the 2010 NHTS.

**Table 5.3** provides a comparison between the modal split for work trips for the 2010 NHTS (PLM) versus the 2020 NHTS (Limpopo Province) for South Africa.

TABLE 5.3: PROVIDES A COMPARISON BETWEEN THE MODAL SPLIT FOR WORKTRIPS FOR THE 2010 NHTS (PLM) VERSUS THE 2020 NHTS (LIMPOPO PROVINCE)									
	FOR SOUTH AFRICA.								
MAIN MODE TO WORK (% of trips)									
NHTS	No. of Trips	Rail	Bus	Taxi	Car	Walk	Other	TOTAL	
2010 NHTS (PLM)	81 583	0%	13.3%	27.3%	27.7%	29.8%	1.9%	100%	
2020 NHTS Limpopo Province)	1 068 000	0%	7.4%	22.9%	32.4%	35.9%	1.3%	100%	

**Figure 5.2** indicates the work trips per area in a graphic format based on the 2010 PLM-NHTS.



The following conclusions can be made regarding work-related trips based on the 2010 PLM-NHTS:

- a) The modal split for work trips in the different areas varies in accordance with the socioeconomic profile of the area:
  - i) In Seshego/Moletjie, the highest percentage of motorised trips to work is by taxi, followed by car and then bus.



- ii) In Polokwane Central, the highest percentage of work trips is by car, followed by taxi and then bus.
- iii) In Polokwane East, most work trips are by bus, followed by taxi and then car.
- iv) In Polokwane West most work trips are by taxi, followed by car and then bus.
- v) Most work trips are by walking, followed by car and then taxi when considering the entire municipal area.
- b) The split between motorised trips and NMT (walk) varies as follows:
  - i) The percentage of walk trips to work are the highest in Polokwane East at 52%, followed by West at 38%, Seshego/Moletjie at 13% and Central at 8%.
  - ii) The average percentage of walk trips for Polokwane is 30%.

### 5.1.2 Modal Split for Trips to Places of Education

**Table 5.4** indicates the main mode of transport used to travel to an educational institution by province based on the 2020 NHTS.

		Statistics				(per cen	Province t within p	rovince)				
Mode of tra	vel	(*000)	wc	EC	NC	FS	KZN	NW	GP	MP	LP	RSA
	Troin	Number	15	3	*	*	2	*	17	*	*	3
	IIdiii	Per cent	0,9	0,1	*	*	0,1	*	0,4	*	*	0,
Public	Bue	Number	101	79	25	29	213	72	284	85	111	99
transport	Dus	Per cent	6,3	3,6	7,5	3,2	6,2	6,3	7,1	6,3	5,2	5,
Tax	Tovi	Number	219	328	34	136	454	193	864	184	301	2 71
	T GAI	Per cent	13,7	15,1	10,3	15,2	13,3	16,8	21,6	13,5	14,2	15,
c	Car/truck	Number	108	32	4	15	52	15	111	29	15	38
Private	driver	Per cent	6,8	1,5	1,2	1,7	1,5	1,3	2,8	2,1	0,7	2,
transport	Car/truck	Number	291	242	40	82	571	129	743	100	191	2 38
	passenger	Per cent	18,2	11,1	12,2	9,1	16,7	11,2	18,6	7,4	9,0	14
Malking all	the way	Number	851	1 475	212	626	2 052	690	1 792	941	1 480	10 12
waiking all	ule way	Per cent	53,3	67,6	64,2	69,9	60,0	60,2	44,8	69,4	69,9	59,
Other		Number	13	23	15	7	74	48	188	17	20	40
oulei		Per cent	0,8	1,0	4,5	0,8	2,2	4,1	4,7	1,2	0,9	2
Total		Number	1 598	2 182	331	896	3 419	1 146	4 000	1 355	2 117	17 04
TUTAT		Per cent	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,

\* Unweighted numbers of 3 and below per cell are too small to Percentages calculated within provinces.

It is evident from **Table 5.4** that 'walking all the way' was the primary method used by learners to reach their educational institutions in all nine provinces. Of the 17,0 million learners who attended an educational institution, more than half (about 10,1 million) walked all the way. About 2,7 million learners made use of a taxi to travel to their educational institution.



In Limpopo Province, 'walking all the way' is also the primary method used by learners to reach their educational institution. Of the about 2,1 million learners who attended an educational institution, approximately 70% (about 1,5 million) walked all the way. About 300 000 learners made use of a taxi to travel to their educational institution.

Table 5.5 indicates the modal split for school trips in Polokwane based on 2010 NHTS.

TABLE 5.5: MODAL SPLIT FOR EDUCATIONAL TRIPS IN POLOKWANE BASED ONTHE 2010 NHTS									
MAIN MODE TO EDUCATION (% of trips)									
Home Area	Home Area         No. of Trips         Bus         Taxi         Car         Walk         Other         TC								
Seshego	37 028	5.9%	9.8%	3.7%	80.5%		100%		
Polokwane Central	9 426		12.4%	57.6%	28.9%	1.2%	100%		
Polokwane East	124 479	3.0%	1.8%	2.9%	91.5%	0.8%	100%		
Polokwane West	43 454	0.5%	4.6%	2.7%	91.3%	0.9%	100%		
TOTAL PLM	214 387	2.9%	4.2%	5.4%	86.8%	0.7%	100%		

**Table 5.6** provides a comparison between the modal split for educational institution trips for the 2010 NHTS for PLM versus the Limpopo Province as part of the 2020 NHTS for South Africa.

TABLE 5.6: COMPARISON BETWEEN THE MODAL SPLIT FOR EDUCATIONAL
INSTITUTION TRIP SPLITS FOR THE 2010 NHTS FOR PLM VERSUS THE LIMPOPO
PROVINCE AS PART OF THE 2020 NHTS FOR SOUTH AFRICA
MAIN MODE TO WORK (% of trips)

NHTS	Nr of trips	Rail	Bus	Taxi	Car	Walk	Other	TOTAL
2010 PLM NHTS	214 387	0%	2.9%	4.2%	5.4%	86.8%	0.7%	100%
2020 LIMPOPO PROVINCE NHTS	2 117 000	0%	5.2%	14.2%	9,7%	69.4%	0.9%	100%

Based on **Table 5.6**, it is evident that the main mode of transport to educational institutions for the PLM versus Limpopo Province differs significantly. The last-mentioned is mainly due to the relatively high percentage of urbanisation that is located in PLM together with economic activities.

**Figure 5.3** indicates the school/educational trips per area in a graphic format based on the 2010 PLM-NHTS.



The following conclusions can be made regarding school/educational trips in PLM:

- a) The modal split for school trips in the different areas also varies in accordance with the socio-economic profile of the area:
  - i) In general, the percentage of school trips by NMT (mostly walking) is substantially higher than is the case for work trips.
  - ii) Polokwane East and West have the highest percentage of walk trips to school namely 91%, followed by Seshego/Moletjie at 80% and Central at 29%.
  - iii) The percentage of walk trips to school for the entire Polokwane area is 87%.
  - iv) In terms of car trips to school, Polokwane Central is the highest at 58%, while the other areas are below 4%.



- v) For taxi trips to school, Central is the highest at 12%, followed by Seshego/Moletjie at 10%, West at 5% and lastly East at 2%.
- vi) The average percentage of walk trips for Polokwane is 30%.

## 5.2 Public Transport

#### Limitations of the current commuter system:

- a) Unattractive roadside bus and taxi stops with no shade or shelter.
- b) Out of the city, there is often no path access or paved waiting area including full barrier kerbing to protect waiting passengers. Access to the stops is often through drainage ditches.
- c) Devenish and Rissik Street public transport and traffic mix is problematic, causing delay to all traffic.
- d) Minibus taxis are supply-driven and not demand-driven. Services are focused on the profitable peak periods.
- e) High level of criminal activities associated with public transport facilities.
- f) The closure and violence from time to time at the Mall of the North taxi facility.
- g) Need for additional integration of various types of public transport modes in CBD.

#### 5.2.1 Intermodal Long-distance Public Transport Terminal

There are several local taxi ranks in the CBD (refer to **Chapter 3** for detail) and a local bus terminal on the north-western side of the CBD in Hospital Street close to Nelson Mandela Drive. PLM, however, does not have a public transport facility that caters for long-distance and cross-border buses and taxis. The last-mentioned modes of transport make use of informal facilities located at different places in PLM CBD.

PLM needs a *"Long-distance Intermodal Public Transport Facility"* that will ensure integration between the various modes of public transport, including long-distance buses, long-distance taxis, rail and the local public transport operations. The location of such a terminal is critical to ensure integration between all existing modes as well as the newly introduced IRPTS. (Leeto La Polokwane Phase 1a)

The passenger railway station is not ideally located since it is relatively far from commercial activities, taxi ranks and other amenities in the CBD. The distance, for example, to the Pick 'n Pay taxi rank is 950 m while the distance to the PLM Civic Centre is 2,2 km. In addition, most of the time there is very little activity at the railway station as there are no commuter trains. Only three long-distance trains stop at Polokwane station per week.

One of the existing informal long-distance bus facilities is located in Thabo Mbeki Street (south of PLM Civic Centre) between Church and Landdros Maré Street. This is located on the southern side of the Leeto La Polokwane Main station (transfers facility) in Joubert Street. The informal facility is well located as a drop-off and pick-up facility for the current long-



distance buses only. The site is, however, too small to be converted to be a complete "Longdistance Intermodal Public Transport Facility" that includes other modes of transport and amenities.

Some of the long-distance taxi operators are currently operating from the non-developed site in President Paul Kruger Street opposite the Pick 'n Pay taxi rank. This facility is also too small to be developed into a complete *"Long-distance Intermodal Public Transport Facility"* and it is further privately owned. The site should rather be incorporated as part (expansion) of the Pick 'n Pay taxi rank. It is further recommended that the relevant property should also be expropriated from the existing private owners since it contributes from time to time to conflict and violence between long-distance operators.

A detailed study should, however, be conducted in order to incorporate all modes of transport and the related amenities within a *"Long-distance Intermodal Public Transport Facility"*.

### 5.2.2 Integrated Rapid Public Transport Network Phase 1a

The implementation of Phase 1a of Leeto LA Polokwane, which includes the Nelson Mandela Drive corridor, made a significant impact on the improvement of public transport infrastructure on this corridor. The infrastructure related to Phase 1a, however, still needs to be completed. The last-mentioned specifically refers to the IRT trunk stations, dedicated bus lanes over a section of the route, intersection upgrades at congested intersections and NMT facilities. The detailed information related to infrastructure required for Leeto Polokwane Phase 1a is contained as part of the 2020 Technical Operational Plan.

It is, however, important to realise that a hybrid IRPTS is implemented by PLM due to the lack of funds, and therefore it requires that a study should be conducted to review the full PIRPTS Plan 2018 to incorporate the following:

- a) To evaluate the process followed to implement Phase 1a to be able to identify the advantages and disadvantages and the lessons learnt as part of the process that is PLM specific related.
- b) To ensure the sustainability of the implemented Phase 1a in the medium and long term.
- c) To determine the extent of the IRPTS system that could be developed in future and the implications of the lately adopted hybrid system by PLM.
- d) To prioritise the phases of the Leeto La Polokwane IRPTS that could still be implemented.
- e) To prepare an updated Technical Operational Plan and Business Plan for the reaming phases.



#### 5.2.3 Taxi Facilities

The vision statement of transport as stated in the National White Paper indicates that public transport operations and infrastructure should be fully integrated. It is therefore recommended that when providing the public transport facilities, the following should be taken into consideration:

- a) Provide multimodal public transport facilities at the main nodes of commercial activities in PLM.
- b) Provide public transport transfer facilities along the respective corridors and at other strategic points in PLM (could be stations).
- c) Provide loading and off-loading facilities for public transport at strategic points in the villages in PLM.

In the CBD, ranks are mostly used for loading passengers bound for local destinations and long-distance destinations. While there are various ranks for local destinations, there is currently no formal long-distance rank that needs to be incorporated as part of the *"Long-distance Intermodal Public Transport Facility".* (A or B point outside the CDM)

The Pick 'n Pay and Spar taxi rank facilities as part of local operations were recently upgraded. (A and B points are located in the CDM). The TR contains information related to the upgraded facilities.

The Oriental Plaza shopping centre informal taxi facility between Hospital, Excelsior, Church Street and the railway line, measuring  $\pm$  3 ha currently, accommodate taxi operations. There is currently a shopping centre on the site, mixed with private parking. By redeveloping the site, it should be possible to retain a retail component, thereby harnessing the full development potential of the site while at the same time optimally utilising the site's location in terms of public transport operations.

A pressing need for public transport, especially on the routes, which will not be replaced by the proposed IRPTS (see Section 6.3), is for a taxi drop-off of passengers at various locations during the AM peak. The large number of taxis circulating on congested inner-city streets to drop off passengers currently adds to the congestion since taxis must stop in the roadway to off-load passengers. This problem can be addressed by implementing the proposed Public Transport Ring Route around the CBD. The route is proposed along Excelsior, Hans van Rensburg, Bodenstein and President Paul Kruger Street. Lay-bys should be provided at strategic points along the route so that taxis (and buses).

Figure 5.4 provides a graphical layout of the inner-city ring route in context with the PIRPTS.

It is important to realise that a high number of facilities in PLM are informal facilities and these facilities are mostly in rural areas.



#### 5.2.4 Bus Facilities

The bus rank in Silicon/Hospital Street includes all necessary infrastructure for commuter buses such as safe ingress, egress, circulation lanes, loading bays, pedestrian queuing areas, shelters and ablution facilities. The facility is located close to the proposed new IRPTS stations ensuring efficient and quick modal transfers between the proposed IRPTS and commuter buses serving areas such as Mankweng, Boyne, Tzaneen and Lebowakgomo.

As is the case for taxis, commuter buses also have trouble circulating and dropping passengers off in the CBD, especially in the AM peak when passengers need to be dropped off at various locations, close to work opportunities.

The proposed Public Transport Ring Route will also address this problem as far as commuter buses are concerned.





FIGURE 5.4: PLM INNER CITY RING ROUTE IN CONTEXT WITH PIRPTS



#### 5.2.5 Bus and Taxi Lay-bys along Public Transport Corridors

As part of compiling **Chapter 3** (Transport Register), surveys were conducted to identify existing bus and taxi lay-bys on public transport routes in Polokwane.

Surveys included the different components of lay-bys including shelters, paving and kerbing. Based on the information collected, existing lay-bys were divided into the following categories:



#### 5.2.5.1 Lay-bys with paving, kerbing and shelters:



These lay-bys are complete and do not require any additional infrastructure such as kerbing or paving as indicated in the photograph.

Taxi lay-bay on Road D4040 between Boyne and Maja.

5.2.5.2 Lay-bys with paving but without shelters:



In this case, the lay-by includes paving and kerbing, but no shelter is provided. The cost of a shelter is inexpensive compared with the cost of the lay-by. This implies that an improved facility, with shelter against the elements, can be provided at a relatively small cost.

Taxi lay-bay on Road D4020 near Boyne (Provincial Road).

5.2.5.3 Lay-bys without paving or shelters:



These lay-bys do not have paving or shelters for protection against the elements. As above, it is proposed that paving and shelters be provided as the cost is minimal compared to the construction of the lay-by.

<u>Taxi lay-bay on Road R71 near</u>

Mankweng (National Road).



**Table A-8.1 of Appendix A-8** below indicates lay-bys that need to upgrade by providing shelters and/or paving as well as locations where new lay-bys are required. A comprehensive survey was done to determine the number and location of the above categories of existing lay-bys to inform budgets on where upgrades are required on existing facilities. A total of 73 lay-bys were identified for upgrading as well as 33 new lay-bys as part of the 2013-CITP.

It is important to note that most of the corridor routes and roads in rural areas are owned by SANRAL and RAL respectively, therefore it requires that PLM should liaise with the relevant road authorities for the implementation and/or upgrading of existing facilities.

### 5.3 Measures to Promote Public Transport

In 2007, the National Department of Transport developed a Public Transport Strategy aimed at improving and thereby promoting public transport in South African cities. This strategy is aimed at promoting public transport by improving services rather than trying to penalise private transport.

A main feature of the strategy is to ensure the development of IRPTNs for the larger cities. The Public Transport Strategy identified IRPTNs as the best option to ensure sustainable, equitable and uncongested mobility in liveable cities and districts.

PLM developed an IRPTS TOP during 2014 and is called Leeto La Polokwane. Phase 1a of Leeto LA Polokwane was implemented during the second quarter of 2021.

The process of developing the PIRPTS was subsequently initiated by the PLM. During 2012, the following five work streams were established to plan, manage and implement the system:

- a) Project Management:
- b) IRPTS Operational Plan:
- c) Marketing & Communications:
- d) Business Model and Industry Transition
- e) Systems and Operations

PLM is the municipal sphere of government responsible for municipal transport functions including municipal public transport in their areas of jurisdiction. A PLM Directorate Roads and Transportations Services were established to appropriately, plan, implement and manage modally integrated public transport networks and travel corridors, including operational planning. The following subdivisions related to the directorate:

- a) Public Transport Regulation and Monitoring that includes:
  - i) Industry Transition
  - ii) Public Transport Regulation and Compliance
  - iii) Marketing


- b) Roads and Stormwater
- c) Public Transport Operations

Section 1.5 of the report provides more information.

It is essential to integrate municipal transport planning with land use planning.

The Provincial Gazette date 13 April 2021, volume 28 number 3153 provides a legal backbone in order to promote public transport in PLM:

# PREMIER'S NOTICE 2 OF 2021 LOCAL GOVERNMENT NOTICE POLOKWANE LOCAL MUNICIPALITY

POLOKWANE MUNICIPALITY LEETO LA POLOKWANE OPERATIONAL BY-LAW

Notice is given that the Municipal Manager of Polokwane Local Municipality hereby publishes, in terms of the provisions of Section 13 & 21 of the Local Government: Municipal Systems Act 32 of 2000, read with Section 162 of the Constitution of the Republic of South Africa, 1996, the by-law set forth hereunder. The said by-law hereto attached shall take effect on the date of publication of this notice. CITY OF POLOKWANE LEETO LA POLOKWANE OPERATIONAL BY-LAWS

#### 5.4 The needs of Learners and Persons with Special Needs

#### 5.4.1 Learner Transport

Pedestrian infrastructure provision adjacent schools are generally extremely poor. Students are not protected from dangerous car behaviour (drop off/pick up) adjacent to school entrances.

Infrastructure does not guide or restrict car movement safely. Kerbing does not protect students. Cars are permitted to drive and park on the verge resulting in conflict with pedestrians and cyclists.

#### 5.4.2 Scholar Patrols

As laid down by the Road Traffic Act (Act 93 of 1996), Section 57.5, scholars and students (learners) can be organised into patrols (known as scholar patrols) to display a stop sign in the prescribed manner (SADCRTSM 11/97, Section 2.8) so that the safety of pedestrians crossing a public street or road can be ensured. It is a function of provinces to support the establishment of scholar patrols where there is a need and where it is demanded by circumstances.

The CDM and Limpopo Province Community Safety Forums need to be incorporated as part of the road safety initiative related to scholar patrol activities and need to drive the process related to road safety at schools.



Where needed, and when requested by school principals and/or recommended by traffic authorities, aid and assistance should be given to assist with the functioning of scholar patrols.

The relevant authority should arrange for insurance cover against collisions and claims resulting from events occurring during the legal functioning of scholar patrols. Equipment should be provided by relevant authorities and guidelines for the implementation and functioning of scholar patrols. The Scholar Patrol Programme benefits the school, the community and the student safety patrollers. The programme provides quality training and recognition for student safety patrollers' efforts.

#### 5.4.3 Transport Users with Special Needs (Universal Access Guidelines Developed)

It is important that the transport environment, including public transport services and transport infrastructure are accessible for people with special needs, which is typically referred to as "universal access design."

The National Land Transport Act 5 of 2009 requires that people with disabilities are provided for in public transport projects as passengers, along with a wider group of other passengers with special categories of need. The term Passenger with Special Categories of Need (PWSCN) is often used interchangeably with Special Needs Passengers (SNP). However, PWSCN is the term referenced in legislative documents of the Department of Transport. Some concerns include related to transport for users with special needs are:

- a) Limited infrastructure provision.
- b) Public transport vehicles i.e. road based MBTs or buses are not specifically tailored to accommodate universal access.
- c) Some intersections have dropped kerbs and tactile paving, but not all intersections in PM have this treatment.
- d) Access into buildings are sometimes equipped with ramps for wheelchairs and prams.

A Universal Design Access Plan (UDAP) was prepared during 2020 by PLM in general; little provision has been made for people with special needs.

The Principles of Universal Design were developed through The Centre for Universal Design, North Carolina State. There are seven principles and they include:

- a) Equitable use.
- b) Flexibility in use.
- c) Simple and intuitive use.
- d) Perceptible information.
- e) Tolerance for error.
- f) Low physical effort.
- g) Size and space for approach and use.



The Department of Transport in South Africa recognises the following groups as universal access passengers or people with categories of special needs:

- a) **People with disabilities**: defined in the Act as people with a physical, sensory or mental disability, which may be permanent or temporary.
- b) **The aged**: or elderly people. People over the age of 55 usually fall into this category.
- c) **Pregnant women**: usually taken as women in their last three months of pregnancy.
- d) Young children: this is usually defined as children between the ages of 0-14.
- e) Those who are limited in their movements by children: men and women accompanying young children.
- f) **Signage passengers**: people who are unable to read or who are unable to understand the language used on the signage. Tourists are also included as signage passengers.
- g) **Female passengers:** whilst safety and security affect all passenger groups and both genders, it should be noted that female passengers (together with people with disabilities) are particularly at risk of crime and abuse.
- h) Load-carrying passengers: people carrying bags, luggage or goods of a size that means that they benefit from accessibility features. This is important to people on low incomes in South Africa. People travelling with bicycles are generally also included in this category.

The following elements of Leeto LA Polokwane Phase 1a were evaluated in terms of universal access:

- a) Operational Context.
- b) Vehicles.
- c) Intelligent Transport Systems (ITS).
- d) Marketing and Communications.
- e) Public Participation.
- f) Website.
- g) Signage and Wayfinding.
- h) Customer Care.
- i) Fare System.
- j) Infrastructure.
- k) NMT Seshego and Moletjie Audit.
- I) Seshego Circle Plans.
- m) Seshego Hospital.
- n) Nelson Mandela and Zebediela Intersection Plans.
- o) Layover (Tempory Depot) Facility Plans.
- p) Control Centre.
- q) Temporary Bus Stops and Route.
- r) Lighting.
- s) General Joubert Street Station.
- t) Guard House.



The PLM-NMT should be updated to incorporate the details of the UDAP.

#### 5.5 Non-motorised Measures Transport (NMT)

The 2014 PLM-NMT Master Plan identified six elements that frame the overall problem statements/needs that beleaguer the city of Polokwane. These are as follows:

a) **Element 1**, Socio-economic upliftment.

#### Problem Statement:

Poverty remains a great challenge in PLM with the majority of the population living in a rural setting. The city's population is still characterised by high unemployment, low education levels and low income. For the majority of the population, the living conditions remain poor, with a lack of basic services (Stats SA, 2011).

#### Objective:

PLM-NMT can play a role in improving the living conditions of the local population through partnering with local SMMEs who could benefit from NMT related projects. Furthermore, given the labour-intensive nature of the construction of NMT infrastructure, an opportunity exists to reduce the unemployment rate in the city.

b) **Element 2,** Enhancing accessibility.

#### Problem Statement:

Universal access to the city remains a challenge for communities that cannot afford public transport. Furthermore, the city's roads were mainly designed with the motorist in mind. This policy aims to reduce disparities in socio-economic conditions between communities by making the city accessible to all. To achieve this, it will be necessary to improve the transport system in the city. The PLM-NMT, as a mode of transport, can play an important role by enabling communities with limited public transport access to cycle to the nearest public transport facility. NMT can also help to increase disposable income for poor households by reducing the need to use public transport for short distances.

#### **Objective:**

NMT, being a low-cost mode, can be an effective tool for targeting the poor and improving their livelihood.



#### c) **Element 3**, Ensuring the protection of the environment.

#### Problem Statement:

Human activities impact on the environment and often overload and destroy it. Emissions have a major impact on the environment especially on-air quality and climate change. Society has a collective responsibility to safeguard the environment for future generations. This requires that the transport systems the city provides are sustainable and environmentally sensitive.

#### Objective:

NMT is essentially an emission-free transport mode which is obviously advantageous to the environment. The promotion and growth of NMT will have a directly positive effect on the environment.

d) **Element 4**, Promoting safer living environments.

#### Problem Statement:

The safety of users is crucial for the successful implementation of NMT in the city. Currently, NMT facilities do not always provide a safe environment for pedestrians and cyclists. As an example, the position of road signs in the NMT facilities poses a safety risk for the users.

#### Objective:

Safety can be achieved through care environmental design which discourages the activities of criminals and ensures integration between motor vehicles and NMT. Safety must be linked to awareness campaigns to ensure that the city's population appreciates the role of NMT.

e) **Element 5,** Promotion of integration.

#### Problem Statement:

There is a lack of integration in the planning and positioning of public transport infrastructure.

#### Objective:

The transport systems that the PLM provides must be integrated. This will ensure that the user experience is seamless and the quality of life is improved. It is expected that this will be addressed as part of the IRPTS the city is currently developing. However, for



this system to function optimally, there is a need for sufficient integration of NMT with all other modes of transport.

f) **Element 6,** Enhancing the quality of life.

#### Problem Statement:

Strong and well-functioning people and communities are the building blocks for a sustainable society. Currently, PLM is lacking in these areas.

#### Objective:

NMT acts as a direct contributor to community building and enhanced quality of life through the improved access it provides. It also allows communities to better share public spaces thus promoting integration.

#### 5.5.1 Public Parking

Public parking should be provided and secured and should be short distances from either bus stops or commercial activities as illustrated in **Figure 5.5**.



#### 5.6 Private Transport

In this context, private transport refers to trips by light vehicles. It includes trips to work and school as well as for business, social, deliveries or any other trips where light vehicles are used. Any vehicle not counted as a bus, taxi or heavy vehicle falls in this category. In terms of road congestion, private transport contributes the most to road congestion as indicated by **Table 5.7** which was developed as a study case.



TABLE 5.7:ROAD SPACE REQUIRED FOR DIFFERENT TRANSPORT MODES ASDETERMINED AS PART OF A STUDY CASE						
Vehicle Type	Vehicle Length	Passengers per Vehicle	Road Space per Vehicle (m) (at 60km/h with 2-sec gaps)	Road Space per Passenger (m) (at 60km/h with 2-sec gaps)	Ratio of Road Space Required per Passenger	
Bus	15	60	48	0,8	1	
Minibus taxi	6	14	39	2,8	3,5	
Car	5	3	38	12,7	15,9	

The table indicates that the road space taken up by private car passengers is almost 16 times more than the road space taken up by bus passengers. Taxi passengers take up 3,5 times more road space than bus passengers. This confirms the inefficiency of private vehicles compared to buses and taxis. The consequence of the above is that private vehicles contribute more to traffic congestion than public transport modes such as taxis and buses. The picture below practically illustrates the difference in road space taken up by the same number of people travelling by car, foot and bus.



Comparative road space taken up by different transport modes.

Public transport should be promoted as this is the best long-term solution to deal with road congestion and the ever-increasing demand for more roads. Polokwane is in a favourable position compared to many other South African cities, as a high percentage of commuters already use public transport. The challenge is, however, to improve public transport services to such a degree that even those who can afford to travel by private car will also use public transport.

Public transport and NMT are high priority in terms of the Transport Needs Assessment needs to be supported to ensure economic growth in future in PLM.



#### 5.7 Travel Demand Estimation

The travel demand estimations should be collected continuously by means of the following types of surveys for the various modes of transport (light vehicles, taxis, buses, heavy vehicles):

- a) Vehicle occupation surveys at strategic points.
- b) Vehicle traffic counts.
- c) Household surveys.
- d) Route utilisation surveys.
- e) Rank utilisation surveys.
- f) Random surveys to determine the satisfaction and needs of operators and passengers.
- g) Constantly compare transport information with economic and land use data.
- h) To conduct transport planning modelling over time.

The main purpose of travel demand estimates is to determine if there is an under or oversupply of public transport at any point and time.

#### 5.8 Freight Transport

The movement of freight through heavy road vehicles, coupled with the tendency to overload, results in deteriorating road infrastructure. This challenge is exacerbated by the lack of road maintenance, which leaves the roads unattended until they deter even further. Despite these challenges, Polokwane has an opportunity to become a freight hub in the province due to its positioning. It is therefore important to find ways to address these challenges while maximising the economic potential of freight in PLM. The following key projects have been identified for this balance and have been detailed in Chapter 9:

- a) Development of intermodal freight logistics hub at PIA.
- b) The development of truck inn/s in PLM.
- c) Implementation of overload control strategy for PLM.

#### 5.9 Transport and Technology

The rise in fuel prices is having an adverse impact on transport costs of the country with subsequent negative impacts on the economy. This problem and other environmental considerations have resulted in ongoing technological investigations to reduce the dependence on conventional fuels such as gasoline. The changes in technology may have a significant impact on the vehicle types within a city as well as the emissions associated with the vehicle mix. According to research conducted by the World Energy Council, certain technology changes will change over time with a clear focus on the introduction of hybrid technology (refer to **Figure 5.6**) for the market of the hybrid technology which can increase to about 7%.





Source: (WEC, 2011: 55)

**Figure 5.7** below provides an indication of the transport emissions that are expected over time. From this figure, it is evident that Africa will experience a steady rise in emissions due to the lack of introducing new technology.





This issue does, however, create opportunities for interventions in public transport, even at a local scale such as Polokwane. The possibility to introduce hybrid or electrical technology in public transport vehicles can be considered by the PLM in future. This will assist with the reduction of fossil fuel depletion and subsequent reductions in CO2 emissions associated with transport.

#### 5.10 Findings and Conclusion

In conclusion, the investigation into the transport needs assessment for Polokwane has had the following important findings:

- a) <u>Walking</u>: Walking (29.8%) is the most important mode of transport for work-related trips in PLM. This finding underlines the importance of proper NMT planning in PLM. The dominance of this mode is highlighted when the educational trips are considered. Walking accounts for 86,8% of school trips in Polokwane. **Chapter 10** addresses NMT strategies for PLM.
- b) <u>Public Transport</u>: When combining taxis and bus trips, 40.6% of work-related trips are public transport trips. Public transport received significant attention with the current IRPTS projects done and what is still underway. **Chapter 6** will provide a more detailed discussion on the public transport operations strategy.
- c) <u>Integration of NMT and PT Planning</u>: Integration between the said modes is required.
  Chapters 6 and 10 will provide more detail in this regard.
- d) <u>Hybrid/Electric Bus Technology</u>: This is a relatively new technology for South Africa and the initial start-up cost is very high although this technology provides an opportunity for future PT interventions.







# 6 PUBLIC TRANSPORT PLAN

The PLM-PTP is based on all relevant data and information available, including the TR, the Subsidy Information System, the Operating Licensing Administration System (OLAS), business plans submitted to DoT in support of applications for PTIS grant funding and other funding, and existing contract documents. Based on the STAATSKOERANT, 28 NOVEMBER 2014 No. 38256 **19:** All Schedule 1 and district municipalities are required to develop a PTP, whether the services in the area covered by the plan are contracted or not, subsidised or not, or whether there are many modes or only a single mode of transport in operation.

The focus of the PLM-PTP is to integrate the public transport network, services and modes. The plan provides the basis for rationalising and restructuring the public transport system, designing contracts for contracted services and awarding operating licences to noncontracted services.

The PTP encompasses and incorporates plans referred to in the 2007 Public Transport Strategy and Action Plan as "Integrated Rapid Public Transport Network Plans" (IRPTNs). The refer-to plan for the high-quality networks of rapid bus rapid transit (BRT) corridors was prepared by Polokwane Municipality in 2014 by means of implementing "catalytic" projects.

PLM has prepared operational and business plans which were submitted annually to the DoT and National Treasury seeking funding for the "IRPTN", based on the required guidelines on the format and contents of these submissions been circulated to the relevant municipalities. The public transport network plan that was developed is incorporated in the PTP and synchronised with the overall CITP process.

#### The PTP comprises of six parts:

- a) Part 1, Policies and Strategies
- b) Part 2, Overall Network Design
- c) Part 3, Commuter Rail Plan (not relevant for Polokwane)
- d) Part 4, Contracted Services Plan
- e) Part 5, Non-Contracted Services Plan
- f) Part 6, Operating License Plan (OLP), separate document.

The subsequent sections will elaborate on the above-mentioned parts of the PTP which are contained in the remainder of **Chapter 6**.



#### 6.1 Part 1: Policies and strategies

#### 6.1.1 Future Development of the Public Transport System in Practical Terms

This section contains a broad perspective of the future development of the public transport system in practical terms, including a policy and strategy for the role of each public transport mode.

#### 6.1.2 Policy in Relation to Packaging of Contracts.

Policies in relation to the packaging of contracts, the type of contracting that will be employed, levels of service, modal integration, land use development and the fare system.

#### 6.1.3 Extent of Subsidies and Cross Cost Contracts

Based on a PLM feasibility study during May 2021 for the "DEVOLUTION OF PUBLIC TRANSPORT REGULATORY AND CONTRACTING FUNCTIONS FROM THE LIMPOPO DEPARTMENT OF TRANSPORT AND COMMUNITY SAFETY TO THE POLOKWANE MUNICIPALITY" the following are relevant:

The contracting authority function, as it pertains to the LDTCS, is only for the subsidised services contracts. The conditional grant for the funding of subsidised service contracts are allocations to the provinces. There are 4 subsidised service contracts that impact directly on the PM viz.:

- a) GNT Seshego negotiated contract funded through equitable share (voted funds).
- b) Bahwaduba Bus service interim contract.
- c) Madodi Bus company interim contract.
- d) Kopano Bus Service sub-contracted to GNT Seshego.

Data on the routes operated, passenger numbers and operating kilometres for each of the above-subsidised service contracts were not available at the time of drafting the report. The funding allocations and the source for each of these contracts in the 2020/2021 financial year were:

- a) Bahwaduba Bus Service R 20 842 000,00 from the PTOG;
- b) Madodi Bus Company R 21 314 000,00 from PTOG; and
- c) GNT Seshego and Kopano Bus Service R142 000 000.00 from equitable share.



#### 6.1.3.1 General comments concerning the contracting functions:

- a) Section 40 of the NLTA requires that subsidised service contracts be integrated into the broader public transport plans as a priority after the commencement of the NLTA. The NLTA was promulgated in 2009 and to date, the subsidised service contracts that impact PM have not yet been integrated.
- b) The PM prepared a city-wide IPTN plan; however, the only missing part is the integration of the subsidised services with the IPTN. The 2019/2020 annual report of the LDTCS indicated that the Council for Scientific and Industrial Research (CSIR) has been appointed to redesign the subsidised services contracts. The IPTN plans for Polokwane were finalised but there was no attempt by LDTCS nor the CSIR to engage with the PM on these issues.
- c) Whilst the subsidised contracts are managed by LDTCS, the PM plays no role at this stage, even though section 40 requires integration. Whether or not the CSIR and the LDTCS have engaged with the CDM has not been determined. If there was an engagement, the fact that PM is part of the 13 cities to roll out the IPTN requires that they be consulted and be given the responsibility to integrate these services within their IPTN plan.
- d) The PM, besides being a planning authority, is also a contracting authority. Section 11(1)(c) (xxvi) of the NLTA implicitly makes the PM a contracting authority. From the perspective of the National Treasury, the contracting authority must be transferred to capable municipalities. They have embarked on a process with metropolitan municipalities on the transfer of the contracting authority functions. The process adopted by National Treasury will have to be utilised by PM to ascertain its readiness to assume this function. Should the PM decide on the devolution of the contracting authority function, the PM would have to comply with every aspect of the National Treasury appraisal framework before the function is devolved.

#### 6.1.4 Disposal of Operating Licenses

A description is provided of relevant policies and principles guiding the disposal of OLs, including but not limited to roles of modes and preferred modes, parallel-subsidised services and commercial service contracts.

#### 6.1.5 Regulation of Non-regular Modes of Transport

Policies in relation to the regulation of non-regular modes of transport such as metered taxis, two- or three-wheeled vehicles such as Tuk-Tuks and long-distance services.

#### 6.1.6 Public Transport Fleet Policy

Public transport fleet policy in relation to reducing carbon emissions and air pollution and in relation to providing universal access.



#### 6.1.7 Network of Contracted and Non-contracted Services

Direction for the design of a network of contracted and non-contracted services that cater for the needs of all potential users including targeted categories of passengers such as:

- a) Learners.
- b) Universally accessible.
- c) Maximise access to services by pedestrians.
- d) Minimise duplication between services.
- e) Reduce under or over-utilisation of available capacity is cost-effective.
- f) Employ the appropriate mode for the requirements of the route or corridor.
- g) Convenient to passengers.
- h) Support the objectives of the SDF.

#### 6.1.8 Integrated Transport Services

- a) Integrate public transport services in and between modes by developing a network and schedules (where relevant) and service frequencies in such a fashion that passengers can move optimally from origin to destination with the minimum number of transfers, waiting times and fare-paying transactions.
- b) Integrated transport infrastructure and passenger information across services and modes.
- c) Incrementally use interoperable electronic fare systems (common fare medium) and charge affordable fares.
- d) Avoid destructive competition between different services on the same route or corridor.

#### 6.1.9 Optimisation of Financial Support

Put any financial support (subsidy) to optimum use, by taking into consideration the costperformance ratio of modal alternatives before any new contract is designed and awarded and are given priority over private transport.

#### 6.2 Overall Network Design

The Overall Network Design describes and sets out the high-level view of the future system for rail and road-based services, contracted and non-contracted. This is particularly important as part of the process to restructure the system - the contracted and/or STAATSKOERANT, 28 NOVEMBER 2014 No. 38256 **21.** This gazette is also available online for free at **www.gpwonline.co.za** non-contracted services - for the purposes of creating the type of quality corridors envisaged in the national Public Transport Strategy.

The CDM recently completed the CDM-IPTN in collaboration with the NDOT. It is important that all future network designs as part of the PIRPTS should be integrated with the CDM-IPTN and vice versa.



#### 6.2.1 Overall Network Design, Preferred Modes of Transport

The overall network design identified the preferred mode or modes of PLM with regard to the particular routes or corridors in the PLM area, including transport into or from the areas of other PA and interprovincial transport.

See Section 6.2.4 concerning the rationalisation of buses.

# 6.2.2 Rationalisation and Restructuring of Contracted Services and Non-contracted Services

Proposals are developed, based on the assessment of the status quo and the policies, for the rationalisation and restructuring of the existing contracted services, the development of new contracted services and the restructuring of the non-contracted services.

Buses and taxis need to be incorporated as part of IRPTS.

A model of providing scheduled taxi services is contained as part of the guidelines provided as per the document prepared for Taxi Operating Companies (TOC) planning and preparations processes as part of the CITP. The taxi industry needs to be consulted about the last-mentioned and it is currently only a concept document.

# 6.2.3 Planned Sequence of Network Implementation

The planned sequencing of network implementation is described, including the timeframes for the conversion of any expired interim, negotiated and tendered contracts and the introduction of new contracts.

#### 6.2.4 Short-term and Long-term Plan for Contracted Services

A short-term and long-term plan for contracted services is set out. In the short term, the focus is on transforming interim subsidised contracts and tendered contracts into negotiated 12-year contracts in accordance with the NLTA.

The longer-term plan deals with the introduction of tendered contracts and the overall restructuring of the subsidised public transport system after the initial new contracts have run their course.

a) The MEC must facilitate arrangements regarding the responsibility for the rationalisation of interprovincial and intraprovincial services.



b) The overall network design is detailed in components of five-year plans for the commuter rail services (where relevant), the contracted services and the non-contracted services as follows.

#### PLM conducted the following feasibility study during May 2021:

# "DEVOLUTION OF PUBLIC TRANSPORT REGULATORY AND CONTRACTING FUNCTIONS FROM THE LIMPOPO DEPARTMENT OF TRANSPORT AND COMMUNITY SAFETY TO THE POLOKWANE MUNICIPALITY"

The objectives of the feasibility study into the devolution of the public transport functions viz. the contracting authority and regulatory operating licence functions are aiming for the improvement in efficiency and effectiveness in the delivery of public transport plans and services. The implications for the PM if such functions are devolved will impact on:

- a) Legal and the enabling legislative requirements.
- b) Finance and affordability.
- c) Resource requirements.
- d) Systems requirements.
- e) Transport contracting and regulatory implications.
- f) Societal benefits.
- g) The efficiency implications in respect of the management and governance of the devolved functions for the municipality, the public transport service providers and ultimately to the citizens.

This section will, however, elaborate only on the contracting authority function regulatory Operating Licence Functions (OLF).

The NLTA provides the enabling legislation for both these functions to be performed at the local sphere of government: the regulatory OLF function through devolution and the contracting authority through a transfer of the subsidised bus contracts. It is important to explain the local sphere of government within the South African context briefly. The local sphere of government in South Africa consists of different levels:

- a) Metropolitan municipalities, which are generally the largest cities in the country.
- b) District municipalities, which consist of numerous local municipalities in the region.
- c) Local municipalities, which generally fall within the boundaries of district municipalities.

For the purposes of the feasibility study, the emphasis and focus were on the local municipality, the PLM, which is the largest local municipality and the economic powerhouse within the CDM and the Limpopo Province.

The feasibility study recommended that the contracting authority function be transferred to the PM in respect of the subsidised bus services contracts subject to:



- a) The LDTCS supporting the transfer of the equitable share that funds the contractual obligations for the GNT Seshego and Kopano Bus Service to the PM for a period of three years. Within this period the PM would integrate this subsidised bus services contract into the PM IPTN.
- b) The PTOG funds for the Bahwaduba Bus Service Interim Contract and the Modidi Bus Company Interim Contract to be allocated to the PM when the function and contracts are transferred.
- c) Should there be any shortfalls in the PTOG allocations, which may extend through the MTREF cycle, the funding of such shortfall would be subject to engagement between the PM, Limpopo Provincial Treasury and the LDTCS.
- d) The LDTCS also transfer the funds that are budgeted in the MTREF for the supervisory monitoring firm costs for monitoring of the following contracts:
  - i) GNT Seshego contract including the Kopano sub-contract (negotiated contract).
  - ii) Bahwaduba Bus Service contract (interim contract).
  - iii) Modidi Bus Company contract.
- e) The CDM being engaged to support the transfer of the above contracts to PM even though some of the routes of these contracts may fall outside the boundaries of the PM but within that of the CDM.
- f) The PM undertakes the role of planning and service design of the affected subsidised bus service contracts within the PLM IPTN planning process;
- g) The Department of Transport and the National Treasury being approached and informed of the decision of PM and that the process of the devolution proceeds.

#### 6.3 Commuter Rail Plan

Where the municipality has passenger rail services, a five-year plan specifying service levels must be developed in agreement with PRASA or other rail service providers. The intermodal planning committee must facilitate the conclusion of appropriate service level agreements between the municipality and PRASA in terms of Section 15 of the Act.

In the event of rail services operating across the boundaries of two or more planning authorities, the relevant planning authorities must liaise with each other to ensure the proper integration of rail issues into their respective plans.

PLM has no commuter rail services; therefore, this part of the plan is not relevant for the PTP.

#### 6.4 Contracted Services Plan

This part of the plan describes the existing contracts in the area as well as setting out the proposed plan for the new contracts that the planning authority will be entered into in the CITP for the 5-year period. These new contracts **22** *No. 38256 GOVERNMENT GAZETTE*,



28 NOVEMBER 2014 This gazette is also available free online at <u>www.gpwonline.co.za</u> may replace - wholly or partially - an existing interim contract or an expired negotiated or tendered contract or any such contracts that will expire.

The following may be done:

- a) Create a new set of routes and/or introduce a new mode of transport such as BRT.
- b) Replace a network of previously non-contracted, non-subsidised services.
- c) These can be negotiated contracts or tendered contracts.
- d) They may be subsidised or commercial service contracts.

The Contracted Services Plan describes the process for rationalising the existing operations and enabling the participation of affected operators in these new contracts. For each contract, the plan describes:

- a) the proposed routes, the frequencies and fleet requirements per route and the contract duration.
- b) the restructuring and changes to be made to the current contracted and non-contracted services to implement the proposed plan.
- c) the estimated impacts and benefits, both positive and negative.
- d) implementation programme and budget (to be reflected in Chapter 11 as well).

The plan for contracted services also describes the nature of the intended contracts (such as gross cost or net cost contracts) and the fare system that will be applicable for these contracts.

PLM should maintain subsidies for Leeto La Polokwane Phase 1a. It should also make provision for further development of IRPTS (Gross Contract).

# 6.5 Non-contracted Services Plan

This five-year plan describes in detail the routes where operating licences will be granted for non-contracted services. The following are further relevant:

- a) It describes the capacity requirements of these routes and the modes that will be considered suitable.
- b) It contains a determination of the required supply of vehicles of a particular mode on each route, based on modal policy, an analysis of data collected for the TR, needs identified through public and stakeholder involvement forums, and records of current legitimate services as reflected in the OLAS.
- c) This plan also covers non-regular modes of transport such as metered taxis, two- or three-wheeled vehicles such as Tuk-Tuks, and long-distance services.
- d) E-hailing.



e) The quality and other requirements are set out in the plan and any restrictions on numbers or geographical locations.

# 6.6 Operating Licences Plan (OLP)

An Operating License Plan (OLP) was prepared as a separate document as part of this Public Transport Plan.

The OLP guides the National Public Transport Regulator (NPTR) and the relevant regulating entities in the award of operating licences for contracted and non-contracted services within the jurisdictional and functional area, in concurrency with affected municipalities.

Based on the requirements of the NLTA no. 5 of 2009 and the related NLTA Regulations, the PLM sets conditions for the granting of OLs by the NPTR and regulating entities. These conditions consist of general conditions applicable to all transactions as well as conditions specific to public transport services. These services include minibus taxis services, private bus services, learner services, staff services, long-distance public transport services, metered taxis services, charter services, tourist services, special events and major special events, courtesy services and Tuk-tuk services on which public transport services applications for OLs are transacted. When the city rejects an application, the granting authority must comply.

In order to enforce and ensure compliance with the conditions on the OL law enforcement strategies, including institutional arrangements, the interrelationship with traffic law enforcement, the setting of targets and measuring performance remain ongoing.

The OLP forms part of the Public Transport Plan (PTP) and the 2023/2024 PLM-CITP. On approval of the CITP and in terms of Section 36 (6) of the NLTA, the planning authority will make its integrated transport plan available to the NPTR and the LPRE and make recommendations to them relevant to applications for new operating licences in the prescribed manner.

Buses and taxis need to be incorporated as part of Polokwane Municipality Integrated Rapid Public Transport System (IRPTS).

A model of providing scheduled taxi services is contained as part of the guidelines provided as per the document prepared for Taxi Operating Companies (TOC) planning and preparations processes as part of the CITP. The taxi industry needs to be consulted about the last-mentioned and it is currently only a concept document. The OLP contains the following Chapters:

- a) Introduction
- b) Operating Licenses
- c) Operating Licences for non-regular modes of transport.



- d) Conditions for evaluation of operating licences.
- e) Operating Licences administration system.
- f) Enforcement strategies.
- g) Conclusion.

The PLM Assistant Manager: Public Transport Regulation and Compliance is a dedicated position to administrate and facilitate the processes and activities between PLM, the Operators and LPRE or NPTR.





# CHAPTER 7

Transport Infrastructure Strategy



# 7 TRANSPORT INFRASTRUCTURE STRATEGY

The chapter will elaborate on the following:

- a) Introduction.
- b) Proposal for new and upgrading of existing infrastructure.
- c) Prioritisation of public transport infrastructure.
- d) Conclusion.

Polokwane Local Municipality's (PLM) Transport Infrastructure Strategy (TIS) deals with the development and maintenance of all transport infrastructure, including the following:

- a) Major roads.
- b) Public Transport (PT) facilities.
- c) Bus Rapid Transport (BRT) networks.
- d) Dedicated lanes for PT.
- e) Depots.
- f) Freight corridor measures.
- g) Non-motorised Transport (NMT) infrastructure.
- h) Rail infrastructure.

#### 7.1 **Proposals for New and Upgrading of Existing Infrastructure**

PLM's planning for new transport infrastructure and the upgrading of existing transport infrastructure confirmed under this 2023/2028 PLM-CITP are summarised below.

#### 7.1.1 New Transport Infrastructure

The new transport infrastructure typical includes the following:

- a) New roads.
- b) New bridges.
- c) New structures (buildings, stormwater culverts, etc).
- d) New NMT infrastructure.
- e) Upgrading of roads from gravel to surfaced.
- f) New freight and logistics infrastructure.
- g) New rail infrastructure.

**Table 7.1** below shows all new transport infrastructure projects planned as per PLM-IDP for 2021 to 2026.



TABLE 7.1: PLM-IDP (2021 TO 2026) NEW/UPGRADED TRANSPORT INFRASTRUCTURE PLANNING						
Name of Proposal, Project or	Summary of Proposal, Project or Programme	Financial Implications over Three Years				
Frogramme		Total CAPEX	Funding Source(s)			
Dublic Octobe	Procurement of Buses, Office Cleaning Equipment and	D14 000 400				
Public Safety	Centre, Installation of Traffic Lights CBD	R14 696 498	CRR			
	Construction and Upgrading of Stormwater in Various Areas	R60 378 994	CRR, NDPG & IUDG			
Transport Services – Roads and	Road Upgrading and Construction	R313 287 847				
Stormwater	Non-motorised Traffic Construction	R5 522 300				
	Bridge Construction	R8 695 652				
Transport Operations – Integrated Rapid Public Transport System	Public Transport Facility Upgrade	R86 317 469	PTNG			
(IRPTS) – Transport and Facilities	Bus Depot Construction and Upgrades	R127 963 127				
	Total	R616 861 887				



#### 7.1.2 Existing Transport Infrastructure

Existing transport infrastructure typically includes the following:

- a) Rehabilitation of roads.
- b) Rehabilitation of bridges.
- c) Rehabilitation of structures (buildings, stormwater culverts, etc).
- d) Rehabilitation of NMT infrastructure.
- e) Rehabilitation of freight and logistics infrastructure.
- f) Rehabilitation of rail infrastructure (not relevant for PLM).

The following institutions are relevant:

- a) Polokwane Local Municipality.
- b) SANRAL.
- c) RAL.

The subsequent sections elaborate on the upgrading of existing infrastructure per Institution.

#### 7.1.2.1 PLM-IDP, Existing Infrastructure Projects.

**Table 7.2** below shows all existing infrastructure projects planned as per PLM-IDP for 2021 to 2026.

Refer also to **Chapter 11** of the 2023/2028 PLM-CITP and the detailed PLM-IDP for more detailed information on the projects.

#### 7.1.2.2 SANRAL, Existing Infrastructure Projects.

**Table 7.3** below shows all existing infrastructure projects in process and planned as per the South African National Roads Agency's (SANRAL) latest information provided. The cost for the projects is, unfortunately, not available.

#### 7.1.2.3 RAL, Existing and Planned Infrastructure Projects.

**Table 7.4** below shows a summary of Roads Agency Limpopo's (RAL) planned roads for the PLM area as obtained from the 2023/2024 PLM-IDP.



TABLE 7.2: PLM IDP EXISTING INFRASTRUCTURE PLANNING						
Name of Proposal.		Financial Imp	Financial Implications Over			
Project or	Summary of Proposal, Project	Three Years				
Programme	or Programme	Total CAPEX	Funding			
	Construction and Upgrading of		Source(s)			
Corporate and Shared Services	Mankweng (Traffic and Licensing Testing Centre) and Ladanna (Fire and Traffic Training Centre, Logistics Offices, Control Centre)	R4 100 337	CRR			
	Building Construction, Greening and Boreholes	R7 565 218				
Transport Services – Roads & Stormwater	Rehabilitation of Roads	R33 482 591	CRR, NDPG & IUDG			
	Traffic Lights and Signage	R2 028 075				
Transport Operations – Integrated Public Rapid Transport	Upgrade, Construction and Rehabilitation of Roads	R114 347 826				
System (IPRTS) – Transport and Facilities	Environmental and OHS Management	R12 429 985	PTNG			
	Total	R173 954 032				



TABLE 7.3: SANRAL, EXISTING INFRASTRUCTURE PLANNING FOR PLM						
Project Number	Description	Project Type	Project Status	Start Date	Planned End Date	
Table will be poluplated as soon as 2023 information is received from SANRAL						

Source: SANRAL



TABLE 7.4: SUMMARY OF PLANNED RAL PROJECTS WITHIN PLM FROM							
2023 TO 2026							
		VAT	VAT	VAT			
		EXCLUSIVE	EXCLUSIVE	EXCLUSIVE			
MULTI YEAR CAPITAL BUDGET	FUNDING	BUDGET	BUDGET	BUDGET			
	SOURCE	VEAR		VEAR +2			
		2022/24	2024/25	2025/26			
PAL Complete the incomplete		2023/24	2024/23 D2 024 575	2023/20 D4 092 176			
road from Kordon to Gilead Road	IODG	-	K3 024 575	R4 003 170			
RAL Completion of road from		P3 024 575	P6 0/0 1/0	P4 083 176			
Phomologia to Makawarena	1000	113 024 373	10049149	114 005 170			
PAL Paying of Sekoala primary			P6 0/0 1/0	P4 083 176			
school road to Meblakong	1000	-	10049149	114 005 170			
RAL Paving of streets in Moleno		R4 347 826	_				
Maia Chuene Cluster	1000	114 347 020	-	-			
RAL Upgrading of access road in Ga	IUDG	R4 536 862	R7 561 437	R4 083 176			
Makaoba	1000	114 000 002	10/ 501 45/	114 000 170			
RAL Upgrading of Access Roads	IUDG	R5 179 584	R3 024 575	R2 192 816			
from Ga Thaba in Moleno Chuene	1000	10 17 5 50 -	110 024 070	112 132 010			
RAL Upgrading of Aarterial Road	IUDG	R5 293 006	R3 024 575	R4 083 176			
D3383 in Setumong via Mahoai	1000	110 200 000	10024010	114 000 170			
RAL Upgrading of Arterial Road	IUDG	R4 914 934	R5 293 006	R4 083 176			
D3355 from Monotwane to Matla	1020		110 200 000				
RAL Upgrading of Arterial Road	IUDG	R500.000	-	-			
D3377 from Setumong to Dibeng via	1020	1,000,000					
GaSelolo.							
RAL. Upgrading of Arterial Road	IUDG	-	R3 024 575	R4 083 176			
D3997 from GaMokgopo to Ga Ma.							
RAL. Upgrading of Arterial Road	IUDG	R500 000	-	-			
from Moetagare in to Setumong Road							
D3382.							
RAL, Upgrading of Arterial Road in	IUDG	R3 024 575	R3 024 575	R4 083 176			
Magongwa village from road.							
RAL, Upgrading of Arterial Road in	IUDG	R5 293 006	R5 293 006	R4 083 176			
Tshware from Taxi Rank							
RAL, Upgrading of Boshega to	IUDG	R4 536 862	R5 293 006	R4 083 176			
Tshebela to Boyne Road.							
RAL, Upgrading of Internal Street in	IUDG	R3 780 718	R3 610 586	R2 778 828			
Ga Ujane to Road D3363.							
RAL, Upgrading of Road D3432.	IUDG	R2 260 869	R3 024 575	R4 083 176			
from Ga-Mosi (Gilead Road) via							
Sengatane to Cheben.							
RAL, Upgrading of road from Ga	IUDG	R4 536 862	R3 024 575	R4 083 176			
Mamphaka to Spitzkop.							
RAL, Upgrading of road from Maja	IUDG	R1 130 435	R3 043 478	R4 083 176			
Moshate to Feke.							
RAL, Upgrading of road from	IUDG	R4 536 862	R3 024 575	R3 478 261			
Mohlonong to Kalkspruit.							
RAL, Upgrading of road from	IUDG	R3 780 718	R3 024 575	R3 478 261			
Monyoaneng to Lonsdale.							
RAL, Upgrading of road from Nobody	IUDG	R3 780 718	R3 024 575	R4 083 176			
Traffic circle to Moshate.							



TABLE 7.4: SUMMARY OF PLANNED RAL PROJECTS WITHIN PLM FROM							
2023 TO 2026							
MULTI YEAR CAPITALBUDGET	FUNDING SOURCE	VAT EXCLUSIVE BUDGET YEAR 2023/24	VAT EXCLUSIVE BUDGET YEAR +1 2024/25	VAT EXCLUSIVE BUDGET YEAR +2 2025/26			
RAL, Upgrading of road from Silicon to Matobole.	IUDG	R4 423 441	R3 024 575	R4 083 176			
RAL, Upgrading of road from Spitzkop to Segwasi.	IUDG	R5 293 006	R9 073 724	R4 083 176			
RAL, Upgrading of road from Titibe to Marobala and Makgoba.	IUDG	R4 536 862	R4 914 934	R4 083 176			
RAL, Upgrading of road in Ga Thoka from reservoir to Makanye.	IUDG	R1 739 130	R4 310 019	R2 344 046			
	TOTAL	R80 950 851	R93 761 819	R83 686 204			

Source: 2023/2024 PLM-IDP

# 7.2 **Prioritisation of Public Transport Infrastructure**

#### 7.2.1 Integrated Rapid Public Transportation System (IRPTS)

In line with the National Land Transport Strategic Framework (NLTSF) developed by the National Department of Transport (NDoT), PLM has recently introduced Phase 1a of Leeto La Polokwane (IRPTS), which is administered by the Project Management Unit (PMU).

The IRPTS currently being implemented for Polokwane aims to transform the PT sector with a high-quality and affordable transport system that will reduce journey times for transport users.

In accordance with the NLTSF, PLM engages with the following stakeholders on an ongoing basis:

- a) Public Transport Operators.
- b) Ward Councillors.
- c) Ward Committees.
- d) Commuters.
- e) Residents.
- f) Any other affected party with an interest in such an initiative.

The 2023 to 2026 PLM-IDP has allocated the following funding for the public participation process described above from the Operational Budget of the Transportation Services Directorate (Implementation of Marketing, Communications Strategy & Stakeholder Engagements):



a)	Year 1	2023/2024	R0.5m
b)	Year 2	2024/2025	R8.0m
C)	Year 3	2025/2026	R1.5m

The IRPTS consists of various modes of transport including:

- a) Taxis.
- b) Buses.
- c) Non-motorised transport services such as bicycle lanes, pedestrian walkways, etc.

As per the latest PLM IDP, the following PT projects have been prioritised over the next three years with a total budget of **R392,170,875**:

- a) PT facility upgrade.
- b) Upgrade and construction of trunk route 108/2017 WP1.
- c) Construction of bus depot civil works 108/2017 WP3.
- d) Construction and provision of station upper structure General Joubert Street.
- e) Construction and provision of station upper structure Seshego.
- f) Construction of bus station in Seshego.
- g) Environmental management Seshego & SDA1.
- h) Environmental management in Polokwane City.
- i) Refurbishment of the bus daytime layover facility.
- j) Upgrading of a transit mall.
- k) Occupational Health & Safety (OHS) Management.
- I) Control Centre.
- m) Refurbishment of walk-in centre.
- n) Widening of Sand River bridge (trunk).
- o) Ditlou Intersection.

In addition, PLM have budgeted for the Esilux (Pty) Ltd (Vehicle Operating Company) an amount of R2.2m per month which amounts to R26.4m annually to provide transport service for Leeto LA Polokwane Phase 1a. As per the PLM IDP of 2023 (Chapter 11.24.5), this budget will be sourced from "Own Revenue" and "Equitable Share" and any balance directly from bus users.

Refer to Chapter 11 and Annexures of 2023/2024 CITP for more detailed information.

#### 7.2.2 Intermodal Public Transport Facility (Infrastructure)

Various challenges beset long-distance commuters to and from Polokwane. These include:

- a) Lack of transport facilities for long-distance transport services.
- b) Poor integration with existing local public transport services.



- c) Integrated ticketing issues there needs to be a system where one ticket purchased can be used across all modes of transport.
- d) Integration of these services with land use management transport services should be provided where people live, and conduct business activities.
- e) Limited links between public transport amenities e.g., taxi–bus and railway facilities and taxi/bus terminuses, the railway station and PIA.

Detailed planning is accordingly required for a Polokwane Intermodal Public Transport Facility.

A Transport Forum has been identified in **Chapter 11** of the 2023/2028 PLM-CITP as a new project that should be budgeted for in future financial years. This forum should establish and maintain an Intermodal Planning Committee and should advise on the locality and potential funding sources of such facilities.

#### 7.2.3 Railway Infrastructure

Railway infrastructure covering both freight and passenger services falls under the responsibility of parastatals as follows:

a) Passenger Rail Agency of South Africa (PRASA)

PRASA was established in terms of Section 22 of the Legal Succession to the Transport Services Act in 2008. PRASA is responsible to the Minister of Transport.

Legislation that governs the operations of PRASA include:

- i) National Transport Policy.
- ii) Public Transport Policy.
- iii) National Land Transport Act.
- iv) Green Paper on Rail.

PRASA is mandated to deliver the following:

- i) Rail services to the metropolitan areas of South Africa.
- ii) Long-distance and intercity rail and bus services internally and to the various borders of South Africa.

This section will be updated on an annual basis as and when PRASA planning is updated.



#### b) Transnet Freight Rail (TFR)

TFR is responsible for providing the transport of commodities by rail for domestic, regional and export markets.

TFR is currently morphing from a centrally operated business model to a decentralised system known as an Operating Corridor model. The new model aims to raise the level of service of freight transport.

As per Chapter 3.7.3 of the 2023/2028 PLM-CITP, Transnet has announced its intentions to move more freight by rail. This is a positive step for PLM as freight costs will reduce and damage to roads will be less.

A high-speed Gauteng–Limpopo passenger link has been mooted for some time, but it is envisaged that planning for such a project will not be considered within the next 5 years.

#### 7.2.4 Maintenance Requirements

This section of the report deals with the maintenance of both surfaced and un-surfaced roads.

#### 7.2.4.1 <u>Introduction.</u>

The National Department of Transport (DoT) and SANRAL define routine maintenance as an essential requirement to ensure that the road lasts to at least its design life.

Road maintenance should ideally be conducted on a **proactive** basis, but this rarely takes place due to the following:

- a) Lack of funding.
- b) Lack of capacity.
- c) Lack of expertise.
- d) Non-prioritisation.

It thus follows that road maintenance work is conducted on a **reactive** basis. This means that a particular road may only receive maintenance work once it has visibly displayed signs of distress such as:

- a) Block cracking.
- b) "Crocodile" cracking.
- c) Potholes.
- d) Edge breaking.
- e) Asphalt aggregate loss.
- f) Undulations in asphalt surface.



- g) Rutting.
- h) Asphalt stripping.

Some of the above conditions, if addressed timeously, can be rectified and the road can be reinstated into an as-new condition. Oftentimes, however, the maintenance issue is addressed too late and maintenance work is a waste of time and money.

7.2.4.2 <u>Maintenance Requirements.</u>

The road network within PLM is approximately 7 495km. This is a vast road network with significant road network requirements. As per the 2023 PLM IDP, there is a backlog of approximately 6 026km, this being 80% of the current road network. The 2013 PLM-SDF and other studies and stakeholder consultations underlined the following road maintenance requirements:

- a) The Class 2 and 3 roads within City/Seshego and Mankweng Cluster have deteriorated due to limited routine and preventative maintenance.
- b) Several roads require rehabilitation due to heavy vehicle traffic.
- c) Maintenance of traffic signs, signals and road markings are required.
- d) Gravel roads in rural areas need upgrading.
- e) Several roads with potholes need to be repaired.

PLM requires a Pavement Management Strategy (PMS) as a critical tool in keeping abreast of the condition of all roads within their jurisdiction. Without a PMS, **proactive** or **routine maintenance** will not be conducted before the surface manifests into a condition where maintenance will no longer address the issue.

If periodic maintenance is applied in a systematic fashion, the usability of the road could be prolonged beyond its design life. The PMS should include the following:

- a) Optimisation of maintenance of their road infrastructure
- b) Prediction and management of network performance.
- c) Preparation of strategic budgets as per the Municipal Finance Management Act (Act 56 of 2003).
- d) A team of full-time, dedicated officials tasked with the implementation of the above.

An analysis of fleet required to render roads full functional are demonstrated as per **Table 7.5** below, as obtained from the 2023/2024 IDP.



TABLE 7.5: ANALYSIS OF FLEET REQUIRED TO RENDER ROADS FULLY FUNCTIONAL						
FLEET DESCRIPTION	TOTAL ALLOCATION	AVAILABLE	OLD FLEET	REQUIRED ADDITIONAL FLEET		
Graders	13	5	8	10		
TLB	4	2	2	2		
Lowbed Truck	1	1		1		
LDV's	13	8	5	7		
4 Ton Maintenance Trucks	17	7	6 awaiting to be fitted with canopies, and 5 are old	12		
Excavator	0			1		
10m <sup>3</sup> Tipper trucks	5	3	2	7		
Front End Loader	1	1	0	0		
Water trucks	2	1	1	2 x 18000l		
Smooth roller	1	1	0	0		
Grid Roller and Tow tractor	0	0	0	1		
Tamping roller	0			1		
Dozer	1	1		0		
Crane Truck	0			1		
Road Marker self-propelled	0			5		
Asphalt milling machine	0			1		
Double drum asphalt compactor	0			2		

RAL has a PMS that covers provincial roads in Polokwane. It is known that normal road deterioration will occur because of normal traffic use and environmental factors. However, the rate of deterioration could be drastically increased by factors such as overloading and/or heavy rainy periods. It is known that the condition of the road can be improved with normal maintenance activities, such as crack sealing, diluted emulsion treatment and resealing, especially if done timeously (preventative maintenance). Once a terminal level or road condition is reached, rehabilitation of the facility, implying one or other form of reconstruction, is needed.

Although RAL has a PMS, this is limited to the roads, generally provincial only, that fall under their responsibility.

# 7.2.5 Road Network Management Strategy

The Provincial Government commissioned a study to look at a Road Network Management Strategy (RNMS) for CDM. This RNMS, if implemented, should be aligned and integrated with the RAL PMS and the PLM roads.



The RNMS potentially consists of the following modules:

#### a) Road Network Module

- i) Develop a coding system for road links.
- ii) Identify a suitable road classification system.
- iii) Collection of existing road network data.
- iv) Identify proposed future road links.

#### b) Traffic Management Module

- i) Establish details of traffic data required.
- ii) Collect available traffic data.
- iii) Populate the database with traffic information.
- iv) Analyse traffic data.
- v) Establish an annual traffic counting programme.

#### c) Pavement Management Module

- i) Identify a suitable pavement condition classification system.
- ii) Assess existing pavement conditions.
- iii) Populate the database with pavement condition data.
- iv) Analyse pavement condition data.

#### d) Road Sign Module

- i) Prepare an inventory of existing road traffic signs.
- ii) Assess the condition of existing road signs.
- iii) Populate the database with traffic sign data.

# e) Geographic Information System (GIS) Module

- i) Prepare the mapping of the existing road network.
- ii) Link road classification database to maps.
- iii) Link traffic information database to maps.
- iv) Link pavement condition database to maps.
- v) Link road sign database to maps.

# f) Financial Module

- i) Analyse available data.
- ii) Identify problem areas in the road network.
- iii) Prioritise road improvements.
- iv) Prepare an annual budget for road maintenance.

The above modules are not exhaustive and additional modules could be added if necessary.



#### 7.3 Conclusion

The following are relevant:

- a) PLM will have to carefully balance new transport infrastructure projects with the maintenance of existing infrastructure.
- b) The lack of an RNMS for PLM has resulted in the deterioration of many roads and other transport infrastructure, some of which are beyond repair.
- c) The RNMS thus will be a critical programme for PLM, without which a dwindling transport budget for new infrastructure will continue.
- d) The Committee of Transport Officials (COTO) has developed technical manuals, norms and guidelines to guide planning, design, construction and management of roads and infrastructure related to roads. Road Authorities should comply to these manuals. The manual can be downloaded from the SANRAL website for free (<u>https://www.nra.co.za/manuals-policies-technical-specification</u>. The COTO documents have full legal standing.
- e) A strategy will need to be adopted to address the 80% backlog of roads infrastructure as described in 7.3.4.2 above.




Travel Demand Management





# 8 TRAVEL DEMAND MANAGEMENT

The following are relevant for **Chapter 8**:

- a) Introduction.
- b) Key components of Travel Demand Strategy.
- c) Specific TDM for PLM.
- d) Conclusion.

# 8.1 Introduction

The objective of travel demand management (TDM) is to manage congestion by reducing the demand for car use in peak periods, especially single-occupancy car use. TDM also aims to bring about environmental improvements through reduced car use. TDM measures are primarily aimed at changing the behaviour of the users of the transport system.

The TDM strategy set out appropriate measures aimed at managing travel demand. These include measures such as high-occupancy vehicle lanes, park and ride facilities, and employer-based car trip reduction programmes, such as telecommuting, teleconferencing, lift-clubs (ridesharing), financial incentives for public transport use in lieu of free parking for employees, etc. Other measures discouraging car use such as tolls, levies and parking charges or limitations on parking availability may be considered.

To be effective, TDM needs to be supported by significant improvements to the public transport system. The TDM Strategy must accordingly describe how the proposed measures are to be phased in over the 5-year life of the CITP to coincide with public transport and non-motorised transport improvements. Proceeds from levies or parking charges should be applied to further improvements in public transport and non-motorised transport in the municipality.

Transportation Demand Management (TDM) is sometimes also referred to as mobility management which is a general term for various strategies that increase transportation system efficiency. Mobility management treats mobility as a means to an end, rather than an end in itself. It emphasises the movement of people and goods, rather than motor vehicles, and so gives priority to more efficient modes (such as walking, cycling, ridesharing, public transit and telework), particularly under congested conditions. It prioritises travel based on the value and costs of each trip, giving higher value trips and lower cost modes priority over lower value, higher cost travel, when doing so increases overall system efficiency (VTPI, 2010).

There are many different TDM strategies with a variety of impacts. Some improve the transportation options available to consumers. Some provide incentives to change trip schedules, routes, modes or destinations. Others reduce the need for physical travel through more efficient land use or transportation substitutes. Although most individual TDM strategies



only affect a small portion of total travel, the cumulative impacts of a comprehensive TDM programme can be significant. When all benefits and costs are considered, TDM programmes are often the most cost-effective way to improve transportation.

**Table 8.1.** below categorises the various TDM strategies that can help achieve equity objectives.

TABLE 8.1: TDM STRATEGIES THAT HELP ACHIEVE EQUITY OBJECTIVES								
Treats Everybody Equally	User-pays	Benefits Lower Income	Benefits Transport Disadvantaged	Basic Mobility and Access				
<ul> <li>Everybody Equally</li> <li>a) Institutional reforms.</li> <li>b) Least cost planning.</li> <li>c) Location efficient mortgages.</li> <li>d) Parking management.</li> </ul>	<ul> <li>a) Comprehensive market reforms.</li> <li>b) Distance-based fees.</li> <li>c) Fuel tax increases.</li> <li>d) Parking management.</li> <li>e) Pay-as-you- drive insurance.</li> <li>f) Parking pricing.</li> <li>g) Road pricing.</li> <li>h) Smart growth.</li> </ul>	<ul> <li>a) Alternative work schedules.</li> <li>b) Car sharing.</li> <li>c) Commuter financial incentives.</li> <li>d) Guaranteed ride home.</li> <li>e) HOV priority.</li> <li>f) Improved security.</li> <li>g) Location efficient mortgages.</li> <li>h) New urbanism.</li> <li>i) Pay-as-you- drive insurance.</li> <li>j) Park and ride.</li> </ul>	<ul> <li>a) Bike/Transit integration.</li> <li>b) Car free planning.</li> <li>c) Commuter financial incentives.</li> <li>d) Comprehensive market reforms.</li> <li>e) Guaranteed ride home.</li> <li>f) HOV preference.</li> <li>g) Parking management.</li> <li>h) Improved security.</li> <li>i) Location efficient development.</li> <li>j) New urbanism.</li> </ul>	<ul> <li>Access management.</li> <li>b) Bike/Transit integration.</li> <li>c) Freight Transport management.</li> <li>d) Guaranteed ride home.</li> <li>e) HOV preference.</li> <li>f) Improved security.</li> <li>g) Parking management.</li> <li>h) Pedestrian and cycling improvements.</li> <li>i) Ridesharing.</li> <li>j) School trip management.</li> <li>k) Shuttle services.</li> <li>l) Smart growth.</li> <li>m) Telework.</li> </ul>				
		<ul> <li>k) Parking management.</li> <li>l) Pedestrian and cycling improvements</li> <li>m) Ridesharing.</li> <li>n) School trip. management.</li> <li>o) Shuttle services.</li> <li>p) Smart growth.</li> <li>q) TDM marketing.</li> <li>r) Telework.</li> <li>s) Transit improvements.</li> <li>t) Transit-oriented development.</li> </ul>	<ul> <li>k) Pedesthan and cycling improvements.</li> <li>l) Ridesharing.</li> <li>m) School trip management.</li> <li>n) Shuttle services.</li> <li>o) Smart growth.</li> <li>p) Street reclaiming.</li> <li>q) Taxi service improvements.</li> <li>r) TDM marketing.</li> <li>s) Telework.</li> <li>t) Tourist transport management.</li> <li>u) Transit improvements.</li> </ul>	<ul> <li>n) Transit improvements.</li> <li>o) Traffic calming.</li> <li>p) Universal design.</li> <li>q) Vehicle use restrictions.</li> <li>r) Market IRPTS for higher-income groups.</li> </ul>				



TABLE 8.1	Y OBJECTIVES			
Treats Everybody Equally	User-pays	Benefits Lower Income	Benefits Transport Disadvantaged	Basic Mobility and Access
			<ul> <li>v) Traffic calming.</li> <li>w) Transit oriented development.</li> <li>x) Universal design.</li> </ul>	

Source: Victoria Transport Policy Institute and 2013 CITP

# 8.2 Key Components of Travel Demand Strategy

Travel Demand Management (TDM) strategies can include all or some of the following components:

- a) Intelligent transport systems.
- b) Reduction of vehicle trips.
- c) Promotion of public transport.
- d) Congestion reduction.

These measures are discussed in more detail below.

# 8.2.1 Intelligent Transport System (ITS)

Intelligent transport systems are used as a tool to manage transport demand. The following are examples of ITS applications:

- a) Providing driver information such as variable message signs (VMSs) to warn drivers in advance of accidents that can result in delays. Traffic reports on radio stations provide more or less a similar service.
- b) Reserving lanes exclusively for high occupancy vehicles (HOV-lanes) or public transport vehicles.
- c) Bus priority lanes can be provided at intersections. This allows buses to get ahead of other traffic, thereby reducing travel time for bus passengers.
- d) Reversible lanes are sometimes used as a way of providing an additional lane in the peak direction. It can, however, be difficult and costly to implement because of the effect it has on traffic movement, signs and signals at intersections.
- e) The use of contra-flow lanes is a variation on reversible lanes. It refers to the use of one or more lanes on a one-way travelling out of town and for buses travelling into town in the morning peak or vice versa.
- f) Sustainable spatial planning policies to ensure that residential areas are close to work opportunities are also forms of TDM.



#### 8.2.1.1 Public Transport Management System (PTMS)

As part of the Operational Plan for Leeto La Polokwane Phase 1a, 2019, the PTMS concept was reviewed based on the moderation process and a revised "PTMS Lite" concept is being implemented. This includes the following features:

- a) Vehicle tracking (AVL).
- b) Real-time map display.
- c) Kilometres travelled report (productive vs unproductive);
- d) Incident and exception reports.
- e) Driver panic button.
- f) 2 CCTV cameras on board.

The system supports the management of Leeto La Polokwane by providing passenger information, real-time monitoring, schedule management, flexible reporting capabilities and key performance indicators for monitoring operators and the VOC. Reliable communication between the control centre, bus drivers, trunk stations, layover facility and the depot is an essential part of the day-to-day operations and more specifically for emergency procedures.

The PTMS is part of the Leeto La Polokwane Control Centre located on the eastern wing of the Peter Mokaba Stadium. Sufficient space had been allocated to expand the PTMS in future. Figure 8.1 provides a graphical presentation of the Control Centre that incorporates PTMS.



FIGURE 8.1: CONTROL CENTRE THAT HOSTS PTMS



#### 8.2.1.2 Account-based Ticketing (ABT)

- a) What is Account-based Ticketing (ABT)?
  - i) Most traditional transport ticketing systems are 'card centric'. This means that travel information and right to travel are stored on Fare Media. These are 'closed-loop' systems.
  - ii) Account-based systems are 'open-loop', meaning Back Office Centric Automatic Fare Collection Systems.
  - iii) Provides a greater degree of convenience for passengers than 'closed loop' and cash-based ticketing systems, while saving transport providers money.
  - iv) In Account-based Ticketing (ABT), all transactions are validated and processed in the Back Office, meaning the right to travel is managed in Back Office and ticket or Fare Media is a token or identifier that is linked to the commuter's account.
- b) Transforming E-toll Account to Mobility Account:
  - i) SANRAL has a sophisticated back-office system to manage the collection of e-tolls.
  - ii) This system consists of account hosting and transaction processing functionality at the Transaction Clearing House (TCH) that has the capacity to process millions of transactions per day.
  - iii) The system functionality has been extended to include the implementation of an ABT fare collection solution for public transport.
  - NDoT requested SANRAL to initiate discussions with Public Transport Operators (PTOs) to utilise the ABT solution to implement Integrated Fare Management (IFM) that will enable interoperability between all participating PTOs across all modes and services.
  - v) SANRAL will only provide the ABT Back Office as part of the solution (the TCH).
  - vi) The PTO remains responsible for the provisioning, management and updating of all other fare collection infrastructure/systems and integration (AFC).
- c) What is the NDoT ABT solution?
  - i) Is a hybrid ABT system.
  - ii) Is a ticketless way to travel.
  - iii) The token is linked to an account in the Back Office.
  - iv) Stores information in the back office and also keeps some information on the card (to overcome potential offline scenarios).
  - v) Utilises NDoT Central Back Office (hosted by SANRAL) immediate interoperability.



- vi) Transport operator keeps its own AFC Back Office.
- vii) Based on CIPURSE open standards as published by the (OSPT) Alliance.

PLM commenced with the implementation ABT during January 2023 as part of Leeto La Polokwane Phase 1a services. **Figure 8.2** demonstrates the Leeto LA Polokwane card and validator. The ridership increased because of the implementation of ABT. The Contracting Authority likes to phase out the paper tickets before the end of July 2023. Currently approximately 9000 Travel card had been sold to passengers.



# 8.2.2 Reduction of Vehicle Trips

The reduction of vehicle trips can be attained by implementing one or a combination of the following strategies:

- a) Reducing drive-alone trips and increasing vehicle occupancy. One way is to mobilise employers to promote ride-share incentives.
- b) Park-and-ride facilities can be provided to reduce the distance travelled by private car. Vehicle owners drive to a central location close to home where they park their cars and board a bus taking them to their destination. Although this is more often used in South Africa at sport events, it can also be implemented daily to get people to work faster and cheaper.
- c) Implementing policies allowing people to work flexible hours is another method that can reduce vehicle trips in the peak hour, thereby reducing road congestion.

All the above methods have the potential to impact positively on people's living standards as it reduces the time spent in traffic while at the same time reducing the negative effects which transport has on the environment such as air pollution and high energy consumption.



# 8.2.3 Promotion of Public Transport

The promotion of public transport is the most sustainable long-term strategy to cope with traffic congestion and the other negative effects of high transport demand. Before such strategies can be implemented, it is necessary to understand the various components of an integrated transport system. Refer to **Figure 8.3** for a depiction of the possible components of an integrated transport system. This figure also underlines the relationship between investment cost and system performance.



Appropriate measures aimed at managing transport demand should be identified and analysed. This should include Intelligent Transport Systems (ITS) and Transport System Management (TSM). Measures that prove to be practical and economically and financially feasible must be further developed for implementation.

Further, the National Land Transport Transition Act, 2000 (Act No. 22 of 2000) provides the following definition for TDM: "travel demand management" means a system of actions to maximise the capacity of the transport system for the movement of people and goods rather than vehicles, among others, through increasing vehicle occupancy, developing priority measures for public transport, encouraging travel during off-peak periods, shifting demand between modes, restricting the space available for parking, adjusting the price of parking and other appropriate measures.



Therefore, the aim of **Chapter 8** in the Polokwane Municipality CITP is restricted simply to identify TDM measures that can be developed further and implemented, particularly in areas within the municipality where they are most needed. Therefore, this chapter does not attempt to develop a comprehensive TDM system for Polokwane Local Municipality which would require significant investment of funds and time.

Higher-income groups should be introduced to Leeto LA Polokwane in order to increase the ridership.

Section 15 of the NTLA provides that the city must establish an Intermodal Planning Committee (IPC) consisting of prescribed officials and representatives of operators. The functions of the committee are to co-ordinate public transport between the modes. The relevant committee should be established.

# 8.2.4 Congestion Reduction

Strategies linked to congestion reduction may include:

- a) Use of HOV, walking, cycling, speed reduction and traffic calming measures.
- b) Road pricing.
- c) Transit improvements and rideshare programmes.
- d) Flexi-time work arrangements.
- e) Parking management and pricing. (Reduction in parking requirements as part of the type of zoning in CBD.)
- f) Removal of on-street parking on busy streets.
- g) Provision of park and ride facilities.

# 8.2.5 Rural TDM

Rural TDM is focused on improving travel arrangements for low income and rural areas. Typical focus areas include:

- a) Accessibility to facilities such as schools, stores, clinics, pharmacies, banks and garages.
- b) Transportation Options NMT, transit, school trip management, ridesharing, telework, public transport improvement, bike/transit integration, etc.

# 8.2.6 TDM Requirements

A study conducted for the provincial government regarding Travel Demand Management in Capricorn District Municipality (2010) identified certain travel demand management challenges that are still relevant. The study findings are summarised as below and the main travel demand challenges point to the following:

a) There is a need for improvement of the road network management.



- b) Maintenance of roads and repair of potholes throughout the district.
- c) There is insufficient public transport in the rural villages.
- d) There is a serious shortage of non-motorised transport infrastructure and facilities.
- e) The need for parking management in the CBD of Polokwane.
- f) Need for the organisation of public transport routes within the city of Polokwane.
- g) Serious traffic congestion on Church Street at Pick & Pay and the taxi rank between Rissik and Jorrisen Streets in Polokwane.
- h) Lack of fences on roads throughout the district, leading to stray animals causing accidents.

Extensive progress had been made since 2010 regarding some of the projects above.

These aspects form the foundation of the TDM strategy for PLM.

# 8.3 Specific Proposed TDM for PLM

The proposed TDM measures for PLM include:

- a) TDM measures for public transport.
- b) TDM measures for transport infrastructure maintenance.
- c) TDM measures, in low-income residential areas.
- d) TDM measures in the CBD of Polokwane.

The subsequent subsections elaborate on the above-mentioned.

#### 8.3.1 TDM Measures for Public Transport

Although public transport aspects are addressed in Chapter 6 of this CITP is it required to emphasise which TDM measures can be introduced to improve public transport utilisation in Polokwane, namely:

- a) Development of public transport facilities along the following corridors:
  - i) Seshego/Moletjie environs to Polokwane.
  - ii) Mankweng environs to Polokwane.
  - iii) Lebowakgomo environs to Polokwane as part of the Dilokong Corridor.
- b) Develop intermodal public transport facilities at the strategic nodal points.
- c) Establish a transport hub in the city of Polokwane.
- d) Develop a public transport distribution system in the city of Polokwane.
- e) Implement low capital improvements at public transport ranks (e.g., lighting, street furniture, passenger information, etc.).

It is evident that most of these projects have been identified in previous sections of this report.



# 8.3.2 TDM Measures for Transport Infrastructure Maintenance

The following are relevant:

- a) Transport infrastructure maintenance improvements include the following items:
  - i) Repair potholes throughout the municipality.
  - ii) Upgrade road signs and road marks.
  - iii) Implement naming of roads, streets and public transport facilities.
  - iv) Maintain the traffic light system which includes synchronisation.
- b) Replace aged and outdated road signs and boards.
- c) Replace road signs that do not conform to the SADC Road Traffic Signs Manual.

#### 8.3.3 TDM Measures in Low Income Residential Areas

A vast majority of the trips to/from major employment zones in Polokwane are made by bus and/or taxi. Therefore, walking inevitably is the initial stage of the total trip. Educational trips are also walking/cycling trips in general. It is further unlikely that there could be a shift towards private transport since this is primarily based on affordability. The main issues are the following:

- a) Provision of non-motorised infrastructure.
- b) Lack of well-developed transport infrastructure.
- c) Quality of existing public transport services and level of accessibility.

Therefore, the current focus should be to provide public transport infrastructure before much consideration is given to TDM in poor settlements. Normally, TDM focuses on making improvements (i.e. capacity, efficiency, effectiveness, safety and security, etc.) to existing transport systems rather than providing new infrastructure. It needs to be a hybrid/integrated system.

The transport challenges in the low-income residential areas which can be readily addressed with less effort compared to much bigger transport infrastructure and operational schemes include the following:

#### a) Paved shared pedestrian/bicycle paths and basic accessibility.

With the current situation in the low-income residential areas, it is realised that not all or even half of existing gravel roads can receive paved shared pedestrian/bicycle paths due to the non-formal nature of roads (i.e. geometry, road pavement stability, etc). However,



considering the fact that emergency transport services currently must have access to these areas as well as the long-term transport plans for the municipality (i.e. promoting public transport) some of the current gravel roads can be improved through gravel road maintenance programmes. Candidate roads to be improved could be strategically selected based on the following criteria:

- i) Relatively long or continuous gravel roads that currently link to existing bus and taxi routes.
- ii) Established gravel roads leading to public facilities such as schools, clinics, sports facilities, etc.
- iii) Gravel roads with generally higher pedestrian and/or vehicle demand.

The intention is to have easy or acceptable levels of accessibility to all residential units and public facilities during all seasons. Where warranted, roads can be upgraded to sealed roads and paved sidewalks. This solution should also be read in conjunction with the NMT measures as proposed in **Chapter 10**.

Therefore, based on the above facts, a rand estimates or timeframes cannot be provided at this stage regarding how much funds is required to address the issues and what are the expected timeframes. This is applicable for low-income residential areas also and will be a benefit for intra-zonal pedestrian/cycling trips.

# b) Sheltered bus/taxi stops.

Sheltered bus and taxi stops improve the attractiveness of public transport in general. Affordable shelters made of corrugated iron or concrete shelters ("ROCLA") are some of the available options, but these should only serve as short-term solutions. The aim should be to provide well-planned shelters where users can be accommodated comfortably. Therefore, it is proposed that sheltered bus/taxi stops be provided along existing main bus and taxi roads and along the candidate roads in section (a) above.

# c) Street lighting.

Street lighting is proposed along existing major bus/taxi routes. In general, the normal high mast streetlights should be adequate; however, these need to cover a wide area as possible. These amenities all encourage public transport use and improve safety and security.

# d) Street fencing.

It is proposed that roads in the district should be fenced to prevent stray animals from causing accidents. This problem is especially pertinent in low-income areas. The community, however, needs to be educated about the need for fencing to prevent fencing from being removed.





# e) Recommendation.

Therefore, as part of TDM, the following is proposed for low-income residential areas:

- i) A Gravel Road Maintenance and Fencing Programme.
- ii) Update the Roads Master Plan done in 2013.

# 8.3.4 TDM Measures in the CBD and other Business Areas of Polokwane

TDM measures, related to the CBD and other business areas in Polokwane, are congestion management parking management.

# a) Congestion management

The lack of space availability (road reserve width) in the CBD of Polokwane tends to pose a challenge in terms of widening the road to increase road capacity. Some of the measures include:

- i) Completion of PIRPTS for Nelson Mandela Street between Polokwane and Seshego/Moletjie. (Phase 1 and 2 of Leeto La Polokwane)
- ii) Update of Church Street between Hospital and Bodenstein Streets to be public transport and pedestrian friendly.
- iii) Traffic signal optimisation and synchronisation.
- iv) Traffic signal maintenance and management.
- v) Re-routing freight vehicles from congested areas.
- vi) Implementation of a public transport planning ring route with sheltered laybys for pickup and drop-off to prevent blocking passing traffic.

# b) Parking management

An alternative to congestion management as a TDM measure is parking management. Options for parking management in PLM include:

- i) Continuous parking studies and policies (collective and isolated problems).
- ii) Maintain and upgrade parking infrastructure and systems as technology improve.
- Restrict the number of available parking bays concurrent with the improvement of the public transport system, with specific reference to residential development in the CBD.
- iv) Allow for special needs parking, bicycle racks and motorcycle parking in the CBD, schools and economic zones.
- v) Provide and manage designated on-street loading zones.



Heavy vehicle delivery vehicles related to hardware shops in Danie Joubert Street is problematic from a traffic perspective.

# 8.4 Conclusion

Several TDM measures were discussed in the aforementioned sections of this report. Specific TDM measures were investigated and proposed for the Polokwane Municipality and they include the following focus areas:

- a) TDM measures for public transport.
- b) TDM measures for transport infrastructure maintenance.
- c) TDM measures in low-income residential areas.
- d) TDM measures in the CBD of Polokwane.







# 9 FREIGHT AND LOGISTICS STRATEGY

This chapter addresses the following aspects:

- a) Legislative and policy requirements.
- b) Situational analysis of freight aspects.
- c) Polokwane freight profile.
- d) Freight vehicle management and overload control (logistics strategies).
- e) Dangerous goods movement.
- f) Conclusion.

These aspects are discussed in detail in the sections to follow.

# 9.1 Legislative/Policy/Guideline Requirements

This section focuses on relevant national, provincial and local policy and legislation that guides freight transport planning and infrastructure requirements.

# 9.1.1 National Policy

From a national policy perspective, the National Freight Logistics Strategy (NFLS) and the National Transport Master Plan (NATMAP) need to be considered from a freight policy perspective.

The growth in freight traffic has surpassed most of the 20-year growth forecasts made by the Government's Moving South Africa initiative many years before they were expected. This has placed massive pressure on infrastructure and operations to deliver acceptable levels of service. The NFLS is a response to the freight system's inability to fulfil the demand for cargo movement at prices, levels of service, quality of service and levels of acceptable reliability. The strategy is developed based on the following principles.

The principles include:

- a) Ownership of infrastructure.
- b) Management of infrastructure.
- c) Operations on infrastructure.
- d) Regulatory structure.
- e) Skills development.

# The strategy implementation is centred on the following:

- a) Governance management.
- b) Regulatory and institutional reform.



- c) Convergence with Transnet strategy.
- d) Integrated planning, information collection and forecasting.
- e) Specific interventions include:
  - i) Linking the first and second economy and assisting BEE and SMMEs.
  - ii) Skills development.
  - iii) Corridor interventions and management.

# 9.1.2 Road Freight Strategy for South Africa

The location of Polokwane on the main route towards Zimbabwe, Zambia, the Democratic Republic of Congo, Malawi, Tanzania and the northern part of Mozambique makes road freight transport a critical component of the PLM-CITP. It is therefore important to consider the findings of the Road Freight Strategy (RFS) for South Africa, undertaken in 2011 by the Department of Transport. The report covered the following:

- a) Excess freight on roads.
- b) Poor road conditions.
- c) Overloading and ineffective law enforcement.
- d) Slow regional integration.
- e) A poor road safety record.

Given that roads and more specifically those carrying freight over long distances are an asset of national importance, the DOT report recommends that this should be reflected in terms of organisational authorities responsible for road maintenance and overload control.

The strategy indicates that a relatively high percentage of the 120 weighbridges in the country are either in disuse or non-operational. In the Limpopo province, there are eight weighbridges, half of which operate 24/7 and the remainder operate sixteen hours a day. There is one weighbridge located within Polokwane which also operates 24/7. In addition to this, there are also three closed weighbridges in the province based on the PLTF, 2015-2019. Some freight transport operators are using this as an opportunity to escape prosecution for overloaded vehicles by changing their routes to avoid prosecution at weighbridges that are operational. Freight traffic is deviated to "back routes" resulting in a devastating effect on lower-order roads which are generally not designed for high volumes of heavy vehicles.

This can be prevented by implementing mobile weighbridge technologies. Weigh-in-motion (WIM) and portable weigh pads can provide the element of surprise which lacks permanent weighbridges. Although current legislation does not allow for prosecution based on these measurements, it can be used for screening purposes. Overloaded vehicles can be identified on almost any route and sent to a permanent weighbridge. WIM technology has the added advantage that information obtained can be used to identify when or where additional law enforcement is required.



The existing weighbridge network consists mainly of fixed weighbridges, which are not 100% effective in controlling overloading. They are easily bypassed by using alternative routes, particularly on the secondary and tertiary road networks, where little overload control enforcement is done. Transgressing transport operators are aware of the limitations of overload control law enforcement and take advantage of the situation.

From the above, it is evident that, although important, the practical implications for Polokwane relate to the maintenance of the transport infrastructure and the interventions regarding the N1 freight corridor.

# 9.1.3 NATMAP 2050

The NATMAP 2050 concludes that future freight development should be demand driven and that the logistics system in South Africa will require significant policy changes to incorporate the views and development perspectives of major industry players. Potential policy changes should incorporate strategies to address the current monopolistic positions of major service providers such as rail, ports and pipeline services. This monopolistic approach has a major negative impact on the operational efficiency and provision of resources and subsequently threatens the ability of the industry to meet future demands.

The demand for rail services on specific corridors (urban and rural) cannot be underestimated and ignored which is in direct contrast with the rapid growth of road freight transport. This rapid supply of growth causes severe strain on existing infrastructure such as the deterioration of road infrastructure, congestion, accidents and pollution and it impacts negatively on freight transport costs. The infrastructure capacity constraints of rail ensure that passenger trains receive preference above freight trains which causes delays for freight train deliveries.

The following main conclusions are drawn by the NATMAP 2050 document, namely that:

- a) "Freight transport operations in all modes will supply services to meet the demands of customer industries.
- b) Government will supply infrastructure and will manage effective quality regulations.
- c) There will be regulated free and open competition within and between all freight modes.
- d) Infrastructure usage charges will provide for current rehabilitation and sustainable funding.
- e) Freight transport services will be self-sustaining for both infrastructure and operations.
- f) Quality regulation will be based on defined and legislated standards to control externalities and ensure equitable competition.
- g) The Department of Transport will be structured to manage the quality standards effectively, with appropriate delegation to provinces and agencies, based on monitored performance contracts.



- Private sector investment and innovation will be promoted in all freight modes including PPP developments in regulation and provision of subsidised social services, e.g., branch lines and rural facilities.
- i) Effective and appropriate information systems will be developed as part of operator registration systems in all modes, to inform policy directions.
- j) Effective cross-border procedures and processes will be developed and implemented to promote South Africa's regional trade.
- k) Intermodal transport will be promoted by removing restrictions on road and rail operations.
- I) Long term strategies and measures will be developed to forestall the impacts of liquid fuel shortages.
- m) Coastal shipping and a South African merchant marine industry will be promoted" (Source NATMAP 2050).

Several critical freight-related projects have been identified in the NAPMAP 2050 planning document, which is earmarked for implementation within the Limpopo Province. **Table 9.1** Indicates the list of relevant freight-related projects for reference.

TABLE 9	0.1: LIST OF CRITICAL FREIGHT PROJECTS FOR THE LIMPOPO PROVINCE (2010 – 2050)
Project Ref No.	Infrastructure Projects Summary per Province
4474	Feasibility Study & Project Management for Development of Polokwane Multi- Modal Logistics Hub & a One-Stop Border Facility in Musina/Martins Drift (Groblersbrug).
660	Pre-feasibility & Construction of the Aero-city Concept and Repositioning of the PIA.
4475	Dilokong Corridor: Extension of Moloto Rail/Road Corridor into Limpopo along Sekhukhune Corridor with Burgersfort.
4481	Upgrade D113: Link between Sun City to Derspoort via Limpopo.
4483	Upgrade of R37 linking Burgersfort via Lydenburg to N4 Corridor and Maputo Harbour.
4567	Jane Furse: Extend New Moloto Rail Corridor
4545	Pretoria – Polokwane High-speed Rail

Source: NATMAP 2050

Most of the projects, indicated in the table above, will have a direct regional impact on freight movement within the province, but the majority of the projects will only have a limited or indirect impact on freight movement within Polokwane (Capricorn District) in general.



# 9.1.4 Provincial Policy

The relevant freight-related provincial policy for Limpopo includes the following:

- a) Provincial Land Transport Framework (PLTF)
- b) Limpopo Logistics Cluster Intervention
- c) Limpopo Province Growth and Development Strategy (LPGDS)

# 9.1.4.1 <u>Provincial Land Transport Framework (PLTF).</u>

The current Limpopo PLTF 2015-2019 identified a number of high impact projects for the Limpopo Province. These projects are aimed at solving a range of freight-related challenges including maintaining the quality of the road, building rail and air freight capacity and improving policy compliance, especially overload control. These projects include (**PLTF Table 8-6; 8-7**):

- a) Upgrade of Roads R37, D113 and D844 which provide a link between key freight attractions and generators within and outside of the province.
- b) Upgrading of provincial coal haulage roads.
- c) Upgrading of the road network serving the Waterberg biosphere.
- d) Construction of formal truck stops to enable road hauliers to rest, refuel and get food in a safe and secure place.
- e) Johannesburg-Polokwane high-speed line providing service for time-sensitive freight.
- f) Dilokong rail corridor connecting Gauteng-Burgersfort-Polokwane.

The PLTF also presents a conceptual freight network aimed at improving the efficiency of freight transport in and out of the province. The conceptual network, shown in **Figure 9.1**, (**taken from Figure 9-4 in the PLTF**) was developed with the objective of connecting major freight attractions and linking the rural economy to the mainstream economy.





# 9.1.4.2 <u>Logistics Cluster Investigation Intervention (Industrial Clusters as a Vehicle for</u> <u>Economic Development)</u>

The logistics cluster investigation conducted by the Limpopo Economic Development, Environment and Tourism Department (LEDET, 2008) identified a number of initiatives that will promote economic development and enhance freight transport by means of improved linkages. These initiates were:

- a) The development of a Musina dry port (trucking depot).
- b) The establishment of a logistics hub in Marble Hall.

The provision of these facilities would, inter alia, deliver the following possibilities:

- a) Create a blueprint for a distribution and logistics hub in the triangular zone connecting Botswana, Zimbabwe, Lesotho, Namibia, Mozambique, Swaziland, Zambia, Malawi and the rest of Africa.
- b) Build, upgrade and integrate the specialised infrastructure needed to create the hub and links to it.
- c) Create efficient processes and working procedures in the hub (e.g., in customs) and building skills to support them.
- d) Galvanise the entry of key private players.
- e) Create an autonomous body to market and manage the distribution and logistics hubs in the province.



# 9.1.4.3 Limpopo Province Growth and Development Strategy (LPGDS)

The PGDS for the Limpopo Province identifies transport as the enabler in facilitating economic growth in the region as well as being the mechanism to improve the movement of people, goods and services. Transport is thus seen as a strategic objective of growing the local economy and, in doing so, improving the quality of life for all.

The emphasis thus from a provincial perspective is to improve all modes of transport within the province to ensure improved levels of service for the movement of people as well as improved freight movement to deliver products to the markets.

# 9.1.5 Local Policy

The relevant freight-related local policy for Polokwane includes the following:

- a) Polokwane 2013 PLM-CITP.
- b) Polokwane Spatial Development Framework. (PSDF)
- c) Polokwane 2021 to 2026 IDP.

#### 9.1.5.1 Polokwane Comprehensive Integrated Transport Plan (2013–2019)

The freight aspect of this report focused primarily on the management of freight traffic through the provision of key infrastructure and policy development. The primary challenge addressed by the report is the deteriorating road infrastructure due to high truck volumes, overloading and underutilised rail capacity. All major routes (the N1 serves as a good example) in the Limpopo Province intersect Polokwane.

The following freight needs were identified:

- a) There is a need for emphasis on freight vehicle management in the city of Polokwane. This includes rest areas, overload control through detours to protect the local street network, safety in terms of congestion management and diverting hazardous materials through town.
- b) Considering freight and commodity flow from neighbouring countries, the Industrial Development Zone and the PIA, there is a need for a freight hub in the city of Polokwane.
- c) There is a need to maintain dedicated routes for the transport of hazardous substances.
- d) Improve utilisation of rail capacity and develop cargo areas at the PIA to facilitate a modal shift from road and, therefore, protect the quality of road infrastructure.

The report also provides a detailed framework for the development of the municipality's overload control strategy. The framework covers policy considerations, the development and location of screening and control facilities, and implementation processes.



# 9.1.5.2 Polokwane Spatial Development Framework

A key strategic thrust highlighted by the Polokwane Spatial Development Framework (SDF - 2010) is that of competitive cluster promotion. A number of clusters are mentioned of which the logistics cluster is of strategic importance to the Province. Resulting from Polokwane's strategic importance, it serves as a distribution/transition station for road freight transport. The PSDF further highlights a number of freight initiatives that require attention within the municipal area, namely:

- a) Improve the utilisation of the current Polokwane container terminal.
- b) Integration of the existing under-utilised container terminal to combine road and rail-based transport of freight.
- c) Transformation of bulk and break-bulk commodities from road to rail.
- d) Improvement of under-developed rail transport to serve all transport modes from a freight perspective.

# 9.1.5.3 <u>2021 to 2026 Polokwane IDP</u>

The final Integrated Development Plan (2021 to 2026) highlights the municipality's geological positioning as a unique advantage for developing Polokwane as a logistic hub. This is because the municipality sits at the centre of major rail and road freight routes connecting main trade centres within the province and long-distance freight between South Africa and neighbouring countries. For example, Polokwane is the largest town along the N1 corridor between Gauteng and Zimbabwe, Zambia, Botswana and Malawi.

The report also acknowledges challenges that come as a result of this positioning. These mainly pertain to the movement of freight by road which results in deteriorated road infrastructure. As a central town, Polokwane is also a resting point for most truck drivers. However, the lack of a dedicated truck inn results in drivers parking all over the city and damaging sidewalks, roads signs and electric poles.

The freight section of the 2021 to 2026 IDP can be summarised into the four objectives:

- a) Developing Polokwane as a logistics hub this will take advantage of the municipality's positioning to facilitate trade within the province and between South Africa and the neighbouring SADC countries.
- b) Developing a freight intermodal this will support the municipal's objective as a logistic hub by facilitating modal integration between air and rail long-distance freight and road freight for short-distance distribution.
- c) Growing rail freight capacity and developing air freight capacity through the Polokwane airport this will help reduce the stress on road infrastructure and help support the municipality's agricultural sector which produces time-sensitive commodities.



d) Construction of a truck inn – this will provide a dedicated resting area for drivers and help limit damage to the city's public service infrastructure.

# 9.1.6 Policy Conclusions

Based on the above policy, the following relevant conclusions are derived with regard to the planning of freight interventions for PLM:

- a) Improved enforcement of road freight policies such as overloading and transportation of dangerous goods.
- b) Construction of a truck inn to protect the city's infrastructure.
- c) The establishment of a freight hub in Polokwane, supported by the development of air freight capacity at the PIA and better utilisation of rail capacity.
- d) Developing a freight intermodal to improve integration and facilitate a better modal split between rail, air and road freight.

# 9.2 Situational Analysis of Freight Aspects

This status quo of the freight strategy chapter aims to reflect on the most recent strategies and studies relating to all modes of freight transport on all levels of government. The most critical initiatives and projects are summarised under the different levels of government which will enable the municipality to plan, budget and align its internal resources for the implementation of such projects when required.

# 9.2.1 Provincial Freight Profile

The provincial freight profile will be discussed in terms of the following:

- a) Logistics infrastructure and facilities.
- b) Road freight considerations.
- c) Rail freight considerations.
- d) Air freight considerations.
- e) Provincial freight conclusion.

#### 9.2.1.1 Logistics Infrastructure and Facilities

There are currently three main intermodal facilities within the Limpopo Province, namely:

- a) The Polokwane Intermodal Facility.
- b) The Tzaneen Intermodal Facility.
- c) The Phalaborwa Intermodal Facility.

The Phalaborwa Intermodal Facility operates from 06h00 to 18h00 Monday to Friday. When there is a need, the facility also operates on weekends. Currently, about 99.5% of



the commodities handled at the facility are mining products that are transported in containers distributed to Durban and Maputo ports for export. The facility is currently underutilised as it has a capacity for 45 containers per day but currently handles 400 containers per month.

The Tzaneen Intermodal Facility currently has no facilities for handling goods on site. The area is solely used for loading citrus fruit during the months of May, June and July only. The Polokwane Intermodal Container Facility is the busiest facility. The facility operates from 07h30 to 16h30 from Monday to Friday. The facility also operates on weekends when there is a need. Currently, the facility handles mostly containers that are destined for Pretoria/Durban. The continued development and utilisation of this infrastructure will enable effective linkage with the existing freight hubs to improve local and cross-border freight movement. The spatial distribution of the above-mentioned intermodal facilities is depicted in Figure 9.2.



Source: Limpopo Freight Databank: Interactive Map

The importance of Polokwane as a freight hub is thus underlined by the aforementioned planning initiatives. In addition to the above, cross-border movement from adjoining SADC countries further increases the freight movement into the province which results in increased pressure on the province's limited infrastructure resources. These border posts situated within the province are shown in Figure 9.3.





Source: Limpopo Freight Databank: Interactive Map

The vast number of border posts indicates the strategic importance of the province from a cross-border freight movement perspective. The freight activity at the various border posts is listed in **Table 9.2** and indicates the tonnage of road-based freight generated by the individual border posts.

TABLE 9.2: BORDER POSTS AND GENERAL FREIGHT MOVEMENT				
Border	Total Freight (tonnes)	Commodities		
Beitbridge	2.6 million	The main identifiable commodities by vehicle were fuel (9%), chemicals (8%), containers (7%) and perishables (53%). Other commodities by vehicle were machinery/vehicles (2%), timber (2%), iron/steel (1%) and rock/stone/ore (2%). Unidentified cargo comprising other (14%) and under sail/tarpaulin (40%) totalling 54% of all vehicles surveyed.		
Groblersbrug	1,119,900	The main identifiable cargoes are fuels (170 400 tonnes p.a.) westbound and containers (104700 tonnes p.a.) also westbound into Botswana		

Source: Limpopo Freight Databank:



The PLM is currently in the planning phase for the development of a truck inn. The truck inn will later link to the proposed logistics centre at the PIA. The truck inn will provide a safe resting area for the drivers with facilities for fuel, food and sleeping. Additionally, this will reduce the destruction of sidewalks and road furniture, which result from trucks parking in the city centre as explained in the 2021/26 IDP. **Figure 9.4** shows the location of the proposed truck inn. The truck inn will be an addition to the three other truck inns currently located within Polokwane, which are the Shell Ultra City N1 East (**Figure 9.5**), Shell Ultra City N1 West (**Figure 9.6**) and Viva Filling Station on R101 (**Figure 9.7**).





FIGURE 9.4: LOCATION OF PROPOSED POLOKWANE TRUCK INN





FIGURE 9.5: LOCATION OF SHELL ULTRA CITY N1 EAST TRUCK INN







FIGURE 9.7. LOCATION OF VIVA FILLING STATION TRUCK

# 9.2.1.2 Road Freight Considerations

A vast network of national, provincial and metropolitan roads exists within the Limpopo Province. The Polokwane metropolitan area experiences a number of challenges when freight movement is concerned. Large industrial and mining conglomerates tend to use road-based freight transport predominantly above that of rail. This phenomenon has a serious impact on the existing road infrastructure and the future expansion of road-based infrastructure as this preference increases daily.

Historic accident data for PLM are contained in Table 9.3.



TABLE 9.3: HISTORIC ACCIDENT DATA								
Year(s)	Total Number	Vehicles per Month		Average number	Avg % HV			
	Accidents (All Vehicles)	Min	Мах	of HV Accidents per month***	month of Total Number***			
2018*	366	16	54	15.5	29%			
2019*	250	8	43	13.0	36%			
2020*	233	3****	44	11.3	34%			
2021**	91	9	31	11.4	35%			

Source: Limpopo Roads Department

Notes: \* Accident data captured for 12 month period

\*\* Accident data captured for 5 month period

\*\*\* Total include heavy vehicles, light delivery vehicles and buses

\*\*\*\*Min during level 5 Covid 19 lockdowns

Detailed information related to the PLM could not be obtained.

#### 9.2.1.3 Rail Freight Considerations

Rail infrastructure for the Limpopo Province is limited to two mainlines, namely:

- a) Hoedspruit Komatipoort Maputo link.
- b) Hoedspruit Kaapmuiden Durban link.

NATMAP (2050) strategy has identified a number of rail links based on economic activity within the province and outside its borders. These links will expand the current Transnet freight network to the following areas, namely:

- a) Lephalale Mahalapye: New line to link the Waterberg Coal Fields with the proposed Trans-Kalahari corridor.
- b) Matlabas Vaalwater Modimolle: A new line and rebuilt of the branch line to link the Waterberg Coal Fields with the main rail network to Richards Bay.

The alignment of these important branch and main lines for the Limpopo Province is indicated in **Figure 9.8**.





Source: Limpopo Rail Freight Databank

The existing mainline corridors within the province are shown in Table 9.4 and border posts and general freight movement (**Table 3-10** from the PLTF also uses the same data from 2011 as there are no updated data).

TABLE 9.4: BORDER POSTS AND GENERAL FREIGHT MOVEMENT								
Link			<b>Total Freight</b>	Volumes/p.a.				
		Distance	Volumes/p.a.	per				
	Rail Link		(million -	Commodity	Commodities			
туре		(KIII)	tonnes)	(mil –				
			(2011)	tonnes)				
Line	Pretoria –		1,8	0,5	Through traffic			
	Pienaarsrivier –			0,727	(both dir.). Liquid			
	Polokwane -	570			petroleum, cement			
ain	Musina – Beit	515			& grain. Coal.			
Σ	Bridge			0,3	Fluorspar,			
	Bhage			0,071	lime.			
	Pyramid South							
Mian Line	– Brits –			5,0	Coal.			
	Rustenburg –	347	6,7	0,85	Iron Ore.			
	Thabazimbi –			0,55	Cement & clinker.			
-	Lephalale							



	TABLE 9.4: BORDER POSTS AND GENERAL FREIGHT MOVEMENT								
Link Type	Rail Link	Distance (km)	Total Freight Volumes/p.a. (million - tonnes) (2011)	Volumes/p.a. per Commodity (mil – tonnes)	Commodities				
Main Line	Groenbult – Tzaneen – Hoedspruit (incl. Phalaborwa branch) – Kaapmuiden	384	5,0	2,2 3,6	Rock phosphate Magnetite				

Source: Limpopo Freight Databank

The Pretoria – Beit Bridge rail link has, for many years, been a busy general freight route for both international and domestic traffic. This link has become even more important seeing that it serves two continuous rail routes within Zimbabwe. This rail line passes through Polokwane. Strategically, from a freight perspective, the Hoedspruit to Beit Bridge link is an important link between Polokwane, KwaZulu-Natal and the border. In addition to transit traffic, this link also transports citrus fruit from along the route.

# Pretoria – Pienaarsrivier – Polokwane – Musina – Beitbridge

The Pretoria – Polokwane – Beit Bridge line carries general freight for domestic use and freight that is destined for neighbouring countries in Africa. This 579 km section of the mainline from Pretoria to Beit Bridge is part of the route which falls within the borders of Limpopo and passes through Polokwane en route to the border. No information is available for freight transported on this main line past the Polokwane Station in the direction of Beit Bridge per annum and vice versa.

# 9.2.1.4 <u>Air Freight Considerations</u>

The Limpopo Province has a number of airports performing various strategic functions within and beyond the boundaries of its borders. These airports are listed below for easy reference, namely:

- a) Baltimore New
- b) Giyani
- c) Hendrick van Eck
- d) Hoedspruit
- e) Lephalale Southwest
- f) Marble Hall
- g) Matshakatini
- h) Modimole
- i) Mokoni



- j) Mussina
- k) Polokwane International Airport (PIA)
- I) Polokwane Municipal Airport (PMI)
- m) Punda Maria.

The geographical locations of the airports are depicted in Figure 9.9 below.



Source: Limpopo Freight Databank

It is important to note that there are 2 airports located within the Polokwane area, namely:

- a) Polokwane International Airport (PIA)
- b) Polokwane Municipal Airport (PMA)

The Polokwane International Airport (PIA) is meant to provide essential logistical options to the mining, agricultural, tourism and forestry clusters as proposed by the Limpopo PGDS. There are currently no cargo facilities at the airport. There are, however, four blocks of hangars, with four hangars in each block, each offering floor space of 540m<sup>2</sup>. Most of these are unoccupied and there is a plan to convert several of these into cargo handling facilities (Limpopo Freight Databank).



The 2013 PLM-CITP provided assumptions on the development of PIA as a cargo alternative to OR Tambo International Airport, with a subsequent runway extension to 3,500m. The forecasted annual cargo throughputs at PIA are shown in **Table 9.5** below.

TABLE 9.5: FORECASTED ANNUAL CARGO THROUGHPUT (TONS) AT PIA								
Forecast Annual Cargo Throughput (tonnes), based on stated assumptions								
Year	2004	2005	2006	2007	2008	2009	2015	2024
Tonnage	-	7,254	12,627	15,045	16,254	17,463	18,000	18,801

Source: Limpopo Freight Databank

According to the Limpopo Freight databank, the forecasted tonnages for 2006 was far less than the actual throughput. In a study conducted for the Limpopo Provincial Government during 2010, it was found that this airport could attract 3600 tonnes of air cargo per annum (Grant Thornton & GIBB, 2010). This amounts to less than one flight per week by an 80-tonne freighter aircraft. It was, however, stated that any airfreight developments at this airport would require significant government intervention. The study proposed typical government interventions, namely:

- i) Establish a working relationship between the PIA and the PMA.
- ii) Investigate the opportunity for GAAL to become involved at Eastgate to improve the chances of Eastgate being able to offer customs and immigration services.
- iii) Foster stronger links with passenger airlines in South Africa.
- iv) Establish a training academy at PIA.
- v) Establish a relationship with Limpopo Tourism and Parks Board.
- vi) Participate in discussions on major events in PLM in order to facilitate charter air access.
- vii) Start negotiations with identified airlines.
- viii) Solicit existing large aircraft maintenance operations to move to PIA.

ix) Establish a cargo hub at PIA that is linked to other modes of transport.

(Source: Limpopo Aviation Strategy and Implementation Plan - Grant Thornton & GIBB, 2010).

# 9.2.1.5 <u>Provincial Freight Conclusions</u>

Based on the above, it is concluded that the following provincial freight transport considerations impact directly on PLM, namely:

a) Freight Logistics Infrastructure: There are three freight intermodals in Limpopo with the Polokwane Container Intermodal being the busiest. Improvements in the utilisation and further development of these intermodals will help support the objective of developing Polokwane as a regional logistics hub. The proposed development of an intermodal freight logistics hub at Polokwane was identified as an important investment in logistics infrastructure to promote economic development within the province. Progress is being made on the development of a truck inn in Polokwane which will add to the existing three truck inns. This will help provide drivers with a safe parking area and protect the city's infrastructure.


- b) **Law Enforcement**: Approximately 65% of freight accidents can be addressed through law enforcement initiatives. This implies that law enforcement with a specific focus on heavy vehicles needs to receive attention.
- c) Air Cargo Development: The proposed development of an air cargo hub at PIA was identified as another proposed investment in logistics infrastructure that requires further investigation. This development is key to supporting the vision of positioning Polokwane as a regional logistic hub, encouraging the move away from road freight and giving the local agricultural sector opportunity to export their goods nationally and to neighbouring countries.
- d) **Rail Capacity and Utilisation:** An emphasis is placed on the underutilised rail capacity in the province. The development of local branch networks will be critical to improving the accessibility to rail and encouraging a shift from road freight.

#### 9.3 Polokwane Freight Profile

The Polokwane freight movement patterns have been adopted from existing figures provided by a number of sources. These sources highlight current freight vehicular movement through the municipal area as well as potential problem areas on specific links and specific intersections. The intention is to utilise these vehicle volumes to develop a freight movement strategy in order to alleviate congestion where possible and to identify infrastructure projects for upgrading.

A high-level freight demand forecasting exercise was conducted to estimate the freight potential for the CDM. The freight growth was derived from the annual freight growth estimates of the Annual State of Logistics Survey. **Table 9.6** provides information on estimated cargo volumes as well as the actual volumes observed for the year 2016.

TABLE 9.	.6: ESTIMATED	CARGO VOLUME	S FOR CDM (2005	TO 2016)
Municipalities	District Freight Transported (2005) (tonnes)	District Freight Transported (2008) (GDP trend tonnes)	District Freight Transported (2011) (GDP trend tonnes)	District Freight Transported (2016) (GDP trend tonnes)
Blouberg				
Agriculture	226,365	416,557	427,388	446,232
Forestry & Logging	110,639	203,599	208,892	218,102
Mining	165,147	303,903	311,804	325,552
Manufacturing	297,008	546,553	560,764	585,488
Aganang				
Agriculture	35,071	64,537	66,215	69,135
Forestry & Logging	1,702	3,132	3,214	3,355
Mining	55,509	102,147	104,803	109,424
Manufacturing	500,434	920,898	944,841	986,500
Molemole				
Agriculture	649,862	1,195,875	1,226,968	1,281,066
Forestry & Logging	161,454	297,107	304,832	318,272
Mining	189,836	349,336	358,419	374,222
Manufacturing	1,394,038	2,565,308	2,632,006	2,748,053
Polokwane				
Agriculture	2,336,006	4,298,716	4,410,483	4,604,945



TABLE 9.6: ESTIMATED CARGO VOLUMES FOR CDM (2005 TO 2016)				
	District Freight	District Freight	District Freight	District Freight
Municipalities	Transported (2005)	Transported (2008)	Transported (2011)	Transported (2016)
	(tonnes)	(GDP trend tonnes)	(GDP trend tonnes)	(GDP trend tonnes)
Forestry & Logging	565,616	1,040,845	1,067,907	1,114,992
Mining	552,645	1,016,976	1,043,417	1,089,423
Manufacturing	6,201,202	11,411,444	11,708,142	12,224,365
Lepelle-Nkumpi				
Agriculture	808,751	1,488,262	1,526,957	1,594,282
Forestry & Logging	68,159	125,425	128,686	134,360
Mining	167,854	308,886	316,917	330,890
Manufacturing	716,929	1,319,293	1,353,594	1,413,276
Capricorn DM	45 204 227	27.079.900	29 706 240	20.074.026
Totals	13,204,227	21,918,800	20,700,249	29,971,930
Limpopo Totals	61,406,410	113,000,000	115,938,000	121,049,820

From the above, it is evident that the CDM generates approximately 25% of the freight volumes of Limpopo Province. These volumes exclude through traffic.

#### 9.4 Freight Vehicle Management and Overload Control for Polokwane

The following are relevant for this section:

- a) Policies.
- b) Overload control strategy.
- c) Static Weighbridges.
- d) Screening points.
- e) Checkpoints.

The above-mentioned are incorporated in the underneath section.

#### 9.4.1 Policies

The Road Freight Strategy for South Africa, undertaken by the NDoT in 2011, deals extensively with overload control.

One of the important findings was that the development of transport corridors could be made more effective if planning and budgeting for major projects were carried out under the auspices of the same authority. The report recommends that planning and execution of road maintenance should be based on priorities co-ordinated with industry needs rather than the capacities of provincial and local budgets.

The proposed solution is to reorganise the responsibility for roads as follows:

a) Expand SANRAL's road network, enabling it to manage all main freight routes, including those currently in the secondary and tertiary road categories where there is inadequate provincial or local capacity.



- b) Give provinces greater capacity to manage roads, mainly by reclassifying to their authority the major roads currently falling under municipalities.
- c) Municipalities should be managing only the local and urban roads after the process of reclassification and reassignment of resources.

It was also proposed that a National Road Maintenance Fund (NRMF) be established and the funds utilised for two purposes:

- a) Road maintenance and infrastructure provision (75%).
- b) Overload control law enforcement (25%).

International experience has shown that a decentralised approach to overload control where law enforcement is carried out by all levels of government is not the solution. The DoT's proposed solution is to establish a single national overload control inspectorate and to consolidate the municipal operations to a provincial level, which would then report to the inspectorate.

Planning of the regular enforcement activities would take place on a provincial level. The overload control inspectorate will also be the custodian of a national overload enforcement database. The overload control inspectorate should be constituted under the RTMC.

#### 9.4.2 Overload Control Strategy

Based on **section 9.4.1 above** it implies that the Overload Control Strategy for PLM should complement the National and Provincial Policies. The PLM Overload Control Strategy will therefore additionally include a network of checkpoints, screening stations and static weighing (see **Figure 9.10**).





## 9.4.3 Static Weighbridges

Currently, there are eight operational weighbridges within Limpopo Province with an additional three weighbridges which are currently closed. The challenge with static weighbridges is that drivers often avoid them, using alternate routes that either have no weighbridges or have non-operational weighbridges. **Figure 9.11** indicates the location of weighbridges in the Limpopo Province and the alternate routes used by truck operators.

Static weighbridges are required for prosecution and are expensive. This is the final stage of the law enforcement process, as the actual prosecution of offenders will be done at static weighbridges.





**Table 9.7.1 to 9.7.2** shows the number of vehicles screened and weighed within at each of the operational weighbridges of SANRAL and **Table 9.7.3 to 9.7.4** for weighbridges for DoT Improving compliance requires finding ways to combat avoidance of weighbridges by drivers. One weighbridge is located within Polokwane Local Municipality and operates 24/7.

TABLE 9.7.1: LIMPOPO WEIGHBRIDGE FOR SANRAL STATISTICS FOR 2018					
Data	Mantsole (N1)	Zebediela (N1)	Beitbridge (N1)	Polokwane (R101)	Totals
Vehicles screened	1,312,720	668,949	347,559	60,518	2,389,746
Vehicles weighed	252,698	141,154	144,138	48,820	586,810
Vehicles overloaded	141,052	30,672	30,176	9,688	111,429
% Overloaded (of total weighed)	55.81%	22%	20.93%	19.84%	19%
% Overloaded vehicles charged	3.76%	6.19%	9.78%	22.60%	10.58%

TABLE 9.7.2: LIMPOPO WEIGHBRIDGE FOR SANRAL STATISTICS FOR 2019					
Data	Mantsole (N1)	Zebediela (N1)	Beitbridge (N1)	Polokwane (R101)	Totals
Vehicles screened	1,291,806	618,024	298,706	52,111	2,260,647
Vehicles weighed	276,599	161,659	178,681	53,688	670,627
Vehicles overloaded	69,380	33,562	38,799	9,514	151,255
% Overloaded (of total weighed)	25.08%	20.76%	21.71%	17.72%	16%
% Overloaded vehicles charged	1.59%	1.02%	1.71%	3.11%	1.61%



TABLE 9.7.3: PROVINCIAL TRAFFIC CONTROL CENTRES STATISTICS FOR 2018					
Name of Institution	Vehicles Weighed	Vehicles Charged	No.: Hours Operated		
Mooketsi TCC	54 943	484	6 432		
Rathoke TCC	24 265	236	3 640		
Groblersbrug TCC	33 610	548	4 390		
Mampakuil TCC	46 360	723	4 170		
Total	159 178	1 991	18 632		

TABLE 9.7.4: PROVINCIAL TRAFFIC CONTROL CENTRES STATISTICS FOR 2019					
Name of Institution	Vehicles Weighed	Vehicles Charged	No.: Hours Operated		
Mooketsi TCC	63 442	501	8 592		
Rathoke TCC	42 582	805	6 142		
Groblersbrug TCC	41 958	665	5 733		
Mampakuil TCC	55 116	911	5 480		
Total	203 098	2 882	25 947		

#### 9.4.4 Screening Stations

A screening station is a location where the actual screening of potential overloaded vehicles occurs. The screening in PLM will be conducted via weigh-in-motion equipment. Screening stations will be located on a site outside the road reserve, with good access from all directions and paved surfaces to support portable weighing equipment. Sufficient parking is needed at these screening stations. Suspected overloaded vehicles will be assembled there and then escorted to a static weighbridge. Potential screening stations can be located along the following routes in Polokwane:

- a) Nelson Mandela Drive.
- b) Polokwane Drive.
- c) Vermikuliet Street.
- d) Thabo Mbeki Drive/Grobler Street
- e) West Street.
- f) Munnik Street.
- g) Church Street.
- h) Landdros Maré Street (east of the railway line)
- i) Veldspaat Street.

Not all screening stations need to be used at the same time as this may be dependent on freight traffic patterns. Heavy vehicles identified at screening stations with a high likelihood of being overloaded will be sent, under escort, for weighing and possible prosecution to the nearest static weighbridge. Refer to **Figure 9.12** for a typical layout of a screening station for class 2 roads.





#### 9.4.5 Checkpoints

Checkpoints are based on the premise of visual screening. Checkpoints do not have fixed locations bases as this may defeat the actual purpose of the exercise. The location of checkpoints is rather based on predetermined routes that are normally used by heavy vehicles. Traffic officers can move around at various checkpoints that will be located near screening stations. Traffic officers can observe heavy vehicles at various points on the road network. They will visually assess the load of an approaching heavy vehicle, and, if thought to be overloaded, stop the heavy vehicle and instruct the driver to proceed to the screening station operating nearby. It should be noted that if the checkpoint is situated near a static weighbridge, the traffic officer may instruct the driver to go directly to the weighbridge.

#### 9.5 Dangerous Goods Movement (Hazmat Strategy)

The section elaborates on the following:

- a) National Land Transport Act (NLTA) 15 of 2009.
- b) Limpopo Provincial Land Transport Framework (PLTF) 2015 to 2019.
- c) PLM Dangerous Goods Movement.



#### 9.5.1 National Land Transport Act 5 of 2009

The following are indicated in terms of the NLTA:

**"35.** (5) All Provincial Land Transport Frameworks must include routes for the transporting of dangerous goods through the province, as reflected in the integrated transport plans within its jurisdiction."

**"36.** (3) All integrated transport plans must include routes for the transporting of dangerous goods by road through their areas."

**"38.** (1) On approval of the national land transport strategic framework, a provincial land transport framework or an integrated transport plan, the Department, MEC or the planning authority, as the case may be, must publish, in the Gazette, Provincial Gazette or newspaper circulating nationally, in the province or municipality, as the case may be, the prescribed particulars of such plans, which must include particulars of routes for dangerous goods."

#### 9.5.2 Limpopo Provincial Land Transport Framework (PLTF), 2015 to 2019

**Section 9.1.5 of the PLTF** contains the following concerning *"Dangerous Goods Movement Legislation"*:

"The legislation pertaining to the transportation of hazardous materials is spread over several government departments and is the responsibility of all levels of government.

#### a) Definition of Hazardous Materials

Hazardous materials are substances that could be biological, chemical, radiological or physical, which could potentially be harmful to humans, animals or the environment through direct contact or contact with other substances. The transportation of these substances is potentially dangerous due to the risk of an accident or spillage.

The routes that are specified in the table below are routes that are classified as main routes and generally avoid residential areas and towns. However, sometimes this cannot be achieved as the destinations of hazardous materials such as oil, gas and fuel are within commercial areas. In these cases, hazardous materials will be transported en routes travelling through commercial areas.

In the case of an accident or spillage, it is important that the DM's Hazmat/Hazchem response equipment and plans are in working order."



#### b) Roles of the Different Spheres of Government

"Table 9.2 as part of the LPTF reflects a summary of each Act's general focus and the resultant imposed duty or responsibility on local authorities. Due to the age of some of the pieces of legislation the general term local authority or even municipality is sometimes used and therefore a specific distinction between District Municipalities (DM) and Local Municipalities (LM) not always clear."

**Table 9.8** underneath provides a copy of the Legal Framework Summary as obtainedLPTF.

TABLE 9.8: COPY OF LEGAL FRAMEWORK STRATEGY SUMMARY FOR					
MOVEMENT OF DANGEROUS GOODS					
A = 1		Local Authority			
Act	General Focus	Duty/Responsibility			
National Road Traffic	The focus is on consignor,	No specific imposed duty or responsibility			
Act, No 93 of 1996	operator and consignee.	on the local authority in whose jurisdiction			
		transport takes place.			
National Land Transport	The Act requires all planning	Local Authorities must develop a freight			
Act, No 5 of 2009	authorities to develop freight	transport strategy and identify routes for			
	transport strategies, specifically	transportation of all dangerous goods.			
	indicating freight routes to be				
	used.				
Environmental	Focuses on rehabilitation of	The competent authority or local authority			
Conservation Act, No 73	environment after incidents and	may direct a person responsible for causing			
of 1989	spillages.	harm to the environment to rectify or			
		remedy the situation at own cost.			
Constitution of South	Responsibility for fire services is	Municipalities must perform all fire and			
Africa	placed with municipalities.	emergency rescue services in their areas of			
		jurisdiction.			
Hazardous Substances	The focus is now mainly on	No specific imposed duty or responsibility			
Act, No 15 of 1973	classification after transfer of	on the local authority in whose jurisdiction			
	certain control functions to the	transport takes place.			
	National Land Transport Act.				
Petroleum Products Act,	Promulgation of regulations on	No specific imposed duty or responsibility			
No 120 of 1977	the transport of petroleum	on the local authority in whose jurisdiction			
	products.	transport takes place.			
Explosives Act, No 15 of	Regulates transport of	No specific imposed duty or responsibility			
2003	explosives.	on the local authority in whose jurisdiction			
		transport takes place.			
Disaster Management	Manages various government	Allows DM to create Municipal Disaster			
Act, No 57 of 2002	bodies for disaster	Management Advisory Forum. Every LM			
	management.	must prepare a Disaster Management Plan			
		in which transport of dangerous goods			
		must be included.			
Fire Brigade Services	Regulates the rendering of fire	The local authority responsible for services			
Act, No 127 of 1987	and rescue services.	relating to fire fighting and rescue. Allows			
		the local authority to formulate and enforce			
		applicable bylaws.			

Source: Limpopo PLTF 2015 to 2019



**Section 9.2.4 of the PLTF** contains the following concerning *"Routes for Transporting Dangerous Goods"*:

"The routes that are specified in Table 9.9 of LPTF, are routes that are classified as main routes and generally avoid residential areas and towns. However, sometimes this cannot be achieved as the destinations of hazardous materials such as oil, gas and fuel are within commercial areas. In these cases, hazardous materials will be transported en routes travelling through commercial areas.

In the case of an accident or spillage, it is important that the CDM Hazmat/Hazchem response equipment and plans are in working order."

**Table 9.9** underneath provides a copy of routes as main routes for the transport of dangerousgoods as obtained from the LPTF.



<b>TABLE 9.9:</b>	COPY OF MAIN ROUTES SUMMARY FOR THE TRANSPORT
	DANGEROUS GOODS

	imended Routes	Recon	Information from District ITPs	District Municip <u>ality</u>	
			No dedicated routes for transportation of hazardous substances.	Capricorn <sup>120</sup>	
n .	Polokwane to Tzaneen	From F	Hazardous substances to be	Mopani <sup>121</sup>	
iyani	en Polokwane and Giyani	Betwee	transported along major roads,		
aar to Tzaneen	11 through Soekmekaar t	From N	residential areas. Sometimes		
	zaneen to Ohrigstad	From 1	hazardous substances are to be		
	zaneen to Mica	From 1	transported to main commercial areas (fuel diesel and das)		
irwa	Gravelotte to Phalaborwa	From (			
n and Trichardtsdal	R36 between Tzaneen an ini	From F to Giya			
orwa	loedspruit to Phalaborwa	From H			
ela-Bela	N1 through area of Bela-I	Road:	Hazardous substances are often transported through the area of Bela-Bela by road and rail in	Waterberg <sup>122</sup>	
Road: R101 through area of Bela-Bela		North-South and South-North			
Rola	rough area of Bela-Bela	Pail: th	directions. Transnet Freight Rail is		
iela	rough area of Dela-Dela	rxan. u	all classes of hazardous substances		
			No dedicated strategy for the transport of hazardous substances.	Sekhukhune <sup>123</sup>	
Beitbridge	From Polokwane to Beit	N1	Hazardous substances to be transported along major roads, avoiding towns and major residential areas. Sometimes bazardous substances are to be	Vhembe <sup>124</sup>	
Makhado Town	Between Vivo and Makh	R522			
Waterpoort to N1	From Vivo through Wa National Road	R523			
rift border	From Vivo to Pontdrift b	R521	transported to main commercial		
ntdrift border	From Musina to Pontdrit	R572	areas (fuel, diesel and gas)		
vn to Punda-Maria	From Makhado Town to	R524			
iyani	From Mphakati to Giyan	R81			
id Tshikondeni	Between Musina and Ts	R525			
/n Jiy Id	From Makhado Town From Mphakati to Giy Between Musina and	R524 R81 R525	CDM DITP, 2013 MDM DITP, 2015 WDM DITP, 2014 SDM DITP, 2007	120 121 121 122 123	

Source: Limpopo PLTF 2015 to 2019

**Section 9.2.5 of the PLTF** contains the following concerning *"Provincial Strategy on Freight Routes"*:

#### a) Transporting of Dangerous goods

The **District Municipalities** should accommodate the transportation of hazardous goods



through its jurisdiction by way of the following:

- *i)* Bypass routes to avoid residential areas or detours for heavy vehicles and hazardous materials.
- *ii)* Avoid the transportation of hazardous goods through towns and sensitive areas.
- iii) Evaluate route plans submitted by operators.
- *iv)* To be equipped with an Incident Management System and protocols to respond to incidents involving hazardous goods.
- v) Law enforcement must be knowledgeable with dangerous goods protocols and legislation to manage offenders and incidents involving hazardous materials.

#### b) Incident Management Plans

Limpopo Province, in collaboration with national and local government, will have to develop incident management plans for all national, toll and provincial roads and corridors in the province in line with the National Road Traffic Act, Act 93 of 1996. Incident plans for the road network in Limpopo Province will have to be co-ordinated on a provincial level and executed on a corridor basis. Traffic law enforcement and communication will have to form an integral part of the provincial strategy to manage incidents, monitor and inspect the transportation of dangerous goods.

In the short-term, contact will have to be made with municipalities in order to consider the movement of dangerous substances on their respective road networks, which should serve as input into the development of a Limpopo Provincial incident management strategy."

#### 9.5.3 PLM Dangerous Goods Movement

At this stage, the PLM does not have a strategy for the movement of hazardous materials and dangerous goods through its area of jurisdiction. It is therefore one of the issues that need to be addressed in terms of future projects in collaboration with CDM. Typical aspects of the strategy include the following:

a) **Preparedness**: This relates to the preparedness of Hazmat emergency services within the municipality. In addition to this, the institutional coordination between emergency response teams within the Capricorn District Municipality and even provincial officers.

Other aspects relate to:

- i) Legal and policy framework.
- ii) Training and training standards.
- iii) Availability of hazmat emergency equipment and supplies.
- iv) Dangerous goods route determination.



- b) **Response:** The important aspects include:
  - i) Notification and reporting.
  - ii) Hazard analysis.
  - iii) Response procedures.
  - iv) Cost recovery.
- c) Recovery: Aspects related to the following:
  - i) Post-incident analysis.
  - ii) Investigation and enforcement.

# Interim routes were identified as part of the 2023/2028 PLM-CITP for freight and dangerous goods movements until a strategy for the movement of hazardous materials and dangerous goods is prepared.

There are three types of freight and dangerous goods traffic in PLM:

- a) Bypass/through freight and dangerous goods traffic:
  - i) The origin or destination is not PLM.
  - ii) The most prominent external routes for this traffic are:
    - ✓ Road N1 South of PLM, from Gauteng.
    - ✓ Road N1 North of PLM, from Machado, Zimbabwe and Africa.
    - ✓ Road N1 bypass East of PLM.
    - ✓ Road R101 South of PLM, from Gauteng.
    - ✓ Road R37 South of PLM; from Burgersfort, Mpumalanga and Mozambique.
    - ✓ Road R71 East of PLM, from Tzaneen.
    - ✓ Road R81 East of PLM, from Giyani.
    - ✓ Road R521 South of PLM, from Vivo, Alldays, Botswana and Zimbabwe and Africa.
  - Freight and dangerous traffic from the north to the south and vice versa from Road N1 respectively to Roads R37, R71 and R81 (vice versa) can make use of the N1 bypass, and therefore do not have to travel through central Polokwane.
  - iv) Other freight and dangerous goods related through traffic have to make use of internal PLM routes (roads).
  - v) **Figure 3.24** demonstrates the PLM freight and dangerous goods road network in PLM.



- b) External to internal and vice versa freight and dangerous goods traffic to PLM:
  - i) This traffic is generated when PLM is serving as an origin or destination.
  - ii) This traffic makes use of the non-central PLM roads as far as possible.
  - iii) Typical freight includes courier services, construction material, manufacturing material, delivery of vehicles, transport of mining material and goods (Polokwane Smelter), petroleum, chemicals, etc.
  - iv) Polokwane serves as a distribution node for a number of well-established brands in South Africa for the Limpopo Province.
  - v) The traffic will make use of the PLM Freight and Dangerous Goods Road Network as indicated in Figure 3.24, where possible but needs to divert on local streets in order to reach their destinations.
- c) Internal freight and dangerous goods traffic within the borders of PLM:
  - i) This traffic will not exit the borders of PLM.
  - ii) The traffic is mostly related to the delivery of freight and dangerous goods from distribution depots to sale points.
  - iii) The traffic will make use of PLM Freight and Dangerous Goods Road Network as indicated in **Figure 3.24**, where possible, but needs to divert on local streets in order to reach their destinations.

Figure 9.13 indicates the PLM interim Freight and Dangerous Goods Road Network.







#### 9.6 Conclusion

Based on the above, the following aspects require further investigation:

- d) Development of intermodal freight logistics hub at PIA.
- e) The development of the truck inn/s in PLM.
- f) Implementation of an overload control strategy for PLM.
- g) Development of a dangerous goods movement (hazmat) strategy for PLM.





# **CHAPTER 10**

Non-motorised Transport Planning



### 10 NON-MOTORISED TRANSPORT PLANNING

#### 10.1 Introduction

This chapter is a critical element of the 2023/2028 PLM-CITP because a high percentage of the PLM population uses NMT.

It is well documented that at least 87% of PLM residents walk to school and 30% walk to work. Non-motorised Transport (NMT) is an essential mode of transportation in PLM-NMT and also serve as a critical feeder to public transport modes.

NMT planning is governed by the National Land Transport Act (NLTA) of 2009, specifically Section 11, which directs the municipal sphere of government to, among others, develop appropriate methods of transport that cater for the broader community in a sustainable and environmentally friendly manner.

The National Department of Transport (NDoT) published updated NMT Facility Guidelines in 2014 from the previous 2003 document – Pedestrian and Bicycle Facility Guidelines.

The Non-motorised Transport (NMT) Policy and Master Planning for Polokwane Local Municipality (PLM) was commissioned in 2014. The following other plans, studies, policies and strategies were undertaken in the Polokwane Local Municipality area concerning NMT:

a) Provincial Land Transport Framework of Limpopo (PLTF) – 2015 to 2019

The PLTF completed in 2015 dealt with NMT in **Chapter 7** and confirmed that they recommended:

- i) DoT, education and district municipalities must develop NMT plans.
- ii) Specific needs of learners must be addressed, where pedestrian facilities, bicycles and animal-drawn vehicles are appropriate.
- iii) Local municipalities must encourage safe bicycle parking at schools, shopping centres and workplaces.
- iv) Bicycle lanes and paths are the main infrastructure element.
- v) Local municipalities must prepare a plan to encourage bicycles and provide NMT infrastructure.

In addition, the PLTF of Limpopo established, from the 2014- NHTS of 2014, that 72% of all trips undertaken in the CDM were NMT trips. Of the 72%, only 0.3% was bicycle trips (the balance being walking trips).

The NHTS was updated in 2020, but unfortunately contains only provincial data rather than district data as per the 2014 document. The 2020 NHTS, however, confirms that 70% of learners in Limpopo Province walk to school.



The Limpopo Province is promoting cycling through a national government initiative from the NDoT - the Shova Kalula programme. The project subsidises bicycles and safety gear to learners in rural areas. It recommends that local municipalities must prepare plans to encourage the use of bicycles and provide the necessary infrastructure.

The Shova Kalula programme is still active with the latest batch of bicycles handed out by the transport deputy minister in Northam, Limpopo, in March 2021. It has been noted, however, that this programme is currently not provided for in the 2021/2022 PLM-IDP and it is recommended that Polokwane apply for the grant and the budget be allocated when the IDP is revised.

b) Comprehensive Integrated Transport Plan for Polokwane (PLM-CITP) – 2012 to 2017

The previous 2013 PLM-CITP was preceded by the ITP for Polokwane (ITP) in 2007.

NMT was addressed in **Chapter 10** of the 2013 PLM-CITP with the following findings:

- i) 71% of PLM residents either walk or travel by bicycle to work or school.
- ii) 30% of PLM residents walk to work.
- iii) An identified road network shortcoming was that there was no user-friendly system for NMT in PLM.
- iv) An identified pedestrian shortcoming was that sidewalks are not user-friendly for NMT.

The 2007 PLM-ITP indicated the following:

- i) Emphasis on NMT gives clear direction as ITP priorities.
- ii) NMT initiatives in settlements and villages are important.
- iii) Gaps in the NMT networks were identified and proposals were made.
- iv) Development measures to promote NMT include safety, comfort, continuity of journeys, infrastructure etc.
- v) Specific issues were identified such as the width of sidewalks, school accesses and separation of vehicular and pedestrian accesses at schools.
- vi) Development of NMT network and inclusion of NMT in the IRPTN systems.

The 2013 PLM-CITP identified the critical need for a PLM-NMT Master Plan to be developed which was subsequently commissioned in 2014 (see 10.1.1 below).



#### 10.1.1 Executive Summary of PLM-NMT Master Plan 2014

The NMT Draft Final Report for PLM dated June 2014 is summarised as follows:

#### 10.2 Introduction

This chapter is a critical element of the PLM-CITP because a high percentage of the PLM population uses NMT.

It is well documented that at least 87% of PLM residents walk to school and 30% walk to work. Non-motorised Transport (NMT) is an essential mode of transportation in PLM-NMT and also serve as a critical feeder to public transport modes.

NMT planning is governed by the National Land Transport Act (NLTA) of 2009, specifically Section 11, which directs the municipal sphere of government to, among others, develop appropriate methods of transport that cater for the broader community in a sustainable and environmentally friendly manner.

The National Department of Transport (NDoT) published updated NMT Facility Guidelines in 2014 from the previous 2003 document – Pedestrian and Bicycle Facility Guidelines.

The Non-motorised Transport (NMT) Policy and Master Planning for Polokwane Local Municipality (PLM) was commissioned in 2014. The following other plans, studies, policies and strategies were undertaken in the Polokwane Local Municipality area concerning NMT:

c) Provincial Land Transport Framework of Limpopo (PLTF) – 2015 to 2019

The PLTF completed in 2015 dealt with NMT in **Chapter 7** and confirmed that they recommended:

- vi) DoT, education and district municipalities must develop NMT plans.
- vii) Specific needs of learners must be addressed, where pedestrian facilities, bicycles and animal-drawn vehicles are appropriate.
- viii) Local municipalities must encourage safe bicycle parking at schools, shopping centres and workplaces.
- ix) Bicycle lanes and paths are the main infrastructure element.
- x) Local municipalities must prepare a plan to encourage bicycles and provide NMT infrastructure.

In addition, the PLTF of Limpopo established, from the 2014- NHTS of 2014, that 72% of all trips undertaken in the CDM were NMT trips. Of the 72%, only 0.3% was bicycle trips (the balance being walking trips).



The NHTS was updated in 2020, but unfortunately contains only provincial data rather than district data as per the 2014 document. The 2020 NHTS, however, confirms that 70% of learners in Limpopo Province walk to school.

The Limpopo Province is promoting cycling through a national government initiative from the NDoT - the Shova Kalula programme. The project subsidises bicycles and safety gear to learners in rural areas. It recommends that local municipalities must prepare plans to encourage the use of bicycles and provide the necessary infrastructure.

The Shova Kalula programme is still active with the latest batch of bicycles handed out by the transport deputy minister in Northam, Limpopo, in March 2021. It has been noted, however, that this programme is currently not provided for in the 2021/2022 PLM-IDP and it is recommended that Polokwane apply for the grant and the budget be allocated when the IDP is revised.

d) Comprehensive Integrated Transport Plan for Polokwane (PLM-CITP) – 2012 to 2017

The previous 2013 PLM-CITP was preceded by the ITP for Polokwane (ITP) in 2007.

NMT was addressed in Chapter 10 of the 2013 PLM-CITP with the following findings:

- v) 71% of PLM residents either walk or travel by bicycle to work or school.
- vi) 30% of PLM residents walk to work.
- vii) An identified road network shortcoming was that there was no user-friendly system for NMT in PLM.
- viii) An identified pedestrian shortcoming was that sidewalks are not user-friendly for NMT.

The 2007 PLM-ITP indicated the following:

- vii) Emphasis on NMT gives clear direction as ITP priorities.
- viii) NMT initiatives in settlements and villages are important.
- ix) Gaps in the NMT networks were identified and proposals were made.
- x) Development measures to promote NMT include safety, comfort, continuity of journeys, infrastructure etc.
- xi) Specific issues were identified such as the width of sidewalks, school accesses and separation of vehicular and pedestrian accesses at schools.
- xii) Development of NMT network and inclusion of NMT in the IRPTN systems.

The 2013 PLM-CITP identified the critical need for a PLM-NMT Master Plan to be developed which was subsequently commissioned in 2014 (see 10.1.1 below).



#### 10.2.1 Executive Summary of PLM-NMT Master Plan 2014

The NMT Draft Final Report for PLM dated June 2014 is summarised as follows:

- a) Introduction
  - i) PLM is mainly rural resulting in challenging infrastructure and service provision.
  - ii) The objective of the PLM-NMT Plan is to address NMT issues by identifying, recommending and costing NMT projects and linking them into existing bylaws and policies.
  - iii) The scope of work included, among others, data analysis of the socio-economic status quo of PLM to determine transport demand which will inform recommendations for future PLM-NMT projects.
- b) PLM-NMT Planning Approach and Methodology
  - i) The NMT describes all modes of transport not requiring batteries or fuel and includes walking, cycling, rickshas, animal-powered carts, pull and pushcarts and recreational activities such as skateboarding, roller-blading etc.
  - ii) The focus for PLM-NMT is on walking, cycling and animal-powered carts.
  - iii) Rural PLM-NMT planning has been largely ignored in the past.
  - iv) Current access and movement flow to be critically assessed.
  - v) Key desire lines were identified and assessed whether optimal or not.
  - vi) Integration of communities to be considered to redress past spatial divisions.
  - vii) Equity is to be considered to ensure that all community members have access to broader social and economic systems.
  - viii) Recommended PLM-NMT projects should be sustainable.
  - ix) In addition to reviewing previous transport planning documents and desktop studies, consultation with key PLM officials and identified stakeholders to be conducted.
- c) Identified PLM-NMT Challenges Definition and Intervention
  - i) NMT has generally been ignored prior to 2014.
  - ii) The connection between urban, semi-rural and rural areas remains a challenge.
  - iii) Urban includes Polokwane CBD and Seshego, the balance being semi-rural and rural.
  - iv) In rural areas, farm workers have difficulty travelling to urban areas.
  - v) Internal mobility in rural areas is well suited to PLM-NMT.
  - vi) Urban areas are not conducive to NMT transport as the past focus was on motorised transport.
  - vii) Proposed NMT projects will be mainly structural requiring land use and special planning interventions.



- viii) NMT planning to be aligned with the PIRPT, schools, links between towns and townships, links to farms and bicycle provision to rural communities (see Shova Kalula Programme mentioned previously).
- ix) During 2014, there were no major NMT facilities in PLM apart from the paved walkways in the CBD.
- d) Review of Existing Literature

Various local and international studies were considered and the following was noted:

- i) Previous NMT programmes undertaken in South Africa have shown that segregation of pedestrians and motorised traffic has generally resulted in higher motorised speeds and more hostile environments for NMT users.
- ii) It has been found that NMT planning should be implemented on a local municipality level to ensure that NMT projects are appropriate for that particular area.
- iii) Various previous studies have concluded that road safety, safe parking facilities for cyclists at schools and poor intermodal linkages prevail.
- iv) Cycling provides potential emergency and paramedic services, can assist in addressing poverty and access, and can offer significant cost savings as opposed to motorised transport.
- v) The construction of NMT facilities can create local job opportunities.
- e) NMT Policy
  - i) NMT planning will include alignment with existing by-laws as well as formulation of new by-laws.
  - ii) NMT policy best practices should include safety, streamlined routing, direct routing, attractiveness and smooth, quick and comfortable routing.
  - iii) Legislative framework informing NMT policy include the Constitution, the white paper on National Transport Policy, the National Land Transport Strategic Framework (NLTSF), Public Transport and Action Plan, the Rural Transport Strategy for South Africa, and all relevant local transport planning documents (PLTFs, CITPs, etc.).
  - iv) The vision and mission for the PLM-NMT planning are described in **Section 10.1.2** below.
  - v) Policy themes, levers and strategies are divided into 6 key focus areas which are described in **Section 10.1.3** below.
- f) Status Quo

Refer to the TR (Chapter 3) of 2023/2028 PLM-CITP.



#### g) PLM-NMT Standards and Guidelines

General PLM-NMT guidelines include the following:

- i) Crime prevention through environmental design.
- ii) Design dimensions.
- iii) User conflict.
- iv) "Shy" (reducing confidence) or obstacle fear distance.
- v) Underpasses.
- vi) Access for the disabled.
- vii) Kerb ramps.
- viii) Handrails.
- ix) Gratings.
- x) Street furniture hazards.
- xi) Street trees and other vegetation.
- xii) Surfacing.
- xiii) Maintenance.
- xiv) Environmental aspects.
- xv) Community awareness.

The guidelines speak to 4 classes of PLM-NMT facilities, namely:

- i) Class 1, (bicycle road/walkway).
- ii) Class 2, (bicycle road/sidewalk).
- iii) Class 3, (bicycle lane).
- iv) Class 4, (no dedicated lane).
- v) These classes are further broken down into 6 levels which are informed by street width, access to erven, budget and traffic demand.

Refer to **Figure 10.2** below for a map of the above cycle paths.

h) Recommended NMT Projects

Proposed infrastructure projects included:

- i) Pedestrian and cyclist routes including maintenance of existing routes and construction of ramps at intersections.
- ii) Safe crossing facilities and refurbishment/redesigning of existing ones.
- iii) Upgrading intersections.
- iv) Non-NMT interventions to optimise road space to include NMT road users.
- v) Projects should be prioritised by assessing size and budget planning, speed and volume of motorised traffic and volume of NMT users.



- vi) PLM has been divided into 38 separate zones for prioritising:
  - Priority 1 includes IRPTS projects that have already been designed and accounted for in the current IDP of PLM.
  - $\checkmark$  Priority 2 includes trunk route and key feeder and distributor roads.
  - ✓ Priority 3 includes projects required to complete IRPTS NMT routes.
  - Priority 4 includes projects that access IRPTS structures, system and activity nodes.
- i) Monitoring and Review

Monitoring of the PLM-NMT Plan included data collection of the following:

- i) Motorised traffic volumes and patterns.
- ii) Wheeled NMT volumes and patterns.
- iii) Pedestrian volumes and patterns.
- iv) Road crash statistics.

Reviewing of the PLM-NMT Plan should be implemented on an ongoing basis due to the dynamic nature of transportation.

#### 10.2.2 Vision and Mission Statements of the 2014 PLM-NMT

The vision and mission of PLM-NMT planning as per the NMT Master Plan of 2014 is as follows:

a) Vision

"To ensure that all NMT users feel safe and secure to walk and cycle and to ensure that public space is shared by all users and everyone has access to urban opportunities and mobility."

b) Mission

"To meet the mobility needs of the city's inhabitants through the provision of a reliable, safe, secure and environmentally sustainable transport system."

#### **10.2.3 Problem Statement and Objective**

The 2014 PLM-NMT Master Plan identified six elements that frame the overall problem statement that beleaguer the city of Polokwane. These are as follows:

a) **Element 1,** Socio-economic upliftment



#### Problem Statement:

Poverty remains a great challenge in PLM with the majority of the population living in a rural setting. The city's population is still characterised by high unemployment, low education levels and low income. For the majority of the population, the living conditions remain poor, with a lack of basic services (Stats SA, 2011).

#### Objective:

PLM-NMT can play a role in improving the living conditions of the local population through partnering with local SMMEs who could benefit from NMT related projects. Furthermore, given the labour-intensive nature of the construction of NMT infrastructure, an opportunity exists to reduce the unemployment rate in the city.

b) **Element 2,** Enhancing accessibility.

#### Problem Statement:

Universal access to the city remains a challenge for communities that cannot afford public transport. Furthermore, the city's roads were mainly designed with the motorist in mind. This policy aims to reduce disparities in socio-economic conditions between communities by making the city accessible to all. To achieve this, it will be necessary to improve the transport system in the city. The PLM-NMT, as a mode of transport, can play an important role by enabling communities with limited public transport access, to cycle to the nearest public transport facility. NMT can also help to increase disposable income for poor households by reducing the need to use public transport for short distances.

#### Objective:

NMT, being a low-cost mode, can be an effective tool for targeting the poor and improving their livelihood.

c) **Element 3,** Ensuring the protection of the environment.

#### Problem Statement:

Human activities impact on the environment, and often overload and destroy it. Emissions have a major impact on the environment especially on-air quality and climate change. Society has a collective responsibility to safeguard the environment for future generations. This requires that the transport systems the city provides are sustainable and environmentally sensitive.



#### <u>Objective:</u>

NMT is essentially an emission-free transport mode which is obviously advantageous to the environment. The promotion and growth of NMT will have a directly positive effect on the environment.

d) **Element 4,** Promoting safer living environments.

#### Problem Statement:

The safety of users is crucial for the successful implementation of NMT in the city. Currently, NMT facilities do not always provide a safe environment for pedestrians and cyclists. As an example, the position of road signs in the NMT facilities poses a safety risk for the users.

#### Objective:

Safety can be achieved through care environmental design which discourages the activities of criminals and ensures integration between motor vehicles and NMT. Safety must be linked to awareness campaigns to ensure that the city's population appreciates the role of NMT.

e) **Element 5**, Promotion of integration

#### Problem Statement:

There is a lack of integration in the planning and positioning of public transport infrastructure.

#### Objective:

The transport systems that the PLM provides must be integrated. This will ensure that user experience is seamless and the quality of life is improved. It is expected that this will be addressed as part of the IRPTS the city is currently developing. However, for this system to function optimally, there is a need for sufficient integration of NMT with all other modes of transport.

f) **Element 6,** Enhancing the quality of life

#### Problem Statement:

Strong and well-functioning people and communities are the building blocks for a sustainable society. Currently, PLM is lacking in these areas.



#### Objective:

NMT acts as a direct contributor to community building and enhanced quality of life through the improved access it provides. It also allows communities to better share public spaces thus promoting integration.

#### 10.2.4 Literature

**Table 10.1** below shows all of the documents relating to PLM-NMT which were available at the time of preparing the 2023/2028 PLM-CITP and were used as references to inform the report.

T/	TABLE 10.1: SUMMARY OF LITERATURE RELATING TO NMT				
Date	Author	Description			
May 2007	Siveri Consultanta	City Of Polokwane Local Municipality			
	Siyazi Consultants	Integrated Transport Plan (ITP) 2007 to 2012			
		City Of Polokwane Local Municipality			
May 2013	ITS Engineers	Comprehensive Integrated Transport Plan			
		(CITP) 2012 to 2017			
		City Of Polokwane Local Municipality			
June 2014	Royal HaskoningDHV	Non-motorised Transport Master Plan			
		Draft Final Report.			
		Polokwane Local Municipality			
May 2014	PLM-IRTPS	Non-motorised Transport Policy:			
		Legal Perspective.			
		Polokwane Local Municipality			
May 2014	PLM-IRTPS	Non-motorised Transport Policy:			
		Transport Perspective.			
		City Of Polokwane Local Municipality			
June 2014	Royal HaskoningDHV	Non-motorised Transport Master Plan			
		Map Book.			
		City Of Polokwane Local Municipality			
June 2014	Royal HaskoningDHV	Non-motorised Transport Master Plan			
		Polokwane Bicycle Map.			
November	Department of Transport	Republic of South Africa Government Gazette			
	Notional	National Land Transport Act, 2009			
2014	National	ITP Minimum Requirements.			
2015	Department of Transport,	Limpopo Province Provincial Land Transport			
2013	Limpopo	Framework 2015 to 2019.			
		city of Polokwane Local Municipality			
June 2016	Royal HaskoningDHV	Non-motorised Transport Guidelines and			
		Standards.			



TABLE 10.1: SUMMARY OF LITERATURE RELATING TO NMT				
Date	Author	Description		
		City Of Polokwane Local Municipality		
July 2017	Royal HaskoningDHV	Non-motorised Transport Master Plan		
		Completed Sections.		
		Provision Of Non-motorised Transport Facilities		
June 2018	Royal HaskoningDHV	on an Ad Hoc Basis on IRPTS Routes Within		
		Polokwane Municipality Close Out Report.		
		City Of Polokwane Local Municipality		
June 2018	Royal HaskoningDHV	Non-motorised Transport Master Plan		
		Standard Construction Detail and Design.		
		City Of Polokwane Local Municipality		
2021	PLM	Integrated Development Plan (IDP)		
		2021 to 2026.		
		Republic of South Africa		
March 2021	Stats SA	National Household Travel Survey (NHTS)		
		2020 Statistical Release		
March 2021		Republic of South Africa		
	State SA	National Household Travel Survey (NHTS)		
Warch 2021	Sidis SA	2020		
		Technical Report		

#### **10.2.5 NMT Minimum Requirements**

The National Department of Transport Government Gazette No. 38256 published on 28 November 2014 prescribes the Minimum Requirements for the preparation of CITPs in terms of the National Land Transport Act of 2009.

The minimum requirements specifically for the provision of NMT are described below:

- a) NMT strategy must describe the measures to promote walking and cycling in the municipality.
- b) The proposed walking and cycling network (where a network is intended to be established) must be mapped.
- c) Plans to upgrade the existing road network to better accommodate walking and cycling must be developed.
- d) Measures to encourage residents to walk or cycle instead of using motorised transport should be developed.
- e) A five-year programme for building NMT networks and promoting behaviour change must be implemented.
- f) The strategy should also focus on infrastructure, e.g., measures to accommodate NMT in new property developments.



- g) Public transport safety and security the strategy must describe the measures that will be implemented to improve the safety of public transport users from accidents and crime, based on a data-driven analysis of the causes and location of the problems.
- h) Road user safety the strategy must describe the measures that will be implemented by the municipality to decrease the rate of injuries and fatalities of road users based on data collected about the causes and location of crashes in the municipal area.
- i) Law enforcement (road traffic and public transport regulation) the strategy must describe the concrete measures and organisational arrangements that will be put in place to improve the enforcement of road traffic violations.
- j) Tourism the strategy must describe transport improvements and measures that will serve tourists specifically and facilitate an increase in tourism in the area.
- k) Accessible transport system all municipalities must describe their proposed strategies to implement universally accessible transport services on their public transport networks in terms of infrastructure, systems, passenger information and vehicles.

The above minimum requirements are dealt with in the sections below.

#### **10.3** Proposed Measures to Promote Walking and Cycling

PLM's proposed measures to promote walking and cycling are set out in **Table 10.2**. These include measures to encourage residents to walk or cycle instead of using motorised transport.

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TABLE 10.2: PLM MEASURES TO PROMOTE PLM-NMT					
No.	Objectives	Measures			
1.	Safety	<ul> <li>a) Separation between motorists and NMT facilities.</li> <li>b) Sidewalks should be separated from the road.</li> <li>c) Sidewalks should be wide enough to accommodate pedestrians, cyclists and other modes of NMT.</li> <li>d) To inform motorists of NMT activities, board signs should be erected along the routes.</li> <li>e) Traffic calming measures should be incorporated where necessary, e.g., zebra crossings, pelicans, toucans, midblock crossings.</li> <li>f) Law enforcement to ensure NMT and motorists adhere to the law.</li> <li>g) NMT facilities should ensure safety of the user both by day and night.</li> <li>h) Safety of pedestrians at schools.</li> <li>i) Activities on footpaths, such as street vendors, must be controlled properly to secure pedestrian safety.</li> <li>j) Facilities and accessories against theft.</li> </ul>			
2.	Continuity	<ul> <li>a) Ensure that PLM-NMT facilities are continuous and do not end abruptly.</li> <li>b) Continuity of facilities is very important to also attract users of the other modes of transport.</li> <li>c) Routes should be coherent and continuous networks linking all origins and destination points for the users rather than ad-hoc facilities that end abruptly.</li> </ul>			
3.	Comfort	<ul> <li>a) Construct dropped kerbs at intersections of PLM roads to facilitate smooth crossings by people such as the disabled and mothers with prams.</li> <li>b) Sidewalk to be wide enough with no services such as lampposts to obstruct wheelchairs along the route.</li> <li>c) Facilities should ensure the smooth, quick and comfortable flow of NMT without excessive gradients or uneven surfacing.</li> </ul>			



TABLE 10.2: PLM MEASURES TO PROMOTE PLM-NMT							
No.	Objectives	Measures					
4.	Attractiveness	<ul> <li>a) Design to be done by local consulting experts and local community (potential user) should be involved in the construction.</li> <li>b) Street furniture such as seats, trees for shade, public phones, etc. should be provided for the user.</li> <li>c) Cycling to school should be promoted by assisting with the procurement of cycles and accessories for scholars.</li> </ul>					
5.	Directness	<ul> <li>Facilities should be provided in line with existing desired lines, usually the shortest and most direct route to the destination.</li> <li>Direct linkages should exist between habitual areas and other areas of interest such as public transport facilities.</li> <li>Facilities should avoid significant detours to mitigate the user ignoring this.</li> </ul>					

#### **10.4** The Proposed Walking and Cycling Network

#### 10.4.1 Master Planning

As previously stated, PLM developed an NMT 5-year Master Plan in 2014. The objectives of the Master Plan were:

- a) Compilation and implementation of new NMT by-laws.
- b) Development of new cycle facility standards.
- c) Coordination and planning of new routes.
- d) Sustainable integration.

**Figure 10.1** provides a copy of the 2014 PLM-NMT Walkway Master Plan, while **Figure 10.2** provides the PLM-NMT Cycle Master Plan.











#### 10.4.2 Design of NMT Facilities

The design of the NMT facilities from the Master Plan should include the following steps:

- a) Identification of roads requiring PLM-NMT.
- b) Survey of roads.
- c) Detailed design.
- d) Compilation of multi-year (3-year) tenders in accordance with the PLM MTREF.
- e) Appointment of a suitable contractor for the relevant construction period.
- f) Construction of facilities based on available budget for each year.
- g) Maintenance and monitoring for the relevant construction period.
- h) Close out and report.
- i) Table 10.3 below shows the roads identified as part of the 2014 NMT Master Plan for the design of NMT facilities.

TABLE 10.3: PLM-NMT MASTER PLAN IDENTIFIED ROADS FOR NMT							
			NMT	NMT			
Street	Street (From)	Street (To)	Pedestrian	Cycle			
			(Km)	(Km)			
Zebediela	Nelson Mandela	Matlala	2.180	2.180			
Maropeng	Nelson Mandela	Matlala	2.742	0.562			
Vermikuliet	Witklip (R521)	Landdros Maré	4.881	4.881			
		(R101)					
Landdros Mare	Vermikuliet	Veldspaat	1.500	1.500			
(R101)							
Road 3437	New Era	Helen Joseph	6.275	3.134			
Ben Harris/Lawton	Matlala	R101	4.902	4.902			
Lawton bridge	Ben Harris	Lawton	0.300				
Matlala	Nelson Mandela	Maropeng	5.145	5.245			
Munnik	Jorrisen	Mall of the North	4.480	4.080			
Magazyn	Suid	Diemeer	6.340	6.340			
Tabriz	Lawton	Orient	1.120	1.120			
Orient	Tabriz	Tagore	1.360	-			
Tagore	Tabriz	Swallow	1.200	-			
Swallow	Swallow	Sapphire	0.820	-			
Sapphire	Swallow	Nikkel	0.460	0.460			
Nikkel	Sapphire	Nelson Mandela	0.860	-			
Lawton pedestrian	Ben Harris	Lawton	0.370	-			
bridge over the							
railway							
		TOTAL (km)	44.935	34.404			



#### 10.4.3 Progress to Date with Implementation PLM-NMT Design of NMT Facilities

Progress had been made since 2014 when the PLM-NMT was prepared.

**Figure 10.3** provides a copy of the survey to indicate where paved sidewalks are provided and where paved sidewalks are required around the CBD of PLM.

**Figure 10.4** provides a copy of the latest 2021 updated NMT Master Plan for PLM and indicates the following progress concerning NMT routes:

- a) Identified for design.
- b) Design completed.
- c) IRPTS related projects completed.
- d) KFW projects completed.
- e) NDPG projects completed.
- f) NDPG projects under construction.






#### FIGURE 10.4: 2021 UPDATED NMT MASTER PLAN FOR PLM







#### 10.4.4 Design of NMT Park

The NMT Park is an NMT training and recreational park identified as part of the 2014 NMT Master Plan and consists of the following:

- a) Children's cycle track.
- b) Children's playground.
- c) Mountain bike trails and walkways.
- d) Parking area.
- e) A fence around the facility.
- f) NMT park building with entrance building with security, fee office, tearoom, shops, ablution facilities and stores.
- g) Limited landscaping.
- h) Cycle park.
- i) Area lighting.
- j) BMX track and pavilion.

The detailed design of the NMT Park was completed in 2018. Although land was earmarked for the NMT Park adjacent to the existing Peter Mokaba Stadium (southern side), this area has since been developed by Baseball South Africa. Another suitable site should be sought for this NMT Park.

#### **10.5** Financial Aspects

#### **10.5.1 Identified Projects**

**Table 10.3** above listed the identified projects for the five years (2013 to 2018) as per the NMT Master Plan of 2014 and then updated in the NMT Master Plan Close Out Report in 2018.

The value of the outstanding work, as per the Close Out Report, is estimated (in 2018 Rand value) to be between **R60 million and R80 million** excluding VAT. This amount excludes the NMT Park, which, if implemented, will cost a further **R56,7 million** excluding VAT.

#### 10.5.2 PLM IDP 2023/2024 PLM-IDP

The latest IDP for 2021 lists the following NMT projects as per **Table 10.4** to be implemented per Grant Source.



TABLE 10.4: NMT IDP FUNDING ALLOCATION PER GRANT SOURCE					
FUNDING	DESCRIPTION	Budget 2023/24	Budget 2024/25	Budget 2025/26	
SUURCE		(R)	(R)	(R)	
CRR	Non-Motorised Traffic Construction	R4 420 174	R506 580	R595 546	
TOTAL		R4 420 174	R506 580	R595 546	

A total as per **Table 10.4** of **R5 522 300** (excluding VAT) has been allocated in the 2023/2024 PLM IDP MTREF from 2023 to 2026.

The German bank – Kreditanstalt für Wierdereaufbau (KFW) – donated R36m to the city in pursuit of a vision to the local municipality to cut carbon emissions by introducing safe NMT infrastructure that supports walking, cycling and skating.

In the first phase which was completed in 2014, the municipality used R8m from its budget to build cycling lanes and pedestrian walkways along Nelson Mandela Drive from Fluoorspar Road to Maropeng Street. The project deliverables in phase 1 included the erection of a steel bridge over the Sand River and upgrading of few intersections which covers 3.7km.

The second phase was set for an eight-month duration, from October 26, 2022 to June 26, 2023. The second phase consist of a 4.26km distance on the "right-hand side of Vermikuliet Street from Nelson Mandela Road to Mika Street, the left-hand side of Vermikuliet street from Lood to Witklip streets; and also from the right-hand side of Staal to Middle streets and the left-hand side Fluoorspar Street from Silikon to Blaauberg Streets. This includes upgrades to all intersections on the named streets with cycle paintings of Vermikuliet and Pietersburg streets, up to the R101."

The funds used and budgeted for in the last project formed part of the 2022/23 Integrated Development Plan (IDP) budget. The project value of the second phase was R26m.

#### 10.6 Conclusion

#### 10.6.1 Summary

The following key points are noted:

- a) PLM remains significantly dependent on NMT facilities.
- b) At least 70% of trips undertaken by PLM residents are of the NMT variety.
- c) Only 0.3% of PLM residents use bicycles for travel.
- d) The 2013 PLM-CITP and 2014 PLM-NMT Master Plan made extensive recommendations and identified priority projects for NMT. Chapter 10 provides a summary of the status of the projects.



- e) Limited facilities and/or institutions have any form of NMT provision, and these are almost exclusively in the CBD of PLM.
- f) Poverty remains rife in PLM.
- g) The environment remains a concern due to the high number of motorised transport users and the pollution resulting thereof.
- h) The safety of NMT users on the existing few and rudimentary NMT facilities is a challenge.
- i) Integration of NMT and public transport facilities within PLM is improved.



#### **10.6.2 Recommendations**

- a) A review and update of the 2014 NMT Master Plan should be prioritised.
- b) The 2022/23 PLM-IDP should be aligned with the 2023/2028 PLM-CITP and the MTREF updated to reflect the prioritised projects summarised in this document and informed by the 2014 NMT Master Plan.
- c) The Shova Kalula bicycle initiative should be championed by PLM and funding sourced from the various government agencies promoting this programme so that the roll-out of bicycles, especially to learners, can commence.
- d) The IRTPS and related infrastructure, planning and the NMT should continue to be aligned.
- e) The locality and relevance of the NMT Park should be reviewed.
- f) Campaigns should be run encouraging the users of motorised vehicles, as well as nonmotorised vehicles, to use bicycles more.
- g) Campaigns should be run encouraging the users of motorised vehicles, to use public transport rather than their own vehicles.

PLM is beset with many challenges which include unemployment, socio-economic issues and the effects of Covid-19. NMT should not be ignored or treated nonchalantly; strong and well-functioning and well-being people and communities are the building blocks for a sustainable society. Effective NMT planning will go a long way in assisting PLM residents and communities to function more efficiently, sustainably and happily.





# **CHAPTER 11**

Finance and Implementation Plan



### 11 FINANCE AND IMPLEMENTATION PLAN

This chapter contains the following sections:

- a) Funding strategy and summarising sources of income and funding constraints.
- b) Summary of all the proposals, projects and programmes for this CITP.
- c) Prioritisation of these proposals, projects and programmes and the allocation of funds to them, depending on budgetary constraints.
- d) Description of the budget and programme for the five-year period of this CITP.

#### 11.1 Funding Strategy Summarising Sources of Income and Funding Constraints

Polokwane Local Municipality (PLM) has various transport project proposals, some of which are already in their implementation phase, for both capital and operational initiatives.

Not all projects are, however, planned and/or funded by PLM. Apart from the "own-funded" projects, there are other government departments and parastatals that fund some of these transport projects. Consequently, the following are summarised and discussed in more detail as part of the following subsections:

- a) Own revenue as per PLM Integrated Development Plan (IDP).
- b) South Africa National Roads Agency (SANRAL).
- c) Roads Agency Limpopo (RAL).
- d) Additional projects identified as part of CITP, to be approved and included as part of future IDPs.

#### 11.1.1 Own Revenue as per PLM IDP

The Division of Revenue Act No. 4 of 2020 (DORA) states, among others, the following:

"To provide for the equitable division of revenue raised nationally among the national, provincial and local spheres of government for the 2023/24 financial year; the determination of each province's equitable share; allocations to provinces, local government and municipalities from national government's equitable share; the responsibilities of all three spheres pursuant to such division and allocations; and to provide for matters connected therewith."

PLM receives a share of DORA which it then manages in terms of the Municipal Finance Management Act of 2003 (MFMA). The transport sector's share of this funding is further administered by the Municipal Land Transport Fund (MLTF).

The MLTF is a fund that has been established in terms of Section 27 (1) of the National Land Transport Act of 2009 (NLTA).



Sections 27 and 28 of the NLTA require PLM to "receive, raise, invest and spend money" through an MLTF for transport-related functions.

Section 27 of the NLTA provides that PLM must administer the MLTF and use it to defray the cost of the functions of the Municipality in terms of the NLTA or its CITP. The MLTF must also be used to cover any other expenditure that will promote the objectives of the NLTA in the Municipality's Area.

Section 27 NLTA states further that the following sums must be paid into the MLTF:

- a) Money appropriated by the Minister.
- b) Money appropriated by the MEC.
- c) User charges collected in terms of Section 28 of the NLTA.
- d) Interest on invested cash balances.
- e) Donations and contributions to the MLTF from any other source, including foreign aid agencies.

Section 28 of the NLTA grants wide powers to impose a variety of user charges.

**Table 11.1** sets out the sources of DORA funding for transport that PLM has access to in the five-year period covered by this CITP.



TA	TABLE 11.1: PLM DORA TRANSPORT FUNDING SOURCES				
	Name of Fund,				
Abbreviation	Grant or	Brief Description/Use			
	Initiative				
IUDG	Integrated	Previously known as the Municipal Infrastructure Grant			
	Urban	(MIG), this grant was adopted in 2016 to transform			
	Development	urban spaces by reducing travel costs and distances,			
	Grant	prevent further development of housing in marginal			
		places; increase urban densities to reduce sprawl;			
		improve public transport and the coordination between			
		transport modes and shifting jobs and investment			
		towards dense peripheral townships.			
PTNG	Public Transport	For funding construction of Integrated Rapid Transport			
	Network Grant	(IRT) and related Public Transport Infrastructure as well			
		as the operations of the IRT.			
NDPG	Neighbourhood	Grant that unlocks investments, by funding			
	Development	neighbourhood development projects to improve the			
	Partnership	life of residents in targeted areas, generally townships.			
	Grant	The partnership of the municipality and National			
		Treasury with this programme, enable the municipality			
		to implement projects identified in municipal plans in			
		order to curb spatial inequalities.			

PLM also allocates funding from non-DORA sources, as per **Table 11.2** below.

TABL	TABLE 11.2: PLM NON-DORA TRANSPORT FUNDING SOURCES					
Abbreviation	Name of Fund,	Brief Description/Use				
	Grant or					
	Initiative					
CRR	Capital	The purpose of the CRR is to set funds aside for the				
	Replacement	financing of capital assets. The CRR is therefore a				
	Reserve	capital asset financing source that represents an				
		alternative to other funding sources available to				
		municipalities, namely external loans interest-bearing				
		borrowings) and government grants and subsidies.				

These sources of funding will be applied to fund the estimates of expenditure arising out of the preparation, implementation and operation of the different transport strategies, proposals, projects and plans, over the five-year period of this CITP.

The financial management and accountability cycle of this CITP is governed by the Municipal Finance Management Act of 2003 (MFMA). The MFMA aims to ensure that prioritisation, planning, finance and implementation of CITP projects are aligned with all other transportation planning undertaken by Polokwane Local Municipality (PLM).



It is thus essential that the CITP is informed by PLM's five-year Integrated Development Plan (IDP). The IDP is a multi-sectoral planning document that is adopted by PLM and reviewed annually where performance is assessed based on the annual report of the Municipality.

Although the IDP is a five-year planning document, the budget for the first three years is considered and updated annually as previously stated. It is, in fact, a legal requirement for the IDP to be reported on over this three-year period.

During the five-year term of the IDP, the annual budgets over the first three-year period are reviewed in the Medium Term Revenue and Expenditure Framework (MTREF) as shown below in **Table 11.3**.

The remaining term of the IDP's projects are reviewed annually and will eventually form part of the MTREF as the five-year period is depleted.

The CITP, essentially a sectoral plan of the IDP, will follow the same reporting methodology.

PLM's operating budgets, as previously stated, are reported on an annual basis and per sector. The current year's budget is fixed and the following two years are estimated. The current approved detailed operating costs for the transport sector from PLM's approved MTREF budget as per the 2023/2024 approved IDP shown below in **Table 11.3**.

TABLE 11.3: PLM IDP MTREF SUMMARY RELATED TO TRANSPORT SECTOR						
Financial		Transpo Se	ort Budget ector		Total IDP	% of Total
Year	Corporate Services	Transport Services	Roads and Stormwater	Public Safety	Budget over 3 Years	IDP Budget
2023/2024	-	R114,329,685	R155,511,230	R5,061,960	R797,238,843	34%
2024/2025	R2,459,276	R115,940,177	R113,685,038	R5,376,891	R708,494,827	34%
2025/2026	R1,641,061	R110,788,545	R161,764,409	R4,257,647	R760,270,789	37%
TOTAL	R4,100,337	R341,058,407	R430,960,677	R14,696,498	R2,266,004,459	35%

The following can be noted from Table 11.3:

- a) The amounts exclude 15% VAT although the final summary of the 2023/2024 PLM-IDP indicate the amounts to be 15% VAT inclusive.
- b) The percentage of IDP budget allocated to the Transport Sector is almost 20% less compared to the previous 2021/2020 PLM-IDP.

**Table 11.4** below shows how these sources of funding will be applied to cover the total cost of each proposal, project and programme. **Table 11.4** also summarises the proposals, projects and programmes from the IDP for this CITP for the 2023/2024 Financial Year, together with the financial implications of each, including subsidies and operational costs.



TABLE 11.4: PLM IDP DETAILED TRANSPORT BUDGET ALLOCATIONS FOR THE 2023/2024 FINANCIAL YEAR				
Name of Proposal, Project or	Summary of Proposal Project or Programme	Financial Implica	ations Over Three Years	
Programme	Summary of Proposal, Project of Programme	Total CAPEX	Funding Source(s)	
	Construction and Upgrading of Mankweng (Traffic and Licensing			
Corporate and Shared Services	Testing Centre) and Ladanna (Fire and Traffic Training Centre,	R4 100 337	CRR	
	Logistics Offices, Control Centre)			
	Procurement of Buses, Office Cleaning Equipment and Alcohol			
Public Safety	Testers, Upgrading of City and Traffic License Centre,	R14 696 498	CRR	
	Installation of Traffic Lights CBD			
	Construction and Upgrading of Stormwater in various areas	R60 378 994		
	Road Upgrading and Construction	R313 287 847		
Transport Convisoo Doodo and	Building Construction, Greening and Boreholes	R7 565 218		
Stormwater	Rehabilitation of Roads	R33 482 591	CRR, NDPG & IUDG	
Stofffwater	Traffic Lights and Signage	R2 028 075		
	Non-motorised Traffic Construction	R5 522 300		
	Bridge Construction	R8 695 652		
Transport Operations Integrated	Public Transport Facility Upgrade	R86 317 469		
Public Repid Transport System	Upgrading, Construction and Rehabilitation of Roads	R114 347 826		
(IDBTS) Transport and Equilities	Bus Depot Construction and Upgrades	R127 963 127	PING	
	Environmental and OHS Management	R12 429 985		
		D700 015 010	CRR, NDPG, IUDG &	
	IOTAL	K/90 815 919	PTNG	



#### 11.1.2 South African Roads Agency (SANRAL)

SANRAL was established in 1998 by an act of Parliament (the SANRAL Act) as an independent statutory company operating commercially as a para-statal. The company complies with relevant government legislation which includes the Public Finance Municipal Act (PFMA) and the Companies Act of 2008.

SANRAL is responsible for the capital and operational expenditure of the national transport routes within PLM, which includes the N1, R37, R71, R81, R521 and N11.

The principal tasks of SANRAL, as per their website, are to:

- a) Strategically plan, design, construct, operate, rehabilitate and maintain South Africa's national roads in order to mobilise our economy.
- b) Generate revenues from the development and management of its assets.
- c) Undertake research and development to enhance the quality of life of all South African citizens, with particular emphasis on their social and economic well-being.
- d) Advise the Minister of Transport on matters relating to South Africa's roads.
- e) Finance, plan, construct, provide, operate and maintain roads in neighbouring countries upon request from the Minister of Transport and in agreement with the respective countries.

**Table 11.5** provides a summary of planned SANRAL projects within PLM from 2023 to 2026.



TABLE 7.3: SANRAL, EXISTING INFRASTRUCTURE PLANNING FOR PLM					
Project Number	Description	Project Type	Project Status	Start Date	Planned End Date
Table will be populated as soon as 2023 information is received from SANRAL					

Source: SANRAL



#### 11.1.3 Roads Agency Limpopo (RAL)

Similarly, to SANRAL, RAL is a para-statal responsible for the development and maintenance of road infrastructure within Limpopo Province.

RAL is registered under the Companies Act and was registered under the Limpopo Province Agency Proprietary Limited Act and Provincial Roads Act 7 of 1998 as amended.

The main functions of RAL, as per their website are planning, designing, construction, maintaining and controlling the provincial road network. It owns and manages provincial road infrastructure that falls within the provincial road network.

Refer to **Table 11.6** for a summary of planned RAL projects within PLM Area.



TABLE 11.6: SUMMARY OF PLANNED RAL PROJECTS WITHIN PLM						
FROM 2023 TO 2026						
MULTI YEAR CAPITALBUDGET	FUNDING SOURCE	VAT EXCLUSIVE BUDGET	VAT EXCLUSIVE BUDGET	VAT EXCLUSIVE BUDGET		
		2023/24	2024/25	2025/26		
RAL, Complete the incomplete	IUDG	-	R3 024 575	R4 083 176		
road from Kordon to Gilead Road.						
RAL, Completion of road from	IUDG	R3 024 575	R6 049 149	R4 083 176		
Phomolong to Makgwareng.						
RAL, Paving of Sekoala primary	IUDG	-	R6 049 149	R4 083 176		
school road to Mehlakong.						
RAL, Paving of streets in Molepo	IUDG	R4 347 826	-	-		
Maja Chuene Cluster.						
RAL, Upgrading of access road in Ga	IUDG	R4 536 862	R7 561 437	R4 083 176		
Makgoba.						
RAL, Upgrading of Access Roads	IUDG	R5 179 584	R3 024 575	R2 192 816		
from Ga Thaba in Molepo Chuene.		DE 000.000	D0 004 575	D 4 000 470		
RAL, Upgrading of Aarterial Road	IUDG	R5 293 006	R3 024 575	R4 083 176		
D3383 In Setumong via Manual.		D4 014 024	DE 202.000	D4 002 176		
RAL, Opgrading of Alterial Road	IUDG	R4 914 934	K5 293 000	R4 063 176		
PAL Upgrading of Arterial Road	IUDG	R500.000	_			
D3377 from Setumong to Dibeng via	1000	1300 000	-	-		
GaSelolo.						
RAL, Upgrading of Arterial Road	IUDG	-	R3 024 575	R4 083 176		
D3997 from GaMokgopo to Ga Ma.						
RAL, Upgrading of Arterial Road	IUDG	R500 000	-	-		
from Moetagare in to Setumong Road						
D3382.						
RAL, Upgrading of Arterial Road in	IUDG	R3 024 575	R3 024 575	R4 083 176		
Magongwa village from road.						
RAL, Upgrading of Arterial Road in	IUDG	R5 293 006	R5 293 006	R4 083 176		
Tshware from Taxi Rank		_				
RAL, Upgrading of Boshega to	IUDG	R4 536 862	R5 293 006	R4 083 176		
I shebela to Boyne Road.	11150	D0 700 740	D0 040 500	D0 770 000		
RAL, Upgrading of Internal Street in	IUDG	R3 780 718	R3 610 586	RZ 778 828		
Ga Ujane to Road D3363.	IUDG	P2 260 860	P2 024 575	P4 092 176		
from Ga-Mosi (Gilead Road) via	IODG	RZ 200 809	K3 024 575	R4 003 170		
Sengatane to Cheben						
RAL Upgrading of road from Ga	IUDG	R4 536 862	R3 024 575	R4 083 176		
Mamphaka to Spitzkop.	1020	1110000002	100021010			
RAL. Upgrading of road from Maia	IUDG	R1 130 435	R3 043 478	R4 083 176		
Moshate to Feke.						
RAL, Upgrading of road from	IUDG	R4 536 862	R3 024 575	R3 478 261		
Mohlonong to Kalkspruit.						
RAL, Upgrading of road from	IUDG	R3 780 718	R3 024 575	R3 478 261		
Monyoaneng to Lonsdale.						
RAL, Upgrading of road from Nobody	IUDG	R3 780 718	R3 024 575	R4 083 176		
Traffic circle to Moshate.						



TABLE 11.6: SUMMARY OF PLANNED RAL PROJECTS WITHIN PLM					
	FROM	2023 TO 2026			
MULTI YEAR CAPITALBUDGET	FUNDING SOURCE	VAT EXCLUSIVE BUDGET YEAR 2023/24	VAT EXCLUSIVE BUDGET YEAR +1 2024/25	VAT EXCLUSIVE BUDGET YEAR +2 2025/26	
RAL, Upgrading of road from Silicon to Matobole.	IUDG	R4 423 441	R3 024 575	R4 083 176	
RAL, Upgrading of road from Spitzkop to Segwasi.	IUDG	R5 293 006	R9 073 724	R4 083 176	
RAL, Upgrading of road from Titibe to Marobala and Makgoba.	IUDG	R4 536 862	R4 914 934	R4 083 176	
RAL, Upgrading of road in Ga Thoka from reservoir to Makanye.	IUDG	R1 739 130	R4 310 019	R2 344 046	
	TOTAL	R80 950 851	R93 761 819	R83 686 204	



#### 11.1.4 Additional Projects Identified as Part of PLM-CITP, to be Approved and Included as Part of Future IDPs

Various transport planning initiatives take place within PLM. It is therefore usual that some projects are devised after the latest IDP has been approved. **Table 11.7** below shows a list of newly identified PLM-CITP related projects that should be incorporated where relevant as part of the IDP reviews.

TABLE 11.7: ADDITIONAL PROJECTS IDENTIFIED PROJECTS AS PART OF PLM- CITP TO BE PART OF FUTURE IDPS			
Project Number	Project Description	Funding Source	
1.	Annual population and update of a consolidated balanced	To be	
	scorecard to measure the progress concerning the objectives	determined	
	and key strategies related to transport in terms of the PLM- CITP.		
2.	Annual updating of PLM CITP.	To be	
		determined	
3.	Annual updating of PLM Roads Master Plan.	To be	
		determined	
4.	Annual updating of PLM Non-motorised Plan.	To be	
		determined	
5.	Annual review of the PIRPTS Strategy that includes an update	To be	
	of budget requirements.	determined	
6.	Develop and maintain PLM Road Network Management	To be	
	System for proactive maintenance of roads.	determined	
7.	Plan, design and construct an interchange link from Landdros	To be	
	Maré Street (south-western direction) to the N1 bypass	determined	
	(south-eastern direction), on the northern side of Polokwane.	<u> </u>	
8.	Plan, design and construct an additional interchange on the	To be	
	N1 bypass, north of the interchange with Road R81, to link	determined	
	heavy vehicle traffic with industrial areas on the northern side		
	of PLM (north of railway crossing in Veldspaat Street).		
9.	Plan, design and construct a section of Road R/1 as part of		
	the interchange with the N1 bypass. (Between Daimada and	determined	
10	N1 bypass interchange).	Taha	
10.	Plan for Delekwane such as ring fensing of OLs and TAS	I U DE	
	members:	determined	
	a) Determine and implement a process to comment on OLs		
	applications received from I PRF		
	b) The Assistant Manager: Public Transport Regulation and		
	Compliance is responsible for the administration related to		



TABLE 11.7: ADDITIONAL PROJECTS IDENTIFIED PROJECTS AS PART OF PLM- CITP TO BE PART OF FUTURE IDPS				
Project	Project Description	Funding		
Number		Source		
	<ul> <li>the processes and activities between PLM, the Operators and LPRE or NPTR.</li> <li>c) Ring-fencing of OLs and TAs members.</li> <li>d) Token system for public transport facilities and the implementation that includes by-laws.</li> <li>e) Metered taxi strategy.</li> <li>f) Guidelines for recommendations pertaining to long-distance public transport service OLs.</li> <li>g) PLM should explore the possibility of Tuk-Tuks services, define the areas where the service will be sustainable and collaborate with the taxi industry as part of the development of the MTS.</li> <li>h) Real-time operational strategy for OLAS for the Limpopo Province. (14 days buffer in order to allow for administrative processes)</li> <li>i) Public Transport Facility Operational Agreements between Operators and PLM if the facility belongs to PLM. The property owner should be included if the facility does not belong to PI M</li> </ul>			
11.	Plan, design and construct a truck inn facility for PLM.	To be		
12	Plan design and construct non-motorised transport projects	To bo		
12.	(schools and identified routes) as per NMT Master Plan.	determined		
13.	Plan, design and construct a bridge in Veldspaat Street to cross the railway line.	To be determined		
14.	PLM household/travel demand survey. (In process)	To be determined		
15.	Development of Emergence Policy or Public Transport (Covid or another pandemic).	To be determined		
16.	Establish and maintain an Intermodal Planning Committee (Transport Forum) to comply with NLTA (Section 15)	To be determined		
17.	Automated Fare Collection System, a pilot project for the incorporation of Non-Leeto La Polokwane Public Transport System vehicles such as private taxis related to affected routes.	To be determined		
18.	Development of freight hub/industrial zone in Polokwane International Airport.	To be determined		
19.	Allocate site for the construction of the NMT Park.	To be determined		



TABLE 11.7: ADDITIONAL PROJECTS IDENTIFIED PROJECTS AS PART OF PLM-CITP TO BE PART OF FUTURE IDPS				
Project Number	Project Description	Funding Source		
20.	Planning and design of the public transport ring route	To be		
	including laybys for safe commuter pickup and drop-off.	determined		
21.	Sheltering of existing public transport stops and construction	To be		
	of new ones.	determined		
22.	Investigate the inclusion of Matlala Road as part of PIRTS in	To be		
	the medium to long term.	determined		
23.	FELLTA House Paul Kruger Street, the relevant property	To be		
	should be expropriated from the existing private owners since	determined		
	it contributes from time to time to conflict and violence			
	between long-distance operators			

**Note:** Table 11.7 is a live element of the CITP and projects could be added annually as part of the list.

#### 11.2 Funding Strategy

This section of Chapter 11 deals with sources of income and funding constraints.

As mentioned above, the MLTF will be used as the funding mechanism for all of PLM's transport priority programmes and projects.

Table 11.8	below shows	the funds a	allocation per	grant source.
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TABLE 11.8: MTREF FUNDING ALLOCATION PER GRANT SOURCE				
Name of Proposal, Project or Programme	Budget 2023/24 (R)	Budget 2024/25 (R)	Budget 2025/26 (R)	
PTNG	R114 329 685	R115 940 177	R110 788 545	
NDPG	R27 972 173	R17 391 304	R17 391 304	
IUDG	R111 587 569	R85 181 644	R112 593 638	
CRR	R21 013 448	R18 948 257	R37 678 175	
TOTAL	R274 902 875	R237 461 382	R278 451 662	
The total amount is R790 815 919				

The following funding for public transport from PLM directly are relevant:

Based on the Provinsiale Koerant, Buitengewoon 7 April 2021, "**Premier's Notices 1 of 2021, POLOKWANE MUNICIPALITY LEETO LA POLOKWANE OPERATIONAL BY-LAW FARE STRUCTURE FOR PHASE 1(A) AS A FLAGSHIP PROJECT FOR POLOKWANE.** Notice is given that the Municipal Manager of Polokwane Local Municipality hereby publishes, in terms of the provisions of **Section 4(1)(c) & 21** of the Local Government:



Municipal Systems Act 32 of 2000, read with **Section 152** of the Constitution of the Republic of South Africa, 1996, the Fare Structure under the By-law set forth hereunder, which shall take effect on the date of publication of this Notice.

The Fare Structure was recently reviewed as part of the 2023/2024 PLM-IDP. The following rates were adopted:

- d) Seshego R13.00 per passenger.
- e) Westernburg R8.00 per passenger.
- f) Flora Park R8.00 per passenger.

That Council approved the initial issuance of the Leeto La Polokwane Traveller's Card for R45.00 and a charge of R60.00 for re-issuance of the Leeto La Polokwane Traveller's Card".

In addition, PLM have budgeted for the Esilux (Pty) Ltd (Vehicle Operating Company) an amount of R2.2m per month which amounts to R26.4m annually to provide transport service for Leeto LA Polokwane Phase 1a. As per the PLM IDP of 2023 (Chapter 11.24.5), this budget will be sourced from "Own Revenue" and "Equitable Share" and any balance directly from bus users.

#### **11.3 Prioritisation of Projects**

The above proposals and programmes as summarised in **Tables 11.4 and 11.8** are aligned with PLM's IDP process and constitute the sectoral transport component of the IDP as required by Section 31 of the NLTA.

All actions and programmes identified are proposed from a process of prioritisation and allocation of available funds in accordance with the following:

- a) Priorities identified in the IDP.
- b) Vision, objectives and long-term strategy (see Chapter 2 for full details).
- c) Spatial vision, policy parameters and development priorities for PLM identified in the SDF.

Prioritisation should be given to phased capital projects; that is, projects that are planned/required to run over several years. The budgets of these projects should still be reported over PLM's three-year budgetary reporting cycle (MTREF) but prioritised provision should be made to ensure their continuation and completion.

All projects and programmes planned are based on available funding rather than an unattainable wish list. They are, therefore, realistic and achievable in terms of PLM's anticipated budgetary constraints.



#### 11.4 Conclusion

The budgeting of the 2023/2024 PLM-CITP considered the following seven elements which inform the Key Strategies (see more detail as part of section 2.5):

- a) Maintain the transport system.
- b) Reduce public transport service backlogs.
- c) Safeguard and improve the utilisation of resources.
- d) Expansion of the transport system.
- e) Reduce infrastructure backlog.
- f) Safety.
- g) Create job opportunities.

A balance of all the above key strategies will ensure the viability and economic betterment of the greater community of PLM.



## CHAPTER 12 Stakeholder Consultation





## **12 STAKEHOLDER CONSULTATION**

The 2023/2028 PLM-CITP includes consultation and participation of interested and affected parties required for the preparation of integrated development plans in terms of Chapter 4 and Section 29(1)(b) of the Municipal Systems Act or replacing legislation. There must also be compliance with the Promotion of Administrative Justice Act 3 of 2000.

The public participation process allows for adequate advertising and presentation of the draft CITP and allows all stakeholders an adequate opportunity to make representations or objections. The authority will consider all representations and objections received and will revise the Final Draft CITP if necessary, before finalising it.

#### 12.1 Introduction

The stakeholder consultation process was held between 2019, 2020, 2021 and 2023 in accordance with the minimum requirements for the development of a CITP as set out in the NLTA with the intention of receiving input into the CITP draft vision. The purpose was to ensure that the relevant stakeholders are informed of the development of the CITP.

The UKU-JV also requested feedback from stakeholders by submitting the following:

- a) Do stakeholders have any comments or additional suggestions or actions to include in their chapters?
- b) Can stakeholders identify any additional actions that are not included in the CITP?

At these meetings, it was agreed that the City of Polokwane and the relevant stakeholders would provide feedback on the outcomes of this process and that they would be able to review changes incorporated in conjunction with the overall draft CITP. A subsequent full public participation process was therefore undertaken to comply with procedural and city requirements.

#### 12.2 Methodology for initial stakeholder consultation

The objective of integrated transport planning is to coordinate planning for all transportrelated infrastructure, operations and regulations. To accomplish this, UKU-JV consulted various government departments, road authorities, regulatory authorities and public transport and freight transport stakeholders. The full list of identifies stakeholders is shown in Table 12.1, which also shows the extent of consultation with individual stakeholders.

Consultation with government departments and authorities was initiated through in-person and/or virtual meetings. Where this was not possible, consultation was conducted through email or telephone. The purpose of this consultation was to give departments an opportunity to state their transport-related needs, challenges and plans; and for UKU-JV to request information which would assist in developing the 2023/2028 PLK-CITP.



The methodology was formulated to maximise the involvement of public transport operators, through UKU-JV hosting 3 working sessions with SANTACO affiliated taxi associations, NTA affiliated taxi associations and metered taxis. It started with a plenary session to explain the purpose of the CITP and provide an overview of the process. Some involvements were through meetings of which some were successful, but some were not. Due to Covid-19 regulations, most departments were working from home. The second session included a smaller group exercise where participants were asked to comment and ask questions that related to survey results once they had been presented. Input was then given on the long-term strategy and each of its themes. This was followed by an exercise requiring the groups to provide comments on these. The work sessions were concluded with a short report back session.

A further opportunity was also provided for stakeholders to provide their reports in hard or soft copies. Participants were encouraged to communicate in the language of their choice to maximise participation. The workshops were organised and facilitated by UKU-JV.

As part of the exercise, each participant received a presentation on PowerPoint. The participants were given an opportunity to comment on the presentation concerning which part of the presentation addressed their challenges, which they felt comfortable with or whether they would like a different approach.

Responses were provided, summarised into recommendations and incorporated as part of the PLM-CITP.

#### 12.3 Results

Feedback from meeting participants was constructive and positive, as stakeholders appreciated being consulted at the beginning of the process, rather than being confronted with a completed draft document near the end of the project. **Table 12.2** summarises key issues raised during the consultation process and how they were addressed.

#### **12.4** The liaison structures operating in the area.

The most important line of communication with role players at grassroots level in the respective municipal areas should be through the local transport forum. Any conflict between public transport operators and traffic officials should be submitted to the local transport forum. The chairperson of the forum and the traffic and safety subcommittee would assist with resolving the conflict. This would benefit both parties, as all parties have representatives in the forum.

The public transport operators could be informed at the local transport forum about the conduct that traffic officers would expect from them and become involved in the traffic safety campaigns. The forum would play an independent role in any conflict that might arise



between the public transport role players and the law enforcers, as the traffic department could not act simultaneously as the law enforcer and judge.

Polokwane, unfortunately, does not have a Transport Forum and this was one of the recommendations: that a PLM Transport Forum should be established, with a proper constitution and a dedicated secretary.

#### 12.5 Stakeholder information

A comprehensive list of stakeholders was compiled, building on previous processes and categorised into sectors: contracted transport operators; non-contracted transport operators; spheres of government and state-owned enterprises. **Table 12.1** shows the list of stakeholders.

ТА	TABLE 12.1: EXTENT OF STAKEHOLDER CONSULTATION FOR THE 2023/2028			
Nr.	PLM-CITP Stakeholder	Representative	Nr. of	
			Meetings	
1.	Adepco	Mr. E Basson	1	
2.	Alldays TA	Mr. NS Ramalahla	2	
3.	AMCE, Project Leader	Mr. E Kabinde	1	
4.	AMCE, Project Management Services	Mr. R Chauke	1	
	(Project Leads)			
5.	AMCE, System Planning Leeto la	Mr. B Serumula	1	
	Polokwane			
6.	AMCE, Systems and OPS	Mr. MP Motloutsi	6	
7.	Bahlaloga TA	Mr. ME Seakamela	1	
8.	Bahlaloga TA	Ms. MW Malefo	1	
9.	Bahwaduba Bus Service	Mr. Boshoff	4	
10.	Bahwaduba Bus Service	Mr. CP Modadi	1	
11.	Bahwaduba Bus Service	Mr. MA Lepelle	1	
12.	Bahwaduba Bus Service	Ms. K Letlhokoa	1	
13.	Bakone TA	Mr. MK Mosomane	1	
14.	Boyne TA	Mr. MRM Rammala	1	
15.	Boyne TA	Mr. NF Mahlase	1	
16.	Capricorn District Municipality	Ms. MP Maja	2	
17.	Capricorn Metered Taxi	Mr. HG Ramoroka	3	
18.	Capricorn Metered Taxi	Mr. NE Semenya	3	
19.	Capricorn Metered Taxi	Mr. SA Maunatlala	3	
20.	Community Safety	Mr. L Grimbeek	1	
21.	Cross Boarder Road Agency (CBTA)	Unsuccessful	1	
		Consultation		
23.	Esilux (Pty) Ltd	Mr. MS Ledwaba		



17	PLM-CITP					
Nr.	Stakeholder	Representative	Nr. of Meetings			
22.	Expectra 12 NPC (PMA)	Mr. K Roux	2			
23.	Freight (Road and Rail)	Mr. R Mukhavhuli	1			
24.	GAAL	Mr. N Netshifhefhe	3			
25.	GAAL	Mr. T Maphiswana	1			
26.	GAAL (Gateway Airports Authority Limited)	Mr. MI Mkhabele	2			
27.	Great North Transport	Ms. N Matlou	4			
28.	Great North Transport (GNT)	Mr. P Sekokotla	1			
29.	Ikageng TA	Mr. SS Manota	2			
30.	Kopano Bus Service	Mr. TF Moloto	4			
31.	Lebowakgomo TA	Mr. MP Phaladi	1			
32.	Letswatla TA	Mr. MR Mokgotho	1			
33.	Limpopo Department of Public Works, Road Asset Management System and Road Maintenance	Unsuccessful Consultation	0			
34.	Limpopo Department of Roads & Transport	Mr. FP Mainganye	1			
35.	Limpopo Department of Transport and Community Safety	Mr. MT Ngobeni	1			
36.	Limpopo Department of Transport and Community Safety	Mr. MT Ramashala	1			
37.	Limpopo Department of Transport and Community Safety	Mr. S Kgorutle	1			
38.	Limpopo Department of Transport and Community Safety (LDTCS)	Mr. NP Lalanamo	1			
39.	Limpopo Province Regulatory Entity (LPRE)	Mr. R Mukhavhuli	6			
40.	Machaka Ramokgopha TA	Mr. MJ Morapama	1			
41.	Madodi Bus Services	Mr. TF Moloto	2			
42.	Mankweng Steering Committee	Mr. MF Kgasago	3			
43.	Mankweng TA	Mr. F Kgasago	7			
44.	Mankweng TA	Mr. MA Maponya	3			
45.	Mankweng TA	Mr. MF Thobakgale	2			
46.	Mankweng TA	Mr. MJ Lekoto	2			
47.	Mankweng TA	Mr. MJ Makola	1			
48.	Mankweng TA	Mr. MP Matlou	1			
49.	Mankweng TA	Ms. MS Kwetepane	3			
50.	Marama TA	Mr. TR Manyola	1			
51.	Masala Ramabulana Holdings	Mr. T Madima	1			



1 A	PLM-CITE	DNSULTATION FOR THE	2023/2028
Nr.	Stakeholder	Representative	Nr. of Meetings
52.	Masala Ramabulana Holdings	Ms. SM Sejeng	1
53.	Mashashane Maraba TA (Mamata)	Mr. LA Manaka	1
54.	Mballtda TA	Mr. MA Malatji	1
55.	Molepo TA SANTACO Capricorn	Mr. MN Mojapelo	1
56.	MOLLDTA	Mr. DC Mashabela	1
57.	National Taxi Alliance (NTA)	Mr. FM Kgasago	1
58.	PEACE	Mr. TL Moeti	1
59.	PLM, Acting Manager Corporate Geo- Information	Mr. Nkosi	1
60.	PLM, Assitant Manager Clusters	Ms. C Duba	1
61.	PLM, Assitant Manager Clusters	Ms. P Mashao	1
62.	PLM, Assitant Manager Clusters	Ms. C Mathekgane	1
63.	PLM, Assitant Manager Clusters	Ms. C Duba	1
64.	PLM, Chief Customer Officer	Mr. T Majola	1
65.	PLM, City Planning	Ms. E Shika	1
66.	PLM, Control Centre	Mr. KJ Chuene	1
67.	PLM, Control Centre	Mr. KM Marakalala	1
68.	PLM, Control Centre	Ms. T Teffo	1
69.	PLM, Disaster Management & Fire Services	Mr. MA Phaho	1
70.	PLM, Disaster Management and Fire Services	Mr. ME Mashamaite	2
71.	PLM, Economic Development & Tourism	Mr. N Marotola	1
72.	PLM, EDST	Ms. LM Tisane	1
73.	PLM, Enterprise Development Specialist	Mr. T Mathatho	1
74.	PLM, GIS Specialist	Mr. N Nevondo	1
75.	PLM, LED	Mr. FF Mashabathakga	1
76.	PLM, Legal Advisor	Ms. B Mphahlele	1
77.	PLM, Manager By-Law Enforcement	Mr. MP Mahlatji	3
78.	PLM, Marketing Officer	Ms. L Mtsetwene	1
79.	PLM, PIRPTS Project Management Unit	Mr. E Kabinde	1
80.	PLM, Project Manager Systems Planning	Mr. A Ligege	5
81.	PLM, Property Management	Ms. S Mabapa	1
82.	PLM, Roads & Transport Operations	Mr. T Teffo	1
83.	PLM, Roads and Transport	Mr. M Lamola	2
84.	PLM, Spatial Planning	Mr. T Sebola	1
85.	PLM, Town Planning	Ms. ME Maponya	1
86.	PLM, Traffic and Safety	Mr. Ramporo	3
87.	PLM, Traffic and Safety	Ms. LM Mahlase	1



16	PLM-CITF	DISULTATION FOR THE	2023/2020
Nr.	Stakeholder	Representative	Nr. of Meetings
88.	PLM, Traffic and Safety	Ms. C Rathando	1
89.	PLM, Transportation Services	Ms. T Monti	13
90.	PLM, Transportation Services	Mr. D Ramakgwakgwa	2
91.	PLM, Transportation Services	Mr. M Maubane	2
92.	PLM, Transportation Services	Ms. MN Madzhie	4
93.	PLM, Transportation Services	Ms. R Malakalaka	2
94.	POLLDTA	Mr. MD Ramabina	2
95.	Polokwane Airport	Mr. Kowie	2
96.	Polokwane Burgersfort TA	Mr. MJ Phasha	1
97.	Polokwane Sibasa TA	Mr. TL Sethosa	1
98.	Polokwane to Germiston TA	Mr. MK Matlou	1
99.	PRASA (Passenger Rail Agency of South Africa)	Ms. Maggie	1
100.	Public Transport Users	Surveys Questionnaire	1
101.	Resilient Properties (Pty) Ltd	Ms. S Tempel	1
102.	Road Agency Limpopo	Mr. P Montjane	3
103.	Road Agency Limpopo	Mr. R Aucamp	1
104.	Road Agency Limpopo (RAL)	Mr. K Tuishi	1
105.	RSA TA	Mr. MD Sekhasembe	1
106.	RSA TA	Mr. MMF Ledwaba	1
107.	Santaco Capricorn Region	Mr. BT Mafafo	1
108.	Santaco Capricorn Region	Mr. D Mosoma	3
109.	Santaco Capricorn Region	Mr. LK Mphafudi	3
110.	Santaco Capricorn Region	Mr. MD Ramusi	3
111.	Santaco Capricorn Region	Mr. MP Rammala	1
112.	Santaco Capricorn Region	Mr. MS Ledwaba	1
113.	Santaco Capricorn Region	Mr. MW Mamorobela	3
114.	Santaco Capricorn Region	Mr. NS Ramalahla	1
115.	Santaco Capricorn Region	Mr. TA Mnisi	1
116.	Santaco Capricorn Region (SCR)	Mr. BJ Manzini	1
117.	Santaco Steering Committee (Bahlaloga TA)	Mr. NW Maleto	1
118.	Santaco Steering Committee (Mankweng TA)	Mr. FM Mohlaka	2
119.	Santaco Steering Committee (SCR)	Mr. TD Mosoma	1
120.	Sekgosese TA (SEKTA)	Mr. ME Lephale	1
121.	Seshego Polokwane TA (SPTA)	Mr. LC Maleke	1
122.	Smec (SDF Service Provider)	Mr. De Waal	1
123.	Smec (SDF Service Provider)	Mr. DJ Van Vuuren	1
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TA	TABLE 12.1: EXTENT OF STAKEHOLDER CONSULTATION FOR THE 2023/2028				
	PLM-CITP		I		
Nr.	Stakeholder	Representative	Nr. of		
			Meetings		
124.	South Africa National Roads Agency	Ms. T Monti	4		
	Limited SOC LTD (SANRAL)				
125.	Steering Committee (Bakone TA)	Mr. MM Moselakgomo	1		
126.	Steering Committee (Molepo Long and	Mr. MH Mojapelo	1		
	Local TA)				
127.	Steering Committee (Seshego Polokwane	Mr. EM Mahlachane	1		
	TA)				
128.	Tembisa TA	Mr. MF Mphalo	1		
129.	TNS, Control Centre	Mr. D Ramabulana	1		
130.	TNS, Control Centre	Mr. MJ Makwela	1		
131.	Transnet	Ms. Maggie	1		
132.	UKU-JV	Mr. E Tshidavhu	15		
133.	UKU-JV	Mr. G Grobler	7		
134.	UKU-JV	Mr. H. Mafafo	4		
135.	UKU-JV	Mr. L Duma	3		
136.	UKU-JV	Mr. L Roets	10		
137.	UKU-JV	Mr. V Lentsoane	6		
138.	UKU-JV	Ms. C Mphela	20		
139.	United Mphahlele TA	Mr. KP Ntsoane	1		
140.	United Zebediela TA	Mr. MC Mahlo	1		

	TABLE 12.2: SUMMARY OF OUTCOMES FROM THE 2023/2028 PLM-CITP CONSULTATIVE PROCESS				
Nr.	Date	Stakeholders Present (UKU-JV attended all sessions)	Type of Meeting	Feedback and/or Issues Raised	
1.	15/05/2019	PLM, Transportation and Services Directorate.	Project admin, management and planning.	<ul> <li><u>The following matters were discussed:</u></li> <li>a) PLM and UKU-JV discussed the Appointment Letter for Contract PM90/2019 by PLM.</li> <li>b) PLM and UKU-JV discussed the Acceptance Letter for Contract PM90/2019 by the UKU-JV.</li> <li>c) The Service Level Agreement would be provided for UKU-JV as soon as completed by PLM and needed to be signed by UKU-JV.</li> <li>d) PLM and UKU-JV discussed the programme of implementation.</li> </ul>	Not re
2.	27/05/2019	PLM, Transportation and Services Directorate.	Project admin, management and planning.	Identification of information related to CITP TR (Chapter 3 of CITP):a) Socio and economic information.b) GIS transport related data.	Not re
3.	03/10/2019	<ul> <li><u>The following stakeholders</u></li> <li><u>attended the consultation</u></li> <li><u>session:</u> <ul> <li>a) PLM, Transportation and Services Directorate.</li> <li>b) PLM (PIRPTS), Project Management Unit</li> <li>c) PLM, Property Management.</li> <li>d) PLM, Town Planning.</li> <li>e) PLM Disaster Management and Fire Services.</li> <li>f) PLM, Local Economic Development</li> <li>g) Great North Transport.</li> <li>h) LDTCS.</li> <li>i) Madodi Bus Company.</li> <li>j) Kopano Bus Service.</li> <li>k) Resilient Properties (Pty) Ltd.</li> <li>l) PLM, GIS Specialist.</li> <li>m) CDM.</li> </ul></li></ul>	<ul> <li><u>Consultation with Transport Role</u> <u>Players to engage on following:</u></li> <li>a) Introduced project to key Role- players.</li> <li>b) Indicate gaps identified in terms of "2012 to 2017 PLM -CITP".</li> <li>c) To highlight key matters.</li> <li>d) To allow key role-players to actively participate and provide input and proposals.</li> <li>e) To indicate the way forward.</li> </ul>	<ul> <li>a) The latest Spatial Development Framework (SDF) of Polokwane Municipality was not concluded.</li> <li>b) Mr. Ntima from Limpopo Province Department of Transport and Community Safety (LDTCS) was in process to amend Provincial the bus subsidies. The outcome would be made available to PLM.</li> <li>c) What was the timelines for the completion of the Review of CITP?</li> <li>d) Question concerning parking and data Collection and whether the scope of work included any modelling for the CBD.</li> </ul>	<ul> <li>a) Imp upc</li> <li>b) The exp</li> <li>c) The</li> <li>d) No that</li> <li>the</li> <li>e) Ind</li> <li>cor</li> <li>liais</li> </ul>
4.	25/10/2019	PLM, Transportation and Services Directorate.	Project admin, management and planning.	<ul> <li><u>The following matters were relevant:</u></li> <li>a) Additional organisations identified to attend future CITP Working Committee Meetings:</li> </ul>	Not re





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portant to review the PLM-CITP in line with the dated PLM-SDF.

e timeline for the Project was 15 months and the pected completion date was June 2020.

e Road Freight Strategy would be reviewed. parking Surveys would be conducted and

at no traffic modelling would be conducted for e CBD.

dividual Departments and Role Players would be nsulted to obtain info and input. PLM would ise with Role Players.

elevant.

back and/or Issues Raised	Feedback and/or Issues Raised	Type of Meeting	Stakeholders Present	Date	<b>.</b>
			(UKU-JV attended all sessions)	Date	Nr.
cy Limpopo SOC (RAL). an National Roads Agency (SANRAL). an Local Government (SALGA). d PRASA. rports Authority (GAAL). partment of Transport. at the Taxi Industry would be consulted ITACO CAPRICORN Regional Taxi c). icipality would write a letter to the SCRTC, to invite the Affiliated Taxi a meeting. mgs would be scheduled with Bus operated in PLM, to collect the mation for the project. The meetings ted by the PLM. les were available as part of the 2012 ter. ved the designed and printed Title blocks omic information were collected as part of ntegrated Development Plan (IDP) of compared with the 2012 Polokwane CITP icipality indicated that Tibane Taxi Rank ough space to occupy all taxis.	<ul> <li>i) Road Agency Limpopo SOC (RAL).</li> <li>ii) South African National Roads Agency (SANRAL).</li> <li>iii) South African Local Government Association (SALGA).</li> <li>iv) Transnet and PRASA.</li> <li>v) Gateway Airports Authority (GAAL).</li> <li>vi) National Department of Transport.</li> <li>b) It was agreed that the Taxi Industry would be consulted through the SANTACO CAPRICORN Regional Taxi Council (SCRTC).</li> <li>c) Polokwane Municipality would write a letter to the Executive of the SCRTC, to invite the Affiliated Taxi Associations to a meeting.</li> <li>d) Individual meetings would be scheduled with Bus Companies that operated in PLM, to collect the resourceful information for the project. The meetings would be facilitated by the PLM.</li> <li>e) Limited Shape files were available as part of the 2012 Transport Register.</li> <li>f) PLM was approved the designed and printed Title blocks for Maps.</li> <li>g) Socio and economic information were collected as part of the Draft 2019 Integrated Development Plan (IDP) of Polokwane and compared with the 2012 Polokwane CIT information.</li> <li>h) Polokwane Municipality indicated that Tibane Taxi Rank did not have enough space to occupy all taxis.</li> </ul>				
ers were intended to be discussed: te Legislation. oad Transport Agency. ht Planning Guidelines. uestions / Way Forward.	<ul> <li>a) Study Area.</li> <li>b) Most Appropriate Legislation.</li> <li>c) Cross Border Road Transport Agency.</li> <li>d) Typical Relevant Planning Guidelines.</li> <li>e) Discussions / Questions / Way Forward.</li> <li>f) Closure.</li> </ul>	Project Consultation and information collection.	<ul> <li><u>The following stakeholders</u> <u>attended the consultation</u> <u>session:</u></li> <li>a) PLM, Transportation and Services Directorate.</li> <li>b) Cross Border Transport Agency (CBTA)</li> <li>c) Cross Border Taxi Industry</li> <li>d) Cross Border Bus Industry</li> </ul>	28/11/2019	5.
	<ul> <li>Companies that or resourceful inform would be facilitate</li> <li>e) Limited Shape file Transport Register</li> <li>f) PLM was approver for Maps.</li> <li>g) Socio and econom the Draft 2019 Interpolokwane and control information.</li> <li>h) Polokwane Munic did not have enou</li> <li>The following matters</li> <li>a) Study Area.</li> <li>b) Most Appropriate</li> <li>c) Cross Border Rood</li> <li>d) Typical Relevant</li> <li>e) Discussions / Quif) Closure.</li> </ul>	Project Consultation and information collection.	The following stakeholders         attended the consultation         session:         a) PLM, Transportation and         Services Directorate.         b) Cross Border Transport         Agency (CBTA)         c) Cross Border Taxi Industry         d) Cross Border Bus Industry	28/11/2019	5.





natters were not discussed due to other mitments by the CBTA.

		TABI	LE 12.2: SUMMARY OF OUTCOMES	FROM THE 2023/2028 PLM-CITP CONSULTATIVE PROCESS	
Nr.	Date	Stakeholders Present (UKU-JV attended all sessions)	Type of Meeting	Feedback and/or Issues Raised	
0.		Services Directorate.	planning.	<ul> <li>a) Limpopo Provincial Department of Transport and Community Safety (LDTCS): <ul> <li>i) Limpopo Provincial Regulatory Entity (LPRE):</li> <li>ii) Bus Subsidy.</li> <li>iii) Register Office.</li> <li>iv) Freight Section.</li> </ul> </li> <li>b) Capricorn District Municipality (CDM)</li> <li>c) Limpopo Department of Public Works: <ul> <li>i) Asset and Management System.</li> <li>ii) Road Budget for Polokwane.</li> </ul> </li> <li>d) National Cross Border Agency (NCBA), Provincial Office.</li> </ul> <li>Concerning COTO and related design documents: <ul> <li>a) The Committee of Transport Officials manuals were introduced to PLM and explained how it would be useful to the CITP project.</li> <li>b) It compulsory for Municipalities to use COTO Manuals.</li> <li>c) It was agreed to provide electronic copies of the following manuals to Ms. Monti from PLM: <ul> <li>i) COTO manuals.</li> <li>ii) Taxi Facility design manual.</li> <li>iii) Bus Facility design manual.</li> <li>iv) South African Traffic Signs Manual (SATSM- VOL-3).</li> </ul></li></ul></li>	by the
				<ul> <li>a) PLM would prepare letter to the Executive of the SCRTC in order to invite the respective affiliated Taxi Associations to a meeting.</li> <li>b) Ms. Monti managed to arrange the appointment with the Secretary Mr. Mosoma SCRTC. The following need to be discussed during the appointment, SCRTC: <ul> <li>i) Introduction of the development of the CITP.</li> <li>ii) Surveys that would be conducted.</li> <li>iii) Problems that might be encountered.</li> <li>iv) Requested a formal meeting with all the chairpersons and Secretaries.</li> <li>v) Requested information of the Associations (List of Associations and Routes that were operating in PLM).</li> </ul> </li> </ul>	





dentified matters and activities were executed erelevant stakeholders.

	TABLE 12.2: SUMMARY OF OUTCOMES FROM THE 2023/2028 PLM-CITP CONSULTATIVE PROCESS				
Nr.	Date	Stakeholders Present (UKU-JV attended all sessions)	Type of Meeting	Feedback and/or Issues Raised	
				<ul> <li>c) Ms. Monti should schedule meetings with the following bus companies for the collection of the information:</li> <li>i) Madodi Bus Services</li> <li>ii) Bahwaduba Bus Services</li> <li>iii) Kopano Bus Services.</li> </ul>	
7.	09/03/2020	<ul> <li><u>The following stakeholders</u> <u>attended the consultation</u> <u>session:</u></li> <li>a) PLM, Transportation and Services Directorate.</li> <li>b) GAAL.</li> </ul>	CITP consultation with key role- players.	<ul> <li>The following information were requested from GAAL:</li> <li>a) Schedules of flights.</li> <li>b) How many companies are operating from Airport.</li> <li>c) Freight movement.</li> <li>d) Passenger information.</li> <li>e) Tower information</li> <li>f) Landing strips within Polokwane.</li> <li>g) Runway assessment.</li> <li>h) Assessment periods.</li> <li>i) Challenges.</li> </ul>	It was be ma Monti
8.	11/03/2020	<ul> <li>Individual consultation</li> <li>sessions with various</li> <li>stakeholders were as follows:</li> <li>a) LDTCS.</li> <li>b) CDM.</li> <li>c) SANTACO Capricorn Region.</li> <li>d) RAL.</li> </ul>	Interaction with institutions to collect data related to PLM-CITP.	<ul> <li>All the Stakeholders requested that PLM should provide a formal letter, to request the information from the relevant stakeholders.</li> </ul>	a) Uł PL b) Th res
9.	21/05/2020	<u>The following stakeholders</u> <u>attended the consultation</u> <u>session:</u> a) PLM, Transportation and Services Directorate. b) AMCE.	Project admin, management and planning.	<ul> <li>The following were relevant: <ul> <li>a) Ms. Monti would arrange with Mr. Pilot of PLM (Roads Manager) to provide the following CITP information of the following within the jurisdiction of PLM: <ul> <li>i) Roads Infrastructure.</li> <li>ii) Traffic Accident Hotspots.</li> <li>iii) Crime Hotspots.</li> <li>iv) Safety and Security Plan.</li> </ul> </li> <li>b) Ms. Monti would arrange a meeting with the PLM Manager of Public Transport, Regulation and Monitoring: Mr. D. Ramakgakgwa to collect PIRPTS Information.</li> <li>c) UKU-JV would collect the CD of the Limpopo Provincial Land Transport Framework from Ms. E. Koedyk of LDTCS.</li> <li>d) PLM would prepare a letter for LDTCS to formally request information related to PLM-CITP.</li> <li>e) It was reported that PLM had 18 operators of CBRTA that operates illegally.</li> </ul></li></ul>	The id the rel

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Polok	wane



s agreed with GAAL that the information would ade available on Friday, 13 March 2020. Ms. would follow-up with Mr. Masodja.

KU-JV agreed to obtain the relevant letter from LM.

ne relevant consultation sessions were scheduled.

dentified matters and activities were executed by elevant stakeholders.

	TABLE 12.2: SUMMARY OF OUTCOMES FROM THE 2023/2028 PLM-CITP CONSULTATIVE PROCESS				
Nr.	Date	Stakeholders Present (UKU-JV attended all sessions)	Type of Meeting	Feedback and/or Issues Raised	
10.	24/06/2020	The following stakeholders         attended the consultation         session: (Zoom Meeting)         a) PLM, Transportation and         Services Directorate.         b) SMEC (SDF Service         Provider)         c) Masala Ramabulana         Holdings.	Engagement with PLM SDF Consultant on following: a) Broad overview and status of CITP project. b) Matters to be clarified in terms of SDF (development modes, zoning & future areas earmarked for development). c) Common planning areas between CITP and SDF (Leeto la Polokwane routes, public transport facilities and routes, developments areas that will require public transport).	<ol> <li>PLM had two cross border bus operators that operate namely; Munenzwa Bus Service and Nedospell Bus Service.</li> <li>Ms. Monti would gather more information related to the monthly report of Way Bridge (SANRAL) from the Local Traffic Department in Webster Street Polokwane.</li> <li>Ms Monti indicated that GAAL had appointed a new CEO. Ms. Monti provided the contact details of Mr. Maphiswana (CEO), the new CEO of GAAL.</li> <li>UKU-JV staff visited various Public Transport Facilities in PLM, where surveys should be conducted.</li> <li>Ms. Monti requested UKU-JV to pay stipends as part of the survey process to the elected members from the Taxi Industry.</li> <li>Ms. Monti indicated that Aganang Cluster has three (3) illegal loading areas excluding the Taxi Rank.</li> <li>The following were relevant:         <ul> <li>Messrs. Basson, S Redeling and P Gomane from Smec attended the meeting.</li> <li>Mr. Roets from UKU-JV gave a detailed presentation about the PLM-CITP Project and presented the summary overview for National Land Transport Act, 2009 (Act No. 5 of 2009) minimum requirements from Government gazette notice. Appendix C: Minimum Contents.</li> <li>Ms. Monti indicated that Polokwane Municipality was aware of the GAPS that were still outstanding from various stakeholders. She mentioned that as soon as the upgrading of Taxi Facilities were done, she would provide information related to CITP and SDF projects.</li> <li>Mr. Roets reported that they were in the advanced stage of the project and managed to collect the information of the GIS, Stormwater, and Electricity.</li> <li>Mr. Roets reported that Polokwane Municipality were busy with the CBD realignment and requested Mr. Ramabulana to co-ordinate matters related to upgrading phase.</li> </ul> </li></ol>	The by th





e identified matters and activities were executed the relevant stakeholders.

	TABLE 12.2: SUMMARY OF OUTCOMES FROM THE 2023/2028 PLM-CITP CONSULTATIVE PROCESS				
Nr.	Date	Stakeholders Present	Type of Meeting	Feedback and/or Issues Raised	
		(UKU-JV attended all			
		sessions)			
11.	25/06/2020	<ul> <li><u>The following stakeholders</u> <u>attended the consultation</u> <u>session:</u></li> <li>a) PLM, Transportation and Services Directorate.</li> <li>b) AMCE.</li> <li>c) Masala Ramabulana Holdings.</li> <li>d) PLM, Economic Development &amp; Tourism (EDST)</li> <li>e) PLM, Community Safety</li> <li>f) Gateway Airport Authority Limited (GAAL).</li> <li>g) Great North Transport (GNT).</li> <li>h) Capricorn District Municipality. (CDM)</li> <li>i) Limpopo Department of Transport and Community safety (LDTCS).</li> </ul>	<ul> <li>CITP consultation with key role- players. The main items were:</li> <li>a) Purpose of Presentation.</li> <li>b) Content of CITP.</li> <li>c) Role Players, Liaison &amp; Intersection.</li> <li>d) Polokwane Overview.</li> <li>e) Gap Analysis and key matters.</li> <li>f) Visual Presentation.</li> <li>g) Surveys to be conducted.</li> <li>Mr. Roets from UKU-JV indicated that the project was delayed due to Covid-19.</li> </ul>	<ul> <li>a) Mr. Ramabula from Ramabulana Holdings (Pty) Ltd presented a PLM SDF presentation to the stakeholders in the meeting.</li> <li>b) It was reported that stage 3 of the PLM SDF had been completed. The status quo report was submitted to PLM for approval. It was indicated that due to the Covid-19 the process was delayed.</li> <li>c) Mr. Ramporo from PLM indicated in terms of gaps identified and wanted to know the status of the current gaps CITP documents.</li> <li>d) It was reported that the current consultant did not manage to resolve the gaps that the community identified on the projects</li> <li>e) Mr. Ramporo from PLM requested the consultant to propose an extra lane at Emdo road to Seshego to the because road has a high volume of traffic in the morning and afternoon.</li> <li>f) It was mentioned that the consultant needs to do the site visit of the area that identified the high volume of traffic.</li> <li>g) Ms. Maja from CDM requested rural Hospitals for the Traditional Leaders to be added on the Video Clips of the CITP.</li> </ul>	<ul> <li>a) It v</li> <li>imp fille</li> <li>wit</li> <li>out</li> </ul>
12.	12/10/2020	<ul> <li><u>The following stakeholders</u> <u>attended the consultation</u> <u>session:</u></li> <li>a) PLM, Transportation and Services Directorate.</li> <li>b) AMCE.</li> <li>c) SANTACO Capricorn Region.</li> <li>d) Mashashane Maraba TA.</li> <li>e) Mphebatho TA.</li> <li>f) Molepo TA.</li> <li>g) Seshego-Polokwane TA.</li> <li>h) Molepo Local &amp; Long- Distance TA.</li> <li>i) Regona TA.</li> <li>j) Polokwane Local &amp; Long- Distance TA.</li> <li>k) Polokwane Germiston TA.</li> </ul>	<ul> <li><u>Taxi Industry consultation to</u> <u>engage on following:</u></li> <li>a) Introduced Project and provide CITP introduction and purpose.</li> <li>b) Indicate Public Transport surveys to be conduction.</li> <li>c) Provide survey Methodology.</li> <li>d) Introduce Mobile Applications to conduct surveys.</li> </ul>	The types of TI related surveys to be conducted:         a) Facility Inventory.         b) Rank Utilization.         c) Route Utilization.         d) Commuter Interview.         The surveys relevant for seven clusters in PLM:         a) Aganang.         b) Dikgale.         c) Mankweng.         d) Molepo.         e) Moletjie.         f) Seshego.         g) City (Polokwane).         Members were acknowledged the Apps developed by the UKU-JV.	a) Th in ( b) Th c) Th me the d) Tra

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Response

was mentioned due the unforeseen plications of Covid-19, all gaps could not be ed-up. The Team was busy communicating th various Stakeholders to gather the relevant

tstanding information required.

s. Monti indicated that Polokwane Municipality ad AMCE were busy working on the updated ocument that would be forwarded to the various akeholders.

was indicated that at the trucks parking of PLM had identified high crime, Mr. Ramporo quested the Consultant to per attention to it.

s. Monti mentioned that PLM had appointed s onsultant was busy compiling more detailed formation related to Truck Parking's in PLM.

ne information would be presented at another onsultative session.

r. Roets, acknowledge input from Mr Rampora nd requested a meeting with Mr. Ramporo in der to collect more information.

ne TI agreed that surveys would be conducted close collaboration with TI.

TI Agreed on time frames for the surveys. TI nominated four Steering Committee embers that worked with the UKU-JV during e TI related surveys.

aining process and surveys could commence.
		TABI	LE 12.2: SUMMARY OF OUTCOMES	FRO	M THE 2023/2028 PLM-CITP CONSULTATIVE PROCESS		
Nr.	Date	Stakeholders Present	Type of Meeting		Feedback and/or Issues Raised		
		(UKU-JV attended all					
		sessions)					
		I) Tembisa TA.					
		m) RSA TA.					
		n) Marama TA.					
		o) Lebowakgomo TA.					
		p) Alldays TA.					
		q) Peace TA.					
		r) Ikageng TA.					
		s) Polokwane Burgersfort TA.					
		t) Sekgosese TA.					
		u) Boyne TA.					
		v) Bahlaloga TA.					
		w) Uunite Zebediela TA.					
		x) Bakone TA.					
13.	16/10/2020	Taxi Survey Steering	Taxi Industry consultation to	a)	The Taxi Steering Committee conducted the recruitment	a)	Th
		Committee Meeting attended	engage on following:		of surveyors per clusters.		Ste
		by following Organisations:	a) Detail introduction into TI			b)	Th
		a) SANTACO Capricorn	surveys.			( c)	Ou
		Region.	b) Survey programme.				Tra
		b) Molepo Local & Long-	c) Training of Surveyors.				
		Distance TA.					
		c) Seshego-Polokwane TA.					
		d) Bahlaloga TA.					
		e) Mankweng TA.					
		f) Maja-Chuene TA.					
14.	19 to 22	PLM, Transportation and	Surveyor Training	a)	All SANTACO Capricorn Region identified surveyors were	a)	Tra
	/10/2020	Services Directorate.			trained for collecting CITP data.		
15.	27/10/2020	Capricorn Metered TA.	Interaction with Capricorn Metered	a)	Capricorn Metered TA requested that PM should allocate	a)	lt v
			TA and collect of data related to		the formal parking sites for metered Taxi Industry for		sul
			PLM-CITP		operation purposes.		inc
				b)	UKU-JV trained the surveyors to conducted surveys	b)	Th
					related to metered taxi operations.		29/
16.	22/10/2020	Mankweng TA EXCO	Taxi Industry consultation to	a)	UKU-JV attended the meeting but could not present.	a)	UK
			engage on following:	b)	Mankweng TA EXCO Members wanted to know to		bet
					understand the difference between IRPTN and CITP.		ΤA
			a) Introduced Project and provide	( c)	The presentation was postponed for a next meeting.	b)	lt v
			CITP introduction and purpose.				me
			b) Indicate Public Transport			c)	Th
			surveys to be conduction.				
			e) Provide survey Methodology.				

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he survey programme was adopted by the TI teering Committee.

he training of surveyors could commence.

utcomes of surveys would be part of Chapter 3, ransport Register, of the PLM-CITP.

aining was conducted.

was mentioned that the comment would be ubmitted to Polokwane Municipality and be cluded in the PLM-CITP.

ne metered taxi surveys were conducted on 9/10/2020.

KU-JV indicated explained the difference etween the IRPTN and CITP for the Mankweng A EXCO members.

was agreed UKU-JV would provide the

embers with a copy of the appointment letter.

ne meeting had to be rescheduled.

		ТАВ	LE 12.2: SUMMARY OF OUTCOMES	FROM THE 2023/2028 PLM-CITP CONSULTATIVE PROCESS	
Nr.	Date	Stakeholders Present (UKU-JV attended all sessions)	Type of Meeting	Feedback and/or Issues Raised	
			<ul> <li>f) Introduce Mobile Applications to conduct surveys.</li> </ul>		
17.	28/10/2020	Mankweng TA EXCO	<ul> <li><u>Taxi Industry consultation to</u> <u>engage on following:</u></li> <li>a) Introduced Project and provide CITP introduction and purpose.</li> <li>b) Indicate Public Transport surveys to be conduction.</li> <li>g) Provide survey Methodology.</li> <li>h) Introduce Mobile Applications to conduct surveys.</li> </ul>	The types of TI related surveys to be conducted:         a) Facility Inventory.         b) Rank Utilization.         c) Route Utilization.         d) Commuter Interview.         The surveys relevant for seven clusters in PLM:         a) Aganang.         b) Dikgale.         c) Mankweng.         d) Molepo.         e) Moletjie.         f) Seshego.         g) City (Polokwane).	a) Thi cor b) Thi sur c) Thi Co JV d) Tra
18.	11/11/2020	PLM Traffic Department	Consultation concerning PLM-CITP: a) UKU-JV received a briefing from Mr. Ramporo.	<ul> <li>The following points were as identified by the Traffic</li> <li>Department to be problematic: <ul> <li>a) POINT 1: ROADS R567 AND D3437</li> <li>PLM Traffic and UKU-JV visited Road R567 (Kwena Moloto) and D3437 (Moletjie) roads that have high volume of accidents and traffic congestion. Problems specifically related to weekends / month-ends and holidays.</li> <li>b) POINT 2: ROAD D544 AND D19</li> <li>PLM and UKU-JV visited Roads D544 (Percy Fyfe) and D19 (Mashashane).</li> </ul> </li> </ul>	a) Mr. sul bai the D3 b) Mr. prc hui driv
19.	16/11/2020	Mankweng TA EXCO.	Steering Committee Mankweng TA Operations Committee	<ul> <li>a) All NTA Capricorn Region identified surveyors were trained for collecting CITP data.</li> </ul>	a) Tra
20.	26/01/2021	PLM, Traffic Department.	Consultation concerning PLM-CITP	Collection of data at Dalmada Road due to the high volume of traffic in the morning.	Mr. Ra
21.	04/03/2021	<ul> <li><u>The following stakeholders</u> <u>attended the consultation</u></li> <li><u>Freight Transport Strategy</u></li> <li><u>"Truck Inn Facility" session:</u></li> <li>a) PLM, Transportation and Services Directorate.</li> <li>b) AMCE.</li> </ul>	<ul> <li><u>Purpose of Presentation:</u></li> <li>a) Inception Report.</li> <li>b) Key Role-Players.</li> <li>c) Freight Transport Strategy (CITP, Chapter 9).</li> <li>d) Truck Inn Facility Dendron Road.</li> <li>e) Way Forward.</li> </ul>	<ul> <li>a) Freight Transport Strategy (CITP, Chapter 9) (Guideline Documents):</li> <li>i) Relevant Acts with specific reference to National Land Transport Act 5 of 2009.</li> <li>ii) National Transport Master Plan (NATMAP 2050 Limpopo Province).</li> </ul>	As par a) Co i) ii) iii) iv)

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- ne MTA EXCO agreed that surveys would be onducted in close collaboration with TI. ne MTA EXCO agreed on time frames for the urveys.
- e MTA EXCO nominated four Steering
- ommittee members that worked with the UKUduring the TI related surveys.
- aining process and surveys could commence.

Ramporo (PLM Traffic) requested UKU-JV to bmit a proposal for a speed hump and rricade along the side of the Road to eliminate U-turns on Roads R567 (Kwena Moloto) and 4437 (Moletjie).

. Ramporo requested UKU-JV to submit the posal of barricade and the extension of speed mp across the road to PLM to distract the taxi's vers to drive at the site of the road.

aining was conducted.

amporo proposed that the Engineer must y the site for a smoother traffic flow.

t of the way forward:

ntinue with the following activities:

- Consultation with Client.
- Identification of role-players and consultation
- (incl. survey with truck drivers).
- Formulating objectives.
- Compare alternatives.

		TABL	E 12.2: SUMMARY OF OUTCOMES	FROM THE 2023/2028 PLM-CITP CONSULTATIVE PROCESS	
Nr.	Date	Stakeholders Present (UKU-JV attended all sessions)	Type of Meeting	Feedback and/or Issues Raised	
		<ul> <li>c) PLM, Roads and Transport.</li> <li>d) PLM, By-law &amp; Enforcement.</li> <li>e) PLM, Manager Transport Operations</li> </ul>		<ul> <li>iii) Limpopo Provincial Land Transport Framework (2015-2019).</li> <li>iv) National Land Transport Framework (2017-2022).</li> <li>v) PM Integrated Development Plan 2020-21 (IDP).</li> <li>vi) Polokwane Comprehensive Integrated Transport Plan 2012 to 2017.</li> <li>vii) Capricorn District Integrated Transport Plan.</li> <li>viii) Polokwane Spatial Development Framework 2020.</li> <li>ix) Arrive Alive.</li> <li>b) The following aspects require further investigation in terms of Chapter 9 (Freight Transport Strategy):</li> <li>i) Development of intermodal freight logistics hub at Polokwane International Airport.</li> <li>ii) Implementation of Overload Control Strategy for Polokwane (Protect Road Infrastructure).</li> <li>iii) Development of Dangerous Goods Movement Strategy for Polokwane.</li> <li>c) Advantages/ Characteristics of modern Truck Stops</li> <li>i) The best way to address driver fatigue/ driver tiredness by offering a good sleep.</li> <li>ii) Security systems with cameras and lighting can prevent the threats of hijacking, theft etc.</li> <li>iii) Increased sanitation with spotlessly clean ablution and shower facilities.</li> <li>iv) High-quality food.</li> <li>v) An excellent venue to address HIV education.</li> <li>vi) An opportunity to boost the local economy with a continuous stream of travelers passing through.</li> </ul>	v) b) Sp( ii) iii) iv) v)
22.	23/03/2021	Expectra 12 NPC consist of five directors and are responsible to run the PMA.	Notes forwarded per email by Mr. K Roux.	<ul> <li>a) Expectra receives water and electricity accounts monthly from PLM.</li> <li>b) PMA is being used by a number of business aircrafts on a daily basis and the passengers could be directors of private companies and can vary from two to six people.</li> <li>c) There are no scheduled flights that land at civil but a lot of private operators make use of the airfield daily.</li> <li>d) Smaller Airlines, like Federal Air / Gen Air does make use of PMA because of the convenience off the Airport.</li> <li>e) The Fire station right next to the field is apparently not active.</li> </ul>	UKU-J noted





- Prepare Preliminary cost estimations,
- implementation options, projected cashflows and possible program.
- ecialists input will be provided:
- Transport, Traffic & Geometric Engineering investigations.
- Basic Town Planning related matters.
- Land Survey.
- Flood Line Determination.
- Desktop Environmental Input.

JV indicated that the information would be into the PLM-CITP report.

		TABI	E 12.2: SUMMARY OF OUTCOMES	FROM THE 2023/2028 PLM-CITP CONSULTATIVE PROCESS	
Nr.	Date	Stakeholders Present (UKU-JV attended all sessions)	Type of Meeting	Feedback and/or Issues Raised	
				<ul> <li>f) SAP Air Wing is active at the PMA and they are based on Civil.</li> <li>g) The runway is 2.2 Km in length (08 / 26) and in a good condition.</li> <li>h) There are 42 Aircraft Hangers in total off various sizes and just about all are occupied.</li> <li>i) The Civil Aviation Authority does inspection at PMA every Year in order to renew the license.</li> <li>j) Expectra 12 NPC consist of five directors and we are responsible to run the PMA.</li> <li>k) There is a full-time person in charge off the Avgas / Jet A 1 installation to supply that to visiting Aircrafts with fuel.</li> </ul>	
23.	31/03/2021	SANTACO Capricorn Region (There were 2 meetings, at 10:00 (SANTACO Only) & 14:00 (with all affiliated Associations)	Feedback related to data surveys	<ul> <li>a) Representative of SANTACO Capricorn Regions were pleased with the results of collected data and it was indicated that whatever the challenges UKU-JV might encounter, they would be available to assist with the corrections.</li> <li>b) The representatives requested soft copy of the data to be presented to the members.</li> <li>c) The Taxi Industry Experienced Operational Challenges during Covid-19 in terms of hitchhikers and illegal operations for Long Distance Taxi Associations. They have requested UKU-JV to convey the message to the Law-enforcement to intervene matter</li> </ul>	a) Mr cha sul b) It v US
24.	31/03/2021	<ul> <li><u>The following stakeholders</u></li> <li><u>attended the consultation</u></li> <li><u>session:</u> <ul> <li>a) SANTACO Capricorn</li> <li>Region.</li> </ul> </li> <li>b) Molepo Local &amp; Long-Distance TA.</li> <li>c) Polokwane Local &amp; Long-Distance TA.</li> <li>d) Polokwane Germiston TA.</li> <li>e) RSA TA.</li> <li>f) Lebowakgo Taxi Owners Association.</li> <li>g) Alldays TA.</li> <li>h) United Mphahlele TA.</li> </ul>	Feedback related to data surveys	<ul> <li>a) Mr. Tshidavhu, Technical Engineer of UKU-JV briefed members of SANTACO Capricorn Region regarding the Surveys that were conducted by UKU-JV as was agreed and UKU-JV presented the data to verify the results by the members.</li> <li>b) It was indicated the types of surveyors were conducted from various in Polokwane: <ul> <li>i) Rank Utilization</li> <li>ii) Route Utilization</li> <li>iii) Facility Inventory</li> <li>iv) Commuter Interview</li> </ul> </li> <li>c) It was reported that UKU-JV collected the Data within the jurisdiction of Polokwane per clusters were as follows: <ul> <li>i) Aganang Cluster</li> <li>ii) City Cluster</li> </ul> </li> </ul>	The v Chapt





r. Mafafo from UKU-JV reported that all the nallenges we have encountered during surveys ould be added as part of CITP report and be ubmitted to PLM.

was agreed that UKU-JV would organise the SB to be distributed to the stakeholder.

verified information was incorporated as part of oter 3, Transport Register, of the PLM-CITP.

		TABI	LE 12.2: SUMMARY OF OUTCOMES	FROM THE 2023/2028 PLM-CITP CONSULTATIVE PROCESS	
Nr.	Date	Stakeholders Present (UKU-JV attended all sessions)	Type of Meeting	Feedback and/or Issues Raised	
		<ul> <li>i) Ikageng TA.</li> <li>j) Polokwane Sibasa TA.</li> <li>k) Zebediela Local &amp; Long- Distance TA.</li> <li>l) Boyne TA.</li> <li>m) Bahlaloga TA.</li> <li>n) United Zebediela TA.</li> <li>o) Bakone TA.</li> <li>p) Marothong TA.</li> <li>q) Maja-Chuene TA.</li> <li>r) Letswatla TA.</li> </ul>		<ul> <li>iii) Dikgale / Sebayeng cluster</li> <li>iv) Mankweng Cluster</li> <li>v) Molepo / Chuene Maja Cluster</li> <li>vi) Moletjie Cluster</li> <li>vii) Seshego Cluster</li> <li>d) It was reported that members were affected by Covid-19 and had restricted (working with shifts).</li> <li>e) It was reported that Local Taxi Associations were not active due to the Covid-19 restricted movement periods and members endorsed to assist UKU-JV with the verification of results.</li> <li>f) Long distance Taxi Association were complained about Hitchhikers and illegal operations that kill their operations and requested the Law-enforcement to intervene.</li> </ul>	
25.	14/04/2021	Mankweng TA EXCO	Feedback related to data surveys.	<ul> <li>a) The Mankweng TA EXCO reported that were very pleased with the collection of data because it did correspond with operational challenges due to Covid-19.</li> <li>b) Vehicles operated in shifts due to Covid -19 in order to manage the business.</li> <li>c) Some Local Taxi Associations reported that there were days that drivers did not get even a single trip due to the Covid-19.</li> <li>d) Members requested PLM to develop the rank structures and toilet facilities at: <ul> <li>i) Mmadiga</li> <li>ii) Dikgale</li> <li>iii) Ga- Mphaka</li> <li>iv) Segopye.</li> </ul> </li> <li>e) Mr. Kgasago requested PLM to maintain the rural routes which were not in a good condition.</li> </ul>	a) Mr we su PL
26.	21/04/2021	Capricorn Metered TA.	Feedback related to data surveys.	<ul> <li>a) Members reported that PLM do not allow for dedicated parking for metered, taxi's which was not supportive for their business and passengers. e.g., Shoprite Centre.</li> <li>b) Members agreed with UKU-JV that the collected data for the metered Taxi's was a true reflection of the operations.</li> <li>c) Members were struggling to get the Operating Licenses and were waiting for response for LDTCS.</li> </ul>	a) M ra Pl
27.	05/05/2021	GAAL represented by:	Consultation concerning PLM-CITP	<ul><li>a) During the visit the Polokwane International Airport:</li><li>i) Was operationally closed due to Covid-19.</li></ul>	All chatter the de





r. Mafafo, UKU-JV reported that all challenges ere mentioned and encountered during the urveys would be added into the CITP report of LM.

Ir. Tshidavhu, UKU-JV reported that all matters aised would be added into the CITP report of PLM.

nallenges identified on site with Operator and letailed operational information were

		TABI	LE 12.2: SUMMARY OF OUTCOMES I	FROM THE 2023/2028 PLM-CITP CONSULTATIVE PROCESS	
Nr.	Date	Stakeholders Present (UKU-JV attended all sessions)	Type of Meeting	Feedback and/or Issues Raised	
28.	05/05/2021	<ul> <li>a) Mr. M Mkhabele.</li> <li>b) Mr. T Maphiswana (Acting CEO).</li> <li>c) Mr. Netshifhefhe (Flight Department).</li> </ul>	The following are relevant:	<ul> <li>ii) Substation 113 &amp; 114, were not operating due to the cable theft.</li> <li>b) Mr. Netshifhefhe from GAAL supported to collect the information.</li> <li>c) The following points were visited in order to gather the information of the facilities inventory: <ul> <li>i) The Taxi way 1A (ECO).</li> <li>ii) The Runway.</li> <li>iii) Taxi Delta, Alfa.</li> <li>iv) Compass Swing.</li> <li>v) Fire Simulation Centre.</li> <li>vi) The hangers.</li> <li>vii) The parameter fencing.</li> <li>ix) The generator.</li> <li>x) The maintenance Workshop.</li> <li>xi) Fuel Farm.</li> <li>xii) Office Block.</li> </ul> </li> </ul>	a) Regist
20.	00/00/2021	a) PLM, Transportation and Services Directorate.	<ul><li>a) Purpose of Presentation.</li><li>b) Summary.</li><li>c) Proposed Options for Site</li></ul>	<ul> <li>aspects required to study the "Truck Inn", including:</li> <li>i) Existing Reports.</li> <li>ii) Town Planning.</li> <li>iii) Transport, Traffic and Geometric Demand Analysis.</li> </ul>	i) i)
		<ul> <li>b) PLM, Chief Security.</li> <li>c) PLM, Disaster Management.</li> <li>d) PLM, Town Planning.</li> <li>e) PLM, Fire Operational.</li> <li>f) PLM, Roads and Transportation.</li> <li>g) AMCE, Project Manager: Systems &amp; Operations.</li> <li>h) AMCE, Project Leader: PIRPTS.</li> </ul>	<ul> <li>Layout.</li> <li>d) Proposed Town Planning Layout Options.</li> <li>e) Costing.</li> <li>f) Recommendations.</li> <li>g) Way Forward.</li> <li>h) Input, Answers and Questions</li> </ul>	<ul> <li>iv) Flood Line Investigation.</li> <li>v) Environmental Aspects.</li> <li>vi) Civil and Electrical Engineering Issues.</li> <li>vii) Infrastructure Costs.</li> <li>b) Proposed Site Layout Options: <ul> <li>i) There are currently two proposals for the truck inn layout (Option 1 and Option 2).</li> <li>ii) The preferred layout is Option 2 it can accommodate 163 trucks, 46 trucks additional to Option 1.</li> <li>iii) Both proposals contain the same land uses, but the</li> </ul> </li> </ul>	iii) iv)
				sizes of the various components differ.	V)





porated as part of Chapter 3, Transport ter, of the PLM-CITP.

## commendations:

- That the proposed development is technically viable in terms of the requirements for approval for such a development.
- That the proposed development is essential for accommodating truck drivers in the Polokwane Local Municipal area.
- That the anticipated number of truck drivers and other traffic intercepted from the surrounding roads would appear to be able to make the proposal viable, as these vehicles would be passing an attractive retail area.
- That the Retail, Commercial and Residential proposals in Option 2 be explored further to ensure viability and profitability of such a development.
- The SDP should, however, be carefully drawn up to ensure minimum potential mitigation measures which could cause undue delay.

		TABI	LE 12.2: SUMMARY OF OUTCOMES	FROM THE 2023/2028 PLM-CITP CONSULTATIVE PROCESS		
Nr.	Date	Stakeholders Present (UKU-JV attended all sessions)	Type of Meeting	Feedback and/or Issues Raised		
						vi)
						vii)
						viii)
					b)	Wa i)
						ii)
29.	12/05/2021	Great North Transport	Data Collection, PLM-Bus Terminal.	<ul> <li>Physical visit at PLM Bus Terminal / Facility, with Great</li> <li>North Transport representative, to identify their operational challenges at the Terminal.</li> <li><u>Amongst other two key issues were highlighted:</u></li> <li>a) The ticket sales offices were not in good condition. (PLM property)</li> <li>b) The Public Information (PI) System was not working. due</li> </ul>	a)	All was Reg
30.	12/05/2021	Madodi Bus Service	Data Collection, PLM-Bus Terminal.	<ul> <li>a) Physical visit at PLM Bus Terminal / Facility, with Mododi Bus Service's representative, to identify their operational challenges at the Terminal.</li> <li>b) The Public Information (PI) System was not working, due to the cable theft.</li> </ul>	a)	All was Reg
31.	31/05/2021	Bahwaduba Bus Service.	Data Collection, PLM-Bus Terminal.	<ul> <li>a) Physical visit at PLM Bus Terminal / Facility, with Bahwaduba Bus Service, to identify their operational challenges at the Terminal.</li> <li>b) The Public Information (PI) System was not working, due to the cable theft.</li> </ul>	a)	All was Reg
32.	02/06/2021	Great North Transport	Data Collection on Site visited various places located outside CBD	<ul> <li>a) Physical visits at Bus Facilities outside the CBD of PLM, with Great North Transport, to identify their operational challenges at these Facilities.</li> <li>b) Shelter, toilet facilities for passengers and condition of unpaved road were identified the key problems.</li> </ul>	a)	All Op Tra





- As per the Environmental Report, the process of the demolition of the existing farmhouse should not be delayed as this could cause undue delay later.
- This facility can be linked in future with the Proposed Logistic Centre at Polokwane International Airport.
- A management and maintenance plan should be prepared and costed.
- ay forward:
- A detailed economic viability study is to be conducted by investigating the following more extensively:
- A Phase 2 Scoping Report is to be commissioned to follow this Inception Report informed by the above processes.
- challenges identified on site with Operator is incorporated as part of Chapter 3, Transport gister, of the PLM-CITP.

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the collected data at the various Facilities with berator were incorporated as part of Chapter 3, ansport Register, of the PLM-CITP.

		TABL	E 12.2: SUMMARY OF OUTCOMES	FROM THE 2023/2028 PLM-CITP CONSULTATIVE PROCESS	
Nr.	Date	Stakeholders Present (UKU-JV attended all sessions)	Type of Meeting	Feedback and/or Issues Raised	
33.	13/06/2021	Bahwaduba Bus Service.	Data Collection on Site visited various places located outside CBD.	<ul> <li>a) Physical visits at Bus Facilities outside the CBD of PLM, with Great North Transport, to identify their operational challenges at these Facilities.</li> <li>b) Shelter, toilet facilities for passengers and condition of unpaved road were identified the key problems.</li> </ul>	a) All Op Tra
34.	14/06/2021	Kopano Bus Service	Data Collection on Site visited various places located outside CBD.	<ul> <li>a) Physical visits at Bus Facilities outside the CBD of PLM, with Great North Transport, to identify their operational challenges at these Facilities.</li> <li>b) Shelter, toilet facilities for passengers and condition of unpaved road were identified the key problems.</li> </ul>	a) All Op Tra
35.	07/06/2021	Transnet / PRASA	Telephonic Discussions with Ms. Maggie	<ul> <li>a) The following were discussed:</li> <li>b) It was reported that the fruits were transported seasonally.</li> <li>i) <u>Fruits Schedule</u> <ul> <li>Transported from Tzaneen to Durban twice per week (Sunday &amp; Thursday);</li> <li>Bela-Bela to Durban (only on Tuesdays); and</li> <li>Polokwane to Bela-Bela Tries per week (Monday, Tuesday and Friday).</li> </ul> </li> <li>ii) <u>Floor Star Schedule</u> <ul> <li>Floor star transported tries a week (Monday, Wednesday and Friday);</li> <li>From Pienaars River to Durban; and</li> <li>Hoedspruit to Musina.</li> </ul> </li> <li>iii) <u>Containers Schedule</u> <ul> <li>It was mentioned that containers transported once a week (Monday to Friday).</li> </ul> </li> <li>iv) <u>Salfa Schedule</u> <ul> <li>Copper transported tries a week from Zambia to Hoedspruit (Monday, Wednesday and Friday).</li> </ul> </li> </ul>	a) All





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I required information was collected very well.

		TABI	LE 12.2: SUMMARY OF OUTCOMES I	FROM THE 2023/2028 PLM-CITP CONSULTATIVE PROCESS	
Nr.	Date	Stakeholders Present	Type of Meeting	Feedback and/or Issues Raised	
		(UKU-JV attended all			
		sessions)			
				Fuel transported from Sasolburg to Mokonane	
				once a week	
36.	21/01/2022	<ul> <li><u>The following stakeholders</u> <u>attended the consultation</u> <u>session:</u></li> <li>a) PLM, Transportation and Services Directorate.</li> <li>b) PLM, Acting Manager Corporate Geo-Information.</li> <li>c) PLM, Divisional Officer Fire Safety.</li> <li>d) PLM, Enterprise Development Specialist.</li> <li>e) PLM, Roads &amp; Transport Operations.</li> <li>f) PLM, Control Centre.</li> <li>g) PLM, Manager By-Law Enforcement.</li> <li>h) AMCE, System Planning Leeto la Polokwane.</li> <li>i) AMCE, Project Leads.</li> <li>j) LDTCS, Director.</li> <li>k) LDTCS, Admin Officer.</li> <li>l) LDTCS.</li> <li>m) TNS, Control Centre.</li> </ul>	Consultation with Transport Role Players to engage on following: a) To present the 2023/2028 PLM- CITP Final Draft. b) To highlight some key matters. c) To allow key role-players to actively participate and provide input and proposals. d) To indicate the way forward.	<ul> <li>a) The following were presented: <ul> <li>i) Content of CITP.</li> <li>ii) Overview of Documents included in CITP.</li> <li>iii) 2023/2024 Projects as part of IDP.</li> <li>iv) New Projects Identified as part of 2023/2028 CITP.</li> <li>v) Way forward.</li> </ul> </li> <li>b) The PLM amongst other includes: <ul> <li>i) A Detailed Operating License Plan (OLP)</li> <li>ii) Guideline for Taxi Industry Operating Companies</li> <li>iii) Detailed Appendices</li> </ul> </li> <li>c) The PLM-CITP is a specific sector plan that feeds into the Integrated Development Plan and ultimately form part of the Provincial Land Transport</li> </ul>	a) The i) ii) iii) v) v)
37.	17/02/2022	Presentation made by Transport and services Directorate to PLM Transport Councillors	<ul> <li><u>Consultation with Transport Role</u> <u>Players to engage on following:</u></li> <li>a) To present the 2023/2028 PLM- CITP Final Draft.</li> <li>b) To highlight some key matters.</li> <li>c) To allow key role-players to actively participate and provide input and proposals.</li> <li>d) To indicate the way forward.</li> </ul>	<ul> <li>a) The following were presented: <ul> <li>i) Content of CITP.</li> <li>ii) Overview of Documents included in CITP.</li> <li>iii) 2021/2020 Projects as part of IDP.</li> <li>iv) New Projects Identified as part of 2023/2028 CITP.</li> <li>v) Way forward.</li> </ul> </li> <li>b) The PLM amongst other includes: <ul> <li>i) A Detailed Operating License Plan (OLP).</li> <li>ii) Guideline for Taxi Industry Operating Companies.</li> <li>iii) Detailed Appendices.</li> </ul> </li> <li>c) The PLM-CITP is a specific sector plan that feeds into the Integrated Development Plan and ultimately form part of the Provincial Land Transport</li> </ul>	b) The i) ii) iii) iv) v)





e following relevant:

- Two weeks were allowed to obtain comments from Officials.
- PLM Council should approve.
- LPDTC liaison and approval process, including MEC.
- The existence of document needs to be advertised and allow members of public to comment.
- Annual update.

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- The existence of document needs to be advertised and allow members of public to comment.
- Annual update.

		TABI	E 12.2: SUMMARY OF OUTCOMES	FROM THE 2023/2028 PLM-CITP CONSULTATIVE PROCES	S
Nr.	Date	Stakeholders Present (UKU-JV attended all sessions)	Type of Meeting	Feedback and/or Issues Raised	
38.	24/02/2022	The following stakeholdersattended the consultationsession:a)PLM, Transportation and Services Directorate.b)PLM, Clusters Assistant Management.c)PLM, Clusters Assistant Chief Traffic.d)PLM, Assistant Chief Traffic.d)PLM, Legal Advisor.e)PLM, Control Centre.f)PLM, Chief Customer Officer.g)PLM, Chief Marketing Officer.h)PLM, Marketing Assistant 	OLP Workshop for PLM OLP Committee	Consultation with Transport Role Players to engage on following:a) Introduced project to key Role-players.b) Operating licencesc) Access to public transport facilitiesd) Operating licences for non-regular modes of transporte) Conditions for evaluation of operating licencesf) Operating licences administration systemg) Enforcement strategiesh) Conclusion	It was of unders respon a) The Dep Lice b) The Inte c) The d) The Res e) The f) The





- observed that the PLM OLP Committee stood the following by means of their nses:
- e need for integration between various
- epartments of PLM in order to issue Operating censes.
- e difference between Local versus
- erprovincial versus cross border Operating enses, and their role on Local level.
- e principle of demand versus supply.
- e interaction with the Limpopo Provincial egulatory Entity.
- e challenges related to e-hailing.
- e need for up-to-date information.