DEPARTMENT OF TRANSPORT

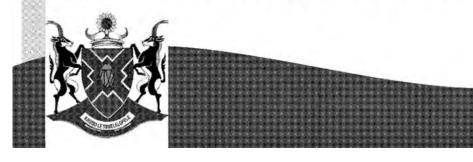
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DR KENNETH KAUNDA DISTRICT MUNICIPALITY DISTRICT INTEGRATED TRANSPORT PLAN (2020 – 2025)

NORTH WEST PROVINCIAL GOVERNMENT DEPARTMENT COMMUNITY SAFETY AND TRANSPORT MANAGEMENT



No. 43934 49

QUALITY ASSESSMENT

PROJECT NAME:

Dr Kenneth Kaunda District Municipality: Development of Implementation Strategies and Operational Plans of the Integrated Transport Plan

PROJECT NO: MD1634 (T01.PTA.000623)

DATE: 6 August 2020 REPORT STATUS:

Final

CARRIED OUT BY:

Royal HaskoningDHV

COMMISSIONED BY:

Department Community Safety and Transport Management (DCSTM) North West Provincial Government

AUTHOR:

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CLIENT CONTACT PERSONS:

Mr Tsholofelo Maseng Ms Tebogo Molapo

SYNOPSIS:

This report provides the District Integrated Transport Plan (DITP) for the Dr Kenneth Kaunda District Municipality for 2020/2025. It is based on the DoT Minimum Requirements for the Preparation of Integrated Transport Plans as gazetted on 29 July 2016 and includes: Transport Vision and Objectives, Transport Register, Summary of the Spatial Development Framework, Overview of Transport Needs Assessment, Public Transport Plan, Transport Infrastructure Strategy, Travel Demand Management (TDM) Strategy, Non-motorised Transport Plan, Freight Transport Strategy, Other Transport-Related Strategies, Funding Strategy, Summary of Project Proposals, Budgets and Programmes and Stakeholder Consultation.

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QUALITY VERIFICATION

This report has been prepared under the controls established by a quality management system that meets the requirements of ISO 9001: 2000.

EXECUTIVE SUMMARY

Background

The Department of Community Safety and Transport Management (DCSTM)in the North West Province has appointed Royal Haskoning DHV(RHDHV) in May 2016 to complete the third generation District Integrated Transport Plan (DITP) for the Dr Kenneth Kaunda District Municipality (DrKKDM) for the period 2020 to 2025.

Dr Kenneth Kaunda District Municipality is a Category C municipality situated within the North West Province. The three local municipalities contained within the District are:

- JB Marks LM (NW405);
- Matlosana LM (NW403); and
- Maguassi Hills LM (NW404).

The N12 Treasure Corridor serves as the main access route and development axis within the District. The N12 Corridor potentially creates future industrial, commercial and tourism developments. Gold mining and agriculture are the dominant economic activities in the district, with Potchefstroom and Klerksdorp serving as the main economic nodes.

This DITP has been prepared for Dr Kenneth Kaunda District Municipality in terms of Section 36(1) of the National Land Transport Act 2009, (Act No. 5 of 2009) (NLTA). The DITP is based on the minimum requirements as set out in the Technical Transport Planning Guidelines for a District Integrated Transport Plan (DITP), to be prepared by Schedule 1 municipalities, as well as Minimum Requirements for the Preparation of Integrated Transport Plans (Government Gazette 40174, 29 July 2016, Notice 881).

The development of the DITP was integrated with the development of the PLTF for the North West Province, as well as the CITP of J.B. Marks LM, and the LITP's of the City of Matlosana LM and Maquassi Hills LM. An IDP was developed for the DrKKDM in 2017, which guided the DITP. The DITP serves as the transport component of the IDP.

The DITP addresses the following components:

- Chapter 1: Introduction
- Chapter 2: Transport Vision and Objectives
- Chapter 3: Transport Register
- Chapter 4: Spatial Development Framework
- Chapter 5: Transport Needs Assessment
- Chapter 6: Public Transport Plan
- Chapter 7: Transport Infrastructure Strategy
- Chapter 8: Travel Demand Management
- Chapter 9: Freight Transport Strategy
- Chapter 10: Non-Motorised Transport Strategy
- Chapter 11: Learner Transport Strategy
- Chapter 12: Institutional Capacity
- Chapter 13: Rural Transport
- Chapter 14: Implementation Budget and Programme



Key findings and strategies of the DITP are provided below:

Transport Needs

Various transport needs have been summarised from the Local Municipalities' Integrated Transport Plans. In view of the co-ordinating and strategic role of the DM, it is proposed that masterplans for Roads, Freight Transport, Non-Motorised Transport, Learner Transport and Rural Transport are conducted by the DM.

Public Transport Plan

The DM is well served with mini-bus taxi routes and services. There are more than 2 039 legally registered mini-bus taxi vehicles, 1 283 operational members, 2 011 operating licences issued of which 1 976 have been issued for commuter services, and 1 004 for long-distance services. There is a total of 112 learner transport operators serving 78 schools with 164 vehicles.

There is no scheduled formal public bus service operating in the District, except for private scholar buses contracted by the Department of Education, the Department of Transport and private services arrange by individual schools. There are also many private operators providing local and long-distance services on a private hire basis. Long distance bus services operate along the N12.

There is one inter-provincial rail line going through the District running between Johannesburg and Cape Town. Long distance passenger services, as well as freight services are operated on this line. Passenger rail services utilise stations at Potchefstroom and Klerksdorp. The freight railway line linking Potchefstroom to the West Rand (Carletonville), passes within close proximity to the Potchefstroom Airport.

The supply of public transport vehicles and operating licences has been matched with the passenger demand by following a corridor approach. It is proposed that:

- New applications to be based on snap surveys of relevant routes.
- A moratorium be implemented for the issuing of new OLs, pending the proper balancing of supply & demand.
- Operators are encouraged through negotiations to move from over-traded areas to new areas or less supplied routes.
- Law enforcement is addressed as critical for the policing of public transport operating licences.
- On over-traded routes/areas the stipulation of the NLTA whereby operating licences can be invoked, if not being operated for 180 days, should be implemented and strictly applied.

Most routes are already over-traded, and no more additional operating licences should be granted on such routes. There are, however, a few of the individual routes where applications for additional operating licences could, under certain circumstances, still be granted.

Passengers are generally very concerned about the safety and security of the public transport system, and this aspect needs to be addressed as part of the overall road safety and security programme. Although the minibus taxi industry has carried out a major reform to become legal by converting permits to operating licences and to re-capitalize, it seems that illegal operations still occur and impact on the quality of service.



Non-motorised Transport (NMT)

The North West Province (PLTF), emphasises NMT as a key mode of transport to be addressed. Key strategies are:

- Develop and provide NMT and road safety education, as well as awareness campaigns at schools and major employers;
- Provide walk and cycle routes with lighting within 5 km of social facilities such as schools, universities, municipal pay points, office blocks and industries;
- Provide walkways to main PT facilities within a 3 km radius of the facility;
- Provide proper sidewalks that are universally accessible along all CBD streets; and
- Provide cycle paths and walkways between the previously disadvantaged residential areas and high-density employment areas, schools, and social facilities.

Transport Infrastructure

Transport Infrastructure is one of the main structuring elements of the spatial development of the Dr Kenneth Kaunda DM. The DM's SDF was used as the guiding framework for the infrastructure strategy and projects.

The DrKKDM has a well-developed transport infrastructure, consisting of a paved and unpaved road network, rail lines and stations, mini-bus taxi facilities, NMT facilities and airports. However, maintenance and rehabilitation are lagging behind, and this needs to be the first priority. New infrastructure should not be built unless there are funds for maintenance and operations. There are also various inefficiencies; the road network is over-utilised whilst the rail infrastructure is under-utilised. Furthermore, the N12 weighbridge is not in an operational condition.

There are two main infrastructure strategies:

- Maintenance and rehabilitation of existing infrastructure; and
- Development of new infrastructure to support and facilitate the SDF and Strategic objectives of the DrKKDM IDP.

Responsibility for the maintenance and upgrading of the road network is divided amongst various authorities, which provides a major challenge to co-ordinate priorities. SANRAL is responsible for 7.9% of the road length, the North West Province for 32.4%, the local municipalities for the majority of roads (59.6%), whilst the DM is only responsible for 0.1% of the roads.

The following key infrastructure strategies will have a major impact on the spatial structure of the municipality.

Public Transport:

Develop the IPTN with route network and upgrade roads serving public transport routes, including lay-by's and inter-modal facilities. The North West Province recently initiated the development for an Integrated Public Transport Network Plan (IPTN) for the D KKDM. This will be a key plan to establish a high quality public transport system for all the municipalities in the District.



Roads:

- Roads master plan for the whole Municipal area and its phased implementation.
- Development of proposed by-passes around urban areas in a way that will not impact negatively on the viability of the CBDs.

NMT:

- Provision of NMT facilities serving economic nodes and social facilities.
- Development of a Cycle Master Plan for whole Municipality.

Freight:

Determine routes for large heavy vehicles by-passing the CBDs on the existing road network, with limited upgrading.

Traffic:

- Identify congested / unsafe intersections and improve capacity and safety.
- Parking supply and demand study and policy in CBDs.
- Improve transport efficiency and safety to access major developments

Freight Transport

The following freight projects have been formulated:

- Define road freight routes for abnormal loads (Local Municipalities/NW Province);
- Define road freight routes for hazardous material (Local Municipalities /NW Province);
- Revise and refine the Alternative Freight Route Map (Local Municipalities /NW Province);
- Update by-laws relating to heavy vehicle traffic (Local Municipalities);
- Feasibility study of the proposed site for an overnight facility for heavy vehicles (at the
 intersection of Seraphina Street and N12 or along the N12 at the intersection with the
 future N12 bypass) (Sanral);
- Formulate an overload control plan (NW Province);
- Conduct a feasibility study for an inter-modal freight hub (NW Province/Sanral)
- · Operationalise the N12 Weigh-Bridge (NW Province); and
- Upgrade freight routes for heavy vehicle traffic (NW Province on provincial routes, Sanral on national routes, Local Municipalities on municipal roads).

Learner Transport

At the local municipality level, the learner transport strategy focuses on local road access, traffic management, road safety, NMT facilities, stops and lay-bys.

The following strategies have been proposed for the local municipalities:

- Provide walk and cycle routes with lighting within 1 km of schools along main access roads;
- Provide cycle paths and walkways between the previously disadvantaged residential areas and schools, amongst other social facilities; and
- · Provide lay-bys, shelters, and pedestrian crossing facilities at schools.

At the District Municipality level, the focus should be on:

Planning and co-ordinating:

- As part of the DrKKDM's IPTN development, conduct surveys of the Learner Transport demand and design public transport routes and services to meet the demand;
- Consider modal integration in all planning aspects; and
- Ensure learner safety in all designs.

Administration and monitoring of the system:

- Spot checks to ensure that learner safety remains a top concern;
- Proper management of contracts and remuneration; and
- Deal with applications speedily and efficiently.

Institutional Reform

The Municipality does not have adequate capacity, or the structure to deal with all the transport and public transport functions required by the NLTA. In terms of Structure, the functions of technical departments in the municipalities involving transport planning, public transport, traffic, construction and asset management, should ideally be established under one department, such as under the Roads and Storm-water department. This department then needs to be renamed. In view of limited funding, it is proposed that a feasibility study first be conducted to determine the benefits of establishing a transport authority, the risks and challenges, as well as required funding. Furthermore, the study should propose the best structure, number of posts and functions, as well as the process of establishing a transport authority.

Rural Transport Strategy

The majority of the North West Province is considered to be rural, where agriculture is the main source of employment. This is also true for the District Municipality. This results in poor access to basic services and poor access to the economy. High levels of poverty are evident within the population, who relies on natural resources and a travelling labour system as main forms of survival. The objective of the Rural Transport Strategy is to provide mobility to the rural population, to enable them to access economic opportunities, education and health institutions, as well as other services and amenities.

Various strategies and projects benefitting rural communities are as follows:

- Feasibility study for the formalization of villages with proper roads;
- Provision of new roads or upgrading of existing access roads to villages, as well as internal roads;
- Grading of gravel roads;
- Provision of street lights and high mast lights;
- Provision of transport for scholars;
- Determination of demand for transport from rural area, as well as a develop a plan to provide transport services;
- · Provision of directional signs; and
- Fencing and gates to prevent animals crossing the roads.

Instead of each Municipality conducting its own feasibility study, demanding estimation and providing transport infrastructure and services on an ad-hoc basis, it is proposed that the DM develops a rural transport master plan for the entire District, including determination of projects, costs and a budget programme.



The DM should further:

- Establish a rural transport forum at district level to determine the needs of rural communities, and to involve them in the planning and implementation of transport infrastructure and services:
- Measure and report on the performance of rural public transport services; and
- Support the NW Province in its initiatives to improve rural transport.

Implementation Programme

The primary sources of infrastructure finance available to municipalities, are internally generated funds and transfers from National Government. However, these sources are insufficient to meet the demand for new infrastructure, in addition to the operation and maintenance of existing infrastructure. As a result, it is necessary for municipalities to explore ways to leverage private funding sources to promote the sustainable development of infrastructure.

Currently, there is no budget provision for transport related activities except for the Rural Roads Asset Management Systems' conditional grant, funded by the national DoT since the 2014/15 financial year, due to the financial challenges of the district municipality. It is proposed that the Five-Year Budget Programme be determined when funding does become available in the future, based on the projects identified for the DITP as indicated below.

The available MTREF and DORA budgets are R 3.77 million and R 177 million respectively for 2017/18, yielding a total budget of R181,2 million. The planned transport project budget according to the 2017IDP for Dr Kenneth Kaunda DM is R 252 million and exceeds that of the available budgets listed in DORA and MTREF.

In view of the budget constraints, only a limited number of new projects are proposed - mostly master plans to integrate transport plans across the District. The development of a District Integrated Public Transport Network Plan (IPTN) has been initiated recently, and the implementation of the IPTN will be a priority once funding can be sourced. The proposed additional District projects amounts to R15 million and are listed below:

- Roads Master Plan
- NMT Master Plan
- Freight Transport Master Plan
- Learner Transport Master Plan
- Rural Transport Master Plan
- Implementation of IPTN Plan

ADOPTION BY THE DR KENNETH KAUNDA DISTRICT MUNICIPALIT

DISTRICT MUNICIPALITY MAYOR

APPROVAL BY THE NORTH WEST DEPARTMENT OF COMMUNITY &TRANSPORT MANAGEMENT

MEMBER OF EXECUTIVE COUNCIL



TABLE OF CONTENTS

1	CHAPTER 1: INTRODUCTION	1-2
1.1	APPOINTMENT,	1-2
1.2	OVERVIEW OF DR KENNETH KAUNDA DISTRICT MUNICIPALITY	1-2
1.3	DITP LEGISLATION AND NATIONAL REQUIREMENTS	1-5
1.4	THE INTEGRATED TRANSPORT PLANNING PROCESS AND SCOPE OF THE LITP	
1.5	CONTENTS OF THE DITP	
1.6	PERIOD AND FREQUENCY OF PLAN PREPARATION	1-7
1.7	STATUS OF PLANNING IN DR KENNETH KAUNDA DISTRICT MUNICIPALITY	
1.8	INSTITUTIONAL AND ORGANISATIONAL STRUCTURE	1-7
1.9	DITP APPROVAL PROCESS	1-11
1.10	References	1-11

LIST OF FIGURES

FIGURE 1.1:	THE LOCATION OF THE DR KENNETH KAUNDA DISTRICT MUNICIPALITY WITHIN THE NORTH WEST PROVINCE	1-3
FIGURE 1.2:	THE LOCATION OF LOCAL MUNICIPALITIES WITHIN THE DR KENNETH KAUNDA DISTRICT MUNICIPALITY	1-4
FIGURE 1.3:	INTER-RELATIONSHIP BETWEEN TRANSPORT PLANS AND FRAMEWORKS	1-6
FIGURE 1.4:	TRANSPORT ORGANISATIONAL STRUCTURE OF DR KKDM	-10

1 CHAPTER 1: INTRODUCTION

1,1 Appointment

The North West Province Department of Community Safety and Transport Management (NWP DCSTM) appointed Royal HaskoningDHV (RHDHV) in May 2016 to compile the third generation District Integrated Transport Plan (DITP) for Dr Kenneth Kaunda District Municipality (DrKKDM) for the period 2020 to 2025.

1.2 Overview of Dr Kenneth Kaunda District Municipality

The Dr Kenneth Kaunda District Municipality (DrKKDM) is a Category C municipality situated within the North West Province. Geographically, DrKKDM is one of the smallest district municipalities within the province, comprising of 14% of the total surface area.

DrKKDM is one of four District Municipalities (DM's) within the North West Province, which includes:

- Dr Kenneth Kaunda DM
- Bojanala Platinum DM
- Ngaka Modiri Molema DM
- Dr Ruth Segomotsi Mompati DM

The location of the Dr Kenneth Kaunda District Municipality within the Province is shown in **Figure 1.1**. The location of the Local Municipalities within the District is shown in **Figure 1.2**.

The three local municipalities within DrKKDM, include:

- JB Marks LM (NW405)
- Matlosana LM (NW403
- Maquassi Hills LM (NW404)

The main cities/towns include Hartbeesfontein, Klerksdorp, Leeudoringstad, Makwassie, Orkney, Potchefstroom, Stilfontein, Ventersdorp, Witpoort, and Wolmaransstad.

The N12 Treasure Corridor serves as the main access route and development axis within the district. The N12 Treasure Corridor potentially creates future industrial, commercial and tourism developments.

Gold mining and agriculture are the dominant economic activities in the district. Ventersdorp focuses on agricultural activity, and Potchefstroom's economic activity is driven by services and manufacturing. A big economic role-player is the North-West University, which has its main campus in Potchefstroom. Potchefstroom's industrial zone focuses mainly on the industries of steel, food and chemicals. Wolmaransstad is situated along the N12 Treasure Corridor (SDI), which focusses on tourism development, agricultural development and protection of sensitive environmental areas (SEA). Klerksdorp is the centre for a large mining and agricultural economy and boasts one of the largest grain co-operatives in the world.

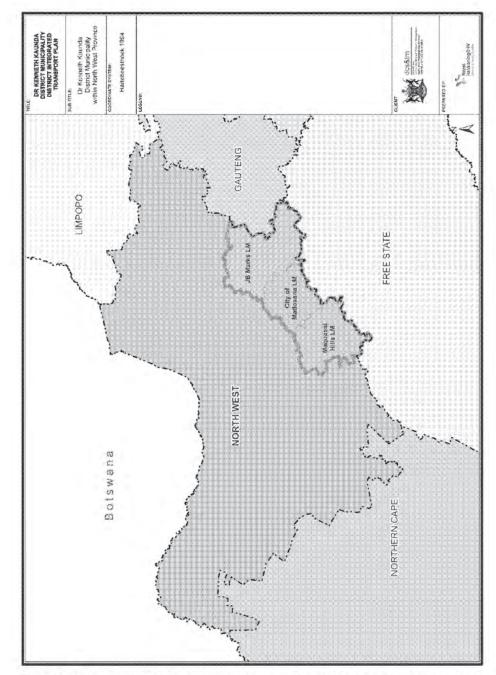


Figure 1.1: The Location of the Dr Kenneth Kaunda District Municipality within the North West Province

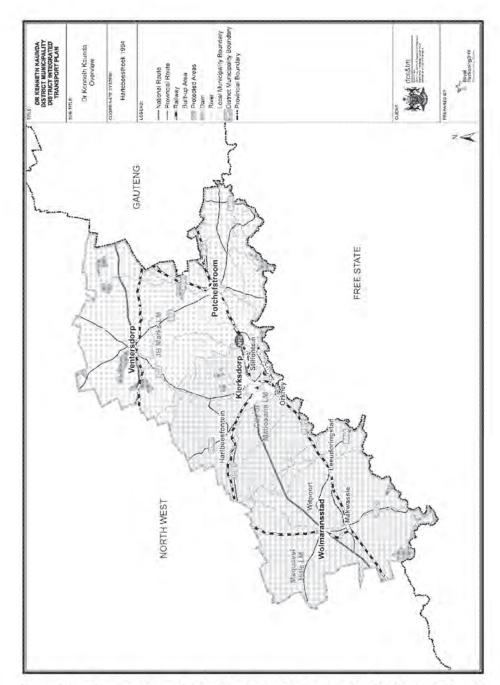


Figure 1.2: The Location of Local Municipalities within the Dr Kenneth Kaunda District Municipality

1.3 DITP Legislation and National Requirements

This DITP has been prepared for Dr Kenneth Kaunda District Municipality in terms of Section 36(1) of the National Land Transport Act 2009, (Act No. 5 of 2009) (NLTA). The DITP prepared for DrKKDM, are based on the minimum requirements as set out in the Technical Transport Planning Guidelines for a District Integrated Transport Plan (DITP), to be prepared by Schedule 1 municipalities, as well as Minimum Requirements for the Preparation of Integrated Transport Plans (Government Gazette 40174, 29 July 2016, Notice 881).

In addition, policies, legislation and planning documentation pertaining to air, road and rail transport have been scrutinised to determine their possible impact on the DITP. The following documents were consulted:

- The Spatial Development Framework
- Environmental Legislation and Plans
- The Local Government: Municipal Finance Management Act, 56 of 2003 (MFMA)
- The Local Government: Municipal Systems Act, 32 of 2000 (Systems Act
- The Local Government: Municipal Structures Act, 17 of 1998 (Structures Act)

1.4 The Integrated Transport Planning Process and Scope of the LITP

Figure 1.3 illustrates the overall planning process, and how the different plans relate to each other according to the DoT Minimum Requirements for the Preparation of Integrated Transport Plans, as gazetted on 29 July 2016.

The development of the DITP was integrated with the development of the PLTF for the North West Province, as well as the CITP of J.B. Marks LM and LITP's of the City of Matlosana LM and Maquassi Hills LM. The PLTF addresses cross-border transport with neighbouring Districts, whilst the Dr Kenneth Kaunda DITP addresses these issues with neighbouring local municipalities.

IDP's were developed for DrKKDM in 2017, which guided the DITP for DrKKDM. The DITP can be regarded as the transport component of the IDP. The IDP is compiled in terms of the Local Government Municipal Systems Act, 2000 (Act 32 of 2000), and is a process by which municipalities prepare a 5-year strategic development plan, which is reviewed annually in consultation with communities and all relevant stakeholders. This development plan serves as the principal strategic instrument which guides all planning, investment, development decisions, and coordinates programs and plans across sectors and spheres of government.

The project was conducted in six phases:

- Phase 1: Project Inception
- Phase 2: Status Quo Analysis
- Phase 3: Development of Strategies and Plans
- Phase 4: Project Identification and Budgeting
- Phase 5: Stakeholder Consultation

Phase 6: Report Writing and Project Management

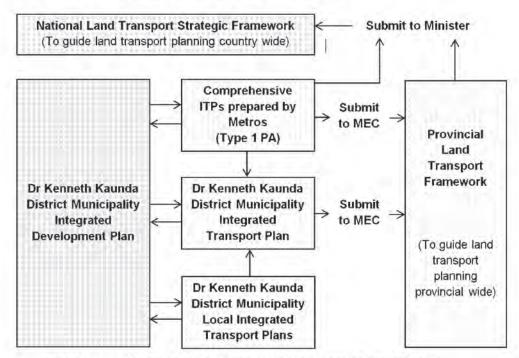


Figure 1.3: Inter-relationship between Transport Plans and Frameworks

The scope of services, as captured in the Terms of Reference (ToR), are as follows:

- Review the current DITP with the minimum requirements as set out in the latest Government Gazette;
- Review the current LITP's for Tlokwe and Ventersdorp with the minimum requirements as set out in the latest Government Gazette;
- Ensure compliance with the related national and provincial legislative requirements;
- Highlight the Vision, Goals and Objectives in the DITP and proposed programs;
- Synchronize, integrate and align with other transport related and development plans in the district and NW Province, including the PLTF;
- Integrate and align with other relevant national, provincial as well as district plans and programs; and
- Review programs that have been overtaken by events and integrate new transport programs in the district.

Historic transport data was obtained from the current LITP's, CPTR and PLTF. This information was subsequently updated with the latest CPTR (2016) survey data, visual assessments from site visits and information regarding problems and needs from the stakeholder consultation process.

1.5 Contents of the DITP

The contents of the DITP according to the DoT Minimum Requirements for the Preparation of Integrated Transport Plans (26 July 2016) are indicated herewith below:

- Chapter 1: Introduction
- Chapter 2: Transport Vision and Objectives
- Chapter 3: Transport Register
- Chapter 4: Spatial Development Framework
- Chapter 5: Transport Needs Assessment
- Chapter 6: Public Transport Plan
- Chapter 7: Transport Infrastructure Strategy
- Chapter 8: Travel Demand Management
- Chapter 9: Freight Transport Strategy
- Chapter 10: Other Transport-Related Strategies
- Chapter 11: Summary of Local Integrated Transport Plans
- Chapter 12: Funding Strategy and Summary of Proposals and Programmes
- Chapter 13: Stakeholder Consultation.

All aspects of the DITP must contain reference to stakeholder consultation and a separate Stakeholder Consultation File was prepared.

1.6 Period and Frequency of Plan Preparation

The DITP requires a complete overhaul, every five years, with an update regarding the list of projects, programmes and budgets annually.

The DITP is synchronised with the District, Municipal and NW Province financial years, as well as the latest Integrated Development Plan (IDP) program.

1.7 Status of planning in Dr Kenneth Kaunda District Municipality

Dr Kenneth Kaunda DM is required to develop a District Integrated Transport Plan (DITP), and the local municipalities each a Local Integrated Transport Plan (LITP).

Dr Kenneth Kaunda DM as well as the Local Municipalities do not have the resources and the capability to develop their own plans as they have small transport departments and very limited budgets. Therefore, the North West Province Department of Community Safety and Transport Management (NWP DCS&TM), has, in terms of the NLTA 5 of 2009, the responsibility to assist with the development of the DITP through financial and technical contributions.

1.8 Institutional and Organisational Structure

Political Management

- Executive Mayor B.E. Mosiane -Segotso
- Speaker D.P. Masiu
- Corporate Services M. Mojahi
- District Economic Development and Tourism H. Mbele
- Sports, Arts and Culture Z Mphafudi



- Financial Services M. Zephe
- Infrastructure & Development S. Valipathwa
- Community Services R. Martins

Administrative Management

Top Management

- Municipal Manager M.I. Matthews
- Director: Corporate Services L. Ralekgetho
- Chief Financial Officer J. Mononela
- Director: Roads and Infrastructure Development T. Chanda
- Director: District Economic Development and Tourism M Makhetha
- Director: Roads, Public Transport, Community Safety and Disaster Risk Management - S.M Lesupi
- Director: Municipal Health Services Vacant

Strategic Unit

- Office of the Executive Mayor S. Modise
- Office of the Speaker F. Canga
- Office of the Municipal Manager Vacant
- Internal Audit R. Seremo
- Communications Vacant
- Performance Management Systems K.L. Mokgoje
- Strategic and Integrated Development Planning T. Mokatsane
- Municipal Information Security Standards L.Kalolo

The DITP's preparation process has been guided by the following three structures:

- Provincial Transport Planning Forum (Chaired by the NWP DCSTM);
- Dr Kenneth Kaunda Inter-governmental Relations Forum (Chaired by Dr KKDM);
- Project Management Committee, and
- Technical Work Groups, including:
 - Public Transport
 - Freight Logistics
 - Roads Infrastructure
 - Law Enforcement
 - Aviation

The following DrKKDM departments were involved in the technical co-ordination meetings:

- Infrastructure
- Public Safety
- Community Services
- Local Economic Development
- Housing and Planning
- Finance

The following key stakeholders were consulted in the development of the DITP:

- Municipal Manager and technical staff of the municipalities;
- Councillors and general public through regional workshops tying in with the IDP process;
- Public transport operators including the Local Taxi Associations and the Dr KKDM Regional Taxi Council;
- Business stakeholders; and
- Developers Forum.

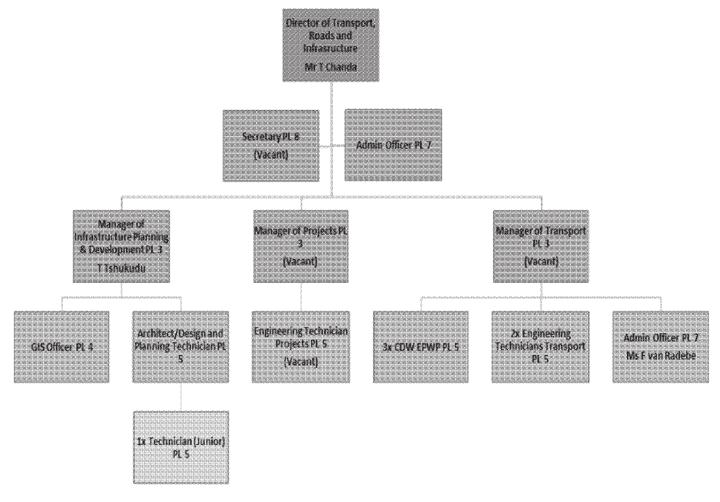


Figure 1.4: Transport Organisational Structure of Dr KKDM

1.9 DITP Approval Process

Part of the DITP process is the coordination with all the DITP stakeholders. In Chapter 5, stakeholder co-ordination is addressed in more detail.

The following DITP approval process is a legal requirement (DoT, 2016):

- It is important that the DITP public participation process be integrated with the over-arching IDP public participation initiatives;
- The DITP requires Council approval, and would need to pass through Mayoral and Portfolio Committees before this can be achieved;
- Following the approval of the DITP by the Council, it must be forwarded to the NWP DCSTM MEC for approval;
- The MEC gives approval in terms of Section 24(4)(b) of the NLTTA 2000, which requires that the province comments on and approves parts of the DITP only as it relates to procedures, financial issues that affect the province, provincial policy and principles, transport across the boundaries of the areas of planning authorities, inter-provincial transport and other matters provided for in provincial laws. The MEC may, before granting approval, request amendments to the DITP. Approval must be given by the MEC within 60 days. If no comment or approval has been received from the MEC within this time, the Planning Authority, i.e. the JBMLM, accepts the DITP as being approved by the MEC;
- Following approval by the MEC, the DITP must be forwarded to the Minister of Transport (National), for record keeping purposes, as well as for approval of the rail component of the plan; and
- When adopted by Council, the DITP will replace any previous ITP's.
 Furthermore, the DITP will be submitted to the MEC to be reflected in the North West Provincial Land Transport Framework (NW PLTF), as well as to the Minister for approval of the rail section of the plan.

1.10 References

The following references were used in the development of the DITP:

- Minimum Requirements for the Preparation of Integrated Transport Plans, Government Gazette No 40174, Notice No 881, 26 July 2016
- National Land Transport Act 2009, Act No. 5 of 2009
- SANRAL Road Management System including road planning for next 10 to 15 years and traffic volumes
- Passenger Travel Patterns from the National Household Travel Survey (NHTS) of SA Stats and DoT (2013) (this data incorporates population census data)
- STATSSA data on population (2001 and 2011 data)
- National Household Travel Surveys (2011)
- National, Provincial and Local Spatial Development Frameworks
- Vehicle ownership trends from the NHTS, eNATIS
- DoT, NATMAP 2050, Third Draft, October 2009
- DoT NATMAP 2015, Draft Summary Report, 2015.
- DrKKDM Transport Register (2017)
- JBMLM IDP 2017-2022
- The Provincial Land Transport Framework PLTF 2017-2021 (DCSTM, 2016)

No. 43934 67

Amongst others, the important policy and strategy documents in various spheres of government informing the preparation of the DITP include:

- National Development Plan (National Planning Commission, 2011
- White Paper on National Transport Policy (Department of Transport, 1996)
- National Land Transport Strategic Framework 2006 2011 (Department of Transport, 2006)
- Technical Transport Planning Guidelines for Comprehensive Integrated Transport Plans (Department of Transport, 2009)
- Minimum Requirements for the Preparation Integrated Transport Plans (Department of Transport, 2007)
- National Public Transport Strategy, (Department of Transport, 2006) and Public Transport Action Plan (Department of Transport, March 2007)
- Draft National Transport Master Plan 2005 2050 (Department of Transport,
- The National Freight Logistic Strategy (Department of Transport, 2006
- Moving South Africa Strategy: 2020 (Department of Transport, 1998)

TABLE OF CONTENTS

2	Chapter 2: Transport Vision And Objectives2-
2.1	Introduction2-
2.2	Vision And Mission2-
2.3	Goals And Objectives

2 CHAPTER 2: TRANSPORT VISION AND OBJECTIVES

2.1 Introduction

This Chapter provides the transport vision, missions and goals for the Dr Kenneth Kaunda District Municipality, based on a review of those formulated in the Provincial Land Transport Framework (PLTF, 2016) of the North West Provincial Government and the IDP of Dr Kenneth Kaunda Municipality (2017 – 2022).

2.2 Vision and Mission

The following Vision, Mission, Key Performance Areas and Goals have been formulated in the Spatial Development Framework (SDF) Review Document of the DrKKDM approved in 2011 (DrKKDM IDP, 2017). Furthermore, these serve as guidelines for the DrKKDM District Integrated Transport Plan (DrKKDM DITP):

Vision:

Exploring prosperity through sustainable service delivery for all

Mission:

To provide an integrated district management framework in support of quality service delivery

Key Performance Areas:

- Basic Service Delivery and Infrastructure Development
- Municipal Institutional Development Transformation
- District Economic Development
- Financial viability and management
- Good Governance and Public Participation
- Spatial Rationale

i. Goals

- ii. The DrKKDM IDP (2017) formulated the following Goals that must be supported by the District transport system:
- Establish an integrated movement system;
- Promote compact and integrated development through consolidation and intensification around the accessibility network;
- Promote opportunities for sustainable rural settlement;
- Maximise spatial economic development opportunities;
- Promote socio-economic development; and
- Sustainable resource use and management.

2.3 Goals and Objectives

The goals of the DrKKDM IDP, as well as those of the JB Marks LM IDP, are well aligned, and hence the transport objectives formulated from the goals of the JBM LM IDP are also appropriate for the DrKKDM DITP.

Therefore, the following five objectives were adopted to guide the development of the DITP strategies and the prioritisation of DITP projects:

- Improve access to land, public facilities and housing improved mobility and accessibility
- ii. Promote environmental sustainability, including promotion of public transport and NMT
- iii. Increase road safety and security from crime at transport facilities and on public transport services
- iv. Promote economic development though transport infrastructure and services
- v. Integrated land and transport development focussed within urban boundaries

TABLE OF CONTENTS

3	CHA	PTER 3: TRANSPORT REGISTER	3-4
	3.1	Introduction	3-4
	3.2	DEMOGRAPHIC AND SOCIO-ECONOMIC	3-4
	3.2.1	Dr Kenneth Kaunda District Municipality	3-4
	3.3	GENERAL OVERVIEW OF THE TRANSPORTATION SYSTEM	3-6
	3.4	NATIONAL HOUSEHOLD TRAVEL SURVEY	3-6
	3.5	MINIBUS-TAXIS	3-8
	3.5.1	Taxi Associations	3-8
	3.5.2	Coding of ranks and routes	3-9
	3.5.3	Minibus-Taxi Ranks	3-9
	3.5.4	Minibus-Taxi Routes	3-13
	3.5.5	Strategic Public Transport Network	3-37
	3.5.6	Minibus-Taxi Fares	3-41
	3.5.7	' Minibus-Taxis Concerns	3-42
	3.5.8	Illegal operations	3-43
	3.6	METERED-TAXIS	3-44
	3.7	BUSES	3-44
	3.8	RAIL	3-44
	3.9	Non-Motorised Transport	3-47
	3.10	RURAL TRANSPORT	3-51
	3.11	ROADS	3-53
	3.11	1 Road network	3-53
	3.11	2 Road ownership	3-55
	3.11	3 Visual Condition Index	3-55
	3.11	4 Road Hierarchy	3-59
	3.11	5 Road Masterplan	3-60
	3.11	6 Dolomite risks related to the road network	3-63
	3.12	Traffic	3-64
	3.12	1 Traffic volumes	3-64
	3.12	2 Growth rates	3-66
	3.12	3 Peak hour	3-66
	3.12	4 Modal split	3-66
	3.12	5 Traffic Safety	3-67
	3.13	FREIGHT TRANSPORT	3-68
	3.14	AVIATION	3-72
	3.14	1 Introduction	3-72
	3.15	POTCHEFSTROOM AIRPORT (FAPS)	3-74
	3.16	PC PELSER AIRPORT (FAKD)	
	3.17	ORKNEY AIRPORT (FAOY)	3-82
	3.18	VENTERSDORP AIRPORT (FAVE)	3-83
	3.19	WOLMARANSSTAD AIRPORT (FAWD)	3-84

LIST OF TABLES

TABLE 3.2: OVERVIEW OF MINIBLUS-TAXI FACULTIES FOR HARTBEESFONTEIN. 3- TABLE 3.3: OVERVIEW OF MINIBLUS-TAXI FACULTIES FOR KANAMA 3- TABLE 3.5: OVERVIEW OF MINIBLUS-TAXI FACULTIES FOR REVENSOOR 3-1 TABLE 3.5: OVERVIEW OF MINIBLUS-TAXI FACULTIES FOR REVENSOOR 3-1 TABLE 3.7: OVERVIEW OF MINIBLUS-TAXI FACULTIES FOR POTCHEFSTROOM. 3-1 TABLE 3.7: OVERVIEW OF MINIBLUS-TAXI FACULTIES FOR POTCHEFSTROOM. 3-1 TABLE 3.1: OVERVIEW OF MINIBLUS-TAXI FACULTIES FOR NOTE STILL FORESTIAL FREES. 3-1 TABLE 3.1: OVERVIEW OF MINIBLUS-TAXI FACULTIES FOR VENTERSOORP. 3-1 TABLE 3.1: OVERVIEW OF MINIBLUS-TAXI FACULTIES FOR WOLMARANSTIAD. 3-1 TABLE 3.1: OVERVIEW OF PRE-OPERATING LICENCES ISSUED FOR LONG DISTANCE SERVICES (2017). 3-1 TABLE 3.1: OVERVIEW OF PRE-OPERATING LICENCES ISSUED FOR LONG DISTANCE SERVICES (2016). 3-1 TABLE 3.1: OVERVIEW OF PRE-OPERATING LICENCES ISSUED FOR LONG DISTANCE SERVICES (2017). 3-1 TABLE 3.1: OVERVIEW OF GEALET A OPERATIONS. 3-2 TABLE 3.1: OVERVIEW OF CODESA TA OPERATIONS. 3-2 TABLE 3.1: OVERVIEW OF GEALET	TABLE 3.1:	SUMMARY OF TAXI ASSOCIATIONS, MEMBERS, VEHICLES AND OPERATING LICENCES IN DR KENNETH KAUP MUNICIPALITY	
TABLE 3.3: OVERVIEW OF MINIBLE-TAN FACILITIES FOR KANANA 3-1 TABLE 3.4: OVERVIEW OF MINIBLE-TAN FACILITIES FOR KEHDMA 3-1 TABLE 3.5: OVERVIEW OF MINIBLE-TAN FACILITIES FOR DRENEY. 3-1 TABLE 3.7: OVERVIEW OF MINIBLE-TAN FACILITIES FOR DRENEY. 3-1 TABLE 3.7: OVERVIEW OF MINIBLE-TAN FACILITIES FOR POTCHESTROOM. 3-1 TABLE 3.7: OVERVIEW OF MINIBLE-TAN FACILITIES FOR POTCHESTROOM. 3-1 TABLE 3.9: OVERVIEW OF MINIBLE-TAN FACILITIES FOR POTCHESTROOM. 3-1 TABLE 3.10: OVERVIEW OF MINIBLE-TAX FACILITIES FOR VOLMARANSTRAD. 3-1 TABLE 3.11: OVERVIEW OF MINIBLE-TAX FACILITIES FOR WOLMARANSTRAD. 3-1 TABLE 3.12: OVERVIEW OF REP-OPERATING LICENCES ISSUED FOR COMMUTER SERVICES (2017). 3-1 TABLE 3.15: OVERVIEW OF BALET TA OPERATIONS. 3-2 TABLE 3.15: OVERVIEW OF GREATER FOR OF TA OPERATIONS. 3-2 TABLE 3.16: OVERVIEW OF GREATER STILLOWS THA OPERATIONS. 3-2 TABLE 3.17: OVERVIEW OF GREATER STILLOWS THA OPERATIONS. 3-2 TABLE 3.19: OVERVIEW OF GREATER STILLOWS THA OPERATIONS. 3-2 TABLE	TARLE 3 2.		
TABLE 3.4: OVERVIEW OF MINIBLS-TAXI FACILITIES FOR KHUMA			
TABLE 3.5: OVERVIEW OF MINIBUS-TAXI FACILITIES FOR KLERKSDORP .3-1 TABLE 3.6: OVERVIEW OF MINIBUS-TAXI FACILITIES FOR ORKNEY .3-1 TABLE 3.7: OVERVIEW OF MINIBUS-TAXI FACILITIES FOR FOR CONCRESTROOM .3-1 TABLE 3.9: OVERVIEW OF MINIBUS-TAXI FACILITIES FOR STILDONIEN AND TIGARE .3-1 TABLE 3.9: OVERVIEW OF MINIBUS-TAXI FACILITIES FOR VALA REFS .3-1 TABLE 3.10: OVERVIEW OF MINIBUS-TAXI FACILITIES FOR VENTERSDORP. .3-1 TABLE 3.12: OVERVIEW OF MINIBUS-TAXI FACILITIES FOR VENTERSDORP. .3-1 TABLE 3.13: OVERVIEW OF PRE-OPERATING LICENCES ISSUED FOR COMMUTER SERVICES (2017). .3-1 TABLE 3.13: OVERVIEW OF PRE-OPERATING LICENCES ISSUED FOR LONG DISTANCE SERVICES (2015). .3-1 TABLE 3.16: OVERVIEW OF GREATER OPERATIONS. .3-2 TABLE 3.16: OVERVIEW OF GREATER ORKNEY TA OPERATIONS. .3-2 TABLE 3.18: OVERVIEW OF GREATER ORKNEY TA OPERATIONS. .3-2 TABLE 3.20: OVERVIEW OF GREATER STILLEONIEN TO APERATIONS. .3-2 TABLE 3.21: OVERVIEW OF GREATER STILLEONIEN TO APERATIONS. .3-2 TABLE 3.22: OVERVIEW OF MINIBUS-TAX APPERATIONS.			
TABLE 3.6: OVERVIEW OF MINIBUS-TAXI FACILITIES FOR POTCHESFIROOM. 3-1 TABLE 3.7: OVERVIEW OF MINIBUS-TAXI FACILITIES FOR POTCHESFIROOM. 3-1 TABLE 3.8: OVERVIEW OF MINIBUS-TAXI FACILITIES FOR STILEONISIN AND TIGARE. 3-1 TABLE 3.10: OVERVIEW OF MINIBUS-TAXI FACILITIES FOR VAN REEFS. 3-1 TABLE 3.10: OVERVIEW OF MINIBUS-TAXI FACILITIES FOR WOLMARANSTIAD. 3-1 TABLE 3.11: OVERVIEW OF MINIBUS-TAXI FACILITIES FOR WOLMARANSTIAD. 3-1 TABLE 3.13: OVERVIEW OF PRE-OPERATING LICENCES ISSUED FOR COMMUTER SERVICES (2017). 3-1 TABLE 3.13: OVERVIEW OF PRE-OPERATING LICENCES ISSUED FOR LONG DISTANCE SERVICES (2016). 3-1 TABLE 3.16: OVERVIEW OF GREATER ACTIONS. 3-2 TABLE 3.16: OVERVIEW OF GREATER POTCH TA OPERATIONS. 3-2 TABLE 3.19: OVERVIEW OF GREATER POTCH TA OPERATIONS. 3-2 TABLE 3.19: OVERVIEW OF GREATER POTCH TA OPERATIONS. 3-2 TABLE 3.20: OVERVIEW OF GREATER POTCH TA OPERATIONS. 3-2 TABLE 3.21: OVERVIEW OF GREATER POTCH TA OPERATIONS. 3-2 TABLE 3.22: OVERVIEW OF INTERSTATE TA OPERATIONS. 3-2			
TABLE 3.7: OVERVIEW OF MINIBUS-TAXI FACILITIES FOR STILFONTEIN AND TIGANE. 3-1 TABLE 3.8: OVERVIEW OF MINIBUS-TAXI FACILITIES FOR STILFONTEIN AND TIGANE. 3-1 TABLE 3.10: OVERVIEW OF MINIBUS-TAXI FACILITIES FOR VARIA REEFS. 3-1 TABLE 3.11: OVERVIEW OF MINIBUS-TAXI FACILITIES FOR WOLMARANSTAD. 3-1 TABLE 3.12: OVERVIEW OF MINIBUS-TAXI FACILITIES FOR WOLMARANSTAD. 3-1 TABLE 3.13: OVERVIEW OF PRE-OPERATING LICENCES ISSUED FOR COMMUTER SERVICES (2017). 3-1 TABLE 3.14: OVERVIEW OF PRE-OPERATING LICENCES ISSUED FOR LONG DISTANCE SERVICES (2016). 3-1 TABLE 3.14: OVERVIEW OF BALETITA OPERATIONS. 3-2 TABLE 3.15: OVERVIEW OF GREATER POTCH TA OPERATIONS. 3-2 TABLE 3.16: OVERVIEW OF GREATER STILFONTEIN TA OPERATIONS. 3-2 TABLE 3.19: OVERVIEW OF GREATER STILFONTEIN TA OPERATIONS. 3-2 TABLE 3.21: OVERVIEW OF GREATER STILFONTEIN TA OPERATIONS. 3-2 TABLE 3.22: OVERVIEW OF MINISTRATE TA OPERATIONS. 3-2 TABLE 3.23: OVERVIEW OF MINISTRATE TA OPERATIONS. 3-2 TABLE 3.25: OVERVIEW OF MINISTRATE TA OPERATIONS. 3-2 <th></th> <th></th> <th></th>			
TABLE 3.8: OVERVIEW OF MINBUST-TAXIF FACILITIES FOR STILL ONTEIN AND TIGANE. 3-1 TABLE 3.9: OVERVIEW OF MINBUST-TAXIF FACILITIES FOR VALE REEFS. 3-1 TABLE 3.10: OVERVIEW OF MINBUST-TAXIF FACILITIES FOR VENTERSDORP. 3-1 TABLE 3.11: OVERVIEW OF MINBUST-TAXIF FACILITIES FOR WOLMARANSTAD. 3-1 TABLE 3.12: OVERVIEW OF PRE-OPERATING LICENCES ISSUED FOR COMMUTER SERVICES (2017). 3-1 TABLE 3.13: OVERVIEW OF PRE-OPERATING LICENCES ISSUED FOR COMMUTER SERVICES (2017). 3-1 TABLE 3.14: OVERVIEW OF FRODES AT A OPERATIONS 3-1 TABLE 3.15: OVERVIEW OF CODES AT A OPERATIONS 3-1 TABLE 3.16: OVERVIEW OF CODES AT A OPERATIONS 3-1 TABLE 3.17: OVERVIEW OF GREATER POICH TA OPERATIONS 3-2 TABLE 3.18: OVERVIEW OF GREATER POICH TA OPERATIONS 3-2 TABLE 3.19: OVERVIEW OF GREATER STILFONTEIN TA OPERATIONS 3-2 TABLE 3.19: OVERVIEW OF INTERSTATE TA OPERATIONS 3-2 TABLE 3.20: OVERVIEW OF INTERSTATE TA OPERATIONS 3-2 TABLE 3.21: OVERVIEW OF JOUBERTON & NOORDKOM TA OPERATIONS 3-2 TABLE 3.22: OVERVIEW OF JOUBERTON & NOORDKOM TA OPERATIONS 3-2 TABLE 3.23: OVERVIEW OF HITESTATE TA OPERATIONS 3-2 TABLE 3.23: OVERVIEW OF LICENSED OR TO OPERATIONS 3-2 TABLE 3.24: OVERVIEW OF LICENSED OR TO OPERATIONS 3-2 TABLE 3.25: OVERVIEW OF LICENSED OR TO OPERATIONS 3-2 TABLE 3.25: OVERVIEW OF LICENSED OR TO OPERATIONS 3-3 TABLE 3.25: OVERVIEW OF LICENSED OR TO OPERATIONS 3-3 TABLE 3.25: OVERVIEW OF LICENSED OR TO OPERATIONS 3-3 TABLE 3.25: OVERVIEW OF LICENSED OR TO OPERATIONS 3-3 TABLE 3.26: OVERVIEW OF LICENSED OR TO OPERATIONS 3-3 TABLE 3.27: RESPONSIBLE AUTHORITY OF ROADS IN DR KENNETH KAUNDA DM. 3-5 TABLE 3.28: SUMMARY OF ROAD SIN DR KENNETH KAUNDA DM. 3-5 TABLE 3.29: SUMMARY OF ROAD SIN DR KENNETH KAUNDA DM. 3-5 TABLE 3.32: LENGTH OR FROADS FOR CLASSIFICATION IN DR KENNETH KAUNDA DM. 3-6 TABLE 3.33: TRAFFIC OUBLIC TRANSPORT NETWORK OF DR KENNETH KAUNDA DM. 3-7 TABLE 3.33: STRATEGIC PUBLIC TRANSPORT NETWORK OF DR KENNETH KAUNDA DM. 3-7 FIGURE 3.1: MODE OF TRANSPORT TO WORK BY AREA IN DR KENNETH KAUNDA DM. 3-3 FIGURE 3.5: STRATEGIC PUBLIC TRANSPORT NETWORK OF	The state of the state of		
TABLE 3.10: OVERVIEW OF MINIBUS-TAXI FACILITIES FOR VENTERSDORP. 3-1 TABLE 3.12: OVERVIEW OF MINIBUS-TAXI FACILITIES FOR WOLMARANSSTAD. 3-1 TABLE 3.13: OVERVIEW OF PRE-OPERATING LICENCES ISSUED FOR COMMUTER SERVICES (2017). 3-1 TABLE 3.13: OVERVIEW OF PRE-OPERATING LICENCES ISSUED FOR LONG DISTANCE SERVICES (2016). 3-1 TABLE 3.14: OVERVIEW OF BALETI TA OPERATIONS. 3-2 TABLE 3.16: OVERVIEW OF GREATER FOR OPERATIONS. 3-2 TABLE 3.17: OVERVIEW OF GREATER FOICH TA OPERATIONS. 3-2 TABLE 3.19: OVERVIEW OF GREATER TOPICH TA OPERATIONS. 3-2 TABLE 3.19: OVERVIEW OF GREATER TA OPERATIONS. 3-2 TABLE 3.20: OVERVIEW OF INTERSTATE TA OPERATIONS. 3-2 TABLE 3.22: OVERVIEW OF HUMBAT TA OPERATIONS. 3-2 TABLE 3.23: OVERVIEW OF KLEINSOR TA OPERATIONS. 3-2 TABLE 3.24: OVERVIEW OF MINIBOLITY MAKWASSI TA OPERATIONS. 3-3 TABLE 3.25: OVERVIEW OF MINIBOLITY MAKWASSI TA OPERATIONS. 3-3 TABLE 3.26: OVERVIEW OF MINIBOLITY MAKWASSI TA OPERATIONS. 3-3 TABLE 3.27: VISUAL CONDITION INDEX OF ROADS IN DR KENNETH KAUNDA DM. 3-5	TABLE 3.8:		
TABLE 3.11: OVERVIEW OF PRE-OPERATING LICENCES ISSUED FOR COMMUTER SERVICES (2017). 3-1 TABLE 3.13: OVERVIEW OF PRE-OPERATING LICENCES ISSUED FOR LONG DISTANCE SERVICES (2016). 3-1 TABLE 3.14: OVERVIEW OF PRE-OPERATING LICENCES ISSUED FOR LONG DISTANCE SERVICES (2016). 3-1 TABLE 3.15: OVERVIEW OF GODES ATA OPERATIONS. 3-2 TABLE 3.16: OVERVIEW OF GREATER ORKNEY TA OPERATIONS. 3-2 TABLE 3.17: OVERVIEW OF GREATER ORKNEY TA OPERATIONS. 3-2 TABLE 3.18: OVERVIEW OF GREATER STIFONTEN TA OPERATIONS. 3-2 TABLE 3.19: OVERVIEW OF GREATER STIFONTEN TA OPERATIONS. 3-2 TABLE 3.20: OVERVIEW OF JOUBERTON TA OPERATIONS. 3-2 TABLE 3.21: OVERVIEW OF JOUBERTON & NOORDKOM TA OPERATIONS. 3-2 TABLE 3.22: OVERVIEW OF MIGHTY MAKWASIS TA OPERATIONS. 3-3 TABLE 3.24: OVERVIEW OF MIGHTY MAKWASIS TA OPERATIONS. 3-3 TABLE 3.27: RESPONSIBLE AUTHORITY OF ROADS IN DR KENNETH KAUNDA DM. 3-5 TABLE 3.28: VISUAL CONDITION INDEX OF ROADS IN DR KENNETH KAUNDA DM. 3-5 TABLE 3.29: SUMMARY OF ROAD CLASSIFICATION. 3-6 TABLE 3.31: TRAFFIC VOLUMES IN TLOKKE.	TABLE 3.9:	OVERVIEW OF MINIBUS-TAXI FACILITIES FOR VAAL REEFS	3-12
TABLE 3.12: OVERVIEW OF PRE-OPERATING LICENCES ISSUED FOR COMMUTER SERVICES (2017). 3-1 TABLE 3.14: OVERVIEW OF PRE-OPERATING LICENCES ISSUED FOR LONG DISTANCE SERVICES (2016). 3-1 TABLE 3.14: OVERVIEW OF PRE-OPERATIONS. 3-2 TABLE 3.15: OVERVIEW OF CODESA TA OPERATIONS. 3-2 TABLE 3.17: OVERVIEW OF GREATER POTCH TA OPERATIONS. 3-2 TABLE 3.19: OVERVIEW OF GREATER POTCH TA OPERATIONS. 3-2 TABLE 3.19: OVERVIEW OF GREATER VENTERSDORP TA OPERATIONS. 3-2 TABLE 3.20: OVERVIEW OF INTERSTATE TA OPERATIONS. 3-2 TABLE 3.21: OVERVIEW OF INTERSTATE TA OPERATIONS. 3-2 TABLE 3.22: OVERVIEW OF SHAMMA TA OPERATIONS. 3-2 TABLE 3.23: OVERVIEW OF KLERKSDORD TA OPERATIONS. 3-3 TABLE 3.24: OVERVIEW OF KLERKSDORP TA OPERATIONS. 3-3 TABLE 3.25: OVERVIEW OF KLERKSDORD TA OPERATIONS. 3-3 TABLE 3.25: OVERVIEW OF KLERKSDORD TA OPERATIONS. 3-3 TABLE 3.25: OVERVIEW OF MICHITY MAKWASSI TA OPERATIONS. 3-3 TABLE 3.27: RESPONSIBLE AUTHORITY OF ROADS IN DR KENNETH KAUNDA DM. <td>TABLE 3.10:</td> <td></td> <td></td>	TABLE 3.10:		
TABLE 3.13: OVERVIEW OF PRE-OPERATING LICENCES ISSUED FOR LONG DISTANCE SERVICES (2016). 3-1 TABLE 3.15: OVERVIEW OF BALETITA OPERATIONS. 3-1 TABLE 3.16: OVERVIEW OF GREATER ORKNEY TA OPERATIONS. 3-2 TABLE 3.17: OVERVIEW OF GREATER POTCH TA OPERATIONS. 3-2 TABLE 3.18: OVERVIEW OF GREATER STILFONTEIN TA OPERATIONS. 3-2 TABLE 3.19: OVERVIEW OF GREATER STILFONTEIN TA OPERATIONS. 3-2 TABLE 3.20: OVERVIEW OF INTERSTATE TA OPERATIONS. 3-2 TABLE 3.21: OVERVIEW OF JOUBERTON & NOORDKOM TA OPERATIONS. 3-2 TABLE 3.22: OVERVIEW OF JOUBERTON & NOORDKOM TA OPERATIONS. 3-3 TABLE 3.23: OVERVIEW OF JOUBERTON & NOORDKOM TA OPERATIONS. 3-3 TABLE 3.24: OVERVIEW OF MICHTY MAKAWASS TA OPERATIONS. 3-3 TABLE 3.25: OVERVIEW OF MICHTY MAKAWASS TA OPERATIONS. 3-3 TABLE 3.26: OVERVIEW OF WIGHTY MAKAWASS TA OPERATIONS. 3-3 TABLE 3.27: RESPONSIBLE AUTHORITY OF ROADS IN DR KENNETH KAUNDA DM. 3-5 TABLE 3.28: VISUAL CONDITION INDEX OF ROADS IN DR KENNETH KAUNDA DM. 3-6 TABLE 3.30:	TABLE 3.11:	OVERVIEW OF MINIBUS-TAXI FACILITIES FOR WOLMARANSSTAD	3-13
TABLE 3.14: OVERVIEW OF BALETI TA OPERATIONS 3-1 TABLE 3.15: OVERVIEW OF GREATER OPERATIONS 3-2 TABLE 3.16: OVERVIEW OF GREATER PORCH TO PERATIONS 3-2 TABLE 3.17: OVERVIEW OF GREATER PORCH TA OPERATIONS 3-2 TABLE 3.18: OVERVIEW OF GREATER STUFONTEIN TA OPERATIONS 3-2 TABLE 3.19: OVERVIEW OF GREATER VENTERSDORP TA OPERATIONS 3-2 TABLE 3.20: OVERVIEW OF INTERSTATE TA OPERATIONS 3-2 TABLE 3.21: OVERVIEW OF JOUBERTON TA OPERATIONS 3-2 TABLE 3.22: OVERVIEW OF KLUMA TA OPERATIONS 3-2 TABLE 3.23: OVERVIEW OF KLERKSDORP TA OPERATIONS 3-3 TABLE 3.25: OVERVIEW OF KLERKSDORP TA OPERATIONS 3-3 TABLE 3.25: OVERVIEW OF MIGHTY MAKWASSI TA OPERATIONS 3-3 TABLE 3.25: OVERVIEW OF UTLIWANENG TA OPERATIONS 3-3 TABLE 3.26: OVERVIEW OF UTLIWANENG TA OPERATIONS 3-3 TABLE 3.27: RESPONSIBLE AUTHORITY OF ROADS IN DR KENNETH KAUNDA DM 3-5 TABLE 3.28: VISUAL CONDITION INDEX OF ROADS IN DR KENNETH KAUNDA DM 3-6 TABLE 3.31: TRAFFIC VOLUMES IN TLOKWE 3-6 <tr< td=""><td>TABLE 3.12:</td><td>OVERVIEW OF PRE-OPERATING LICENCES ISSUED FOR COMMUTER SERVICES (2017)</td><td>3-13</td></tr<>	TABLE 3.12:	OVERVIEW OF PRE-OPERATING LICENCES ISSUED FOR COMMUTER SERVICES (2017)	3-13
TABLE 3.15: OVERVIEW OF CODESA TA OPERATIONS 3-2 TABLE 3.16: OVERVIEW OF GREATER ORKNEY TA OPERATIONS 3-2 TABLE 3.17: OVERVIEW OF GREATER POTCH TA OPERATIONS 3-2 TABLE 3.19: OVERVIEW OF GREATER STILFONTEIN TA OPERATIONS 3-2 TABLE 3.20: OVERVIEW OF INTERSTATE TA OPERATIONS 3-2 TABLE 3.21: OVERVIEW OF JOUBERTON TA OPERATIONS 3-2 TABLE 3.22: OVERVIEW OF JOUBERTON & NOORDKOM TA OPERATIONS 3-2 TABLE 3.23: OVERVIEW OF KLERKSDORP TA OPERATIONS 3-2 TABLE 3.24: OVERVIEW OF KLERKSDORP TA OPERATIONS 3-3 TABLE 3.25: OVERVIEW OF MIGHTY MAKWASSI TA OPERATIONS 3-3 TABLE 3.26: OVERVIEW OF MIGHTY MAKWASSI TA OPERATIONS 3-3 TABLE 3.27: RESPONSIBLE AUTHORITY OF ROADS IN DR KENNETH KAUNDA DM 3-5 TABLE 3.28: VISUAL CONDITION INDEX OF ROADS IN DR KENNETH KAUNDA DM 3-5 TABLE 3.30: LENGTH OF ROADS PER CLASSIFICATION IN DR KENNETH KAUNDA DM 3-6 TABLE 3.31: TRAFFIC VOLUMES IN TLOKWE 3-6 TABLE 3.32: LIST OF FIGURES LIST	TABLE 3.13:	OVERVIEW OF PRE-OPERATING LICENCES ISSUED FOR LONG DISTANCE SERVICES (2016)	3-15
TABLE 3.15: OVERVIEW OF CODESA TA OPERATIONS 3-2 TABLE 3.16: OVERVIEW OF GREATER ORKNEY TA OPERATIONS 3-2 TABLE 3.17: OVERVIEW OF GREATER POTCH TA OPERATIONS 3-2 TABLE 3.19: OVERVIEW OF GREATER STILFONTEIN TA OPERATIONS 3-2 TABLE 3.20: OVERVIEW OF INTERSTATE TA OPERATIONS 3-2 TABLE 3.21: OVERVIEW OF JOUBERTON TA OPERATIONS 3-2 TABLE 3.22: OVERVIEW OF JOUBERTON & NOORDKOM TA OPERATIONS 3-2 TABLE 3.23: OVERVIEW OF KLERKSDORP TA OPERATIONS 3-2 TABLE 3.24: OVERVIEW OF KLERKSDORP TA OPERATIONS 3-3 TABLE 3.25: OVERVIEW OF MIGHTY MAKWASSI TA OPERATIONS 3-3 TABLE 3.26: OVERVIEW OF MIGHTY MAKWASSI TA OPERATIONS 3-3 TABLE 3.27: RESPONSIBLE AUTHORITY OF ROADS IN DR KENNETH KAUNDA DM 3-5 TABLE 3.28: VISUAL CONDITION INDEX OF ROADS IN DR KENNETH KAUNDA DM 3-5 TABLE 3.30: LENGTH OF ROADS PER CLASSIFICATION IN DR KENNETH KAUNDA DM 3-6 TABLE 3.31: TRAFFIC VOLUMES IN TLOKWE 3-6 TABLE 3.32: LIST OF FIGURES LIST	TABLE 3.14:	OVERVIEW OF BALETI TA OPERATIONS	3-19
TABLE 3.17: OVERVIEW OF GREATER POTCH TA OPERATIONS 3-2 TABLE 3.18: OVERVIEW OF GREATER STILFONTEIN TA OPERATIONS 3-2 TABLE 3.19: OVERVIEW OF GREATER VENTERSDORP TA OPERATIONS. 3-2 TABLE 3.20: OVERVIEW OF INTERSTATE TA OPERATIONS. 3-2 TABLE 3.21: OVERVIEW OF JOUBERTON TA OPERATIONS. 3-2 TABLE 3.22: OVERVIEW OF JOUBERTON & NOORDKOM TA OPERATIONS. 3-2 TABLE 3.23: OVERVIEW OF JOUBERTON & NOORDKOM TA OPERATIONS. 3-3 TABLE 3.24: OVERVIEW OF KHUMA TA OPERATIONS. 3-3 TABLE 3.25: OVERVIEW OF MIGHTY MAKWASSI TA OPERATIONS. 3-3 TABLE 3.26: OVERVIEW OF MIGHTY MAKWASSI TA OPERATIONS. 3-3 TABLE 3.27: RESPONSIBLE AUTHORITY OF ROADS IN DR KENNETH KAUNDA DM. 3-5 TABLE 3.29: SUMMARY OF ROAD CLASSIFICATION. 3-6 TABLE 3.29: SUMMARY OF ROAD CLASSIFICATION IN DR KENNETH KAUNDA DM. 3-6 TABLE 3.31: TRAFFIC VOLUMES IN TLOKKE 3-6 TABLE 3.32: ELECTRONIC LINKS COUNTS (2015) 3-6 TABLE 3.33: HISTORIC DATA ON N12 (SANRAL CTO 1373) 3-6 <	TABLE 3.15:		
TABLE 3.18: OVERVIEW OF GREATER STILFONTEIN TA OPERATIONS 3-2 TABLE 3.19: OVERVIEW OF GREATER VENTERSDORP TA OPERATIONS 3-2 TABLE 3.20: OVERVIEW OF INTERSTATE TA OPERATIONS 3-2 TABLE 3.21: OVERVIEW OF JOUBERTON TA OPERATIONS 3-2 TABLE 3.22: OVERVIEW OF JOUBERTON & NOORDKOM TA OPERATIONS 3-2 TABLE 3.23: OVERVIEW OF KHUMA TA OPERATIONS 3-3 TABLE 3.24: OVERVIEW OF KHUMA TA OPERATIONS 3-3 TABLE 3.25: OVERVIEW OF MIGHTY MAKWASSI TA OPERATIONS 3-3 TABLE 3.26: OVERVIEW OF UTLWANDENG TA OPERATIONS 3-3 TABLE 3.27: RESPONSIBLE AUTHORITY OF ROADS IN DR KENNETH KAUNDA DM 3-5 TABLE 3.28: VISUAL CONDITION INDEX OF ROADS IN DR KENNETH KAUNDA DM 3-5 TABLE 3.29: SUMMARY OF ROAD CLASSIFICATION IN DR KENNETH KAUNDA DM 3-6 TABLE 3.30: LENGTH OF ROADS PER CLASSIFICATION IN DR KENNETH KAUNDA DM 3-6 TABLE 3.31: TRAFFIC VOLUMES IN TLOKWE 3-6 TABLE 3.32: ELECTRONIC LINKS COUNTS (2015) 3-6 TABLE 3.33: HISTORIC DATA ON N12 (SANRAL CTO 1373) 3-6	TABLE 3.16:	OVERVIEW OF GREATER ORKNEY TA OPERATIONS	3-21
TABLE 3.19: OVERVIEW OF GREATER VENTERSDORP TA OPERATIONS. 3-2 TABLE 3.20: OVERVIEW OF INTERSTATE TA OPERATIONS. 3-2 TABLE 3.21: OVERVIEW OF JOUBERTON TA OPERATIONS. 3-2 TABLE 3.22: OVERVIEW OF JOUBERTON & NOORDKOM TA OPERATIONS. 3-2 TABLE 3.23: OVERVIEW OF KHUMA TA OPERATIONS. 3-3 TABLE 3.24: OVERVIEW OF KHUMA TA OPERATIONS. 3-3 TABLE 3.25: OVERVIEW OF MIGHTY MAKWASSI TA OPERATIONS. 3-3 TABLE 3.26: OVERVIEW OF MIGHTY MAKWASSI TA OPERATIONS. 3-3 TABLE 3.27: RESPONSIBLE AUTHORITY OF ROADS IN DR KENNETH KAUNDA DM. 3-5 TABLE 3.28: VISUAL CONDITION INDEX OF ROADS IN DR KENNETH KAUNDA DM. 3-5 TABLE 3.29: SUMMARY OF ROAD CLASSIFICATION. 3-6 TABLE 3.30: LENGTH OF ROADS PER CLASSIFICATION IN DR KENNETH KAUNDA DM. 3-6 TABLE 3.31: TRAFFIC VOLUMES IN TLOKWE 3-6 TABLE 3.32: LIST OF FIGURES 3-6 FIGURE 3.3: MODE OF TRANSPORT TO EDUCATION BY AREA IN DR KENNETH KAUNDA DISTRICT IN 2013 3-7 FIGURE 3.3: STRATEGIC PUBLIC TRANSPORT NETWORK OF DR KENNE	TABLE 3.17:	OVERVIEW OF GREATER POTCH TA OPERATIONS	3-23
TABLE 3.20: OVERVIEW OF INTERSTATE TA OPERATIONS 3-2 TABLE 3.21: OVERVIEW OF JOUBERTON TA OPERATIONS 3-2 TABLE 3.22: OVERVIEW OF JOUBERTON & NOORDKOM TA OPERATIONS 3-2 TABLE 3.23: OVERVIEW OF KHUMA TA OPERATIONS 3-3 TABLE 3.25: OVERVIEW OF KLERKSDORE TA OPERATIONS 3-3 TABLE 3.25: OVERVIEW OF MIGHTY MAKWASSI TA OPERATIONS 3-3 TABLE 3.26: OVERVIEW OF UTLWANENG TA OPERATIONS 3-3 TABLE 3.27: RESPONSIBLE AUTHORITY OF ROADS IN DR KENNETH KAUNDA DM 3-5 TABLE 3.28: VISUAL CONDITION INDEX OF ROADS IN DR KENNETH KAUNDA DM 3-5 TABLE 3.29: SUMMARY OF ROAD SUBJECATION 3-6 TABLE 3.30: LENGTH OF ROADS PER CLASSIFICATION IN DR KENNETH KAUNDA DM 3-6 TABLE 3.31: TRAFFIC VOLUMES IN TLOKWE 3-6 TABLE 3.32: ELECTRONIC LINKS COUNTS (2015) 3-6 TABLE 3.33: HISTORIC DATA ON N12 (SANRAL CTO 1373) 3-6 TABLE 3.34: COORDINATES OF AIRPORTS IN DR KENNETH KAUNDA DM 3-7 LIST OF FIGURES FIGURE 3.5: STRATEGIC PUBLIC TR	TABLE 3.18:	OVERVIEW OF GREATER STILFONTEIN TA OPERATIONS	3-24
TABLE 3.21: OVERVIEW OF JOUBERTON TA OPERATIONS 3-2 TABLE 3.22: OVERVIEW OF JOUBERTON & NOORDKOM TA OPERATIONS 3-2 TABLE 3.23: OVERVIEW OF KHUMA TA OPERATIONS 3-3 TABLE 3.24: OVERVIEW OF KLERKSDORP TA OPERATIONS 3-3 TABLE 3.25: OVERVIEW OF MICHTY MAKWASSI TA OPERATIONS 3-3 TABLE 3.26: OVERVIEW OF UTLWANENG TA OPERATIONS 3-3 TABLE 3.27: RESPONSIBLE AUTHORITY OF ROADS IN DR KENNETH KAUNDA DM. 3-5 TABLE 3.28: VISUAL CONDITION INDEX OF ROADS IN DR KENNETH KAUNDA DM. 3-5 TABLE 3.29: SUMMARY OF ROAD CLASSIFICATION 3-6 TABLE 3.30: LENGTH OF ROADS PER CLASSIFICATION IN DR KENNETH KAUNDA DM. 3-6 TABLE 3.31: TRAFFIC VOLUMES IN TLOKWE 3-6 TABLE 3.32: ELECTRONIC LINKS COUNTS (2015) 3-6 TABLE 3.33: HISTORIC DATA ON N12 (SANRAL CTO 1373) 3-6 TABLE 3.34: COORDINATES OF AIRPORTS IN DR KENNETH KAUNDA DISTRICT IN 2013 3-7 LIST OF FIGURES FIGURE 3.2: STRATEGIC PUBLIC TRANSPORT TO WORK BY AREA IN DR KENNETH KAUNDA DISTRICT IN 2013 3-7 <	TABLE 3.19:	OVERVIEW OF GREATER VENTERSDORP TA OPERATIONS	3-25
TABLE 3.22: OVERVIEW OF JOUBERTON & NOORDKOM TA OPERATIONS 3-2 TABLE 3.23: OVERVIEW OF KHUMA TA OPERATIONS 3-3 TABLE 3.24: OVERVIEW OF KLERKSDORP TA OPERATIONS 3-3 TABLE 3.25: OVERVIEW OF MIGHTY MAKWASSI TA OPERATIONS 3-3 TABLE 3.26: OVERVIEW OF UTIWANENG TA OPERATIONS 3-3 TABLE 3.26: VISUAL CONDITION TO ROADS IN DR KENNETH KAUNDA DM 3-5 TABLE 3.29: SUMMARY OF ROAD CLASSIFICATION 3-6 TABLE 3.39: SUMMARY OF ROAD CLASSIFICATION IN DR KENNETH KAUNDA DM 3-6 TABLE 3.30: LENGTHOR FORDADS PER CLASSIFICATION IN DR KENNETH KAUNDA DM 3-6 TABLE 3.31: TRAFFIC VOLUMES IN TLOKWE 3-6 TABLE 3.32: ELECTRONIC LINKS COUNTS (2015) 3-6 TABLE 3.33: HISTORIC DATA ON N12 (SANRAL CTO 1373) 3-6 TABLE 3.34: COORDINATES OF AIRPORTS IN DR KENNETH KAUNDA DM 3-7 LIST OF FIGURES FIGURE 3.2: MODE OF TRANSPORT TO EDUCATION BY AREA IN DR KENNETH KAUNDA DM 3-3 FIGURE 3.3: STRATEGIC PUBLIC TRANSPORT NETWORK OF DR KENNETH KAUNDA DM <t< td=""><td>TABLE 3.20:</td><td>OVERVIEW OF INTERSTATE TA OPERATIONS</td><td>3-26</td></t<>	TABLE 3.20:	OVERVIEW OF INTERSTATE TA OPERATIONS	3-26
TABLE 3.23: OVERVIEW OF KHUMA TA OPERATIONS	TABLE 3.21:		
TABLE 3.24: OVERVIEW OF KLERKSDORP TA OPERATIONS	TABLE 3.22:	OVERVIEW OF JOUBERTON & NOORDKOM TA OPERATIONS	3-29
TABLE 3.25: OVERVIEW OF MIGHTY MAKWASSI TA OPERATIONS 3-3 TABLE 3.26: OVERVIEW OF UTLWANENG TA OPERATIONS 3-3 TABLE 3.27: RESPONSIBLE AUTHORITY OF ROADS IN DR KENNETH KAUNDA DM 3-5 TABLE 3.28: VISUAL CONDITION INDEX OF ROADS IN DR KENNETH KAUNDA DM 3-5 TABLE 3.29: SUMMARY OF ROAD CLASSIFICATION 3-6 TABLE 3.30: LENGTH OF ROADS PER CLASSIFICATION IN DR KENNETH KAUNDA DM 3-6 TABLE 3.31: TRAFFIC VOLUMES IN TLOKWE 3-6 TABLE 3.32: ELECTRONIC LINKS COUNTS (2015) 3-6 TABLE 3.33: HISTORIC DATA ON N12 (SANRAL CTO 1373) 3-6 TABLE 3.34: COORDINATES OF AIRPORTS IN DR KENNETH KAUNDA DM 3-7 LIST OF FIGURES FIGURE 3.1: MODE OF TRANSPORT TO WORK BY AREA IN DR KENNETH KAUNDA DISTRICT IN 2013 3-7 FIGURE 3.3: STRATEGIC PUBLIC TRANSPORT NETWORK OF DR KENNETH KAUNDA DM 3-3 FIGURE 3.4: STRATEGIC PUBLIC TRANSPORT NETWORK OF JB MARKS LM 3-3 FIGURE 3.5: STRATEGIC PUBLIC TRANSPORT NETWORK OF JB MARKS LM 3-3 FIGURE 3.6: STRATEGIC PUBLIC TRANSPORT NETWORK OF JB MARKS LM 3-3 FIGURE 3.6: STRATEGIC PUBLIC TRANSPORT NETWORK OF MAQUASSI HILLS LM 3-3 FIGURE 3.7: RATEGIC PUBLIC TRANSPORT NETWORK OF MAQUASSI HILLS LM 3-4 FIGURE 3.7: RAIL NETWORK IN DR KENNETH KAUNDA DM 3-4 FIGURE 3.7: RAIL NETWORK IN DR KENNETH KAUNDA DM 3-4 FIGURE 3.7: RAIL NETWORK IN DR KENNETH KAUNDA DM 3-4 FIGURE 3.7: RAIL NETWORK IN DR KENNETH KAUNDA DM 3-4 FIGURE 3.7: NON-MOTORIZED TRANSPORT IN POTCHEFSTROOM 3-4 FIGURE 3.9: NON-MOTORIZED TRANSPORT IN POTCHEFSTROOM 3-4	TABLE 3.23:	OVERVIEW OF KHUMA TA OPERATIONS	3-31
TABLE 3.26: OVERVIEW OF UTLWANENG TA OPERATIONS	TABLE 3.24:		
TABLE 3.27: RESPONSIBLE AUTHORITY OF ROADS IN DR KENNETH KAUNDA DM	TABLE 3.25:	OVERVIEW OF MIGHTY MAKWASSI TA OPERATIONS	3-33
TABLE 3.28: VISUAL CONDITION INDEX OF ROADS IN DR KENNETH KAUNDA DM	TABLE 3.26:		
TABLE 3.29: SUMMARY OF ROAD CLASSIFICATION	TABLE 3.27:		
TABLE 3.30: LENGTH OF ROADS PER CLASSIFICATION IN DR KENNETH KAUNDA DM. 3-6 TABLE 3.31: TRAFFIC VOLUMES IN TLOKWE. 3-6 TABLE 3.32: ELECTRONIC LINKS COUNTS (2015) 3-6 TABLE 3.33: HISTORIC DATA ON N12 (SANRAL CTO 1373) 3-6 TABLE 3.34: COORDINATES OF AIRPORTS IN DR KENNETH KAUNDA DM. 3-7 LIST OF FIGURES FIGURE 3.1: MODE OF TRANSPORT TO WORK BY AREA IN DR KENNETH KAUNDA DISTRICT IN 2013 3-7 FIGURE 3.2: MODE OF TRANSPORT TO EDUCATION BY AREA IN DR KENNETH KAUNDA DISTRICT IN 2013 3-7 FIGURE 3.3: STRATEGIC PUBLIC TRANSPORT NETWORK OF DR KENNETH KAUNDA DM. 3-3 FIGURE 3.4: STRATEGIC PUBLIC TRANSPORT NETWORK OF JB MARKS LM 3-3 FIGURE 3.5: STRATEGIC PUBLIC TRANSPORT NETWORK OF CITY OF MATLOSANA LM 3-3 FIGURE 3.6: STRATEGIC PUBLIC TRANSPORT NETWORK OF MAQUASSI HILLS LM 3-4 FIGURE 3.7: RAIL NETWORK IN DR KENNETH KAUNDA DM. 3-4 FIGURE 3.8: NON-MOTORIZED TRANSPORT IN POTCHEFSTROOM 3-4 FIGURE 3.9: NON-MOTORIZED TRANSPORT IN POTCHEFSTROOM 3-4	TABLE 3.28:	The Confidence of the Confiden	
TABLE 3.31: TRAFFIC VOLUMES IN TLOKWE	TABLE 3.29:		
TABLE 3.32: ELECTRONIC LINKS COUNTS (2015)	TABLE 3.30:		
TABLE 3.33: HISTORIC DATA ON N12 (SANRAL CTO 1373)	TABLE 3.31:		
LIST OF FIGURES FIGURE 3.1: Mode of Transport to Work by Area in Dr Kenneth Kaunda District in 2013			
LIST OF FIGURES FIGURE 3.1: Mode of Transport to Work by Area in Dr Kenneth Kaunda District in 2013		The Paris of the P	
FIGURE 3.1: MODE OF TRANSPORT TO WORK BY AREA IN DR KENNETH KAUNDA DISTRICT IN 2013	TABLE 3.34:	COORDINATES OF AIRPORTS IN DR KENNETH KAUNDA DM	3-72
FIGURE 3.2: MODE OF TRANSPORT TO EDUCATION BY AREA IN DR KENNETH KAUNDA DISTRICT IN 20133-1 FIGURE 3.3: STRATEGIC PUBLIC TRANSPORT NETWORK OF DR KENNETH KAUNDA DM3-3 FIGURE 3.4: STRATEGIC PUBLIC TRANSPORT NETWORK OF JB MARKS LM3-3 FIGURE 3.5: STRATEGIC PUBLIC TRANSPORT NETWORK OF CITY OF MATLOSANA LM3-3 FIGURE 3.6: STRATEGIC PUBLIC TRANSPORT NETWORK OF MAQUASSI HILLS LM3-4 FIGURE 3.7: RAIL NETWORK IN DR KENNETH KAUNDA DM3-4 FIGURE 3.8: NON-MOTORIZED TRANSPORT IN POTCHEFSTROOM3-4 FIGURE 3.9: NON-MOTORIZED TRANSPORT IN POTCHEFSTROOM3-4		LIST OF FIGURES	
FIGURE 3.2: MODE OF TRANSPORT TO EDUCATION BY AREA IN DR KENNETH KAUNDA DISTRICT IN 20133-1 FIGURE 3.3: STRATEGIC PUBLIC TRANSPORT NETWORK OF DR KENNETH KAUNDA DM3-3 FIGURE 3.4: STRATEGIC PUBLIC TRANSPORT NETWORK OF JB MARKS LM3-3 FIGURE 3.5: STRATEGIC PUBLIC TRANSPORT NETWORK OF CITY OF MATLOSANA LM3-3 FIGURE 3.6: STRATEGIC PUBLIC TRANSPORT NETWORK OF MAQUASSI HILLS LM3-4 FIGURE 3.7: RAIL NETWORK IN DR KENNETH KAUNDA DM3-4 FIGURE 3.8: NON-MOTORIZED TRANSPORT IN POTCHEFSTROOM3-4 FIGURE 3.9: NON-MOTORIZED TRANSPORT IN POTCHEFSTROOM3-4	FIGURE 3.1:	MODE OF TRANSPORT TO WORK BY AREA IN DR KENNETH KAUNDA DISTRICT IN 2013	3-7
FIGURE 3.3: STRATEGIC PUBLIC TRANSPORT NETWORK OF DR KENNETH KAUNDA DM. 3-3 FIGURE 3.4: STRATEGIC PUBLIC TRANSPORT NETWORK OF JB MARKS LM 3-3 FIGURE 3.5: STRATEGIC PUBLIC TRANSPORT NETWORK OF CITY OF MATLOSANA LM 3-3 FIGURE 3.6: STRATEGIC PUBLIC TRANSPORT NETWORK OF MAQUASSI HILLS LM 3-4 FIGURE 3.7: RAIL NETWORK IN DR KENNETH KAUNDA DM 3-4 FIGURE 3.8: NON-MOTORIZED TRANSPORT IN POTCHEFSTROOM 3-4 FIGURE 3.9: NON-MOTORIZED TRANSPORT IN POTCHEFSTROOM 3-4	FIGURE 3.2:	MODE OF TRANSPORT TO EDUCATION BY AREA IN DR KENNETH KAUNDA DISTRICT IN 2013	3-8
FIGURE 3.5: STRATEGIC PUBLIC TRANSPORT NETWORK OF CITY OF MATLOSANA LM	FIGURE 3.3:		
FIGURE 3.6: STRATEGIC PUBLIC TRANSPORT NETWORK OF MAQUASSI HILLS LM 3-4 FIGURE 3.7: RAIL NETWORK IN DR KENNETH KAUNDA DM 3-4 FIGURE 3.8: Non-Motorized Transport in Potchefstroom 3-4 FIGURE 3.9: Non-Motorized Transport in Potchefstroom 3-4	FIGURE 3.4:	STRATEGIC PUBLIC TRANSPORT NETWORK OF JB MARKS LM	3-38
FIGURE 3.7: RAIL NETWORK IN DR KENNETH KAUNDA DM	FIGURE 3.5:	STRATEGIC PUBLIC TRANSPORT NETWORK OF CITY OF MATLOSANA LM	3-39
FIGURE 3.8: NON-MOTORIZED TRANSPORT IN POTCHEFSTROOM	FIGURE 3.6:	STRATEGIC PUBLIC TRANSPORT NETWORK OF MAQUASSI HILLS LM	3-40
FIGURE 3.8: NON-MOTORIZED TRANSPORT IN POTCHEFSTROOM	FIGURE 3.7:	RAIL NETWORK IN DR KENNETH KAUNDA DM	3-46
	FIGURE 3.8:	NON-MOTORIZED TRANSPORT IN POTCHEFSTROOM	3-48
FIGURE 3.10 Non-Matarisen Transport in Kuerkshard	FIGURE 3.9:	NON-MOTORIZED TRANSPORT IN POTCHEFSTROOM	3-49
FIGURE 3.10. INDIVINOIDED TRANSFORT IN RECENSOOR	FIGURE 3.10:	NON-MOTORISED TRANSPORT IN KLERKSDORP	3-50

STAATSKOERANT, 27 NOVEMBER 2020

No. 43934 **73**

FIGURE 3.11:	RURAL VILLAGES IN DR KENNETH KAUNDA DM	3-52
FIGURE 3.12:	OVERVIEW OF TRANSPORT NETWORK IN DR KENNETH KAUNDA DM	3-54
FIGURE 3.13:	OVERVIEW OF RESPONSIBLE AUTHORITY OF ROADS IN DR KENNETH KAUNDA DM	3-57
FIGURE 3.14:	OVERVIEW OF ROAD CLASSIFICATION IN DR KENNETH KAUNDA DM	3-58
FIGURE 3.15:	TLOKWE ROADS MASTERPLAN	3-62
FIGURE 3.16:	PROPOSED BYPASS ON N12 AROUND KLERSKDORP	
FIGURE 3.17:	POTCHEFSTROOM TRAFFIC VOLUMES	
FIGURE 3.18:	FREIGHT ROUTES IN DR KENNETH KAUNDA DM	3-69
FIGURE 3.19:	FREIGHT FACILITIES IN DR KENNETH KAUNDA DM	3-71
FIGURE 3.20:	AIRPORTS AND AIRFIELDS IN DR KENNETH KAUNDA DM	3-73
FIGURE 3.21:	EXISTING LAYOUT OF POTCHEFSTROOM AIRPORT	3-75
FIGURE 3.22:	EXISTING LAYOUT OF P.C PELSER AIRPORT	3-78
FIGURE 3.23:	EXISTING APRON AT P.C PELSER AIRPORT	
FIGURE 3.24:	EXISTING TERMINAL BUILDING AND ELEVATED CONTROL TOWER PLATFORM AT P.C PELSER AIRPORT	3-80
FIGURE 3.25:	ORKNEY AIRPORT	3-82
FIGURE 3.26:	VENTERSDORP AIRPORT	3-83
FIGURE 3.27:	VENTERSDORP AIRPORT HANGAR	3-84
FIGURE 3 79.	WOLMADANICTAN ALDRODT	3.95

3 CHAPTER 3: TRANSPORT REGISTER

3.1 Introduction

This chapter provides a summary and analysis of the data collected and it covers the full spectrum of transport information, including an overview of demographic and socio-economic characteristics, transport infrastructure and public transport services for passengers and freight.

Various Transport Registers (TR), previously referred to as the Current Public Transport Record (CPTR), has been compiled for the Dr Kenneth Kaunda District Municipality (DrKKDM). The first TR was compiled in 2002/2003, then updated in 2007/2008 and again in 2010. These first three CPTR's were compiled under the previous Transport Act, i.e. the National Land Transport Transition Act (Act 22 of 2000), as well as different versions of the minimum guidelines for the compilation of Integrated Transport Plans (ITP's) and CPTRs. Therefore, they have different focus areas and outcomes based on the applicable guidelines at that time. In most cases, only peak period surveys were conducted, and certain municipalities may not have been covered properly, due to numerous problems observed during the surveys. During the 2007/2008 update, a more particular focus was adopted with a greater emphasis to complete the data collection omitted during the previous register cycle. with one of those being the collection of taxi data in a twelve-hour time horizon. During the 2010 CPTR update, more emphasis was placed on non-conventional transport operations, such as non-motorized transport and shifting of operations during peak operations.

The NWP DCSTM updated the Transport Register (TR) in 2016 (RHDHV, 2016). This TR was based on the National Transport Act (Act 5 of 2009) and the latest gazetted Minimum Requirements for the Preparation of Integrated Transport Plans (Government Gazette, 29 July 2018, Government Notice 881). Data is based on 2016 surveys, as well as information issued by the Provincial Registration Entity (PRE) in July 2016.

A moratorium on the issue of new operating licences was issued by the North West Department of Community Safety and Transport Management in December 2016, stating that Operating Licences may not be issued within the North West Province.

3.2 Demographic and Socio-Economic

3.2.1 Dr Kenneth Kaunda District Municipality

DrKKDM is a region with a rich and diverse natural and cultural heritage, with the potential for sustained economic growth. The region is home to some of the most prominent gold mines in the world, as well as one of the oldest meteor impact sites in the world.



The district is serviced by numerous primary roads, with the N12 Treasure Corridor forming the main development axis in the district, serving as a potential concentration point for future industrial, commercial and tourism development.

The following are the key socio-economic indicators:

Population Size

- 2011: 695 933
- 2016: 742 821
- 2023: 753 885

Household Size (2016)

- 240 543 households
- Average Household Size: 3.1 people / household

Age Profile (2016)

- 29.3% population under 15
- 65.8% population between 15 and 64
- 4.8% population over 65

Level of Education (Population segment 20 years and older)

- 8.9% no schooling
- 30.7% matric
- 9.6% higher education

Average Household Income:

2013: R5103.53 per month

Racial Profile (2011)

- 82.8% Black African
- 3.8% Coloured
- 0.6% Indian/Asian
- 12.3% White
- 0.5% Other

Dwelling Type (2011)

- 53% House or brick structure on separate stand
- 23.2% Informal dwelling (shack, not in backyard)
- 6.4% Flat or apartment in a block of flats
- 17.4% Informal dwelling (shack, in backyard)

3.3 General Overview of the Transportation System

The regional connectivity of the DrKKDM roads is very good. Potchefstroom is strategically located on the N12 between Johannesburg and Bloemfontein. Klerksdorp and Wolmaransstad are also located on the N12 between Potchefstroom and Kimberley. Ventersdorp is located on the N14 between Johannesburg and Mafikeng. The R30 connects Ventersdorp to Klerksdorp and Rustenburg, whilst the R53 connects Ventersdorp to Potchefstroom.

The R502 connects Orkney, Leeudoringstad and Makwassie. The R505 connects Wolmaransstad and Makwassie.

The access roads to rural settlements are generally in a poor condition.

DrKKDM is well supplied with mini-bus taxi vehicles of which more than 2 039 are legally registered mini-bus taxi vehicles and 1 283 operational members. If illegal operations are added, then this figure would actually be much higher. Currently (PRE, 2017), there are a total of 2 011 operating licences issued of which 1 976 have been issued for commuter services, and 1 004 for long-distance services.

Most mini-bus taxi vehicles use fixed infrastructure, such as formal and informal ranks to load passengers onto routes which further disperse them to different destinations. Most of the minibus taxi infrastructure facilities in the district are informal of nature, with little or no physical infrastructure provided for commuters. In some instances, minibus taxis also roam in townships, and load passengers at taxi stops which differ on demand along the road network. In many cases, these informal stops serve as feeder points to formal facilities from where the actual route starts. Chapter 3 provides an overview of the location of mini-bus taxi ranks, as well as other boarding points for the district. In total, there are approximately 109 identified taxi facilities, of which 87 are used for boarding, and approximately 11 can be classified as formal.

There is a total of 112 learner transport operators serving 78 schools with 164 vehicles.

3.4 National Household Travel Survey

Figure 3.1 illustrates the modes of transport to work.

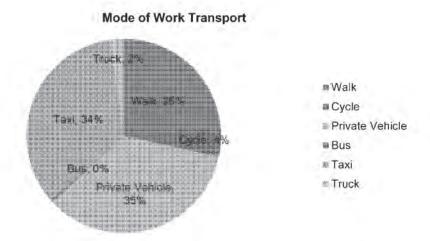


Figure 3.1: Mode of Transport to Work by Area in Dr Kenneth Kaunda District in 2013

The most popular modes of transport to work are taxi's (34%) and cars (35%), followed by walking (25%). One of the least popular modes of transport to work is cycling, with only 4% of employees traveling in this manner.

The average travel time to work is:

- Walking 31 min
- Car 57 min
- Taxi 45 min

Figure 3.2 illustrates the modes of transport to education facilities.

The majority of learners, 63%, in the Dr Kenneth Kaunda District Municipality walk to and from educational facilities. Taxi's and private vehicles are also utilised as a means of transport for educational purposes with only 3% of learners travelling by bus. This is due to the low availability of busses in the district as the only bus services available are utilised for learner transport.

The average actal travel time to educational facilities is listed below:

- Bus 56 min
- Taxi 55 min
- Car 70 min
- Walk 32 min

According to the Stats SA, National Household Travel Survey in 2013, the average total monthly household income in the district is R5103,53., and the average public transport cost is R154,45 with roughly 3% of income spent on transport.

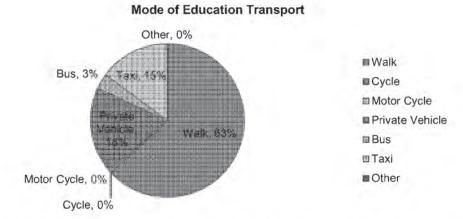


Figure 3.2: Mode of Transport to Education by Area in Dr Kenneth Kaunda District in 2013

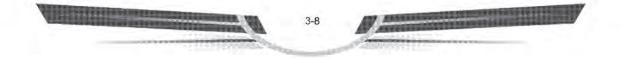
3.5 Minibus-Taxis

3.5.1 Taxi Associations

Table 3.1: Summary of Taxi Associations, Members, Vehicles and Operating Licences in Dr Kenneth Kaunda District Municipality

	VEHICLES	MEMBERS	PERMITS	ROUTES
Baleti	127	65	130	12
Codesa	153	112	158	21
Greater Orkney	92	69	91	29
Greater Potch	267	168	265	10
Greater Stilfontein	148	102	146	13
Greater Ventersdorp	37	27	37	6
Interstate	203	130	187	25
Jouberton & Noordkom	93	57	90	14
Jouberton	276	146	263	50
Khuma	154	104	153	19
Klerksdorp	299	203	303	15
Mighty Makwassie	81	48	82	17
Utlwaneng	109	52	106	32
	2039	1283	2011	263

Source: Provincial Registration Entity 2017



3.5.2 Coding of ranks and routes

Ranks, termini and routes are uniquely coded to allow for identification. The coding that was adopted in the DrKKDM TR (2016) includes:

For Facilities:

- NWRP0049-T where:
 - NW = North West Province
 - RP = Rank Point / CP = Cordon Point / SP = Scholar Point
 - o 0049 = Unique number for the rank or point
 - T = Taxi / MT = Metered Taxi / B= Bus / S = Scholar

For Routes:

- NWRP0067-T005 where:
 - NW = North West Province
 - RP = Origin Rank Point / CP = Cordon Point / SP = Scholar Point
 - 0067 = Unique origin point number
 - T = Taxi / MT = Metered Taxi / B= Bus / S = Scholar
 - 005 Unique route numbers from origin point

These codes have only been created for this register and do not interfere with the adopted legal numbering systems of the OLAS and eNATIS systems. The facility and route codes in this register have been linked with these statutory codes as far as formal links could be established and are only utilised for reporting purposes to stakeholders.

3.5.3 Minibus-Taxi Ranks

Tables 3.2 to 3.11 list the taxi ranks in each of the towns in the District. Maps of the rank locations are provided in Chapter 6: Public Transport Plan.

Table 3.2: Overview of Minibus-Taxi Facilities for Hartbeesfontein

FACILITY NAME	TYPE	FORMAL	HOLDING/LOADING
Gold Mine 2 Rank (Hartbeesfontein)	Rank	IF	Not Verified
Gold Mine 6 Rank (Hartbeesfontein)	Rank	JF	Not Verified
Gold Mine 7 Rank (Hartbeesfontein)	Rank	IF	Not Verified
Hartbeesfontein Rank	Rank	F	Not in Use

Table 3.3: Overview of Minibus-Taxi Facilities for Kanana

TYPE	FORMAL	HOLDING/LOADING
Rank	IF.	Not Verified
Rank	IF	Not Verified
Rank	JF .	Not Verified
Rank	IF	Not Verified
	Rank Rank Rank	Rank IF Rank IF Rank IF



FACILITY NAME	TYPE	FORM	AL HOLDING/LOADING
Ext 9 (Kanana)	Rank	IF	Not Verified
Kanana Mall	Rank	IF	Loading
Kanana Rank (Not currently in use)	Rank	F	Not Verified

Table 3.4: Overview of Minibus-Taxi Facilities for Khuma

FACILITY NAME	TYPE	FORM	AL HOLDING/LOADING
Ext 8 Rank (Khuma)	Rank	IF	Loading
Ext 6 Rank (Khuma)	Rank	JĒ.	Loading
Khuma Rank	Rank	IF	Holding Area
Ext 2 Rank (Khuma)	Rank	IF.	Not Verified

Table 3.5: Overview of Minibus-Taxi Facilities for Klerksdorp

DIE 3.3. OVERVIEW OF WITHDUS-TAXE	i acintics for the	actities for Kierksdorp			
FACILITY NAME	TYPE	FORMAL	HOLDING/LOADING		
Alabama (Klerksdorp)	Rank	IF	Holding Area		
Anncron Clinic Drop Off (Klerksdorp)	Drop Off Point	IF.	Holding Area		
Caltex Drop Off (Klerksdorp)	Drop Off Point	IF	Holding Area		
Checkers (Klerksdorp)	Drop Off Point	IF	Holding Area		
Doringkruin Holding Area (Klerksdorp)	Rank (Holding)	IF	Holding Area		
Ellaton Informal Holding Klerksdorp Industrial Site	Rank (Holding)	JF	Holding Area		
Engen Minibus Holding (Klerksdorp)	Rank (Holding)	IF	Holding Area		
Flamwood Walk Centre (Klerksdorp)	Drop Off Point	IF	Holding Area		
Fresh Produce Market (Tambaai) (Klerksdorp)	Rank	IF	Holding Area		
Jabulani Mall (Tambaai) (Klerksdorp)	Rank	IF	Holding Area		
Hospital Holding (Klerksdorp)	Rank (Holding)	1F	Holding Area		
Industrial Site (Klerksdorp)	Rank	IF	Not Verified		
Klerksdorp Shell Garage Rank (Klerksdorp)	Rank	F	Not Verified		
Klerksdorp Station	Rank	IF	Not Verified		
KOSH CAB (Klerksdorp)	Rank	F	Not Verified		
La Hoff	Rank	IF	Holding Area		
Matlosana Mall Rank (Klerksdorp)	Rank	F	Pick-Up Point		
Pick n Pay Holding Area (Klerksdorp)	Rank (Holding)	1F	Holding Area		
Randlespar Holding Area (Klerksdorp)	Rank (Holding)	IF	Holding Area		
Jazz Bar Taxi Rank (Klerksdorp)	Rank	IF.	Loading		
Price 'N Pride Rank (Tambai Area) (Klerksdorp)	Rank	F	Loading		
Price 'N Pride Rank (Klerksdorp)	Rank	IF	Loading		
Ext 13 (Jouberton)	Rank	IF.	Holding Area		

FACILITY NAME	TYPE	FORMAL	HOLDINGALOADING
Ext 18 (Joulberton)	Rank	F	Holding Area
Ext 21 (Jouberton)	Rank	IF	Holding Area
Ext 2 (Jouberton)	Rank	JF	Not Verified
Ext 3 (Jouberton)	Rank	IF	Not Verified
Ext 13 (Jouberton)	Rank	JF.	Not Verified
Ext 7 (Jouberton)	Rank	IF .	Not Verified
Ext 22 (Jouberton)	Rank	IF	Holding Area
Tshepong Hospital Main Rank (Jouberton)	Rank	F	Not Verified
Jouberton Rank	Rank	IF.	Not Verified
Seleke Tavern Ext 7 (Jouberton)	Rank	IF .	Holding Area
Shell Garage Tambaai Holding (Jouberton)	Rank (Holding)	IF	Tambaai Holding
Stop 7 (Jouberton)	Rank	IF	Not Verified

Table 3.6: Overview of Minibus-Taxi Facilities for Orkney

FACILITY NAME	TYPE	FORMAL	HOLDING/LOADING
Orkney Taxi Rank 2	Rank	IF	Loading
Ext 2 Rank (Orkney)	Rank	F	Not Verified
Orkney Taxi Rank 1	Rank	F	Not Verified

Table 3.7: Overview of Minibus-Taxi Facilities for Potchefstroom

FACILITY NAME	TYPE	FORMAL	HOLDING/LOADING
Baipei Aksie/ Promosa Taxi Rank	Rank	IF	Loading
Chubby Chick Taxi Rank	Rank	IF	Loading
Dassierand Taxi Rank	Rank	IF.	Loading
Hospital Taxi Rank (Potchefstroom)	Rank	F	Combined
Industry Taxi Rank (Potchefstroom)	Rank)F	Combined
Potchefstroom Main Taxi Rank (Potchefstroom)	Rank	F	Combined
Post Office Taxi Rank (Promosa)	Rank	1F	Loading
Sarafina Taxi Rank	Rank	IF	Combined
Von Weillich Taxi Rank	Rank	SF	Combined
Witrand Taxi Rank	Rank	IF	Loading
Caltex N12	Rank	-1F	Pick-Up Point
Baillie Park	Rank	IF	Pick-Up Point
Mohadin Holding	Rank (Holding)	IF	Holding Area
Tshwarelanang Holding Area	Rank (Holding)	IF	Holding Area
Skierlik Holding Area	Rank (Holding)	IF	Holding Area
Ext 11 Taxi Rank (Ikageng)	Rank	IF	Combined
Ext 6 Taxi Rank (Ikageng)	Rank	IF	Loading

FACILITY NAME	TYRE	FORMAL	HOLDING/LOADING
Ext 7 Taxi Rank (likageng)	Rank	F	Combined
Gate Mall Taxi Rank (Ikageng)	Rank	IF	Loading
4 A Taxi Rank (Ikageng)	Rank	JF	Combined
Ext 4B Taxi Rank (Ikageng)	Rank	IF	Loading
Ikageng Holding Area (Ikageng)	Rank (Holding)	JF.	Holding Area
Ext 11 Holding Area (Ikageng)	Rank (Holding)	IF	Holding Area
Ext 4 Holding Area (Ikageng)	Rank (Holding)	IF.	Holding Area
Mandela Rank (Ikageng)	Rank	IF'	Pick-Up Point
Kanana Taxi Rank (Kanana)	Rank	SF	Combined
Kanana Holding Area (Kanana)	Rank (Holding)	IF.	Holding Area

Table 3.8: Overview of Minibus-Taxi Facilities for Stilfontein and Tigane

FACILITY NAME	TYPE	FORMAL	HOLDING/LOADING
Stilfontein Main Taxi Rank (Stilfontein)	Rank	F	Loading
Stilfontein Spar (Stilfontein)	Rank	JF	Loading
Ext 8 Rank (Stilfontein)	Rank	IF	Holding Area
Stilfontein Rank (Stilfontein)	Rank	JE	Not Verified
Tigane (Tigane)	Rank	IF.	Holding Area

Table 3.9: Overview of Minibus-Taxi Facilities for Vaal Reefs

FACILITY NAME	TYPE	FORMAL	HOLDING/LOADING
Umuzumuhle Rank (Vaal Reefs)	Rank	JF	Not Verified
Umuzumuhle or Vaal Reefs Rank (Vaal Reefs)	Rank	F	Not Verified
Mine 2 Rank (Vaal Reefs)	Rank	IF:	Not Verified
Mine 4 Rank (Vaal Reefs)	Rank	IF.	Not Verified
Vaal Reefs Rank (Vaal Reefs)	Rank	IF	Not Verified

Table 3.10: Overview of Minibus-Taxi Facilities for Ventersdorp

FACILITY NAME	TYPE	FORMAL	HOLDING/LOADING
Greater Ventersdorp Taxi Rank (Ventersdorp)	Rank	IF	Loading
Manaka Str Pick-Up (Ventersdorp)	Pick-Up Point	IF	Pick-Up
Mothlabane Str Pick-Up (Ventersdorp)	Pick-Up Point	1F	Pick-Up
Monamodi Pick-Up (Ventersdorp)	Pick-Up Point	IF	Pick-Up
Spar Informal Rank (Ventersdorp)	Pick-Up Point	IF	Pick-Up
GaMogopa (Ventersdorp)	Pick-Up Point	JF.	Pick-Up
Goedgevonden (Ventersdorp)	Pick-Up Point	IF	Pick-Up
Boikhutso (Vlieger) (Ventersdorp)	Pick-Up Point	IF	Pick-Up
Tsetse (Doornkop) (Ventersdorp)	Pick-Up Point	IF	Pick-Up

FACILITY NAME	TYPE	EDEMAL	HOLDINGA GADING
Bolkhutsong (Bruidegomakraal) (Ventersdorp)	Pick-Up Point	IIF.	Pick-Up
Welgevonden (Ventersdorp)	Pick-Up Point	IF	Pick-Up
Ventersdorp Rank (Ventersdorp)	Rank	F	Not Verified
JB Marks Health Centre Ext 2 (Tsing)	Pick-Up Point	IF	Pick-Up
Ext 5 Pick-up (Tsing)	Pick-Up Point	IF	Pick-Up

Table 3.11: Overview of Minibus-Taxi Facilities for Wolmaransstad

FACILITY NAME	ТҮР	FORMAL	HOLDING L	OADING
Capitec Taxi Rank (Wolmaransstad)	Rank	IF.	Loading	
Capitec Tambai Rank (Wolmaransstad)	Rank	IF	Loading	
N12 Engen/ Total Garage (Wolmaransstad)	Rank	lF	Loading	
Wolmaransstad Taxi Rank (Wolmaransstad)	Rank	IF	Loading	
Wolmaransstad Tambaai Rank (Wolmaransstad)	Rank	JF.	Loading	

3.5.4 Minibus-Taxi Routes

Table 3.12: Overview of PRE-operating licences issued for commuter services (2017)

ORIGIN AND DESTINATION	UNIQUE PERMITS
Alabama	59
Klerksdorp	59
Jouberton	547
Hartebeesfontein	
Jouberton	7
Klerksdorp	495
Klerksdorp Rural	29
Vaal Reefs	15
Kanana	69
Klerksdorp	29
Orkney	36
Vaal Reefs	3
Viljoenskroon	1
Kgakala	6
Klerksdorp	4
Wolmaransstad	2
Khuma	139
Klerksdorp	97
Orkney	4
Stilfontein	34

ORIGIN AND DESTINATION	UNIQUE PERMITS
Vaal Reefs	.
Klerksdorp	123
Hartebeesfontein	8
Klerksdorp	19
Kroonstad	2
Leeudoringstad	8
Orkney	28
Ottosdal	
Potchefstroom	7
Stilfontein	17
Vaal Reefs	28
Wolmaransstad	
Lebaleng	2
Maquassi Hills	2
Leeudoringstad	1
Kgakala	
Letsopa	15
Ottosdal	
lkageng	483
Potchefstroom	483
Makwassie	13
Klerksdorp	
Wolmaransstad	10
Orkney	5
Orkney	1
Vaal Reefs	4
Ottosdal	15
Klerksdorp	15
Potchefstroom	53
Boskop Training Centre (Potchefstroom)	3
Klerksdorp	16
Potchefstroom	.
Potchefstroom Rural	12
Taung	13
Ventersdorp	5
Promosa	66
Potchefstroom	66
Stilfontein	190
Klerksdorp	161

ORIGIN AND DESTINATION	UNIQUE PERMITS
Potchefstroom	29
Tigane	33
Klerksdorp	33
Tshing	21
Ventersdorp	21
Tswelelang	17
Maquassi Hills	11
Wolmaransstad	6
Vaal Reefs	16
Khuma	4
Klerksdorp	3
Orkney	11
Ventersdorp	28
Klerksdorp	4
Potchefstroom	3
Ventersdorp	8
Ventersdorp Rural	13
Wolmaransstad	75
Klerksdorp	41
Makwassie	34
Total	1976

Table 3.13: Overview of PRE-operating licences issued for long distance services (2016)

(2010)		 			
ORIGIN AND DESTI	IATION		UNIQUE	PERMITS	
Hartebeesfontein				3	
Mafikeng				1	
Rosendal				2	
Jouberton			1	2	
Johannesburg			1	1	
Vierfontein				1	
Khuma			8	8	
Butterworth			1	5	
Clocolan				4	
Johannesburg			4	6	
Kimberley				4	
Pietersburg			1	4	
Schweizer Reneke				5	
Klerksdorp			41	66	

ORIGIN AND DESTINATION	UNIQUE PERMITS
Bloemfontein	21
Carletonville	7
Delareyville	.
Durban	9
Hartswater	1
Itsoseng	2
Johannesburg	55
Kimberley	1
Kokstad	
Kroonstad	8
Ladybrand	14
Lenasia	1
Lichtenburg	2
Itsoseng	7
Madibogo	4
Mafikeng	71
Malutí a Phofung	17
Odendaalsrus	16
Pampierstad	2
Phuthaditjhaba	2
Pietersburg	16
Pretoria	25
Queenstown	
Randfontein	7
Rosendal	2
Rustenburg	53
Sannieshof	2
Schweizer Reneke	1
Sterkspruit	: : : : : : : : : : : : : : : : : : :
Taung	46
Umtata	8
Vereeniging	11
Vryburg	41
Welkom	3
Zeerust	
Leeudoringstad	2
Mafikeng	1
Rustenburg	1
Makwassie	.

ORIGIN AND DESTINATION	UNIQUE PERMITS
Kimberley	
Maquassi Hills	
Mafikeng	
Orkney	53
East London	18
Ficksburg	3
Ladybrand	
Mafikeng	
Matatiele	
Rustenburg	
Umtata	12
Vierfontein	13
Viljoenskroon	2
Wepener	
Ottosdal	8
Lichtenburg	7
Rustenburg	1
Potchefstroom	173
Baragwanath	2
Carletonville	6
Durban	3334 9338 9338 9338 934 1 1333 933 933 933
Fochville	
Johannesburg	23
Krugersdorp	16
Mafikeng	27
Parys	7
Pietersburg	11
Pretoria	15
Rustenburg	23
Schweizer Reneke	8
Taung	7
Vereeniging Rural	15
Viljpenskroon	11
Stilfontein	33
Johannesburg	9
Rustenburg	13
Schweizer Reneke	2
Welkom	9
Vaal Reefs	103

GOVERNMENT GAZETTE, 27 NOVEMBER 2020

88 No. 43934

ORIGIN AND DESTINATION	UNIQUE PERMITS
Bethlehem	2
Bisho	30
Ficksburg	12
Fouriesburg	1
Johannesburg	3
Ladybrand	13
Marquard	2
Matatiele	1
Umtata	
Vryburg	2
Wepener	15
Zastron	10
Ventersdorp	39
Mafikeng	5
Rustenburg	34
Wolmaransstad	22
Johannesburg	
Total	1004

Table	3.14:	Overview	of Baleti	TAO	perations

ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
Letsopa	Klerksdorp	From Letsopa, Ottosdal taxi rank, return left to Hartebeesfontein via N12 Main reef road into Park street, into Noord street Klerksdorp taxi rank and return	BRCNWBTA02	11	15
Klerksdorp	Mafeking Rural	From Klerksdorp taxi rank to Mafikeng taxi rank and return	BRCNWBTA07	4	4
Alabama	Klerksdorp	From Alabama taxi rank via N12 Main reef road into Park street onto Noord street Klerksdorp taxi rank and return	BRCNWBTA01	27	27
Jouberton	Klerksdorp Rural	From Jouberton taxi rank via Klerksdorp all extensions, Industrial site, suburbs to Klerksdorp taxi rank and return	BRCNWBTA05	26	29
Alabama	Klerksdorp	From Alabama taxi rank via Klerksdorp all extensions, Industrial site, suburbs to Klerksdorp taxi rank and return	BRCNWBTA06	28	31
Ottosdal	Lichtenburg	From Ottosdal taxi rank to Lichtenburg taxi rank and back	BRCNWBTA07MULTI	2	7
Letsopa	Ottosdal	From Letsopa taxi rank to Ottosdal taxi rank and return	BRCNWBTA08	10	15
Ottosdal	Johannesburg South	From Ottosdal taxi rank Johannesburg taxi rank and return	BRCNWBTA12	0	0
Ottosdal	Rustenburg	From Ottosdal taxi rank to Rustenburg taxi rank and return	BRCNWBTA11	1	1
Klerksdorp	Itsoseng	From Klerksdorp taxi rank to Itsoseng taxi rank and back	BRCNWBTA09	2	2
Klerksdorp	Ottosdal	From Klerksdorp taxi rank to Ottosdal taxi rank and return	BRCNWBTA10	2	2
Klerksdorp	Vryburg	From Klerksdorp taxi rank to Vryburg taxi rank and return	BRCNWBTA13	2	2
Tigane	Klerksdorp	From Tigane to Klerksdorp	BRCNWBTA03	23	24

Table 3.15: C	Overview of	Codesa 1	TA o	perations
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ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
lkageng	Potchefstroom	From Ikageng township to Potchefstroom taxi rank and all extensions and return	BRCNWCOTA01	94	109
Promosa	Potchefstroom	From Promosa township to Potchefstroom taxi rand and all extensions and return	BRCNWCOTA02	19	21
Potchefstroom	Parkstasie	From Potchefstroom taxi rank to Johannesburg taxi rank at Parkstasie rank and return	BRCNWCOTA03	11	11
lkageng	Potchefstroom	From Ikageng township to Potchefstroom all extensions and return	BRCNWCOTA08	9	9
Potchefstroom	Klerksdorp	From Potchefstroom taxi rank to Klerksdorp taxi rank and return	BRCNWCOTA09	3	3
Potchefstroom	Ventersdorp	From Potchefstroom taxi rank to Ventersdorp taxi rank and return	BRCNWCOTA14	3	3
lkageng	Potchefstroom	From Seraphina to Potchefstroom taxi rank and return	BRCNWCOTA17	1	1
Potchefstroom	Johannesburg CBD	From Potchefstroom taxi rank to Johannesburg taxi rank at Parkstasie rank and return	BRCNWCOTA03	11	11
Potchefstroom	Mafikeng	From Ikageng Potchefstroom via Ventersdorp, Coligny, Lichtenburg to Mafikeng taxi rank and return	BRCNWCOTA04	10	11
Potchefstroom	Carletonville	From Potchefstroom taxi rank to Carletonville taxi rank and return	BRCNWCOTA05	4	4
Potchefstroom	Vereeniging Rural	From Potchefstroom taxi rank to Vereeniging taxi rank and return	BRCNWCOTA11	1	1
Potchefstroom	Parys	From Potchefstroom taxi rank to Parys taxi rank and return	BRCNWCOTA15	4	4
Potchefstroom	Schweizer Reneke	From Potchefstroom taxi rank to Schweizer- Reneke taxi rank and return	BRCNWCOTA10	3	8
Potchefstroom	Rustenburg	From Potchefstroom taxi rank to Rustenburg taxi rank and return	BRCNWCOTA16	4	7
Potchefstroom	Pietersburg	From Potchefstroom taxi rank via Johannesburg, Pretoria, Bela-Bela to Pietersburg taxi rank and return	BRCNWCOTA13	3	9
Potchefstroom	Fochville	From Potchefstroom taxi rank to Fochville taxi rank and back	BRCNWCOTA20	0	0
kageng	Viljoenskroon	From Potchefstroom to Viljoenskroon	BRCNWCOTA07	1	2

Table 3.16:	Overview of	Greater Orkney	v TA operations

ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
Orkney	Kroonstad Other	From Orkney taxi rank to Kroonstad taxi rank via Viljoenskroon and back	BRCNWGOSLDTA13	-1	0
Orkney	Ficksburg	From Orkney taxi rank to Viljoenskroon, Kroonstad, Steynsrus, Senekal, Rosendal Ficksburg and back	BRCNWGOSLDTA23	1	3
Vaal Reefs	Orkney	From Vaal reefs Gold mine Umzimuhle taxi rank to Orkney taxi rank and back	BRCNWGOSLDTA27	1	3
Vaal Reefs	Vaal Reefs	From Vaal Reefs Umuzimuhle taxi rank to Vaal Reefs shaft 9 and back	BRCNWGOSLDTA37	1	0
Orkney	Matatiele	From Vaal Reefs no 1&3 taxi rank direct to Orkney via R30 then on R76 to Viljoenskroon pass keep on Kroonslad keep on pass direct to Steynrus pass on till we reach Betelhem direct to Harrismith, Ladysmith, proceed with N3 to Mooirivier, Howick, Pietermaritsburg via Richmond R561 direct to Umzimkhulu proceed from there to Matatiele and return via same route	BRCNWGOSLDTA38	1	1
Vaal Reefs	Vryburg	From Vaal Reefs no 3 shaft Orkney to Kuruman taxi rank via Klerksdorp, Ottosdal, Delareyville, Vryburg and back	BRCNWGOSLDTA40	1	1
Vaal Reefs	Vryburg	From Vaal Reefs no 9 shaft, to Ganyesa, Morokweng district, Vryburg vlak Klerksdorp, Ottosdal, Delareyville, Vryburg and back	BRCNWGOSLDTA41	1	1
Orkney	Orkney	From Orkney taxi rank and all extensions through to main road R30 and then turn right into R30, turn left into Flecker road, turn left in Fitzgerald	BRCNWGOSLDTA47	1	1
Vaal Reefs	Marquard	From Vaal Reefs No 8 Shaft via Viljoenskroon, Kroonstad, Steynrus Senekal to Marquard taxi rank and back	BRCNWGOSLDTA48	1	2
Vaal Reefs	Wepener	From Vaal Reefs via Orkney to Wepener taxi rank via Bothaville, Odendaalsrus, Theunissen, Brandfort, Bloemfontein, Dewetsdorp to Wepener and back	BRCNWGOSLDTA50	1	4

ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
Vaal Reefs	Zestron	From Vaal Reefs taxi rank to Zastron taxi rank via Bloemfontein and back	BRCNWGOSLDTA53	1	2
Vaal Reefs	Matatlele	From Vaal Reefs no 1&3 Taxi rank direct to Orkney via R30 then on R76 to Viljoenskroon pass keep on Kroonstad direct to Harrismith, Ladysmith, Mooirivier, Howick, Pietermaritzburg via Richmond, Ixopo, Umzimuhle, Transkei and back	BRCNWGOSLDTA58	1	-1
Vaal Reefs	Ladybrand	From Vaal Reefs via Orkney taxi rank to Ladybrand taxi rank via Viljoenskroon, Kroonstad, Steynsrus, Senekal, Marquard, Clocolan to Ladybrand and back	BRCNWGOSLDTA51	2	5
Vaal Reefs	Orkney	From Umuzimuhle taxi rank through Vaal Reefs join R502 to Macauley road, turn into Orkney taxi rank and return	BRCNWGOSLDTA57	2	3
Vaal Reefs	Umtata NU	From Vaal Reefs taxi rank via Orkney, Bloemfontein, Queenstown to Umtata taxi rank and return.	BRCNWGOSLDTA46	3	3
Kanana	Klerksdorp	From Kanana township taxi rank through R30 Church street to Klerksdorp taxi rank and back	BRCNWGOSLDTA07	5	6
Orkney	Vierfontein	From Orkney taxi rank turn right to Macauley street join R502 main road, turn right to Vaal Reefs Shaft Number 8,9 and 11 Vierfontein taxi rank and return	BRCNWGOSLDTA21	8	13
Vaal Reefs	Umtata NU	From Vaal Reefs Taxi rank via Orkney taxi rank, Bothaville, welkom, Theunissen, Bloemfontein, pass till you reach DeWetsdorp, Wepener, Sterkspruit, Barkley East, Elliot, Engcobo to Umtata taxi rank and return	BRCNWGOSLDTA43	8	9
Orkney	Umtata NU	From Orkney taxi rank via Viljoenskroon, Kroonstad, Bethlehem, Harrismith, Escourt, Pietermaritzburg, Ixopo, Umzimkhulu, Kokstad, Mount Frere to Umtata taxi rank and Back	BRCNWGOSLDTA19	11	12
Orkney	East London	From Orkney taxi rank to East London taxi rank via Bloemfontein, Aliwal North, Queenstown, Cartcart stutterheim to East London and return	BRCNWGOSLDTA11	16	18

ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
Kanana	Orkney	From Kanana township to R30 Carlyle road, Milton road and Fleck Road through Fritzgerald road to Orkney taxi rank and return.	BRCNWGOSLDTA08	26	29

Table 3.17: Overview of Greater Potch TA operations

ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
lkageng	Potchefstroom	From Ikageng township extensions, N12, Industrial site, Miederpark, Baillie park, Von Wielig street, Witrand, Military camp to Potchefstroom terminus taxi rand and return	BRCNWGPTA01	247	250
Potchefstroom	Bloemfontein	From Potchefstroom taxi rank to Bloemfontein taxi rank and return	BRCNWGPTA10	0	0
Promosa	Potchefstroom	From Promosa township and extensions, N12, Industrial site, Miederpark, Baillie park, Von Wielig street, Witrand, Military camp to Potchefstroom terminus taxi rank and return	BRCNWGPTA03	12	14
Potchefstroom	Klerksdorp	From Potchefstroom taxi rank to Klerksdorp taxi rank and return	BRCNWGPTA06	2	2
Potchefstroom	Ventersdorp	From Potchefstroom taxi rank to Ventersdorp taxi rank	BRCNWGPTA09	2	1
Potchefstroom	Johannesburg	From Potchefstroom taxi rank to Johannesburg taxi rank and return	BRCNWGPTA05	4	4
Potchefstroom	Pretoria	From Potchefstroom taxi rank to Pretoria taxi rank and return	BRCNWGPTA07	1	1

ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
Potchefatroom	Polokwane	From Potchefstroom taxi rank at New Market street right into River street, left into Potgleter street proceed to Johannesburg R29 go through Johannesburg and Pretorie on M1 proceed to Namboomspruit and through Voortrekkers road in Potgletersrus on N1 turn right into R71 turn left into Marnatintarie residential area and right into the taxi rank, Marnatintarie at Polokwarie and return	BRCNWGPTA02	2	2
Potchefstroom	Carletonville	From Potchefstroom taxi rank to Carletonville taxi rank and return	BRCNWGPTA04	2	2
Potchefstroom	Rustenburg	From Potchefstroom taxi rank to Rustenburg taxi rank and return	BRCNWGPTA08	3	2
Potchefstroom	Ramatabama	From Ikageng taxi rank at Potchefstroom to Ga- Ramatabama taxi rank and back	BRCNWGPTA13	0	0
Potchefstroom	Vereeniging	From Potchefstroom taxi rank to Vereeniging Taxi rank and back	BRCNWGPTA11	0	0
Potchefstroom	Johannesburg	From Potchefstroom taxi rank to Johannesburg and back	BRCNWGPTA11	2	0

Table 3.18: Overview of Greater Stilfontein TA operations

ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
Stilfontein	Klerksdorp	From Khuma township and Stilfontein through Harties mines no 2, 5, 6 and 7, Vaal Reefs mines no 1, 2, 5 and 8, Buffels mines no 1 & 2, joint N12 and Zandpan road into Klerksdorp taxi rank and return	BRCNWGSTA01	96	138
Stilfontein	Johannesburg South	From Khuma location Stilfontein through Vaal Reefs Mines no 1, 2, 5 join N12 into Johannesburg taxi rank and return	BRCNWGSTA02	4	1

ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
Stilfontein	Welkom	From Stilfontein taxi rank to Welkom taxi rank and return	BRCNWGSTA08	6	9
Stilfontein	Schweizer Reneke	From Stilfontein taxi rank to Schweizer Reneke taxi rank and return	BRCNWGSTA09	2	2
Stilfontein	Rustenburg	From Stilfontein taxi rank to Rustenburg taxi rank and return	BRCNWGSTA10	7	13
Stilfontein	Potchefstroom	From Khuma taxi rank to Potchefstroom taxi rank and back	BRCNWGSTA21	12	29

Table 3.19: Overview of Greater Ventersdorp TA operations

ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
Ventersdorp	Rustenburg	From Ventersdorp taxi rank to Rustenburg taxi rank and back	BRCNW3	25	29
Ventersdorp	Carletonville	From Ventersdorp taxi rank to Carletonville taxi rank and back	BRCNW4	0	0
Ventersdorp	Carletonville	From Ventersdorp to Carletonville, via Rysmierbult, Klerkskraal and Randfontein	BRCNW9	0	0

Table	3.20:	Overview	of Interstate	TA operations
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ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
Potchefstroom	Viljoenskroon	Middle distance (Farms & Villages) From Potchefstroom taxi rank right into River street, left into Potgieter street N12 right into Mooi river to Smithfield plotte off load & loading of passengers, left in Skandinaviadrift for off load and loading of passengers, left into R501 to Viljoenskroon Rammulus rank for offloading and loading of passengers back via the same route	BRCWINTERSTATE 02	9	9
Ventersdorp	Mafikeng Rural	Ventersdorp Long & Middle distance. From Ventersdorp taxi rank right into van Tonder street right turn into Sessem street proceed to van Riebeeck street join up with the N14 to Coligny off load passengers proceed to R501 to Lichtenburg offloading passengers proceed to Mafikeng at station road to park and to load back via the same route	BRCWINTERSTATE 05	. 4	5
Potchefstroom	Randfontein	From Potchefstroom taxi rank to Randfontein taxi rank and return	BRCWINTERSTATE 21	1	0
Ventersdorp	Ventersdorp Long & middle distance From Ventersdorp taxi rank into van Tonder street right to Hendrik Potgieter street, join the R30 to		BRCWINTERSTATE 06	4	5
Potchefstroom	Carletonville	From Potchefstroom taxi rank to Carletonville taxi rank and return	BRCWINTERSTATE 20	0	0
Potchefstroom	Krugersdorp	From Potchefstroom taxi rank to Krugersdorp taxi rank and return	BRCWINTERSTATE 22	14	16
Potchefstroom	Mafikeng Rural	From Potchefstroom taxi rank to Mafikeng taxi rank and return	BRCWINTERSTATE 18	15	16
Potchefstroom	Vereeniging Rural	From Potchefstroom taxi rank to Vereeniging taxi rank and return	BRCWINTERSTATE 23	11	14

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ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
Potchefstroom	Taung	From Potchefstroom taxi rank via Wolmaransstad, Schweizer-Reneke to Taung taxi rank and return	BRCWINTERSTATE 17	3	5
Potchefstroom	Fochville	From Potchefstroom Taxi rank to Fochville taxi rank and return	BRCWINTERSTATE 19	1	1
Potchefstroom	Rustenburg	From Potchefstroom taxi rank via Derby, Koster to Rustenburg taxi rank and return	BRCWINTERSTATE 25	11	14
Potchefstroom	Johannesburg South	From Potchefstroom taxi rank to Johannesburg taxi rank and return	BRCWINTERSTATE 26	7	8
Potchefstroom	Pretoria	From Potchefstroom taxi rank right into River street left into Potgieter street N12 proceed to Fochville off load and load at the rank back to the N12 proceed to Johannesburg of ramp at West street right into Prichard and into President street off load passengers proceed to Pretoria rank Esselen street to Park and return load back via the same route	BRCWINTERSTATE 03	12	14
Potchefstroom	Polokwane	From Potchefstroom taxi rank to Polokwane taxi rank and return	BRCWINTERSTATE 27	0	0
Potchefstroom	Parys	Middle distance (Farms & Villages) From Potchefstroom taxi rank into River street left into Potgieter street N12 right into Mooirivier lane R53 proceed to Parys left into Kruis street into Brand street Tumahole taxi rank for offloading and loading of passengers back to Potchefstroom via the same route.	BRCWINTERSTATE 08	3	3
Ventersdorp	Koster	From Ventersdorp taxi rank via Derby to Koster taxi rank and return	BRCWINTERSTATE 29	0	0
Mogapa	Rustenburg	From Mogapa via Ventersdorp taxi rank to Rustenburg taxi rank and return	BRCWINTERSTATE 30	0	0
Potchefstroom	Krugersdorp	From Ikageng Potchefstroom to points within Krugersdorp and return where the group were picked up in the first instance	BRCWINTERSTATE 31 ORG	0	0

ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
Potchefstroom	Taung	From Potchefstroom to Klerksdorp, Khuma, Wolmaransstad to Taung out of the Main rank left into River street, right into Potgieter proceed within the N12 left of ramp to Khuma off load and back to N12 proceed to Klerksdorp rank to off load and load back to N12 proceed to Wolmaransstad offloading of passengers, turn into R504 to Schweizer Reneke for off load and load turn into R506 to Taung at station to park for the return load with the same route back	BRCWINTERSTATE 34	12	13

Table 3.21: Overview of Jouberton TA operations

ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
Jouberton (Klerksdorp)	Jouberton (Klerksdorp)	From Jouberton taxi rank via Bengi Olifant road and Joe Slovo road to Klerksdorp taxi rank and return	BRCNWJANATA06	5	5
Jouberton (Klerksdorp)	Jouberton (Klerksdorp)	From Jouberton taxi rank to Klerksdorp taxi rank and return	BRCNWJANATA01	47	45
Klerksdorp	Randfontein	From Jazz bar taxi rank, Klerksdorp to Randfontein taxi rank via Potchefstroom, Carletonville and return	BRCNWJANATA03	3	3
Klerksdorp	Vryburg	From Klerksdorp taxi rank to Vryburg taxi rank and return	BRCNWJANATA04	2	1
Klerksdorp (Orkney)	Johannesburg South	From Jouberton, Klerksdorp into Mercury road R29 Main Reef Road, turn right into Park Street into Voortrekker road left into Commissioner right into Golf street left into Prinsloo street right to R29 pass Potchefstroom through Potgieter street and join R29	BRCNWJANATA02	6	6
Klerksdorp	Mafeking Rural	From Klerksdorp taxi rank to Mafikeng taxi rank and return	BRCNWJANATA05	6	4

ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
Tigane (Hartebeesfontein)	Klerksdorp	From Tigane taxì rank to Klerksdorp taxi rank and return	BRCNWJANATA07	1	1
Klerksdorp	Potchefstroom	From Klerksdorp taxi rank to Potchefstroom taxi rank and return	BRCNWJANATA08	5	4
Vaal Reefs (Stilfontein)	Johannesburg South	From Vaal Reefs taxi rank to Johannesburg taxi rank and return	BRCNWJANATA09	3	3
Klerksdorp	Delareyville	From Klerksdorp taxi rank to Delareyville taxi rank and return	BRCNWJANATA10	2	1
Klerksdorp	Rustenburg	From Klerksdorp taxi rank to Rustenburg taxi rank and return	BRCNWJANATA13	3	2
Klerksdorp	Taung	From Klerksdorp taxi rank to Taung taxi rank and return	BRCNWJANATA14	3	2
Klerksdorp	Itsoseng (Lichtenburg)	From Klerksdorp taxi rank to Itsoseng taxi rank and return	BRCNWJANATA16	0	0
Jouberton (Klerksdorp)	Klerksdorp (Orkney)	From Jouberton township and all its extensions to Industrial sites, Klerksdorp Suburbs, Klerksdorp Terminus taxi rank and return	BRCNWJANATA17	15	18
Jouberton (Klerksdorp)	Klerksdorp (Orkney)	From Jouberton - Klerksdorp	BRCNWJANATA15	10	15

Table 3.22: Overview of Jouberton & Noordkom TA operations

ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
Klerksdorp Taxi Rank	Jouberton (Klerksdorp)	From Klerksdorp taxi rang terminus to Jouberton taxi rank and return	BRCNWJT013	0	0
Klerksdorp	Bloemfontein	From Jouberton taxi rank at Klerksdorp to Bloemfontein taxi rank and back	BRCNWJT039	0	0
Klerksdorp	Marquand	From Klerksdorp taxi rank Marquand taxi and return	BRCNWJT002	0	-1

ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
Jouberton (Klerksdorp)	Hartebeesfontein Mines (Stiffontein)	From Jouberton township to Harties Mines all shafts and return	BRCNWJT002	1	1
Klerksdorp	Delareyville	From Klerksdorp taxi rank to Delareyville taxi rand and return	BRCNWJT003	4	5
Klerksdorp	Pietersburg	From Klerksdorp taxi rank to Pietersburg taxi rank via Johannesburg, Pretoria and return	BRCNWJT0035	7	8
Klerksdorp	Kimberley	From Klerksdorp taxi rank to Christiana, Taung and Kimberley taxi rank	BRCNWJT0049	1	/ 1 :
Klerksdorp	Vryburg	From Klerksdorp taxi rank to Vryburg taxi rank via Ottosdal, Delareyville and return	BRCNWJT0049	0	0
Klerksdorp	West Street (Johannesburg CBD)	From Jouberton taxi rank Klerksdorp into Mercury road turn right into R29 towards Klerksdorp along Main Reef Road. Pass Klerksdorp town towards Potchefstroom along Potchefstroom-Klerksdorp town main road R29 through Potgieter street at Potchefstroom and t	BRCNWJT006	16	17
Klerksdorp	Kroonstad	From Klerksdorp taxi rank via Leeudoring stad taxi rank to Kroonstad taxi rank and return	BRCNWJT007	0	0
Klerksdorp	Pretoria	From Klerksdorp taxi rank to Pretoria taxi rank via route R29 through Potchefstroom continue on R29 to route N1, then via N1 (bypass Johannesburg to the Western bypass) to routes R28 into Pretoria, and return via the same route	BRCNWJTO10	8	9
Klerksdorp	Thabong	From Klerksdorp taxi rank to Welkom taxi rank via Main Reef road, drive along Main Reef road and then turn right into Park street and then left into Noor street and then left into Commissioner street and then rights into Park street, left into Noor street	BRCNWJT011	0.	0
Jouberton (Klerksdorp)	Johannesburg	From Jouberton township to Johannesburg taxi rank via Randfontein and return	BRCNWJT012	4	7
Hartebeesfontein	Mafikeng	From Hartebeesfontein taxi rank to Mafikeng taxi rank via Vryburg taxi rank and return	BRCNWJT014	1	1
Klerksdorp	Johannesburg South	From Klerksdorp taxi rank to Johannesburg taxi rank via Lenasia, Randfontein and return	BRCNWJT015	14	18

ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
Klerksdorp	Orkney	From Klerksdorp taxii rarik to Orkney taxii rarik and return	BRCNWJT016	17	23
Klerksdorp	Stilfontein	From Jouberton Klerksdorp with shortest direct route via Klerksdorp R29, Hartebeesfontein R503 up to Coligny circle left on to the R47 to Thusong hospital, Itsoseng to Lichtenburg via Buiten street and left to Mafikeng taxi rank and return	BRCNWJT017	6.	6
Klerksdorp	Johannesburg South	From Klerksdorp taxi rank to points within the municipal area of Johannesburg via R29 through Potchefstroom far as M1 then via 1 and M2 into Johannesburg and return	BRCNWJTO18	3	3
Klerksdorp	Vaal Reefs	From Klerksdorp taxi rank via Orkney taxi rank to Vaal Reefs taxi rank and return	BRCNWJTO19	19	22

Table 2 22.	Overview of	Khuma TA	anarations
Table 3.73:	Overview of	Knuma I A	operations

ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
Stilfontein	Klerksdorp	From Khuma Stilfontein taxi rank through Stilfontein to Klerksdorp taxi rank and return	BRCNWKUSUTA01	23	22
Khuma	Orkney	From Khuma township via Vaal Reefs to Orkney taxi rank and return	BRCNWKUSUTA10	1	4

Table 3.24: Overview of Klerksdorp TA oper
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ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCE PER ROUTE (2017)
Klerksdorp	Wolmaransstad	From Klerksdorp taxi rank to Wolmaransstad taxi rank and return	BRCNWKDTA09	1	1
Jouberton	Johannesburg South	From Jouberton via Klerksdorp taxi rank to Johannesburg taxi rand and return	BRCNWKDTA10	2	4
Klerksdorp	Mafikeng Rural	From Klerksdorp taxi rank via Mareetsane to Mafikeng taxi rank and return	BRCNWKDTA08	6	7
Klerksdorp	Klerksdorp	From Klerksdorp terminus taxi rank to all Klerksdorp suburbs e.g. Witkoppies, La Hoff, Adamayview, Flamwood, Ellaton, Doringkruin Uraniaville, industrial sites and return	BRCNWKDTA02	3	3
Klerksdorp taxi rank (Klerksdorp)	Rustenburg taxi rank (Rustenburg)	From Klerksdorp taxi rank to Rustenburg taxi rank and return	BRCNWKDTA06	3	5
Klerksdorp	Taung	From Klerksdorp taxi rank to Taung taxi rank and return	BRCNWKDTA07	7	9
Klerksdorp taxi rank (Klerksdorp)	Stilfontein	From Klerksdorp terminus taxi rank to Stilfontein taxi rank and return	BRCNWKDTA03	7	8
Klerksdorp	Polokwane	From Klerksdorp taxi rank to Polokwane taxi rank and return	BRCNWKDTA17	1	3
Klerksdorp taxi rank (Klerksdorp)	Vryburg town rank (Vryburg)	From Klerksdorp taxi rank to Vryburg taxi rank and return	BRCNWKDTA05	2	5
Jouberton	Klerksdorp	From Jouberton township and all its extensions to Industrial sites, Klerksdorp Suburbs, Klerksdorp terminus taxi rank and return	BRCNWKDTA01	264	276
Tigane	Noordkom Noord street taxi rank (Klerksdorp)	From Tigane taxi rank to R503, turn right to Voortrekker Street, turn left to Boom street, turn right to Hartebeesfontein and back to R503, turn right to Afrikaner Mine route and back to R503 to R29, turn left to Park street, turn right to Noord Street turn right to Noordkom taxi ran and return	BRCNWKDTA04	7	1
Klerksdorp	Lichtenburg	From Klerksdorp taxi rank to Lichtenburg taxi rank and return	BRCNWKDTA12	1	1

ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
Klerksdorp taxi rank (Klerksdorp)	Mafikeng taxi rank	From Klerksdorp taxi rank to Mafikeng taxi rank and back	BRCNWKDTA18	4	7
Alabama	Klerksdorp	From Alabama to Klerksdorp taxi rank and return	BRCNWKDTA15	2	1
Klerksdorp	Delareyville	From Klerksdorp taxi rank to Delareyville taxi rank and return	BRCNWKDTA14	1	1

Table 3.25: Overview of Mighty Makwassi TA operations

ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
Wolmaransstad	Klerksdorp	From Wolmaransstad to Klerksdorp taxi rank and back	BRCNWMMTA01	15	16
Wolmaransstad	Makwassie	From Wolmaransstad taxi rank turn left in Bomman street up to four-way turn right in Broadbent up to N12 route, turn left to R305 route up to Makwassie taxi rank and return	BRCNWMMTA02	33	34
Makwassie	Wolmaransstad	From Makwassie taxi rank to Wolmaransstad taxi rank and return	BRCNWMMTA03	10	10
Wolmaransstad	Johannesburg South	From Wolmaransstad taxi rank to Johannesburg taxi rand via Klerksdorp, Potchefstroom and return	BRCNWMMTA04	8	14
Wolmaransstad	Johannesburg South	From Wolmaransstad taxi rank to Johannesburg taxi rank via Klerksdorp, Potchefstroom and return	BRCNWMMTA06	2	8
Wolmaransstad	Klerksdorp	From Kgakala via Leeudoringstad to Klerksdorp taxi rand and return	BRCNWMMTA07	24	25
Tswelelang	Wolmaransstad	From Tswelelang township to Wolmaransstad taxi rank and return	BRCNWMMTA08	4	6
Kgakala	Wolmaransstad	From Kgakala township via Leeudoringstad, Makwassie, to Wolmaransstad to taxi rank and return	BRCNWMMTA10	3	2
Makwassie	Klerksdorp	From Makwassie taxi rank via Wolmaransstad to Klerksdorp taxi rank and return	BRCNWMMTA12	3	3

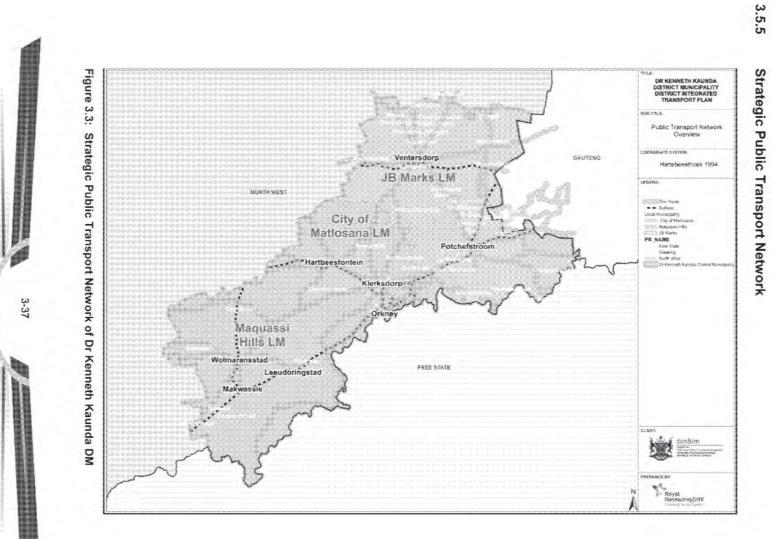
ORIGIN	OESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LIGENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
Leeudoringstad	Kgakala		BRCNWMMTA09	Ď.	1
Kgakala	Klerksdorp		BRCNWMMTA049	0	4
Lebaleng	Maquassi Hills		BRCNWMMTA17	0	2
Maquassi Hills	Mafikeng		BRCNWMMTA22	0	1
Makwassie	Kimberley		BRCNWMMTA36	0	1
Leeudoringstad	Rustenburg		BRCNWMMTA40	0	1
Leeudoringstad	Mafikeng		BRCNWMMTA42	0	1.
Tswelelang	Maquassi Hills		BRCNWMMTA48	0	11

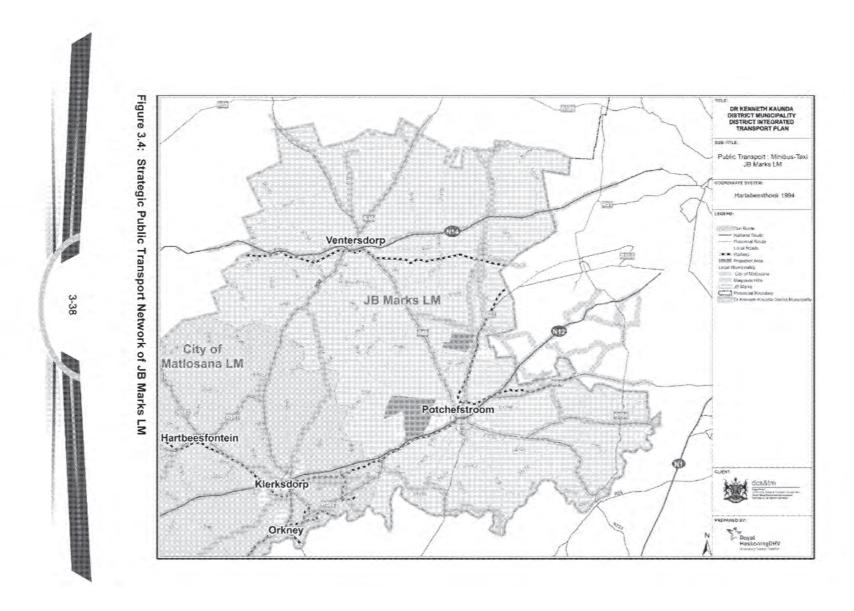
Table 3.26: Overview of Utlwaneng TA operations

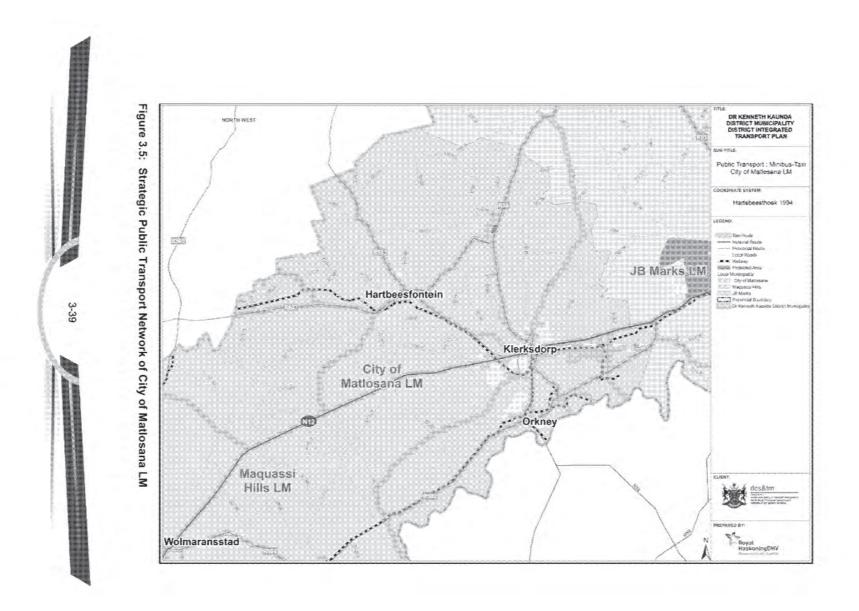
IDIE 3.20. OVE	i view or ottwarieng	TA operations					
ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)		
Klerksdorp	Welkom	From Klerksdorp taxi rank to Welkom taxi rank and return	BRCNWUGTA01	2	3		
Klerksdorp	Odendaalsrus	From Klerksdorp taxi rank to Odendaalsrus taxi rank and return	BRCNWUGTA02	15	16		
Klerksdorp	Itsoseng	From Klerksdorp taxi rank to Itsoseng taxi rank and return	BRCNWUGTA03	3	4		
Klerksdorp	Wolmaransstad	From Klerksdorp taxi rank to Wolmaransstad taxi rank and return	BRCNWUGTA04	1	1		
Klerksdorp	Carletonville	From Klerksdorp taxi rank to Carletonville taxi ran and return	BRCNWUGTA05	7	7		
Klerksdorp	Johannesburg South	From Klerksdorp taxi rank to Johannesburg taxi rank and return	BRCNWUGTA06	3	4		
Klerksdorp	Vereeniging Rural	From Klerksdorp taxi rank via Potchefstroom to Vereeniging taxi rank and return	BRCNWUGTA07	11	11		
Klerksdorp	Ventersdorp	From Jouberton, Klerksdorp taxi rank to Ventersdorp taxi rank and return	BRCNWUGTA17	0	0		

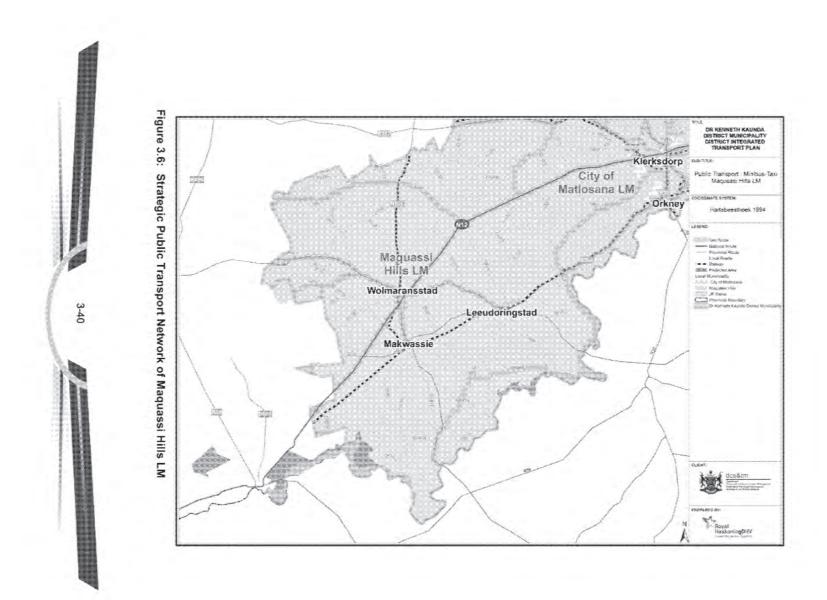
ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LICENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
Klerksdorp	Rustenburg	From Klerksdorp taxi rank to Rustenburg taxi rank via Ventersdorp and return	BRCNWUGTA08	13	14
Kanana	Vaal Reefs	From Kanana taxi rank to Vaal Reefs taxi ran via Orkney and return	BRCNWUGTA09	3	3
Jouberton	Klerksdorp	From Jouberton township to Klerksdorp taxi rank and return	BRCNWUGTA10	8	11
Orkney	Vaal Reefs	From Orkney taxi rank to Vaal Reefs taxi rank and return	BRCNWUGTA11	1	2
Vaal Reefs	Orkney	From Vaal Reefs Umuzimuhle taxi rank to Orkney taxi rank and return	BRCNWUGTA12	0	0
Kanana	Klerksdorp	From Kanana taxi rank via Orkney to Klerksdorp taxi rank and return	BRCNWUGTA13	23	23
Klerksdorp	Stilfontein	From Klerksdorp taxi rank to Stilfontein taxi rank and return	BRCNWUGTA14	2	3
Klerksdorp	Randfontein	From Klerksdorp taxi rank to Randfontein taxi rank and return	BRCNWUGTA15	1	0
Klerksdorp	Taung	From Klerksdorp taxi rank to Taung taxi rank and return	BRCNWUGTA16	14	16
Klerksdorp taxi rank (Klerksdorp)	Potchefstroom taxi rank	From Klerksdorp taxi rank to Potchefstroom taxi rank and return	BRCNWUGTA19	4	3
Klerksdorp taxi rank (Klerksdorp)	Qwata tax rank, cnr Mampol & Setsing (Phuthadijithaba)	From Orkney taxi rank to QwaQwa via Bothe-Bothe and return	BRCNWUGTA18	2	2
Klerksdorp	Ottosdal	From Klerksdorp taxi rank via Tigane to Ottosdal taxi rank and return	BRCNWUGTA20	2	2
Klerksdorp	Schweizer- Reneke	From Klerksdorp taxi rank to Schweizer-Reneke taxi rank and return	BRCNWUGTA21	2	1
Klerksdorp	Harstwater	From Klerksdorp taxi rank to Harstwater taxi rank and return	BRCNWUGTA22	1	1
Klerksdorp	Bloemfontein	From Klerksdorp taxi rank to Bloemfontein taxi rank and return	BRCNWUGTA23	15	15

ORIGIN	DESTINATION	ROUTE DESCRIPTION	BOARD ROUTE CODE	LIGENCES PER ROUTE (2016)	LICENCES PER ROUTE (2017)
Klerksdorp	Pampierstad	From Klerksdorp taxi rank to Pampierstad taxi rank and return	BRCNWUGTA24	2	2
Klerksdorp	Leeudoringstad	From Klerksdorp taxi rank to Leeudoringstad taxi rank and return	BRCNWUGTA25	0	0
Klerksdorp	Vaal Reefs	From Klerksdorp taxi rank via Orkney to Vaal Reefs taxi rank and return	BRCNWUGTA26	5	6
Klerksdorp	Kanana	From Klerksdorp taxi rank to Kanana taxi rank and return	BRCNWUGTA27	0	0
Klerksdorp	Lichtenburg	From Klerksdorp taxi rank via Itsoseng to Lichtenburg taxi rank and return	BRCNWUGTA28	0	1
Orkney	Kroonstad	From Orkney taxi rank to Kroonstad taxi rank and return	BRCNWUGTA29	-1	2
Klerksdorp	Orkney	From Klerksdorp taxi rank to Orkney taxi rank and return	BRCNWUGTA30	3	5
Hartebeesfontein	Klerksdorp	From Hartebeesfontein taxi rank to Klerksdorp taxi rank and return	BRCNWUGTA31	1	1
Klerksdorp	Viljoenskroon	From Klerksdorp taxi rank to Viljoenskroon taxi rank and return	BRCNWUGTA32	0	Ō
Kanana	Orkney	From Kanana to Orkney taxi rank and return	BRCNWUGTA34	5	7
Orkney	Viljoenskroon	From Okney taxi rank to Viljoenskroon taxi rank and return	BRCNWUGTA36	1	1
Klerksdorp	Sannieshof	From Klerksdorp taxi rank to Sannieshof taxi rank and return	BRCNWUGTA35	2	2
Orkney	Klerksdorp	From Orkney taxi rank to Klerksdorp taxi rank and all extensions and return	BRCNWUGTA37	1	2
Kanana	Stilfontein	From Kanana taxi rank to Stilfontein taxi rank and return	BRCNWUGTA38	0 -	1
Klerksdorp	Wolmaransstad, Schweizer Reneke/Taung	From Klerksdorp taxi rank to Wolmaransstad, Schweizer Reneke and Taung taxi rank and return	BRCNWUGTA39	1	1









3.5.6 Minibus-Taxi Fares

Typical fares for the minibus taxis (2016) are as follows:

From Potchefstroom to:

- Anywhere in and around Potchefstroom: R10
- Klerksdorp: R30Ventersdorp: R40
- Johannesburg: R110
- Carltonville: R35
- Mafeking: R80
- Vereeniging: R55
- Taung: R70
- Pretoria R150
- Fochville: R30
- Randfontein R70

Even though operating licences are issued for services to Bloemfontein, Polokwane, Eastern Cape and Natal, none of the current licence owners operate these routes.

From Ventersdorp to:

- Anywhere in and around Ventersdorp and to/from Tshing: R10
- Anywhere in and around Ventersdorp and to/from Gamotlatla, Boikhutso, Doornkop, Tsetse, Rural areas (Ga-Mogopa, Ga-Motlatla, Tsetse, Boikhutso, Goedgevonden, Welgevonden): R10
- Ventersdorp to Klerksdorp: R30
- Ventersdorp Klerksdorp: R50
- Ventersdorp to Carletonville: R30

From Klerksdorp to:

- Local: R8-10
- Alabama: R10
- Jouberton (All): R13
- Hartbeesfontein: R12
- Vaal Reefs: R13
- Orkney: R13
- Stilfontein: R12
- Phelandaba: R13

From Orkney

Vaal Reefs (Shaft 8,9,11,13 and 14): R10

Orkney (Internal): R10
Kanana (All): R10
Klerksdorp: R13

From Wolmaransstad

Wolmaransstad: R10
 Tswelelang Location: R10

Makwassie: R15
 Ext10, Ext13: R10
 Chris Hani Street: R10

The average fare for most short distance local trips of less than 30 km, are on average between R10 and R13, and longer trips over 50 km are roughly based on 80c to 100c per km, e.g. Potchefstroom to Pretoria will cost R150 for 153 km on average. For many commuters who travel to work in the morning from informal areas to business areas, an average of between R20 and R30 is spent for one roundtrip, daily. For many commuters who earn less than R200 per day, this is expensive, but the only form of transport.

3.5.7 Minibus-Taxis Concerns

Although 2016 rank surveys have not included perception surveys, certain passengers have been asked about their general perception with regards to the service, which was also linked to the results of the National Travel Household Survey conducted in 2011 (StatsSA, 2013). Passengers are generally very concerned about the safety and security of the public transport system, and these concerns need to be addressed as part of the overall road safety and security program. Although the minibus taxi industry has carried out a major reform to become legal, to convert permits to operating licences and to re-capitalize, it appears that there are ongoing illegal operations that impact service quality.

The following information was provided by the NHTS and is still applicable on existing operations:

- Seventeen percent (17%) of households indicated that they had no transport related problems. The most important general problems mentioned were the poor conditions of roads, overloading, rude drivers and crime.
- Most importantly are problems relating to taxis, i.e. far too expensive, reckless drivers, not in close proximity, and not available at specific times.
- By far, the biggest problem is the non-availability of buses.
- Approximately 27% of taxi users were not satisfied with taxi services overall, and mainly due to high fares, drivers' behavior towards passengers, facilities at ranks, safety from accidents, as well as security at ranks.

The main factors that bus users were dissatisfied with, were distance of bus stop
from home, security walking to the bus stop, at the stop and on the bus,
frequency of service, as well as facilities at bus stops.

Following these the SDF of 2014 also highlighted that some informal taxi ranks are located on dolomite. These include ranks like:

- Sarafina
- Lusaka / Kanana
- Ikageng
- Mohadin

As required by SANS 1936 (2012), a local authority that encompasses areas underlain by dolomite and other soluble strata (e.g. limestone), must establish and implement a Dolomite Risk Management Strategy (DRMS) and Dolomite Risk Management Plan (DRMP). Future formalization of these public transport nodes, as well as any new public transport-related buildings must be in accordance with the SANS 1936 (2012) and Tlokwe 2013 DRMP and DRMS.

3.5.8 Illegal operations

Illegal operations were observed at the following sites:

Potchefstroom:

- N12 Engen Garage
- N12 Caltex Garage
- R53 Baille Park
- Industrial Park

Ventersdorp:

Visser Street and Van Riebeeck Street in the CBD

Klerksdorp:

- All along the N12
- Engen and Caltex Garages
- Normal parking bays at shopping areas

Orknev:

Vaal Reefs Mine Road

Maquassi Hills

Garages in town along the N12

3.6 Metered-Taxis

KOSH Cab Taxi Association provides operations within the Matlosana LM from Klerksdorp in a similar manner as normal minibus-taxi operation. There are no metered taxis that operate on a price per kilometer.

The location of the formal metered-taxi rank in Klerksdorp is on the north-west corner of Koch Street and Church Street, behind the municipal offices.

Issues exist with regards to the operating licences as many of the vehicles have applied for operating licences, however these licences were not received due to an oversupply of operating licences. Therefore, they are operating illegally,

Uber does not, as yet provide shared passenger taxi services in the area (2016).

3.7 Buses

There is no scheduled formal public bus service operating in DrKKDM except for private scholar buses contracted by the Department of Education, Department of Transport and private services arranged by individual schools. Furthermore, there are numerous private operators providing local and long-distance services on a private hire basis. Long distance bus services operate along the N12.

3.8 Rail

Figure 3.7 is an overview of the rail network in DrKKDM.

There is one inter-provincial line going through DrKKDM, running between Johannesburg and Cape Town. The line passes through Potchefstroom, Klerksdorp, Orkney, Leeudoringstad and Makwassie. Long distance passenger services, as well as freight services are operated on this line. Passenger rail services utilise the Potchefstroom and Klerksdorp stations.

Scheduled mainline passenger train services are operated by Shosholoza Meyl from Johannesburg to Kimberly and Cape Town. Most trains travel from Johannesburg to Welverdiend, where there are lines to Dunfield and Klerksdorp, as well as a line from Vereeniging to Potchefstroom via Klerksdorp, Leeudoringstad and Maquassi.

There are three long distance services which operate in the area, namely:

- Shoshaloza Meyl (mainly over weekends);
- Blue Train (operated by Luxrail with no fixed schedule); and
- The Premier Class between Johannesburg and Cape Town (departs from Johannesburg every Thursday and Sunday and from Cape Town every Tuesday and Saturday, stopping at Potchefstroom and Klerksdorp stations).

The Potchefstroom train station is a major station, which was earmarked for major development into a multi-modal transport facility during 2011 / 2012 financial year according to the Tlokwe Integrated Development Plan (IDP) (2011 - 2016).

There are three (3) other minor train stations (mostly used for freight operations) within Tlokwe along the Johannesburg - Kimberley - Cape Town route. With the proximity of the stations to one another and being in the vicinity of major economic zones, these are presumably some of the reasons for an inter-urban passenger rail service feasibility study for the Johannesburg - Potchefstroom - Klerksdorp route, which was planned for the 2011 / 2012 financial year (Tlokwe IDP 2011 - 2016).

The freight railway line linking Potchefstroom to the West Rand (Carletonville), passes within close proximity to the Potchefstroom Airport. Safar camp railway station on this route is less than a kilometer from the airport, and to this end, the feasibility study of a railway link to the airport could be considered.

The rail line through Ventersdorp is a freight line and links Johannesburg and Lichtenburg. This line carries agricultural products, dolomitic lime and cement.

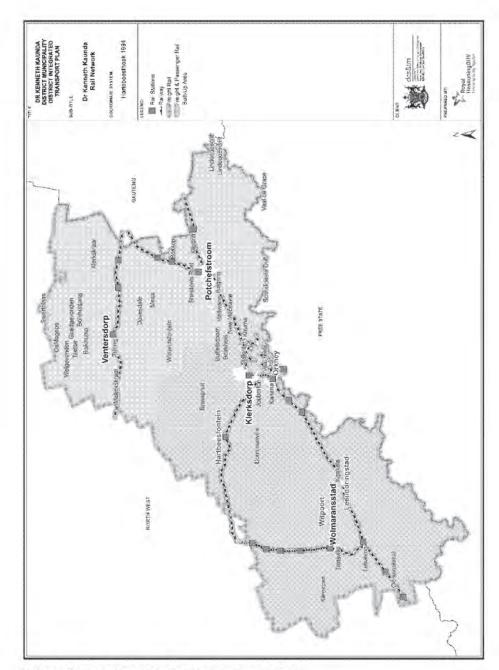


Figure 3.7: Rail Network in Dr Kenneth Kaunda DM

3.9 Non-Motorised Transport

Non-Motorised Transport (NMT) includes walking and cycling, as well as animal-drawn carts, especially in the rural areas of DrKKDM. NMT has not received much attention in the existing ITP and IDP, except to mention that NMT is a significant mode in the area, but that facilities are lacking and unsafe. Schools are major users of NMT and require NMT facilities.

The Shova Kalula National Project was launched in 2001. The main aim is to promote cycling as a low-cost mobility solution, which will improve accessibility and mobility. The project was also implemented in the North West Province.

NMT facilities are crucial for the public to walk or cycle to/from the origin and destination ends of public transport routes. All CBD streets require proper sidewalks that are universally accessible. Pedestrian (walker) and cycler routes are required within 5 km of social facilities such as schools, universities, municipal pay points, office blocks and industries. The national DoT developed an NMT Facility Guideline (DoT NMT Facility Guideline, 2014), whilst the 2016 PLTF provides an NMT Strategy for municipalities.

Not much information is available on NMT routes and is not formally supplied.

As indicated by the National Household Travel Survey 2013, most learners walk to and from school (63%), whilst a large proportion of commuters walk or cycle (29%). The use of NMT is fairly high in DrKKDM due to the relatively flat terrain, short travel distances, limited subsidies and poor public transport, as well as a high percentage of poor people. However, commuters still have to walk excessive distances to their destinations, or to arrive at the public transport facilities. Over the longer distances, bicycles may provide a solution and, as such, the Shova Kalula project may play a role here.

There is a great need for cycle paths and walkways between the previously disadvantaged community residential areas, and high-density employment areas, schools, and social facilities. Therefore, it is important that the Municipality creates a user-friendly environment to accommodate walking and cycling.

Figure 3.8 to Figure 3.10 shows the NMT facilities of various towns in DrKKDM.

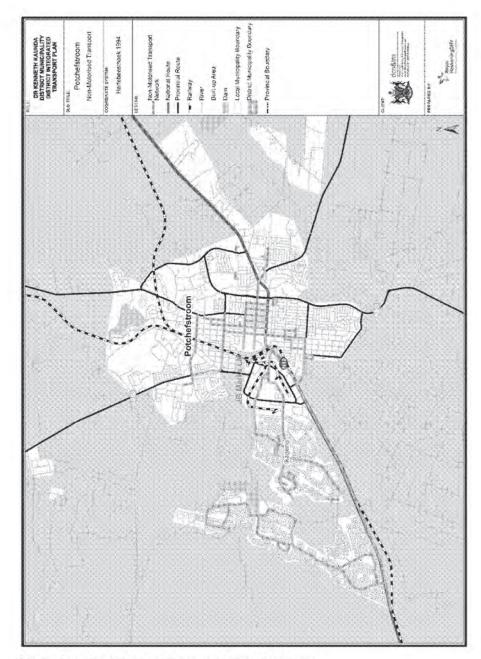


Figure 3.8: Non-Motorized Transport in Potchefstroom

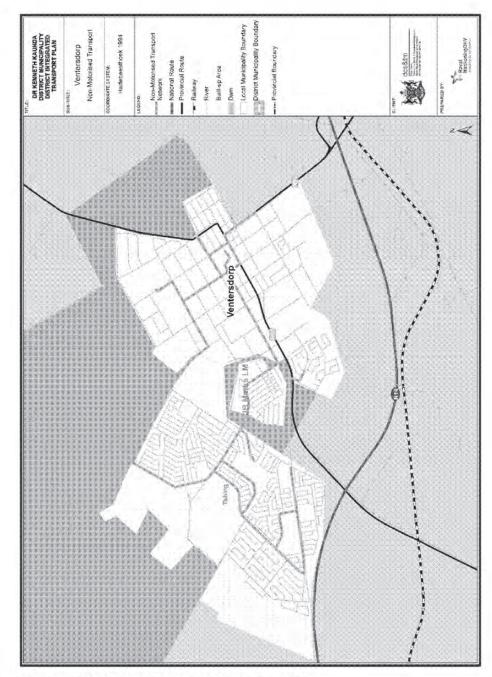


Figure 3.9: Non-Motorized Transport in Ventersdorp

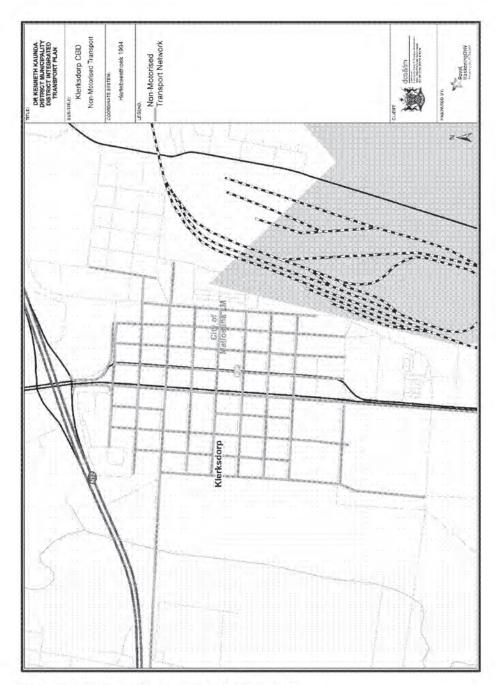


Figure 3.10: Non-Motorised Transport in Klerksdorp

3.10 Rural Transport

The Draft North West Province Provincial Land Transport Framework (PLTF, 2016), defined the rural nature of the North West Province in view of a literature research study as follows:

- Sparse population density resulting in long travel distances;
- Areas that experience low levels of service;
- Limited access to transport and high levels of walking;
- · Low levels of education and employment; and
- Agricultural households.

The 2016 PLTF identified various long-term strategies and short-term measures to improve transport in rural areas, these include:

- Provide a rural transport system accessible to all user types, especially women, children, disabled and illiterate citizens;
- Investigate the provision of transport services before a new village is proclaimed;
- Provision of public transport and NMT infrastructure;
- Introduction of additional transport services for specific focus groups and/or specific areas;
- Improve levels of service of current rural transport services;
- · Transport security projects (safety of road users);
- Sectoral training to encourage Rural Entrepreneurial Support Centers and Internet Communication Networks;
- Develop a strategic rural road network upgrade and maintenance plan with budgets;
- Establish a rural transport forum at district level; and
- Measure and monitor rural access and public transport services.

Figure 3.11 shows the rural villages in DrKKDM and Table 13.1 in Chapter 13 is a summary of the rural villages and transport services in the various villages.

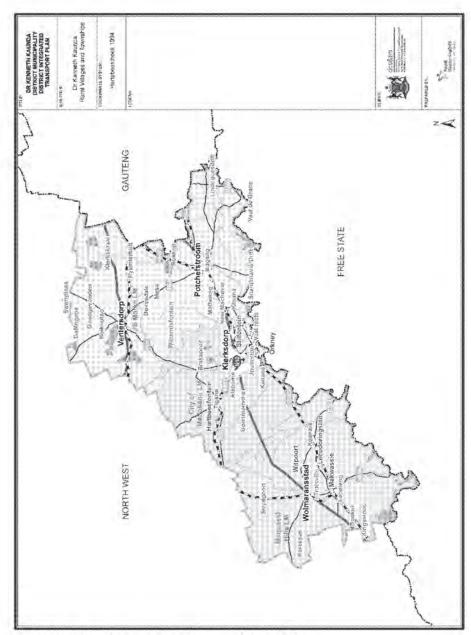


Figure 3.11: Rural Villages in Dr Kenneth Kaunda DM

3.11 Roads

3.11.1 Road network

Figure 3.12 shows the national and provincial road network in the DrKKDM. The Figures in **Annexure A** show the ownership of the roads, distinguishing between national, provincial and municipal roads. The national and provincial routes within the town boundaries are the responsibility of the District Municipality.

The national and provincial network provides inter-regional and inter-provincial linkages. The N12 forms part of the National / Provincial Spatial Development Initiative known as the "Treasure Route" SDI. The national route, N14, runs pass Ventersdorp, linking Gauteng with Mahikeng and Gaboerone.

Numerous important and strategic routes are linked to the N12 in the DrKKDM namely:

- R501 from Potchefstroom to Merafong and Viljoenskroon
- R503 from Klerksdorp to Hartbeesfontein
- R30 linking Klerksdorp to Ventersdorp and Orkney
- R502 linking Khuma, Orkney, Leeudoringstad and Makwassie
- R504 linking Wolmaransstad to Leeudoringstad, Witpoort and Schweizer-Reneke
- R505 linking Wolmaransstad to Ottosdal and Makwassie
- R53 linking Potchefstroom with Ventersdorp and Parys
- R54 linking Potchefstroom with Sedibeng District Municipality

Ventersdorp and N14 are linked by the following routes:

- R53 to Tlokwe
- R30 to Matlosana
- R30 to Rustenburg
- R53 to Swartruggens

The various outlying rural villages are removed from the main towns in DrKKDM and are connected to the main road network by lower order roads.

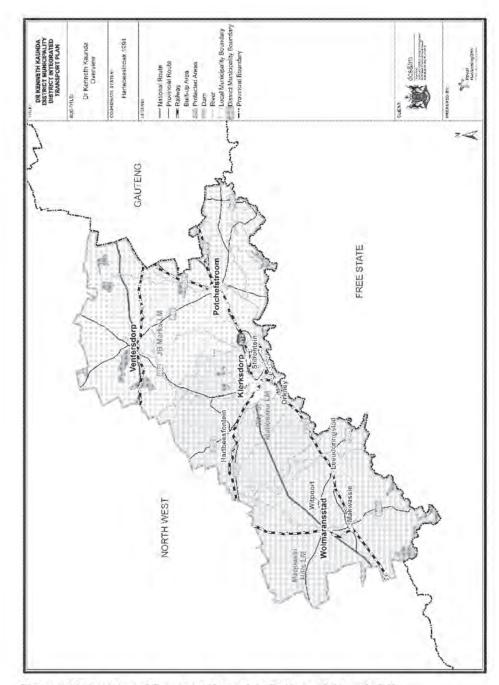


Figure 3.12: Overview of Transport Network in Dr Kenneth Kaunda DM

3.11.2 Road ownership

Table 3.27 is a summary of the responsible authority of paved and gravel roads in Dr Kenneth Kaunda DM.

Table 3.27: Responsible Authority of Roads in Dr Kenneth Kaunda DM

RESPONSIBLE AUTHORITY	PAVED	GRAVEL	TOTAL
SANRAL	795 km	0 km	795 km
North West	933 km	2 340 km	3 273 km
Dr Kenneth Kaunda DM	11 km	0 km	11 km
Local Municipality	1 650 km	4 381 km	6 031 km
Total Road Network	3 389 km	6 721 km	10 110 km

Source: RRAMS, 2016, Aganang

SANRAL is responsible for 7.9% of the roads in DrKKDM. The North West Province is responsible for 32.4% of the roads in the district, and the local municipalities are responsible for the majority of the roads (59.6%). DrKKDM is responsible for only 0.1% of the roads in the district.

Figure 3.13 shows an overview of the Responsible Authority in DrKKDM. **Annexure A** shows the maps of the responsible authority in various towns in the district.

3.11.3 Visual Condition Index

Table 3.28 is a summary of the Visual Condition Index of Roads in the Local Municipalities.

Table 3.28: Visual Condition Index of Roads in Dr Kenneth Kaunda DM

	CONDITION	6000 (75+)	FAIR. (50 – 70)	POOR (<\$0)	NOT ASSESSED	TOTAL
	Paved	299 km	274 km	96 km	735 km	1 404 km
Matlosana LM	Gravel	3 km	4 km	1 km	1 102 km	1 110 km
-141	Total	302 km	278 km	97 km	1 837 km	2 514 km
	Paved	17 km	56 km	96 km	431 km	600 km
Maquassi Hills LM	Gravel	6 km	82 km	129 km	2 575 km	2 792 km
THIS EN	Total	23 km	138 km	224 km	3 006 km	3 391 km
	Paved	81 km	221 km	154 km	926 km	1 382 km
JB Marks LM	Gravel	0 km	0 km	0 km	2 825 km	2 825 km
	Total	Not Assessed	Not Assessed	Not Assessed	Not Assessed	4 207 km

Source: RRAMS, 2016, Aganang

Gravel roads to be upgraded must be prioritised, depending on the traffic volumes and public transport usage. There is a need to pave access routes linking the outlying villages. A visual condition assessment of the gravel roads has not been conducted. There are 6 721 km of gravel roads in the district.

Annexure B shows the maps of the VCI in various towns in the district.

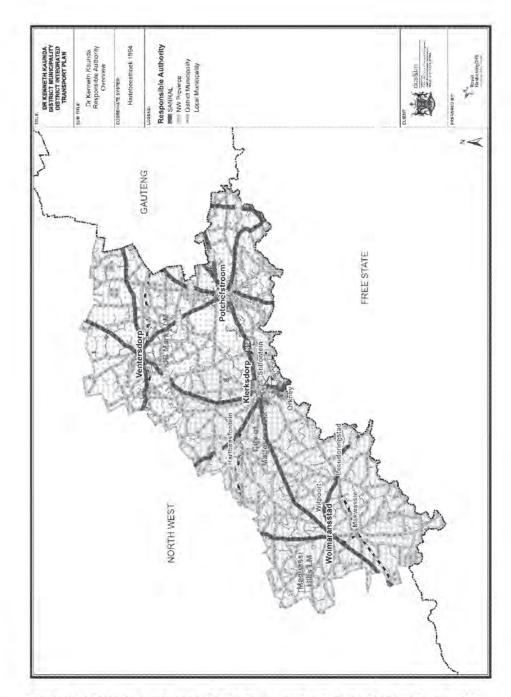


Figure 3.13: Overview of Responsible Authority of Roads in Dr Kenneth Kaunda DM

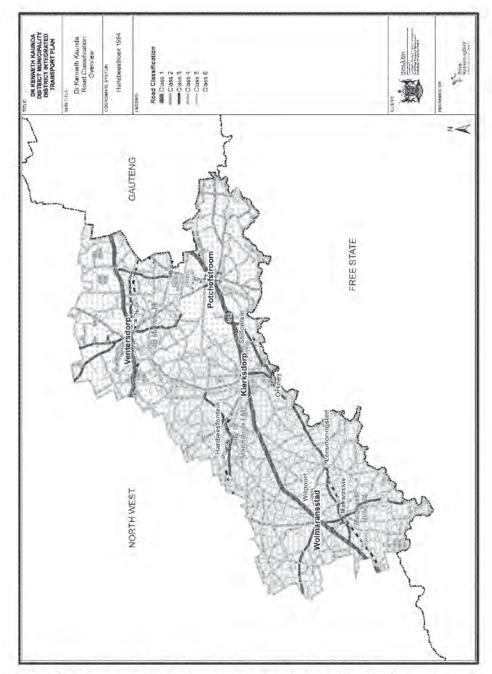


Figure 3.14: Overview of Road Classification in Dr Kenneth Kaunda DM

3.11.4 Road Hierarchy

The Roads Master Plan pointed out the main areas of non-compliance, including:

- "There are insufficient major arterials that can accommodate longer distance travel within and through the urban areas;
- Insufficient spacing of intersections on arterial roads, which results in staggered intersections, inefficient traffic control, poor traffic signal progression, traffic conflict and congestion;
- Insufficient access management, particularly direct property access from arterial roads;
- Within residential areas, the high volume of traffic on arterial roads results in a degradation of living conditions and a proliferation of non-residential activities;
- Parking along arterial roads that is a traffic safety concern; and
- Poor access design with insufficient queue areas on access roads that lead to congestion and interruption of traffic flow on the arterial road."

A classification system was developed according to the network classification in terms of the SA Road Classification and Access Manual (TRH26). **Figure 3.14** and **Table 3.30**, indicate the various road classifications of roads within the DrKKDM.

The Class 3 routes have a mobility function, whilst the Class 4 and 5 roads have an accessibility function.

Planned roads are also shown in the Master Plans. N12 by-pass ring roads are proposed to take through traffic away from the N12 in the CBDs of Potchefstroom and Klerksdorp. The ring roads will reduce the congestion caused by passing through town traffic: A concern is that businesses may suffer. However, from experience elsewhere, the by-pass routes will attract new businesses, whilst existing businesses in the CBD will benefit from reduced congestion, attracting more local visitors. The ring roads are also within the towns' boundaries, and, hence the towns will not lose business.

Table 3.29: Summary of Road Classification

ROAD CLASS	FUNCTION AND DESIGN	EXAMPLE
Principal Arterial (Class 1)	Freeway. High speed mobility corridor. Accommodates mainly national, regional and longer distance metropolitan trips. Access is restricted to the interchanges only. Typically owned by SANRAL.	N12 N14
Major Arterial (Class 2)	Highway. Mobility route. Mainly for inter-regional and metropolitan trips. No direct access should be allowed. Access at intersections with co-ordinated traffic signals. No parking. Provide public transport facilities at intersections to ensure safe pedestrian access. NMT facilities off-road.	R502 R503 R30
Minor Arterial (Class 3)	Main roads with mobility function. Shorter distance distribution and mainly metropolitan trips. No parking. Limit direct access. Must safely accommodate public transport and pedestrian movement. Provision of off-road pavements and cycle lanes for pedestrians and cyclists.	Leemhuis Street Joe Slovo Road Church Street
Collector Road/ Street (Class 4)	Access, activity role. High level of (direct) access. Speed calming. Must safely accommodate public transport and pedestrian movement. Provide public transport facilities at intersections. Priority for pedestrians and cyclists by widening the road.	Kock Street Bram Fischer Street Milton Avenue
Local Road/ Street (Class 5)	Access, activity role. High level of (direct) access. Cycle lanes within roadway. Parking allowed on road shoulders.	Reitz Road Clement Street

Table 3.30: Length of Roads per Classification in Dr Kenneth Kaunda DM

ROAD CLASSIFICATION	TOTAL
Principal Arterial (Class 1)	391 km
Major Arterial (Class 2)	535 km
Minor Arterial (Class 3)	342 km
Collector Road/ Street (Class 4)	3 313 km
Local Road/ Street (Class 5)	5 451 km
No Value	80 km
Total	10 113 km

Annexure C shows the maps of the various classifications of roads per town in the district.

3.11.5 Road Masterplan

The Tlokwe LM developed a Tlokwe Roads Master Plan as shown in **Figure 3.15**. A proposed Northern and Southern by-pass (SANRAL) is shown. These roads will reduce the congestion caused by through traffic in the CBD. A concern is that businesses may suffer. However, from experience elsewhere, the by-pass routes will attract new businesses, whilst existing businesses in the CBD will benefit from reduced

congestion and attract more local visitors. The by-passes are also within the town's boundaries, and, hence the town will not lose businesses.

The Tlokwe LM should coordinate with SANRAL to protect the road reserve for the future by-passes.

In terms of priorities the proposed eastern ring road (R501 to N12) is urgently needed. The detailed planning of this road is proposed in the Roads Master Plan. The Tlokwe Roads Master Plan also needs to be expanded to Ventersdorp.

SANRAL has carried out the basic planning for a bypass for the N12 to the south of Klerksdorp, as indicated in **Figure 3.16**. Due to the high cost, construction will not take place in the foreseeable future (within next 10 years). The proposed bypass to the south of Klerksdorp will follow the R520 alignment and have an interchange at the:

- N12/R520/N12 bypass
- N12 bypass/Khuma
- N12 bypass/S643/Vermaasdrift Road
- N12 bypass/PC Pelser Airport
- N12 bypass/Vaal Reefs
- N12 bypass/R30
- N12 bypass/Kanana

The road reserve for the required N12 and proposed interchanges should be protected by the Local Municipality.



Figure 3.15: Tlokwe Roads Masterplan

Source: V&V, 2014

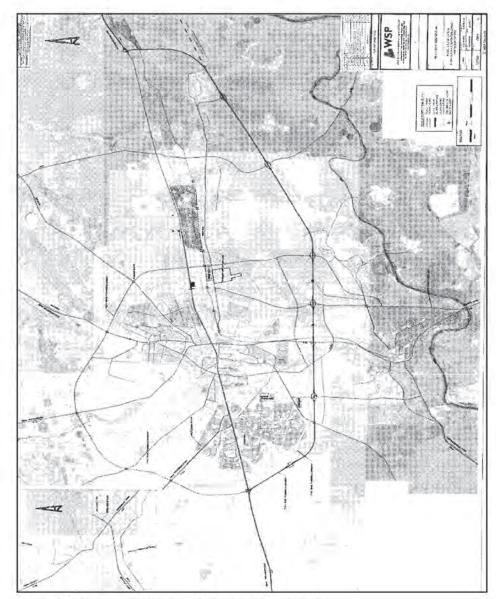


Figure 3.16: Proposed bypass on N12 around Klerskdorp (Source: WSP Road Master Plan, 2013)

3.11.6 Dolomite risks related to the road network

All roads and stormwater systems on dolomite may be adversely affected by dolomite instability features, with the following roads in Tlokwe City Council affected (Tlokwe SDF, 2014):

- The far western section of the N12 towards Stilfontein;
- Portions of the R53 to the north west of Potchefstroom towards Ventersdorp;
 and
- · Various sections of regional secondary roads throughout the municipality

Operation and maintenance, as well as urgent prioritisation of infrastructure upgrading as set out in the 2013 DRMS and DRMP, and in line with the SANS 1936 (2012) should be carried out.

3.12 Traffic

3.12.1 Traffic volumes

Traffic surveys were conducted during the preparation of the 2015 Tlokwe CITP to identify the typical traffic patterns, traffic growth, as well as the modal split. Electronic traffic counts were conducted between 16 and 22 February 2015, as depicted in Table 3.31.

Table 3.31: Traffic volumes in Tlokwe

NO	ROADS	TOTAL (VEH/H)	MINIBUS TAXI. BUSES (VEHIH)	HEAVY VEHICLE (VEH/H)
1	Nelson Mandela (N12) & Govan Mbeki (R53)	3,119	185	129
2	Nelson Mandela (N12) & James Moroka	3,690	236	131
3	Thabo Mbeki (R501) & Chief Albert Luthuli	2,255	166	44
4	Chief Albert Luthuli (R53) & Govan Mbeki (R501)	1,435	55	40
5	Louis Le Grange (R53) & Chief Albert Luthuli (R53)	1,937	215	50
6	Thabo Mbeki (R501) & MC Roode	836	18	34
7	Louis Le Grange (R53) & Deppe	1,996	113	53
8	Govan Mbeki & MC Roode	818	27	19
9	Thabo Mbeki (R501) & Meyer	1,273	75	35
10	Parys (R53) & Erica	591	2	28
11	Govan Mbeki (R501) & Viljoen	654	8	43
12	Louis Le Grange & Jeppe	1,537	204	35
13	Nelson Mandela (N12) & Beyers Naude	3,370	663	146
14	Nelson Mandela (N12) & Ross	2,342	406	204
15	Chris Hani & Kruis	1,911	216	36
16	Govan Mbeki & Chris Hani	983	17	16
17	Ross & Ikageng	1,786	347	49

Source: Tlokwe CITP, 2015

Electronic link counts were also conducted by SANRAL along the R53 (north and south) and the R501 (north). A summary of the 2015 Average Daily Traffic (ADT),

Average Daily Truck Traffic (ADTT), as well as the percentage heavy vehicle traffic, is shown in Table 3.32.

Table 3.32: Electronic links counts (2015)

LOCATION	ADT	ADTT	%HV
N12 - South of Potchefstroom	20,716	3,404	16%
N12 - North of Potchefstroom	14,632	3,182	22%
Govan Mbeki Street - North of Viljoen Street	4,172	587	14%
R53 – North of Potchefstroom	3,768	660	18%
R501 - North of Potchefstroom	4,585	646	14%
R53 – South of Potchefstroom	4,589	735	16%

Source: Tlokwe CITP, 2015

A high percentage of the traffic on the N12 consists of heavy vehicles (16-22%). There is more traffic on the southern portion of the N12 (south of Potchefstroom) than on the northern section. This is due to the high traffic approaching the town from Ikageng (south-west) and Klerksdorp. The heavy vehicle volumes remain consistent, decreasing slightly by 10% from the southern to the northern portion, as shown in **Figure 3.17**.

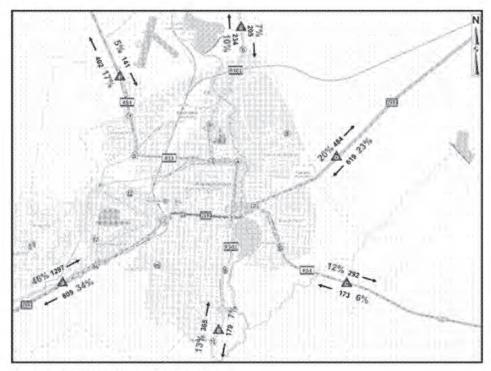


Figure 3.17: Potchefstroom Traffic Volumes Source: V&V, Tlokwe CITP, 2015

No further traffic counts have been carried out in DrKKDM The DrKKDM RRAMS (Aganang, 2016) will conduct traffic counts for the rest of the district's road network. The information was not available for this study.

3.12.2 Growth rates

SANRAL has a permanent Comprehensive Traffic Observation (CTO) station on the N12 north of the R54 Intersection, CTO 1373. The traffic volumes recorded between 2009 and 2013 at CTO 1373 are summarised herewith below.

Table 3.33: Historic Data on N12 (SANRAL CTO 1373)

YEAR	ADT	% GROWTH	ADTT	% GROWTH
2009	12,566	n/a	1,774	n/a
2010	13,183	5%	1,874	6%
2011	13,429	2%	1,979	6%
2012	12,762	-5%	1,964	-1%
2013	13,062	2%	2,046	4%

Source: Tlokwe CITP, 2015

3.12.3 Peak hour

The typical peak hours in Potchefstroom are:

- From 7:00 to 8:00 during weekday mornings
- From 13:00 to 14:00 during weekday afternoons
- From 15:30 to 16:30 during weekday late afternoons

Higher traffic volumes are observed on the following routes during peak hours:

- N12 passing through Klerksdorp, Potchefstroom and Wolmaransstad
- R30 passing through Klerksdorp
- R502 (Flecker Road) passing through Orkney

Typical peak hours in Klerksdorp are:

- From 7:00 to 8:00 during weekday mornings
- From 14:00 to 15:00 during weekday afternoons
- From 16:30 to 17:30 during weekday late afternoons

Typical peak hours in Orkney are:

From 16:00 to 17:00 during weekday afternoons

3.12.4 Modal split

The modal split (2015) is as follows:

N12 traffic through the CBD areas:

- Light 78%
- Minibus taxis 10%



- Bus 0.2%
- Heavy Vehicles 11.8%

3.12.5 Traffic Safety

The N12 has one of the largest road safety problems in the Dr Kenneth Kaunda District Municipality probably due to the dual carriageway, which encourages speeding. Road safety is particularly a problem on the N12 between Matlosana and Wolmaransstad. Only one lane per direction is available, with no median. A lot of serious accidents occur as a result of high speeds, overtaking, and lack of road markings.

The following problems were highlighted:

- There are no traffic safety plans, nor any road safety audits in the residential areas;
- There are no traffic safety education programmes or communication bodies (forums) to deal with the safety issues;
- The current incident management plan only focusses on the N12 Highway;
- Hazardous material (HAZMAT) vehicles are outdated and need replacement, due to difficulty in obtaining parts to maintain the vehicles;
- The fire engine used for HAZMAT incidents is hired from another local municipality, and the HAZMAT trailer is on loan from SASOL;
- A limited number of staff has advanced training in dealing with serious HAZMAT incidents;
- The Alternative Freight Route Map requires revision, to take into account serious incidents on the road network; and
- Bylaws are outdated and require alignment with latest legislative requirements.

Roads and intersections where there is a high accident rate include:

- Along the N12 directly west of City of Matlosana pedestrian safety is a huge problem at the crossing point between Jouberton and Alabama townships and as a result of the absence of crossing facilities, the traffic situation for pedestrians is confusing;
- Around the Church Street on/off ramp on the N12 in the City of Matlosana, many accidents involving pedestrians occur as a result of the high number of pedestrians crossing to and from the taxi ranks in the area;
- The first intersection of the N12 in the City of Matlosana from Potchefstroom (Plataan Road), is also an accident hot spot, mainly as a result of high speeds;
- Due to high speeds and the large amount of trucks the road between the City of Matlosana and Hartebeesfontein, is a high accident zone;
- The road between the City of Matlosana and Ventersdorp, is also a high accident zone, mainly resulting from poor road conditions;
- At the intersections of the R502 (Orkney Potchefstroom) between Four Shaft road (near the Orkney stadium) and Vermaasdrif road, many road accidents take place

between vehicles. The first intersection is a signal controlled, while the second one is a four-way stop. Road conditions are poor at certain sections of the R502;

- Near the entrance of the Kanana Township, near Orkney, a lot of accidents take place as the result of high speeds and the chaotic traffic situation;
- At Zandpan road from Orkney via the local airstrip to Stilfontein and Khuma, serious head-on accidents are frequent as a result of high speeds. The speed limit on this road is 100 km/h, and it is a busy taxi route;
- Three intersections at the N12 in Stilfontein are accident hotspots for pedestrians.
 This also has to do with the mini-bus taxi stops along the road;
- On the Leemhuisweg in the City of Matlosana, problems with the safety of cyclists and pedestrians occur;
- Car traffic safety is a huge problem on the N12 between the City of Matlosana and Wolmaransstad. Only one lane per direction is available, with no median. A lot of serious accidents occur as a result of high speeds, overtaking, and lack of road markings;
- Due to the introduced 80 km/h speed limit, that is not supported by any change in the road design, high speeds are still common at this section of the N12.

Based on historic data less than 1% of annual accidents are fatal, whilst approximately 8% inflicted injury on drivers and passengers. The majority of accidents (91%) only caused damage to vehicles, which places financial pressure on the economy of the province, and the country alike.

3.13 Freight transport

The PLTF indicates that the triangular region enclosed by the urban nodes, namely: Mahikeng, Rustenburg, Madibeng and Matlosana, contains the largest concentrations of urban and economic nodes, active mining and associated industrial belts. This triangle contains well-developed transport infrastructure for both rail and road and has strong links with the Gauteng Economic Hub.

Figure 3.18 shows the main road freight routes and heavy vehicle volumes, as well as the freight rail lines.

The main route connecting Gauteng with the North West province, Northern Cape and Western Cape is the N12 which traverses the Potchefstroom, Klerksdorp and Wolmaransstad area. The N14 by-passing Ventersdorp is the other main freight route connecting Gauteng with North West province.

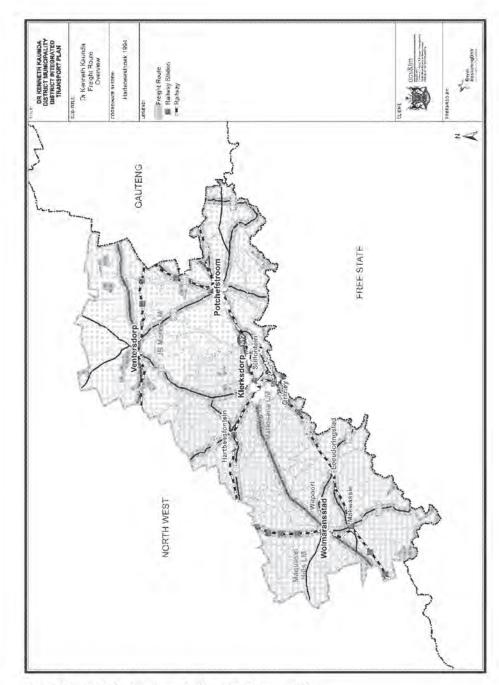


Figure 3.18: Freight Routes in Dr Kenneth Kaunda DM

The N12 route carries a substantial number of heavy vehicles, on a daily basis. The main routes entering Potchefstroom from all directions are the following:

- N12
- R501
- R503
- R30
- R53

The main freight corridor is the N12. Accessibility through Potchefstroom to other main freight corridors (mentioned above), is limited to a few specific roads which cause heavy vehicles to pass through the CBDs. Therefore, extensive damage is caused to the internal road network of Klerksdorp, Potchefstroom and Wolmaransstad which could typically be alleviated by a bypass route for heavy vehicles.

Certain of the bypass routes are classified as Class 3 and 4 roads. Channeling heavy vehicles through the CBDs on these routes will cause severe infrastructure problems, as well as shorten the lifespan of road infrastructure which has not specifically been designed for the heavy loads. The alternative heavy vehicle routes will be revisited and adjusted where necessary, to alleviate congestion in the CBDs and safeguard against infrastructure damage.

Freight movement by road poses a challenge for the DrKKDM. A large number of freight vehicles pass through the CBDs on a daily basis and in some instances, have to overnight in the vicinity of the CBDs. Up to 100 heavy vehicles park along the N12, in both directions, and along public roads within the CBDs. It is unsafe for truck drivers to park along these public roads at night, which further causes health issues, as no ablution facilities exist within the areas where these vehicles park overnight. In certain instances, they have to drive into the CBD to buy food and refuel their vehicles before leaving for their overnight locations. These actions cause congestion and safety issues within the CBD, which can be avoided if proper overnight facilities are provided.

A number of CTO counting stations are positioned around Tlokwe to monitor heavy vehicle movement on some of the main corridors entering the city. These CTO counting stations are managed and maintained by SANRAL and the North West Roads Department.

Overload Control Law Enforcement is currently only conducted on the N12 (north-east of Tlokwe). The only static weight bridge, owned by the Provincial Roads Department, is situated along the N12. These facilities have not been operational for some time which implies that vehicle overload control remains a challenge in the CBD areas. The district does not conduct any overload control law enforcement as this is primarily the responsibility of the Province. This problem is exacerbated by the fact that the bylaws are old and not specifically focused on freight vehicles.

Figure 3.19: Freight Facilities in Dr Kenneth Kaunda DM shows the current and proposed freight facilities in DrKKDM.

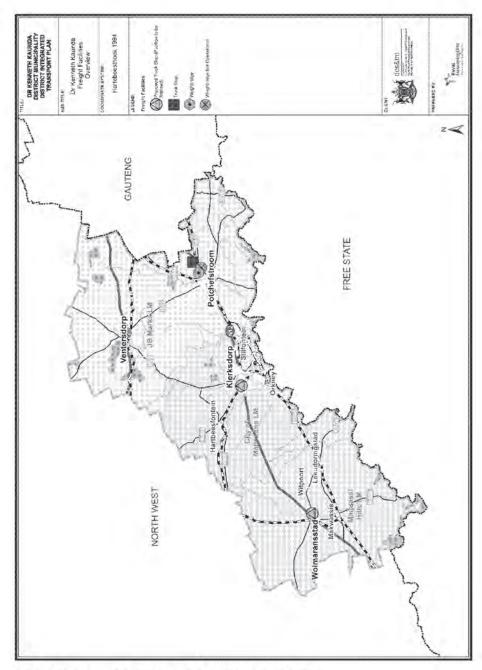


Figure 3.19: Freight Facilities in Dr Kenneth Kaunda DM

3.14 Aviation

3.14.1 Introduction

The 5 airports that fall within Dr Kenneth Kaunda DM, are listed in Table 3.34 below:

Table 3.34: Coordinates of Airports in Dr Kenneth Kaunda DM

NAME	LATITUDE	LONGITUDE	ELEVATION (FT)	ICAO CODE
Potchefstroom Airport	-26.67099953	27.08189964	4520	FAPS
P.C Pelser Airport	-26.87109947	26,71800041	4444	FAKD
Wolmaransstad Airport	-27.17000008	25.97999954	4513	FAWD
Ventersdorp Airport	-26.30089951	26.81419945	4917	FAVE
Orkney Airport	-26.98390007	26.65139961	4265	FAOY

The above five airports are currently non-commercial airports, with none of them receiving scheduled flights.

Each of the 5 airports is described in more detail in the sub-chapters below, based on information we have been able to source. These sub-chapters are, namely:

- Potchefstroom Airport (FAPS)
- P.C Pelser Airport (FAKD)
- Orkney Airport (FAOY)
- Ventersdorp Airport (FAVE)
- Wolmaransstad Airport (FAWD)

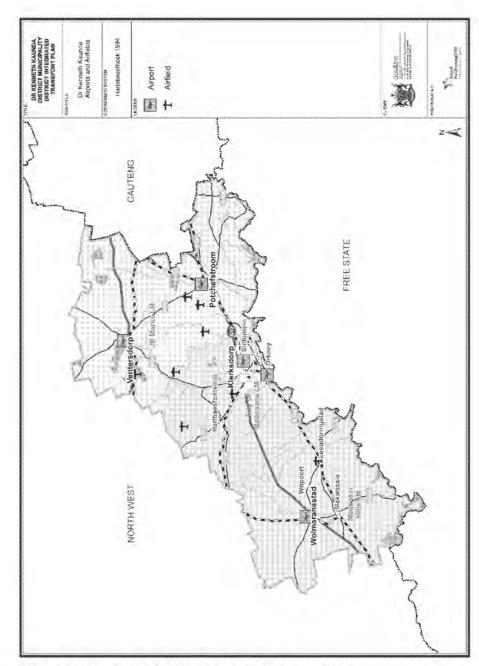


Figure 3.20: Airports and Airfields in Dr Kenneth Kaunda DM

3.15 Potchefstroom Airport (FAPS)

Ownership

It is understood that Potchefstroom Airport is a part civil and part military airport, which falls under the joint ownership of the Tlokwe City Council and the Department of Defense.

Furthermore, there is restricted military airspace west of the airfield, and users are requested to beware of the FAR173 (ammunition testing area) north-east of the airfield.

The civil part of the airport allows for use typically by general aviation and flight training operators, as no scheduled commercial flights currently operate from Potchefstroom airport. The flying training area is over the Boskop dam, just north of the airfield.

Capacity

The airport is mainly utilised by the military, however, it is available for use by chartered general aviation companies, local flight schools for training, and small private operators who have private aircraft hangarage.

Although there are no scheduled commercial flights by scheduled airlines, the airport is a reasonably active general aviation airport. There are numerous private companies operating at the airport, namely:

- AKA-Vlieg Potchefstroom a renowned gliding club in Potchefstroom;
- Marianair a pilot owned company providing flight training and aircraft charter services;
- · Jonker Sailplanes creators of the famous JS-1 sailplanes; and
- Axella Aeronautical Engineering a company that specializes in the design, maintenance and construction of aircraft mainly in the NTCA category.

Runways

The airport has the following two Runways:

Asphalt Runway 03/21

- 1 809 m long, 30 m wide
- Left circuit for Runway 03
- Right circuit for Runway 21
- Fitted with runway lights and PAPI (3 degrees)

Grass Runway 15/33

1 000 m long, 30 m wide

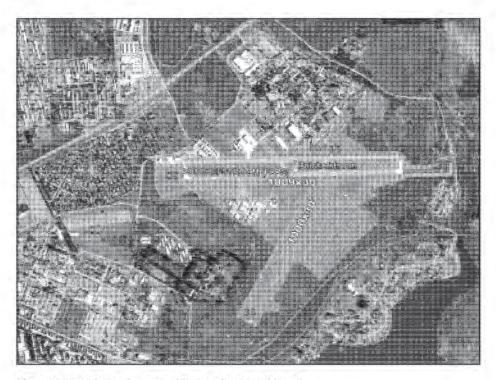


Figure 3.21: Existing Layout of Potchefstroom Airport

Taxiways

The runways are supported by two Taxiways each with a width of ± 22 m.

Apron

No information readily available.

Approach and Lighting System

Runway 03/21 has medium intensity Runway Edge Lights (REL), precision approach markings and a Precision approach path indicator (PAPI) system. There is no approach light system on Runway 03/21.

Runway 15/33 has medium intensity REL, Visual markings and a PAPI system. There is no approach light system.

Control Tower

It is understood that, at present, the control tower is no more than an elevated platform.

Terminal Buildings

The floor space area information is not available.

Hangers

Information regarding the number of hangers and the tenants is not available.

Security Systems

The airport is understood to be fenced off with a perimeter fence. No information regarding a security detection system or any other security measures is available.

Navigational Aids

The airport is supplied with a Non- Directional Beacon (NDB) that has a Power output of 100W and 50NM Coverage.

Communication Systems

The airport is provided with an Aerodrome Flight Information Service (AFIS).

Fuel/Oil types

Avgas and JetA1 are available at the airport.

Motor Vehicle Parking

No information available.

Future Role of the Airport

Although little is known of the future plans and role of the airport, it is understood from the Tlokwe City Council that the Premier of North West Province would like the airport to be a strategic stop-over between Johannesburg (the business hub of the country) and Botswana, as well as Namibia and Angola. Furthermore, following the upgrades in 2010, the vision is to create opportunities for business people with regards to warehousing, airport transfers, and many other airport related businesses.

The ideal future role, however, needs to take into account the other airports in the province, as well as airports in proximity which also have similar visions for growth and expansion.

Most notably, other airports within the North West already receive scheduled commercial flights, such as Pilansberg and Mahikeng, and this growth could allow for regional flights to other neighboring countries, dependent on the International Airport License.

3.16 PC Pelser Airport (FAKD)

Ownership

The airport in the City of Matlosana (Klerksdorp), known as P.C Pelser Airport, is owned and operated by the City of Matlosana.

The Municipality has designated the Klerksdorp Pilots Association (KPA) to assume the role as Operating Agency at the airport on a voluntary basis.

Capacity and Capability

The airport is currently an unmanned, but operational airport, and is mainly utilised by chartered general aviation companies, local flight schools for training, and small private operators who have private aircraft hangarage.

Although there are no scheduled commercial flights by scheduled airlines, the airport is a reasonably active general aviation airport, currently handling the following types of air services:

- ±1600/month aircraft movements excluding training operations;
- Small sized business jets, turbo props, recreational, helicopters;
- Recreational purposes (80%); and
- · Private Charter business flights.

Avgas 100 and Jet A1 are available on request arranged with a fuel supplier.

In the event of certain aircraft requiring firefighting services by regulation, arrangements are made with the Municipal Fire Fighting Services to provide the necessary support.

Runways

The airport has three runways as follows:

- Main runway (18/36), paved with a length of 1 500 m (landing and take-off distance) and a width of 18 m;
- Graded earth/grass runway (05/23) with a length of 900 m (landing and take-off distance) and a width of 25 m; and
- Graded earth/grass runway (15/33) with a length of 1000 m (landing and takeoff distance) and a width of 25 m.

The existing 1 500 m main runway is not long enough for aircraft typically used for scheduled flights, and ideally needs to be lengthened and widened, to accommodate the typical aircraft utilised by scheduled operators, typically with wingspans of up to 24 m.

Typical aircraft include the Jetstream 41 (wingspan 18.4 m, 29 pax), CRJ100 (wingspan 21.2 m, 50 pax) and the Embraer 135 (wingspan 20.0 m, 37 pax), which have runway length requirements (adjusted for temperature and elevation for Klerksdorp) of 2 000m to 2 500 m.

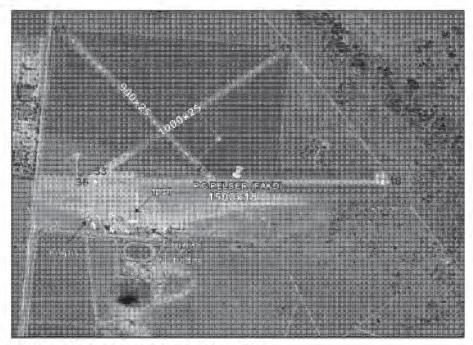


Figure 3.22: Existing Layout of P.C Pelser Airport

Taxiways

The main runway is supported by a paved parallel taxiway system to the west of the runway. The taxiway is 10 m wide, and is separated from the main runway by 140 m.

Apron

The apron is a paved area of approximately 60 m x 70 m.

Approach and Lighting System

The main runway is equipped with landing lights and a PAPI system, approaching from the northern side on the main (paved) runway. Furthermore, the runway has runway edge lights at approximately 60 m intervals.

The taxiway system has limited lighting over a short distance.

Control Tower

The control tower is no more than an elevated platform at present.

This would not really be suitable for scheduled operations should they in future take off from this airport, and, in the event of this taking place, the terminal building would have to be expanded.



Figure 3.23: Existing Apron at P.C Pelser Airport

Terminal Buildings

The terminal building provides floor space of ± 150 square meters. For the current general aviation operations, the terminal building is not a necessity, and it is only a small building with a small coffee shop.

Hangers

Thirty (30) hangers have been erected, of which eleven (11) are municipal owned and the rest privately developed on municipal land. The size of the hangers is ± 10 m x 10 m.

All the hangers located on the airport premises are leased on an annually renewable basis. In addition, the KPA, the West Transvaal Flying School and the Klerksdorp Microlight Training School, also have a presence at the airport.

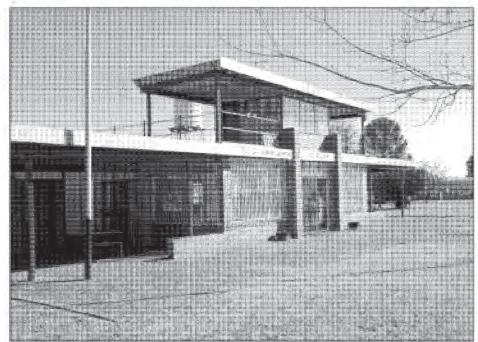


Figure 3.24: Existing Terminal Building and Elevated Control Tower Platform at P.C Pelser Airport

Security Systems

The entire airport is fenced-off with a perimeter fence and the apron area has some flood lights. There is no security detection system, or any other security measures.

Navigational Aids

The airport is equipped with a NDB situated 1,6 NM away from the airfield.

Communication Systems

Radio, telefax, telex, and telephone links are available.

Motor Vehicle Parking

An area of 150 000 $\rm m^2$ is available for public parking outside the airport perimeter fence. This area is normally used for air shows. Limited parking is also available at the terminal building.

Current Activities

Klerksdorp Airport is currently categorised as an unmanned aerodrome, and, as such, no air traffic services are provided.

The leasing of hangers located on the airport premise is carried out on an annually renewable basis. In addition, the Klerksdorp Pilots Association (KPA), the West Transvaal Flying School and the Klerksdorp Microlight Training School also have a presence at the airport.

Future Role of the Airport

Although the current role of the airport is a general aviation airport, the future planned role for the airport is for it to be grown and expanded to a secondary regional airport, with the airport capable of handling scheduled domestic commercial flights, i.e. a one scheduled aircraft movement per day service on a 29-seater J41 type aircraft.

Based on the work done on an Airport Development Business Plan and Master Plan Report by SSI Engineers and Environmental Consultants in 2011, it is envisaged that the airport could be served by smaller local and regional carriers, such as South African Express or Airlink, who have the type of aircraft in their fleet that would suit the current airport capacity and capability.

Since the 2011 report, other local airlines have also emerged, and these smaller airlines, such as Cemair or Federal Air, could also be attracted to fly from Klerksdorp.

The report detailed a potential phased development to the expansion of the airport, with the initial phase seeing the runway being lengthened and widened to a 2150 m x 30 m runway (capable of handling small regional jet and propeller type aircraft in the 30-50 seater range), including strengthening of the runway pavement layers.

Depending on the growth and demand for air services to and from Klerksdorp, the airport runway could ultimately be extended to 2 430 m x 30 m, which would see it capable of handling larger jet aircraft (in the 50-100 seater range).

The growth of the airport is anticipated to be a stimulus for the growth of a business development center, with the following focal land uses:

Inside the airport, the following complimentary non-aeronautical businesses could be established:

- Courier services
- Indirect income generation through spin-offs such as car rental, hangers and warehousing

Outside the airport, the following off-airport businesses could be established:

- Medical hub
- Hotel located adjacent to the N12
- Meat processing plant
- Maize centre
- Dualisation of the N12
- Speed train infrastructure service run between Klerksdorp and Johannesburg (passenger and cargo logistics)



Although the above planned growth and development is dependent on demand in the area for passenger air services, it is foreseen that this demand would not only come from Klerksdorp itself, or the neighboring towns such as Potchefstroom, but that demand could come from the larger dense population of the southwestern suburbs of Johannesburg, such as Soweto or Lenasia.

Furthermore, another possible catalyst for economic development has been suggested by the City of Matlosana as freight, although the business case for air cargo is not feasible in the short term.

3.17 Orkney Airport (FAOY)

Apart from the co-ordinates provided in **Table 3.34**, no information is readily available on Orkney Airport.

An aerial image of the airport is shown in Figure 3.26.

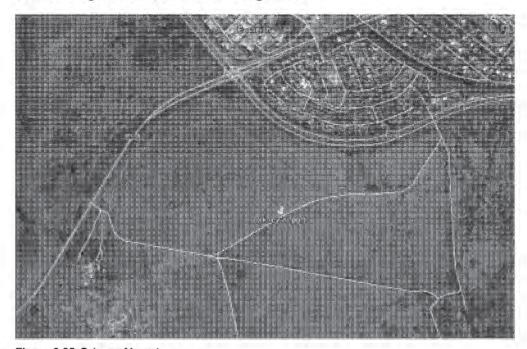


Figure 3.25: Orkney Airport

Based on the image above, this is a disused grassed airstrip, and although it appears that there are two cross grassed runways (the main runway which is approximately 1 200 m in length, and a secondary runway which is approximately 870 m in length), it seems that both are not active airstrips, as the airport site seems to be crisscrossed by other gravel roads.

3.18 Ventersdorp Airport (FAVE)

Apart from the coordinates provided in **Table 3.34**, no information is readily available on Ventersdorp Airport.

An aerial image of the airport is shown below.

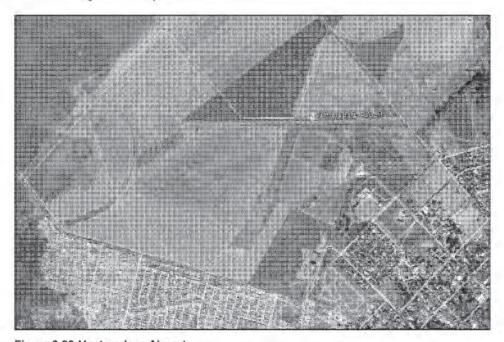


Figure 3.26: Ventersdorp Airport

Based on the image above, it seems that the 1 300 m gravel airstrip is not used frequently and is possibly mainly for private farming (irrigation) purposes.

There also only appears to be a single hangar on the eastern end of the runway, as shown in **Figure 3.27**.

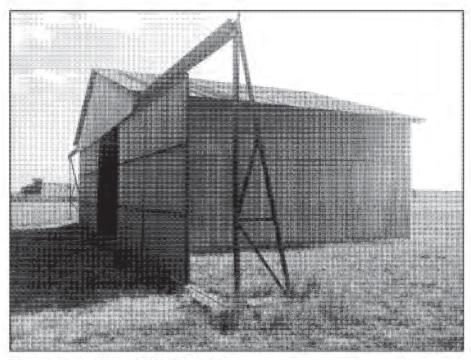


Figure 3.27: Ventersdorp Airport Hangar

3.19 Wolmaransstad Airport (FAWD)

Apart from the coordinates provided in **Table 3.34**, no information is readily available on Wolmaransstad Airport.

An aerial image of the airport is shown in Figure 3.28.

Based on the image above, a gravel airstrip of approximately 1 280 m is identified, which seems to be a gravel airstrip that is not used frequently, and possibly mainly for private farming (irrigation) purposes.

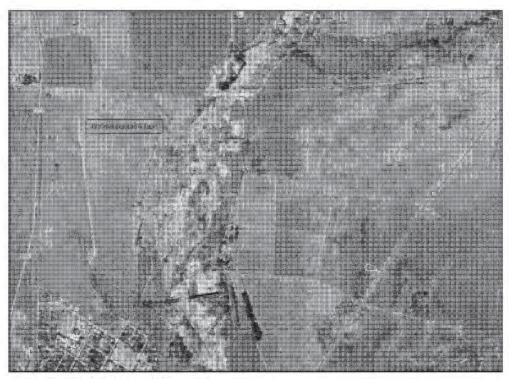


Figure 3.28: Wolmaransstad Airport

TABLE OF CONTENTS

4 CHAPT	TER 4: SPATIAL DEVELOPMENT FRAMEWORK
4.1 1	NTRODUCTION
	PROVINCIAL CONTEXT DR KENNETH KAUNDA DISTRICT MUNICIPALITY
4.3 5	SUMMARY OF SPATIAL DEVELOPMENT FRAMEWORKS
4.3.1 D	DISTRICT SDF
4.3.20	CITY OF MATLOSANA LM SDF
4.3.3 N	MAQUASSI HILLS LM SDF
4.3.4 T	LOKWE LM SDF
4.3.5 V	/ENTERSDORP LM SDF
4.4 1	MPLEMENTATION OF THE SDF AND DITP
FIGURE 4.1:	INVESTMENT AREAS AND NODES
FIGURE 4.1:	INVESTMENT AREAS AND NODES
FIGURE 4.2:	Existing Land Use of City of Matlosana
FIGURE 4.3:	URBAN SPATIAL PROPOSALS FOR KLERKSDORP, ORKNEY AND STILFONTEIN
FIGURE 4.4:	URBAN SPATIAL PROPOSALS FOR HARTBEESFONTEIN
FIGURE 4.5:	CITY OF MATLOSANA URBAN NETWORK STRATEGY
FIGURE 4.6:	New Developments in Maquassi Hills LM
FIGURE 4.7:	Existing Tlokwe Land Use (2014)
FIGURE 4.8:	TLOKWE MUNICIPAL-WIDE SPATIAL PROPOSALS
FIGURE 4.9:	TLOKWE CORRIDOR AND NODAL DEVELOPMENT
FIGURE 4.10:	EXISTING LAND USE IN VENTERSDORP
FIGURE 4.11:	VENTERSDORP SDF

4 CHAPTER 4: SPATIAL DEVELOPMENT FRAMEWORK

4.1 Introduction

This chapter provides a summary of the Spatial Development Framework (SDF) and the transport implications of the various SDF's in the Dr Kenneth Kaunda DM. The SDF information was obtained from the Tlokwe SDF 2014 Review (Maxim, 2014), the Ventersdorp Local Municipality SDF 2010 (Maxim, October 2010), the Draft Maquassi Hills SDF (Maxim, 2017), the City of Matlosana SDF (Maxim, 2016).

The SDF is an indicative plan that shows the desired patterns of land use, direction of growth, special development areas and conservation-worthy areas. The provision of good infrastructure is not only important in order to maintain a high level of development, but also to attract new investment in areas.

According to the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013), each sphere of government must take responsibility for spatial planning in their jurisdiction. In this regard, the Local Municipality being the sphere of government operating closest to the community, will have a direct role to play in spatial planning on which all decisions on land development should be based.

The Spatial Planning and Land Use Management Act, 2013 (SPLUMA 2013) specifies the role of a Local Municipality relating to spatial planning and land use management on the following elements:

- The compilation of integrated development plans (IDP's) and its components prescribed by legislation and falling within the competence of a municipality, including a spatial development framework and a land use scheme; and
- The control and regulation of the use of land within the municipal area.

4.2 Provincial Context Dr Kenneth Kaunda District Municipality

According to the National Spatial Development Perspective (NSDP, 2003), the Tlokwe and Matlosana municipal areas are situated in a mass produced and specialised economy area called a "Significant Economic Activity Area".

The NSDP principles are applied to the North West Province through the Provincial Spatial Development Framework (PSDF). The NSDP principles include:

- Principle 1: Rapid economic growth that is sustained and inclusive, with poverty alleviation a key;
- Principle 2: Provide basic services to all citizens;
- Principle 3: Government spending on fixed investment should be focused on localities of economic growth and to create long-term employment opportunities;
- Principle 4: Efforts to address past and current social inequalities should focus on people, not places; and

 Principle 5: To overcome the spatial distortions of apartheid, future settlement and economic development opportunities should be channelled into activity corridors and nodes that are adjacent to or that link the main growth centres.

The PSDF for the North West Province provides a spatial interpretation of the Provincial Growth and Development Strategy (PGDS), as well as the NSDP.

Potchefstroom and Klerksdorp have been identified as Priority 1 investment nodes on the Treasure Corridor in the PSDF. Makwassie has been identified as a Priority 2 investment node, and Ventersdorp has been identified as a Priority 3 investment node.

The PSDF also identified a development corridor on the R53, linking Potchefstroom with Ventersdorp and the N14.

Figure 4.1 shows the investment area and nodes, as well as the development corridors in the North West Province (NW PSDF, 2012).

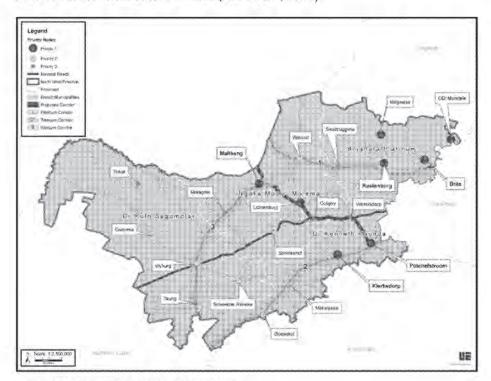


Figure 4.1: Investment Areas and Nodes (NW PSDF, 2012)

4.3 Summary of Spatial Development Frameworks

4.3.1 District SDF

The DrKKDM SDF is to a large extent based on the proposals of the PSDF, as well as inputs from existing municipal SDF's. Regarding Tlokwe, some of the broader

proposals were incorporated (such as the urban edge), and special emphasis was placed on the development of the N12 Treasure Corridor between Matlosana and Tlokwe, in terms of the benefits that could emanate from potential projects on the corridor.

The SDF shows development proposals for various land uses, land reform projects, rural development focus areas, the existing urban footprint, various protected areas and nature reserves, as well as important agriculture areas.

4.3.2 City of Matlosana LM SDF

Summary of Matlosana LM Spatial Development Framework.

The most prominent land uses in the municipal area include grassland (57%) that is mostly utilized for grazing and cultivated dry-land (23%) in the Northern parts of the Municipal area. Urban areas comprise 2.28% of total land cover, and industry and commerce 0.25% of total land cover.

Figure 4.2 shows the current land use map of City of Matlosana. There are 484 households living in various rural settlements, as follows:

- Erfdeel (Settlement / Production)
- Oblate (Settlement / Production)
- Brakspruit (Settlement / Production)
- Nkagisang (Settlement / Production)
- Ikageng (Farming)
- Tshwaragang (Farming)
- Flint (Farming)
- Mvala (Farming)
- Jacaranda (Settlement)
- Maputle Ghaanakgomo (Settlement)

There is an urgent need to accommodate approximately 49 290 residential units in the City of Matlosana area.

Over the past decades, the CBD of Klerksdorp, as well as the smaller CBD's of Stilfontein, Orkney and Hartbeesfontein, experienced a decline and degradation of Business and Retail activities, mainly due to the decentralisation of Business on Retail activities to sub-urban centres and upmarket suburbs (Flamwood and Wilkoppies areas in Klerksdorp). Retail and business facilities, as well as infrastructure in the neighbourhoods of Jouberton, Kanana, Khuma, Tigane and Alabama (old Business areas) are in a dilapidated state, due to the insufficient maintenance of buildings and infrastructure, as well as a lack of new investments in these areas.

A large number of business and retail activities exist on residential stands or properties, where the activity is in conflict with the legal zoning of the properties. This trend is mainly due to a lack of proper land use management that could further imply a loss of revenue for the municipality.

New businesses are developing adjacent to main transport routes attracted by exposure to traffic passing by:

- N12
- Central Avenue
- Buffeldoorn Road
- Platan Avenue / Austin Street
- Dr Yusuf Dadoo Avenue
- Chris Hani Road

This could lead to unwanted ribbon development that could create serious traffic flow and parking problems, which occurred in Buffeldoorn Road.

The majority of the mining activities are concentrated in the area between Klerksdorp, Stilfontein and Orkney, as well as between Klerksdorp and Hartbeesfontein within the City of Matlosana's municipal area. These mines are mainly large scale gold / uranium mines.

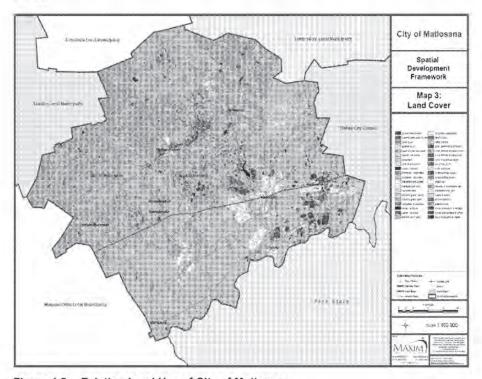


Figure 4.2: Existing Land Use of City of Matlosana (City of Matlosana SDF, 2016)

Business Development Initiatives

The main aim of the Neighbourhood Development Partnership Grant (NDPG) Programme for the City of Matlosana funded by National Treasury, is to invest in infrastructure programmes by providing a combination of technical support and capital finance for projects that will leverage private sector investment. The NDPG

No. 43934 163

programme that is currently in a process of implementation, identified specific multipurpose nodes in the neighbourhoods where business and retail development could be stimulated, including:

- Jouberton
 - Sylvia Benjamin Entrance
 - Span Multi-Purpose node
 - Multi-Purpose Community Node
 - New multipurpose entrance node (Tower Mall)
- Kanana
 - Kanana Community node.
 - Khotso/JD Khumalo intersection node (new)
- Khuma
 - Khuma Multi-Purpose node
 - Extension 8 node upgrade
- Tigane
 - Tigane Community node
 - New Multi-Purpose node in Freedom street
- Alabama
 - Alabama Multi-Purpose node

New application and initiatives for retail centres include:

- City of Matlosana Mall situated on the N12 between Klerksdorp and Stilfontein;
- City of Matlosana Estates (business site) situated on the intersection of the Hartbeesfontein & Klerksdorp road within the N12;
- West Ride Mall Wilkoppies Agricultural Holdings;
- Landmark Properties Development situated on the intersection of N12 with Jabulani Street (Jouberton) and Buitekant Street in Alabama;
- Jouberton Mall adjacent to Benji Oliphant road in Jouberton;
- Flamwood Walk Centre (Redevelopment of current centre);
- Checkers Hyper Centre (Redevelopment of current centre); and
- New Business Development in the area between N12 and Senwes Office (Klerksdorp Extension 37).

The NDPG Programme identified the Development of Light Industrial Parks in Jouberton, Kanana and Khuma. The North West Development Corporation has already approved funding for the Development of the Light Industrial Park for Jouberton.

Proposals and implementation strategies for centralisation and needs for social amenities, form part of the Neighbourhood Development Programme of the NDPG programme for Jouberton, Kanana, Khuma, Tigane and Alabama. These proposals include:

- Upgrading of sports facilities within the neighbourhoods of Kanana, Khuma and Tigane;
- A new proposed multi-purpose sports facility for the Jouberton area;
- The Goudkoppie Legacy Project;
- Orkney Vaal Development Plan; Redevelopment of Orkney Vaal into an economic viable recreational area; and

 Faan Meintjes Nature Reserve: Upgrading, improvement of investment opportunities and enhancement of ecotourism.

Large scale mining operations are gradually transforming to smaller scale and open cast gold and diamond mines in the district.

In terms of Local Economic Development, the following projects are in process:

- City of Matlosana Enterprise Development Centre;
- Solar Plant on the farm portion north of Vaal River Village;
- Meat processing plant on the eastern Townlands (feasibility investigation); and
- Khayaletha Residents Property, north of the CBD in Orkney: Emergency Rescue College.

The CBD of Klerksdorp serves as the main CBD for the City of Matlosana LM. It includes large and small communities, as well as neighbourhood (large convenience) retail centres. The main link roads between these nodes serve as prominent movement corridors, as well as development activity corridors. There is a large concentration of mixed retail, business, office, commercial and residential development adjacent to the mobility corridors. Current development trends indicate that these corridors (especially N12 in Klerksdorp, Dr. Yusuf Dadoo Road and Buffelsdoorn Road) are popular for the establishment of new business and office developments.

Spatial Proposals

The following areas earmarked for future residential development are indicated in **Figure 4.3** and **Figure 4.4**, and should be sufficient to address the short, medium and longer term residential needs within the urban areas (for municipal, as well as private sector development):

- Areas between Jouberton, Kanana and Klerksdorp South (private and municipal area);
- Areas between Meiringspark, Alabama / Manzilpark and Jouberton. This area also include the vacant areas between Uraniaville and Roosheuwel / Freemanville (private and municipal land);
- Areas west of Alabama / Manzilpark (municipal land);
- Areas between Meiringspark and Schoonspruit (private land);
- Areas west and north of La-Hoff, north of Wilkoppies and east of Flamwood (private land);
- Areas between Klerksdorp and Stilfontein (private land);
- Areas south of Stilfontein and between Stilfontein and Khuma (private- and state land);
- Areas between Vaal River Complex and Orkney (proposals from Anglo Gold) Mining land (Subject to dolomite stability);
- Areas south of Randlespark (municipal land);
- Areas west of Orkney (state, municipal and private land); and
- Area north of Orkney (Municipal land).

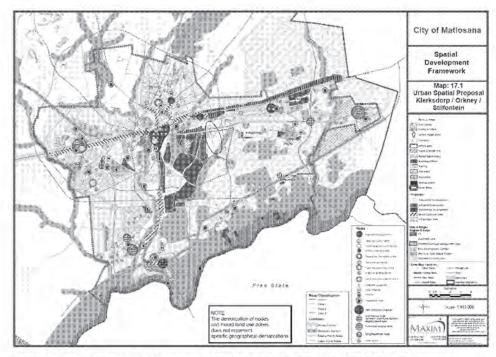


Figure 4.3: Urban Spatial Proposals for Klerksdorp, Orkney and Stilfontein (City of Matlosana SDF, 2016)

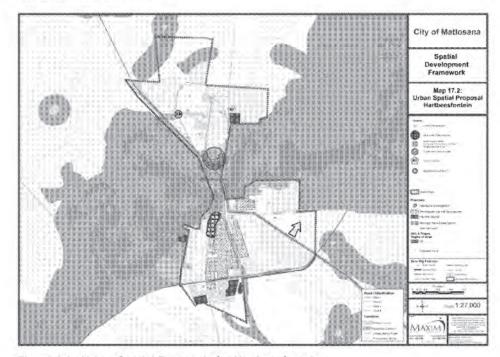


Figure 4.4: Urban Spatial Proposals for Hartbeesfontein

(City of Matlosana SDF, 2016)

SDF Issues relating to transport

The following transport related issues have been extracted from the City of Matlosana LM SDF (2016):

- Revision of current urban edge to accommodate new development areas where sufficient bulk services could be provided;
- Formulation of a proper nodal and corridor strategy;
- Maintenance of current infrastructure
 - Lack of funding for the provision of bulk services to potential development areas
- Upgrading of roads
 - ITP-roads upgrading programme
 - Upgrading of Jouberton/N12 intersection (District IDP funding)
 - Improvement of urban section of the N12 in Klerksdorp
 - Access roads to Kanana (single lane bridges)
- Upgrading of airport;
- Maintenance of rural roads;
- A roads masterplan with a road hierarchy (road classification) is required;
- Various infrastructure, including taxi ranks, are located on dolomite land which may not be compliant to dolomite standards;
- N12 Treasure corridor to be promoted; and
- National and Provincial ring road system (draft proposal) for N12 to bypass Klerksdorp.

The following spatial concepts were utilised to convey the intention of the spatial development proposals for the urban areas:

- Determination of an urban edge;
- Development of activity corridors and spines;
- Development of activity nodes;
- Enhancement of intensification and integration of residential areas;
- Enhancement of industrial and commercial development;
- Development of a municipal open space system; and
- Enhancement of the image and legibility of the city.

The proposed urban network framework forms an integrated part of the spatial development proposals. The urban network framework was informed by the identification of the main economic hubs (CBD areas, business nodes and multipurpose nodes), linkages of the municipal wide transportation network (existing and future), as well as the public transportation network and infrastructure as encompassed in the Integrated Transportation Plan (ITP).

Figure 4.5 shows the City of Matlosana Urban Network Strategy (City of Matlosana SDF, 2016).

The main objectives for the establishment of an integrated movement system for the City of Matlosana include the following:

 Support public transport, and non-motorised options i.e. cycling and pedestrians;

- Reduce travel time and transport costs;
- Promote accessibility of communities to employment, recreation and social opportunities;
- Ensure a movement system supported by development nodes and higher density residential development;
- Recognise the role of walking and cycling as important ways of moving around within settlements; and
- A quality road network that is well maintained and which is crucial for the sustainable development of the City of Matlosana.

From a spatial point of view, priority must be given to the proper maintenance and upgrading of all roads that also function as development corridors, as well as public transportation routes.

Special emphasis must be placed on the improvements of the access roads to Kanana by the upgrading of the two single lane bridges on the Schoonspruit, as well as the level crossing on the main Gauteng – Cape Town railway line. Access between Kanana and Orkney could be improved by the provision of a link road between Kanana and Flecker Road in Orkney (old main road in Orkney).

Access from the western areas of Klerksdorp to the eastern townlands could be improved by the re-alignment of a portion of Ariston road to link with the P50-1 and R30 (Klerksdorp – Orkney road).

Upgrading of roads must be carried out according to the Integrated Transportation Plan (ITP). The ITP is supplemented by the new draft Roads Masterplan, that is mainly based on the planning of a new ring-road system for the City of Matlosana, as well as the classification of all the roads (Class 1 to Class 6).

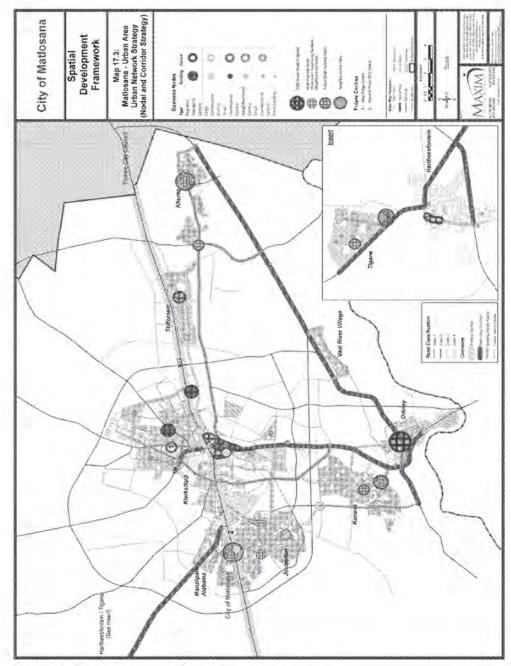


Figure 4.5: City of Matlosana Urban Network Strategy (City of Matlosana SDF, 2016)

The proposals of the Roads Masterplan were integrated with the identification of development corridors, including:

- Current and proposed local economic initiatives to improve the transport infrastructure of the City of Matlosana;
- Upgrading of the airport, based on the recently compiled airport master plan;
- Proposal for the establishment of a logistics and transport hub in the City of Matlosana. A detail investigation study is needed to determine the feasibility for such a project. Based on previous studies, the City of Matlosana is well situated for such a facility, due to its location on the N12 Treasure Corridor, main railway line, availability of land and possible upgrading of the airport to accommodate freight facilities;
- Provision of heavy vehicle facilities. Provision of truck stops with filling stations, toilets, restaurants, and over-night accommodation will reduce driver fatigue and improve road safety and security, as well as promote economic development. Furthermore, providing formal truck stops will reduce the activities of sex workers and the subsequent spread of HIV / Aids, which has become a major problem in the heavy vehicle industry; and
- Providing loading facilities and encouraging night drops to avoid peak periods to improve road safety. |Provision of traffic control, signage, and road geometry for heavy vehicle movements on main routes, will reduce traffic congestion and delays caused by heavy vehicles.

Little is known about heavy vehicle facilities, their location and condition, and there is a lack of a proper heavy vehicle traffic management system, creating an opportunity for the District and Local Municipalities to play a pivotal role through engaging the Provincial Department of Public Roads and Transport, as well as SANRAL.

4.3.3 Maquassi Hills LM SDF

The Draft Maquassi Hills SDF (Maxim, 2017), identified the following new developents in the Maquassi Hills LM:

- New developments in Wolmaransstad include:
- Wolmaransstad Ext 17: 2 500 residential stands. Informal settlements have commenced:
- Wolmaransstad Ext 18: 1 506 residential stands;
- Wolmaransstad Ext 19: 593 residential stands; and
- Wolmaransstad Ext 15: Re-layout of stands into 122 residential stands and cemetery (area between Tswelelang and future N12 bypass).

New developments in Rulanganyang (Witpoort) include:

Rulanganyang Ext 2: 265 residential stands.

New developments in Kgakala and Leeudoringstad include:

- Kgakala Ext 3: (Area between Kgakala and the railway lines). 1 783 residential stands (Private Development); and
- Leeudoringstad Ext 6, 7, 8 and 9.

Makwassie:

Residential development in area between Lebaleng and Makwassie.

Kwazi Industrial Park

 Development of an industrial park in the vicinity of the transport node along the N12 bypass in the Wolmaransstad CBD.

Figure 4.6 shows the new developments in the Maquassi Hills LM.

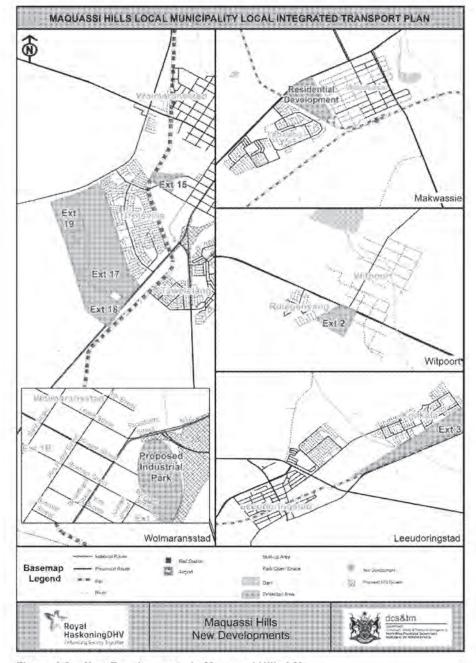


Figure 4.6: New Developments in Maquassi Hills LM

4.3.4 Tlokwe LM SDF

Existing Land Use

Figure 4.7 shows the existing land use in Tlokwe.

The most prominent land uses in the Tlokwe municipal area include farming (73%) in the eastern, southern and north-western parts of the municipal area. Urban land uses consist of urban areas (1.4%) and industry and commerce (0.48%).

The main agricultural activities consist of cattle farming and crop production, complemented by poultry farming, as well as game farms.

Mining development is currently restricted to the activities of Anglo Gold Ashanti (mine waste solutions) on the western boundary of the municipal area (Megadam), as well as certain portions north of Stilfontein. New applications for mining rights were submitted for the Eleaser Mine in the central western part of the municipal area, as well as New Heights Mine, south of Boskop.

Rural settlements:

- Matlwang is situated adjacent to the Highveld Park north of the N12 and consists
 of ± 276 households. Areas to the west of Matlwang are part of the indicated
 dolomite risk area, and care should be taken to avoid development in these
 areas;
- Buffelsdoorn Settlement informal village is situated adjacent to district road D836 in the north western part of the municipal area. The village consists of 15 informal houses, and is situated on private land (Tlokwe SDF, 2014);
- Boskop village, consisting of 23 households, is situated at the old Boskop Training Centre. This village consists of 23 formal houses on surveyed stands (4 stands are still vacant);
- Lindequesdrift Agricultural Holdings is situated adjacent to district road D304 in the far eastern part of the municipal area, sand consist of ± 285 holdings; and
- Vaal de Grace is a golf-estate situated on an island within the Vaal River.
 Currently uncertainty exists relating to the official municipal and provincial boundary, as the boundary cuts through the island.

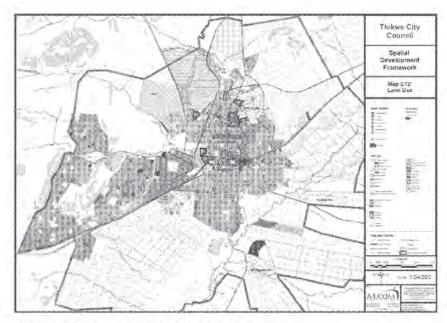


Figure 4.7: Existing Tlokwe Land Use (2014) (Tlokwe SDF, 2014)

Other rural developments include:

- Denel industrial development near Boskop, adjacent to road R501;
- Klipdrift Military Base situated adjacent to road R54, which could serve as a multipurpose rural node for the surrounding farming areas;
- SAPS Mounted Unit adjacent to R53, between Potchefstroom and Ventersdorp;
- Artillery School on the R53, north of Potchefstroom.

The distribution of business activities in the rural areas are:

- A large concentration of business activities exist at Boskop as a prominent rural node, as well as Venterskroon in the Vredefort Dome which can develop into a potential tourism node; and
- The area between Potchefstroom and Boskop (on the R501) is a popular area for business activities such as wedding venues and guest houses.

The community facilities in the rural areas of Tlokwe consist of 22 primary schools and 7 combined schools.

Currently, there are many public and private resorts mostly concentrated in the Vredefort Dome area, or adjacent the Vaal River. These resorts / recreational areas can contribute towards the tourism potential of Tlokwe, especially in the Vredefort Dome area.

Tlokwe urban area consists of 28 548 residential stands of which 26 407 stands are classified as Residential 1 stands (single dwelling units), and 2 141 medium to higher residential stands. Most of the residential development (21 581 Residential 1 stands)

is concentrated in the western urban areas (Ikageng / Mohadin and Promosa). A significant number of the stands in the western urban area are situated on dolomitic land.

The majority of the private sector development is taking place in the eastern and northern sectors of the Potchefstroom urban area, which are predominantly higher priced residential areas.

The Housing Development Agency is in the process of planning the development of Vyfhoek Agricultural Holdings (south of Railway / N12, and west of the agricultural college) for residential purposes (5 961 potential residential units).

The greatest pressure for the provision of housing is experienced in the western urban areas.

The majority of the medium to higher densification is taking place in the northern residential areas around the North-West University (Bult area to Dassie Rand). The North-West University Potchefstroom Campus plans to increase from 19 600 full time students in 2013 to 22 900 in 2019. This translates into an additional demand of an estimated 3 300 student accommodation over this period of time. The estimated forecast for student hostel accommodation is 4 800 in 2013 to 5 000 in 2014. The demand for student accommodation will remain high in the areas surrounding the North-West University.

Medium to higher density development is taking place in the area south of the CBD (Potchefstroom-south). Medium density development is occurring in the eastern residential areas (Grimbeekpark, Baily Park and Van Der Hoff Park).

Retail and business development is mostly concentrated in a large number of small and large business centres, as well as specific zones. The most prominent business areas include the following:

- The CBD area that is also supported by:
 - Mooi River Mall;
 - Riverwalk Shopping Centre; and
 - Westacres Centre.
- "Groen Akker" Centre;
- Van Der Hoff Park (Pick 'n Pay);
- Miedepark Spar;
- Cachet Park / Bult centres; and
- Oriental Plaza Centre.

Business activities in the western urban areas (Ikageng / Promosa and Mohadin) are underdeveloped and consist of small retail outlets. The Ikageng Entrance Node, Promosa Mohadin Node, and the N12 Node on Sarafina road, were identified as future multi-purpose nodes, with Sarafina and Mogoladi Nodes as supporting nodes for those areas.

New business development is aimed towards the north and south of the CBD area. The areas north of the CBD, as well as the Bult area, are popular for office development.

Business and office developments were approved adjacent to the N12 east (Baily Park). This area is in the process of developing into a mixed land use zone, mainly due to exposure and accessibility from the N12.

The Mooi River Mall Node is strengthened with the development of the Canal Crossing Centre south of the N12.

Community facilities are well-developed and consist of general social facilities (10), such as community centres, libraries and police stations, hospitals and clinics (13), sports and recreation areas (10), primary schools (18), secondary schools (15), special schools (4), and university / technicons (5).

During 2010, a state of the art convention centre and hotel complex was planned on the site of the Madiba Banqueting Halls adjacent to the N12.

An economic area analysis indicated the potential for the following community facilities for the western urban area:

- Ikageng Entrance Node:
 - Community Health Centre; and
 - Youth Centre.
- Mogolodi Street Node:
 - Police Station.
- Social facility projects in process:
 - New regional cemetery (± 60ha) (on the municipal land west of the sewer works):
 - New community hall for Lusaka in Ikageng; and
 - A Velodrome including a BMX track is earmarked at the Potchefstroom Dam resort on a site of 3.8 ha. This site will be the first indoor cycling track in Africa.

Most of the industrial development is taking place in the current industrial area between Potchefstroom and Ikageng. The potential of this industrial area could be further enhanced by means of a sub-division of under-utilised stands and the utilisation of vacant sites.

The previous SDF identified a potential industrial park adjacent to the N12-east. Township applications for light industrial / commercial activities were already submitted in this area. The main challenge for the development of this industrial park is the lack of sufficient bulk services, i.e electricity.

The economic area analysis identified the potential for a light industrial area (0.91 ha) at the Ikageng Entrance Node, that could accommodate light industries, logistics, warehouse opportunities, as well as an incubation centre. A further potential was further identified at the Oriental Plaza for a light industrial area of 1.64 ha, to accommodate a hybrid commercial park and warehousing.

Municipal-wide spatial proposals

Figure 4.8 shows the municipal-wide spatial proposals in terms of:

- Municipal Nodal and Corridor development
- Agriculture development

- Environmental protection
- Mining development
- Protection of cultural heritage sites
- Transportation

Nodal and corridor development

Nodal and Corridor Development proposal, includes:

- The N12 Treasure corridor, supported by the Gauteng / Cape Town main railway line, is intended to strengthen the east-west development initiatives from Gauteng to the Northern Cape;
- The R53 route to Ventersdorp forms part of the provincial secondary corridor, whilst the R501, R53 and R54 form the main link roads to Carletonville, Vereeniging, Parys and Viljoenskroon; and
- The R501 to Parys also serves as a tourism corridor to the Vredefort Dome and Vaal River. The roads adjacent to the Vaal River, as well as the Venterskroon road in the Vredefort Dome, serve as tourism corridors to a large number of tourist attractions in this area.

The main activity corridors within the urban edge area of Tlokwe, consist of the following:

- The primary activity corridor is formed by the N12 (Treasure Corridor) that is also classified as one of the primary corridors in terms of the PSDF. This corridor already services a large concentration of mixed land uses, as well as appropriate new development initiatives;
- Activity spines include the main existing, and future main routes within the urban area, as well as linking Tlokwe with neighbouring towns:
 - R501 North-south route
 - Thabo Mbeki Drive
 - Walter Sisulu Avenue
 - R53 (Ventersdorp Road)
 - Louis Le Grange Street
 - Ross Street
- Chief Albert Luthuli Drive linking with Bathoeng street in Ikageng and the N12
- Wolmerans Road, Promosa Road, Daniel Road linking with Areaganeng and Mogolodi streets in Ikageng and the N12.
- In the future these corridors will link with future activity spines for the southern urban area, as well as the proposed link road between R501 and the N12 east of Van Der Hoff Park;
- Activity Roads: this includes all the main collector and distribution networks of local traffic within and between the different urban areas. These activity roads will align with the future road network.

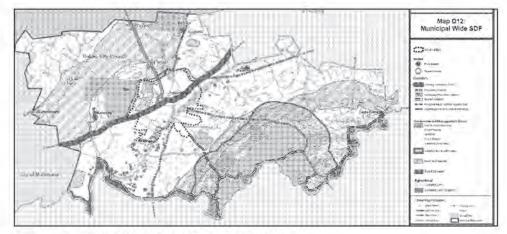


Figure 4.8: Tlokwe Municipal-wide Spatial Proposals (Tlokwe SDF, 2014)

Rural nodes

Spatial issues affecting the rural nodes include:

- Lindequesdrift: A portion of Lindequesdrift is underlain by dolomite.
 Development in this settlement is subject to a dolomite risk management strategy / plan;
- Klipdrift Node: The Klipdrift Military base and surrounding area could serve as a rural service node for the surrounding rural areas;
- Boskop Node: this node functions as a rural service node. The Boskop village consisting of 23 households is situated on land that is owned by the Land Bank. The village consists of 23 formal houses and 4 vacant stands. The main challenge for this village is the lack of a water connection. It is proposed that a feasibility investigation be conducted for the formalisation of this village with proper services;
- Matlwang Rural Village: there are certain development challenges for the development of this village which should be addressed, including:
 - Provision of proper houses (in terms of Rural Housing Programme)
 - Upgrading of the access road from the N12 (currently in a very bad condition)
 - Provision of additional water and electricity
 - That this village be incorporated into the Land Use Scheme of Tlokwe in order to ensure proper land use management
- Venterskroon node can be developed into a prominent and attractive tourism node in the Vredefort Dome.

New rural villages

As far as the establishment of new villages is concerned, the land use management guidelines must be followed, as required in terms of the Provincial Spatial Development Framework. A sequential approach must be utilised to determine the optimal location of an agri-village, i.e. it must be demonstrated why farm worker

housing cannot be provided in an urban area, before an agri-village can be established outside of existing nodes.

Mining activities

Mining activities in the Tlokwe Municipal area consist mainly of:

- Megadam (Anglo Gold Ashanti)
- Eleazer mine
- New mining development near Denel / Boskop

Proposed urban network framework

The proposed urban network framework, as indicated on Figure 4.5, forms an integrated part of the spatial development proposals. The urban network framework was informed by the identification of the main economic hubs / nodes (CBD area, business nodes, multipurpose nodes, as well as specialized nodes); linkages of the municipal wide transportation network (existing and future); as well as the main public transportation networks / infrastructure.

The upgrading of non-compliant infrastructure in high risk dolomite areas within the western urban areas, will reduce the risk of the formation of sinkholes and subsidences.

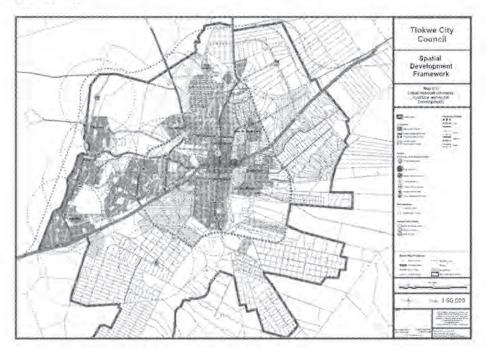


Figure 4.9: Tlokwe Corridor and Nodal Development (Tlokwe SDF, 2014)

Nodal development



Tlokwe CBD area (Regional Node) includes the area between Retief, Dr. Beyers Naude, Wolmarans and Goven Mbeki Drive. It also includes Riverwalk Centre (large community centre), Mooirivier Mall, including the new Canal Crossing Centre (Regional Centre), as well as Westacres Centre (Community Centre).

During 2006, a detailed Revitalisation Strategy was conducted for the CBD area in order to create new opportunities, as well as strategic interventions that are vital for this area.

This re-vitalization strategy could be supplemented by a precinct plan for the CBD area with special reference to:

- Improvement of the traffic flow in the CBD area;
- Urban renewal of the taxi rank / Riverwalk centre including pedestrian movements between taxi rank, Riverwalk, Mooi Rivier Mall and Canal Crossing Centre south of Nelson Mandela;
- Protection of heritage sites and landmarks in the CBD area; and
- Community input which was received to investigate Dr. Beyers Naude Street as a pedestrian route.

Community nodes and centres

The main community nodes outside the CBD area include:

- Bult Centre:
- Ikageng Entrance node; and
- N12 node (Sarafina) still vacant; this node will mainly function as a retail node due to its locality on the N12.

Future Community Nodes include:

- Intersection of MC Roode and Thabo Mbeki Drive;
- Intersection of Chief Albert Luthuli Drive and Louis Le Grange roads (Provincial offices already exist at this intersection);
- Intersection of a future Class 3 road with N12 (eastern area);
- A future community node for the south-western development area;
- Sarafina Node (Ikageng) which is also earmarked for community facilities such as a community hall, police and a fire station;
- Mogolodi Street Node;
- Bathoeng Street Node (Old business area in Ikageng Proper);
- Promosa / Mohadin business node;
- Oriental Plaza;
- Goven Mbeki Centre (SPAR);
- Van Der Hoff Park centre;
- Miederpark Spar centre;
- Centre of the intersection of Walter Sisulu and Aarbei avenues (Miederpark);
 and
- Neighbourhood node on the intersection of Kruis and Chris Hani streets.

Future neighbourhood centres include:

- Centre for the north-eastern development area;
- Intersection of MC Roode Road and Nelson Mandela Drive (N12);

- Centre for the south-eastern area (Grimbeek park) at corner of Chris Hani and Parys Roads;
- Centre of the south-western development area; and
- Centre for the development area north of Promosa.

The main specialized nodes within the urban area include:

- Educational Nodes (North West University and Agricultural College);
- Sports recreational nodes Senwes park / Fanie du Toit; Olien park;
 Potchefstroom dam including the Velodrome; and
- Military node including the airport.

North West University / Bult Nodal Precinct

The high intensity development of this area creates challenges that warrant a dedicated precinct plan. These challenges include high traffic volumes, bulk services capacity, parking, business development management, environmental issues and densification.

The NWU / Bult nodal precinct area includes the footprint area of the NWU campus, business areas and residential areas, where a large concentration of student accommodation exists. Precinct planning of this area must be carried out in close cooperation with the North West University.

The Ikageng Entrance / Mixed node

lkageng Entrance / Mixed Node was identified as the preferred area to develop as a community hub. The Ikageng Mall and the provision of a formal minibus taxi rank at the mall, improved the area aestetically and improved public transport.

There is a need for a detail precinct plan for this node that can form the basis for the upgrading, landscaping, as well as further private and public investments to further develop this node.

Mixed development zones

Mixed development zones are based on current development trends along movement corridors within the urban area, including:

- Nelson Mandela Drive (N12) road from Parys road to MC Roode Road;
- Walter Sisulu Avenue, north and south of the CBD area:
- Chief Albert Luthuli Drive; and
- Goven Mbeki Drive and Spruit Street, north of the CBD area.

Land use activities within these mixed land use zones must be restricted to:

- Manufacturing enterprises including any noxious activities and workshops;
- Heavy vehicle parking;
- Parking within road reserves:
- Non-pedestrian orientated retail activities and commercial services such as Hair dressers / beauty salons, printing enterprises, DIY / hardware / home improvement enterprises including garden services and nurseries, Computer / IT enterprises

- Office development including home offices, estate agents, info centres, medical consulting rooms and other professional offices;
- Social amenities, such as care centres and other medical related enterprises;
 and
- Guest houses.

Parking facilities must be provided on the stands in accordance with the requirements of the land use scheme.

Housing development

The total housing need for the Potchefstroom urban area is estimated at approximately 15 965 for the next 5 years (2010-2015), which includes the waiting list of 14 500 units. Based on the needs assessment, the land requirement for housing is estimated at \pm 1 751 ha, based on an average gross density of 15 units per ha. Land needs for subsidized and institutional housing is estimated at \pm 940 ha (\pm 14093 units).

New development projects include:

- Ikageng Ext. 8 110 stands
- Ikageng Ext. 9 500 stands
- Promosa Ext. 4 800 stands
- Ikageng Ext. 13 1 200 stands
- Dassierand Ext. 1 500 stands
- Vyfhoek 5 961 stands

The priority areas for development includes the north-eastern area (north of the N12), area between the N12 and Loopspruit, the south-western area, and the area north of Promosa.

Commercial and industrial development

The existing industrial area is already developed to its full capacity. A need was identified for a future heavy industrial area for more noxious industries in the area adjacent to Bert-Bricks, which can develop north-west in the direction of the railway line and N12.

Light (non-noxious) industries, commercial activities and certain business activities are proposed for the area adjacent to the N12 east, as well as the area between railway line and N12. These areas can be developed in industrial commercial parks, mainly due to its exposure and visibility from the N12.

A suitable site needs to be identified in the vicinity of the lkageng Access node for the development of a small SMME area (e.g. kwazi industrial park). This industrial park could accommodate small workshops and industrial activities that are currently being conducted on residential stands in lkageng.

Social facilities

The future 5-year needs for social facilities were determined as follows, based on expected population growth 2013-2018:

Secondary schools – 2

- Primary schools 3
- Crèches / early childhood centres 7
- Primary clinic 1
- Community hall 2
- Local library 1
- Post office 2
- Municipal pay point 1

The urban area is well-serviced with the most crucial social amenities.

4.3.5 Ventersdorp LM SDF

Ventersdorp Figure 4.10 shows the existing land use in Ventersdorp.

The following includes an overview of Ventersdorp from the SDF:

- The businesses in Ventersdorp are in a reasonable condition and overall the CBD area does not appear to be dilapidated;
- Parking within the CBD is a problem and needs to be addressed;
- The sidewalks are in a fair condition;
- A CBD revitalisation strategy is proposed with greening of the CBD and entrance foyers;
- Problems are experienced with heavy vehicle through traffic on Van Riebeeck Street and on Hendrik Potgieter Street;
- The industrial area of Ventersdorp is dilapidated and requires private investment. The locality of the industrial area (adjacent to the N14) has great advantages and potential for the industries; and
- The road conditions within the urban area are in very poor state. There is an
 urgent need for maintenance and upgrading of the roads.

Figure 4.11 indicates the SDF of Ventersdorp.

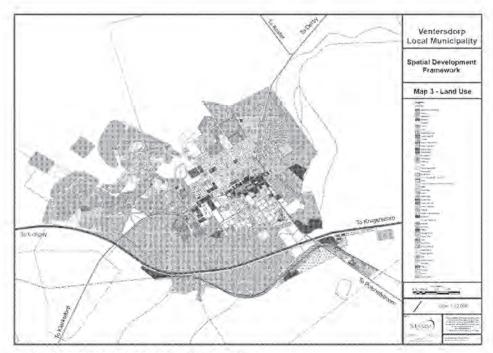


Figure 4.10: Existing Land Use in Ventersdorp (Ventersdorp SDF, 2010)

Rural villages

The majority of the rural villages (Boikhutso, Tsetse, Welgevonden, Goedgevonden, Ga-Magopa and Boikhutsong) are situated approximately 20 km north of Ventersdorp CBD, between the Ventersdorp-Derby and Ventersdorp-Swartruggens provincial roads. The Klipgat village is situated approximately 42 km north-east of Ventersdorp (Klerkskraal dam – Boons gravel road).

The following rural village spatial issues have been highlighted as follows:

- All the rural villages are situated on land that is underlain by dolomite. This has an impact on the type of development that could be allowed (construction of residential vs industrial and provision of infrastructure);
- DrKKDM appointed service providers in 2008 to attend to the process of formalization (proclamation) of Boikhutso, Boikhutsong, Tsetse, Welgevonden, Goedgevonden and Ga-Magopa; and
- The Department of Human Settlement initiated subsidised housing in these villages. The formalization process did not address the problem of dolomite stability. Therefore, unfortunately, the housing development could not commence as both the NHBRC and the Council of Geoscience did not approve the development.



Figure 4.11: Ventersdorp SDF (Ventersdorp SDF, 2010)

Regional nodes

A number of regional nodes that need future planning were identified, including:

- Botsemmogo rural node
- Sterkstroom rural node
- Polica rural node
- Rysmierbult rural node
- Makokoskraal rural node

The current status of these regional nodes is as follows:

- All the nodes, with the exception of Rysmierbult, are farms that are earmarked for future land reform projects;
- Rysmierbult consists, of a Post Office, a Clinic (Kgotso clinic), a church, a tavern
 as well as a business. This informal rural settlement could be utilised as a future
 multi-purpose rural node, with the opportunity of a possible school, pension paypoint, as well as a community hall. The settlement consists of 150 informal and
 10 formal houses, with VIP pit latrines on each stand. Water (water tank and
 communal taps) are also available; and
- "Sterkstroom" actually refers to the farm Buffelsvlei. It consists of an informal housing area and a shop. The households lease the stands for R50 per month from the land owner.

Transport implications of the Tlokwe and Ventersdorp SDFs

Transport infrastructure and services provide a key mechanism to facilitate and achieve the objectives of the SDF. The CITP will not only respond to the land use changes to satisfy the demand, but will also stimulate further development along corridors and nodes. It is important that the implementation of the CITP, IDP and SDF be fully integrated in order to get the most benefit from these planning tools.

In general, the main objectives for the establishment of an integrated transport system for the Tlokwe and Venstrsdorp SDFs are:

- Support public transport, and non-motorised options i.e. cycling and pedestrians;
- Reduce travel time and transport costs;
- Promote accessibility of communities to employment, recreation and social opportunities;
- Ensure a movement system supported by development nodes and higher density residential development;
- Recognise the role of walking and cycling as important ways of moving around within settlements;
- A quality road network that is well maintained is very crucial for sustainable development;
- Priority must be given to the proper maintenance and upgrading of all roads that also function as development corridors, as well as public transportation routes; and
- A comprehensive Roads Master Plan.

Main corridors and activity spines that must be supported in terms of upgrading and management are:

- The N12 Treasure corridor;
- Gauteng Cape Town main railway;
- The R53 route between Tlokwe to Ventersdorp (provincial secondary corridor);
- The R501, R53 and R54 (provincial secondary corridors);
- The R501 to Parys (tourism corridor to the Vredefort Dome and Vaal River);
- Activity spines including the main existing and future main routes within the Tlokwe urban areas;
 - R501 North-south route
 - Thabo Mbeki Drive
 - Walter Sisulu Avenue
 - R53 (Ventersdorp Road)
 - Louis Le Grange Street
 - Ross Street
 - Chief Albert Luthuli Drive linking with Bathoeng street in Ikageng and the N12
 - Wolmerans Road, Promosa Road, Daniel Road linking with Areaganeng and Mogolodi streets in Ikageng and the N12
- Activity roads, including all the main collector and distribution networks of local traffic within and between the different urban areas. These activity roads will also align with the future road network

Transport related issues identified in the SDF, include:

- Classification and planning of a new road system for Tlokwe;
- Investigation of the feasibility for one-way roads in the CBD and between the CBD and the North West University (NWU) campus;
- Upgrading of intersections on Chief Albert Luthuli Drive; and
- Truck shop / parking of heavy vehicles.

Development pressure is experienced at the following locations within Tlokwe, which will require improved transport capacity and efficiency:

- Provision of housing in the western urban areas of Tlokwe;
- Medium to higher densification in the northern residential areas within the market area of the NWU Campus (Bult area to Dassie Rand);
- Business activities on the stands north and south of the CBD area;
- Multi-purpose nodes at Ikageng Entrance Node, Promosa/Mohadin Node and the N12 Node on Sarafina Road;
- Mixed land use zone along the N12 east (Baily Park); and
- Industrial development taking place in the current industrial area between Potchefstroom and Ikageng.

Potchefstroom CBD transport related challenges that must be addressed (Tlokwe SDF, 2010) are:

- A detailed precinct plan is required for the Potchefstroom CBD due to the high intensity of development within the CBD. The transport related challenges in the CBD includes high traffic volumes and parking issues;
- Parking requirements impact on the re-development and upgrading of buildings in the CBD;
- Pedestrian movements in the CBD between the Potchefstroom Main taxi rank and Mooi River Mall on Goven Mbeki drive;
- Future pedestrian movements between Mooi River Mall and Canal Crossing Centre on the N12 east;
- Upgrading / revitalisation of the taxi rank;
- Church street pedestrian mall;
- Conflict between motor transport, cyclists and pedestrian movement;
- Investigate the feasibility of a one-way road system that includes the following roads:
 - Nelson Mandela drive as a west-east one way and Wolmarans street as a east-west one way; and
 - As an alternative, Du Plooy street, with a wider road reserve can be investigated as an alternative east-west one-way.
- Improve traffic flow at the Potchefstroom main taxi rank. Investigate a one-way system on "Noord" (Goets) and River roads between Nelson Mandela drive and James Moroka avenue;
- Improve traffic flow from Nelson Mandela drive (N12) to the northern areas (Bult and University) on the western side of the CBD;
- Investigate the feasibility of a one-way road system of Dr Beyers Naude avenue (north) and Peter Mokaba avenue (south);
- Urban renewal of the Potchefstroom main taxi rank / Riverwalk centre including pedestrian movements between taxi rank, Riverwalk, Mooi Rivier Mall and Canal Crossing Centre south of Nelson Mandela;
- Opening of Church street Mall for 2-way traffic to improve its function as a prominent activity corridor;

- Parking requirements impact on the re-,development or upgrading of buildings in the CBD area;
- Investigate Dr Beyers Naude street as a pedestrian route;
- Feasibility for a one-way road system should be investigated along Hoffman street from Dr Beyers Naude avenue to Meyer street as a south-north one-way and Steve Biko avenue from Meyer street as a north-south one-way. This oneway system could improve traffic flow to the NWU, as well as the Bult area between Meyer- and Esselen street;
- Investigate the upgrading of the intersections of Hoffman street, Steve Biko avenue and Molen street with Chief Albert Luthuli drive;
- Investigate the feasibility for student parking areas outside the campus; and
- Upgrade access road to Mathlewang Node.

The Ventersdorp SDF identified the following transport related projects:

- Van Riebeeck street is currently accommodating most of the through traffic from the N14 south (Klerksdorp) to Derby / Rustenburg. The through traffic from Potchefstroom / Krugersdorp / N14 to Rustenburg / Derby must execute a rightturn on Van Riebeeck street and a left turn on Rothman street before exiting on the Leeukraal road to Rustenburg. In order to alleviate the heavy vehicle pressure on Van Riebeeck street, as well as the Van Riebeeck / Rothman and Hendrik Potgieter / Rothman Street intersections, the following link roads are proposed:
 - Direct link road from Rothman street to Hendrik Potgieter street;
 - Direct link of Carmichael street with Van Riebeeck street, also to link with the proposed link road; and
 - Rothman street as the north-south traffic increases a one-way system could be considered on Van Riebeeck and Carmichael streets.

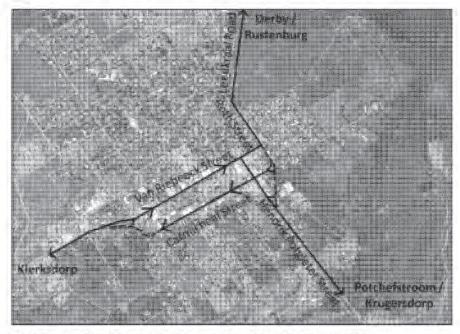


Figure 4.12: Proposed heavy vehicle routes through Ventersdorp

(Ventersdorp SDF, 2010).

4.4 Implementation of the SDF and DITP

The SDF should provide a 20-year spatial vision for the municipality and should be reviewed at least on a five (5) year basis, in line with the five (5) year IDP cycle and the DITP cycle. The success of the implementation of the SDF depends on effective and efficient monitoring, as well as an evaluation. Monitoring and evaluation systems that must be put in place should provide reliable and accurate information, reflecting inputs and outputs of all resources involved in the implementation of the SDF.

The aim will be for the systematic collection and analysis of information, in order to track performance, and to provide a basis for decision-making.

The implementation plan should be revised yearly, based on the final outputs of the monitoring and evaluation framework of the SDF. Specific aspects that may require annual assessment and revision include:

- Identification of priority intervention areas;
- Incorporation of the recommended projects in support of the SDF into the IDP;
- Budget (MTREF) and the implementation thereof;
- Impact of development changes; and
- Impact of Council policies and decisions on the spatial development.

The Municipal Manager will delegate officials in a number of ways in order to ensure the achievement of SDF outcomes. Certain key strategic programmes need to be considered, in order to facilitate the successful implementation and management of the Spatial Development Framework proposals.

TABLE OF CONTENTS

5	CHAPTER 5: TRANSPORT NEEDS ASSESSMENT
5,1	INTRODUCTION
5.2	SOURCES OF NEEDS 5-2
5.3	SUMMARY OF NEEDS FROM LOCAL MUNICIPALITIES
5,4	STRATEGIC NEEDS OF DR KENNETH KAUNDA DM
	LIST OF FIGURES
FIGURE	5.1: BAR CHART OF THE NUMBER OF NEEDS IDENTIFIED FOR EACH LOCAL MUNICIPALITY PER PROJECT CATEGORY

5 CHAPTER 5: TRANSPORT NEEDS ASSESSMENT

5.1 Introduction

According to the DITP Minimum Requirements (Government Gazette 40174, 29 July 2016 Notice 881), this chapter must determine and adequately describe the transport-related issues, problems, and needs of the municipality and its residents based on the following:

- Assessment of issues, problems, trends and performance standards revealed by the Transport Register;
- 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; and
- The upgrading and maintenance needs of all roads and public transport facilities
 for which the planning authority is responsible must be identified. 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 process that was followed to identify the upgrading and maintenance needs of all roads and public transport facilities for which the local municipality has responsibility should be described.

The information may be taken from the municipality's IDP, if available. If not available in the IDP, it should be obtained from stakeholder consultation or other methods. The agreed Scope of Work did not allow for demand estimation, as the transport network extent and complexity of transport in the Municipality does not warrant demand estimation.

5.2 Sources of Needs

The following sources were utilised in compiling the transport needs for the Dr Kenneth Kaunda DM:

- City of Matlosana LM LITP (RHDHV 2017)
- JB Marks LM CITP (RHDHV 2017)
- Maguassi Hills LM LITP (RHDHV 2017)
- Dr Kenneth Kaunda DM IDP (2017)
- North West Province PLTF (2016)
- Stakeholder Coordination Meetings:
 - NW Province Transport Planning Forum;
 - Dr Kenneth Kaunda Technical Inter-Governmental Relations (IGR)
 Meeting:
 - Dr Kenneth Kaunda District Municipality District ITP Technical Coordination;
 - City of Matlosana Stakeholder Coordination;

- Maguassi Hills Stakeholder Coordination;
- Technical Coordination with Tlokwe Stakeholders; and
- Ventersdorp Stakeholder Coordination.

5.3 Summary of Needs from Local Municipalities

Figure 5.1 provides a bar chart giving the number of needs identified for each Local Municipality per project category. This gives an indication of the most important type of needs and where these are located. More detailed information can be found in the relevant Local Municipality's LITP or CITP.

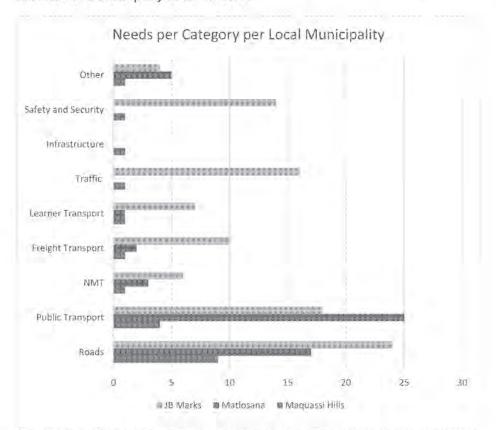


Figure 5.1: Bar Chart of the Number of Needs Identified for each Local Municipality per Project Category

The needs of JB Marks LM are mostly related to Roads, Public Transport and Traffic, the needs of Matlosana LM are mostly related to Public Transport and Roads, and-the needs of Maquassi Hills LM are mostly related to Roads and Public Transport.

When comparing the number of needs for each specific category by Municipality, Safety and Security, Traffic, Learner Transport, Freight, NMT and Roads needs are mostly prevalent in JB Marks, whilst Public Transport needs are mostly prevalent in Matlosana.

5.4 Strategic Needs of Dr Kenneth Kaunda DM

From a review of all the needs in each municipality, the following needs are of a strategic nature and need to be addressed by the District Municipality by means of co-ordination, consultation, technical support and facilitation of funding.

Mini-Bus Taxis

- Upgrading and maintenance of taxi ranking facilities;
- Provision for passengers with special needs and people doing informal trading;
- Provide adequate lay-bys on primary taxi routes to eliminate random traffic interruptions as well as signage;
- Passengers are generally very concerned about the safety and security of the public transport system;
- Four informal taxi ranks are located on dolomite;
- Illegal minibus taxi operations;
- There gaps in the information regarding the detailed demand and supply of public transport;
- There are insufficient government subsidies for public transport such as minibus taxi services and bus services;
- Support for public transport and non-motorised options i.e. cycling and pedestrians;
- Reduction in travel time and transport costs;
- There is a lack of metered-taxi services in the District. Implementing a structured system of metered taxi services could be greatly beneficial due to the District's tourist activity; and
- Provision of public transport and NMT infrastructure serving rural villages.

Metered-Taxis

- Metered-taxis are operating illegally operating licences have not been issued to metered-taxis due to an oversupply of operating licences;
- There is a lack of formal metered-taxi services and, to this end, implementing a structured system of metered-taxi services could be greatly beneficial due to the District's tourist activity; and
- There is lack of a fare structure for metered-taxis.

Bus Transport

- There is no scheduled formal public bus service operating for commuters in the Dr Kenneth Kaunda District Municipality; and
- There is a need to assess the demand for scheduled bus services from detailed demand surveys.

Learner Transport

There is a major lack in the supply of formal transport for learners.

Rail Transport

- The Potchefstroom Train Station was earmarked for major development into a multi-modal transport facility;
- An inter-urban passenger rail service feasibility study for the Johannesburg Potchefstroom - Klerksdorp route is needed;
- Passenger rail services are inadequate and could be developed to carry a larger fraction of the public transport demand; and
- PRASA is investigating the revitalisation of certain stations.

Road infrastructure

- Paving of urban gravel roads and maintenance of potholes in main roads;
- Access roads to rural settlements are generally in a poor condition;
- All CBD streets require proper sidewalks that are universally accessible.
 Pedestrian and cycle routes are required within 5 km of social facilities, such as schools, universities, municipal pay points, office blocks and industries;
- Developing a strategic rural road network upgrade and maintenance plan with budgets;
- Establishing a rural transport forum at district level;
- A proposed future road network was planned for the urban areas of Tlokwe and Matlosana. Road access management for mobility roads in line with the proposed road classification of the main road network. These roads master plans need to be expanded to the entire District; and
- A quality road network that is well maintained is very crucial for sustainable development.

Freight Transport

- Provide routes for heavy vehicles, hazardous materials and abnormal loads;
- Ensure proper management for the movement of dangerous goods and abnormal loads;
- Problems are experienced with heavy vehicle through traffic along the N12;
- There is a need for a truck stop and holding area for heavy vehicles on the N12;
- Feasibility study for the establishment of an inter-modal freight hub, in order to integrate road, rail and airfreight in one location;
- Overload Control Law Enforcement is currently only conducted on the N12 (north-east of Tlokwe), at the static weight bridge owned by the Provincial Roads Department. These facilities have not been operational for some time:
- Upgrade Disaster Management Centre.

Non-motorised Transport

- Provide sidewalks, lay-bys and pedestrian crossing facilities at schools;
- Continue programmes of paving of sidewalks;
- Provision of cycle lanes and lighting serving schools, major commercial centers and public transport facilities;
- Planning need to include cycling and walking Tlokwe has included a cycle lane on the N12; and

MIG programme need to prioritise NMT projects.

Airports

There is an under utilisation of airports in terms of passenger transport as well
as freight transport. If attention is given to this problem, it would be greatly
beneficial to increase business and tourist activities.

Safety and Security

- There are no traffic safety plans, nor any road safety audits in the residential areas;
- There are also no traffic safety education programmes or communication bodies (forums) to deal with the safety issues;
- The current incident management plan only focusses on the N12 Highway;
- Hazardous material (HAZMAT) vehicles are outdated and need replacement due to difficulty in obtaining parts to maintain the vehicles;
- A limited number of staff has advanced training in dealing with serious HAZMAT incidents;
- The Alternative Freight Route Map requires revision to take into account serious incidents on the road network;
- By-laws are outdated and require alignment with latest legislative requirements;
 and
- Passenger safety and security for public transport requires improvement.

Learner Transport

- 19 School bus operators have applied for permits to transport scholars, but are still waiting – operating illegally;
- Scholar transport routes full of potholes;
- Scholar transport vehicles are un-roadworthy;
- 4+1 vs GVTA conflicts also impacts on the scholar transport and affects the scholars:
- School bus transport is not subsidised by the Province Department of Transport or the Department of Education;
- New permit system is a problem to school transport operators; and
- Dual membership of GVTA and SOSTOA is an issue.

Institutional

- Lack of capacity in the District Municipality and Local Municipalities. Transport Planning is a Provincial Function as very few of the LM's can afford a Transport Planning component, and the LM's do not have the power to enforce the transport planning actions. Municipalities to establish transport departments with officials to handle transport issues;
- Each municipality should have at least 3 people to present the transport forums, however, the municipalities are struggling to comply;
- N12 is being upgraded by SANRAL— no communication received on what is planned;
- Need funding for future plans; and
- LM's do not have MMC responsible for transport planning.

General

- Need to align with the National Development Plan (NDP) 2030 alignment. Key is to address unemployment, poverty, inequality.
- Municipalities need to support provincial priorities:
 - Village, Township and Small Dorpie (VTSD): The Province is currently developing a VTSD plan for each town. This to be included in the DITP;
 - Agriculture, culture and tourism (ACT) are the three anchors of economic growth, especially in rural areas where poverty, unemployment and inequality are very high;
 - Setsokotsane Setosokotsane is an approach for radical socio-economic transportation with special focus on villages, townships and small dorpies;
 - Saamtrek Saamwerk all government levels to break the silo mentality and to pull in one direction to work and serve the communities; and
 - Reconciliation, healing and renewal healing of past ills as a result of segregation and past apartheid laws.

TABLE OF CONTENTS

6	CHAPTER 6: PUBLIC TRANSPORT PLAN	3
6.1	Introduction	3
6.1.1	Minimum requirements (Government Gazette, 2016)	3
6.1.2	Contents and structure of the report	5
6.2	PUBLIC TRANSPORT POLICIES AND STRATEGIES	6
6.2.1	Introduction	6
6.2.2	Existing national, provincial and municipal policy framework	7
6.2.3	Legislation controlling the disposal of operating licences	
6.2.4	Framework for the disposal of operating licences	B
6.3	OVERALL NETWORK DESIGN	13
6.3.1	Introduction	
6.3.2	Overview of the public transport system	17
6.4	RAIL NETWORK	18
6.5	BUS SERVICES	20
6.6	MINI-BUS TAXI SERVICES	20
6.6.1	Mini-bus Taxi Associations	20
6.6.2	Mini-bus taxi routes	21
6.6.3	Mini-bus taxi facilities	21
6.7	OPERATING LICENCES PLAN (OLP)	26
6.7.1	Introduction	
6.7.2	Supply of public transport services	
6.7.3	Mini-bus taxi operating licence routes	33
6.7.4	Mini-bus taxí observed routes	
6.7.5	Utilization of public transport infrastructure	38
6.7.6	Vehicle capacity and utilisation	39
6.7.7	Passenger demand	
6.7.8	Future expansions and developments	
6.7.9	Restructuring of the Public Transport System	6-62
6.7.10	Law Enforcement	6-62
6.7.11	Consultation/Public Participation	6-65
6.7.12	Implementation	
6.8	CONCLUSIONS AND RECOMMENDATIONS	6-67
6.8.1	Guiding principles	
6.8.2	Recommendations	6-67
	LIST OF TABLES	
TABLE 6.1:	OVERVIEW OF MINI-BUS TAXI AND METERED TAXI ASSOCIATIONS, OWNERS, VEHICLES AND ROUTES	20
TABLE 6.2:	MINI-BUS TAXI ROUTES IN DRKKDM	21
TABLE 6.3:	MINI-BUS TAXI FACILITIES IN DRKKDM	
TABLE 6.4:	UNIQUE VEHICLES AT MINI-BUS TAXI FACILITIES IN DRKKDM	
TABLE 6.5:	OPERATING LICENCES ISSUED FOR COMMUTER SERVICES BY THE PRE (2017)	27
TABLE 6.6:	OPERATING LICENCES ISSUED FOR LONG-DISTANCE SERVICES BY THE PRE (2017)	30
TABLE 6.7:	OVERVIEW OF MINI-BUS TAXI OPERATING LICENCE ROUTE OPERATIONS	36
TABLE 6.8:	MINI-BUS TAXI OBSERVED ROUTES	
TABLE 6.9:		
TABLE 6.10	: DAILY ROUTE CAPACITY AND UTILIZATION FOR AM AND PM PEAK PERIODS FOR 20 BUSIEST ROUTES	40
TABLE 6.11	DEMAND PER ROUTE	42
	AGGREGATED CORRIDORS IDENTIFIED	
TABLE 6.13	: ROUTE MATRIX OF RECOGNISED PUBLIC TRANSPORT OPERATING LICENCES	46

LIST OF FIGURES

FIGURE 6.1:	DR KENNETH KAUNDA DM OVERALL NETWORK DESIGN IN TERMS OF THE STRATEGIC PUBLIC TRANSPORT NETW	-
	(SPTN)	
FIGURE 6.2:	OVERALL NETWORK DESIGN IN TERMS OF THE STRATEGIC PUBLIC TRANSPORT NETWORK (SPTN) IN THE JB MAR	
	LM	
FIGURE 6.3:	OVERALL NETWORK DESIGN IN TERMS OF THE STRATEGIC PUBLIC TRANSPORT NETWORK (SPTN) IN THE MATLO	SANA
	LM	
FIGURE 6.4:	OVERALL NETWORK DESIGN IN TERMS OF THE STRATEGIC PUBLIC TRANSPORT NETWORK (SPTN) IN THE MAQUA	
	HILLS LM	17
FIGURE 6.5:	OVERVIEW OF RAIL NETWORK IN DR KENNETH KAUDA DM	19
FIGURE 6.6:	OVERVIEW OF MINI-BUS TAXI RANKS, BOARDING POINTS AND ROUTES FOR JB MARKS LM	23
FIGURE 6.7:	OVERVIEW OF MINI-BUS TAXI RANKS, BOARDING POINTS AND ROUTES FOR POTCHEFSTROOM	23
FIGURE 6.8:	OVERVIEW OF MINI-BUS TAXI RANKS, BOARDING POINTS AND ROUTES FOR VENTERSDORP	24
FIGURE 6.9:	OVERVIEW OF MINI-BUS TAXI RANKS AND BOARDING POINTS FOR MATLOSANA LM	24
FIGURE 6.10:	OVERVIEW OF MINI-BUS TAXI RANKS AND ROUTES IN TOWNS OF MATLOSANA LM	25
FIGURE 6.11:	OVERVIEW OF MINI-BUS TAXI RANKS AND BOARDING POINTS FOR MAQUASSI HILLS LM	26
FIGURE 6.12:		
FIGURE 6.13:	MAJOR PUBLIC TRANSPORT CORRIDORS THROUGHOUT THE DRKKDM AREA	47
FIGURE 6.14:	PUBLIC TRANSPORT CORRIDOR: POTCHEFSTROOM - VENTERSDORP	48
FIGURE 6.15	PUBLIC TRANSPORT CORRIDOR: POTCHEFSTROOM - ORKNEY	49
FIGURE 6.16:	PUBLIC TRANSPORT CORRIDOR: POTCHEFSTROOM - KLERKSDORP	50
FIGURE 6.17:	PUBLIC TRANSPORT CORRIDOR: KLERKSDORP - HARTBEESFONTEIN	51
FIGURE 6.18	PUBLIC TRANSPORT CORRIDOR: KLERKSDORP - STILFONTEIN	52
FIGURE 6.19:	PUBLIC TRANSPORT CORRIDOR: KLERKSDORP - ORKNEY	53
FIGURE 6.20:	PUBLIC TRANSPORT CORRIDOR: KLERKSDORP - WOLMARANSTAD	54
FIGURE 6.21:	PUBLIC TRANSPORT CORRIDOR: WOLMARANSTAD - LEEUDORINGSTAD	55
FIGURE 6.22:	PUBLIC TRANSPORT CORRIDOR: WOLMARANSTAD - MAKWASSIE	56
FIGURE 6.23:	PUBLIC TRANSPORT CORRIDOR: KLERKSDORP - VENTERSDORP	57
FIGURE 6.24:	SIMPLIFIED PROCESS FOR DISPOSING OF OPERATING LICENCE APPLICATIONS	6-66

6 CHAPTER 6: PUBLIC TRANSPORT PLAN

6.1 Introduction

6.1.1 Minimum requirements (Government Gazette, 2016)

In view of the fact that the Dr KK District Municipality has only non-contracted minibus taxis, and certain learner bus services and metered-taxi services, this Public Transport Plan will only focus on relevant aspects of the requirements, with limited reference to the other aspects, and according to the Minimum Requirements:

"The focus of the Public Transport Plan (PTP) should be to integrate the public transport network, services and modes. The plan needs to provide the basis for rationalising and restructuring the public transport system, designing contracts for contracted services and awarding of operating licences to non-contracted services."

The PTP must be comprised of six parts:

"(a) Policies and strategies: This should cover:

- A broad perspective of the future development of the public transport system, including a policy and strategy for the role of each public transport mode:
- Determining where and to what extent subsidies should be paid;
- A description of relevant policies and principles guiding the disposal of operating licences, including, but not limited to, roles of modes and preferred modes, parallel-subsidised services and commercial service contracts; and
- Policies in relation to the regulation of non-regular modes of transport such as metered taxis, electronic hailing services, two- or three-wheeler vehicles such as tuk-tuks, and long-distance services.

The policies and strategies should be directed at designing a network of contracted and non-contracted services that:

- Cater for the needs of all potential users including targeted categories of passengers such as learners, to ensure that they are universally accessible;
- Maximise access to services by pedestrians; and
- Minimise duplication between services and reduce under-or over-utilisation of available capacity.

(b) Overall Network Design

An Overall Network Design must be described which sets out the high-level view of the future system for rail and road-based services, contracted and non-contracted.

(c) 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.

(d) Contracted Services Plan

This part of the plan should describe the existing contracts in the area, as well as set out the proposed plan for the new contracts that the planning authority will enter into the ITP 5-year period.

(e) Non-contracted Services Plan

This five-year plan should describe in detail the routes where operating licences will be granted for non-contracted services. It should describe the capacity requirements of these routes, and the modes that will be considered suitable. It must contain 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.

Furthermore, this plan must cover non-regular modes of transport such as metered taxis, electronic hailing services, as well as two- or three-wheeler vehicles such as tuk-tuks, and long-distance services. The quality and other requirements must be set out in the plan, as well as any restrictions on numbers or geographical locations.

(f) An Operating Licences Plan (OLP)

The Operating Licences Plan (OLP) forms part of the Public Transport Plan (PTP) and aims at guiding the awarding of future operating licences. The Operating Licence Plan (OLP) should ideally take the form, not only of a once-off document, but of an active database linked in a "live" way to the Operating Licences Administration System (OLAS). The demand information depicted in terms of routes and services will be compared and matched with the Operating Licence Administrative System (OLAS) information, obtained from the North West Provincial Regulatory Entity (PRE).

This is essential for the planning authority to comply with section 55 of the National Land Transport Act (NLTA), act no. 5 of 2009. Operating licences are required for all public transport service vehicles, whether they are contracted or non-contracted, commuter or long-distance in nature. The National Public Transport Regulator (NPTR) and/or the Provincial Regulatory Entity (PRE) will be required to refer any application for operating licences to the applicable planning authority within whose area the services being applied for, will operate, or the planning authority which was responsible for the preparation of the PTP for that particular area. Should the service being applied for, fall into more than one municipal area, then the application will be referred to all the municipalities that will be affected, each reacting to the application in terms of the implications this may have on its area.

The OLP must provide clear guidance to the planning authority as to which operating licence applications should be recommended for approval or rejected by it. As these recommendations are binding on the NPTR, or PRE, in terms of section 55(5) of the NLTA, the PTP must provide the planning authority with a reliable and accurate basis for its decisions.

The successful implementation of the OLP requires that the OLAS be updated continuously, so that the database accurately and reliably reflects the details of all active operating licences pertaining to the area at the time any new application is

being considered. The routes described in the OLAS will be the same as, or at least relatable to, the routes or route groups described in the planning authority's Transport Register (TR), PTP and OLP.

The OLP will describe the operating licences required for all proposed new contracts (e.g. route descriptions, duration and conditions).

In respect of non-contracted regular, daily services in the area, it will describe the defined public transport routes or specified groups of routes on which non-contracted services may operate, as well as the number of vehicles of each capacity-type that the planning authority will authorise, having taken demand into account. The PTP should describe the number of operating licences already active on each route or route group (as per the data in the OLAS), and the additional number of operating licences that could be granted on each route where there is an under-supply, or the surplus number of operating licences on each route where there is an over-supply.

In the case of an over-supply, the OLP should contain a proposal as to what action the planning authority proposes to pursue to reduce this (e.g. refuse renewal applications). The plan should describe the public transport facilities that are associated with the particular routes in the OLAS, that may be authorised for use by operating licence holders on the routes, taking into account their capacity as determined in the TR.

The OLP must also provide guidance for recommendations, which the planning authority will utilise regarding applications for operating licences for non-regular modes of transport such as metered taxis, two- or three-wheeler vehicles such as tuk-tuks, and long-distance services. The quality conditions that will be attached to such operating licences and other requirements, must be set out in the plan, as well as any restrictions on numbers or geographical locations.

The OLP should also describe any conditions which should be imposed by the PRE, in respect of operating licences, such as duration. For example, duration may be shortened on routes where a new BRT service will be introduced in the near future. Tuk-tuks may have a set of special conditions such as a limited length radius of operation.

The OLAS should be made available on-line to the planning authorities so that they can extract information about the number of operating licences active on each route, the vehicles and their capacity, and the validity period of each operating licence. If the OLAS is not available on-line, the regulatory entity must provide such information to the planning authority at its request, so that recommendations are always based on current data.

The OLP must describe law enforcement strategies for maintaining the operating licencing system, including institutional arrangements, the interrelationship with traffic law enforcement and the setting of targets and measuring performance".

6.1.2 Contents and structure of the report

This Chapter is based on the final Operating License Plan(OLP) that was developed for the Dr KK District Municipality (DCSTP, 2018).

This Chapter addresses the following broad components:

Public Transport Policies and Strategies

- Overall Network Designs
- Commuter Rail Plan
- Contracted Services Plan
- Non-contracted Services Plan
- Operating Licences Plan

6.2 Public Transport Policies and Strategies

6.2.1 Introduction

Various stakeholders and role players have been engaged by the Project Team to provide their over-arching broad public transport policies and strategies, related to public transport and land-use. These covered:

- 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;
- Policies în 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;
- Determining where and to what extent subsidies should be paid (none at present). In the case of gross cost contracts, these will take the form of covering the difference between system cost and fare revenue collected by the contracting authority;
- A description of relevant policies and principles guiding the disposal of operating licences, including but not limited to, roles of modes and preferred modes, parallel-subsidised services and commercial service contracts;
- Policies in relation to the regulation of non-regular modes of transport such as metered taxis, Uber, two- or three-wheeler vehicles such as tuk-tuks, and long-distance services; and
- Public Transport fleet policy in relation to reducing carbon emissions and air pollution, as well as in relation to providing universal access.

The policies and strategies will be directed at designing a network of contracted and non-contracted services that:

- Cater for the needs of all potential users including targeted categories of passengers such as learners so that they are universally accessible;
- Maximise access to services by pedestrians;
- Minimise duplication between services;
- Reduce under- or over-utilisation of available capacity;
- Are cost-effective;
- Employ the appropriate mode for the requirements of the route or corridor;
- Are convenient to passengers;
- Support the objectives of the Spatial Development Framework (SDF);
- 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. It also requires integrating transport infrastructure and
 passenger information across services and modes;
- Incrementally use interoperable electronic fare systems (common fare medium), and charge affordable fares;

- Avoid destructive competition between different services on the same route or corridor;
- Compensation policy for Public Transport (PT) operators;
- Improve PT service provision without infrastructure;
- Form the basis of moderating PT contracts;
- Minimise vehicle emissions;
- Promote universal access:
- Put any financial support (subsidy) to optimum use, by taking into consideration the cost-performance ratio of modal alternatives before any new contract is designed and awarded; and
- Give priority over private transport:
 - Prioritise Public Transport over Private Vehicles
 - Non-Motorised Transport
 - Pedestrian zones/Car-free zones e.g. CBD
 - Sustainable Transport

The need exists to develop a strategy with regards to Uber, tuk-tuks and other metered taxis. A literature review of best practices will be conducted, and the policies and strategies adopted. This could well form the basis for future by-laws in this regard.

6.2.2 Existing national, provincial and municipal policy framework

The policy framework is based on the following, national, provincial and municipal transport documentation, and deals with the practical issues relating to the disposal of operating licences in the District and JB Marks LM:

- National Land Transport Strategic Framework (NLTSF), 2016
- White Paper on National Transport Policy, 1996
- Moving South Africa, The Action Agenda, 1999 Provincial policy documentation
- Public Transport Strategy and Action Plan, 1997
- North West Province Provincial Land Transport Framework (PLTF), 2016
- District Integrated Development Plan (IDP)
- District Integrated Transport Plan (DITP), 2011

The Framework is discussed in the DrKKDM DITP and is not duplicated herein. The policies and strategies derived from the Policy Framework are provided, however, in a later section of the chapter.

6.2.3 Legislation controlling the disposal of operating licences

Legislation controlling the disposal of Operating Licences (OLs) has been promulgated by both National and Provincial spheres of Government, namely:

National Land Transport Act (NLTA, Act No. 5, 2009) and regulations

The NLTA requires the establishment of a NPTR and PRE's (Sections 20 and 23 respectively) to, inter alia, receive and decide on applications relating to OLs for inter-provincial and intra-provincial services respectfully.

The NLTA allows the Minister to assign the Operating Licence Function (OLF) to municipalities. In Section 18 it is required from a municipality to whom the OLF has been assigned, to receive and decide on applications relating to OLs for

services wholly in their areas of jurisdiction, excluding applications that must be made to the NPTR or a PRE.

In Section 36(6) the NLTA requires that: every Planning Authority (PA) must make its ITP available to the NPTR and relevant PRE and provide direction to them relevant to applications for new OLs, in the prescribed manner.

Section 55(5) must dispose of an application in accordance to the direction given by the planning authority and may NOT grant an operating licence contrary to the directions of the ITP and planning authority.

Chapter 6 of the NLTA deals with the regulation of road-based public transport. Matters that are covered in the NLTA include:

- The rationalisation of existing scheduled and of mini-bus taxi type services Sections 47 to 49);
- Entities that must issue Operating Licences (Section 51);
- Validity period of OL's (Section 52);
- Processes for the application for new services (Section 54), Operating Licences for public transport services provided for in transport plans (Section 55), Operating Licences for contracted services (Section 56), disposing of applications with regards to OL's for non-contracted services (Section 57) and renewal, amendment or transfer of an Operating Licence or permit (Section 58);
- The contents of an Operating Licence is described in Section 62;
- The issuing of an Operating Licence for a range of supplementary modes and/or services is dealt with in Sections 65 to 72. The following modes/services are covered:
 - Long-distance services
 - Metered taxi services
 - Charter services
 - Staff services
 - Lift clubs
 - Tuk-tuks
 - Adapted light delivery vehicles
 - Transporting of scholars, students, teachers, and lecturers

The regulation of tourist transport services is covered in Sections 80 to 84.

6.2.4 Framework for the disposal of operating licences

This section presents the policy framework developed for the DrKKDM, based on the existing national, provincial and municipal documentation. It comprises a statement of purpose, followed by policies to guide the Municipality when making its directions and representations to the PRE. The framework must, however, always be read in conjunction with national, provincial and district policy, and does not supersede these documents or any legislation on the matter.

1) Purpose of the policy framework

The purpose of the policy framework is to assist the Municipality in formulating recommendations and representations on applications received by the PRE, namely:

- The granting, renewal, amendment, or transfer of an Operating Licence authorising the operation of any public transport service other than a charter service; and
- The conversion of a permit to an Operating Licence that involves a conversion from a radius or area-based permit to a route-based Operating Licence, or to an operating licence for a larger vehicle. The Municipality will only support an application for the conversion of a permit to an Operating Licence, if the service authorised by the permit had been provided on a regular basis for a period of at least 180 days prior to the date of application. However, the NLTA does not make provision for any further conversions of permits to Operating Licences as, at the date of enactment, all permits issued under previous legislation automatically expire after 7 years.

2) Types of public transport services that require operating licences

Public transport services are defined within the NLTA as services for the carriage of passengers for a fare or other consideration or reward and include:

- A scheduled service;
- An unscheduled service (which includes a mini-bus taxi-type service);
- A charter service:
- A long-distance service;
- A metered taxi service;
- A tourist service;
- A staff service;
- Tuk-tuk;
- Adapted light delivery vehicles; and
- A learner (scholar) transport service.

Certain services are exempt from the requirements for their operator to hold a permit or an operating licence. These include a farmer conveying employees in his or her own vehicle, a local authority conveying people in its own vehicle without reward, persons conveying patients to receive medical treatment (e.g. ambulance drivers), a hotel conveying guests to the nearest or most convenient transport facility in its own vehicle, and an employer conveying employees between workplaces (but not between home and work). Also exempted are persons operating under the authority of permits issued in terms of the Cross-Border Road Transport Act (No. 4 of 1998).

In section 69, the NLTA allows for the National Minister to make regulations on the requirements to qualify for a lift club. This will include the requirement that lift clubs be registered with PAs.

No person may operate a road public transport service unless he or she is the holder of an Operating Licence or permit (Section 50(1)). The Act, however, allows that an Operating Licence may authorise the vehicle to which it relates, to operate more than one service or type of service (Section 50(2)).

Spatial, land-use and economic planning

The Municipality intends that all land transport functions be integrated with related functions, such as spatial, land-use, and economic planning and development.

This is to be achieved through, amongst other actions, the development of an IPTN, corridors, densification, and infilling.

4) Types of vehicles which may be utilised for public transport services

The Municipality notes that vehicles to be used to convey passengers must comply with the National Road Traffic Regulations, 2000, and other relevant legislation. In particular, the Municipality stipulates that no person shall on a public road, carry any person for reward in the goods compartment of a motor vehicle.

Operating Licences may only be issued for vehicles designed or lawfully adapted by a registered manufacturer to carry, as defined in the NLTA:

- motor car fewer than 9 persons, including the driver, or
- mini-bus between 9 and 16 persons, including the driver, or
- midi-bus between 17 and 35 persons, including the driver, or
- bus 35 or more persons, including the driver,

unless the National Minister, in consultation with the MEC's, provides otherwise for special categories of vehicles to cater for exceptional cases in rural areas, or exceptional cases in relation to tourist or courtesy services (NLTA Section 71).

No vehicle may be used for the operation of a public transport service, unless it is a vehicle contemplated above, or otherwise a special category of vehicle (NLTA Section 71). When making recommendations and representations to the PRE, the Municipality takes into consideration the role of each public transport mode, and promotes the integration of all modes (NLTA Section 31).

5) Operating licences for contracted services

The Municipality shall include in its considerations, when providing its directions to the PRE, with respect to an application for the granting, renewal, amendment or transfer of an OL for a contracted service, the following:

- The availability and improvement need of terminals and bus stop facilities on the route in question, for boarding and alighting of passengers;
- Whether the application is supported in light of the City's transport plans, and
- Any other recommendations or representations the City may have in relation to the application.

The Municipality notes that existing contracted services (interim and current tendered contracts) are to be replaced, by the relevant Government Departments, with commercial and subsidised service contracts. In the case of negotiated contracts, subsidised contracts or commercial contracts, the Municipality stipulates that the relevant PRE, must issue an OL for each vehicle involved in the contract, and that such Operating Licences must be made specific for the validity period of that contract (Section 56).

6) Operating licences for non-contracted services

The Municipality will include, in its considerations when providing direction and making representation to the PRE, with respect to an application for the granting,

renewal, amendment or transfer of an Operating Licence for a non-contracted service, the following:

- The availability of ranks or terminals or other facilities or spaces for boarding or alighting, or holding, or parking of vehicles;
- Whether the application is supported in the light of its transport plans (ITP);
- Whether or not the public transport requirements for that particular route, or routes, are adequately served by an existing public transport service of a similar nature, standard or quality provided in terms of a commercial service contract, or subsidised service contract, or in terms of operating licences as shown by the City's transport plans;
- The existence of any by-law, regulation, prohibition, limitation or restriction that is relevant to the transport service that the applicant proposes to operate:
- The period for which the operating licence should be issued; and
- Any other direction or representation the City may have in relation to the application.

The Municipality deems the non-availability of ranking space at a public transport facility owned by the local municipalities, to be sufficient reason not to support an application for an Operating Licence. Instead, when considering any application for an Operating Licence for a mini-bus taxi type service, the Municipality requires the applicants to nominate their 'priority route' to assist the Municipality to best manage the public transport facilities on that route.

When in receipt of an application for an Operating Licence for long distance services, the Municipality will also take into account, the following:

- The days of the week, or month, and time of day for departure;
- For a mini-bus taxi-type service, those passengers may not be picked up or set down en-route, unless the operator has reached an agreement in this regard with the Municipality and other relevant transport authorities, and with the taxi associations operating locally in the area concerned;
- In this context, the Municipality prefers long distance services that are operated by vehicles that also provide a public transport service within the municipality. When in receipt of an application for an operating licence for a metered taxi service, the Municipality will take into account the latest version of its operation plan for metered taxi services developed with the industry; and
- With regards to applications for Operating Licences for tourist services, the Municipality gives preference to tour operators, since it deems services of a predominantly shuttle/transfer nature more suited to other types of transport services, such as charter services.

7) Validity period for operating licences

The Municipality notes that no Operating Licences may be issued for a period not exceeding 7 years, except where a negotiated contract has been awarded, in terms of section 41, to an operator for more than seven years, then such an Operating Licence must be awarded for the period of the contract (NLTA Section 52).

When the Municipality makes its representations and provides direction to the PRE, with respect to the validity period of an Operating Licence for contracted

services, the validity period shall be only for the duration, and subject to the terms and conditions of the contract. The period will be amended to extend the duration thereof, where the duration of the relevant contract is extended (NLTA Section 56(3)).

When considering its representations and directions to the RE with respect to the validity period of an Operating Licence for non-contracted services, the City may include the following:

- Current and envisaged trends in utilisation on the route, routes, or in the particular area;
- Efficiency of the proposed services in meeting users' needs;
- Likelihood that, in the future, the public transport services for which the application is being made, may no longer be required in terms of the City's transport plans; and
- Likelihood that the public transport services for which the application is being made, may become the subject of a commercial service contract or a subsidised service contract.

The Municipality notes that Operating Licence for charter services, long distance services, staff and tourist services, must be for a fixed period.

8) Cancellation of Operating Licence not brought into use (Section 78)

The Municipality may bring to the notice of the PRE, that an OL converted from a permit has not been brought into use within 180 days, as well as that a service authorised by a permit or an OL has not been observed by the Municipality to operate, and may, therefore, not be faithfully carrying out the conditions or the requirements of the authority (Section 78 (5)). The PRE, may then call on the holder to give good reasons why the authority to operate that service should not be suspended or cancelled.

9) Special needs passengers

The Municipality will consider the needs for special categories of passengers when making representations and providing direction to the PRE, with regards to Operating Licence applications.

It is National policy that all IPTNs are to be designed to be universally accessible, if funded by Government. It is anticipated that all contracted public transport services will be required to be universally accessible in the near future. In as such, the Municipality will encourage applicants who wish to provide services with universally accessible vehicles, provided that all other criteria and assessments are positive, until such time as a universal access policy is concluded.

6.3 Overall Network Design

6.3.1 Introduction

The objective of the Integrated Public Transport Network (IPTN) is to integrate public transport services between modes, with through-ticketing and other appropriate mechanisms. There is a need for commuters to be able to travel from origin to destination in a seamless manner, with integrated pedestrian access for all passengers. Furthermore, it will create a strategic direction for investment. The Strategic Public Transport Network (SPTN) has been identified on a corridor-by-corridor basis to form the IPTN.

The objectives of the SPTN are:

- The network must serve the main travel demand patterns;
- Direct linking of all main activity nodes and residential areas;
- Form the basis of integrating all public transport modes;
- Serve mobility and accessibility needs in terms of network hierarchy supporting the Road Network hierarchy and the Spatial Development Framework;
- Identification of transfer stations and HOV lanes; and
- Interface with networks of neighbouring districts and Gauteng province.

Figure 6.1 shows the Overall Strategic Public Transport Network (SPTN) for the DrKKDM to view the District context, whilst **Figure 6.2**, **Figure 6.3**, and **Figure 6.4** shows the Public Transport Routes for the Local Municipalities.

The location of major public transport facilities, such as bus termini and taxi ranks, form part of the overall public transport network.

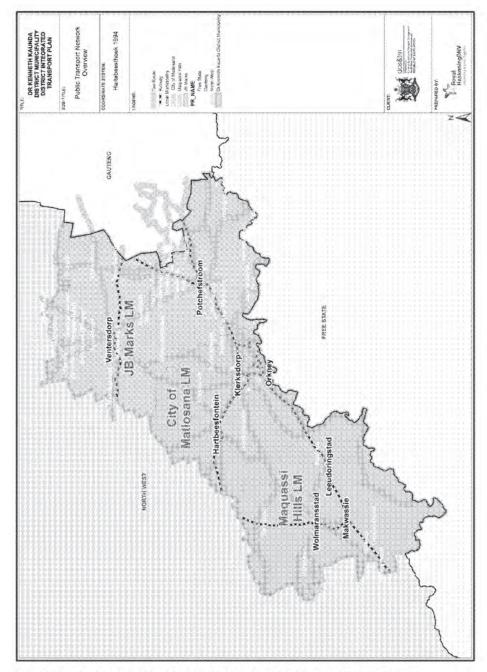


Figure 6.1: Dr Kenneth Kaunda DM Overall Network Design in terms of the Strategic Public Transport Network (SPTN)

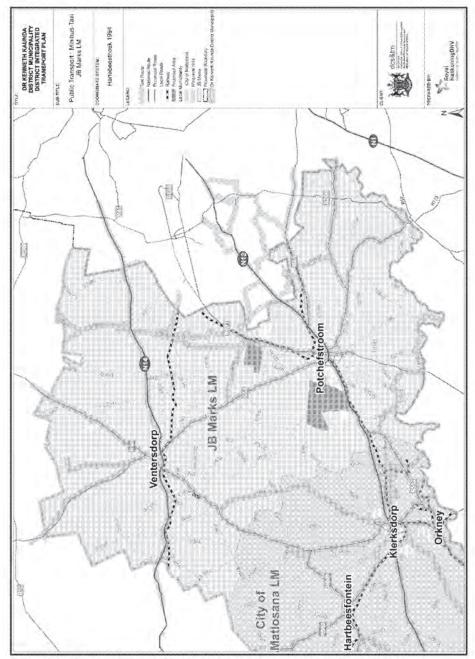


Figure 6.2: Overall Network Design in terms of the Strategic Public Transport Network (SPTN) in the JB Marks LM

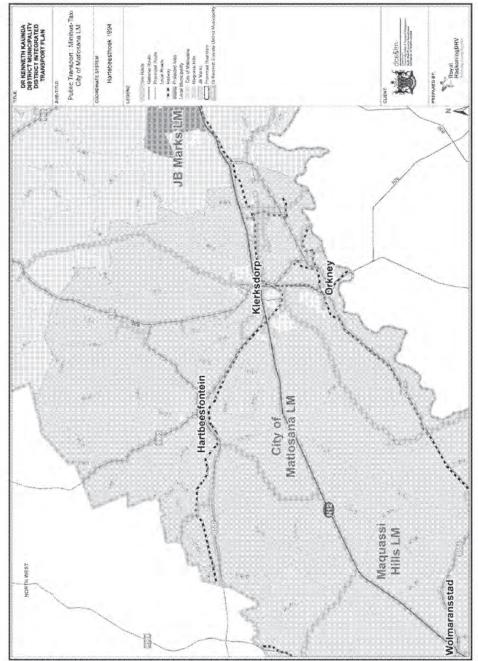


Figure 6.3: Overall Network Design in terms of the Strategic Public Transport Network (SPTN) in the Matlosana LM

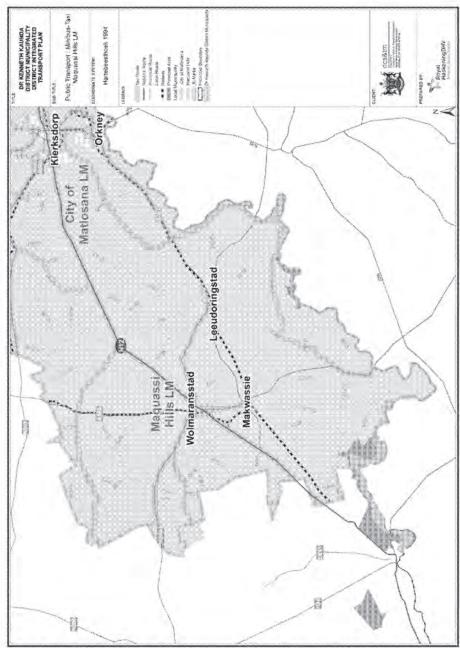


Figure 6.4: Overall Network Design in terms of the Strategic Public Transport Network (SPTN) in the Maquassi Hills LM

6.3.2 Overview of the public transport system

An Overall Network Design has been described, setting out the high-level view of the future system for road-based services. This is particularly important when the planning authority is proposing to restructure the system for the purposes of creating the type of quality corridors envisaged in the national Public Transport Strategy. The Overall Network Design includes the following aspects:

- The overall network design must identify the preferred mode or modes with regards to the particular routes, or corridors in the area, including transport into or from the areas of other planning authorities, and inter-provincial transport.
- Proposals must be 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.
- The planned sequencing of network implementation should be described, including the timeframes for the conversion of any expired interim, negotiated and tendered contracts, and the introduction of new contracts. Short-term and long-term plans for contracted services should be set out. In the short-term, its focus must be on transforming interim subsidised contracts and tendered contracts into negotiated 12-year contracts in accordance with the NLTA. The longer-term plan should deal with the introduction of tendered contracts and the overall restructuring of the subsidised public transport system, including rail, after the initial new contracts have run their course.

The MEC must facilitate arrangements regarding the responsibility for the rationalisation of inter-provincial and intra-provincial services.

Input from DrKKDM (PTP) and NW DoT (PT) have been vital at the start of the task. This was assessed and work-shopped with the relevant group to confirm the short-, medium- and long- term plans. During this workshop, discussing the overall network design, the city's previously developed PTP were used as a basis for discussion. The network design also factored in e.g. metered taxi, NMT and long-distance travel. Furthermore, there was a need to factor in all new areas/wards in the DM's area of jurisdiction.

Following consultation with the land-use component, recommendations for possible gaps in the network were proposed.

6.4 Rail Network

There is one inter-provincial line going through DrKKDM running between Johannesburg and Cape Town. The line passes through Potchefstroom, Klerksdorp, Orkney, Leeudoringstad and Makwassie. Long-distance passenger services, as well as freight services are operated on this line. Passenger rail services make use of stations at Potchefstroom and Klerksdorp.

There are no commuter rail lines in the DrKKDM. An overview of the rail network in the DrKKDM is shown in Figure 6.5

Scheduled mainline passenger train services are operated by Shosholoza Meyl from Johannesburg to Kimberly and Cape Town. Most trains travel from Johannesburg to Welverdiend, where there are lines to Dunfield and Klerksdorp. There is also a line from Vereeniging to Potchefstroom via Klerksdorp, Leeudoringstad and Maquassi. There are three long distance services which operate in the area, namely:

- Shoshaloza Meyl (mainly over weekends);
- Blue Train (operated by Luxrail with no fixed schedule); and
- The Premier Class between Johannesburg and Cape Town (departs from

Johannesburg every Thursday and Sunday and from Cape Town every Tuesday and Saturday, stopping at Potchefstroom and Klerksdorp stations).

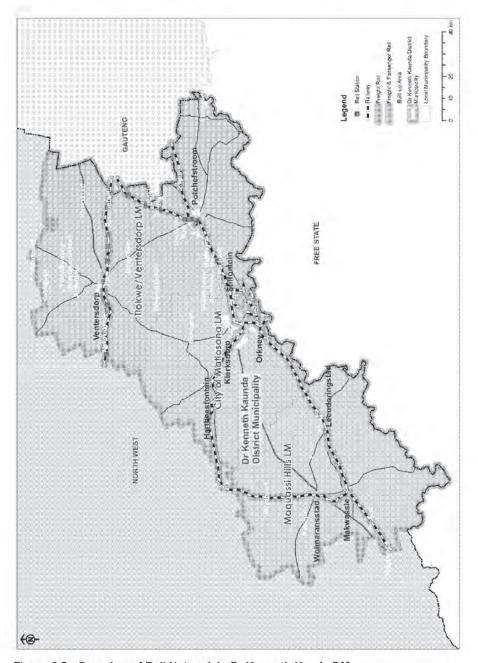


Figure 6.5: Overview of Rail Network in Dr Kenneth Kauda DM

6.5 Bus Services

Bus operations are limited within the DrKKDM. A few bus operations have closed or have rationalised their services due to a lack of Government subsidies. There are no subsidised bus services within the DrKKDM. There are two private bus operators, namely:

- · Vaal Maseru: There are 9 routes used by the Vaal Maseru; and
- City-to-City: the number of used routes is unknown.

These buses mainly operate either long-distance services, contract services for the mines in the area, or scholar services. Commuter services are not being operated, and no information regarding bus termini is available.

The North West Province Department of Transport and Community Services operates various Learner Transport services within DrKKDM. This is addressed in Chapter 11.

6.6 Mini-bus Taxi Services

6.6.1 Mini-bus Taxi Associations

As shown in **Table 6.1** there are 13 mini-bus taxis and 1 metered taxi association in the DrKKDM area. DrKKDM is well supplied with mini-bus taxi vehicles of more than 2,660 legally registered mini-bus taxi vehicles and 1,648 operational members (PRE, 2016). This figure is actually much higher, if illegal operations are added. If a simple ratio of vehicles to routes is calculated, it shows that there are approximately 8 vehicles for every legal route, which is a vague indication of an over-supply of mini-bus taxi vehicles in the district.

Table 6.1: Overview of mini-bus taxi and metered taxi associations, owners, vehicles and routes

OPERATIONAL AREA	TAXI ASSOCIATION	MEMBERS	VEHICLES	ROUTES
	Baleti Taxi Association	70	159	11
	Greater Orkney Short- & Long- Distance Taxi Association	310	128	26
	Greater Stilfontein Taxi Association	116	249	12
	Jouberton Taxi Operators	153	519	37
Matíosana LM	Jouberton and Noordkom Amalgamated Taxi Association	56	109	11
maticalna Em	Khuma & Stilfontein United Taxi Association	104	276	17
	Klerksdorp and District Taxi Association	217	336	14
	Utlwanang Greater Transport Long Distance Taxi Association	57	170	30
	Kosh Cab Metered Taxi Association	82	98	1
	Codesa_Aksie Taxi Association	117	211	21
	Greater Potch Taxi Association	174	278	10
JB Marks LM	Interstate	130	312	23
	Greater Ventersdorp Taxi Association	25	112	12
Maqwassie Hills LM	Mighty Maqwassie Taxi Association	37	124	15

OPERATIONAL AREA	TAXI ASSOCIATION	MEMBERS	VEHICLES	ROMES
	TOTAL	1,545	3,081	240

Source: Provincial Regulatory Entity (2016)

6.6.2 Mini-bus taxi routes

There is a total of 240 taxi routes operated within the DrKKDM. **Table 6.2** shows the number of routes per local municipality.

Table 6.2: Mini-bus Taxi Routes in DrKKDM

LOCAL MUNICIPALITY	NUMBER OF ROUTES
Matlosana	159
JB Marks	66
Maquassi-Hills	15
TOTAL FOR DRKKDM	240

Source: Provincial Regulatory Entity (December 2017)

Most routes link the residential areas with main towns, industrial and shopping areas, health and social facilities.

6.6.3 Mini-bus taxi facilities

Most mini-bus taxi vehicles use fixed infrastructure like formal and informal ranks to load passengers, before dispersing towards different destinations. Most of the mini-bus taxi infrastructure facilities in the district are informal in nature with little or no physical infrastructure provided for commuters. In some instances, mini-bus taxis also roam around in townships and load passengers along the road and at taxi stops, without passing through any taxi facility. In many cases these informal stops act as feeder points to formal facilities from where the actual route starts.

Figure 6.6 to Figure 6.6 show the location of mini-bus taxi ranks and other boarding points in the respective areas within the District.

There are 104 identified taxi facilities in the District, of which 88 are informal, mainly used for boarding, whilst 16 can be classified as formal as can be seen in **Table 6.3**: Mini-bus Taxi Facilities in DrKKDM.

Table 6.3: Mini-bus Taxi Facilities in DrKKDM

	FORMAL	INFORMAL	TOTAL
Matlosana	11	52	63
JB Marks	4	23	27
Maquassi-Hills	1	13	14
TOTAL FOR DRKKDM	16	88	104

Source: Transport Register (2017)

During recent rank surveys, a total of 2,353 unique vehicles have been observed at the ranks listed in **Table 6.4** below.

Table 6.4: Unique Vehicles at Mini-bus Taxi Facilities in DRKKOM

Die 6.4: Unique Venicies			171 1415-411/11 B
HANK	VEHICLES	PASSENGERS	UTILIZATION
Balpel Promosa	6j	506	18
Capitac Rank	45	675	15
Capitac Tambaal Rank	29	435	15
Chubby Chick	16	238	195
Dassierand	9	133	15
Ext.11	85	929	14
Ext 6	155	2,303	15
Ext 6 Rank (Khuma)	40	597	15
Ext 7	96	1,364	14
Ext 8 Rank (Khuma)	187	2,731	15
Greater Ventersdorp Taxi	24	344	14
Hospital Rank	60	877	15
Ikageng 4A Rank	19	269	14
lkageng Ext 4B	6	89	15
Ikageng Gate Mall Rank	60	863	14
Industry Rank	7	104	15
Jazz Bar Taxi Rank (Klerksdorp)	116	1,645	14
Kanana	51	732	14
Kanana Circle Rank	20	285	14
Kanana New Mall Rank	29	407	14
Klerksdorp Main Taxi Rank	242	3,450	14
Klerksdorp Main Taxi Rank (Tambai Area)	161	2,354	15
N12 Engen/ Total Garage	28	427	15
Orkney Taxi Rank	180	2,547	14
Potchefstroom Main Taxi Rank	349	5,012	14
Promosa Rank (Town)	100	1,465	15
Sarafina	64	960	15
Stilfontein Main Taxi Rank	5	72	14
Stilfontein Rank	8	126	16
Stilfontein Rank (Spar)	5	69	14
Von Weillich	43	620	14
Witrand	16	229	14
Wolmaranstad Tambaai Rank	31	465	15
Wolmaranstad Taxi Rank	26	370	14
Grand Total	2,353	34,092	14

Source: Transport Register (2017)

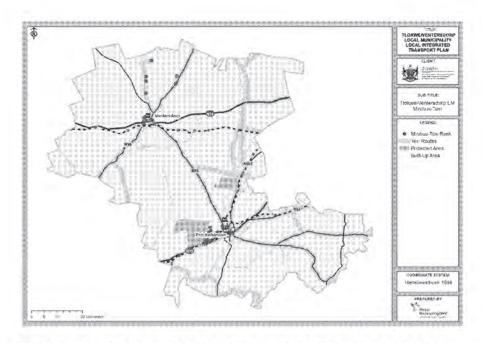


Figure 6.6: Overview of Mini-bus taxi Ranks, Boarding Points and Routes for JB Marks LM

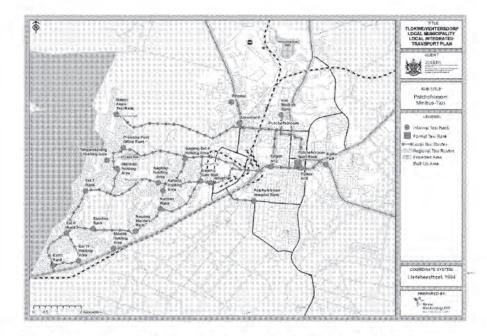


Figure 6.7: Overview of Mini-bus taxi Ranks, Boarding Points and routes for Potchefstroom

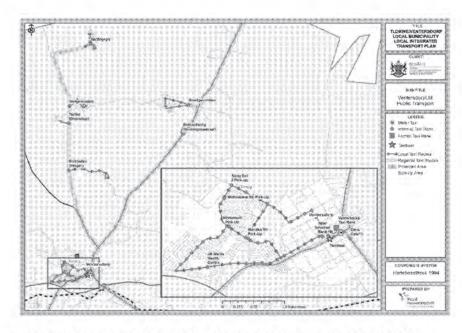


Figure 6.8: Overview of Mini-bus taxi Ranks, Boarding Points and routes for Ventersdorp

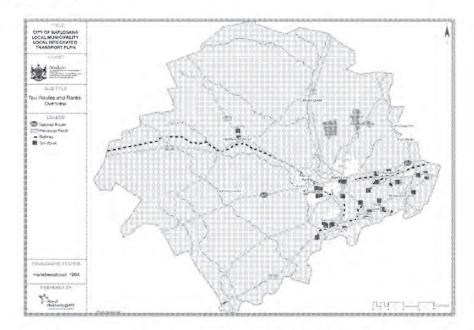


Figure 6.9: Overview of Mini-bus taxi Ranks and Boarding Points for Matlosana LM

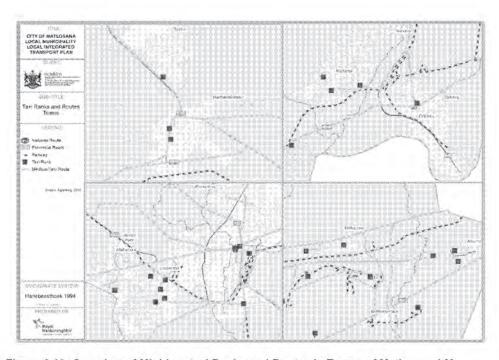


Figure 6.10: Overview of Mini-bus taxi Ranks and Routes in Towns of Matlosana LM

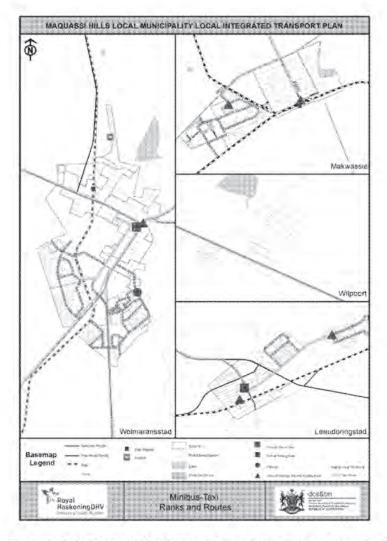


Figure 6.11: Overview of Mini-bus taxi Ranks and Boarding Points for Maquassi Hills LM

When comparing the number of passengers counted, it is evident that vehicle utilisation is very good with an average of 14 passengers per vehicle. This is an indication that vehicles leave the rank only when fully loaded. Due to the relatively longer distance between towns, operators do not contemplate filling the vehicle en-route, and, therefore, do not depart from the rank, unless the vehicle is filled to capacity.

6.7 Operating Licences Plan (OLP)

6.7.1 Introduction

As mentioned previously, the main objective of the OLP is to supply the District Municipality with a document which can guide the municipality when disposing of operating licence applications, received from the PRE. Such an OLP needs to enable the municipality to decide, on an ad-hoc basis, per route, whether to

recommend for the awarding or rejection of an individual application. This decision rests mainly on two (2) questions.

The first, centres around the passenger demand on the route in question. If there is adequate demand to warrant the introduction of an additional vehicle, the operating licence application could be positively considered. If on the other hand, the passenger demand is already satisfied or if there is already over-trading (over-supply) taking place on the particular route, the problem will be exacerbated with the granting of an additional Operating Licence. The second factor for the municipality to consider when disposing of an Operating Licence application, is whether the public transport facilities, affected by the route in question could accommodate the addition of another public transport vehicle. If there is no spare capacity in the facility/taxi rank, it could result in friction/conflict amongst operators, which is not desired and, therefore, an application should be turned down.

6.7.2 Supply of public transport services

According to 2017 information received from the North West Provincial Regulatory Entity (PRE), there are 2,990 operating licences issued of which 1,948 are for commuter services and 1,042 for long-distance services.

The list of Operating Licences issued for Commuter Services and Long-Distance Services respectively, as supplied by the PRE (2017), are shown separately per taxi association operated, in **Table 6.5**: Operating Licences issued for Commuter Services by the PRE (2017) and **Table 6.6**: Operating Licences issued for Long-Distance Services by the PRE (2017). below.

Table 6.5: Operating Licences issued for Commuter Services by the PRE (2017)

TAXI ASSOCIATION	ORIGIN	DESTINATION	NO OF OPERATING LICENCES	NO. OF UNIQUE VEHICLES
Baleti	Alabama	Klerksdorp	58	58
	Jouberton	Klerksdorp Rural	29	29
	Klerksdorp	Ottosdal	2	2
	Letsopa	Ottosdal	15	15
	Ottosdal	Klerksdorp	15	15
	Tigane	Klerksdorp	24	24
	Total: Baleti		143	143
Codesa	Khuma	Stilfontein	1	1
	Ikageng	Potchefstroom	109	109
	Ikageng	Potchefstroom	9	9
	Ikageng	Potchefstroom	1	1
	Potchefstroom	Klerksdorp	3	3
	Potchefstroom	Ventersdorp	3	3
	Promosa	Potchefstroom	21	21
	Total: Codesa		147	147
Greater Orkney	Kanana	Klerksdorp	6	6
	Kanana	Orkney	29	29
	Kanana	Viljoenskroon	1	1
	Orkney	Orkney	1	t
	Orkney	Vaal Reefs	1	1
	Vaal Reefs	Khuma	1	1

			LIST FIE	tion mer
TAXI ASSOCIATION	ORIGIN	DESTINATION	NO. OF OPERATING LICENCES	UNIQUE VEHICLES
	V 15			
	Vaal Reefs	Klerksdorp	1	1
	Vaal Reefs	Orkney	6	6
	Total: Greater Orkney		46	46
Greater Potch	Ikageng	Potchefstroom	250	249
	Potchefstroom	Klerksdorp	2	2
	Potchefstroom	Potchefstroom	1	1
	Potchefstroom	Ventersdorp	1	1
	Promosa	Potchefstroom	14	14
	Total: Greater Potch		268	267
Greater	Khuma	Stilfontein	5	5
Stilfontein	Stilfontein	Klerksdorp	138	138
	Stilfontein	Potchefstroom	29	29
	Total: Greater Stilfontei	n.	172	172
Greater	Tshing	Ventersdorp	14	14
Ventersdorp	Ventersdorp	Ventersdorp	8	8
	Ventersdorp	Ventersdorp Rural	13	13
	Total: Greater Ventersd	lorp	35	35
Interstate	Ikageng	Potchefstroom	114	114
	Potchefstroom	Boskop Training Centre	3	3
	Potchefstroom	Klerksdorp	11	11
	Potchefstroom	Potchefstroom	3	3
	Potchefstroom	Potchefstroom Rural	12	12
	Potchefstroom	Taung	13	13
	Potchefstroom	Ventersdorp	1	1
	Promosa	Potchefstroom	31	31
	Tshing	Ventersdorp	7	7
	Ventersdorp	Klerksdorp	4	4
	Ventersdorp	Potchefstroom	3	3
	Total: Interstate		202	202
Jouberton &	Jouberton	Klerksdorp	83	82
Noordkom	Klerksdorp	Potchefstroom	4	4
	Tigane	Klerksdorp	1	1
	Total: Jouberton & Noo		88	87
Jouberton	Jouberton	Hartebeesfontein	1	1
	Jouberton	Jouberton	7	7
	Jouberton	Klerksdorp	116	116
	Jouberton	Vaal Reefs	15	15
	Klerksdorp	Hartebeesfontein	8	8
	Klerksdorp	Klerksdorp	14	14
	Klerksdorp	Leeudoringstad	8	8
	Klerksdorp		23	23
		Orkney		
	Klerksdorp	Stilfontein	6	6

TAXI ASSOCIATIOI	. ORIGIN	DESTINATION	NO. OF OPERATIN	NO. OF G UNIQUE VEHICLE!
Market Control	• ;		OPERATIN LICENCES	i yracte
	Klerksdorp	Vaal Reefs	22	22
	Total: Jouberton		220	220
Khuma	Khuma	Klerksdorp	97	96
	Khuma	Orkney	4	4
	Khuma	Stilfontein	27	27
	Khuma	Vaal Reefs	4	4
	Orkney	Vaal Reefs	1	1
	Stilfontein	Klerksdorp	22	22
	Vaal Reefs	Khuma	3	3
	Vaal Reefs	Orkney	5	5
	Total: Khuma		163	162
Klerksdorp	Alabama	Klerksdorp	1	1
	Jouberton	Klerksdorp	275	274
	Klerksdorp	Klerksdorp	3	3
	Klerksdorp	Stilfontein	8	8
	Klerksdorp	Wolmaransstad	1	1
	Tigane	Klerksdorp	7	7
	Total: Klerksdorp		295	294
Mighty	Kgakala	Klerksdorp	4	4
Makwassie	Kgakala	Wolmaransstad	2	2
	Lebaleng	Maquassi Hills	2	2
	Leeudoringstad	Kgakala	1	1
	Makwassie	Klerksdorp	3	3
	Makwassie	Wolmaransstad	10	10
	Tswelelang	Maquassi Hills	11	11
	Tswelelang	Wolmaransstad	6	6
	Wolmaransstad	Klerksdorp	25	25
	Wolmaransstad	Makwassie	34	34
	Total: Mighty Makwas	sie	98	98
Utlwaneng	Jouberton	Klerksdorp	11	11
	Kanana	Klerksdorp	23	23
	Kanana	Orkney	7	7
	Kanana	Vaal Reefs	3	3
	Khuma	Stilfontein	1	1
	Klerksdorp	Klerksdorp	2	2
	Klerksdorp	Kroonstad	2	2
	Klerksdorp	Orkney	5	5
	Klerksdorp	Ottosdal	2	2
	Klerksdorp	Potchefstroom	3	3:
	Klerksdorp	Stilfontein	3	3
	Klerksdorp	Vaal Reefs	6	6
	Klerksdorp	Wolmaransstad	1	1
	Orkney	Vaal Reefs	2	2
	Total: Utlwaneng		71	71

Wales		NO. OF NO. OF
25555 27554	ORIGIA	
		LICENCES VEHICLES
		1948 1944

Source: Provincial Regulatory Entity (December 2017)

Table 6.6: Operating Licences issued for Long-Distance Services by the PRE (2017).

VII).			KO OE .	
TAXI ASSOCIATI	ON ORIGIN	DESTINATION	OPERATING U	IO OF SIGUE HCLES
Baleti	Klerksdorp	Itsoseng	2	2
	Klerksdorp	Mafikeng	4	4
	Klerksdorp	Vryburg	2	2
	Ottosdal	Lichtenburg	7	7
	Ottosdal	Rustenburg	1	1
	Tol	al: Baleti	16	16
Codesa	Klerksdorp	Johannesburg	1	1
	Potchefstroom	Baragwanath	2	2
	Potchefstroom	Carletonville	4	4
	Potchefstroom	Durban	1	1
	Potchefstroom	Johannesburg	11	11
	Potchefstroom	Mafikeng	11	11
	Potchefstroom	Parys	4	4
	Potchefstroom	Pietersburg	9	9
	Potchefstroom	Rustenburg	7	7
	Potchefstroom	Schweizer Reneke	8	8
	Potchefstroom	Taung	2	2
	Potchefstroom	Vereeniging Rural	1	
	Potchefstroom	Viljoenskroon	2	2
	Stilfontein	Johannesburg	1	1
	Tol	tal: Codesa	64	64
Greater	Orkney	East London	18	18
Orkney	Orkney	Ficksburg	3	3
	Orkney	Ladybrand	1	1
	Orkney	Mafikeng	1	1
	Orkney	Matatiele	1	1
	Orkney	Rustenburg	1	1
	Orkney	Umtata	12	12
	Orkney	Vierfontein	13	13
	Orkney	Wepener	1	1
	Vaal Reefs	Bethlehem	2	2
	Vaal Reefs	Ficksburg	1	1
	Vaal Reefs	Ladybrand	5	5
	Vaal Reefs	Marquard	2	2
	Vaal Reefs	Matatiele	1	
	Vaal Reefs	Umtata	12	12
	Vaal Reefs	Vryburg	2	2

TAXI ASSOCIATION	ORIGEN	DESTINATION	NO.OF N OPERATING U LICENCES VE	
	Vaal Reefs	Wononor		
	Vaal Reefs	Wepener	2	4
		Zastron tal: Greater Orkney	82	
Creater Batch	Potchefstroom	Carletonville	2	8:
Greater Potch	Potchefstroom		4	
	Potchefstroom	Johannesburg Pietersburg	2	
	Potchefstroom	Pretoria	1	
	Potchefstroom	Rustenburg	2	
		Greater Potch	11	1
Greater	Khuma	Butterworth	15	1
Stilfontein	Khuma	Johannesburg	7	
	Khuma	Kimberley	4	
	Khuma	Pietersburg	14	14
	Khuma	Schweizer Reneke	5	
	Stilfontein	Johannesburg		
	Stilfontein	Rustenburg	13	1;
	Stilfontein	Schweizer Reneke	2	
	Stilfontein	Welkom		
		tal: Greater Stilfontein	77	7
Greater	Khuma	Butterworth	15	1
Ventersdorp	Khuma	Johannesburg	7	
	Khuma	Kimberley	4	
	Khuma	Pietersburg	14	1.
	Khuma	Schweizer Reneke	5	
	Stilfontein	Johannesburg	8	
	Stilfontein	Rustenburg	13	1
	Stilfontein	Schweizer Reneke	2	
	Stilfontein	Welkom	9	
	Tot	tal: Greater	77	7
	Vei	ntersdorp		
Interstate	Potchefstroom	Fochville	1	
	Potchefstroom	Johannesburg	8	
	Potchefstroom	Krugersdorp	16	1
	Potchefstroom	Mafikeng	16	1
	Potchefstroom	Parys	5	
	Potchefstroom	Pretoria	14	1
	Potchefstroom	Rustenburg	14	1.
	Potchefstroom	Taung	3	
	Potchefstroom	Vereeniging Rural	14	1.
	Potchefstroom	Viljoenskroon	9	
	Ventersdorp	Mafikeng	5	
	Ventersdorp	Rustenburg	5	
	Tot	tal: Interstate	110	110

TAXI ASSOCIATIO	N ORIGIN	DESTINATION	NO. OF N OPERATING UI LICENCES VEI	O.OF NODE
Jouberton &	Kierkedurp	Johanneaburg	JNJENNER VE. B	
Noordkom	Klerksdore	Mahkeng	4	
	Werkedoro	Randfortein	3	
	Klerkadorp	Rustenburg	7	
	Werkerlorg	Tiburig	2	
	Meriasiono	Vrybung		
	Vaal Reefe	Johannesturo	3	
		al Jouberton &	22	- 2
	No.	erdkom		
Jouberton	Hartebeesfontei n	Mafikeng		
	Jouberton	Johannesburg	7	
	Jouberton	Vierfontein		
	Klerksdorp	Bloemfontein	6	
	Klerksdorp	Delareyville	5	
	Klerksdorp	Durban	9	
	Klerksdorp	Johannesburg	44	4
	Klerksdorp	Kimberley	1	
	Klerksdorp	Kokstad	1	
	Klerksdorp	Kroonstad	8	
	Klerksdorp	Ladybrand	14	1
	Klerksdorp	Lenasia	1	
	Klerksdorp	Itsoseng	3	
	Klerksdorp	Madibogo	4	
	Klerksdorp	Mafikeng	49	4
	Klerksdorp	Maluti a Phofung	17	1
	Klerksdorp	Pietersburg	13	1
	Klerksdorp	Pretoria	25	2
	Klerksdorp	Queenstown	1	
	Klerksdorp	Randfontein	4	
	Klerksdorp	Rosendal	2	
	Klerksdorp	Rustenburg	32	3
	Klerksdorp	Sterkspruit	1	
	Klerksdorp	Taung	18	1
	Klerksdorp	Umtata	8	
	Klerksdorp	Vryburg	23	2
	Klerksdorp	Zeerust		
	Tot	al: Jouberton	299	29
Khuma	Hartebeesfontei n	Rosendal	2	
	Khuma	Clocolan	4	
	Khuma	Johannesburg	38	3
	Vaal Reefs	Bisho	30	3
	Vaal Reefs	Ficksburg	11	1
	Vaal Reefs	Fouriesburg	1	

TAXI ASSOCIATIO	u ORIGIN	DESTINATION	NO. OF OPERATING	NO OF INICHE
			LICENCES V	
	Vaal Reefs	Ladybrand	.	- 5
	Vaal Reefa	Wepener		
	Veal Reefs	Zastron	9	9
	Īαl	al. Khuma	114	114
Klerksdorp	Jouberton	Johannesburg	4	4
	Klerksdorp	Delareyville	1	1
	Klerksdorp	Lichtenburg	1	1
	Klerksdorp	Mafikeng	14	14
	Klerksdorp	Pietersburg	3	3
	Klerksdorp	Rustenburg	5	5
	Klerksdorp	Taung	9	9
	Klerksdorp	Vryburg	5	5
	Tot	al: Klerksdorp	42	4
Mighty	Leeudoringstad	Mafikeng	1	1
Makwassie	Leeudoringstad	Rustenburg	1	1
	Makwassie	Kimberley	1	1
	Maquassi Hills	Mafikeng	1	1
	Wolmaransstad	Johannesburg	22	2 2
	Total: Mighty Makwassie		26	2 6
Utlwaneng	Klerksdorp	Bloemfontein	15	15
	Klerksdorp	Carletonville	7	7
	Klerksdorp	Hartswater	1	1
	Klerksdorp	Johannesburg	4	4
	Klerksdorp	Lichtenburg	1	1
	Klerksdorp	Itsoseng	4	3
	Klerksdorp	Odendaalsrus	16	15
	Klerksdorp	Pampierstad	2	2
	Klerksdorp	Phuthaditjhaba	2	2
	Klerksdorp	Rustenburg	14	14
	Klerksdorp	Sannieshof	2	2
	Klerksdorp	Schweizer Reneke	1	1
	Klerksdorp	Taung	17	17
	Klerksdorp	Vereeniging	11	10
	Klerksdorp	Welkom	3	3
	Orkney	Viljoenskroon	2	2
	Tot	al: Utlwaneng	102	99
	Grand Total: All Area	_	1 042	1 039

Source: Provincial Regulatory Entity (December 2017)

Mini-bus taxi route desire lines of all operators is shown in **Figure 6.12**: Mini-bus Taxi Desire Lines: All Operators and the desire lines for individual taxi associations can be viewed in the DrKKDM Operating License Plan (2018).

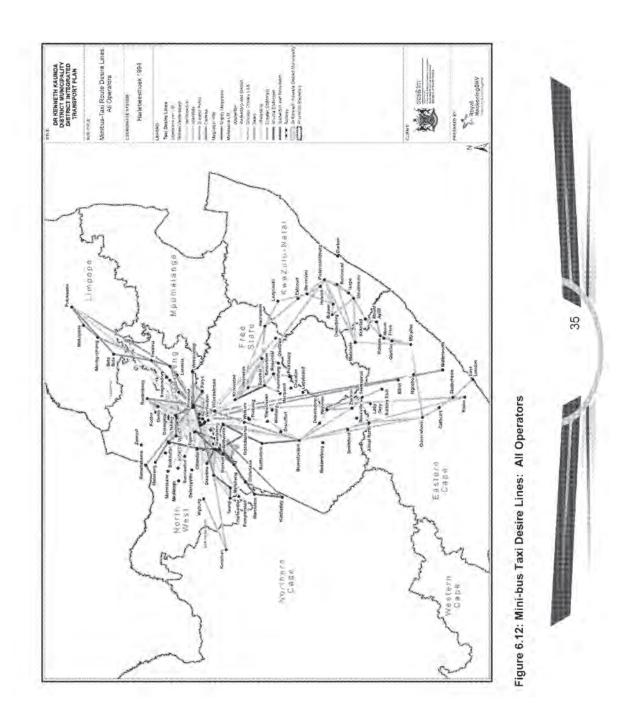
6.7.3 Mini-bus taxi operating licence routes

The number of unique origin-destination route pairs, operated by each of the individual mini-bus taxi operators on both commuter and long-distance services, are summarised in **Table 6.7**: Overview of mini-bus taxi operating licence route operations below. It gives an overview of the legal routes served, number of operating licenses issued, as well as the unique vehicles operated by each association.

In total, 239 mini-bus routes, both commuter- as well as long-distance services, are being operated for which a total of 2,990 operating licences have been issued and which are being operated by making use of 2,983 unique vehicles.

The total of 239 mini-bus taxi routes, cover the municipal areas very well and its dominance over bus is clear from the extensive route network. Taxis operate mainly on the tarred roads between district and regional nodes and provide limited services to the rural areas along gravel roads. The rural services provide an important link between informal settlements, rural development nodes and main roads, which again link up with the major nodes of Klerksdorp and Potchefstroom. In many of the regional nodes the travel distances are still relatively long between home and workplaces and passengers need to travel longer distances to get to work. This is evident in the number of routes which operate outside the core business areas of each major town in the area.

Based on the registered operating licences Greater Potchefstroom TA, Klerksdorp TA and Jouberton TA have by far the most vehicles and operate the most routes in the district. The Potchefstroom routes serve more the local town and immediate surrounding areas while Klerksdorp also have longer regional links to other districts and provinces. The mine sector has played a big role over the years in these route applications. Recent closure of some mine shafts in the area have led to a decline in certain areas resulting in routes less utilized.



	COMMUTER ROUTES COMMUTER ROUTES CONSTITUTE ROUTES			us taxi operating lic communer roumes	20090 3	AUTO OPERATIONS LONG-DISTANCE ROUTES	<u> </u>	831	Ŧ	ALL ROUTES	
ASS NO.	NAME OF TAXI ASSOCIATION	NO. OF UNIQUE ORIGIN-	NOITANITSEO 881A9 OETARERO	OPERATING LICENCES	AEHICCES NAIGNE	NO. OF UNIQUE ORIGIN- DESTINATION PAIRS OPERATED	SMITARE90 SECUCES	AEHICCES NAIGNE	NO. OF UNIQUE ORIGINA- DESTANTON SSIA9 OPERATED	OPERATING LICENCES	AEHICCES NAIONE
138	Baleti	9		143	143	5	16	16	11	159	159
199	CODESA	7		147	147	14	64	64	21	211	211
200	Greater Orkney	8		46	46	18	82	82	26	128	128
201	Greater Potch	5		268	267	2	1	11	10	279	278
202	Greater Stilfontein	က		172	172	o o	77	11	12	249	249
203	Greater Ventersdorp	က		35	35	o	11	111	12	112	112
204	Interstate	11		202	202	12	110	110	23	312	312
205	Jouberton	10		220	220	27	299	299	37	519	519
206	Jouberton & Noordkom	က		88	87	8	22	22	11	110	109
207	Khuma & Stilfontein	œ		163	162	6	114	4114	Þ	2772	276
208	Klerksdorp	9		295	294	80	42	42	14	337	336
209	Mighty Maquassie	10		86	86	S	26	26	15	124	124
214	Utlwanang	41		71	71	16	102	66	30	173	170
	Total	94		1 948	1944	145	1 042	1 039	239	2 990	2 983

Source: Provincial Regulatory Entity (December 2017)

6.7.4 Mini-bus taxi observed routes

The results of the mini-bus taxi route observations at all formal ranks in the area, representing the 3hr AM and PM operations and covering +-90% of all operations for that specific day, are shown in **Table 6.8**: Mini-bus taxi observed routes below.

Table 6.8: Mini-bus taxi observed routes

ROUTE ORIGIN NAME	NO OF DESTINATION	TOTAL OBSERVED S VEHICLES
4 A Taxi Rank (Ikageng)	6	19
Baipei Aksie/ Promosa Taxi Rank	8	60
Capitec Tambaai Rank (Wolmaransstad)	3	28
Capitec Taxi Rank (Wolmaransstad)	12	45
Chubby Chick Taxi Rank	5	15
Dassierand Taxi Rank	4	9
Ext 11 Taxi Rank (Ikageng)	15	65
Ext 4B Taxi Rank (Ikageng)	1	6
Ext 6 Rank (Khuma)	3	40
Ext 6 Taxi Rank (Ikageng)	19	155
Ext 7 Taxi Rank (Ikageng)	8	96
Ext 8 Rank (Khuma)	3	176
Gate Mall Taxi Rank (Ikageng)	16	60
Greater Ventersdorp Taxi Rank (Ventersdorp)	9	22
Hospital Taxi Rank (Potchefstroom)	17	59
Industry Taxi Rank (Potchefstroom)	1	7
Jazz Bar Taxi Rank (Klerksdorp)	6	146
Kanana Mall	2	29
Kanana Taxi Rank (Kanana)	10	71
N12 Engen/ Total Garage (Wolmaransstad)	13	28
Orkney Taxi Rank 2	13	147
Post Office Taxi Rank (Promosa)	9	100
Potchefstroom Main Taxi Rank (Potchefstroom)	29	349
Price 'N Pride Rank (Klerksdorp)	11	239
Price 'N Pride Rank (Tambai Area)(Klerksdorp)	6	138
Sarafina Taxi Rank	8	64
Stilfontein Main Taxi Rank (Stilfontein)	4	13
Stilfontein Spar (Stilfontein)	2	5
Von Weillich Taxi Rank	23	43
Witrand Taxi Rank	5	16
Wolmaransstad Tambaai Rank (Wolmaransstad)	3	29
Wolmaransstad Taxi Rank (Wolmaransstad)	4	25
TOTAL	278	2,304
unas Transport Dagistas (2017)		

Source: Transport Register (2017)

Based on the surveys, a total of 278 route destinations have been observed. A large decline has, however, been observed of vehicle numbers utilising these formal ranks. The observed figure has dropped by more than 45%, based on registered vehicles which show that some routes are less economically viable than before.

6.7.5 Utilization of public transport infrastructure

The utilisation of the public transport infrastructure is shown in **Table 6.9**: Rank Infrastructure Utilization (Observed).

Table 6.9: Rank Infrastructure Utilization (Observed)

RANK CODE	RANK NAME	NO OF ROUTES	UNIQUE	TRIPS	DESTINATIONS	VVG TRIPS IVEH
NWRP0049-T	4 A Taxi Rank (Ikageng)	6	18	19	6	1
NWRP0041-T	Baipei Aksie/ Promosa Taxi Rank	8	45	67	8	1
NWRP0028-T	Capitec Tambaai Rank (Wolmaransstad)	3	27	30	3	1
NWRP0027-T	Capitec Taxi Rank (Wolmaransstad)	12	22	69	12	3
NWRP0042-T	Chubby Chick Taxi Rank	5	15	20	5	1
NWRP0043-T	Dassierand Taxi Rank	4	6	9	4	2
NWRP0044-T	Ext 11 Taxi Rank (Ikageng)	15	32	76	15	2
NWRP0050-T	Ext 4B Taxi Rank (Ikageng)	1	6	7	1	1
NWRP0104-T	Ext 6 Rank (Khuma)	3	40	44	3	1
NWRP0045-T	Ext 6 Taxi Rank (Ikageng)	19	78	195	19	3
NWRP0046-T	Ext 7 Taxi Rank (Ikageng)	8	71	140	8	2
NWRP0066-T	Ext 8 Rank (Khuma)	3	169	197	3	1
NWRP0047-T	Gate Mall Taxi Rank (Ikageng)	16	57	61	16	1
NWRP0020-T	Greater Ventersdorp Taxi Rank (Ventersdorp)	9	20	28	9	1
NWRP0048-T	Hospital Taxi Rank (Potchefstroom)	17	44	63	17	1
NWRP0051-T	Industry Taxi Rank (Potchefstroom)	1	7	7	11:	1
NWRP0003-T	Jazz Bar Taxi Rank (Klerksdorp)	6	112	148	6	1
NWRP0102-T	Kanana Mall	2	29	29	2	1
NWRP0052-T	Kanana Taxi Rank (Kanana)	10	64	72	10	1
NWRP0029-T	N12 Engen/ Total Garage (Wolmaransstad)	13	28	28	13	1
NWRP0067-T	Orkney Taxi Rank 2	14	165	181	14	1
NWRP0054-T	Post Office Taxi Rank (Promosa)	9	59	117	9	2
NWRP0053-T	Potchefstroom Main Taxi Rank (Potchefstroom)	29	269	445	29	2
NWRP0004-T	Price 'N Pride Rank (Klerksdorp)	11	234	258	11	1
NWRP0004b- T	Price 'N Pride Rank (Tambai Area)(Klerksdorp)	6	88	219	6	2
NWRP0055-T	Sarafina Taxi Rank	8	47	89	8	2
NWRP0005-T	Stilfontein Main Taxi Rank (Stilfontein)	4	13	18	4	1
NWRP0118-T	Stilfontein Spar (Stilfontein)	2	5	5	2	-1
NWRP0056-T	Von Weillich Taxi Rank	23	21	44	23	2
NWRP0057-T	Witrand Taxi Rank	5	15	16	5	11

RANK CODE	RANK NAME	NO OF ROUTES	UNIQUE	12(28	DESTINATIONS	AVG TRIPS WEH
NWRP0031-T	Wolmaransstad Tambai Rank (Wolmaransstad)	3	29	31	3	1
NWRP0030-T	Wolmaransstad Taxi Rank (Wolmaransstad)	4	25	31	4	1

Source: Transport Register (2017)

Potchefstroom Main Rank (combined) is the busiest rank in the Tlokwe LM and generates about 450 trips per day during peak periods. Other busy ranks in the area are the Ikageng ranks located in extensions 6, 7 and 8. These combined areas generate approximately 600 trips during peak periods. Based on the public transport network, the main movement in this area is between the eastern suburb ranks and the Potchefstroom CBD via different destinations in-between. Based on the AM and PM distribution, most of the ranks in the area are very busy during the morning and afternoon peak hours. During this period taxis mostly carry out 1 to 2 trips, however, some vehicles manage to carry out 3 trips.

In Klerksdorp, the two ranks in the CBD, being the Main Rank and the Jazz Bar Rank combined, produce about 400+ trips per day. The main movements from these ranks are Jouberton, Orkney, Kanana, and Khuma which reflect the main settlement areas for commuters without transport. The pattern herein is the same as in Tlokwe, where the AM and PM peak hours are extremely busy with less activity in the off-peak. Most of the other ranks in the area, such as Wolmaransstad, Hartbeesfontein, Vaal Reefs and Ventersdorp, have very little activity during the day, and serve a very limited, but important service to neighbouring rural communities. These trips vary between 16 and 30 trips per day and cover mostly only one trip in the AM and one in the PM. At present, the number of vehicles at the ranks, almost matches the trips made, which indicates that there is a major over-supply of vehicles.

6.7.6 Vehicle capacity and utilisation

Capacity and utilisation of each road-based route for mini-bus taxis(commuter) have been established through obtaining the following information:

- Fleet size (number of mini-bus taxis)
- Mini-bus taxi frequencies (peak period only)
- Service capacity between origin and destination on each route
- Frequencies (number of trips) on each route and
- The service capacity (the number of seats and standing spaces available)

The top 20 busiest routes observed are listed in **Table 6.10**: Daily Route Capacity and Utilization for AM and PM Peak Periods for 20 busiest routes below.

Table 6.10: Daily Route Capacity and Utilization for AM and PM Peak Periods for 20 busiest routes

ROUTE ORIGIN	ROUTE DESTINATION	VEMICLE	VEHCAP	PASSENGERS	испестиом
Klerksdorp Main Taxi Rank	Jouberton (Ext 6,7,12,13,16,17,22), Sun City	163	2402	2388	99%
Khuma Rank Ext 8	Klerksdorp	123	2067	1490	72%
Jazz Bar Taxi Rank (Klerksdorp)	Kanana (Ext 14), (M13), (ZM)	111	1784	1784	100%
Potchefstroom Main Taxi Rank	Ext3, Ext6, Ext7, Ext 11	96	1202	1202	100%
Klerksdorp Main Taxi Rank (Tambai Area)	La Hoff	42	1107	816	74%
Ext 6	Ext3, Ext6, Pholapark, Sarafina	64	1071	1064	99%
Klerksdorp Main Taxi Rank (Tambai Area)	Wilkoppies	44	1016	672	66%
Orkney Taxi Rank	Vaal Reefs (Shaft 8, 9, 11, 12, 13, 14)	62	916	909	99%
Capitec Rank	Tswelelang Location, Mixed, Chris Hani, Ext 13	31	810	810	100%
Promosa Rank (Town)	Aksie, Baipei	57	779	779	100%
Orkney Taxi Rank	Kanana (Road X, Z), Vaal Park	54	759	759	100%
Potchefstroom Main Taxi Rank	Block 5, Diloan, First stop	48	719	719	100%
Ikageng Gate Mall Rank	Potchefstroom Main Taxi Rank (Town) via Hospital, Parys, Von Weillich	48	702	636	91%
Khuma Rank Ext 8	Stilfontein	45	687	504	73%
Potchefstroom Main- Taxi Rank	ESKOM	11	675	675	100%
Ext 7	Potchefstroom Main Taxi Rank (Town)	25	658	658	100%
Ext 6 Rank (Khuma)	Klerksdorp	39	638	552	87%
Promosa Rank (Town)	Promosa, Promosa(Afl Station)	38	614	607	99%
Klerksdorp Main Taxi Rank (Tambai Area)	Meiringspark	28	570	375	66%
Sarafina	Sarafina	28	542	542	100%
	2010				

Source: Transport Survey 2016

The busiest routes in Potchefstroom are those between the Potchefstroom main rank and the eastern suburbs of extension 3, 6, 7 and 11, which cover most areas of Ikageng, Mohadin and Promosa. The daily vehicles to these areas are between 50 and 100, with a seated capacity of about 1 000 passengers per day in the peak periods.

In Matlosana LM, the Klerksdorp CBD ranks to Jouberton (all destinations), as well as Khuma and Kanana settlements, are the busiest. These destinations have between 110 and 160 vehicles in the peak periods per day, and a seat capacity of approximately 2 000 passengers per day.

With the exception of a few less lucrative routes, all routes have utilisation rates of between 90 to 100%, which indicates that the network is saturated, and owing to the fact that taxis are the only public transport supplier, the demand will remain high.

A complete list of vehicle capacity and utilisation per individual route, can be found in the DrKKDM Operating License Plan (2018).

6.7.7 Passenger demand

1) Demand per route

To match the supply and demand per route, the vehicle supply on the individual routes or origin-destination pairs, as obtained per mini-bus taxi operator, have been re-grouped and combined, irrespective of which operator is rendering the service. Similarly, the passenger demand per route have been matched and compared to the vehicle supply to determine if an over-or under supply of services exist. This process and results are shown in **Table 6.11**: Demand per Route below.

Following the results in **Table 6.11**: Demand per Route, it is clear that the majority of routes are already over-traded (indicated in red), and no additional operating licences could be granted on such routes. There are, however, a few of the individual routes where applications for additional operating licences could, under certain circumstances, still be granted. These are indicated in green.

The fact that operational circumstances are extremely fluent, and could easily be influenced by new work opportunities, or new settlements being established, decisions with respect to operating licence applications should in all cases be based on thorough recent demand information.

However, such additional applications should not merely be granted without conducting up-to-date and detailed on-board surveys on each of the routes in question.

Table 6.11: Demand per Route

NO.	ORIGIN	DESTINATION		SUPPLY		9/21	IAND	OVER/UNDE	COMBINED
			NO. OF OPERATING LICENCES	NO. OF UNIQUE VEHICLES	NO. OF VEHICLE TRIPS AVAILABLE (AM PEAK)	PEAK PERIOD PASSENGER DEMAND	NO. OF VEHICLE TRIPS REQUIRED	R-SUPPLY (PEAK PERIOD TRIPS)	CORRIDOR
1	Alabama	Klerksdorp	59	59	118	270	18	100	5
2	Jouberton	Klerksdorp Rural	29	29	58	*		58	5
3	Jouberton	Klerksdorp	199	198	396	*		325	
4	Jouberton	Hartebeesfontein	1	1	2	*		2	4
5	Jouberton	Jouberton	7	7	42	3 045	203	-161	5
6	Jouberton	Vaal Reefs	15	15	30	45	3	27	6
7	Jouberton	Klerksdorp	286	285	1 425	18 270	1 218	207	5
8	Kanana	Klerksdorp	29	29	58	2 520	168	-110	5
9	Kanana	Orkney	36	36	72	2 505	167	-95	6
10	Kanana	Viljoenskroon	1	1	2	*		2	6
11	Kanana	Vaal Reefs	3	3	6	90	6		6
12	Kgakala	Klerksdorp	4	4	8	*		8	7
13	Kgakala	Wolmaransstad	2	2	4	30	2	2	9
14	Khuma	Stilfontein	6	6	12	*		12	5
15	Khuma	Klerksdorp	97	96	192	***************************************		192	5
16	Khuma	Orkney	4	4	8	30	2	6	6
17	Khuma	Stilfontein	28	28	56	270	18	38	5
18	Klerksdorp	Ottosdal	19	19	38	*		34	4
19	Klerksdorp	Potchefstroom	7	7	14	90	6	8	3
20	Klerksdorp	Hartebeesfontein	8	8	16	45	3	19	4
21	Klerksdorp	Klerksdorp	19	19	152	3 045	203	-51	5
22	Klerksdorp	Leeudoringstad	8	8	16	15	1	15	7
23	Klerksdorp	Orkney	28	28	56	480	32	24	6

24	Klerksdorp	Stilfontein	39	39	78	270	18	60	5
25	Klerksdorp	Vaal Reefs	22	22	44	540	36		6
26	Klerksdorp	Wolmaransstad	2	2	4	60	4	0	7
27	Klerksdorp	Kroonstad	2	2	4			4	6
28	Klerksdorp	Vaal Reefs	7	7	14	60	4	10	6
29	Lebaleng	Maquassi Hills	2	2::::::::::::::::::::::::::::::::::::::	4	***************************************		4	:10 :::::::::::::::::::::::::::::::::::
30	Leeudoringstad	Kgakala	1	1	2	*		2	9
31	Letsopa	Ottosdal	15	15	30	***************************************		36	4
32	lkageng	Potchefstroom	483	482	964	*		964	3
33	Makwassie	Klerksdorp	3	3	6	30	2	4	7
34	Orkney	Orkney	1	1	6	315	21	-15	6
35	Orkney	Vaal Reefs	4	4	24	1 200	80	-56	2
36	Potchefstroom	Klerksdorp	16	16	32	225	15	17	3
37	Potchefstroom	Ventersdorp	5	5	10	135	9		1
38	Potchefstroom	Potchefstroom	4	4	32	9 705	647	-615	3
39	Potchefstroom	Boskop Training Centre	3	3	6	45			3
40	Potchefstroom	Potchefstroom Rural	12	12	24	195	13		3
41	Potchefstroom	Taung	13	13	26	***************************************			9
42	Promosa	Potchefstroom	66	66	132	1 350	90	42	3
43	Stilfontein	Klerksdorp	138	138	276	1 560	104		5
44	Stilfontein	Potchefstroom	29	29	58	135	9	49	3
45	Tigane	Klerksdorp	32	32	64	960	64	1	4
46	Tshing	Ventersdorp	21	21	42	450	30	12 11 1	1
47	Tswelelang	Wolmaransstad	6	6	12	30	2	10	10
48	Vaal Reefs	Khuma	8	8	16	60	4	12	6
49	Vaal Reefs	Orkney	11	11	22	840	56	-34	6
50	Ventersdorp	Ventersdorp	8	8	48	675	45	3	8

STAATSKOERANT, 27 NOVEMBER 2020

51	Ventersdorp	Ventersdorp	13	13	26	*		26	1
		Rural							
52	Ventersdorp	Klerksdorp	4	4	8	750	50	-42	8
53	Ventersdorp	Potchefstroom	3	3	6	30	2	4	1
54	Wolmaransstad	Klerksdorp	25	25	50	90	6	44	7
55		Makwassie	55	55	110	300	20	90	10
		Totals	1 9 4 8	1 9 4 4	4 9 6 1	5 0 7 6 0	3 3 8 4		

^{*} Insufficient information available

2) Demand per Corridor

Broad corridors have been determined by aggregating the routes listed in **Table 6.12**: Aggregated Corridors Identified, with common origins and common destinations, as well as assigning a corridor to each of the individual routes (see last column of **Table 6.12**: Aggregated Corridors Identified). The ten (10) identified corridors are described in detail in **Table 6.12**: Aggregated Corridors Identified below.

Table 6.12: Aggregated Corridors identified

CORRUDOR NO.	CORRIDOR DESCRIPTION (ORIGIN TO/FROM DESTINATION)
1	Potchefstroom to/from Ventersdorp / Tshing / Ventersdorp Rural
2	Potchefstroom to/from Orkney / Vaal Reefs
3	Potchefstroom / Ikageng / Promosa / Potchefstroom Rural to/from Klerksdorp / Stilfontein (Also Potchefstroom – Potchefstroom)
4	Klerksdorp / Jouberton to/from Hartbeesfontein / Letsopa/ Tigane / Ottosdal
5	Klerksdorp / Alabama / Jouberton to/from Stilfontein / Kanana / Khuma (Also Klerksdorp – Klerksdorp and Jouberton – Jouberton)
6	Klerksdorp / Jouberton/Khuma to/from Orkney / Vaal Reefs / Kanana / Kroonstad / Viljoenskroon (Also Orkney – Orkney)
7	Klerksdorp to/from Wolmaranstad / Makwassie / Kgakala / Leeudoringstad
8	Klerksdorp to/from Ventersdorp / Tshing (Ventersdorp – Ventersdorp)
9	Wolmaranstad / Taung to/from Leeudoringstad/Kgakala
10	Wolmaranstad / Tswelelang to/from Makwassie / Lebaleng

Internal routes where the main origin is the same as the main destination, have been allocated to the corridor with the closest desire line, e.g. Potchefstroom – Potchefstroom have been allocated to the Potchefstroom – Klerksdorp corridor (corridor No. 3; similar allocation has been made with the Klerksdorp – Klerksdorp, Jouberton – Jouberton, Orkney – Orkney and Ventersdorp – Ventersdorp to corridor numbers 5, 6 and 8 respectively).

Figure 6.13: Major Public Transport Corridors throughout the DrKKDM Area shows all the above-mentioned major corridors throughout the DrKKDM area, while Figure 6.14: Public Transport Corridor: Potchefstroom – Ventersdorp to Figure 6.23: Public Transport Corridor: Klerksdorp - Ventersdorp shows the individual corridors in more detail.

In accordance with OL information, received from the PRE, there are a total of 1,948 operating licences issued to Public Transport operators, operating in and around the DrKKDM. **Table 6.13**: Route Matrix of Recognised Public Transport depicts a route matrix of recognised Operating Licences.

Table 6.13: Route Matrix of Recognised Public Transport Operating Licences

			SUPPLY		DEM	AND	
CORRIDOR NO.	ORIGIN-DESTINATION CORRIDOR	NO. OF OPERATING LICENCES	NO. OF UNIQUE VEHICLES	NO. OF VEHICLE TRIPS AVAILABLE (AM PEAK)	DAILY PASSENGER DEMAND	NO. OF VEHICLE TRIPS REQUIRED	OVER/UNDER SUPPLY (VEHICLE TRIPS)
1	Potchefstroom - Ventersdorp	42	42	84	615	41	- 1
2	Potchefstroom - Orkney	4	4	24	1 200	80	-56
3	Potchefstroom - Klerksdorp	620	619	1 262	11 745	783	479
4	Klerksdorp - Hartbeesfontein	75	75	150	1 005	67	63
5	Klerksdorp - Stilfontein	936	933	2 863	29 250	1 950	913
6	Klerksdorp - Orkney	138	138	280	4 965	331	-51
7	Klerksdorp - Wolmaranstad	42	42	84	195	13	71
8	Klerksdorp - Ventersdorp	12	12	56	1 425	95	-39
9	Wolmaranstad - Leeudoringstad	16	16	32	30	2	34
10	Wolmaranstad - Makwassie	63	63	126	330	22	104
	Total	1 948	1 944	4 961	50 760	3 384	

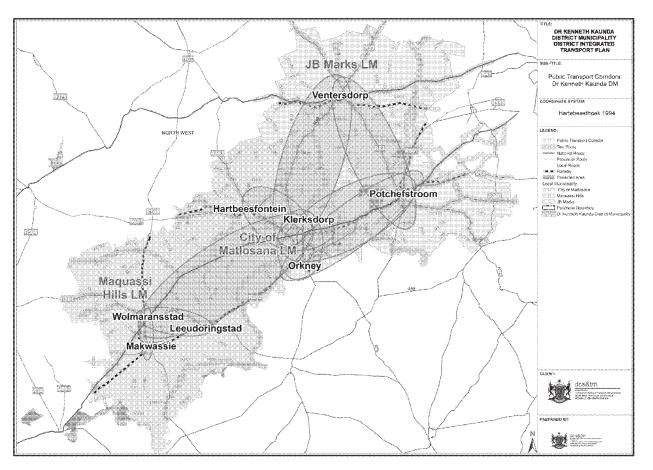


Figure 6.13: Major Public Transport Corridors throughout the DrKKDM Area

DR KENNETH KAUNDA DISTRICT MUNICIPALITY DISTRICT INTEGRATED TRANSPORT PLAN

Public Transport Corridors: Potchefstroom - Ventersdorp

Provinces Boundary

In Kerneth Records Dentict Morecoust

Royal HeskoningCHV

COCRDINATE SYSTEM:

Toxi Roude

Hatural Roude

Provincial Roude

Provincial Roude

Local Roude

Local Roude

Local Roude

City of MidRoude

Magazent Hills

28 Starts

Boikhutsong

(Bruidegomskraal)

Bolkhutse

(Vileger)

Figure 6.14: Public Transport Corridor: Potchefstroom – Ventersdorp

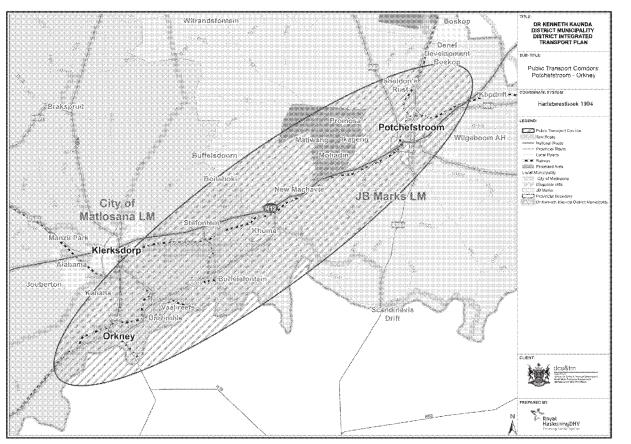


Figure 6.15 Public Transport Corridor: Potchefstroom – Orkney

STAATSKOERANT,

27 NOVEMBER

2020

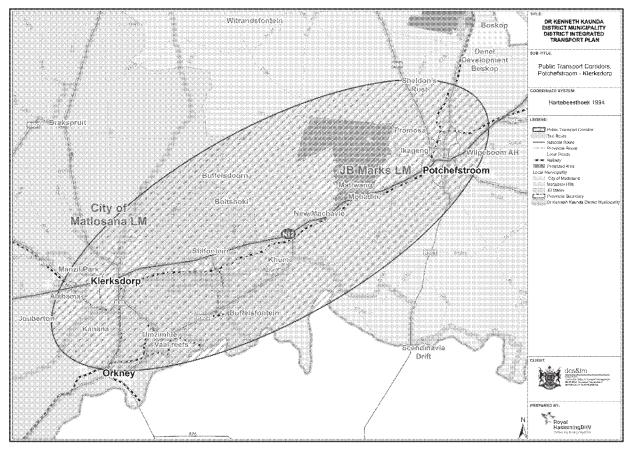


Figure 6.16: Public Transport Corridor: Potchefstroom - Klerksdorp

Figure 6.17: Public Transport Corridor: Klerksdorp - Hartbeesfontein

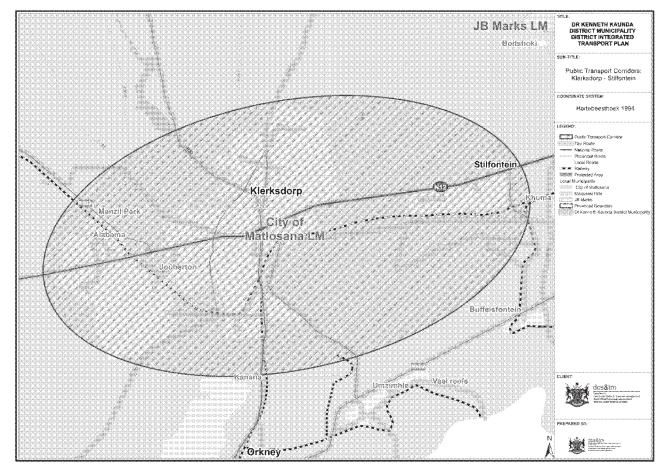


Figure 6.18 Public Transport Corridor: Klerksdorp - Stilfontein

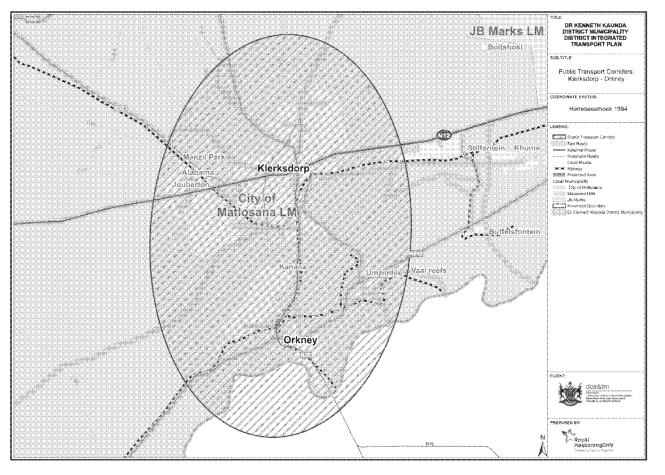


Figure 6.19: Public Transport Corridor: Klerksdorp - Orkney

Figure 6.20: Public Transport Corridor: Klerksdorp – Wolmaranstad

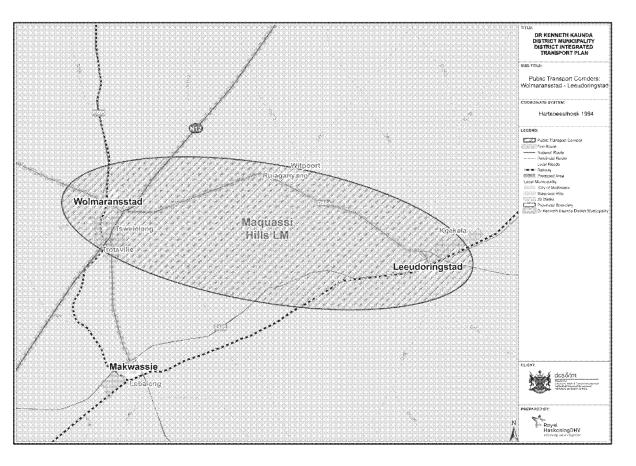


Figure 6.21: Public Transport Corridor: Wolmaranstad - Leeudoringstad

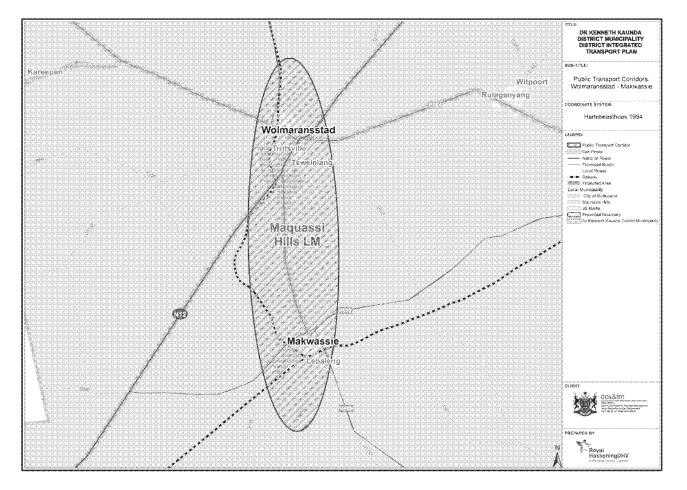


Figure 6.22: Public Transport Corridor: Wolmaranstad – Makwassie

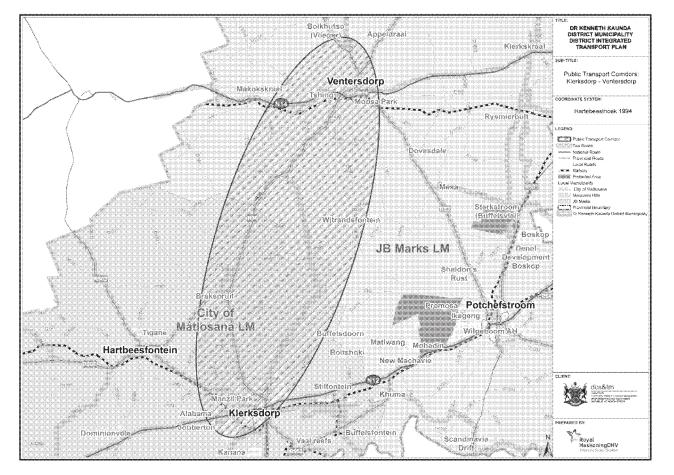


Figure 6.23: Public Transport Corridor: Klerksdorp - Ventersdorp

From the supply and demand, shown in **Table 4.8** above, it is clear that 7 of the 10 corridors are at present over-traded, where no additional operating licence applications can, under any circumstances, still be granted. These corridors are, namely:

- Corridor 1: Potchefstroom to Ventersdorp;
- Corridor 3: Potchefstroom to Klerksdorp;
- Corridor 4: Klerksdorp to Hartbeesfontein;
- Corridor 5: Klerksdorp to Stilfontein;
- Corridor 7: Klerksdorp to Wolmaranstad;
- Corridor 9: Wolmaranstad to Leeudoringstad; and
- Corridor 10: Wolmaranstad to Maguassi.

If the passenger demand for some reason increases in the future, the decision not to grant additional operating licences could be reconsidered. In such cases, the decision should be based on proper on-board survey demand information, as well as capacity verifications of the particular public transport facilities to be utilised during the operation.

The remaining 3 corridors, indicated as indeed requiring additional supply, still, however, need to be treated with extreme circumspect when considering the granting of additional operating licences. These corridors are, namely:

- Corridor 2: Potchefstroom to Orkney;
- Corridor 6: Klerksdorp to Orkney; and
- Corridor 8: Klerksdorp to Ventersdorp.

As mentioned previously, additional applications on these under-traded corridors could only be considered depending on accurate verifiable information. In the case of an economic upswing, resulting in mines expanding production or opening shafts up which have previously been closed, detailed on-board surveys on each of the routes in question should be conducted in order to verify such demand situation. Only once this has been carried out, could additional applications be granted.

Tables 7.7 and **7.8** above indicate, respectively, the individual routes and corridors on which additional operating licences could be granted. Corridors where the PT passenger demand is greater than the vehicle supply are shown in green, whilst the converse is highlighted in red. However, due to the lack of detailed supply and/or demand information on certain routes, no absolute inconclusive recommendations per individual route or corridor could be made at this stage.

Due to the fact that, from observations on the ground during survey processes, it would seem that there is, generally-speaking, an over-supply on most individual routes, it is recommended that no new operating licences be considered to be granted until a proper on-board survey can be undertaken, in order to come to grips with the actual demand and supply of public transport services rendered throughout the district municipality.

Ideally this analysis should be carried out on a route basis, however, in most cases detailed route data is not available, especially demand-side information, and it has, therefore, been carried out by corridor, as permitted by the minimum requirements.

The recommendation, therefore, is that before the DrKKDM endorses any further OL applications in the short term, snap surveys on the routes under consideration should be undertaken, so that any endorsement or rejection is based on current data rather

than out-of-date information. To perform a more refined matching of supply and demand on individual route level in the long run, it is proposed that on-board surveys be conducted on all bus and mini-bus taxi routes. This information will provide detailed demand information which can accurately be matched to the supply information obtained from the PRE.

Based on **Table 7.7**, it seems that most of the public transport routes in the DrKKDM are overtraded. Active enforcement should be in place to control any un-licenced or fraudulent operations.

The following are some guiding principles that should give direction in considering endorsing applications for new OLs:

- Do not endorse OLs to new operators until all over-traded areas have been brought into equilibrium.
- Prioritize the relocation of operators from over-traded areas.
- It should be borne in mind that various provisions contained in the NLTA 2009 give the relevant regulatory entity the power to cancel any license which remains unused for a period greater than 180 days. In addition, DrKKDM can request the relevant entity to invoke this provision by calling in and cancelling any unused OLs.
- Furthermore, where OLs have lapsed (through non-operation), these should not be resuscitated, as prevailing legislation provides for automatic lapsing of such OLs.

6.7.8 Future expansions and developments

An OLP would not be complete without having a look at earmarked future developments in the DrKKDM. New residential, retail, and commercial developments have a significant influence on the need for public transport, and as a result, the operating licences to be applied for and issued in order to legalize such service rendering. The Spatial Development Frameworks (SDFs) of the respective Local Municipalities, falling within the DrKKDM area, have been scrutinised in order to list all possible developments in the DM.

3) Developments in Matlosana LM

Development of the N12 corridor between Klerksdorp and Gauteng via Potchefstroom. The development of certain key or flagship projects in the corridor could have a positive impact on the neighbourhoods in the City of Matlosana in terms of job creation opportunities.

New businesses are developing adjacent to main transport routes attracted by exposure to traffic passing by, namely:

- N12:
- Central Avenue;
- Buffeldoorn Road:
- Platan Avenue / Austin Street;
- Dr Yusuf Dadoo Avenue; and
- Chris Hani Road.

New application and initiatives for Retail Centres include:

- City of Matlosana Mall situated on the N12 between Klerksdorp and Stilfontein;
- City of Matlosana Estates (business site) situated on the intersection of the Hartbeesfontein & Klerksdorp road within the N12;
- West Ride Mall Wilkoppies Agricultural Holdings;
- Landmark Properties Development situated on the intersection of N12 with Jabulani Street (Jouberton) and Buitekant Street in Alabama;
- Jouberton Mall adjacent to Benji Oliphant road in Jouberton;
- Flamwood Walk Centre (Redevelopment of current centre);
- Checkers Hyper Centre (Redevelopment of current centre); and
- New Business Development in the area between N12 and Senwes Office (Klerksdorp Extension 37).

Development of Light Industrial Parks in Jouberton, Kanana and Khuma.

Development of the Light Industrial Park for Jouberton.

Proposals and implementation strategies for the centralisation and needs for social amenities for Jouberton, Kanana, Khuma, Tigane and Alabama include:

- Upgrading of sports facilities within the neighbourhoods of Kanana, Khuma and Tigane;
- A new proposed multi-purpose sports facility for the Jouberton area;
- The Goudkoppie Legacy Project;
- Orkney Vaal Development Plan: Redevelopment of Orkney Vaal into an economic viable recreational area; and
- Faan Meintjes Nature Reserve: Upgrading, improvement of investment opportunities and enhancement of ecotourism.

In terms of Local Economic Development, the following projects are in process:

- City of Matlosana Enterprise Development Centre;
- Solar Plant on the farm portion north of Vaal River Village;
- Meat processing plant on the eastern Townlands (feasibility investigation); and
- Khayaletha Residents Property, north of the CBD in Orkney: Emergency Rescue College.

Areas earmarked for future residential development are:

- Areas between Jouberton, Kanana and Klerksdorp South (private and municipal area):
- Areas between Meiringspark, Alabama / Manzilpark and Jouberton. This area also includes the vacant areas between Uraniaville and Roosheuwel / Freemanville (private and municipal land);
- Areas west of Alabama / Manzilpark (municipal land);
- Areas between Meiringspark and Schoonspruit (private land);
- Areas west and north of La-Hoff, north of Wilkoppies and east of Flamwood (private land);
- Areas between Klerksdorp and Stilfontein (private land);
- Areas south of Stilfontein and between Stilfontein and Khuma (private- and state land);
- Areas between Vaal River Complex and Orkney (proposals from Anglo Gold) Mining land (Subject to dolomite stability);
- Areas south of Randlespark (municipal land);

- Areas west of Orkney (state, municipal and private land); and
- Area north of Orkney (Municipal land).

4) Developments in Makwassie Hills LM

New developments in Wolmaransstad include:

- Wolmaransstad Ext 17: 2 500 residential stands. Informal settlements have commenced;
- Wolmaransstad Ext 18: 1 506 residential stands;
- Wolmaransstad Ext 19: 593 residential stands; and
- Wolmaransstad Ext 15: Re-layout of stands into 122 residential stands and cemetery (area between Tswelelang and future N12 bypass).

New developments in Rulanganyang (Witpoort) include:

Rulanganyang Ext 2: 265 residential stands

New developments in Kgakala and Leeudoringstad include:

- Kgakala Ext 3: (Area between Kgakala and the railway lines), 1 783 residential stands (Private Development); and
- Leeudoringstad Ext 6, 7, 8 and 9.

Makwassie

Residential development in area between Lebaleng and Makwassie

Kwazi Industrial Park

 Development of industrial park in the vicinity of the transport node along the N12 bypass in the Wolmaransstad CBD

5) Developments in JB Marks LM

Development pressure is experienced at the following locations within Tlokwe, which will require improved transport capacity and efficiency:

- Provision of housing in the western urban areas of Tlokwe;
- Medium to higher densification in the northern residential areas within the market area of the NWU Campus (Bult area to Dassie Rand);
- Business activities on the stands north and south of the CBD area;
- Multi-purpose nodes at Ikageng Entrance Node, Promosa/Mohadin Node and the N12 Node on Seraphina Road;
- Mixed land use zone along the N12 east (Baily Park); and
- Industrial development is taking place in the current industrial area between Potchefstroom and Ikageng.

Main corridors and activity spines that must be supported in terms of upgrading and management are:

- The N12 Treasure corridor;
- Gauteng Cape Town main railway corridor;

- The R53 route between Tlokwe to Ventersdorp (provincial secondary corridor);
- The R501, R53 and R54 (provincial secondary corridors); and
- The R501 to Parys (tourism corridor to the Vredefort Dome and Vaal River).

Activity spines including the main existing and future main routes within the Tlokwe urban areas:

- R501 North-south route
 - Thabo Mbeki Drive
 - Walter Sisulu avenue
- R53 (Ventersdorp road)
 - Louis Le Grange street
 - Ross street
- Chief Albert Luthuli Drive linking with Bathoeng street in Ikageng and the N12.
- Wolmerans road, Promosa road, Daniel road linking with Areaganeng and Mogolodi streets in Ikageng and the N12.

Ventersdorp

Development of the Tshing township to the west

6.7.9 Restructuring of the Public Transport System

The OLP should ideally provide the opportunity for the rationalisation of modes and between modes. Existing services should be scrutinised thoroughly and evaluated with the view of determining if it is still the best way of meeting commuter needs, through the matching of passenger demand in terms of vehicle supply. The opposite also holds true, where in some instances new services should be introduced where land-use changes might have taken place, and passenger demand justifies the addition of such services.

6.7.10 Law Enforcement

Law enforcement relating to the management of operating licences is an absolute necessity, as it highlights the intent to achieve compliance with legal prescription and, in the process, diminish the negative impacts of destructive competition.

Destructive competition is the product of imbalances in supply and demand that have resulted in overtrading, and this is evident between transport modes, and within modes. The consequences are a deterioration in the quality of services delivered, reduced earning potential of operators, and deterioration in the quality of services as a whole. Given a scenario where there is an absence of effective law enforcement, the value of having an OLP could be questioned.

The fundamental building blocks that will support the enforcement strategy are:

- A visible presence of enforcement personnel;
- Preventative interventions to deal with specific areas of concern, followed by sustained law enforcement and the prosecution of offenders;
- Access to information and intelligence regarding components of the public transport system;

- Coordination between various authorities to optimise the use of limited resources; and
- The implementation of appropriate technologies for detection and processing of offenders.

Law enforcement programmes need to be carefully considered and implemented in an open manner that:

- Inform both the public transport industry and travelling public of problem areas;
- Create an understanding of the need to address these identified issues;
- Recognise that the initiatives will positively contribute to better service delivery;
 and
- Presents as beneficial to public transport service providers.

Within the mini-bus taxi industry, issues of roadworthiness, speeding, no Operating Licences and operators operating contrary to their Operating Licence conditions are target areas. Infrastructure, equipment, and trained personnel need to be in place, and there should be a mechanism of dealing with passengers inconvenienced in the process.

The National Land Transport Act (Chapter 7, Sections 85 to 91) is very specific with regards to law enforcement, in that it is required that the Provincial Minister, and municipalities, take active steps to develop systems to improve land transport law enforcement. The agreed 'enforcement authority' for the jurisdictional area may be the Provincial Minister, a municipality who will enter into agreements with respect to:

- Enforcement functions in relation to jurisdictional areas;
- The secondment of personnel between authorities;
- Joint enforcement initiatives; and
- The financing of such activities.

The Operating Licence is a contractual agreement between Government and the operator regarding the delivery of specific public transport services to the user.

Pre-requisites to effective law enforcement include:

- A clearly specified contract or operating licence issued by the NPTR/PRE. The OLP provides guidelines for managing the supply of an Operating Licence. However, the onus is on the PRE to ensure that the Operating Licence is drafted in a manner that clearly describes the services in a legally defendable manner. Particularly in respect of route description, operational hours, service frequency, loading rights and so forth.
- An accessible information database: All information attached to the Operating Licence must be readily accessible at any time (24 hours/ day, seven days a week) to those with authorised access. The database is to include information on pending Operating Licences issued. It is important that the information is accessible to the law enforcement officer attending to a situation out on the street, and consequently, the database system must make use of modern telematics technology. Access should also be available to those managing the supply of Operating Licences and for transport planning purposes.
- An adequately staffed and trained law enforcement component: Within the present environment with its high percentage of illegal operations, it is necessary that the Public Transport Unit receives specialised training on issues and management with regards to the public transport sector. Law enforcement actions should be routine, special, and selective in nature, but will also aim to

- encourage self-regulation, with all activities undertaken in accordance with agreed operational plans.
- The provision of appropriate equipment and infrastructure: Apart from the standard equipment issued to law enforcement officers in a patrol vehicle, there should be specialised equipment required to enable access to the information database, establish geographic position (GPS). Ensure that the officer's movement is being tracked and that support resources are available in the event of emergencies. In addition, it is essential to have access to suitable facilities to prevent illegal public transport vehicles from proceeding on their trips. In this regard, the provision of vehicle pounds strategically located (either permanently or temporarily), and the use of wheel locks if required, must be included in the enforcement strategy. A driver who is found to be operating in contradiction to the authority provided on the licence, will be arrested and the vehicle impounded, in accordance with Section 90 of the NLTA.
- A judiciary with the understanding of the need for control in the public transport industry: Special effort is required to inform, provide advice, and train public prosecutors, magistrates and judges regarding this specialised field of law enforcement. Attention must be given to the effectiveness of processing citations, to minimise delays and maximise the use of law enforcement officers in field operations.
- An understanding public: An informed public will have a significant influence on the achievement of order. The passenger has rights and is entitled to safe passage and protection through the legal system. Whilst the operating licence is a contract between Government and the operator, it is based on an agreement between Government and the user in respect of a quality charter. Dedicated marketing and communication efforts are required to achieve this objective.
- Dedicated public transport enforcement: The NLTA Section 86(1) stipulates that the MEC may appoint employees of the Provincial Department, or a municipality to which the operating function has been assigned, who are fit and proper persons, as inspectors for the relevant functions. The function of an appointed inspector is to monitor compliance with this Act in the Province or transport area concerned. Therefore, they are required to assist with the investigation and prevention of offences contemplated in Section 89 which have been committed within the Province - subject to Provincial laws and the directions of the MEC, as well as the Head of the Provincial Department.
- Strong political support: The transformation of the public transport system
 requires strong political leadership and the will to succeed. It is important to
 remember that legalising the public transport system is, but one aspect of the
 broader objectives towards establishing efficient, and affordable public
 transport.

In conclusion, public transport law enforcement will ultimately:

- Improve public transport journey times;
- Discourage the use of private vehicles;
- Attract more people to public transport;
- Ease congestion;
- Demonstrate law enforcement;
- Alter driver behaviour;
- Increase fleet capacity without adding new vehicles; and
- Address the imbalances between supply and demand on certain routes.

6.7.11 Consultation/Public Participation

Throughout the process of preparing the OLP, consultation with public transport operators is paramount. Adequate opportunity should be given to allow existing operators to make representations, should they feel that their rights are being affected.

6.7.12 Implementation

Public Transport Applications are usually for a:

- New Operating Licence;
- Transfer;
- Amendment [Additional Authority / Amendment of Route or Area / Change of Particulars / Amendment of Time Tables, Tariffs or other conditions / Replace Existing Vehicle / Operating Licence for Recapitalized Vehicle];
- Renewal;
- Conversion; and
- Others Separate (Tourist Transport Operator, Provider of Courtesy Services, etc.).

The forms to be completed in terms of the Act, are:

- Form 1B: Application for Granting (New), Renewal, Amendment, Transfer or Conversion of an Operating Licence or Permit
- Form 2B: Notification to Planning Authority from PRE, of Application concerning an Operating Licence
- Form 1D: Application for Duplicate Operating Licence or Decal
- Form 2D: Application for Authorization for Temporary Replacement of Vehicle
- Form 3D: Subpoena Requiring a Person to Appear Before a Regulatory Entity
- Form 4D: Application by Hirer of Vehicle to Certify it for use by Tourist Transport Operator

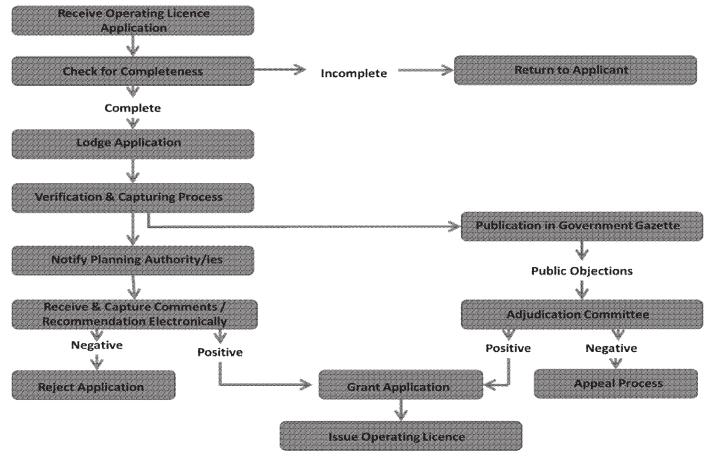


Figure 6.24: Simplified Process for Disposing of Operating Licence Applications

6.8 Conclusions and Recommendations

The supply of public transport vehicles and operating licences has been matched with the passenger demand by following a corridor approach. It is proposed that new applications be based on snap surveys of relevant routes, and that a moratorium be implemented for the issuing of new Operating Licences pending the proper balancing of supply & demand, that operators be encouraged through negotiations to move from over-traded areas to new areas or less supplied routes. Law enforcement has been sighted as critical for the policing of public transport operating licences. On over-traded routes/areas the stipulation of the NLTA whereby operating licences can be invoked, if not being operated for 180 days, should be implemented and strictly applied.

The majority of routes are already over-traded and no more additional operating licences could be granted on such routes. There are, however, a few of the individual routes where applications for additional operating licences could, under certain circumstances, still be granted.

The fact that operational circumstances are extremely fluent and could easily be influenced by new work opportunities or new settlements being established, decisions with respect to operating licence applications should, in all cases, be based on thorough recent demand information.

Such additional applications should, however, not merely be granted without conducting up-to-date and detailed on-board surveys on each of the routes in question.

6.8.1 Guiding principles

The following are some guiding principles that should give direction in considering endorsing applications for new Operating Licences:

- Do not endorse Operating Licences to new operators until all over-traded areas have been brought into equilibrium.
- Prioritize the relocation of operators (through intense negotiations) from overtraded areas to new developments / under-traded areas.
- It should be borne in mind that various provisions contained in the NLTA 2009, give the relevant regulatory entity the power to cancel any license which remains unused for a period greater than 180 days. In addition, DrKKDM could request the relevant entity to invoke this provision by calling in and cancelling any unused Operating Licences.
- Furthermore, where Operating Licences have lapsed (through non-operation), these should not be resuscitated, as prevailing legislation provides for automatic lapsing of such Operating Licences.

6.8.2 Recommendations

The following principals for the day-to-day application of the OLP are recommended:

- Responsibility for determining the number of public transport licences required vest with the Transport Authority.
- As per the requirements of the NLTA, no new Operating Licence will be issued
 for a period longer than 5 years, except where the licence issued is pursuant
 of a permit allowed for in terms of provincial legislation, as in the case of a 7year subsidised bus contract.



- The DrKKDM will not support applications for the transfer of an Operating Licence from the holder of the Operating Licence to another person, for which the holder of the Operating Licence has been providing the service for less than a period of 1 year.
- The DrKKDM will make its recommendation and any representations it considers fit, having due regard to the PTP and any other relevant investigations carried out and submit them to the PRE, within the required period.
- Except on the conversion of a taxi permit to an OL, no person has a right to be issued with an Operating Licence. An Operating Licence in respect of a minibus taxi type service may only be granted to a person who is a registered member of an association.
- Applications for bus and mini-bus taxi licences must show proof of, or the ability to secure passenger liability insurance from a recognised insurer.
- A person applying for a new mini-bus taxi Operating Licence, on an existing route, must belong to the same association(s) as the operators currently providing service on that route.
- All vehicles must comply with SABS or SANS standards and specifications,
- Where the holder of an Operating Licence wishes to replace the vehicle that is specified in the Operating Licence with another vehicle with the same passenger capacity, the holder must apply to the PRE, for approval on the basis that the replacing vehicle meets all requirements in the Operating Licence and the quality of service is not affected.
- Special equipment (e.g. for special needs access) attached to approval of a licence must be installed and operational before commencement of service.
- The granting of an Operating Licence is conditional upon the necessary rank permits being obtained and annually renewed. If a rank permit is not renewed the operator must cease to operate on that route.
- It will be the responsibility of the mini-bus taxi licence applicant to identify suitable holding space in a location acceptable to the DrKKDM.
- Subject to other conditions being met consideration of licence approvals for services between defined origin-destinations will be made based on levels of demand in relation to available capacity as set out in the full OLP.
- Where applicable, a service timetable or frequency of service must be attached to Operating Licence applications.
- Special conditions regarding fares must be attached to licence applications.

TABLE OF CONTENTS

7 CHA	PTER 7: TRANSPORT INFRASTRUCTURE	7-2
7.1	Introduction	7-2
7.1.1		
7.1.2	Overview of transport infrastructure	7-2
7.1.3		
7.2	ROAD INFRASTRUCTURE STRATEGIES	
7.3	PUBLIC TRANSPORT INFRASTRUCTURE	7-10
7.3.1	Rail	7-10
7.3.2	Mini-bus taxi	7-12
7.4	FREIGHT	7-16
7.5	TRAFFIC	7-16
7.6	NMT	7-16
7.7	AIRPORTS	
7.8	PROPOSED INFRASTRUCTURE STRATEGIES AND PROJECTS	7-18
TABLE 7.1.	THE TRH26 ROAD CLASSIFICATION SYSTEM (RCAM)	7_0
	LIST OF TABLES	
TABLE 7.1:	THE TRH26 ROAD CLASSIFICATION SYSTEM (RCAM)	7-5
TABLE 7.2:	LENGTH OF ROADS PER CLASSIFICATION IN DR KENNETH KAUNDA DM	
TABLE 7.3:	OWNERSHIP OF ROADS IN DR KENNETH KAUNDA DM	
TABLE 7.4:	VISUAL CONDITION INDEX OF ROADS IN DR KENNETH KAUNDA DM	
TABLE 7.5:	NORTHWEST PROVINCE PUBLIC TRANSPORT FACILITIES IMPROVEMENTS PROGRAMME	
TABLE 7.6:	COORDINATES OF AIRPORTS IN DR KENNETH KAUNDA DM	7-16
	LIST OF FIGURES	
FIGURE 7.1:	OVERVIEW OF MAIN TRANSPORT INFRASTRUCTURE IN JB MARKS LOCAL MUNICIPALITY	7-5
FIGURE 7.2	ROADS MASTER PLAN FOR TLOKWE	
FIGURE 7.3:	PROPOSED BYPASS ON N12 AROUND KLERSKDORP	7-9
FIGURE 7.4:	RAIL NETWORK IN DR KENNETH KAUNDA DM	7-1
FIGURE 7.5:	AIRPORTS AND AIRFIELDS IN DR KENNETH KAUNDA DM	7-17

7 CHAPTER 7: TRANSPORT INFRASTRUCTURE

7.1 Introduction

Transport Infrastructure is one of the main structuring elements of the spatial development of the Dr Kenneth Kaunda DM. The SDF was utilised as the guiding framework for the infrastructure strategy and projects.

This Chapter provides strategies for the development, upgrading and maintenance of all types of infrastructure, including roads, public transport, NMT, traffic, freight and airports.

7.1.1 Minimum requirements

The Minimum Requirements states:

"The transport infrastructure strategy must deal with the development and maintenance of all types of transport infrastructure, including major roads, public transport facilities, BRT networks, dedicated lanes for public transport, depots, freight corridor measures, non-motorised transport infrastructure, and rail infrastructure.

The transport infrastructure strategy must include proposals for new facilities and for the improvement of existing public transport facilities and major roads. Only firm schemes on which work will commence within the five-year ITP planning period must be included in the strategy.

The transport infrastructure strategy must include measures aimed at giving priority to public transport where such measures are practical and economically justified."

7.1.2 Overview of transport infrastructure

Figure 7.1 gives an overview of the main infrastructure elements in the Municipality, namely the road network, rail network and airports, as well as the built-up areas. The main economic nodes of Potchefstroom, Klerksdorp, Wolmaransstad and Ventersdorp are traversed in an east-west direction by the two national roads, linking the towns with Gauteng to the east and the rest of North West Province and Botswana to the west. Rural settlements surround the main economic nodes, and although well linked with the road network, some of these are gravel roads.

The main passenger and freight rail lines between Gauteng and the Northern Cape and Western Cape pass through Potchefstroom, and Klerksdorp, whilst the freight lines pass through Ventersdorp.

Five airports are serving the District, with the larger ones in Potchefstroom and Klerksdorp, and small airfields in Orkney, Wolmaransstad and Ventersdorp.

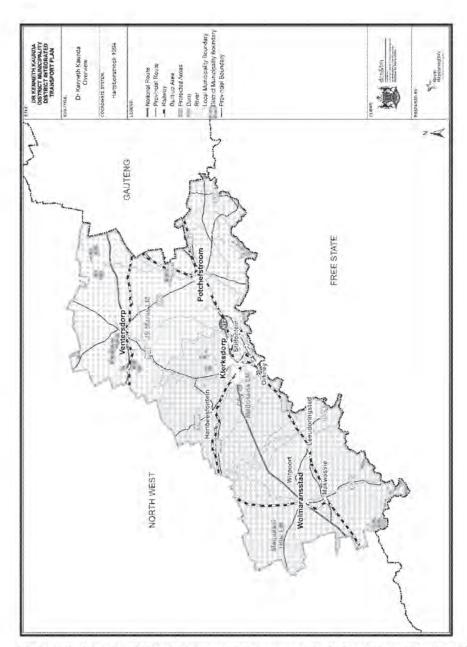


Figure 7.1: Overview of Main Transport Infrastructure in JB Marks Local Municipality

7.1.3 Content of chapter

This Chapter covers strategies for:

- Road infrastructure strategies developed from the Needs Assessment, the Tlokwe and Matlosana Roads Master Plan, and the Tlokwe ITP of 2015;
- Public transport infrastructure developed from the Needs Assessment, the Transport Register, Public Transport Facilities Audit conducted by the NW DSCTP. Strategies cover Minibus Taxi, Bus, Rail, Scholar Transport, NMT and Transport for Persons with Special Needs;
- Freight infrastructure, such as weigh bridges, freight depots, heavy vehicle facilities;
- Traffic, including intersection control and parking;
- NMT, including walk and cycle ways; and
- Airports.

7.2 Road Infrastructure Strategies

A key component of the DITP is an Infrastructure Plan, including a Roads Master Plan. The NLTA guidelines indicate the role and importance of the Roads Master Plan (DoT, 2009).

Roads are a fundamental and integral element in the transport infrastructure system, to ensure accessibility to the whole of the transport network and to promote the mobility of people and goods, which in turn is essential for economic development and job creation. All three spheres of government (National, Provincial and Local) have the responsibility to plan, permit, design, construct, operate, manage and maintain an adequate road network in their area of jurisdiction to ensure sustainable growth. In order to achieve the above, the following actions need to be undertaken:

- Determine the existing extent and classification of the road network;
- Determine the existing condition of the road network;
- Determine the existing utilisation of the road network, i.e. traffic volumes on the road network in relation to the existing capacity of the road network;
- Determine existing deficiencies in the road network (congestion and poor condition);
- Develop mitigation measures to address the deficiencies (I.e. either capacity improvements or demand management), including cost estimates;
- Determine a programme (time and budget) to implement mitigating measures;
- Determine the future land use of the area and the resultant future required road network:
- Prepare a Roads Master Plan and protect the future required road reserves;
- Prepare Access Management Plans;
- Manage and maintain the existing road infrastructure and its associated facilities (i.e. storm water facilities, public transport and freight facilities), and
- Maintain traffic signals.

The emphasis on comprehensive roads planning does not indicate that private car travel is favored over public transport. Roads are critical to the efficient circulation of

freight and passenger transport in urban areas. Expansion of urban road networks should not be a reaction to congestion or an effort to satisfy car demand, but rather to accommodate new urban growth and to provide dedicated road space for public transport, even freight.

A Roads Master Plan indicates the road hierarchy of the existing road network, as well as a range of higher order future roads required to accommodate the future transport demand, given the future planned land uses in the planning area. The Road Master Plan is an invaluable and necessary planning tool to protect future transport reserves for road (private and public transport) and rail, and will ensure that expropriation of expensive properties is not necessary to provide the future required right of way.

Road master plans have been developed for Tlokwe and the City of Matlosana, which reviewed the classification of the road network and identified future road needs. **Figure 7.2** and **Figure 7.3** give a map of the road classification and future road network. The Tlokwe Roads Master Plan also needs to be extended to the Ventersdorp area.

Table 7.2 gives the length of roads per class in the Dr Kenneth Kaunda DM.

Table 7.3 is a summary of the responsible authority of paved and gravel roads in the Dr Kenneth Kaunda DM.

Table 7.1 gives the TRH26 classification. This manual was published in 2011 by SANRAL under the auspices of the Committee of Road Transport Officials (COTO), and provides guidance to National, Provincial and Municipal spheres of government regarding the functional classification of roads, and the methodology according to which such classification must be undertaken. Furthermore, it offers guidance on how a road must be managed in order to function effectively in accordance with its classification.

Table 7.2 gives the length of roads per class in the Dr Kenneth Kaunda DM.

Table 7.3 is a summary of the responsible authority of paved and gravel roads in the Dr Kenneth Kaunda DM.

Table 7.1: The TRH26 Road Classification System (RCAM)

ROAD CLASS	FUNCTION AND DESIGN	EXAMPLE
Principal Arterial	Freeway. High speed mobility corridor	N12
(Class 1)	Accommodates mainly national, regional and longer distance metropolitan trips.	N14
	Access is restricted to the interchanges only.	
	Typically owned by SANRAL	
Major Arterial	Highway, Mobility route. Mainly for inter-regional and metropolitan trips. No direct access should be allowed.	R502
(Class 2)	Access at intersections with co-ordinated traffic signals. No	R503
	parking. Provide public transport facilities at intersections to ensure safe pedestrian access. NMT facilities off-road.	R30

ROAD CLASS	FUNCTION AND DESIGN	EXAMPLE
Minor Arterial (Class 3)	Main roads with mobility function. Shorter distance distribution and mainly metropolitan trips. No parking. Limit direct access. Must safely accommodate public transport and pedestrian movement. Provision of off-road pavements and cycle lanes for pedestrians and cyclists.	Leemhuis Street Joe Slovo Road Church Street
Collector Road/ Street (Class 4)	Access, activity role. High level of (direct) access. Speed calming. Must safely accommodate public transport and pedestrian movement. Provide public transport facilities at intersections. Priority for pedestrians and cyclists by widening the road.	Kock Street Bram Fischer Street Milton Avenue
Local Road/ Street (Class 5)	Access, activity role. High level of (direct) access. Cycle lanes within roadway. Parking allowed on road shoulders.	Reitz Road Clement Street

Table 7.2: Length of Roads per Classification in Dr Kenneth Kaunda DM

ROAD CLASSIFICATION	TOTAL
Principal Arterial (Class 1)	391 km
Major Arterial (Class 2)	535 km
Minor Arterial (Class 3)	342 km
Collector Road/ Street (Class 4)	3 313 km
Local Road/ Street (Class 5)	5 451 km
No Value	80 km
Total	10 113 km

Table 7.3: Ownership of Roads in Dr Kenneth Kaunda DM

RESPONSIBLE AUTHORITY	PAVED	GRAVEL	TOTAL
SANRAL	795 KM	0 KM	795 KM
North West	933 KM	2 340 KM	3 273 KM
Dr Kenneth Kaunda DM	11 KM	0 KM	11 KM
Local Municipality	1 650 KM	4 381 KM	6.031 KM
Total Road Network	3 389 KM	6 721 KM	10 110 KM

Source: RRAMS, 2016, Aganang

SANRAL is responsible for 7.9% of roads in the DrKKDM. The North West Province is responsible for 32.4% of roads in the district, and the local municipalities are responsible for the majority of the roads (59.6%). DrKKDM is responsible for only 0.1% of roads in the district.

Table 7.4 is a summary of the Visual Condition Index of Roads in the Local Municipalities.

Table 7.4: Visual Condition Index of Roads in Dr Kenneth Kaunda DM

	CONDITION	GDOD (70+)	FAIR (50 – 70)	POOR (<50)	NOT ASSESSED	TOTAL.
= = =	Paved	299 km	274 km	96 km	735 km	1 404 km
Matlosana LM	Gravel	3 km	4 km	1 km	1 102 km	1 110 km
Livi	Total	302 km	278 km	97 km	1 837 km	2 514 km
	Paved	17 km	56 km	96 km	431 km	600 km
Maquassi Hills LM	Gravel	6 km	82 km	129 km	2 575 km	2 792 km
TIMO CIVI	Total	23 km	138 km	224 km	3 006 km	3 391 km
	Paved	81 km	221 km	154 km	926 km	1 382 km
JB Marks	Gravel	0 km	0 km	0 km	2 825 km	2 825 km
LM	Total	Not Assessed	Not Assessed	Not Assessed	Not Assessed	4 207 km

Source: RRAMS, 2016, Aganang

Gravel roads to be upgraded must be prioritised, depending on the traffic volumes and utilisation by public transport. There is a need to pave access routes linking the outlying villages. A visual condition assessment of the gravel roads has not been conducted, with 6 721 km of gravel roads in the district.

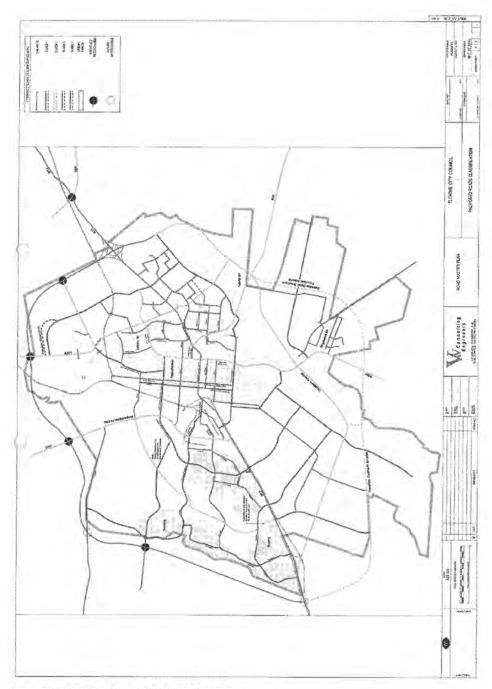


Figure 7.2: Roads Master Plan for Tlokwe

(Source: V&V Consulting Engineers, 2013)

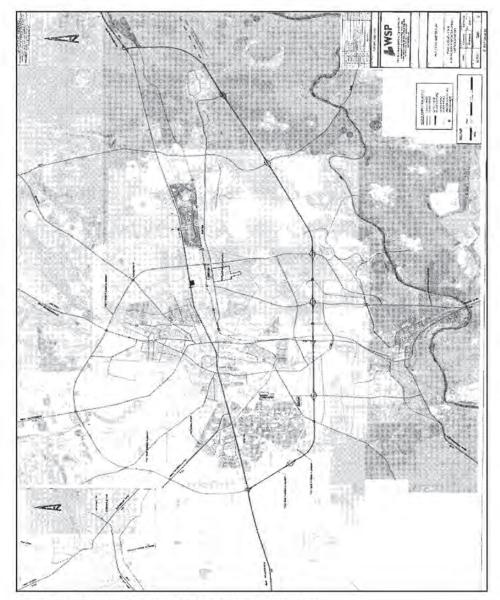


Figure 7.3: Proposed bypass on N12 around Klerskdorp

(Source: WSP Road Master Plan, 2013)

The IDP indicated that most roads have been tarred in urban areas. Provision is made in each financial year for the tarring of a certain number of kilometers of road. New developments have also had their main roads tarred and stormwater is in the process

of being installed. The plan is to continue tarring more roads and gravel roads in the rural areas.

Capital projects identified by the Draft IDP 2016/17 are:

- Resealing of Roads 15,000,000.00
- Upgrading of gravel Roads to paved roads & installation of Storm Water (Construction of Roads & Storm Water at Ikageng & Promosa) 1,9,17,18,20
- On-Going Upgrading of gravel roads & Installation of stormwater in Bophelong, Kuamosi, Reetsang, Tswere, Tshwagong, Baagi, Mokwele, Thutong, Galeokwe, Molepe, and Thibedi streets. 5.29 km gravel road & storm water upgraded R 8,000,000.00
- Reconstruction of Road (Reconstruction of RoadSpruit Meadow Streets) 25
 New Number of meters road reconstructed in Spruit & Meadow Streets120m reconstructed R 2,000,000.00

7.3 Public Transport Infrastructure

7.3.1 Rail

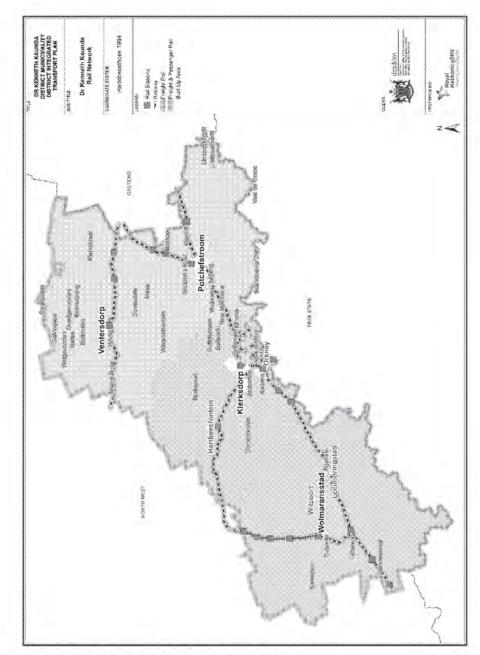


Figure 7.4: Rail Network in Dr Kenneth Kaunda DM

There are no commuter rail services, only freight services as discussed in Chapter 3.

7.3.2 Mini-bus taxi

The rank surveys conducted in 2016 did not survey the condition and availability of facilities in ranks. However, the NW DCSTP conducted a province-wide inventory survey of facilities in 2014, which is valuable for identifying rank upgrading needs. Table 7.5 shows key characteristics of public transport facilities in Dr Kenneth Kaunda DM from the inventory (Public Transport Infrastructure and Facilities Plan Vol 2, former NW Department of Public Transport, Roads and Transport, June 2014). The Table shows the condition of each facility, amongst other characteristics, as well as the proposed improvement measure. A priority index and costs have also been estimated that are given in the chapter on the Five -Year Program of projects.

Public transport infrastructure strategies identified are summarised below:

- Provision of new and/or formalisation and upgrading of the existing minibus-taxi ranks:
- · Provision of minibus-taxi stop facilities and lay-bys along the routes;
- · Mast lighting at facilities;
- Provision of sidewalks and pedestrian crossing facilities at schools;
- · Street lighting along NMT facilities; and
- Intermodal facility at Tlokwe Railway Station.

The IDP identified the following projects:

- CBD Taxi Rank: 1. Construct counters & Shelves. 2. Construct Canopy for commuters. Ward 251. R500,000
- Ikageng Ex. 7 taxi rank. 1. Engineering Designs and drawings R1,500,000

STAATSKOERANT, 27 NOVEMBER 2020

Table 7.5: Northwest Province Public Transport Facilities Improvements Programme

FACILITY NAME	TOWNSHIP	LOCAL MUNICIPALIT Y	FACILIT Y STATUS	QUALITY	REMEDIAL MEASURE
Tswelelang Ext 2	Tswelelang	MH LM	Pickup IF	Poor	Provide Shelter
Ext 10 Wolmaransstad	Trotsville	MH LM	Pickup IF	Poor	Provide Layby and Shelter
Ext 13+Trots	Trotsville	MH LM	Pickup IF	Poor	Provide Paving and Retrofit
Kgakala Location	Kgakala	MH LM	Pickup IF	Poor	Provide Layby and Shelter
Tswelelang Ext 1	Tswelelang	MH LM	Pickup IF	Poor	Provide Shelter
Lebaleng Informal Taxi Rank	Lebaleng	MH LM	Taxi IF	Poor	Provide Roofing and Toilets
Tswelelang Ext 3	Tswelelang	MH LM	Pickup IF	Poor	Provide Shelter
Makwasi Old Taxi Rank 9	Makwassie	MH LM	Pickup IF	Poor	Provide Layby and Shelter
Wolmaransstad Taxi Rank	Wolmaransstad	MH LM	Taxi F	Good	None
Leeudoringstad Taxi Rank	Leeudoringstad	MH LM	Taxi F	Good	Refurbish Toilets
Terminus No 2A (Tambai 4+1)	Klerkdorp Central	CoM LM	Taxi IF	Poor	Rank Construction
Jazzbar Taxi Rank	Klerkdorp Central	CoM LM	Taxi SF	Poor	Rank Construction
Terminus No 2(Klerksdorp Taxi Rank)	Klerkdorp Central	CoM LM	Taxi F	Good	Refurbish Toilets and Provide Signage
Terminus No 1(Long Distance)	Klerkdorp Central	CoM LM	Taxi F	Good	Provide Roofing and Toilets
Industrial Site Informal Taxi Rank	Klerksdorp Industrial	CoM LM	Taxi IF	Poor	Provide Roofing and Toilets
Jouberton Downhall	Jouberton	CoM LM	Pickup IF	Poor	Provide Shelter
Jouberton Ext 21	Jouberton	CoM LM	Pickup IF	Poor	Provide Roofing and Toilets
Seleke Ext 7	Jouberton	CoM LM	Pickup IF	Poor	Provide Roofing and Toilets
Jouberton Stop 7	Jouberton	CoM LM	Pickup IF	Poor	Provide Roofing and Toilets
Jouberton Ext10	Jouberton	CoM LM	Taxi IF	Poor	Provide Layby and Shelter
Jouberton Taxi Rank	Jouberton	CoM LM	Taxi F	Poor	Provide Roofing and Toilets
Jouberton Ext 12 & 13	Jouberton	CoM LM	Taxi IF	Poor	Rank Construction
Pick n Pay Hypermarket Pickup point	Wilkopies	CoM LM	Taxi IF	Poor	Rank Construction
Alabama Pickup Point	Alabama	CoM LM	Taxi IF	Poor	None
Lahoff Pickup Point	Flimieda	CoM LM	Taxi IF	Poor	Rank Construction

FACILITY NAME	TOWNSHIP	MUNICIPALIT Y	FACILII Y STATUS	QUALITY	REMEDIAL MEASURE
Tigane Pickup Point	Tigane	CoM LM	Taxi IF	Poor	None
Kanana Matlosana Informal Taxi Rank	Kanana	CoM LM	Taxi IF	Poor	None
Khuma Ext 8 & 9	Khuma	CoM LM	Taxi IF	Poor	Provide Roofing and Toilets
Dooringkruin Pickup Point	Dooringkruin	CoM LM	Taxi IF	Poor	Rank Construction
Umuzimuhle Taxi Rank	Umzimhle	CoM LM	Taxi SF	Poor	Rank Construction
Grace Mokhomo	Kanana	CoM LM	Taxi F	Poor	Provide Perimeter Fencing
Khuma Pickup Point	Khuma	CoM LM	Taxi IF	Poor	Rank Construction
Sizabantu Pickup Point	Khuma	CoM LM	Pickup IF	Poor	Provide Roofing and Toilets
Khuma Ext 6 Taxi Rank	Khuma	CoM LM	Taxi SF	Reasonabl e	Provide Roofing and Toilets
Orkney Taxi Rank	Orkney	CoM LM	Taxi F	Good	None
Stilfontein Taxi Rank	Stilfontein	CoM LM	Taxi F	Good	None
Ikageng Ext 11	Potchefstroom	JBM LM	Taxi IF	Poor	Rank Construction
Promosa Taxi Rank	Potchefstroom	JBM LM	Taxi IF	Poor	Rank Construction
Potchefstroom Taxi Rank-Long Dist	Potchefstroom	JBM LM	Taxi IF	Reasonabl e	Rank Construction
Potchefstroom Taxi Rank (Local)	Potchefstroom	JBM LM	Taxi IF	Good	Rank Construction
Potchefstroom Hospital Informal Taxi Rank	Potchefstroom	JBM LM	Taxi IF	Poor	Rank Construction
Hospital & Military base	Potchefstroom	JBM LM	Pickup IF	Poor	Provide Layby and Shelter
Ikageng Pickup Point	PotchIndustria	JBM LM	Taxi IF	Poor	Provide Roofing and Toilets
Bult Informal Taxi Rank	Potchefstroom	JBM LM	Taxi IF	Poor	Provide Signage
Aksie Pickup Point	Potchefstroom	JBM LM	Taxi IF	Poor	Provide Roofing and Toilets
Ikageng Ext 6	Ikageng Ext 6	JBM LM	Taxi IF	Poor	Provide Roofing and Toilets
lkageng	Ikageng Ext 7	JBM LM	Pickup IF	Poor	Rank Construction
Sarafina	Ikageng	JBM LM	Taxi IF	Poor	Rank Construction
Kanana Taxi Rank	Ikageng Tlokwe LM	JBM LM	Taxi IF	Poor	Provide Roofing and Toilets
Ikageng Ext 11	Ikageng Ext 11	JBM LM	Taxi IF	Poor	Provide Layby and Shelter

FACILITY NAME	TOWNSHIP	LOCAL MUNICIPALIT Y	FACILIT Y STATUS	QUALITY	REMEDIAL MEASURE
Lekhela Pickup Point	Ikageng	JBM LM	Pickup F	Poor	Provide Layby and Shelter
Promosa Ext 2	Promosa	JBM LM	Pickup IF		Provide Roofing and Toilets
Promosa Old Location	Promosa	JBM LM	Pickup F	Poor	Provide Layby and Shelter
Kopanong Ext 11	Ikageng Ext 11	JBM LM	Pickup IF	Poor	Provide Roofing and Toilets
Mogolodi/Kopanong	Ikageng Ext 11	JBM LM	Pickup IF	Poor	Provide Layby and Shelter
Lekhela & Bathoeng Pickup Point	Ikageng	JBM LM	Pickup F	Poor	Provide Layby and Shelter
Lekhela & Chele Pickup Point	Ikageng	JBM LM	Pickup F	Poor	Provide Layby and Shelter
Maphongo	Ikageng	JBM LM	Pickup F	Poor	Provide Layby and Shelter
Sepotokele Pickup Point	Ikageng	JBM LM	Pickup IF	Poor	Poor Provide Roofing and Toilets
Bathoeng	Ikageng	JBM LM	Pickup IF	Poor	Provide Layby and Shelter
Ventersdorp Taxi Rank	Ventersdorp	JBM LM	Taxi IF	Poor	Refurbish Toilets
Oleis Café	Ventersdorp	JBM LM	Taxi IF	Poor	Rank Construction
Spar Complex Pickup Point	Ventersdorp	JBM LM	Taxi IF	Poor	Rank Construction
Tsetse Village	Doornkop	JBM LM	Pickup IF	Poor	Provide Roofing and Toilets
Ga Mogopa	GaMogopa	JBM LM	Pickup IF	Poor	Provide Roofing and Toilets
Tshing Ext 2 Pickup Point	Tshing	JBM LM	Taxi IF	Poor	Provide Roofing and Toilets
Oukasie-Losie Pickup Point	Tshing	JBM LM	Pickup IF	Poor	Provide Layby and Shelter
Boikhutso Pickup Point	Vlieger	JBM LM	Pickup IF	Poor	Provide Layby and Shelter
Welgevoeden Pickup Point	Welgevonden	JBM LM	Pickup IF	Poor	Provide Roofing and Toilets
Boikhutsong Pickup Point	Bruidegomskraal	JBM LM	Pickup IF	Poor	Provide Layby and Shelter
69 Goedgevonden	Goedgevonden	JBM LM	Pickup IF	Poor	Provide Roofing and Toilets
Tshing Ext 5	Ventersdorp	JBM LM	Pickup IF	Poor	Provide Shelter
Umuzimuhle Shopping Complex	Umzimhle CoM LM		Taxi SF	Reasonabl e	Provide Roofing and Toilets

STAATSKOERANT, 27 NOVEMBER 2020

7.4 Freight

Freight transport infrastructure strategies from the 2015 ITP are summarised below:

- Technical investigation and feasibility study for the establishment of a Truck Stop along the N12 and implementation of the Truck Stop
- Implement screening stations (4 stations)

7.5 Traffic

Traffic infrastructure strategies from the 2015 ITP are summarised below:

- · Maintenance and upgrade of traffic signal equipment
- · Optimisation of traffic signal settings and coordination
- Installation of traffic signals at critical intersections

7.6 NMT

NMT infrastructure strategies from the 2015 ITP are summarised below:

- · Street lighting along NMT facilities
- · Compilation of a Cycle Master Plan

The IDP indicated that the Municipality planned to pave as many sidewalks as the budget allows for yearly. The following project has been identified by the IDP:

 Paving & Kerbing of Sidewalk (Paving & Kerbing of Sidewalk Noordsig Flats to SPAR3 R100,000.00

7.7 Airports

The 5 airports that fall within Dr Kenneth Kaunda DM, are listed in Table 7.6 below:

Table 7.6: Coordinates of Airports in Dr Kenneth Kaunda DM

NAME	LATITUDE	LONGITUDE E	LEVATION (FT)	ICAO CODE
Potchefstroom Airport	-26.67099953	27.08189964	4520	FAPS
P.C Pelser Airport	-26.87109947	26.71800041	4444	FAKD
Wolmaransstad Airport	-27.17000008	25.97999954	4513	FAWD
Ventersdorp Airport	-26.30089951	26.81419945	4917	FAVE
Orkney Airport	-26.98390007	26.65139961	4265	FAOY

The above five airports are currently non-commercial airports, with none of them receiving scheduled flights.

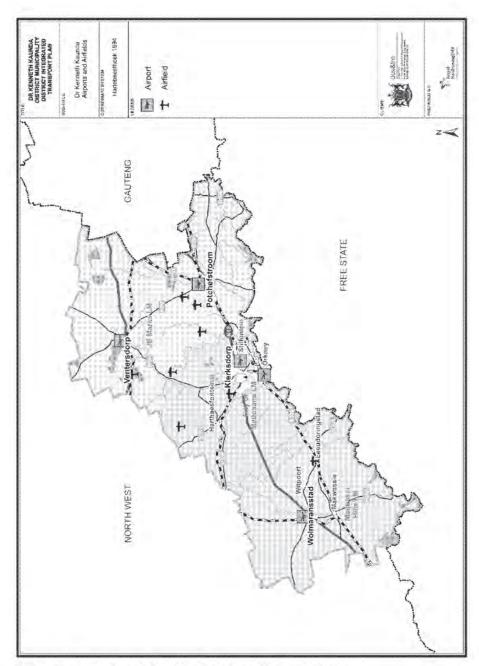


Figure 7.5: Airports and Airfields in Dr Kenneth Kaunda DM

7.8 Proposed Infrastructure Strategies and Projects

• The DrKKDM has a well-developed transport infrastructure, consisting of paved and unpaved road networks, rail lines and stations, mini-bus taxi facilities, NMT facilities and airports. However, maintenance and rehabilitation are lagging behind, and this needs to be the first priority. New infrastructure should not be built unless there are funds for maintenance and operations. Furthermore, there are various inefficiencies – the road network is over-utilised while the rail infrastructure is under utilised. The N12 weigh bridge is not in an operational condition.

There are two main infrastructure strategies:

- Maintenance and rehabilitation of existing infrastructure; and
- Development of new infrastructure to support and facilitate the SDF and Strategic objectives of the DrKKDM IDP

This Chapter summarises the Infrastructure strategies from other chapters, with the following key strategies that will have a major impact on the spatial structure of the municipality.

Public Transport:

Develop the IPTN and upgrade roads serving public transport routes, including lay-by's and inter-modal facilities. The North West Province initiated an Integrated Public Transport Network Plan for the DrKKDM. This will be a key plan to establish a high quality public transport system for all the municipalities in the District.

Roads:

- Roads master plan for the whole Municipal area and its phased implementation.
- Development of proposed by-passes around urban areas in a way that will not impact negatively on the viability of the CBDs.

NMT:

- Provision of NMT facilities serving economic nodes and social facilities.
- Development of a Cycle Master Plan for whole Municipality.

Freight:

- Determine routes for large heavy vehicles by-passing the CBDs on the existing road network, with limited upgrading.
- Conduct feasibility study of all rail sidings and formulate a plan to upgrade viable rail sidings.

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- Traffic:
 - Identify congested / unsafe intersections and improve capacity and safety.
 - o Parking supply and demand study and policy in CBDs
 - o Improve transport efficiency and safety to access major developments

Figure 14.1 in Chapter 14 shows a map of the transport infrastructure projects.

TABLE OF CONTENTS

8	CHAPTER 8: TRAVEL DEMAND MANAGEMENT	8-2
8.1 8.1.1	INTRODUCTION	8-2
8.1.2 8.2	Guidelines from North West Province PLTFFRAMEWORK FOR TDM MEASURES	8-3
8.3	PROPOSED TDM STRATEGIES AND PROJECTS	8-5
	LIST OF TABLES	
TABLE	8.1. EVANDLES OF VOLUNTARY DECLINATORY PRICING AND PHYSICAL TOM MEASURES	0.7

8 CHAPTER 8: TRAVEL DEMAND MANAGEMENT

8.1 Introduction

According to the DoT's Minimum Requirements, the objective of Travel Demand Management (TDM), is to manage congestion by reducing the demand for car usage in peak periods, especially single-occupancy car usage. TDM measures are primarily aimed at changing the behaviour of the users of the transport system. Furthermore, it aims to bring about environmental improvements through reduced car usage.

The National Land Transport Act, 2009 requires municipal bodies in South Africa to develop TDM strategies as part of their ITP's.

This Chapter covers the following aspects:

- DoT Minimum Requirements;
- Guidelines from North West Province Draft PLTF;
- Framework for TDM Measures; and
- Proposed TDM strategies and projects.

8.1.1 Minimum requirements

The TDM strategy should 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.;
- Measures discouraging car usage such as tolls, levies and parking charges or limitations on parking availability;
- Proceeds from tolls, levies or parking charges should be applied to further improvements in public transport and non-motorised transport;
- Transit Oriented Development (TOD), to promote mixed use residential and commercial development, designed to maximise access to public transport and incorporate features to encourage transit ridership; and
- High density residential development should be situated near to transport nodes such as stations or multimodal transit facilities.

8.1.2 Guidelines from North West Province PLTF

TDM's objectives would include prioritising public transportation, as well as the constraints associated with the usage of private vehicles. It motivates the movement of people and commodities, instead of vehicles, and gives preference to more efficient modes of transportation.

TDM was initially implemented in the province with the intent of addressing the issue of an increased demand for transportation-related infrastructure, coupled with the reduction in funding, whilst still providing a means for addressing the demand.

Furthermore, TDM was intended to focus on encouraging the shift from private to public transportation.

At the national government sphere, the development of a National Road Traffic Demand Management Policy was proposed and considers the following principles:

- Adopt the "user pay" principle;
- Reduce the need for travel by single occupant vehicles;
- Diversify transportation options;
- Integrate land use and transport planning;
- Integrate a Non-Motorised Transport philosophy in spatial development strategies; and
- Encourage more efficient Heavy Goods Vehicle (HGV) movements.

In the rural areas of the province, TDM is particularly relevant in ensuring the provision of public transport for rural populations. Matters of concern to be addressed include:

- The availability of alternative modes of transport serving more origins and destinations; and
- The provision of non-motorised facilities.

One of the provincial traffic management strategies is to provide dedicated heavy vehicle routes through towns, therefore, avoiding sensitive areas.

Typical TDM goals for public transport management are (Bojanala Platinum IPTN, 2016):

- To promote public transport by improving service levels and to make public transport more affordable;
- To introduce bus and train services more efficiently than taxi services, and integrate the various transport modes;
- To integrate public transport with the SDF and use public transport to facilitate the development of the SDF;
- To improve public transport service levels and facilities to suit the needs of learners;
- To provide non-motorised transport (NMT) facilities;
- To upgrade and develop the mini-bus taxi system as part of the formal and integrated public transport system in the North West province, meeting passenger and operator needs in terms of safety, security, service levels, economic and financial viability;
- To manage travel demand to ensure that traffic congestion is kept to affordable and safe levels; and
- To support and facilitate the strategic management of freight transport in the province, which will optimize the role of the road, rail and air modes, ensuring safe and cost-efficient transport and promote economic development.

8.2 Framework for TDM Measures

The "Guide to Calculating Mobility Management Benefits" (Victoria Transport Policy Institute, 2011) indicates the wide-range of benefits of TDM that are often ignored by conventional project evaluation methods, geared towards road upgrading schemes. These benefits are, namely:

- Congestion reduction;
- Road and parking cost savings;
- Consumer cost savings;
- Improved transport diversity;
- Improved traffic safety:
- Energy conservation;

- Pollution reductions:
- Efficient land use; and
- Improved fitness and health.

TDM is implemented to counter the following main issues (Victoria Transport Policy Institute, 2011):

- Congestion of roads (demand for travel exceeding capacity);
- Under-utilization of existing transport infrastructure and services;
- Over-use or dependency of one particular mode of road-based transport;
- Inappropriate expenditure on infrastructure not conducive to meeting the objectives of TDM;
- Lack of new and innovative infrastructure and traffic control elements required for a forward compatible and progressive transport solution;
- Vehicles travelling on inappropriate roads to avoid congestion or delays;
- Environmental quality reduction based on vehicle emissions associated with congestion and longer travel times; and,
- The absence of an understanding of what measures will have the most cost effective and efficient impact on the transport network.

The Victoria Transport Institute published a comprehensive manual in the form of an on-line Encyclopedia regarding TDM, summarising international best practice. The Manual indicates four broad categories of TDM measures:

- Voluntary measures: These encourage changes in travel behaviour through incentives or awareness campaigns;
- Regulatory measures: These force changes in travel behaviour through the imposition of new or changed regulations governing travel choices;
- Pricing measures: These encourage and sometimes force changes in travel behaviour through the imposition of new or changed regulations governing travel choices; and
- Physical measures: These encourage or force changes in travel behaviour through infrastructure retrofitting.

Table 8.1 shows examples of the different types of TDM measures suitable for the Dr Kenneth Kaunda District Municipality which are highlighted.

Table 8.1: Examples of Voluntary, Regulatory, Pricing, and Physical TDM measures

VOLUNTARY	REGULATORY	PRICING MEASURES	PHYSICAL
MÉASURES	MEASURES		MEASURES
Work Schedules Ride share Flexi time Car sharing Park and ride Guaranteed ride home Alternate work schedule Telecommuting Cycling	Parking supply restrictions Vehicle use restrictions Area entry restrictions Staggered school/work hours Car-free days	Tolling of urban roads Congestion parking Parking fees Fuel taxes PT fare levels Car ownership taxes	Public transport upgrades Construction of HOV lanes Road capacity improvements ITS Traffic calming measures Bus lanes Cycle lanes Foot bridges Pathways

TDM measures can be very effective in influencing travel behaviour. However, they must be implemented alongside the improvement of alternatives, such as non-motorised modes and the public transport system. Road capacity changes should be carried out mainly for the benefit of the public transport system and to the detriment of the private car user.

In the JB Marks LM, the congestion levels are not comparable to large urban areas such as Johannesburg and Tshwane. Congestion is focused on the CBD of Potchefstroom and around the University, and only during a short time period in the morning and afternoon peaks. Through traffic on the N12 running thorough the CBD of Potchefstroom, especially heavy vehicles, also causes congestion. Therefore, the need for TDM measures is not very high. However, a few practical measures to reduce congestion and move people from private to public transport would be valuable.

Public transport is one of the economical and sustainable means of reducing traffic congestion. In certain situations, road capacity improvements may be needed alongside PT improvements. TDM measures should be used to lock in the benefits of the public transport system.

8.3 Proposed TDM Strategies and Projects

The following TDM strategies have been proposed for the JB Marks municipality:

- Improve mini-bus taxi transport to provide more efficient, regular, and safe services at an affordable price. The Public Transport Plan provided in Chapter 6 addresses these objectives. A few examples are listed herewith below:
 - The Operating License Strategy will reduce the over-supply of taxis, reducing congestion;
 - The integrated route network will provide public transport to within walking distance for most residents;
 - The various rural settlements would benefit from an improved public transport service;
 - The North West Province has recently put a tender out for an Integrated Public Transport Plan for the DrKKDM;
 - Improved public transport infrastructure and services would shift some car users to public transport;
 - If a commuter bus service is found feasible along high-demand corridors, this would reduce the number of mini-bus taxis on the road and some car trips;
 - Design public transport system meeting; demand and determine the optimal vehicle for each corridor, determine subsidy needs, and put system out to contract. This will fully replace the current mini-bus taxi services however the existing owners and drives will be offered shares and jobs in the system.
- Provide NMT facilities and promote NMT as a beneficial mode of transport.
 Chapter 10 indicates the NMT improvements, Specific examples are:
 - Increased participation in the DoT's Shova Kalula project for learners, which would reduce the need for parents to drive learners to school;
 - A bike sharing scheme for university students which would reduce car travel;

- Provide proper walkways to main ranks, with adequate lighting; and
- Develop a cycle master plan.
- Determine a route for large heavy vehicles by-passing CBD on the current road network, with limited upgrading; and
- Identify congested / unsafe intersections and improve capacity and safety.

Most of the above strategies are addressed in detail by other Chapters of the DITP. In the TDM chapter, only strategies not addressed by other chapters are addressed.

The following TDM projects are proposed, giving a short description and aspects to address:

Develop a Cycle Master Plan for whole JB Marks LM

In the 2015 Tlokwe ITP, a Cycle Master Plan was proposed. This initiative should be taken further to completion and implementation, as well as extending the master plan to the Ventersdorp area.

The following aspects should be addressed:

- Determine high demand corridors, for example between outlying residential areas and employment nodes, around schools and the North West University in Potchefstroom;
- Consultation with stakeholders, such as Chamber of Commerce, large businesses, North West University, school bodies, etc.;
- Determine cycle lane infrastructure requirements;
- Determine measures to promote cycling including investigation of the Shova Kalula project;
- Draft funding and maintenance scheme, including facilitating the establishment of cycle workshops, where bicycles are sold and maintained; and
- Implementation of action plan implement in a phased manner.

A bike sharing scheme for university students in Potchefstroom

International bike sharing schemes have become very popular. In South Africa the Nelson Mandela University implemented a bike sharing scheme, and the City of Tshwane together with the University of Pretoria is planning the implementation of a pilot scheme.

The scheme involves the provision of bicycle pick-up and drop-off points, where bikes can be hired for usage for a certain period of time.

The following aspects should be addressed:

- Determine cycle demand patterns around the University and optimal location of pick-up and drop-off points;
- Consultation with stakeholders, North West University, Student Council, etc.;
- Determine infrastructure requirements and carry out cost estimates;
- Pricing structure and price levels;
- Funding and maintenance scheme;
- HR requirements;
- Management structure; and

Implementation of action plan.

CBD shuttle service to be provided by mini-bus taxi operators in Potchefstroom

This will involve a shuttle service to be provided by minibus taxi operators over short distances in and around the CBD, as well as the North West University in Potchefstroom. This service was provided as part of the Aardklop arts festival, and this initiative could be adapted for the CBD.

The following aspects should be addressed:

- Determine demand for a shuttle service;
- Consultation with stakeholders, such as Chamber of Commerce, large businesses, the North West University, etc.;
- Determine infrastructure requirements and carry out cost estimates;
- Plan service to be provided in terms of routes, frequencies, stops, depot, and vehicle requirements;
- Consultation with Taxi Associations;
- Identify potential operators;
- Pricing structure and price levels;
- Funding and maintenance scheme;
- Management structure; and
- Implementation of action plan.

Parking supply and demand study and policy in Potchefstroom CBD

In the 2015 Tlokwe ITP, a parking study was proposed for the Potchefstroom CBD. This initiative should be taken further to completion and implementation.

The following aspects should be addressed:

- Conduct parking demand and supply study of on- and off-street parking in the CBD;
- Develop a parking policy;
- Determine infrastructure requirements and carry out cost estimates;
- Consultation with stakeholders, such as Chamber of Commerce, large businesses, etc.;
- Pricing structure and price levels;
- Funding and maintenance scheme;
- Management structure; and
- Implementation of action plan.

Pilot study of solar system for traffic lights

A feasibility study for the JRA of a typical solar system to provide power for traffic lights as a back-up system during power outages, indicated that this is an economically viable scheme. The saving in the cost of traffic congestion during power outages is much more than the costs of the scheme. The scheme could also be used on a permanent basis to save electricity costs.

The following aspects should be addressed:

- Literature research and consultation to determine infrastructure requirements and costs;
- Selection a few sites for a pilot study;
- Consultation with the Traffic Department;
- Funding and maintenance scheme; and
- Implementation of action plan.

TABLE OF CONTENTS

9	CHAPTER 9: FREIGHT TRANSPORT	9-2
9.1	INTRODUCTION	9-2
9.2	FREIGHT STRATEGIES FROM THE NORTH WEST PROVINCE PLTF	9-2
9.3	FREIGHT ROUTES	9-3
9.4	FREIGHT OVERNIGHT FACILITY	9-6
9.5	TRANSPORT OF HAZARDOUS GOODS	9-8
9.5.1	Hazardous Goods	9-9
9.6	TRANSPORT OF ABNORMAL LOADS	9-16
9.7	OVERLOAD CONTROL	9-16
9.8	HEAVY VEHICLE PROBLEMS AND NEEDS	9-18
9.9	PROPOSED FREIGHT TRANSPORT STRATEGIES	9-19
9.10	PROPOSED FREIGHT TRANSPORT PROJECTS	9-20
	LIST OF TABLES	
TABLE 9.1:	PROVINCIAL FREIGHT TRANSPORT KPI'S AND TARGETS (2017, PLTF)	9-3
TABLE 9.2:	BIODIVERSITY-COMPATIBLE LAND-USE GUIDELINES MATRIX (HOLNESS & SKOWNO, 2011)	9-12
	LIST OF FIGURES	
FIGURE 9.1	E: FREIGHT ROUTES IN DR KENNETH KAUNDA DM	9-4
FIGURE 9.2	Preight Facilities in Dr Kenneth Kaunda DM	9-7
FIGURE 9.3	B: HAZARDOUS FREIGHT ROUTES ENVIRONMENTAL CONCERNS AND POPULATION CONCENTRATIONS	9-15

FIGURE 9.1:	FREIGHT ROUTES IN DR KENNETH KAUNDA DM	9-4
FIGURE 9.2:	FREIGHT FACILITIES IN DR KENNETH KAUNDA DM	9-7
FIGURE 9 3:	HAZARDOUS ERRIGHT ROUTES ENVIRONMENTAL CONCERNS AND POPULATION CONCENTRATIONS	9-15

9 CHAPTER 9: FREIGHT TRANSPORT

9.1 Introduction

This Chapter covers the following aspects:

- Description of the main freight traffic routes in the municipality, as well as problems caused by or inhibiting freight movement;
- Address the transporting of goods to, from and through the area by road or rail;
- Routes identified for travel by vehicles transporting abnormal loads and dangerous goods;
- State measures in place to deal with overloading;
- Identify routes for moving goods, to promote their seamless movement;
- Measures for road freight transport to avoid conflict with road traffic; and
- A plan for the movement of hazardous substances contemplated in section 2(1) of the Hazardous Substances Act 15 of 1973, by road along designated routes, as required by section 37(3) and (4) of the Act in accordance with the strategy in the provincial transport framework.

9.2 Freight Strategies from the North West Province PLTF

The North West Freight Transport Strategy, Passenger and Freight Rail Plan (Draft, March 2015) states that: Abnormal loads and the identification of abnormal truck routes (inter alia where the height of vehicles is not restricted by overhead lines, short turns etc.), conveyance of hazardous materials, incident management in the case of accidents or spillage of hazardous materials, weigh bridges and overload control, and road classification and road access management were raised in the District Municipalities Integrated Transport Plans, but it is important that they should be coordinated at the provincial level.

The Freight Transport Management Project forming part of the Freight Strategy of the Province, which is indicated as a medium-term project (10 – 20 years) should address these issues.

One of the biggest challenges of freight transport in the province is the excessive burden placed on road infrastructure, whilst the railway infrastructure is under utilised. One of the main goals of Transnet Freight Rail is to attract freight from road to rail. The main road freight corridors, such as the N12 virtually run parallel with the railway lines. This provides the ideal environment for the implementation of integrating road and rail, as well as increasing the rail market share.

To transfer commodities from road to rail, it would be ideal to start with commodities which used to be transported via rail such as coal, cement and agricultural-related products, such as grain, maize and wheat.

Over-loading of heavy vehicles is another major problem in the Province. The following overload control strategies have been suggested by the North West province:

Restricting the use of local roads by heavy vehicle through traffic;

- Providing strict law enforcement on roads transporting dangerous goods;
- Installing Traffic Control Centres at strategic places to effectively control overloading; and
- The DoT is currently in the process of developing a National Overload Control Strategy (NOCS), which will be supported by the North West.

Strategies that the North West Provincial Department of Community Safety & Transport Management have committed to include:

- Carry out the regulation and administration of concurrent and exclusive provincial transport functions;
- Implement national legislation and transport policy in the North West Province;
- Develop and implement provincial policy and legislation;
- Secure funding for investment in transport infrastructure, facilities and services;
- Supply guidance and assistance to municipalities, monitor them and co-ordinate municipal transport plans; and
- Monitor transport trends in the Province, as well as the use and condition of transport infrastructure, facilities and services.

The following KPI's and targets have been defined:

Table 9.1: Provincial Freight Transport KPI's and Targets (2017, PLTF)

KEY PERFORMANCE INDICATOR	TARGET
Reduction in overloading by enforcing limits on gross vehicle mass	% reduction in overloading
Improve heavy goods vehicle safety performance; roadworthiness and self- regulation	% increase in Road Transport Management System (RTMS) certification and compliance
Provision of alternative routes for the transport of hazardous materials and/or heavy goods vehicles in urban areas	Number of towns/cities with alternative routes for hazardous materials

9.3 Freight routes

The PLTF indicates that the triangular region enclosed by the urban nodes, namely: Mahikeng, Rustenburg, Madibeng and Matlosana, contains the largest concentrations of urban and economic nodes, active mining and associated industrial belts. This triangle contains a well-developed transport infrastructure for both rail and road and has strong links with the Gauteng Economic Hub.

Figure 9.1 shows the main road freight routes and heavy vehicle volumes, as well as the freight rail lines.

The main route connecting Gauteng with the North West province, Northern Cape and Western Cape, is the N12 which traverses the Potchefstroom, Klerksdorp and Wolmaransstad area. The N14 by-passing Ventersdorp is the other main freight route connecting Gauteng with North West province.

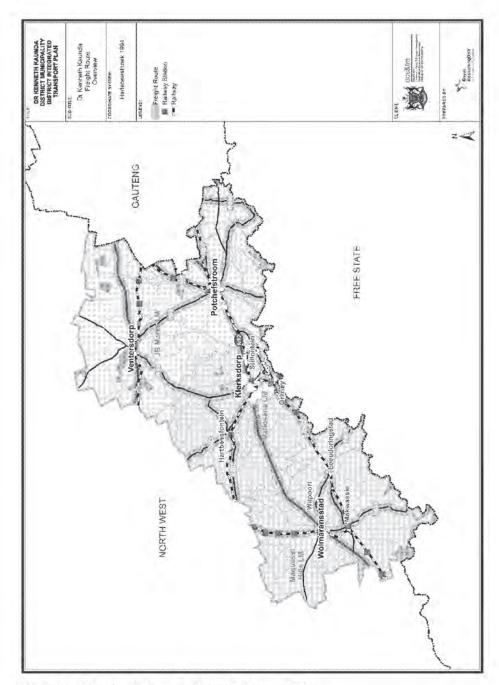


Figure 9.1: Freight Routes in Dr Kenneth Kaunda DM

The N12 route carries a substantial number of heavy vehicles daily. The main routes entering Potchefstroom from all directions are the following:

- N12;
- R501;
- R503
- R30; and
- R53.

The main freight corridor is the N12. Accessibility through Potchefstroom to other main freight corridors (as mentioned above) is limited to a few specific roads which cause heavy vehicles to pass through the CBDs, causing extensive damage to the internal road network of Klerksdorp, Potchefstroom and Wolmaransstad, which could typically be alleviated by a bypass route for heavy vehicles.

Certain bypass routes are classified as class 3 and 4 roads. Channeling heavy vehicles through the CBDs on these routes will cause severe infrastructure problems, as well as shorten the lifespan of road infrastructure which has not specifically been designed for the heavy loads. The alternative heavy vehicle routes should be revisited and adjusted where necessary, to alleviate congestion in the CBDs and safeguard against infrastructure damage.

Freight movement by road poses a challenge for the Dr Kenneth Kaunda DM. A large number of freight vehicles pass through the CBDs on a daily basis and in some instances, have to overnight in the vicinity of the CBDs. Up to 100 heavy vehicles park along the N12, in both directions, and along public roads within the CBDs. It is unsafe for truck drivers to park along these public roads at night, which further causes health issues as no ablution facilities exist within the areas where these vehicles park overnight. In some instances, they have to drive into the CBD to buy food and re-fuel their vehicles before leaving for their overnight locations. These actions cause congestion and safety issues within the CBD, which could be avoided if proper overnight facilities are provided.

A number of CTO counting stations are positioned around Tlokwe to monitor heavy vehicle movement on some of the main corridors entering the city. These CTO counting stations are managed and maintained by SANRAL and the North West Roads department.

Overload Control Law Enforcement is currently only conducted on the N12 (north-east of Tlokwe). The only static weighbridge owned by the Provincial Roads Department is situated along the N12. These facilities have not been operational for some time, which implies that vehicle overload control remains a challenge in the CBD areas. Furthermore, the Ventersdorp weighbridge is not operational. The District does not conduct any overload control law enforcement, as this is primarily the responsibility of the Province. This problem is exacerbated by the fact that the bylaws are old and not specifically focused on freight vehicles.

9.4 Freight overnight facility

To address the need for an overnight facility for the parking of heavy vehicles and accommodation for drivers, a few possible locations were identified. The potential locations are:

- At the intersection of Seraphina Street and the N12 within Potchefstroom;
- Along the N12 on the eastern side (between Gauteng and Potchefstroom) of the proposed N12 bypass;
- At the intersection of Jabulani Street and the N12 outside Klerksdorp (Jouberton); and
- Along the N12 at Wolmaransstad.

The zoning, ownership and suitability of the site need to be investigated before any planning can proceed. The proposed truck stop facility should be integrated with other commercial activities in its surroundings for easy access by truck drivers, as well as the public in general. Typical facilities planned for the site could include:

- Filling station
- Ablution facilities
- Leisure and entertainment facilities
- Lodging
- Commercial developments (retail shops)
- Truck parking areas
- Truck maintenance/wash bay areas

Figure 9.2: Freight Facilities in Dr Kenneth Kaunda DM show the current and proposed freight facilities in Dr Kenneth Kaunda DM.

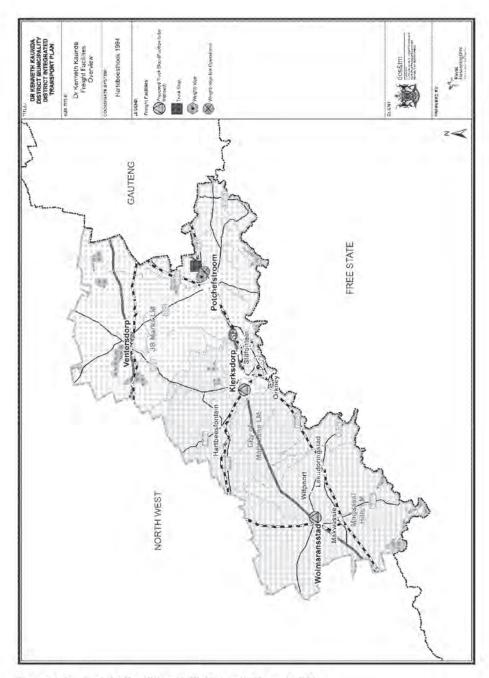


Figure 9.2: Freight Facilities in Dr Kenneth Kaunda DM

9.5 Transport of Hazardous Goods

The North West Provincial Department of Environmental Affairs is responsible for the transportation of hazardous goods. For the spillage of hazardous materials, no management plan is currently in place and incidents are managed on an ad hoc basis. The Department intends to introduce a province-wide incident management system which will link the emergency services of the North West Province (disaster management), district municipalities and local municipalities.

The North West Province has not yet identified major routes for the transport of dangerous goods. This will be done in consultation with the relevant stakeholders. 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.

According to the 2010 DKKDM DITP, there is currently no management plan for road transport-related incidents such as major road accidents or spillage of hazardous materials. Currently incidents are managed on an ad-hoc basis.

Road freight routes for hazardous loads should preferably avoid towns and populated areas, in order to avoid interfering with commuter traffic, however, if this is not possible, routes should pass through industrial areas. The routes should also have adequate structural capacity.

At present, it seems like the Province is managing the movement of hazardous goods on an ad-hoc basis. However, it is required in terms of this Integrated Transport Plan, that certain key routes be classified as hazardous goods routes, and that these routes be clearly demarcated and are closely monitored by an "Incident Management" team, with provision for appropriate response times in the event of an incident.

Furthermore, it is proposed that certain areas be declared no-go areas for hazardous materials except for limited volume local deliveries. Such areas will mainly comprise central business districts and dense residential areas. The implementation of a rigorous hazardous loads movement plan, will involve regulating land usage involving such hazardous materials, to ensure that such development occurs, only, adjacent to appropriate routes.

- The 2015 Tlokwe ITP identified the following strategies with regards to the transport of hazardous materials:
 - HAZMAT vehicles are outdated and need replacement;
 - The fire engine used for HAZMAT incidents is hired from other authorities and may be recalled at any time;
 - The Incident Management System focuses primarily on incidents along the N12 route;
 - A limited number of staff have received advanced training in dealing with serious HAZMAT incidents, however further training is required;
 - The Alternative Freight Route Map requires revision to accommodate serious incidents on the road network; and
 - By-laws are outdated and require alignment with latest legislative requirements.

9.5.1 Hazardous Goods

The movement of dangerous substances and abnormal loads by road is a specialised form of freight transport. Companies are required to follow national regulations to ensure the safety of all road users. In terms of these regulations and codes of practice, additional precautions, such as the classification and display of the type of hazardous cargo on the vehicle, specialist driving training, and notification of the route to be traversed to authorities, are required to ensure that satisfactory levels of safety are achieved.

According to the Federal Highway Administration, the factors to be considered in the preparation of a hazardous goods route network will include, but not necessarily be limited to:

- Population density;
- Terrain considerations;
- Type of road;
- Continuity of routes;
- · Types and quantities of hazardous material;
- Emergency response capabilities; and
- Alternative routes.

The requirements are stipulated in the NLTA Section 37(3), with respect to the movement of dangerous goods on the JB Marks LM road network. This Section states: (3) The strategy must also include a plan for the movement of dangerous substances contemplated in Section 2(1) of the Hazardous Substances Act, 1973 (Act No. 15 of 1973), by road along designated routes in accordance with the general strategy or plan provided for in the relevant Provincial Land Transport Framework.

The definition of dangerous goods is provided in the National Road Traffic Act and provides the quantities of each type of dangerous goods that are exempt from the legislation. The Act also stipulates the requirements in terms of the vehicle markings, as well as the required documentation carried by the driver. Regulations pertaining to the movement of dangerous goods are stipulated in the NRTA.

The responsibilities of the Dr Kenneth Kaunda DM, in accordance with Section 37(3) of the NLTA, concerning the transportation of dangerous goods can be summarised as follows:

- To have a route plan in place for the movement of dangerous goods as required by the NLTA;
- To ensure that dangerous goods are, as far as possible, not transported through residential and ecologically sensitive areas;
- To evaluate route plans submitted by conveyors of dangerous goods, to ensure that the routes are acceptable and do not pose unnecessary and avoidable danger (responsibility of the disaster management department in the office of the municipal manager);
- To be capable of efficiently handling incidents involving dangerous goods;

- To have the necessary equipment and substances available to counter dangerous goods spillages; and
- To enforce the legislation to ensure that dangerous goods vehicles are recognizable and transported according to the legislation.

The recommended road network, which must be used by vehicles conveying dangerous goods, essentially comprises national routes on the road network. Various dangerous goods, for example fuel, need to be delivered into residential areas. However, in terms of the application for a certificate to convey dangerous goods, the proposed route must consist of a direct route from the trip origin onto the DrKKDM major road network (i.e. class 2 and 3 roads), and a direct route from the major road network to the trip destination. The only exception would be if the direct route passes particularly sensitive areas or strategic locations, in which case an alternative route must be provided for approval by the Disaster Management Department for the issuance of the appropriate certificate.

Due to the fact that it is of crucial importance to regulate the transportation of these materials, dialogue between authorities and holders to discuss the permitted routes and allowed times for the transportation of hazardous materials within the Municipal area, are of the utmost importance.

In terms of ecological sensitivity, all planning projects need to comply with the National Environmental Management: Biodiversity Act (NEM:BA: Act No. 10 of 2004), and regulations in providing the co-operative governance in biodiversity management and conservation. The NEM:BA also provides for the National Biodiversity Framework, Bioregional Plans, Biodiversity Management Plans, Biodiversity Management Agreements, the identification, listing and promotion of threatened or protected ecosystems, and alien invasive species control and enforcement.

Figure 9.3 delineates the biodiversity priority areas for the Dr Kenneth Kaunda DM, namely Critical Biodiversity Areas (CBAs), Ecological Support Areas (ESAs) and Protected Areas. CBAs include natural or near-natural terrestrial and aquatic features that are selected based on an areas biodiversity characteristics, spatial configuration and requirement for meeting both biodiversity pattern and ecological process targets. ESAs are natural, near-natural, degraded or heavily modified areas, required to be maintained in an ecologically functional state to support CBAs and/or Protected Areas. Protected Areas are areas which have legal protection under relevant legislation, or which are managed with a primary conservation objective (such as Nature Reserves).

Such bioregional plans are one of the tools provided for in the Biodiversity Act. These plans are used to inform other planning processes that affect biodiversity. The plan identifies a number of Critical Biodiversity Areas (CBAs) that are needed to meet biodiversity objectives, which are used to inform integrated development planning and sustainable development. As such, it is an important consideration in the formulation of the Dr Kenneth Kaunda DM Local Integrated Transport Plan.

A Biodiversity-Compatibility Land Use Guideline takes the challenges of planning for social needs and economic growth, within the sphere of sensitive biodiversity and landscapes, and, provides guidelines on how to determine compatible and incompatible land uses (Refer to **Table 9.2**).

These guidelines take into consideration the CBA categories as mentioned above (i.e. protected area, CBA 1, CBA 2, ESA 1, ESA 2, other natural area, and no natural remaining). This is compared to land management objectives, recommendations, compatible uses and incompatible uses. CBAs and protected areas are the most important ecological areas to meet targets for biodiversity pattern (features), or ecological processes. The ecological risk of hazardous and dangerous goods is very high, and, where possible, CBAs and protected areas should be avoided as hazardous routes.

STAATSKOERANT, 27 NOVEMBER 2020

Table 9.2: Biodiversity-compatible land-use guidelines matrix (Holness & Skowno, 2011)

CATEGORY ON THE CBA MAP	DESCRIPTION	LAND MANAGEMENT OBJECTIVE	LAND MANAGEMENT RECOMMENDATIONS	COMPATIBLE LAND-USE	INCOMPATIBLE LAND-USE
Critical Biodiversity Areas (1)	Areas required to be maintained in a natural or near natural state to meet targets for biodiversity pattern (features) or ecological processes.	Maintain natural land and ecological processes. Rehabilitate degraded areas to a natural or near natural state and manage for no further degradation.	Obtain formal conservation protection where possible. Implement appropriate zoning to avoid net loss of intact habitat or intensification of land use.	Conservation and associated activities. Extensive game farming and ecotourism operations with strict control on environmental impacts and carrying capacities, where the overall there is a net biodiversity gain. Extensive Livestock Production with strict control on environmental impacts and carrying capacities. Urban Open Space Systems	Urban land-uses including Residential (including golf estates, rural residential, resorts), Business, Mining & Industrial; Infrastructure (roads, power lines, pipelines). Intensive Animal Production (all types including dairy farming associated with confinement, imported foodstuffs, and improved/ irrigated pastures). Arable Agriculture (forestry, dry land & irrigated cropping). Small holdings
Critical Biodiversity Area (2)	Cultivated landscapes which retain importance for supporting threatened species	Maintain current agricultural activities. Ensure that land use is not intensified and that activities are managed to minimize impact on threatened species.	Avoid conversion of agricultural land to more intensive land uses which may have a negative impact on threatened species or ecological processes.	Current agricultural practices including arable agriculture, intensive and extensive animal production, as well as game and ecotourism operations, so long as these are managed in a way to ensure populations of threatened species are maintained and the ecological processes which support them are not impacted.	Urban land-uses including Residential (including golf estates, rural residential, resorts), Business, Mining & Industrial; Infrastructure (roads, power lines, pipelines). More intensive agricultural processes than currently undertaken on site.
Scological Arcapust Areas (1)	Natural, near natural and degraded areas required to be maintained in an ecologically functional state to support Critical Biodiversity Areas.	Maintain ecological processes.	Implement appropriate zoning and land management guidelines to avoid impacting ecological processes. Avoid intensification of land use.	Conservation and associated activities. Extensive game farming and ecotourism operations. Extensive Livestock Production. Urban Open Space Systems. Low density rural residential, smallholdings or resorts where development design and overall development densities allow maintenance of ecological functioning.	Urban land-uses including Residential (including golf estates, rural residential, resorts), Business, Mining & Industrial; Infrastructure (roads, power lines, pipelines). Intensive Animal Production (all types including dairy farming associated with confinement, imported foodstuffs, and improved/irrigated pastures) Arable Agriculture (forestry, dry land & irrigated cropping). Small holdings Note: Certain elements of these
					Note: Certain elements of these activities could be allowed subject to detailed impact assessment to

CATEGORY ON THE CSA MAP	DESCRIPTION	LAND MANAGEMENT OBJECTIVE	LAND MANAGEMENT RECOMMENDATIONS	COMPATIBLE LAND-USE	INCOMPATIBLE LAND-USE
					designed to maintain overall ecological functioning of ESAs.
Ecological Support Areas (2)	Areas with no natural habitat which retain potential importance for supporting ecological processes.	Avoid additional impacts on ecological processes.	Avoid intensification of land use, which may result in additional impact on ecological processes.	Existing activities (e.g. arable agriculture) should be maintained, but where possible a transition to less intensive land uses should be favoured.	Any land use or activity which results in additional impacts on ecological functioning, mostly associated with the intensification of land use in these areas (e.g. change of floodplain from arable agriculture to an urban land use or from recreational fields and parks to urban).
Other Natural Areas	Natural and intact but not required to meet targets, or identified as Critical Biodiversity Areas or Ecological Support Areas.	of the Bioregional Plan. The possible existing transformed later be required either due	ese areas are nevertheless subject ed areas should be favoured for de	ons or land-use guidelines are provided a to all applicable town and regional plann velopment before "Other natural areas" a nknown important biodiversity features o d to identify alternative sites.	ing guidelines and policy. Where as before "Other natural areas" may

In terms of the NLTA requirements, it is recommended that hazardous freight routes follow the National routes (N14 and N12). Within DrKKDM, the R30, R71 and R505 have constraints, as the roads pass through Critical Biodiversity Areas, particularly the R30 which is adjacent to the Skoonspruit and Johan Neser Dam. The R53 should be avoided, as it passes through a protected area, namely the Vredefort Dome World Heritage Site. The latter is subject to the various requirements and controls under the UNESCO World Heritage Site Convention.

Due to the presence of environmentally sensitive areas (particularly water courses and natural vegetation), the ability to efficiently handle incidents involving dangerous goods is critical along all national and provincial routes.

Figure 9.3 below indicates proposed hazardous freight routes taking into account the following:

- The environmentally sensitive areas in the DrKKDM; and
- High risk areas with high population concentrations (built-up areas).

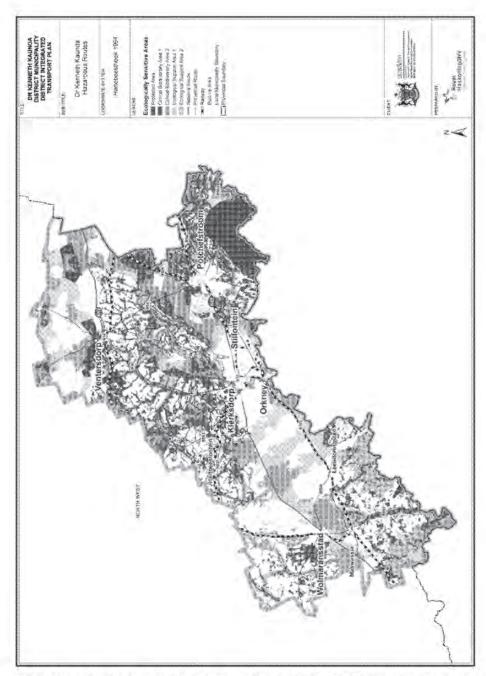


Figure 9.3: Hazardous Freight Routes Environmental Concerns and Population Concentrations

9.6 Transport of Abnormal Loads

The National Road Traffic Act (Act 93 of 1996) and the National Road Traffic Regulations, 2000, prescribe certain limitations on vehicle dimensions and axles, as well as vehicle masses that a vehicle using a public road must comply with. However, certain vehicles and loads cannot be moved on public roads without exceeding the limitations in terms of the dimensions and/or mass as prescribed. Where such a vehicle or load cannot be dismantled, without disproportionate effort, expense or risk of damage, into units that can travel or be transported legally, it is classified as an abnormal load and is permitted to travel on public roads under an exemption permit issued in terms of Section 81 of the National Road Traffic Act.

Where a vehicle or load exceeds the regulated maximum weights and dimensions, and the movement of an abnormal load is considered to be in the economic and/or social interest of the country, an exemption permit may be issued to allow a vehicle(s) transporting such an abnormal load, to operate on a public road for a limited period. The Provincial Administration may issue a permit authorising the vehicle to operate for a specified period on a public road. Extensive stipulations governing these vehicles are contained in TRH 11 (Dimensional and mass limitations and other requirements for abnormal load vehicles, DoT, 2009).

9.7 Overload control

Overloading causes huge damage to the roads' infrastructure nationally, as well as in local areas. To address this issue, it is recommended that the Police Department (PD) ensure that it is up to date on the issues of overloading, and train officers to enforce the regulations with regards to heavy vehicles more stringently. Furthermore, it is important to ensure that the PD works in conjunction with the Provincial, and other authorities in the surroundings.

Road freight routes for abnormal loads should preferably avoid towns and populated areas, to avoid interfering with commuter traffic. If not possible, routes should pass through industrial areas. The routes should have adequate structural capacity.

In the process the following needs to be considered:

- The Province creates a platform where transportation companies and officials can work together to find a mutual agreement;
- Operations on overload control takes place in accordance with the National Department of Transport guidelines;
- Operations on overload control takes place in terms of the Provincial law enforcement strategies;
- Both the main freight routes as well as known "escape routes", are patrolled by experienced personnel within the Police Department;
- A potential weighbridge be identified (on the N12) to ensure that vehicles comply with weight requirements;

- Investigate the possibility of funding from alternative sources for a weighbridge;
- Use of portable scales with the necessary road works, to ensure their accuracy, may be a cost-effective solution for a wider coverage of screening vehicle weights. Currently the screening might be carried out by visual inspection (checking tyre inflation and suspension depression) due to the lack of equipment; and
- In order to be more effective, and operating on a 24-hour basis, the manpower in the PD would need to be reconsidered.

The following provincial and national over load control strategies have been identified:

- 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;
- Give provinces greater capacity to manage roads, mainly by re-classifying ownership of the major roads currently falling under municipalities;
- Municipalities should only be managing local and urban roads; and
- Establish a National Road Maintenance Fund for road maintenance and infrastructure provision.

In addition, the DoT would establish a single national overload control inspectorate and would consolidate the municipal operations to a provincial level, which would then report to the inspectorate. 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. Regular enforcement activities would take place on a provincial level.

The overload control strategy for DrKKDM should comprise of a network of checkpoints, screening stations and static weighing to control overloading. Checkpoints can be move around, and officials would visually screen heavy vehicles and send them to the nearest weighbridge for accurate weighing.

At a screening station the screening will be conducted with weigh-in-motion equipment. Screening stations need to be located along the following routes in DrKKDM:

- R53 (North/South Link)
- R501 (North/South Link)
- R30 (North/South Link)
- R502 (East/West Link)
- R503 (North/South Link)
- R504 (East/West Link)
- R505 (North/South Link)
 N12 (East/West Link)
- N12 (East/West Link)
 N14 (East/West Link)

Static weighbridges are required for prosecution and are expensive. The provincial weighbridge along the N12, as well as an alternative option could be used as the

weighbridge facility at the waste disposal site at Felophepa. A feasibility study should be conducted by NW Province/Sanral.

9.8 Heavy Vehicle Problems and Needs

In the Transport Register and other studies, the following problems and needs relating to heavy vehicle traffic have been identified:

- Heavy vehicle routes through both Potchefstroom, Ventersdorp, Klerksdorp, Orkney and Wolmaransstad are limited to a few specific roads, which cause heavy vehicles to pass through the CBD's causing congestion;
- The main freight route is the N12 passing through the Potchefstroom CBD, Klerksdorp CBD and Wolmaransstad CBD. Extensive damage is caused to the internal road network which could typically be alleviated by a bypass route for heavy vehicles;
- Some of the freight bypass routes are classified as class 3 and 4 roads. Channeling heavy vehicles through the CBD on these routes will cause severe infrastructure problems, as well as shorten the lifespan of the roads which has not been designed for heavy loads;
- There is a need to review and adjust alternative heavy vehicle routes and upgrade them to alleviate congestion in the CBD, as well as a safeguard against infrastructure damage;
- Although new by-pass routes for the N12 have been planned around Potchefstroom and Klerksdorp by Sanral, lack of funding and competing priorities implies that these routes would only be constructed in the long-term;
- Many heavy vehicles, up to 100, park along the N12 within the Potchefstroom CBD, Klerksdorp CBD, and Wolmaransstad CBD in both directions, as well as along other public roads within the CBD. Various problems are caused, such as:
 - Lack of safety for truck drivers;
 - Health issues as no ablution facilities exist;
 - Heavy vehicles drive into the CBD to buy food and re-fuel which causes congestion and safety issues.
 - There is, therefore, a huge need for proper overnight facilities for freight vehicles:
 - There is a lack of the Overload Control Law Enforcement, especially on the N12. The only static weighbridge (on the N12 to the north-east of Potchefstroom), is owned by the North West Provincial Roads Department, and has not been operational for some time:
 - The DrKKDM does not conduct any overload control law enforcement, as this is primarily the responsibility of the Province. This problem is exacerbated by the fact that the by-laws are old and not specifically focused on freight vehicles; and
 - DrKKDM officials indicated that the establishment of an inter-modal freight hub should be investigated, to integrate road, rail and airfreight in one location.







9.9 Proposed Freight Transport Strategies

The strategies for which the DrKKDM will be fully or partly responsible for are summarised below:

- Define road freight routes for abnormal loads which would avoid congested route sections, have adequate structural capacity and have adequate overhead clearance (clearance to overhead lines).
 - Routes should be defined in consultation with NW Province and neighbouring municipalities;
 - Provide strict law enforcement on heavy vehicle routes;
- Define road freight routes for hazardous material (HAZMAT) that would avoid towns and densely populated areas.
 - Routes should be defined in consultation with the NW Province and neighbouring municipalities;
 - Provide strict law enforcement on HAZMAT routes;
 - Replace current HAZMAT vehicles;
 - Train more staff on dealing with serious HAZMAT incidents;
- Revise and refine the Alternative Freight Route Map to alleviate congestion in the CBD, safeguard against infrastructure damage, and to accommodate serious incidents on the N12:
 - Define alternative routes for heavy vehicles (above 8 GVM) to avoid the congested N12 route;
 - Conduct strict law enforcement; and
 - Upgrade heavy vehicle routes.
- Update by-laws and align with latest legislative requirements relating to heavy vehicle traffic;
- Investigate the zoning, ownership and suitability of the proposed site for an
 overnight freight facility. Potential site is at the intersection of Seraphina Street
 and N12. Proceed with the detailed planning and implementation. Accommodate
 parking of heavy vehicles, accommodation for drivers, restaurant and ablutions
 facilities, safety and security.
- Formulate an overload control plan in co-operation with the NW Province including a network of checkpoints, screening stations and static weighing to control overloading.
- Operationalise the N12 Weighbridge and Ventersdorp Weighbridge.
- Conduct a feasibility study for an inter-modal freight hub to integrate road, rail and air freight in one location, together with Matlosana LM, the DrKKDM, as well as the NW Province and Transnet.
- Consider the interface between PC Pelser airport, the N12 and the Johannesburg-Cape Town rail line. An Airport Development Master Plan and Business Plan had been formulated for the PC Pelser Airport, and there is potential for air freight (City of Matlosana, 2011). The Master Plan indicates that:

The municipality is strategically located along the N12, and the Transnet railway line, which constitutes one of country's important freight corridors. The municipality is considering the possibility of establishing a local freight hub. The

development of the Klerksdorp airport (within Matlosana LM, adjacent to JB Marks LM) will assist in the location of the freight and public transport hubs, to promote inter-modality.

9.10 Proposed Freight Transport Projects

From the above Freight Transport Strategies, the following freight projects have been formulated:

- Define road freight routes for abnormal loads (Local Municipalities/NW Province);
- Define road freight routes for hazardous material (Local Municipalities /NW Province);
- Revise and refine the Alternative Freight Route Map (Local Municipalities /NW Province);
- Update by-laws relating to heavy vehicle traffic (Local Municipalities);
- Feasibility study of the proposed site for an overnight facility for heavy vehicles (at the intersection of Seraphina Street and N12 or along the N12 at the intersection with the future N12 bypass) (Sanral);
- Formulate an overload control plan (NW Province);
- Conduct a feasibility study for an inter-modal freight hub (NW Province/Sanral)
- Operationalize the N12 Weigh-Bridge (NW Province); and
- Upgrade freight routes for heavy vehicle traffic (NW Province on provincial routes, Sanral on national routes, Local Municipalities on municipal roads).

TABLE OF CONTENTS

10	CHAPTER 10: NON-MOTORISED TRANSPORT	10-1
10.1	INTRODUCTION	
10.2	NMT STRATEGIES TO PROMOTE WALKING AND CYCLING	
10.2.2	Strategies from Tlokwe LITP (2015)	
10.2.3	Strategies from JB Marks IDP (2016)	
10.3	PROPOSED NMT STRATEGIES	
10.4	PROPOSED NMT PROJECTS	10-3

LIST OF FIGURES

FIGURE 10.1:	NON-MOTORISED TRANSPORT NETWORK FOR KLERKSDORP CBD	10-5
FIGURE 10.2:	NON-MOTORISED TRANSPORT NETWORK FOR POTCHEFSTROOM	10-6
FIGURE 10.3:	NON-MOTORISED TRANSPORT NETWORK FOR VENTERSDORP	10-7

10 CHAPTER 10: NON-MOTORISED TRANSPORT

10.1 Introduction

This Chapter covers the following aspects of Non-Motorised Transport:

- DoT Minimum Requirements:
- Guidelines from the NW PLTF (2017);
- · Strategies from previous studies;
- Proposed NMT Strategies; and
- Proposed NMT Projects, giving detailed scope, cost estimate and locality map.

10.1.1 Minimum Requirements

The DoT Minimum Requirements specifies that the NMT Plan must address:

- Measures to promote walking and cycling;
- Map the proposed walking and cycling network;
- Upgrade the existing road network to better accommodate walking and cycling;
- Encourage residents to walk or cycle instead of utilising motorised transport;
- Provide a five-year programme for building NMT networks and promoting behaviour change; and
- Focus on infrastructure, e.g. measures to accommodate NMT in new property developments.

10.2 NMT Strategies to Promote Walking and Cycling

10.2.1 NMT Strategies from North West Province PLTF

There exists a great need for the development of an NMT Master Plan for the North West Province. The Provincial NMT Strategy (PLTF, 2016) is as follows:

- Take cognisance of the Key Performance Indicators;
- · Conduct a NMT Road Safety Programme;
- Include NMT Components on all road projects;
- Include the NMT Plan in all DITP's:
- Provide NMT Facilities, based on the NMT Plan;
- Adopt NMT Guidelines to be used for the Province;
- Implement the Shova Kalula Programme;
- Utilise the Public Transport Infrastructure Grant (PTIF) where NMT will receive priority; and
- Increase the width of gravel shoulders to provide for NMT.

The NW Province would like to equip the entire province with safe and convenient NMT facilities. To achieve this, the Province should ensure that:

- Every provincial road project should include an NMT component;
- NMT should be approached at a municipal level and an NMT Plan should be included in the District ITP's;

- A set of NMT design guidelines should be adopted, covering the following elements:
 - Class of NMT facility
 - Width of facilities
 - Signage and road markings
 - Universal access design
 - Street lighting
 - Traffic calming
 - Traffic signals
 - Landscaping
 - Street furniture

Three PLTF strategies are noteworthy:

Shova Kalula Programme:

This is a DoT project and involves the provision of subsidised bicycles to underprivileged learners. The PLTF proposes that education, awareness campaigns at schools, and major employers be implemented.

A total number of 13 330 bicycles were distributed in schools throughout 15 local areas within the North West Province. In the JB Marks LM, only Ventersdorp received bicycles under this program. The programme needs to be expanded to realise its full effect.

Increase the width of gravel shoulders to provide for NMT and agricultural vehicles:

It is recommended that the accommodation of NMT and animal-drawn vehicles be incorporated as an integral element of the provincial road management system. This would be carried out by upgrading and increasing the width of gravel shoulders along provincial roads, which would increase the safety of NMT users.

Animal-Drawn Carts:

The NW Province requested the SABS to develop specifications for the building of animal-drawn vehicles (NMV) for local usage in 2002. Subsequently, preferred design concepts for prototype NMVs were identified. The SABS was contracted to manage the development and testing of specific prototypes, and they sub-contracted various manufacturers, field, - and mechanical testers to assist. The current status is unknown.

Herewith below, are the PLFs recommendations:

- Key priority areas should be schools and clinics, where a large majority of pedestrian trips terminate;
- All local municipalities must be influenced to complete an NMT Plan;
- The NW Government plans to facilitate the preparation of Rural Transport Plans with the emphasis on NMT;
- The provincial government's plans to invest in electric bicycles/ carts should be accelerated to reduce the carbon footprint of public transport, and to increase rural mobility; and
- Road safety education policies and implementation plans need to be developed.

10.2.2 Strategies from Tlokwe LITP (2015)

A few high-level NMT strategies have been defined by the 2015 Tlokwe LITP, namely:

- Provide sidewalks, lay-bys and pedestrian crossing facilities at schools; and
- · Provision of walkways, cycle lanes and lighting.

One project identified from the 2015/16 IDP was included in the ITP:

 Paving of sidewalk on Sarafina road: New paving of 14 100m² of sidewalk would be carried out by June 2016. Wards 18 and 19; budget was R12.6million from MIG funding.

10.2.3 Strategies from JB Marks IDP (2016)

Needs identified during the JB Marks IDP community participation process (2016) with regards to NMT include:

- Pedestrian safety at all schools, as there is an insufficient amount of Zebra crossings at schools and speedbumps to ensure slowing down of vehicles in front of the schools in our ward. Especially at "Woel en Werskaf" nursery school in Ballie Park. (Ward 3);
- · Paving of sidewalks in Ikageng Ward 6;
- There is a need for a bicycle lane from the entrance of Mohadin at Promosa road to ensure the safety of cyclists and pedestrians (Ward 9);
- Pedestrian sidewalks in Ward 15;
- Paving of sidewalks in Ward 16 in RDP housing area;
- Sidewalks required in Ward 21;
- Bicycle lanes to town out of township (Ward 21);
- Bicycle lanes in Ward 22, 23, 32;
- Sidewalks required in Ward 22, 23, 32;
- Pedestrian bridges for safety (Ward 24); and
- Paved pedestrian walkways in Molen street, Bult area, Mooivallei plotte, and Klinkenberg street (Ward 24).

10.3 Proposed NMT Strategies

The following strategies are high-level descriptions covering a broad scope based on the PLTF strategies, the 2015 Tlokwe CITP, as well as the Transport Needs identified in Chapter 5.

- Develop and provide NMT and road safety education, as well as awareness campaigns at schools and major employers;
- Provide walk and cycle routes with lighting within 5 km of social facilities, such as schools, universities, municipal pay points, office blocks and industries;
- Provide walkways to main PT facilities within a 3 km radius of the facility;
- Provide proper sidewalks that are universally accessible along all CBD streets;
- Provide cycle paths and walkways between the previously disadvantaged residential areas and high-density employment areas, schools, and social facilities; and
- Co-ordinate actions with NW Province.

10.4 Proposed NMT Projects



From the above NMT Strategies the following projects have been identified:

- Investigate Dr Beyers Naude street in Potchefstroom as a pedestrian route;
- Develop and provide NMT and road safety education, as well as awareness campaigns at schools and major employers;
- Provide sidewalks, lay-bys and pedestrian crossing facilities at schools;
- · Continue program of paving of sidewalks;
- Provision of cycle lanes and lighting serving schools, major commercial centres and public transport facilities;
- Pedestrian movements in the Potchefstroom CBD between the Potchefstroom main taxi rank and Mooi River Mall on Goven Mbeki rive;
- Pedestrian movements between Mooi River Mall and Canal Crossing Centre on the N12 east;
- Church Street pedestrian mall;
- Need a bicycle lane from the entrance of Mohadin at Promosa Road for safety to cyclists and pedestrians (Ward 9);
- Upgrade of pedestrian crossings at schools, provision of taxi lay-byes, and shelters for school buses at schools.

Figures 10.1, 10.2 and 10.3 show the proposed NMT networks for Klerksdorp CBD, Potchefstroom and Ventersdorp, respectively.

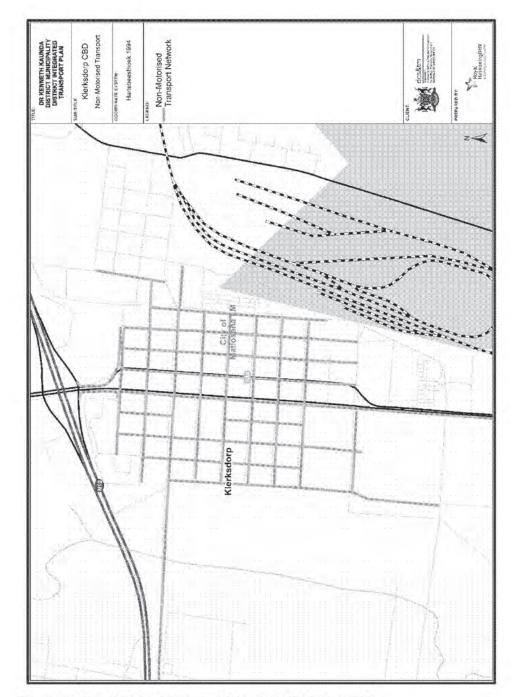


Figure 10.1: Non-Motorised Transport Network for Klerksdorp CBD

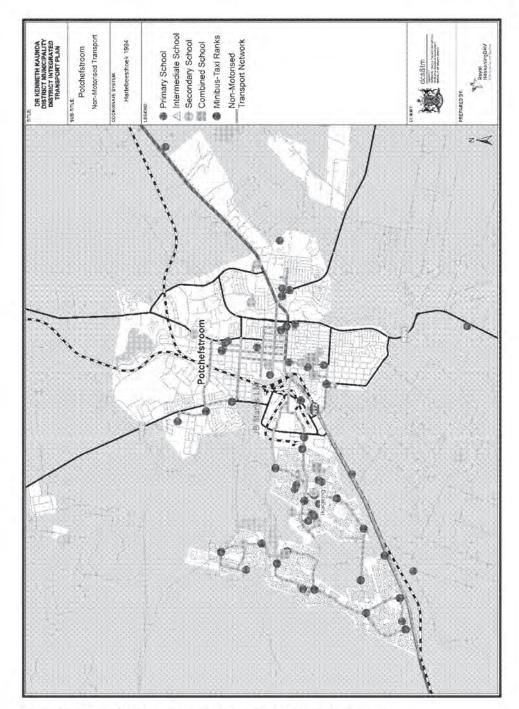


Figure 10.2: Non-Motorised Transport Network for Potchefstroom

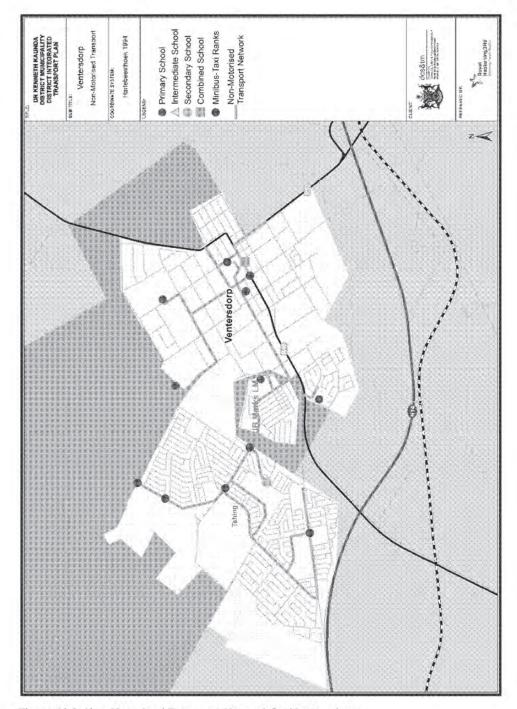


Figure 10.3: Non-Motorised Transport Network for Ventersdorp

TABLE OF CONTENTS

11.	LEARNER TRANSPORT	11-2
11.1	INTRODUCTION	11-2
11.1.1	The National Learner Transport Policy	11-2
11.1.2	Shava Kalula Project	11-3
11.1.3	Learner Transport in North West Province	11-4
11.1.4	Status of Learner Transport Contract Information	11-6
11.2	LEARNER TRANSPORT IN JB MARKS LM	11-7
11.2.1	Subsidised Learner Transport	11-7
11.2.2	Non-Subsidised Transport	11-9
11.3	LEARNER TRANSPORT IN MAQUASSI HILLS LM	11-11
11.3.1	Subsidised Learner Transport	11-11
11.3.2	Non-Subsidised Transport	11-11
11.4	LEARNER TRANSPORT IN MATLOSANA LM	11-12
11.4.1	Subsidised Learner Transport	11-12
11.4.2	Non-Subsidised Transport	11-14
11.5	PRIVATE TRANSPORT	11-17
11.6	NON-DEDICATED LEARNER TRANSPORT SERVICES	11-17
11.7	CONCERNS REGARDING LEARNER TRANSPORT	11-17
11.7.1	General Concerns	11-17
11.7.2	Issues Identified by the Transport Operators	11-17
11.8	LEARNER TRANSPORT STRATEGY	11-18
11.9	REFERENCES	11-18
	LIST OF FIGURES	
FIGURE 11	1.1: RURAL SCHOLAR CONCEPTUAL TRIP MAP	11-2
FIGURE 13	1.2: OVERVIEW OF SUBSIDISED LEARNER TRANSPORT IN JB MARKS LM	11-8
FIGURE 13	1.3: Subsidised Learner Transport in Potchefstroom	11-8
FIGURE 11	1.4: SUBSIDISED LEARNER TRANSPORT IN VENTERSDORP	11-9
FIGURE 13	1.5: NON-SUBSIDISED LEARNER TRANSPORT SERVICES, POTCHEFSTROOM	11-10
FIGURE 11	1.6: NON-SUBSIDISED LEARNER TRANSPORT SERVICES, VENTERSDORP	11-10
	LIST OF TABLES	
TABLE 11.		
TABLE 11.	2: SCHOOLS WITH SUBSIDISED TRANSPORT, JB MARKS LM	11-7
TABLE 11.	3: SCHOOLS WITH SUBSIDISED TRANSPORT, MAQUASSI HILLS LM	11-11
TABLE 11	4: SCHOOLS WITH SUBSIDISED TRANSPORT, CITY OF MATLOSANA LM	11-12

11. LEARNER TRANSPORT

11.1 Introduction

" the struggle for access to safe schools that offer quality education continues to elude most learners."

Foronaaz Veriava (2017)

According to the National Household Travel Survey (StatsSA, 2013), 'walking all the way' was the primary method utilised by learners to reach their educational institutions in all nine provinces. Of the 17,4 million learners that attended educational institutions, more than half (about 11 million) walked all the way, and about 2,6 million learners made use of taxis to travel to their educational institutions.

The above-mentioned figures, clearly illustrate that the learner transport situation in South Africa is an issue that requires attention. It is a complex issue with many aspects. In their study of transport and rural development in the North West Province, Motatsa & Mokwena (2014), designed a conceptual trip map (Figure 11.1) to illustrate factors that influence learner mobility.

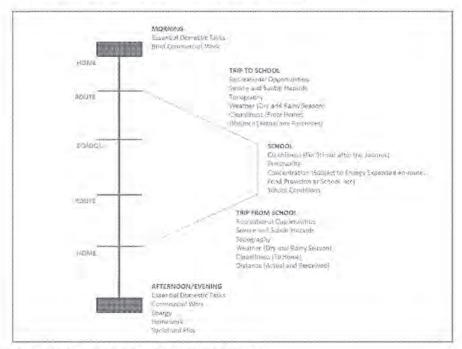


Figure 11.1: Rural Scholar Conceptual Trip Map

Source: Motatsa, K.W. & Makwena, O.H. 2014

11.1.1 The National Learner Transport Policy

The National Learner Transport Policy, 2015 states the following:

"The DoT together with the DBE recognised the need to develop a national learner transport policy to address the problems mentioned above and to change the current learner transport environment. The Policy provides a uniform framework and an enabling environment for government and other stakeholders to address learner transport challenges."

The primary objectives of this Policy are to provide a uniform approach to norms and standards, promote co-ordination and co-operation among stakeholders, and provide a framework for monitoring, and evaluation of learner transport services. Learner transport will be provided based on numerous guiding principles, including operational safety and efficiency, broad-based access, equity and redress, operational sustainability and multi-modal integration. The target group for subsidised transport is learners who attend grade R to 12 and live in areas where they do not have access to public transport services and walk long distances to school.

The Policy makes a distinction between the following classes of learner transport:

- Dedicated learner transport services which exclusively transport learners and can be a subsidised or a non-subsidised service.
- Non-dedicated services that transport the general public, as well as learners with or without government subsidised tickets.

At a meeting of the Parliamentary Monitoring Group (September 2015), the key elements of the policy were highlighted. Certain of the elements acknowledged were:

Safety:

- Vehicles have to meet the safety requirements of the National Road Traffic Act No 93 of 1996.
- Road infrastructure, pick-up/drop off points/stops and signage for the safe transportation of the learner should be taken into consideration.
- Provincial Departments of transport and municipalities shall ensure that there is sufficient and efficient law enforcement to monitor the operations.

Design:

Design should promote all types of transport and ensure integration of all modes.

Operators:

- Only authorised operators with approved modes of transport shall be contracted.
- A standardised measure of remuneration for subsidised learner transport based on total kilometres travelled should be used. Factors such as road conditions must be considered.
- Remuneration shall be funded through provincial treasuries budget allocations.

11.1.2 Shova Kalula Project

The Shova Kalula (meaning pedal easy) project, has the following aims:

- To promote cycling as a low-cost mobility solution which would improve rural accessibility/ urban mobility to basic services, including access to educational centres;
- To improve access to quality education by low cost, affordable and effective NMT service; and
- To promote small business developments and job creation through the establishment of maintenance systems and programmes.

Through this initiative, bicycles are supplied to children in rural, semi-rural and peri-urban areas who meet the criteria (walk more than 3km to get to school, etc.). Road safety forms an integral part of the programme and although the Shova Kalula project is a national initiative, the NDoT is willing to support provinces, amongst others, by subsidising the tender process, supplying initial stock and developing skills of shop managers. They will also liaise with NRA regarding the creation of non-motorised infrastructures, such as bicycle tracks and pedestrian walkways. Provinces are to undertake the overall implementation and control of the projects. Municipalities are expected to work with all departments (education, agriculture, sports and recreation, housing and environmental affairs) to expand the role of bicycle transport. (NMT Conference, 31 October 2014).

11.1.3 Learner transport in North West Province

11.1.3.1 Background

According to the National Household Travel Survey report of 2013 in North West Province, approximately 7% of respondents indicated that they walked all the way, while 26,1 % used public transport (2.7% train, 10% bus, 7.8% taxi). Many learners still walk to their transport. The NHTS figures report that 97% of learners in North West Province walk up to 15 minutes and 2.9% 15 to 30 minutes to their first transport. In addition, learners have to wait for transport to arrive (93% wait up to 15 minutes), and then still have to walk some distance to their schools (94% walk up to 15 minutes).

Learner transport is the joint responsibility of the Departments of Basic Education and the Department of Transport. (North West Province PLTF, 2016). The administration of licences that was previously handled by the Department of Education, was transferred to the Department of Public Works, Roads and Transport. However, the Department of Education I remains involved regarding service design and general liaison (CPTR, 2007-2012), as well as by providing lists of learners who require transport.

Learner transport can be divided into the following categories;

- Dedicated learner transport, i.e. these vehicles transport only learners and no other passengers. These services can be subsidised or non-subsidised;
- Non-dedicated learner transport services many learners use regular public transport which transports the general public; and
- Private transport some learners are transported to school by transport organised and paid for by their parents/families.

11.1.3.2 Current Situation

In July 2017, new learner transport service providers were appointed in all four District Municipalities. The NTI (Northwest Transport Investments), established as a parastatal company solely owned by the North West Provincial Government, was the contracting authority acting on behalf of the North West Province Department of Transport.

The service providers are being paid on a monthly basis from the North West Provincial Government budget. The term of these contracts is five years.

All previous contracts due to expire in March 2018, were given an extension until the end of April 2018. As of 1 May 2018, the only contracts in place will be the new contracts. Many of the old service providers working on month-to-month contracts entered into the new five-year contracts. A total of 55 contracts were awarded. These service providers service the district through a total of 175 buses. Collectively, a distance of 13 244 kilometres a day is covered, with the average distance travelled being 240 kilometres. The longest distance travelled by an operator is 840 kilometres per day.

Table 11.1 below lists the contractors indicating the number of buses they offer, as well as the daily distances travelled. Unfortunately, school names were not provided by the department.

Table 11.1: Learner Transport Operators - DR KKDM, 2018

NO.	OPERATORS COMPANY NAME	KM PER DAY	NO. OF BUSES
1	Janerro Group	32.0	1
2	Kumalampu Trading Enterprise	415.2	4
3	Zenzele	61.0	5
4	An Boqo Taxi Service(Pty)Ltd	284.0	4
5	Boipelo Solutions	68.0	2
6	Bokgaitsadi Nw Facilitators	328,0	4
7	Chongo Express Cc	285.6	3
В	Cmm Trading Cc	360.6	5
9	Comakae Holdings	133.0	4
10	Dilaga Trading	268.0	3
11	Dns Sihlangene Suppliers	121.0	3
12	Dikopane Project Management	508.0	4
13	Diminos Business Enterprises	56.0	2
14	Dineoza Enterprise And Projects (Pty) Ltd	104.8	3
15	Dinkebogile Transport Service	241.8	3
16	Dintwe Transport Services and Tours Cc	68.0	4
17	Dipico Mining and Construction Cc	86.0	3
18	Dokos Design Clothing Cc	114.0	3
19	Fadbet Business Support Service	166.6	3
20	G-Kids Transport	128.6	4
21	Gogontle Security Maintenance Service	150.0	3
22	Going Places Construction and Projects 303 Cc	132.6	2

NO.	OPERATORS COMPANY NAME	KM PER DAY	NO. OF BUSES
23	Gosema Business Solutions (Pty) Ltd	139.0	3
24	Intensiv Civils and Projects	194.0	
25	Kanjee Tour & Projects	204.0	3
26	Katlamelo Maintenance and Construction Services	273.2	4
27	Kc Moroke Construction (Pty) Ltd	840.2	12
28	Ketshabile Trading Enterprise Cc	86.0	2
29	Koa And Gomolemo Construction	332.8	3
30	Kobamelo Construction and Services	238.0	3
31	Les and Sons (Pty) Ltd	98.0	3
32	Malenyalo Construction & Projects	518.8	3
33	Man Moroko Alocious Nthusang Cc	328.8	3
34	Mdila Trading Enterprise	446.0	3
35	Moroko Wa Byala Trading	48.0	1
36	Nomdimba & Tutuse Road Construction Limited	160.0	2
37	Ntshafatso Transport Services Cc	243.2	3
38	Odi-Mor Catering Services and Projects	284.0	3
39	Ome Business Enterprise	350.4	3
40	Panyaza Transport Services Cc	414.2	3
41	Perfect Girls Trading	338.0	3
42	Panyane Bus Service Cc	486.6	3
43	Presevation Trading Enterprise Cc	276.0	3
44	Ragadimeng	334.0	3
45	Ratang Transport & Driving School Cc	201.8	3
46	Sadimo Trading	123.2	3
47	Segodi Transport Service Cc	282.0	3
48	Snebu Trading and Projects Cc	243.2	4
49	Tapisego Trading and Projects	102.0	3
50	Teborea Security Services	274.6	3
51	The Kwakwanta Trading Enterprise	108.0	1
52	Triple M Passenger Services	382.0	5
53	Thulani Investment Cc	41.0	2
54	Xhumani Makhubeni Trading (Pty) Ltd Ore Thando Trading Enterprise (Pty) Ltd	352.0	3
55	Tmt Manos	388.8	3
	TOTAL	13244.6	175

11.1.4 Status of Learner Transport Contract Information

The information concerning the 2017 contracts, only became available after the Local Integrated Transport Plans were already completed for the three local municipalities. Therefore, the LITP's included information on the previous contracts. As many of the contractors remained the same, and presumably the same schools still require assistance, as well as for the purpose of providing an historic picture, the older information, such as school services is included in this Chapter. However, no contract specific information (such as number and duration)

regarding the old contracts is included in this Chapter, seeing as the 2017 contracts replace the old contracts.

11.2 Learner Transport in JB Marks LM

11.2.1 Subsidised learner transport

Transport services to learners (in the form of minibuses or buses) are offered at several nursery, primary, and high schools in JB Marks LM. Transport services to some of the schools are provided under the learner transport contracts, managed by the Department of Education, whilst other services are organized and paid for by parents. The scholar transport services are mainly operated by dedicated private buses and mini-bus taxis. There are nine learner transport operators in Potchefstroom, operating 32 routes and 5 licensed learner transport operators in Ventersdorp, with a number of applications pending (PRE, database, June 2016). **Table 11.2** lists the schools in JB Marks that were previously receiving subsidised transport, whilst the location of these schools is shown in **Figure 11.2**.

Table 11.2: Schools with Subsidised Transport, JB Marks LM

NAME	TYPE
Bert's Bricks Primary	Primary School
Bokamoso Primary	Primary School
Botoka Comprehensive	Secondary School
Buffelsvlei Intermediate	Combined School
Cecilia's Primary	Primary School
De Beerskraal Primary	Primary School
Duduetsang Primary	Primary School
Ikhutseng Intermediate	Combined School
Mogodiri Primary	Primary School
Mponeng Primary Farm School	Primary School
Nthebe Primary	Primary School
Opang Diatla Intermediate Farm School	Combined School
Ourief Primary	Primary School
Padi Intermediate	Combined School
Phiri Secondary	Secondary School
Rabana Primary	Primary School
Rabana Primary	Primary School
Thuka Intermediate	Combined School

Figure 11.2 gives an overview of subsidised learner transport in JB Marks LM.

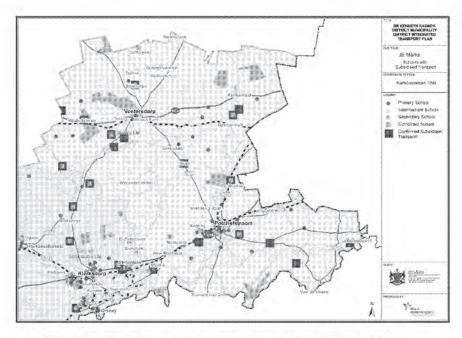


Figure 11.2: Overview of Subsidised Learner Transport in JB Marks LM

The more detailed maps in Figure 11.3 and Figure 11.4 show the distribution of schools in the Potchefstroom and Ventersdorp being serviced by subsidised transport.

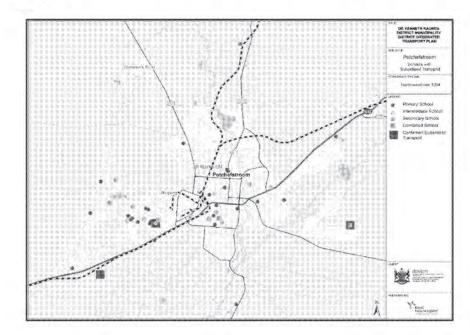


Figure 11.3: Subsidised Learner Transport in Potchefstroom

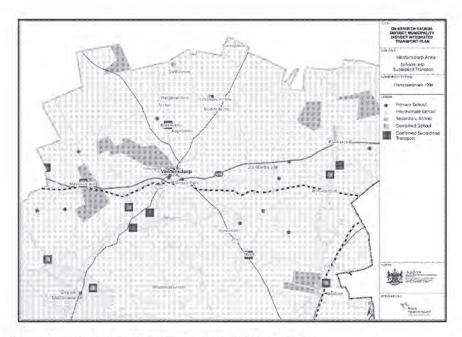


Figure 11.4: Subsidised Learner Transport in Ventersdorp

11.2.2 Non-subsidised transport

Minibus taxis, small bus operators and light delivery vehicles (LDV's), and even animal-drawn carts, provide an unsubsidised learner transport service. The fact that this transport is dedicated to transporting learners, specifically distinguishes it from general public transport.

Figure 11.5 (Potchefstroom) and Figure 11.6 (Ventersdorp) indicate the school serviced by non-subsidised transport services. Approximately 20 schools in Potchefstroom and 3 schools in Ventersdorp provide non-subsidised transport.

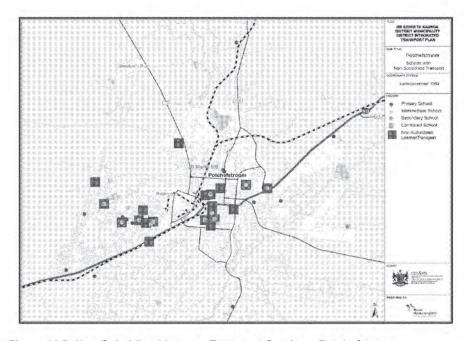


Figure 11.5: Non-Subsidised Learner Transport Services, Potchefstroom

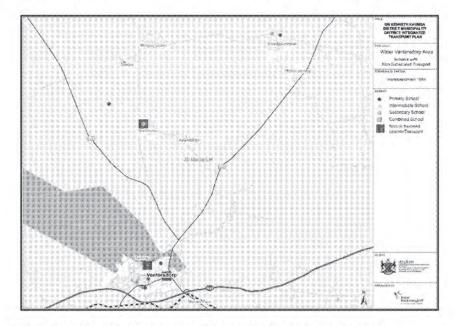


Figure 11.6: Non-Subsidised Learner Transport Services, Ventersdorp

11.3 Learner Transport in Maquassi Hills LM

11.3.1 Subsidised learner transport

Subsidised transport services in Maquassi Hills are mostly to rural schools (see Figure 11.6 below). Transport services to some of the schools is provided under the learner transport contracts managed by the North West Province Department of Community Services and Transport Management, whilst other services are organised and paid for by parents. The scholar transport services are mainly operated by dedicated private buses and mini-bus taxis. Before the new contracts of 2017, MH LM had contracts with 24 service providers from the area. The schools are listed in **Table 11.3**.

Table 11.3: Schools with Subsidised Transport, Maguassi Hills LM

NAME	TYPE
Bareetse	Primary School
Greylingsrus	Primary School
Hollowayrust Primary School	Primary School
Laerskool Makwassie	Primary School
Mahlomabedi	Primary School
Phakedi	Primary School
Samuel Phiri	Primary School
Sentihaga	Primary School

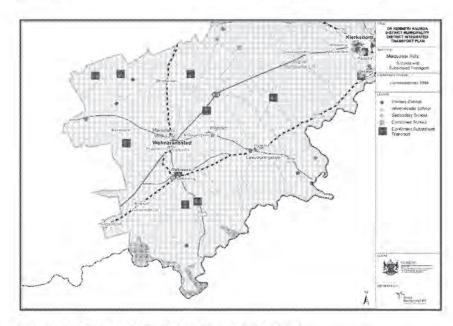


Figure 11.7: Overview of Dedicated Learner Transport

11.3.2 Non-subsidised transport

There is not a lot of evidence for non-subsidised learner transport in Maquassi Hills. Only one school in Kgakala came up in the list.

Figure 11.58 indicates that the school is serviced by non-subsidised transport services.

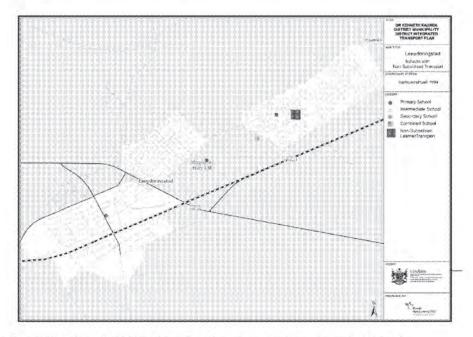


Figure 11.8: Non-Subsidised Learner Transport Services, Leeudoringstad

11.4 Learner Transport in Matlosana LM

11.4.1 Subsidised learner transport

Schools in the City of Matlosana LM with confirmed subsidised transport, is listed in **Table 11.4.**

Table 11.4: Schools with Subsidised Transport, City of Matlosana LM

NAME	TYPE
Bolopapelo Intermediate	Combined School
Bosworth	Combined School
Cocekani Comprehensive	Secondary School
Khuma Primary	Primary School
Letlhasedi Combined	Combined School
Lofdal Christian School	Combined School
Maheelo Intermediate	Combined School
Nkagisang Combined	Combined School
Syfergat	Primary School
Tshedimosetso Secondary	Secondary School
Vaal Reefs Technical High School	Secondary School

Figure 11.2 gives an overview of subsidised learner transport in the City of Matlosana LM.

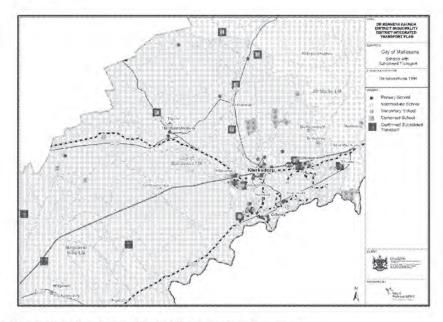


Figure 11.5: Overview of Subsidised Learner Transport

The maps below in Figures 11.6 and 11.7 provide a more detailed view.

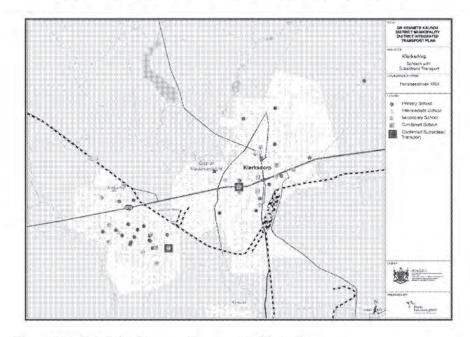


Figure 11.6: Subsidised Learner Transport in Klerksdorp

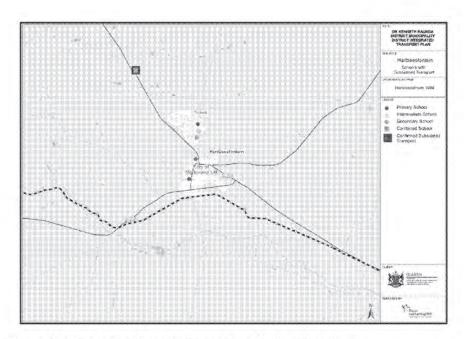


Figure 11.7: Subsidised Learner Transport in Hartbeesfontein

11.4.2 Non-subsidised transport

In the City of Matlosana there are many non-subsidised operators. Refer to **Figures 11.8 to 11.11** below to see schools in Klerksdorp, Orkney, Jouberton and Stilfontein respectively.

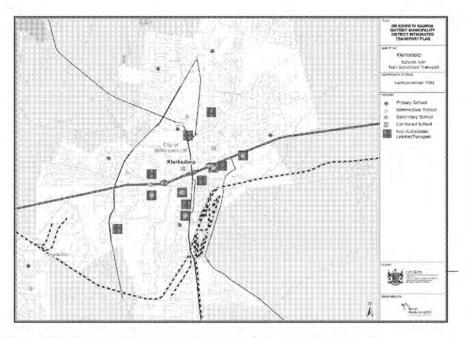


Figure 11.8: Non-Subsidised Learner Transport Services, Klerksdorp

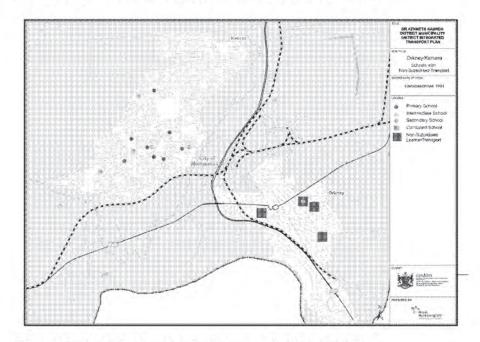


Figure 11.9: Non-Subsidised Learner Transport Services, Orkney

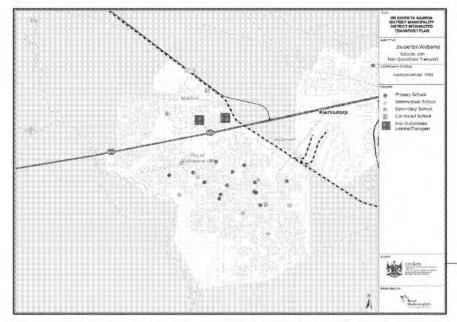


Figure 11.10: Non-Subsidised Learner Transport Services, Jouberton

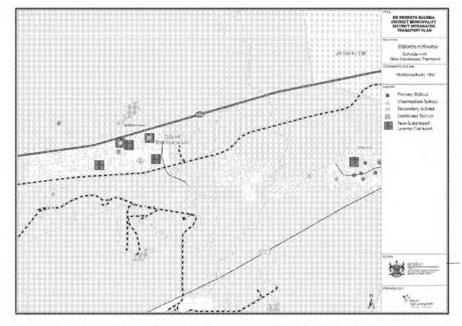


Figure 11.11: Non-Subsidised Learner Transport Services, Stilfontein

11.5 Private Transport

Some learners are transported to school by transport organised and paid for by their parents/families. According to the Department, many schools for children with special needs make use of private transport.

11.6 Non-Dedicated Learner Transport Services

Many learners use regular public transport which transports the general public

11.7 Concerns regarding Learner Transport

11.7.1 General concerns

During a meeting of the Portfolio Committee on Public Works and Transport in August 2015 (described in a post on the South African Government website), some issues transport operators are faced with were mentioned by the Chairperson of the North West Small Bus Operator Council, (NWSBOC).

Some of these issues (paraphrased) are listed below:

- Contracts have loopholes that do not benefit bus operators and puts the safety of the learners at risk;
- Equal rates are applied for paved and gravel roads. This is a disadvantage as the poor condition of gravel roads results in higher maintenance cost on vehicles. Many operators have returned to certain routes which are not contributing to business growth, causing learners not to have transport and some vehicles overloaded due to a lack of transport;
- Payments are not reliable, and as such, operators are wary to upgrade vehicles; and
- Permits take time to be renewed by the Department when contracts are awarded.

Other general concerns include issues such as:

- The poor condition of rural roads and unsafe vehicles which can put learners' safety at risk;
- Uncoordinated, unreliable services which cause learners to miss school;
- Lack of administration which result in individuals abusing the system;
- Lack of coordinated planning;
- Inadequate loading and off-loading facilities. Scholars are often picked up and dropped within the streets;
- Lack of side-walks and NMT facilities;
- No proper pedestrian crossing facilities near schools; and
- Some of the scholar transport vehicles are poorly maintained and is therefore a safety risk for scholars.

11.7.2 Issues identified by the transport operators

At an LITP Stakeholder meeting (Friday, 9 September 2016), the following issues were identified by the SA Scholar Transport Operators Association:

Scholar transport routes are full of potholes and unsafe;

- Scholar transport vehicles are unroadworthy;
- 4+1 vs taxi association conflicts also impact on the scholar transport and affects the scholars;
- Dual membership of taxi associations (especially Greater Ventersdorp Taxi Association) and South Africa Scholar Transport Operators Association (SOSTOA) is an issue;
- Parents pay for the transport which is not subsidised by the Province's Department of Transport or Department of Education; and
- Most of the permits have been upgraded from areas to routes.

11.8 Learner Transport Strategy

At the local municipality level, the learner transport strategy focuses on local road access, traffic management, road safety, NMT facilities, stops and lay-by's.

The following strategies have been proposed for the local municipalities:

- Provide walk and cycle routes with lighting within 1 km of schools along main access roads;
- Provide cycle paths and walkways between the previously disadvantaged residential areas and schools, amongst other social facilities; and
- Provide lay-bys, shelters, and pedestrian crossing facilities at schools.

At the District Municipality level, the focus should be on:

Planning and coordinating:

- As part of the DrKKDM's IPTN development, conduct surveys regarding the Learner Transport demand and design public transport routes and services, to meet the demand;
- Consider modal integration in all planning aspects; and
- Ensure learner safety in all designs.

Administration and monitoring of the system:

- Spot checks to ensure that learner safety remains a top concern;
- Proper management of contracts and remuneration; and
- Deal with applications speedily and efficiently.

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TABLE OF CONTENTS

12	CHAPTER 12: INSTITUTIONAL ARRANGEMENTS	12-2
12.1	INTRODUCTION	12-2
12.1.1	DoT's DITP Minimum Requirements	
12.1.2	Co-operative Government	12-2
12.1.3	Assignment of Functions	
12.2	SCOPE OF REPORT	
12.3	CURRENT INTERNAL INSTITUTIONAL STRUCTURES IN DR KENNETH KAUNDA DM DEALING WITH TRANSPORT	
12.3.1	Political Structure	
12.3.2	Administrative Structure	
12.3.3	Towns included in the Dr Kenneth Kaunda DM	
12.3.4	Cooperative governance	12-4
12.3.5	Ward Committees	12-5
12.3.6	Capacity of Transport Division	12-5
12.4	PUBLIC SECTOR TRANSPORT STAKEHOLDERS	12-6
12.4.1	Dr Kenneth Kaunda District Municipality	
12.4.2	The Department of Transport (national)	12-6
12.4.3	The National Public Transport Regulator (NPTR)	
12.4.4	The Provincial Regulatory Entity (PRE)	
12.4.5	The Passenger Rail Agency of SA (PRASA)	
12.4.6	Transnet Limited	
12.4.7	The South African National Roads Agency Limited (SANRAL)	12-7
12.4.8	The Cross-Border Road Transport Agency (CBRTA)	12-8
12.4.9	The Road Traffic Management Corporation (RTMC)	
12.4.10	The Road Traffic Infringement Agency (RTIA)	
12.4.11	The Airports Company of South Africa (ACSA)	12-8
12.4.12	The National Treasury (NT)	
12.4.13	The Financial and Fiscal Commission (FFC)	12-8
12.4.14	Adjacent municipalities	
12.5	PRIVATE SECTOR TRANSPORT STRUCTURES	12-9
12.5.1	Introduction	12-9
12.5.2	Minibus taxi associations	12-9
12.5.3	Bus Operator Associations	12-10
12.5.4	Metered Taxi Associations	
12.5.5	Commuters and the general public	12-10
12.6	CONSULTATIVE MECHANISMS AND CO-ORDINATING STRUCTURES	
12.6.1	The proposed North West Province Transport Co-Ordinating Structure	12-11
12.6.2	The Intermodal Planning Committee (IPC)	
12.6.3	The Land Transport Advisory Board (LTAB)	
12.7	OPTIONS TO ESTABLISH A NETWORK AUTHORITY TO MANAGE THE PUBLIC TRANSPORT NETWORK	12-11
12.8	PROPOSED INSTITUTIONAL REFORM IN DR KENNETH KAUNDA DISTRICT MUNICIPALITY	
	LIST OF TABLES	
TABLE 12.	1: OVERVIEW OF MINIBUS TAXI OWNERS, VEHICLES AND ROUTES	12-10
	LIST OF FIGURES	
FIGURE 12	2.1 TYPICAL TRANSPORT FUNCTION ORGANOGRAM:	12-12

12 CHAPTER 12: INSTITUTIONAL ARRANGEMENTS

12.1 Introduction

The Institutional Framework for the ITP 2017-2021 for the Dr Kenneth Kaunda District Municipality (DrKKDM) is set out in this Chapter. This Institutional Framework is based on the Department of Transport's Local and Comprehensive Integrated Transport Plan (LITP and CITP), Minimum Requirements for Integrated Transport Plans (DoT. 2007) and National Land Transport Act of 2009 (NLTA 2009).

The Dr Kenneth Kaunda District Municipality is a Category C municipality in the North West Province. It is located 65km south-west of Johannesburg and borders the Gauteng Province on that side. It is the smallest district in the province, making up 14% of its geographical area. The Municipality consists of three local municipalities: JB Marks, City of Matlosana and Maguassi Hills.

This Chapter covers the institutional arrangements and capacity of the local municipality addressing the DoT's DITP Minimum Requirements.

12.1.1 DoT's DITP minimum requirements

The DoT's DITP Minimum Requirements as Gazetted are summarised below:

- The description of any relevant institutional and organisational arrangements that will have an impact on the functioning of the planning authority should be described. Liaison and communication mechanisms available to co-ordinate the planning task with other responsibilities of the municipality, and those of other stakeholders, need to be described.
- A Public Transport Plan needs to be included as part of the DITP. The Public Transport Plan deals with the management of the public transport network including its Operating License Strategy, fare system and transport register. An Institutional Plan to establish a "network authority" to deal with such issues is provided.
- The institutional and organisational set-up of the public transport industry needs to be outlined, by providing detail of companies and associations making up the bus, minibus-taxi and metered taxi industries in terms of:
 - Name of company / association
 - Fleet composition and sizes under its control
 - Corridors of operation

12.1.2 Co-operative government

Co-operative governance, including the provision of public transport, through mutual trust and good faith and avoiding disputes is provided for by the South African Constitution. All spheres of government must work together towards a mutual goal. These are outlined in Chapter 3 of the Constitution and intergovernmental Relations Framework Act 13 of 2005 (IGRFA). IGRFA also provides for the measures for the dispute resolution within the three spheres of government.

NLTA 2009 allows for the establishment of the inter-municipality forum to facilitate substantial transport movements in-between different municipalities. The Intermunicipality forum may be established according to IGRFA. Alternatively, a multi-jurisdictional service utility may be established according to Municipal Systems Act (MSA).

Section 12(2) of the NLTA provides that one or more adjacent municipalities may agree on the joint exercise of their functions in terms of that Act, or establish a municipal entity under the Municipal Systems Act for that purpose.

12.1.3 Assignment of functions

The Constitution and NLTA assigns specific duties related to transport planning to different spheres of government. Functions allocated to a certain government sphere may be transferred to another government sphere. Section 11 of the NLTA 2009 outlines the functions of the different government spheres.

12.2 Scope of Report

The Institutional Framework covers the following topics:

- Current Internal Institutional Structures in Dr Kenneth Kaunda DM dealing with Transport;
- Public Sector Transport Stakeholders;
- Private Sector Transport Structures;
- Consultative Mechanisms and Co-Ordinating Structures;
- Options to Establish a Network Authority to Manage the Public Transport Network; and
- Proposed Institutional Reform in Dr Kenneth Kaunda District Municipality.

12.3 Current Internal Institutional Structures in Dr Kenneth Kaunda DM Dealing with Transport

12.3.1 Political structure

In terms of the political structure, Dr Kenneth Kaunda District Municipality has a Mayor, with executive power and responsibilities. The Mayor takes overall strategic and political responsibility over the Wards, and leads mayoral committees. The mayoral committee includes members responsible for different aspects of municipal government. Each member of the mayoral committee chairs a portfolio committee, made up of councilors.

The key political committee consists of the following positions:

- Executive Mayor
- Speaker
- Single Whip of Council

12.3.2 Administrative structure

The information on the Dr Kenneth Kaunda DM current structure has been sourced from the final Dr Kenneth Kaunda DM Integrated Development Plan 2017/18 - 2021/22.

In terms of the administrative structure, the District Municipality is managed by the Municipal Manager, along with Strategic Managers responsible for relevant municipal functions.

The top structure consists of:

- Municipal Manager
- Director Corporate Services
- Director Financial Services
- Director Public Safety
- Director Infrastructure: This includes Roads and by implication, other transport infrastructure, amongst others.
- Director Community Services: This includes, Environmental health, Traffic, Disaster Management, and Security, amongst others
- Director Sports, Arts and Culture
- Director Local Economic Development
- Director Planning and Human Settlement

12.3.3 Towns included in the Dr Kenneth Kaunda DM

The Municipality consists of the following towns:

- Hartbeesfontein
- Klerksdorp
- Leeudoringstad
- Makwassie
- Orkney
- Potchefstroom
- Stilfontein
- Ventersdorp
- Witpoort
- Wolmaransstad

12.3.4 Co-operative governance

Various forums have been established to share best practices among municipalities and to ensure compliance. These forums focus mainly on issues of progressive governance, resolving bottlenecks and service delivery. The Forums in which the Municipality participates are:

- District IGR Forum
- Municipal Manager's Forum

- Chief Financial Officer's Forum
- IDP and PMS Coordinator's Forum

Other Forums in which the Municipality participates are:

SALGA, at Provincial and National Level.

- The Municipality has a partnership with the Region of Kronoberg in Sweden and Vaxjo Kummun.
- The Bokone Bophirima Premier Co-ordinating Committee (BBPCC) of the North West Province is attended by the Executive Mayor. The purpose of this forum is to close the gaps between municipalities and provincial government.
- North West Department of Economic Development and Tourism (NWDEDT) forum.
- North West Planning Commission, which assist municipalities in aligning their development programmes with the National Planning Commission's priorities.
- The North West Premier Technical Co-ordinating Committee consists of the Administrative Staff of the Office of the Premier and all Municipal Managers.

The IGR structures established by the Dr Kenneth Kaunda District Municipality, are as follows:

- District Economic Development Forum
- Mining Forum
- Rural Economic Development Forum
- MM and CFO's Forum
- District IDP and PMS Forum

12.3.5 Ward committees

The Municipality has established Ward Committees in all 34 Wards. Ward Committees provide an important role for the municipality to consult with its communities.

The Municipality and Ward Committees have initiated another mechanism of deepening and broadening public participation. This includes the compilation of a database of all relevant community and stakeholder organisations, as well as informing the community, and stakeholders of the municipality's intentions to embark on the Integrated Development Planning process.

12.3.6 Capacity of transport division

As in many rural local municipalities in South Africa, the shortage of human resources is a major concern in the North West Province. Presently, there are no resources dealing exclusively with transport planning and management, nor with public transport, which is a major concern to be addressed through this planning process, as well as through the new revised structure, considering the transport-related role and responsibilities of this authority.

One of the important roles of the transport division should be to develop and implement the transport network and infrastructure plans for the municipality.

Currently the function of transport planning and development would be the responsibility of the Road and Storm-Water Drainage Division.

The current capacity of the DrKKDM and institutional structure to deal with all the aspects required by the NLTA, is inadequate.

12.4 Public Sector Transport Stakeholders

The DrKKDM is required to consult various stakeholders during their transport planning process. These stakeholders are listed below with a brief outline of their functions.

Furthermore, the DrKKDM is required to develop a stakeholder engagement plan in terms of the DITP minimum requirements to co-ordinate their needs.

12.4.1 Dr Kenneth Kaunda District Municipality

The Dr Kenneth Kaunda District Transport, Roads and Infrastructure Services are responsible for co-ordinating transport planning and development in the District.

District Municipality Plans need to be integrated with the Local Municipality plans within the jurisdiction of the district. The Dr Kenneth Kaunda district is composed of the following three Local Municipalities:

- JB Marks Local Municipality
- Maguassi Hills Local Municipality
- Matlosana Local Municipality

12.4.2 The Department of Transport (national)

The NLTA 2009 sets out specific functions of the DoT, as well as the Minister, which includes the development of the transport policy, roles in co-operative governance, and roles relating to operating licences, etc. The roles of the DoT and the Minister thereof, regarding air and maritime transport that relates to Dr Kenneth Kaunda DM, are required to be considered during the planning process.

12.4.3 The National Public Transport Regulator (NPTR)

The NPTR is established by the Minister in terms of the NLTA 2009, and consists of designated departmental officials with specific training and experience in the following fields:

- Public Transport
- Transport Economics
- Accounting, Auditing or Actuarial Science
- Law

- Tourism transport
- Vehicle standards and specifications

The functions of the National Transport Regulator include:

- Monitoring and overseeing public transport in the country in general, as well as the activities of the Provincial Regulatory Entities (PRE) and municipalities;
- Receiving and deciding on applications relating to operating licenses or accreditation for interprovincial transport, tourist transport services and other services designated by the Minister;
- Overseeing fares charged for public transport services throughout the country;
 and
- advising the Minister regarding the compilation of regulations in relation to fares or fare structure.

12.4.4 The Provincial Regulatory Entity (PRE)

The Provincial Regulatory Entity is established by the MEC in terms of the NLTA 2009. As the NPTR, PRE, is compiled of designated departmental officials with specific training and experience.

Functions of the PRE, include:

- Monitoring and overseeing public transport within the province; and
- Receiving and deciding on applications relating to operating licenses for intraprovincial transport, where no municipality exists to which the operating license function has been assigned, but excluding applications that must be made to the National Public Transport Regulator in terms of section 21

12.4.5 The Passenger Rail Agency of SA (PRASA)

PRASA is responsible for short and long-distance rail and bus services. PRASA and Transnet are the owners of the existing rail network in South Africa.

The DoT is currently developing the National Rail Policy.

12.4.6 Transnet Limited

Transnet is responsible for rail, maritime and pipeline transport services. The rail network in the DrKKDM is owned by Transnet, as there are no dedicated commuter rail services in the area.

12.4.7 The South African National Roads Agency Limited (SANRAL)

The functions of SANRAL are to plan, construct, and finance and maintain national roads. SANRAL may declare any provincial or municipal road as a national road. It may also declare any national road or portion thereof as a toll road, with the Minister's approval, and collect toll fees, after taking certain prescribed steps.

12.4.8 The Cross-Border Road Transport Agency (CBRTA)

The Cross-Border Road Transport Agency regulates transport operations between South Africa and other countries. The functions of the CBRTA include the issuing of permits for cross-border freight and passenger operations, which may include neighbouring countries such as Botswana, Zimbabwe and Namibia.

12.4.9 The Road Traffic Management Corporation (RTMC)

The RMTC is responsible for the co-ordination of road traffic in various spheres of government. The RTMC must establish functional units for road traffic law enforcement, training of traffic personnel, vehicle registration and licensing, road traffic information etc. The RTMC has developed a draft National Road Traffic Law Enforcement Code which was published for comment in January 2014.

12.4.10 The Road Traffic Infringement Agency (RTIA)

The functions of the RTIA include:

- Administering a procedure to discourage the contravention of road traffic laws, and to support the adjudication of infringements as set out in the subsection;
- Enforcing penalties imposed against persons contravening road traffic laws as set out in the subsection;
- Providing specialised prosecution support services as set out in the subsection;
 and
- Undertaking community education and community awareness programmes, in order to ensure that individuals understand their rights and options.

12.4.11 The Airports Company of South Africa (ACSA)

ACSA is concerned with the acquisition, establishment, development, provision, maintenance, management, control or operation of any airport, any part of any airport or any facility or service at any airport normally related to the functioning of any airport.

12.4.12 The National Treasury (NT)

The NT plays a role in managing public finances, and, therefore allocates an equitable share to municipalities of revenue collected nationally in terms of the Constitution. Furthermore, NT allocates conditional grants to municipalities, such as the PTNG (Public Transport Network Grant) and PTIG Public Transport Infrastructure Grant.

12.4.13 The Financial and Fiscal Commission (FFC)

The FFC is responsible for providing an advisory role with regards to financial and fiscal matters in terms of section 220 of the Constitution. Organs of state may request the services of the FFC, or it may act on its own discretion.

12.4.14 Adjacent municipalities

Should there be significant transport movement between the DrKKDM and adjacent municipalities, an inter-municipality forum may be established in terms of Inter-Governmental Relations Framework Act 2005, or multi-jurisdictional service utility in terms of Systems Act.

12.5 Private Sector Transport Structures

12.5.1 Introduction

The DrKKDM is served by the following types of public transport services outlined below:

- Minibus-Taxi services:
- Metered taxis;
- Learner bus services: Contracts are managed by the Department of Education,
 Department of Transport and private contracts from the individual schools; and
- Local buses available for hired trips.

12.5.2 Minibus taxi associations

There are long- and short-distance taxi associations operating in the DrKKDM, namely:

- Baleti TA
- Codesa TA
- Greater Orkney TA
- Greater Potch TA
- Greater Stilfontein TA
- Greater Ventersdorp TA
- Interstate TA
- Jouberton and Noordkom TA
- Jouberton TA
- Khuma TA
- Klerksdorp TA
- Mighty Makwassie TA
- Utlwaneng TA

All these taxi associations fall under the Dr Kenneth Kaunda Regional Taxi Council which coordinates the taxi industry for the DrKKDM.

Table 12.1 gives an overview of the minibus taxi owners, vehicles and routes in DrKKDM.

Table 12.1: Overview of minibus taxi owners, vehicles and routes

	VEHICLES	MEMBERS	PERMITS	ROUTES
Baleti	127	65	130	12
Codesa	153	112	158	21
Greater Orkney	92	69	91	29
Greater Potch	267	168	265	10
Greater Stilfontein	148	102	146	13
Greater Ventersdorp	37	27	37	6
Interstate	203	130	187	25
Jouberton & Noordkom	93	57	90	14
Jouberton	276	146	263	50
Khuma	154	104	153	19
Klerksdorp	299	203	303	15
Mighty Makwassie	81	48	82	17
Utlwaneng	109	52	106	32
	2039	1283	2011	263

Source: Provincial Registration Entity 2016

12.5.3 Bus operator associations

The national bus operator, Southern African Bus Operators' Association (SABOA) should be consulted where appropriate. Bus operators that are not part of SABOA should be consulted, if they are available in the Municipality.

12.5.4 Metered Taxi Associations

KOSH Cab Taxi Association provides operations within the Matlosana LM from Klerksdorp, in a similar manner as normal minibus-taxi operations. There are no metered taxis that operate on a price per kilometer.

The location of the formal metered-taxi rank in Klerksdorp is on the north-west corner of Koch street and Church street behind the municipal offices.

Issues exist with regards to the operating licenses, as many of the vehicles have applied for operating licences but did not receive them due to an oversupply of operating licenses. They are, therefore, operating illegally.

Uber does not, as yet, provide shared passenger taxi services in the area (2016).

12.5.5 Commuters and the general public

The general public, commuters and business representatives should be consulted during the planning process. Organisations representing commuters should also be consulted.

12.6 Consultative Mechanisms and Co-Ordinating Structures

12.6.1 The proposed North West Province Transport Co-ordinating Structure.

A Transport Co-ordinating Committee may be established to create an opportunity for different stakeholders to be involved in a transport policy formulation. In 2006 the North West Province Department of Roads, Transport and Community Safety embarked on the process of establishing these structures at a provincial and local government level.

The proposed Provincial Co-ordinating Committee was to be chaired by the MEC for Roads, Transport and Community Safety, and consists of MMCs for district municipalities. The proposed district co-ordinating committee was to be chaired by district MMCs and consists of different respective local municipalities.

12.6.2 The Intermodal Planning Committee (IPC)

If found feasible, the DrKKDM is required to establish an Intermodal Planning Committee (IPC), which comprises prescribed officials and representatives of operators, as required by NLTA 2009. The function of the Committee is to co-ordinate public transport between all the modes.

The NLTA currently states that the IPC should include representatives of operators and organized business. However, the Act is being amended to provide that the IPC should be a committee of officials only, and that the private sector should be represented through the Land Transport Advisory Board.

12.6.3 The Land Transport Advisory Board (LTAB)

The LTAB may be established by the Dr Kenneth Kaunda DM according to Section 16 of the NLTA. This structure should consist of government representatives, as well as the private sector, to play an advisory role on land transport matters.

12.7 Options to Establish a Network Authority to Manage the Public Transport Network

A Public Transport Plan as required by the Minimum ITP Requirements, should outline an institutional plan to manage all its matters, such as the Operational License Strategy, Transport Register, contracted and non-contracted services, etc.

Various functions have been undertaken by the Provinces according to NLTA 2009. The capacity of the DrKKDM to perform the transport functions should be evaluated and assigned accordingly. Municipalities should have both Roads & Storm-water and Transport functions within their organograms.

A structure could be established through one of the options provided below. Furthermore, it is important that an effort be made that both Roads & Storm-water and Transport functions be established in one department, reporting to either the Municipal Manager or the Deputy Municipal Manager.

Metropolitan municipalities have well established institutional structures to deal with roads and transport issues. The City of Cape Town has established transport for Cape Town within its organisational structure, to deal with Roads & Storm-water and Transport functions. Smaller municipalities have roads and storm-water functions. However, they do not have transport functions.

Consequently, the majority of municipalities have been characterised by the lack of communication/co-ordination in the land transport planning processes. They often lack a land transport planning authority, integration of the ITP into the IDP, poor co-ordination with regards to the transport policy, etc. There is also a lack of officials dedicated to transport related issues (i.e. Transport Manager, Transport Planner; Official dealing with legislation, Operating License etc.).

The Municipality has three options to establish a network or transport authority, namely:

 A unit/section/department within the City's administrative structure. This can be established internally by means of municipality by-laws. Figure 12.1 shows a typical organogram that could be adopted by municipalities.



Figure 12.1 Typical transport function organogram:

- Establish a Municipal Entity (ME). This can be established as a separate entity/ company (such as the Johannesburg Roads Agency as an entity for the City of Johannesburg) or;
- Outsource functions to third parties, which could be organs of state, such as the Province or SANRAL, or to the private sector.

Before deciding on an option, the City has to undertake a "section 78" assessment in terms of the MSA to establish whether to use an internal or external mechanism.

No. 43934 **351**

12.8 Proposed Institutional Reform in Dr Kenneth Kaunda District Municipality

As indicated previously, the Municipality does not have adequate capacity or the structure to deal with all the transport and public transport functions required by the NLTA. To deal only with its road and stormwater function, it is 20 % under capacity. Funding for roads alone is also a major challenge, according to the 2016/17 Annual Report.

Should the Municipality wish to deal with all the functions as described in this DITP; it will first have to build its capacity and amend its structure. In terms of structure, the functions of technical departments in the municipalities involving transport planning, public transport, traffic, construction and asset management, should ideally be established under one department, such as under the Roads and Storm-water department. This department then needs to be re-named.

According to the NW DoT, a Transport Unit for the District Municipality was investigated, however, the lack of funding prohibited its implementation.

In view of limited funding, it is proposed that a feasibility study first be conducted to determine the benefits of establishing a transport authority, the risks and challenges, as well as the required funding. The study should also propose the best structure, number of posts and functions, as well as the process of establishing a transport authority.

TABLE OF CONTENTS

13	CHAPTER 13: RURAL TRANSPORT	13-1
13.1	Introduction	13-1
13.1.1	Sources of Rural Transport Strategies	
13.1.2	Definition of Rural Areas	
13.2	PROVINCIAL RURAL TRANSPORT STRATEGY	
13.3	KEY PERFORMANCE AREAS OF RURAL TRANSPORT STRATEGIES	13-4
13.4	RURAL SETTLEMENTS IN DR KENNETH KAUNDA DM	
13.5	OVERVIEW OF EXISTING TRANSPORT TO RURAL AREAS	13-5
13.6	RURAL TRANSPORT STRATEGY	13-13
TABLE 13	LIST OF TABLES 1: OVERVIEW OF EXISTING TRANSPORT TO RURAL SETTLEMENTS	13-7
	LIST OF FIGURES	
Figure 1	2.1. Location of Dupa Certification in Dr. VV DAA	13.5

13 CHAPTER 13: RURAL TRANSPORT

13.1 Introduction

The North West Provincial Land Transport Framework provides background and strategies for rural transport in the Province (PLTF, 2016): The majority of the North West Province is considered to be rural, where agriculture is the main source of employment. This results in poor access to basic service and poor access to the economy. High levels of poverty are evident within the population, who relies on natural resources, and a travelling labour system, as main forms of survival. The objective of the Rural Transport Strategy is to provide mobility to the rural population, to enable them to access economic opportunities, education and health institutions, as well as other services and amenities.

Very few households own a vehicle and rely on walking as a form of mobility. People living in rural areas have limited access to education, resulting in illiteracy, especially among the older generations. In rural areas cycling is a rare mode of transport due to the larger distance that needs to be travel. However, most people who use cycling as a mode of transport can be found in urban areas.

Weekdays are used for travelling to health services and shopping for household goods, where weekend travelling is usually for religious or health reasons. During weekdays the main modes of transport are animal-drawn carts, minibus-taxis and walking. During weekends modes of transport include taking a bus, minibus-taxi, cars, getting a lift and walking.

The majority of rural school-going children walk from home to school, and they prefer walking as opposed to using a bus or minibus-taxi to school. The majority of households spend between R100 and R200 on school trips – 20% spent more than R200 p.m. (PLTF, 2016) Approximately 50% of the trips in rural areas are made by walking, which might be due to rural poverty. Rural transport predominantly relies on minibus-taxi services, however, the low travel demand in rural areas results in low supply. Another contributing factor to this low supply is the poor condition of the roads operated on. In general, it is found that there is good access to public transport in rural areas, even if it is considered as expensive, when comparing public transport costs to household income.

The main requirements in rural areas include:

- Improving the affordability and accessibility of public transport; and
- Improving the NMT, as this is the preferred mode of transport.

13.1.1 Sources of rural transport strategies

The following sources were used to identify rural transport strategies:

- NW Province Provincial Land Transport Framework (PLTF, 2016)
- The Rural Development Strategy (RDS, 1995)
- The Rural Development Framework (RDF, 1997)
- The National Rural Transport Strategy (RTS, 2007)
- Comprehensive Rural Development Programme (2009)

 National Housing Code (Department of Human Settlements, 2009) Volume 5 (Rural Intervention)

13.1.2 Definition of Rural Areas

The STATSSA (2010) Concepts and Definitions document defines rural as 'farms and traditional areas characterised by low population densities, low levels of economic activity and low levels of infrastructure."

The StatsSA Census 2011 provided a more detailed definition and defined rural as "farms and traditional areas characterised by low population densities, low levels of economic activity and low levels of infrastructure."

The North West Province in general is seen as a rural province. This is also true for the DrKKDM outside the urban areas of Tlokwe and Matlosana. These areas are characterised by:

- Sparse population density;
- Great distances to the nearest service points;
- Low levels of service;
- Limited access to transport;
- High levels of walking;
- Low levels of education and employment; and
- Agricultural households.

13.2 Provincial Rural Transport Strategy

The North West Province PLTF (2016) recommends the following strategy to develop a rural transport system:

- "The identification, development and consolidation of strategic rural transport corridors;
- The development of a five-year North West Provincial Rural Access Programme to expand access to the poor and creation of economic opportunities through the utilisation of labour based public work methodologies."

To accelerate the above process, the following high-level strategies are recommended:

- "Rural Transport Agenda: The provision of a rural transport system should be accessible to all user types, especially women, children, disabled citizens and illiterate citizens. A framework is needed in this regard. For safety purposes, the use of light delivery vehicles (LDV/bakkies) should be reconsidered as a mode of public transport in terms of legislation and minimum safety measures.
- Rural Transport Management Agenda: In future, the provision of transport services in a village should be investigated, before a village is newly proclaimed. In the case of existing villages, the transport services should be evaluated and the necessary remedial measures should be applied.
- The development of key performance indicators for rural transport services needs to be set, as well as the provision of scheduled and guaranteed services.
- The role of intermediate modes of transport such as non-motorised transport modes needs to be defined.

- Institutional Re-engineering and Capacity Development:
 - There should be effective and sustainable elements in existence such as infrastructure.
 - There should also be a rural capacity building programme in place for district and local municipalities,
 - Audits of existing capacities should be conducted.
 - Training in planning, implementing and monitoring institutional capacities should also be conducted to sustain these systems.
 - The issue of responsibility of rural access roads needs to be revisited with clear responsibilities between province and municipalities stipulated.
 - The responsibility for the provision of rural access roads needs to match with proper capacity and funding mechanisms."

To support rural commuters within the North West Province, the province commits itself to providing a transport system that ensures:

- Access to economic opportunities and social services;
- Provision of affordable public transport to the public and the poor specifically;
- Cost efficiency, high quality and safe;
- Integrated across modes of transport;
- Optimal allocation and utilisation of resources; and
- Promoting economic, fiscal, technical and environmental sustainability.

The DoT, Provinces and Municipalities will elevate the transport related Strategic Infrastructure Projects (SIPs) in their respective Integrated Transport Plans. The following transport-oriented SIPs relevant to the North West Province are reinforced in the NLTSF:

- Agri-logistics and rural infrastructure: Improve investment in agricultural and rural infrastructure that supports expansion of production and employment, small-scale farming and rural development, including facilities for storage (silos, fresh-produce facilities, packing houses); and
- Transport links to main networks (rural roads, branch rail lines), fencing of farms, irrigation schemes to poor areas, improved R&D on rural issues (including expansion of agricultural colleges), processing facilities (abattoirs, dairy infrastructure), aquaculture incubation schemes and rural tourism infrastructure.

Tangible, cost- and time-bound projects are identified in an attempt to improve the North West Province's rural transport situation. The projects are categorised into the following classes:

- Provision of public transport infrastructure;
- Provision of non-motorised transport infrastructure;
- Introduction of additional transport services for specific focus groups and/ or specific areas;
- Improving levels of service of current rural transport services; and
- Upgrading of road infrastructure.

The PLTF shortlisted the following projects within the DrKKDM as part of the proposed Rural Transport Implementation Plan for the North West Province:

 Welgevonden (near Ventersdorp): Provision of public transport infrastructure, including construction of taxi lay-byes together with a ring road around the

- village. Provision of a walkway and cycle path from Welgevonden to Goedgevonden (vertical separation between road and walkway/ cycle path)
- Goedvonden (near Ventersdorp): Provision of a walkway and cycle path from Welgevonden to Goedgevonden (vertical separation between road and walkway/ cycle path) as noted above
- Boskuil (Maquassi Hills): Introduction of a new scheduled public transport service from Boskuil to Wolmaransstad

13.3 Key Performance Areas of Rural Transport Strategies

The following key performance areas were identified by the National Land Transport Strategic Framework (2015 – 2020) (NLTSF,2016):

- Review the Integrated Sustainable Rural Transport Strategy and key rural communities for investing in transport and access;
- Develop actions and measure impact of rural transport interventions on safety and travel time;
- Improve rural accessibility to improve population having access to some form of transport and determine the accessibility index of key rural communities;
- Develop a strategic rural road network upgrade and maintenance plan with budgets for rural road network infrastructure upgrades and maintenance;
- Establish the rural transport forum at district level;
- Measure Rural Access Index, which measures the number of people living within two kilometres of an all-season road and/or transport service, as a proportion of the total rural population;
- Measure and report on the performance of rural public transport services using the following performance indicators:
 - Cost per passenger trip
 - Fare revenue per passenger trip
 - Passenger trip time
 - Operating subsidy per passenger trip
 - Vehicle revenue kilometres
 - Customer satisfaction index
 - Number of passengers
 - Vehicle operating cost
 - Number of bicycle distributed to rural learners

13.4 Rural Settlements in Dr Kenneth Kaunda DM

Figure 13.1 gives the location of rural settlements in the District. These are listed below:

Rural settlements in City of Matlosana:

- Jacaranda
- Mahome
- Dominionville
- Buffelsfontein
- GTC Village
- Khayalihle
- Paballong Village

- Stilfontein Gold Mine
- Oblate (Erfdeel 274)
- Brakspruit
- Mahemsvlei
- Nkagisang (Kafferskraal)
- Ikageng
- Syferlaagte
- Tshwaragang (Kafferskraal)
- Flint
- Mvala
- Goedgenoeg
- Maputle Ghaanakgomo (Kafferskraal)
- Boitshoki

Rural settlements in Maguassi Hills:

- Lavine
- Boskuil
- Kgakala

Rural settlements in JB Marks:

- Matlwang
- Appledraai
- Boikhutso
- Ga- Mogopa
- Goedgevonden
- Uitkyk
- Welgevonden
- Klipgat
- Tsetse
- Rysmierbult
- Boikhutsong
- Joko
- Buffelsdoorn
- Boskop
- Lindequesdrift
- Vaal de Grace
- Venterskroon
- Klipdrift (military base)
- Botsemmogo
- Sterkstroom (Farm Buffelsvlei)
- Polica
- Makokoskraal

13.5 Overview of Existing Transport to Rural Areas

Table 13.1 gives an overview of the existing transport supply to the rural areas in the District which has been compiled from the Transport Register. The Table provides the Local Municipality, the Settlement Name, the Economic Sector, the Population Size, Number of Households, Public Transport and Learner Transport Supply.

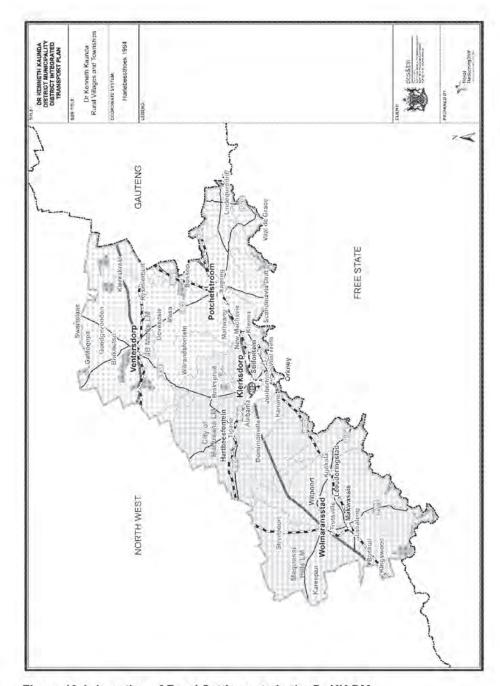


Figure 13.1: Location of Rural Settlements in the Dr KK DM

Table 13.1: Overview of Existing Transport to Rural Settlements

LOCAL MUNICIPALITY	SETTLEMENT NAME	ECONOMIC SECTOR	POPULATION SIZE	NUMBER OF HOUSEHOLDS	PUBLIC TRANSPORT SUPPLY	LEARNER TRANSPORT SUPPLY
City of Matlosana	Jacaranda (T)	Agriculture Trade/Services	TBD	50	None	Yes Schools: Nkagisang Primary School Cocekani High School Tshedimosetso Secondary School Operator:
City of Matlosana	Mahome (V)	Agriculture				Nondiba & Tutuse Routes: Jacaranda-Nkagisang Jacaranda-Cocekani & Tshedimosetso
		Trade/Services				
City of Matlosana	Dominionville		676	159	None	No school. Yes, scholar transport to Jouberton
City of Matlosana	Buffelsfontein	Mining	2233	1385	None	No school. Yes, scholar transport to Pelonome (Klerksdorp)
City of Matlosana	GTC Village	Mining	548	181	None	No school. Yes, scholar transport provided to Vaal Reefs
City of Matlosana	Khayalihle	Mining	1839	1953	None	N.A.
City of Matlosana	Paballong Village	Mining	635	197	None	N.A.
City of Matlosana	Stilfontein Gold Mine	Mining	569	246	None	No school. Kids travel to Vaa Reefs and Khuma
City of Matlosana	Erfdeel (Settlement/Producti on) Erfdeel 274	Manufacturing	TBD	31	None	N.A.

LOCAL MUNICIPALITY	SETTLEMENT NAME	ECONOMIC SECTOR	POPULATION SIZE	NUMBER OF HOUSEHOLDS	TRANSPORT SUPPLY	LEARNER TRANSPORT SUPPLY
City of Matiosana	Obtale (Settlement/Producti on) Erfosel 274	Manufacturing	TBD	60	None	No achoot. Yes, scholar transport provided to Ventersdorp
City of Matlosana	Brakspruit (Settlement/Producti on) Mahemsvlei 110 units	Manufacturing	TBD	110	None	No school. Yes, scholar transport provided to Nkagisang Primary School, Bosworth Primary School. Letlhasedi Combined (Primary and Secondary)
City of Matlosana	Nkagisang (Settlement/Producti on) Kafferskraal 224 units	Manufacturing	TBD	152	None	Yes Schools: Nkagisang Primary School Cocekani High School Tshedimosetso Secondary School Operators: Nondiba & Tutuse Tau More Routes: Jacaranda-Nkagisang Schoemanfontein-Nkagisang Bentjieskraal-Nkagisang Tigane-Nkagisang
City of Matlosana	lkageng Syferlaagte	Agriculture	TBD	20	None	None
City of Matlosana	Tshwaragang Kafferskraal	Agriculture	TBD	31	None	None
City of Matlosana	Flint Flint 411	Agriculture	TBD	10	None	None
City of Matlosana	Mvala Goedgenoeg	Agriculture	TBD	8	None	None

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STAATSKOERANT, 27 NOVEMBER 2020

LOCAL MUNICIPALITY	SETTLEMENT NAME	ECONOMIC SECTOR	POPULATION SIZE	NUMBER OF HOUSEHOLDS	PUBLIC TRANSPORT SUPPLY	LEARNER TRANSPORT SUPPLY
City of Matlosana	Maputle Ghaanakgomo (Settlement) Kafferskraal		TBD	12	None	None
City of Matlosana	Boitshoki (V)		TBD		None	None
Maquassi Hills	Lavine (V)	Agriculture Mining Manufacturing Retail and Service				
Maquassi Hills	Boskuil (V)	Agriculture Retail and Service				
Maquassi Hills	Kgakala (V)	Agriculture Retail and Service				
JB Marks	Matlwang (V)	Agriculture Culture Tourism Mining Manufacturing Retail and Service	838	276	None	Scholar transport from Matlwang to schools in Ikageng Matlwang-Ikageng
JB Marks	Appledraai (V)	Agriculture Culture Tourism Manufacturing Retail and Service				

LOCAL MUNICIPALITY	SETTLEMENT NAME	ECONOMIC SECTOR	POPULATION SIZE	NUMBER OF HOUSEHOLDS	PUBLIC TRANSPORT SUPPLY	LEARNER TRANSPORT SUPPLY
JB Marks	Boikhutso (V)	Agriculture Culture Tourism Manufacturing Retail and Service	TBD	TBD	Yes, minibus taxi operations provided by Greater Ventersdorp Taxi Association	Phiri Secondary School: Welgevonden-Phiri SS Duduetsang & Rabana Primary Schools and Opang Diatla Intermediate School: Sterkstroom to Duduetsang, Rabana and Opang Diatla
JB Marks	Ga- Mogopa (V)	Agriculture Tourism Mining Manufacturing Retail and Service	TBD	TBD	Yes, minibus taxi operations provided by Greater Ventersdorp Taxi Association	Phiri Secondary School: Welgevonden-Phiri SS Duduetsang & Rabana Primary Schools and Opang Diatla Intermediate School: Sterkstroom to Duduetsang, Rabana and Opang Diatla
JB Marks	Goedgevonden (V)	Agriculture Tourism Manufacturing Retail and Service	TBD	TBD	Yes, minibus taxi operations provided by Greater Ventersdorp Taxi Association	Phiri Secondary School: Welgevonden-Phiri SS Duduetsang & Rabana Primary Schools and Opang Diatla Intermediate School: Sterkstroom to Duduetsang, Rabana and Opang Diatla
JB Marks	Uitkyk (V)	Agriculture Tourism Mining Manufacturing Retail and Service				

LOCAL MUNICIPALITY	SETTLEMENT NAME	ECONOMIC SECTOR	POPULATION SIZE	NUMBER OF HOUSEHOLDS	PUBLIC TRANSPORT SUPPLY	LEARNER TRANSPORT SUPPLY
JB Marks	Welgevonden (V)	Agriculture Tourism Mining Manufacturing Retail and Service	TBD	TBD	Yes, minibus taxi operations provided by Greater Ventersdorp Taxi Association	Phiri Secondary School: Welgevonden-Phiri SS Duduetsang & Rabana Primary Schools and Opang Diatla Intermediate School: Sterkstroom to Duduetsang, Rabana and Opang Diatla
JB Marks	Klipgat (V)	Agriculture Tourism Mining Manufacturing Retail and Service	TBD	TBD	None	No scholar transport No internal school
JB Marks	Tsetse (V)	Agriculture Tourism Manufacturing Retail and Service				
JB Marks	Rysmierbult (V)	Agriculture Tourism Mining Manufacturing Retail and Service	500	160	None	Sizamele Primary School: Rysmierbult-Sizamele De Beerskraal Primary School: Rysmierbult-De Beerskraal
JB Marks	Boikhutsong (V)	Agriculture Tourism Manufacturing Retail and Service	TBD	TBD	Yes, minibus taxi operations provided by Greater Ventersdorp Taxi Association	Phiri Secondary School: Welgevonden-Phiri SS Duduetsang & Rabana Primary Schools and Opang Diatla Intermediate School: Sterkstroom to Duduetsang, Rabana and Opang Diatla

STAATSKOERANT, 27 NOVEMBER 2020

LOGAL MUNICIPALIT JB Marks	Joka	ECONOMIC POPULATION SECTOR SIZE Agriculture Tourism Manufacturing Retail and	NUMBER OF HOUSEHOLDS	PUBLIC TRANSPORT SUPPLY	LEARNER TRANSPORT SUPPLY
JB Marks		Service 50	15	None	No scholar transport No internal school
JB Marks	Boskop	184	47	Yes, minibus taxi operations provided by Interstate Taxi Association	No scholar transport No internal school
JB Marks	Lindequesdrift	1 147	388	None	No scholar transport No internal school
JB Marks	Vaal de Grace:	No information	No information	None	No scholar transport No internal school
JB Marks	Venterskroon node	No information	No information	None	Scholar transport to Mponeng Primary School from Venterskroon-Mponeng PS
JB Marks	Klipdrift Node: a military base	No information	No information	None	No scholar transport No internal school
JB Marks	Botsemmogo	TBD	TBD	None	No scholar transport No internal school
JB Marks	Sterkstroom (Farm Buffelsvlei)	TBD	TBD	None	Bolopapelo Intermediate School: Sterkstroom to Bolopapelo IM
JB Marks	Polica rural node	TBD	TBD	None	No scholar transport No internal school
JB Marks	Makokoskraal	TBD	TBD	None	No scholar transport No internal school

13.6 Rural Transport Strategy

The IDP's and SDF's of the Local Municipalities in the District, identified some strategies and projects benefitting rural communities namely:

- Feasibility study for the formalization of villages with proper roads;
- Provision of new roads or upgrading of existing access roads to villages as well as of internal roads;
- Grading of gravel roads;
- Provision of street lights and high mast lights;
- Provision of transport for scholars;
- Determination of demand for transport from rural areas and develop plan to provide transport services;
- Provision of directional signs; and
- Fencing and gates to prevent animals crossing the roads.

Instead of each Municipality conducting its own feasibility studies, demand estimation and providing transport infrastructure and services on an ad-hoc basis, it is proposed that the DM develops a rural transport master plan for the entire District, including determination of projects, costs and budget programme.

The DM should also:

- Establish a rural transport forum at district level to determine the needs of rural communities and to involve them in the planning and implementation of transport infrastructure and services;
- Measure and report on the performance of rural public transport services; and
- Support the NW Province in its initiatives to improve rural transport.

TABLE OF CONTENTS

14	CHAPTER 14: IMPLEMENTATION BUDGET AND PROGRAMME	14-1
14.1	Introduction	14-1
14.2	FUNDING LEGISLATION	14-1
14.3	FUNDING SOURCES	14-2
14.3.1	Internal Funding	
14.3.2	External Public Funding Sources	
14.3.3	Private Funding Sources	
14.3.4	Other Funding Sources	
14.4	MTREF BUDGET ALLOCATIONS	
14.5	MUNICIPAL TRANSPORT BUDGET	14-8
14.6	PROPOSED BUDGET PROGRAMME	14-8
14.7	LIST OF REFERENCES	14-10

LIST OF TABLES

TABLE 14.1:	EXTERNAL PUBLIC FUNDING SOURCES FOR TRANSPORT PROJECTS	14-3
TABLE 14.2:	DR KKDM MTREF CAPITAL BUDGET ALLOCATION (2017/18 IDP)	14-6
TABLE 14.3:	DORA FUNDING ALLOCATIONS TO DRKKDM (NATIONAL TREASURY, FEB. 2017)	14-7
TABLE 14.4:	SUMMARY OF TOTAL MTREF AND DORA ALLOCATIONS TO DRKKDM	14-8
TABLE 14.5:	SUMMARY OF THREE-YEAR MTEF PROJECT PROGRAMME FROM 2017 IDP (DETAILS IN ANNEXURE A)	14-8

14 CHAPTER 14: IMPLEMENTATION BUDGET AND PROGRAMME

14.1 Introduction

This Chapter provides the Implementation Budget and Programme for the Dr Kenneth Kaunda District Municipality (DrKKDM) DITP.

In terms of the Minimum Requirements for the Preparation of Integrated Transport Plans set out in the National Land Transport Act of 2009, the Funding Strategy must consist of, at least the following components:

- Summary of proposals;
- Funding strategy i.e. sources of funding that will be used;
- Prioritisation of projects: and
- Budget per project and programme for 5 years.

This Chapter is structured as follows:

- Funding Legislation
- Funding Sources
- Prioritisation Method
- MTREF Budget Allocations
- Summary of Municipal Transport Budget and Required Budget
- Five-Year Budget Programme

14.2 Funding Legislation

The following Acts govern the funding strategy:

Municipal Finance Management Act 56 of 2003 (MFMA)

The financial environment of a municipality is regulated by the Local Government: Municipal Finance Management Act 56 of 2003 (MFMA). The purpose of the Act is to secure sound and sustainable management of the financial affairs of the municipality, and other institutions in the local sphere of government, to establish treasury norms and standards for the local sphere of government and to provide for matters connected therewith.

This Act also regulates Public Private Partnerships (PPPs).

Municipal Property Rates Act 6 of 2004

This Act empowers the City to levy rates on properties and makes provision for the establishment of special rating areas. In addition, the Act allows the City to agree with land owners to offset rates against development contributions.

Division of Revenue Act (DoRA)

The main mechanism through which national, provincial and municipal authorities obtain funding for their expenditure requirements, is the Division of Revenue Acts (DoRA) that are passed for each financial year (1 April to 31 March). DoRA stipulates how nationally raised revenue will be shared between the three spheres of government (national, provincial and local) annually. National and provincial departments can also transfer some of their own resources to governments in other spheres, in the form of conditional or unconditional grants.

National Land Transport Act 5 of 2009 (NLTA)

Sections 27 and 28 of the NLTA require the City to receive, raise, invest and spend money through a Municipal Land Transport Fund (MLTF) for transport related functions. According to section 27 of the NLTA, every municipality that is establishing an integrated public transport network must establish an MLTF with the following monies to be paid into the fund:

- Money appropriated by the Minister for the MLTF
- Money appropriated by the MEC for the MLTF
- User charges collected in terms of section 28 of the NLTA (as described below).
- Interest on invested cash balances belonging to the NLTA; and
- Donations and contributions to the NLTA from any other source, including foreign aid agencies.

The Municipality must administer the MLTF and use the funds to defray the cost of the functions of the Municipality in terms of the NLTA or its CITP, and to cover any other expenditure that will promote the objects of the NLTA in its area.

14.3 Funding Sources

The primary sources of infrastructure finance available to municipalities, are internally generated funds and transfers from National Government. However, these sources are insufficient to meet the demand for new infrastructure, in addition to the operation and maintenance of existing infrastructure. As a result, it is necessary for municipalities to explore ways to leverage private funding sources to promote the sustainable development of infrastructure.

14.3.1 Internal Funding

Municipalities are empowered to employ various revenue instruments. Specifically, municipalities fund their capital expenditure through a combination of local tax revenues and credit instruments. Own tax revenues are usually municipal operating budget surpluses that derive from property taxes, user charges and other local taxes. Local government can also leverage credit financing to support its short- to long-term infrastructure planning.

14.3.2 External Public Funding Sources

The main source of external funding is allocations made by National Government on an annual basis, as promulgated in the Division of Revenue Act (DoRA, Act No 3 of 2017). The allocations are either unconditional allocations or conditional allocations. The unconditional allocations are made in the form of an "Equitable Share", which can be utilised at the discretion of the Municipality to meet their constitutional and legislative mandates and responsibilities.

Table 14.1Error! Reference source not found. lists the unconditional and conditional g rants that may be accessed for transport projects.

Table 14.1: External Public Funding Sources for Transport Projects

UNCONDITIONAL GRANTS	DORA SCHEDULE	PAID DIRECTLY TO THE MUNICIPALITY
Equitable share	Sched 3	Yes
CONDITIONAL GRANTS	DORA SCHEDULE	PAID DIRECTLY TO THE MUNICIPALITY
Urban Settlements Development Grant (USDG)	Sched 4 column B (vote 31)	Yes
Integrated City Development Grant	Sched 4 column B (vote 10)	Yes
Municipal Systems Improvement Grant	Sched 5 column B (vote 3)	No
Energy Efficiency and Demand Side Management Grant	Sched 5 column B (votes 29 and 31)	No
Municipal Human Settlements Capacity Grant	Sched 5 column B (vote 10)	No
Infrastructure Skills Development Grant	Sched 5 column B (votes 7 and 37)	Yes
Local Government Financial Management Grant	Sched 5 column B (votes 35 and 38)	Yes
Expanded Public Works Programme	Sched 5 column B (vote 3)	
Integrated Grant for Municipalities	Sched 5 column B (vote 3)	No
Public Transport Network Grant (PTNG)	Sched 5 column B (vote 10)	Yes
Water Services Operating Subsidy Grant	Sched 5 column B (vote 37)	Yes
Municipal Disaster Recovery Grant	Sched 5 column B (vote 37)	No

Municipal Infrastructure Grant (MIG)	Sched 5 column B (vote 38)	No
Integrated National Electrification Programme (Municipal) Grant	Sched 5 column B (vote 29)	
Rural Households Infrastructure Grant	Sched 5 column B (vote 31)	No
Neighbourhood Development Partnership Grant (NDPG)	Sched 5 column B (vote 10)	Yes
Rural Roads Asset Management Systems Grant	Sched 5 column B (vote 37)	No
Municipal Water	Sched 5 column B (vote 38)	No

The Municipal Infrastructure Grant (MIG) is the largest infrastructure transfer to support government's aim to expand service delivery and alleviate poverty. The grant funds the provision of infrastructure for basic services, roads and social infrastructure for poor households in all non-metropolitan municipalities.

14.3.3 Private Funding Sources

Unfortunately, public funding sources are inadequate to fund all of the required infrastructure, and as a result the Municipality will have to explore innovative alternatives to mobilise private party funds. Private sector investment in local transport projects has been extremely limited to date. Private equity investment could reduce the public sector's financing costs and, therefore, diversify the financing package. A number of options have been identified:

Value Capturing

Value capturing entails the principle of local government extracting the increase in property value created by some form of public investment. This investment is normally by way of a new infrastructure development, or the renovation, or improvement of existing infrastructure.

A prime example is the Transit-Oriented Development (TOD) which provides a significant opportunity to capture the increase in market value created by the improved accessibility, as well as the movement of large numbers of people.

Development charges

These charges are levies imposed on developers when land is re-zoned or development / building permits are issued.

Public-Private-Partnerships

The term Public-Private Partnership (PPP) has no legal definition and is used to describe a wide variety of arrangements between the public and private sectors, working together to deliver a governmental function. The MFMA provides a set of regulations that govern PPPs. The provision of public infrastructure under long term contracts can be structured in two main "types" of PPPs:

- Concession PPP: The municipality grants a private party the right to design, build, finance, and operate a public sector owned infrastructure asset. The concession contract normally covers a fixed period around 25–30 years, after which responsibility for operation reverts back to the municipality. The concessionaire recoups its investment, operating, and financing costs, while making a return commensurate with the risk assumed by charging members of the public a user fee. Typical concession examples include toll roads, railways, urban transport schemes, ports and airports.
- Availability-Based PPP: This arrangement is similar to a concession, i.e. the private party also assumes design risk, financing risk, construction risk, and subsequently operation and maintenance risk. However, in this case, the municipality (as opposed to the user) pays the private party to the extent that a public service (not an asset) is made available, based on certain output criteria. As a result, the demand or usage risk remains with the public sector. This principle has also been successfully used for the provision of social infrastructure such as schools, hospitals, prisons, or government buildings, where payments are generally based on the availability of the accommodation facility, equipment, or system and not on the volume of usage.

Loans

Loans represent a significant source of funding for the municipality, however, the availability of loans is limited by the financial standing and performance of the municipality. To leverage future cash flow to be earned as a result of infrastructure investment, the municipality should explore the possibility of incurring loans against predictable new revenue streams. The main requisites for such an arrangement to succeed are:

- The value and timing of the revenues must be reasonably predictable;
- The revenue streams must be sustainable, at least for the duration of the loan;
- The revenue stream ring-fenced and dedicated to the repayment of the loan.

14.3.4 Other funding sources

Economic opportunities at public transport facilities are as follows:

The municipality can generate revenue by making space available at public transport facilities that private operators can utilise for some form of commercial gain.

User charges:

- Parking fees: Off-street and on-street parking provides a good opportunity for revenue generation to the Municipality. These parking facilities further provide an ideal opportunity for concessions, ranging from a full Build Operate and Transfer concession, where the Municipality receives a periodic concession fee, to a Management concession, where the Municipality pays an operator to manage the parking facility for the Municipality's benefit.
- Traffic Enforcement and Fines: Simply improving enforcement of existing traffic regulations, can generate moderate revenue streams through the imposition of fines and penalties. A more rigorous approach to enforcement may involve a cultural change to the policing environment. If the fines and penalties are dedicated towards new transport projects, there may be greater public acceptance of tougher enforcement of traffic regulations and stiffer fines.

14.4 MTREF Budget Allocations

Table 14.2 gives a projected Medium-Term Revenue and Expenditure Framework (MTREF) for capital expenditure from 2017/18 to 2019/20 of the DrKKDM (IDP 2017/18). The MTREF is the internal budget of the municipality.

Table 14.2: Dr KKDM MTREF Capital Budget Allocation (2017/18 IDP)

SUDGET YEAR (2017/2018) R'1000	BUDGET YEAR (2018/2019) R11000	8UDGET YEAR (2019/2020) R'1000
R3 757	R2 245:180	F3.371
R10.0	R3,160	R3,371
R2 757.00	R2 248.36	P66,74
R3 747	R2 242	R0
	YEAR (2817/2019) R*1000 R3 757 R10/0 R3 757.00	YEAR (2018/2019) (

The total District Municipality's budget of R176 million for 2016/17 is much smaller than those of the three Local Municipalities, which are R350 million for Maquassi Hills, over R1.4 billion for JB Marks and over R2.5 billion for Matlosana. The gap between the increase in budget (3% p.a.) and increase in the cost of operating the Municipality (8-10% p.a.) is increasing every year at a rate of 5% of the budget per year. This increasing gap between the available budget and costs of projects impacts severely on the DM's ability to deliver the required services.

Table 14.3: DORA funding allocations to DrKKDM (National Treasury, Feb. 2017)

gives the DORA (2017) allocations for the DrKKDM in terms of the Equitable Share, Extended Public Works Programme (EPWP) and Rural Roads Asset Management (RRAMS). The Equitable Share allocation increased by 6.9 per cent over the three-year period, while the RRAMS allocation increased by 10.3 per cent over the period (National Treasury, 2017). The EPWP allocation is only made for 2017/18 and none thereafter.

Table 14.4 gives a summary of the total MTREF and total DORA allocations, as well as the overall budget per year

Table 14.3: DORA funding allocations to DrKKDM (National Treasury, Feb. 2017)

DESCRIPTION	BUDGET YEAR (2017/2018) R'1000	BUDGET YEAR (2018/2019) R'1000	BUDGET YEAR (2019/2020) R'1000
Equitable Share: Schedule 3	R173 676	R179 905	R185 575
Expanded Public Works Programme Integrated Grant:	R1 292		
Rural Roads Asset Management Systems Grant	R2 455	R2 653	R2 708
Total Allocation	R 177 423	R 182 558	R 188 283

Table 14.4: Summary of Total MTREF and DORA allocations to DrKKDM

DESCRIPTION	BUDGET YEAR (2017/2018) R*1000	BUDGET YEAR (2018/2019) R:1000	BUDGET YEAR (2019/2020) R'1000
MTREF	R3 767.00	R2 248.36	R6.74
DORA.	R 177 423.00	R 182 558.00	R 188 283.00
Total Allocation	R 181 190.00	R 184 806.36	R 188 289.74

14.5 Municipal Transport Budget

The DrKKDM Department of Technical Services indicated that there is no budget provision for transport related activities except for the Rural Roads Asset Management Systems conditional grant, funded by the NDoT since 2014/15 financial year, due to the financial challenges of the district municipality. It is proposed that the Five-Year Budget Programme be determined when funding does become available in future, based on the projects identified for the DITP as indicated below.

14.6 Proposed Budget Programme

For the purpose of this report, the planned roads projects identified by the 2017 IDP are utilised as the basis. **Annexure D** provides the Three-Year MTEF Road Sector Program from 2017/18 to 2019/20. Table 14.5 gives a summary of the planned Three-Year MTEF Project Programme from 2017 IDP.

In view of the budget constraints, only a limited number of new projects are proposed - mostly master plans to integrate transport plans across the District. The development of a District Integrated Public Transport Network Plan (IPTN) has been initiated recently, and the implementation of the IPTN will be a priority once funding can be procured. Table 14.6 gives the proposed additional District projects.

Table 14.5: Summary of Three-Year MTEF Project Programme from 2017 IDP (Details in Annexure D)

PROJECT CATEGORY	TOTAL AVAILABLE R'000 2017/18	MTEF FORWARD ESTIMATES R'000 2018/19	MTEF FORWARD ESTIMATES R'900 2019/20
Total New Infrastructure Assets	R 28 730	R 28 730	R 40 000
Total Upgrades and Additions	R 651	R 12 000	
Total Refurbishment and rehabilitation	R 55 000	R 125 000	R 190 000
Total Maintenance and repairs	R 167 863	R 3 500	
Total Public Works and Roads (Roads Sector)	R 252 244	R 169 230	R 230 000

Table 14.6: Proposed Additional District Projects

PROJECT CATEGORY	Estimated Budget
Roads Master Plan	Ft2 000 000
NMT Master Plan	R2 000 000
Freight Transport Master Plan	R2 000 000
Learner Transport Master Plan	R2 000 000
Rural Transport Master Plan	R2 000 000
Implementation of IPTN Plan	R5 000 000
Total Cost	R15 000 000

14.7 List of References

Aganang Consulting Engineers, 2014, Public Transport Infrastructure and Facilities Plan, 2nd Provisional Draft Report submitted to North West Province Department of Community Safety and Transport Management.

CSIR, 2015, Guidelines for Social Amenities

Department of Transport, 2015, Strategic Plan 2015/16 - 2019/20

Department of Transport, 2006, The National Freight Logistic Strategy

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Department of Transport, 1994, Multi-Criteria Priority Assessment of Urban Transport Projects, Report Number RR91/413/2

Dr Kenneth Kaunda District Municipality, 2017, Dr Kenneth Kaunda Integrated Development Plan, 2017 – 2022.

National Treasury, 2017, Division of Revenue Act (DoRA), Act Number 3 of 2017, Government Gazette Volume 623, No 40871, 30 May 2017

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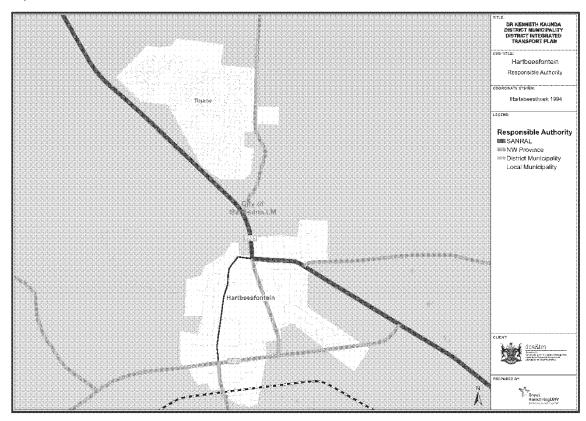
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SANRAL, 2017, Road management system including road planning for next 10 to 15 years and traffic volumes

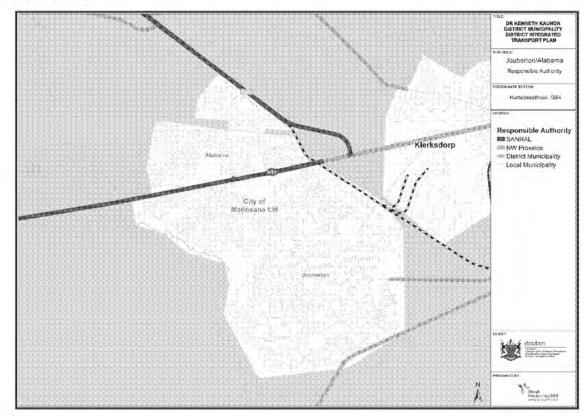
SMEC, 2016, Final Draft Provincial Land Transport Framework, PLTF 2016-2020, submitted to North West Province Department of Community Safety and Transport Management.

ANNEXURE A RESPONSIBLE AUTHORITY

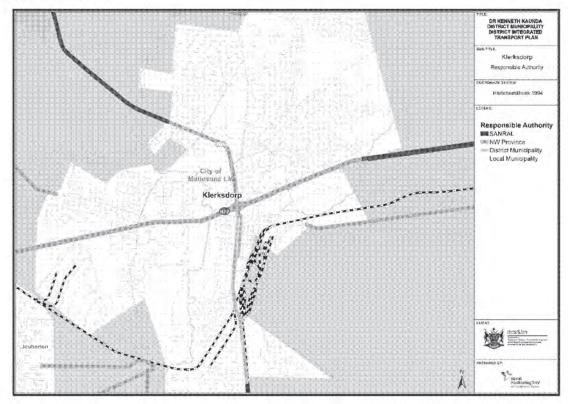
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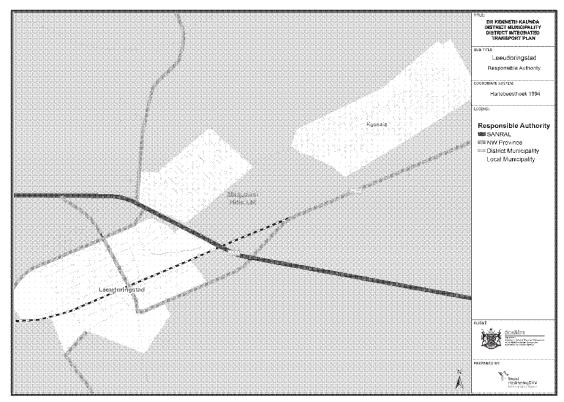
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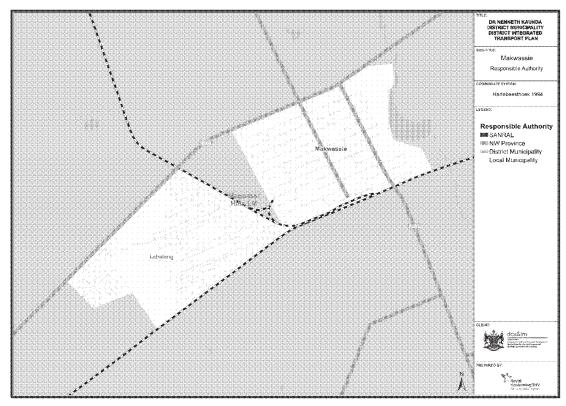
c) Klerksdorp



d) Leeudoringstad



e) Makwassie

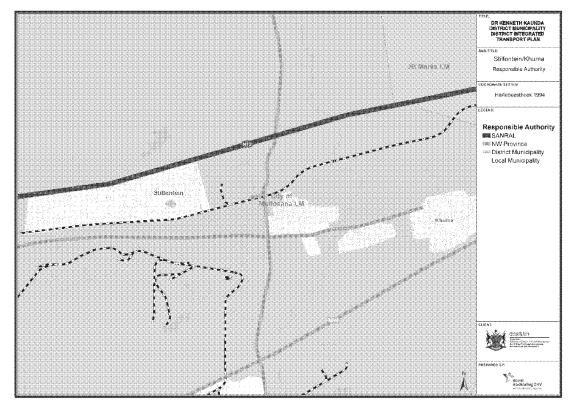


TOTALISTS TOTALISTS

g) Potchefstroom



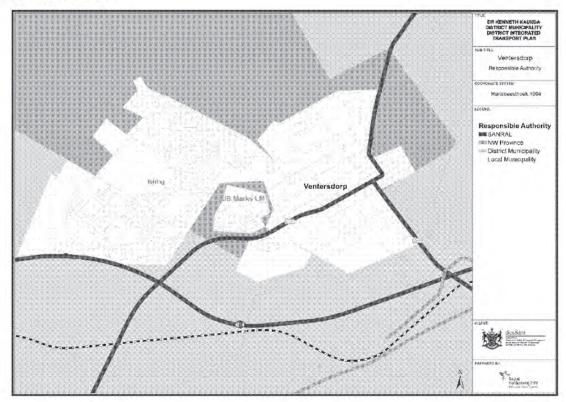
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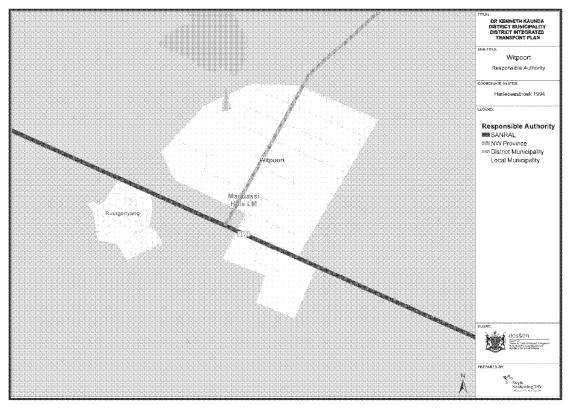
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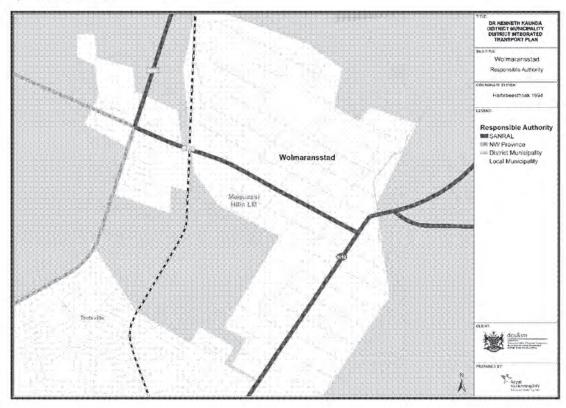
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k) Witpoort

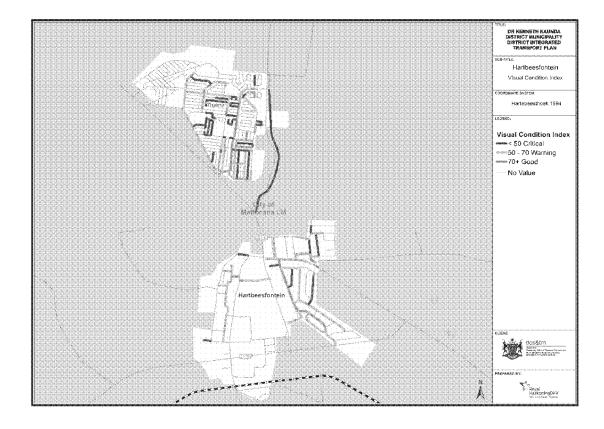


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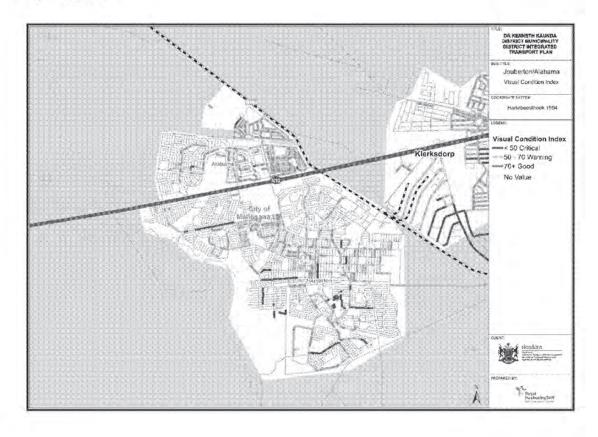


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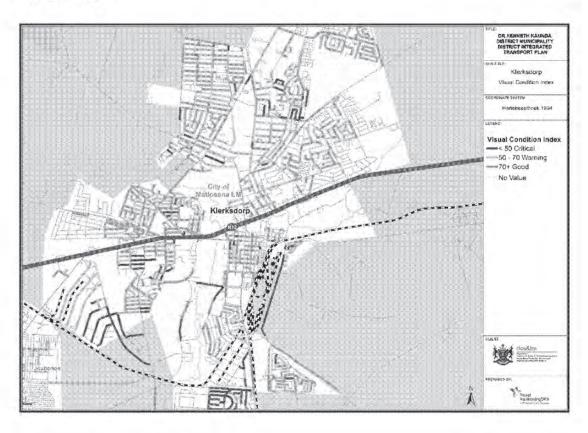
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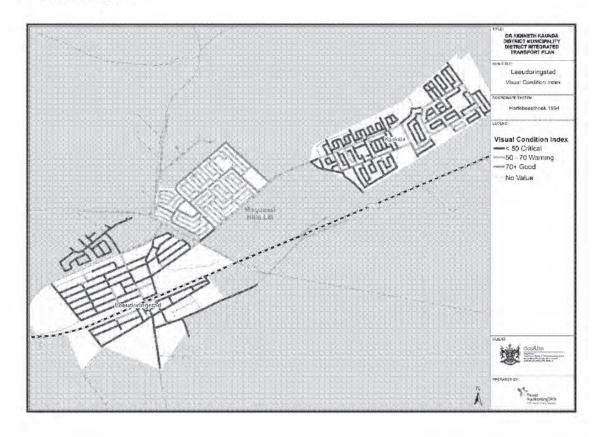
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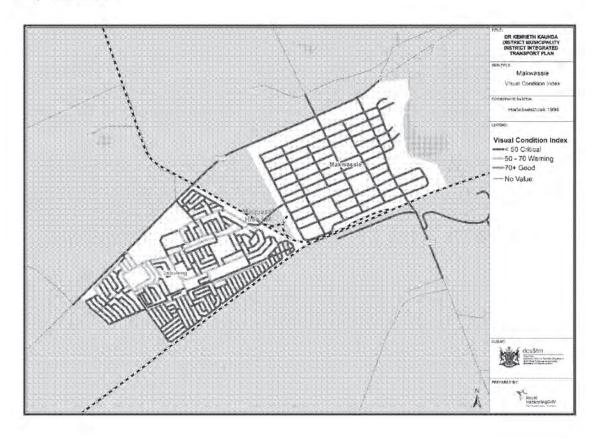
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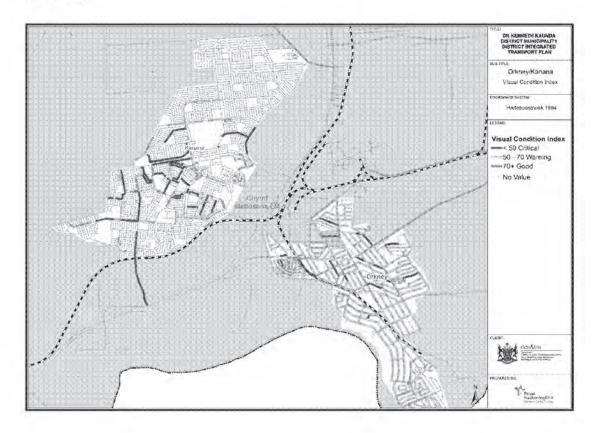
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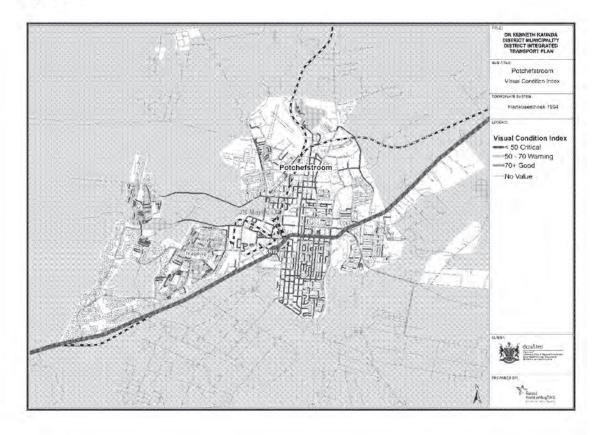
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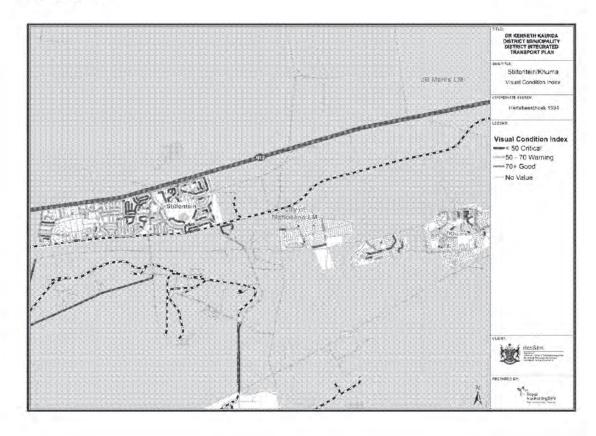
f) Orkney



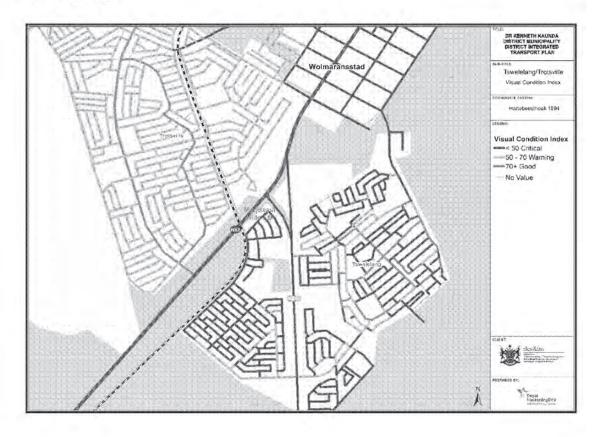
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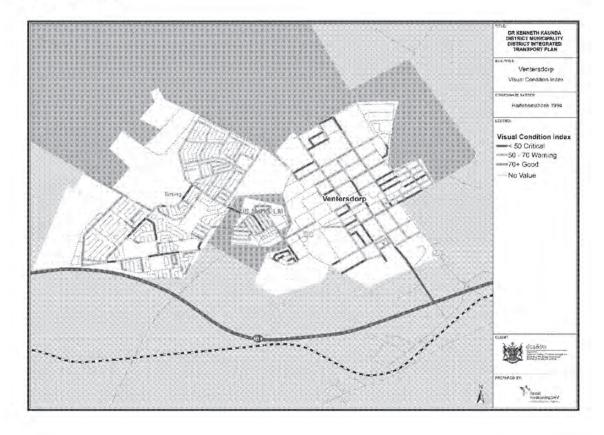
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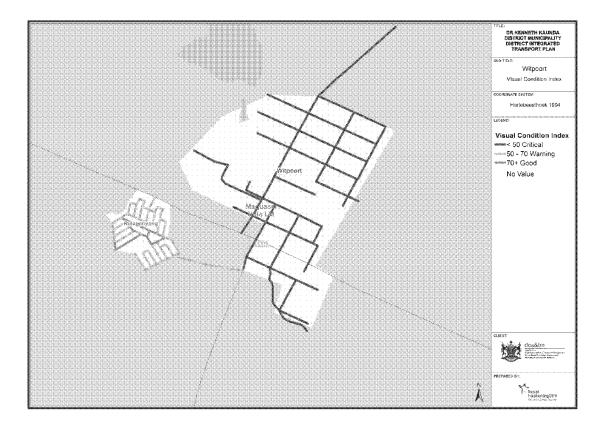
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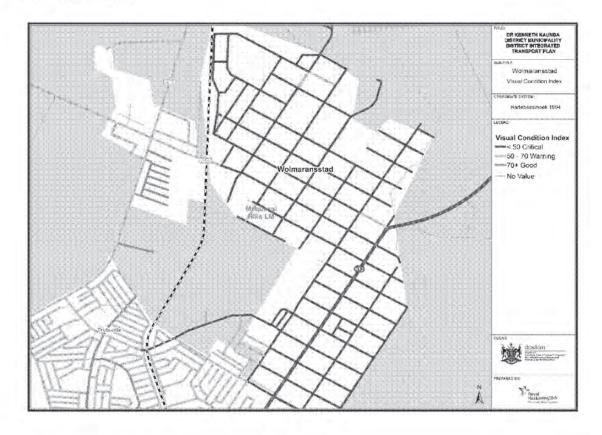
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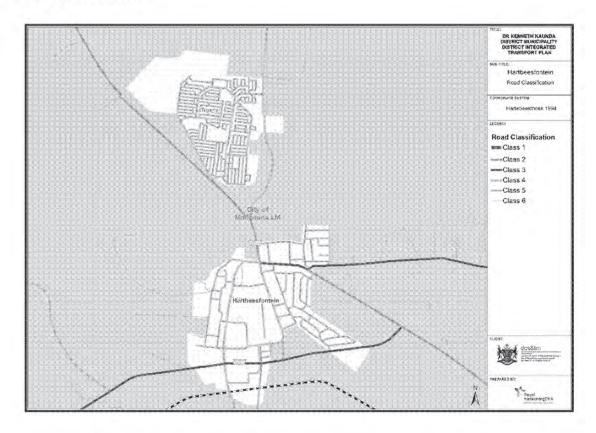


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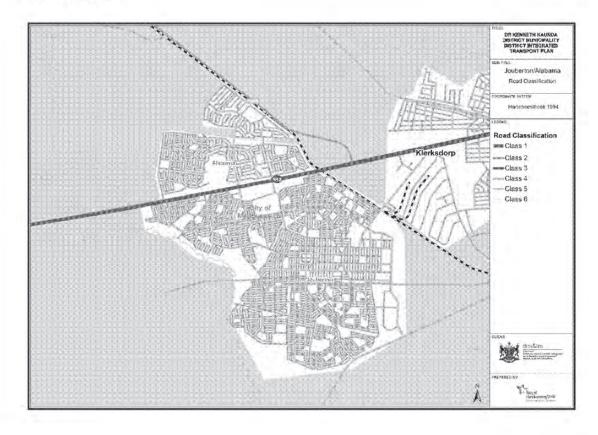


ANNEXURE C ROAD CLASSIFICATION

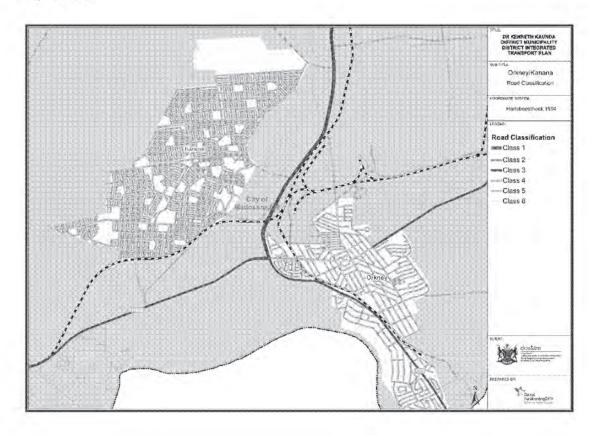
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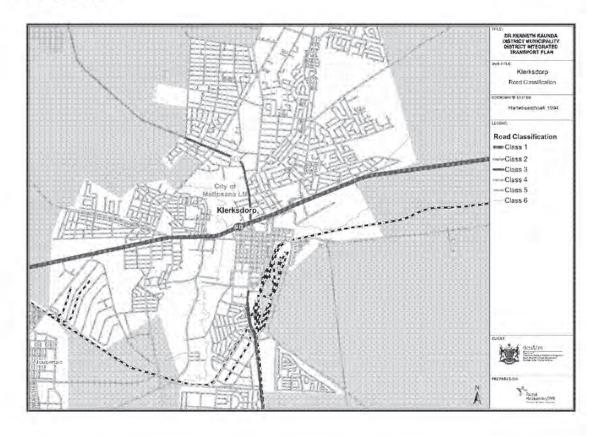
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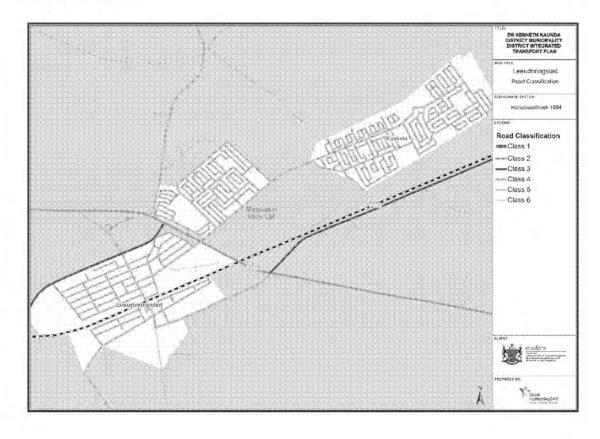
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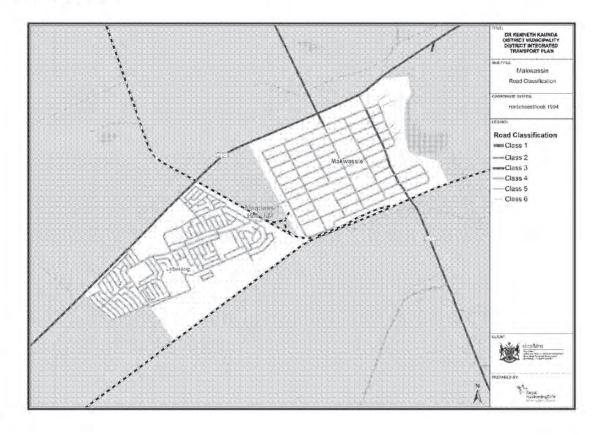
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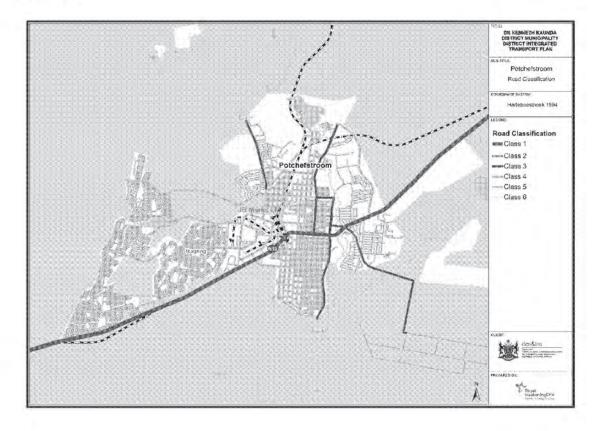
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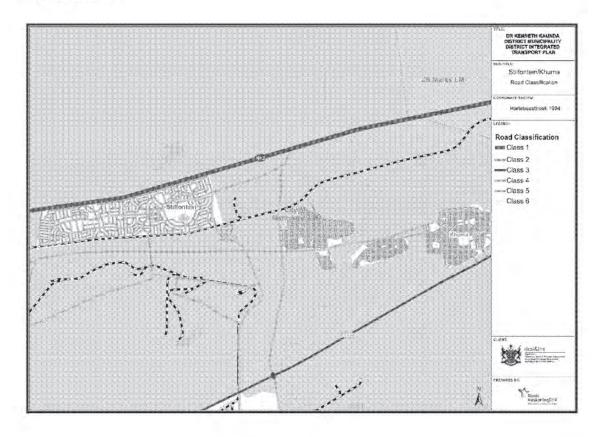
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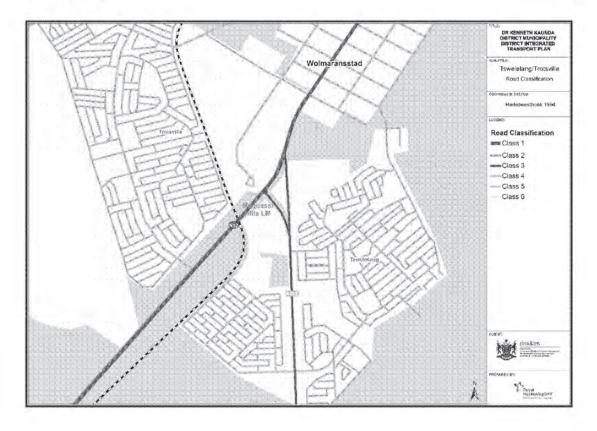
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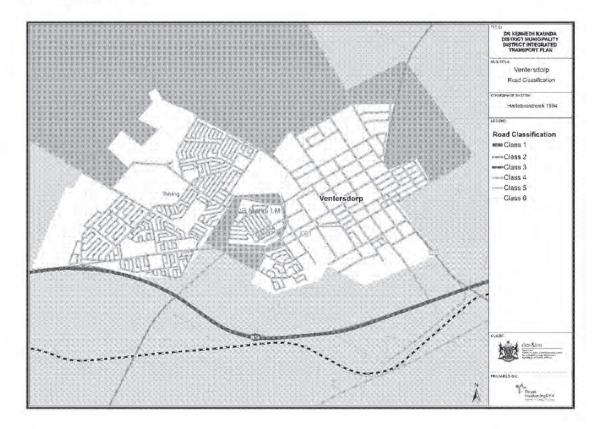
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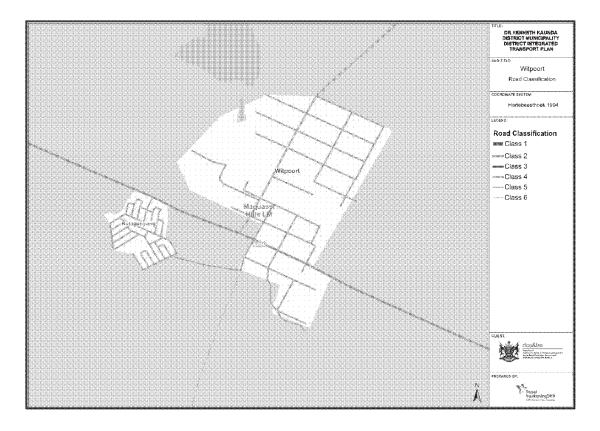
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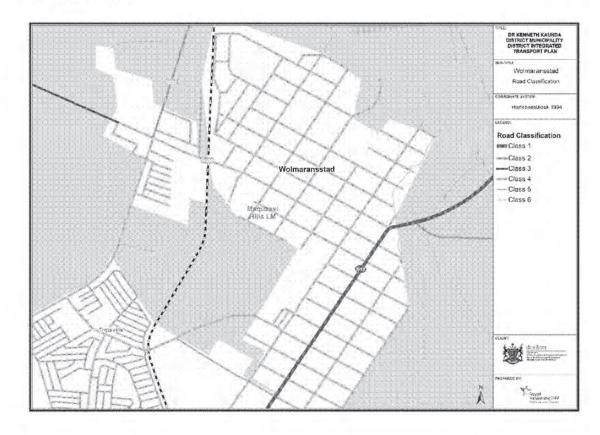
j) Ventersdorp



k) Witpoort



I) Wolmaransstad



ANNEXURE D

THREE-YEAR MTEF ROAD SECTOR PROGRAM FROM 2017/18 TO 2019/20

Project No.	Project name e assets	Project Status	Type of infrastructu	ne Total availal: 2017/18	MTEF F MTEF 2018	orward estimates
PWRT 161/13a	Upgrading Ventersdorp Weighbridge Infrastructure (Electrification, Canopy above Scale, Parking Shelter and Flood lights)	Practical Completion	Weighbridge			
PWRT85/12	Road Asset Management System RAMS (Budget Item)	Project Initiation	Roads, Bridges	10 000	10 000	10000
NEW	Appointment of relevant technical expects for Roads Infrastructure (Department of Transport)	Project Initiation		18 730	18 730	10000
PWRT161/125	Upgrading of Wolmaranstad weighbridge	Underplanning and design	Weighbridge			20000
Total New infrastru	ture assets			28 730	28 730	40000
2. Upgrades and ad-	ditions					
PWRT103/11A	Upgrading from gravel to surface of Road D509 between Leeuwdoringstad and Road D1138 Phase 1	Under Construction	Road	651	6 000	
NEW 11 - 31	Upgrading of Road D1303 between Wolmaraanstad from and Makwassiie Hills	Project Initiation	Road			
PWRT103/11b	Upgrading of Road D509 in Leeuwdoringstad in Dr Kenneth Kaunda District (EPWP) Phase 2	Project Initiation	Road		6 000	
Total Upgrades and	additions			651	12 000	
3. Refurbishment and	d rehabilitation					
PWRT47/13	Emergency Repairs of bridge over Vaal River in the Kenneth Kaunda District(DisasterFunds)	Under planning and design	Bridge			
PWRT86/13	Rehabilitation and Reseal of road P13/4 from Wolmaranstad to Wesselbron (Border Free State)	Under planning and design	Road		25 000	75000

Project No.	Project name	Project Status	Type of infrastructure	Total available		
				2017/18	NITEF 2018/19	WITEF 2019/2
PWRT02/11C	Reseal and Light Rehab of Afrikaner Mine Road (Road D842) from P56/1 to D860 (14.4km), D860 from N12 to Hartebeesfontein (16,4km) and Road R507 from D860 to P56/1 (2,7km)	Under planning and design	Road			
PWRT85/13	Rehabilitation of Road P175/1 from Potchefstroom to Vanderbijlpark road (border Gauteng)	Under planning and design	Road	55 000	55 000	35000
PWRT90/13	Rehabilitation of Road P34/5 (R506) from Schweizer- Reneke to Christiana	Under planning and design	Road		45 000	80000
PWRT139/12c-2b	Reseal of Road P137/1 from Orkney to N12 (passing T- Junction D2541) 30km	Planning and Design	Road			_
PWRT139/12c-2a	Reseal and Fogspray of road D2541 from Potchefstroom to Mooibank (31.5km)	Planning and Design	Road			
PWRT045/9	Roads capex Programme Managers		Road		T	
Total Refurbishmen	t and rehabilitation			55 000	125	190
4. Maintenance and	repairs					
PWR 129/15	Rehabilitation of Road P3/4 from P56/1(R503) to P32/1 (R30) and P3/5 from P32/1(R30) in Klersdorp to end of section(Limit)	Practical completion	Road	1 500		
New	Rehabilitation of Road P137/1 at Vaal Reefs intersection due to high accident rate	Project initiation	Road	-	-	
New	Regravelling of unpaved roads	Project initiation	Road			
New	Pothole patching, resealing and maintenance of road P47/3 from Swartruggens to Ventesdorp.		Road			

STAATSKOERANT, 27 NOVEMBER 2020

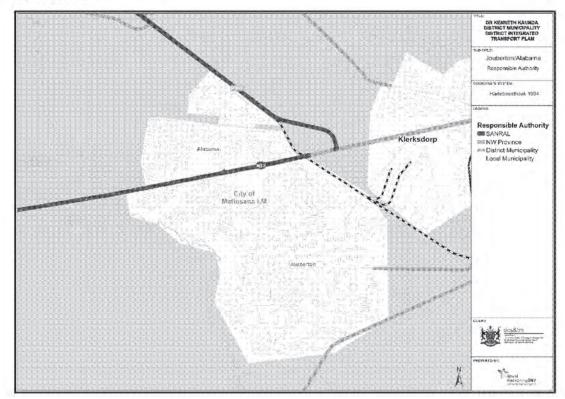
Project No.	Project name	Project Status	Type of infrastructure	Total available	MTEF Forward estimates
				2017/18	MTEF 2018/19 MTEF 2019/20
Plevi	Re-gravelling of unpawed roads	Project inflation	Road		
Routine Maintenance	Road Infrastructure maintenance- Yellow Fleet	Continuous	Road		
Routine Maintenance	Road Infrastructure maintenance	Continuous	Road	-	
PWR 129/15a	Rehabilitation, Repairs and Reseal of road P3/4 from P56/1 (R503) to P32/1 (R30) and P3/5 from P32/1 (R30) in klerksdorp to end of section (LIMIT) PHASE 2	Project initiation	Road	46 363	3 500
PWR 49/16	Re-gravelling of road D85 from Schoemansdrift to Ventersdorp (10km)	Project initiation	Road	5 000	-
New	Road routine maintenance		Road	90 000	
New	District Operation Maintenance		Floated	25 000	
Total Maintenance and repairs				167.863	3 500
Total Public Works and Roads (Roads Sector)				252 244	169 230 230 000

ANNEXURE A RESPONSIBLE AUTHORITY

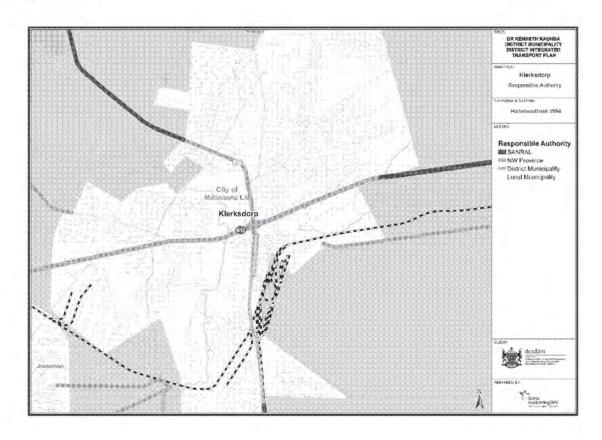
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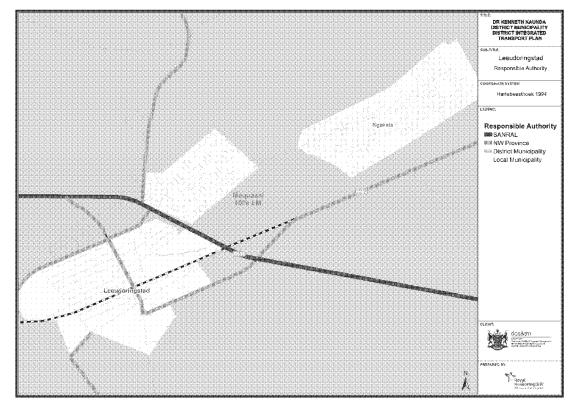
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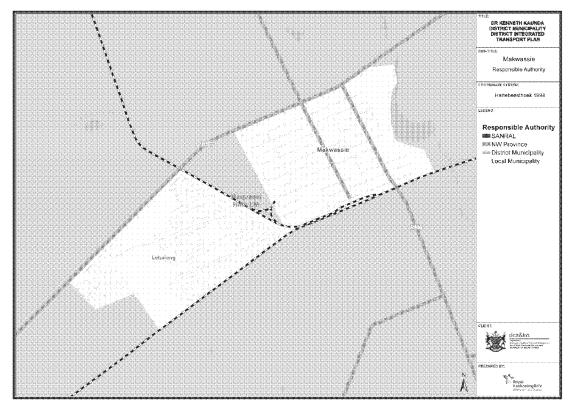
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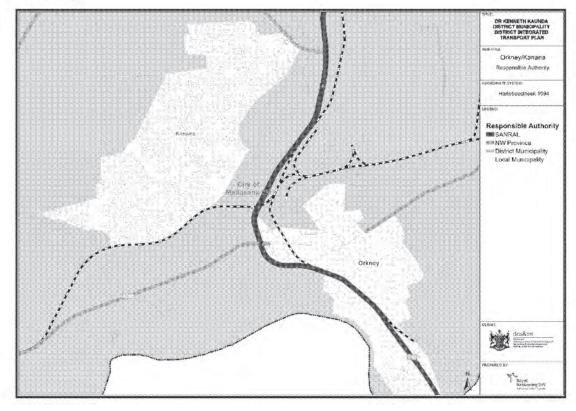
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e) Makwassie



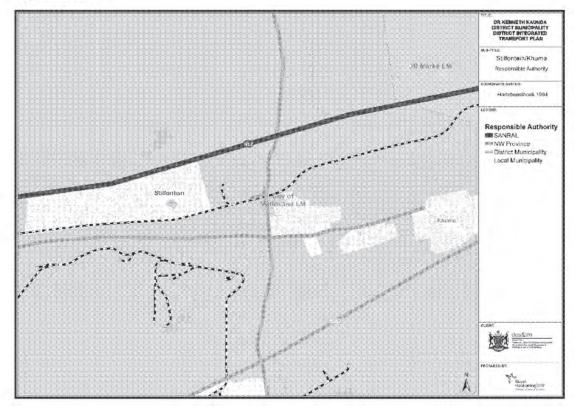
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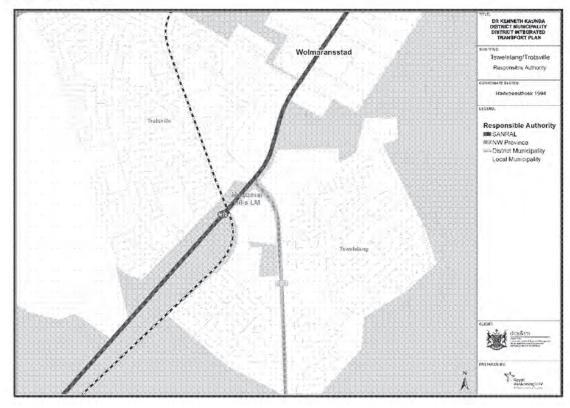
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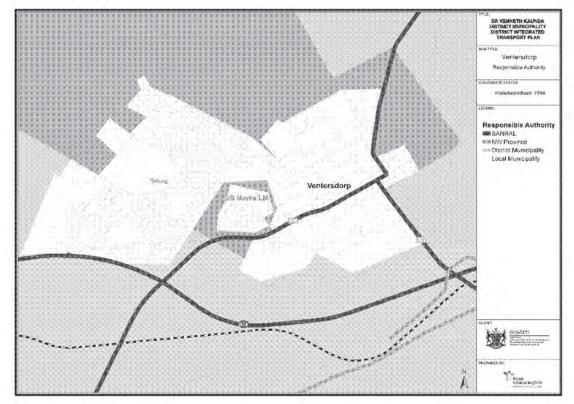
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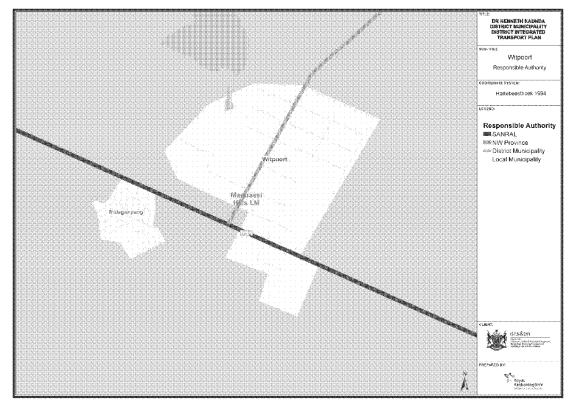
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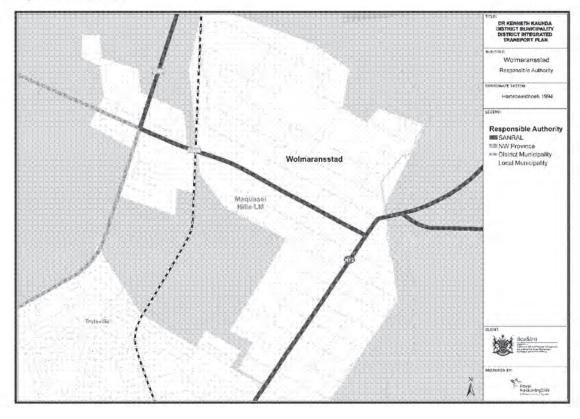
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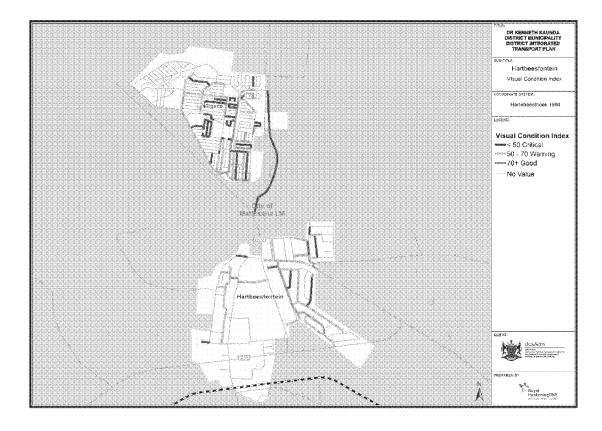


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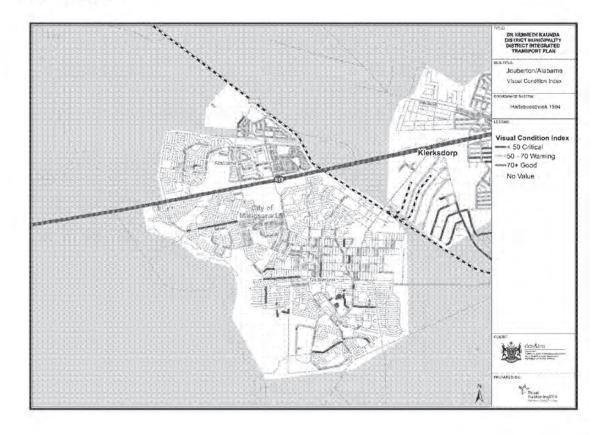


ANNEXURE B VCI

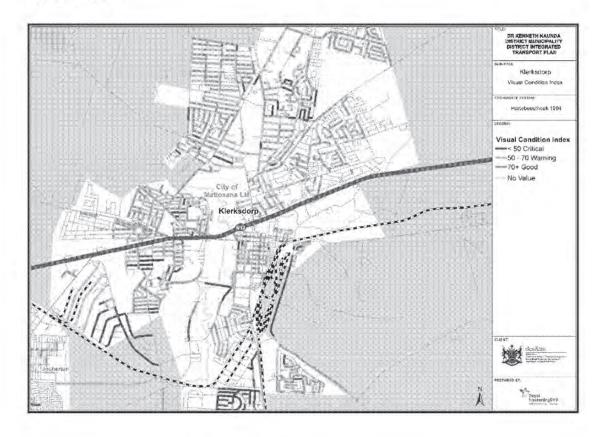
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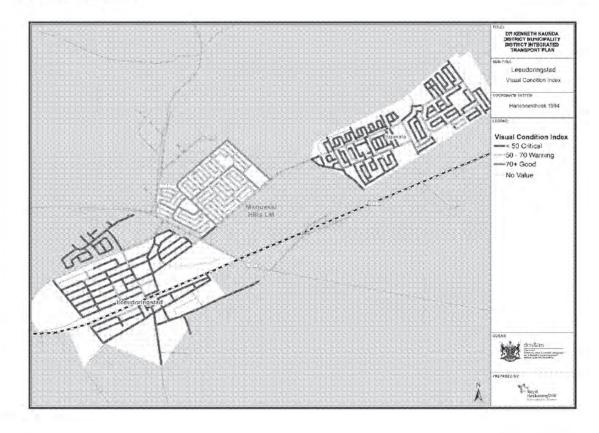
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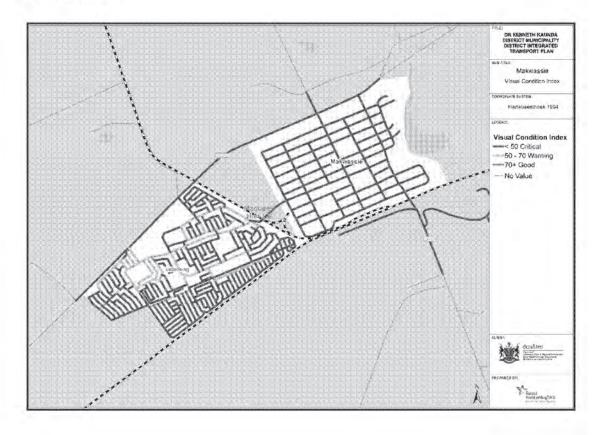
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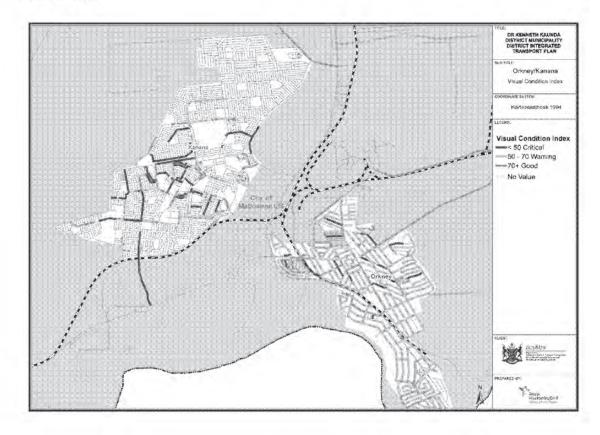
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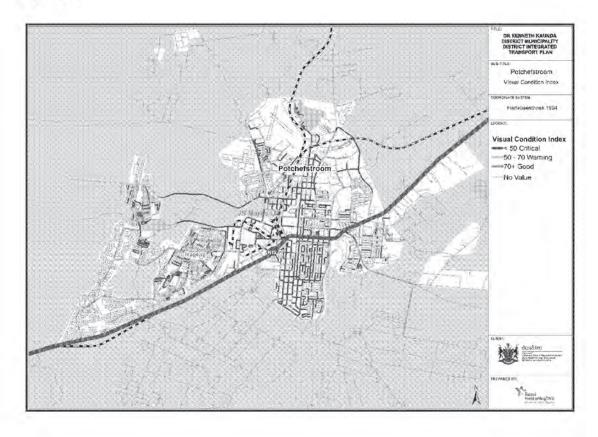
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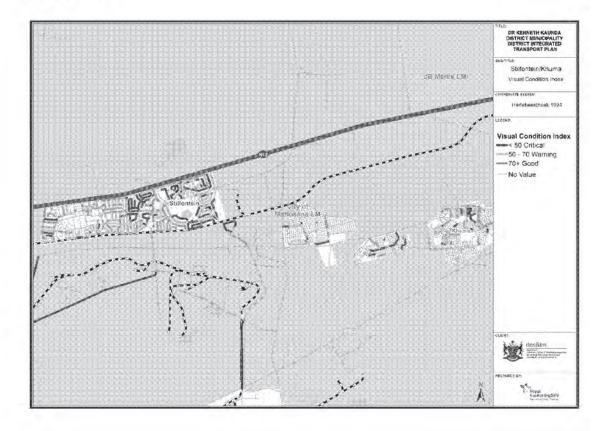
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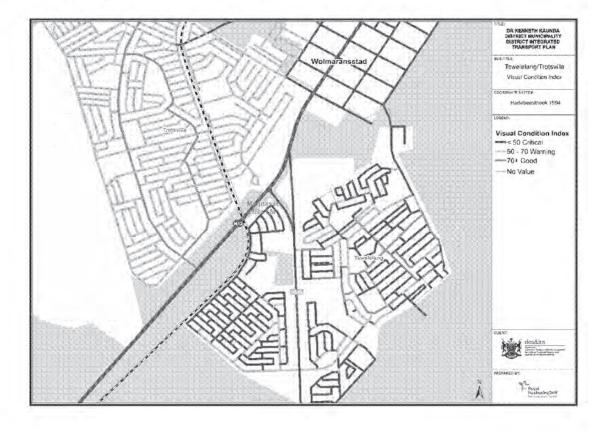
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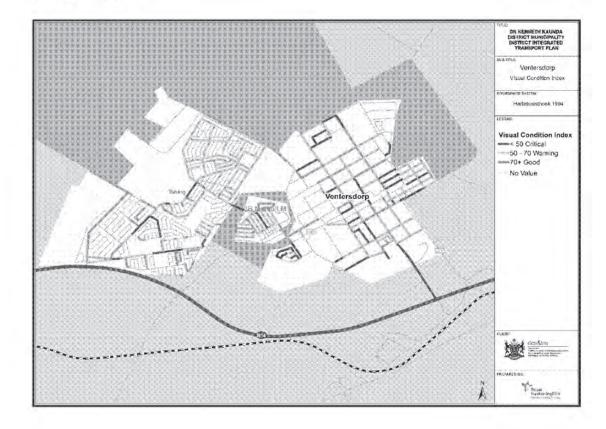
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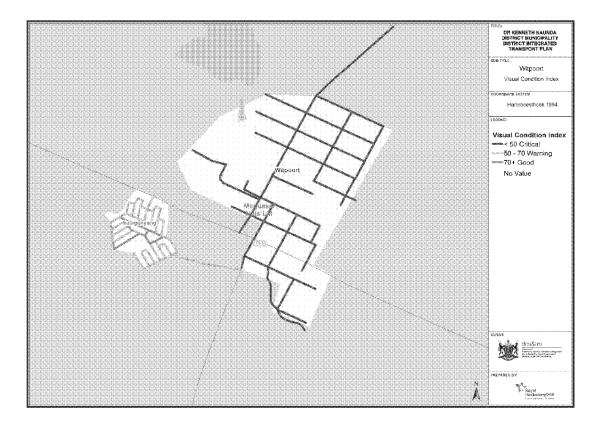
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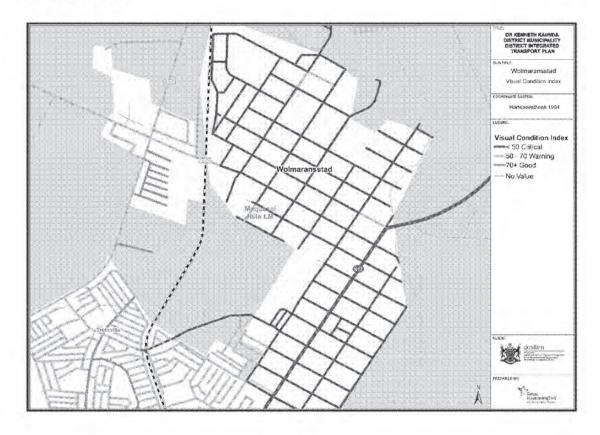
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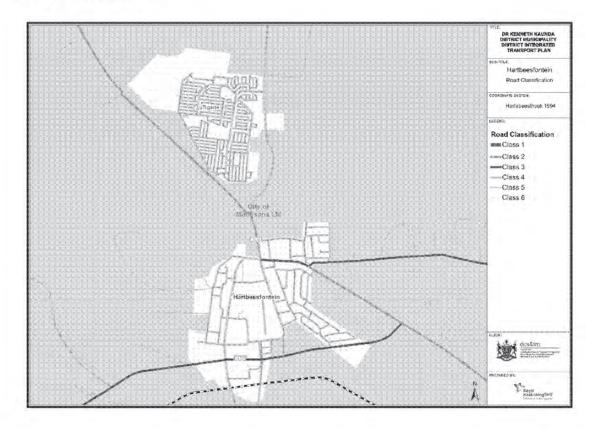


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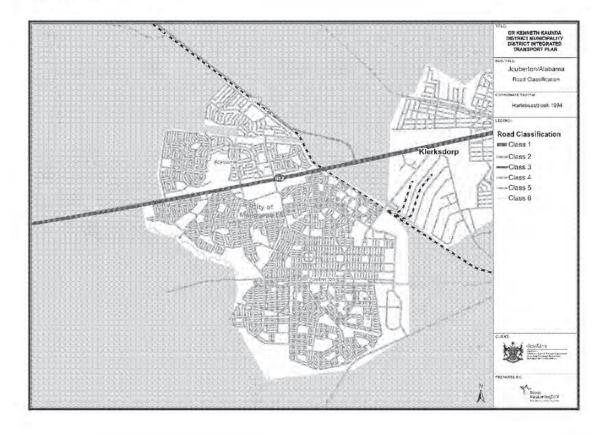


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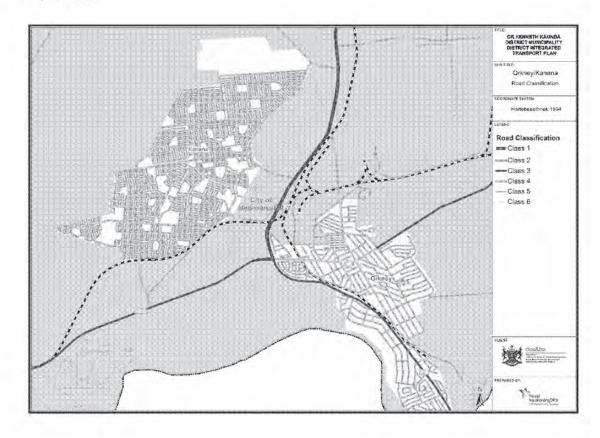
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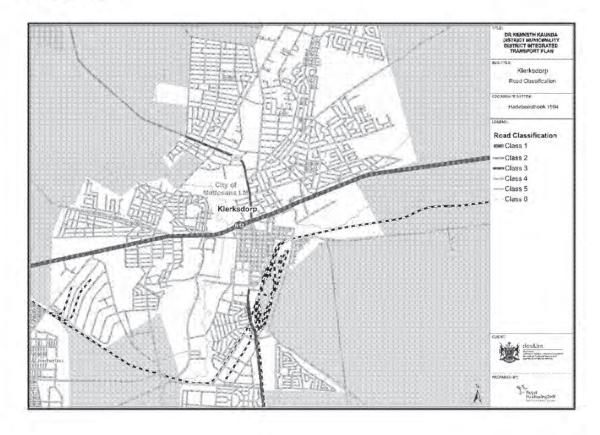
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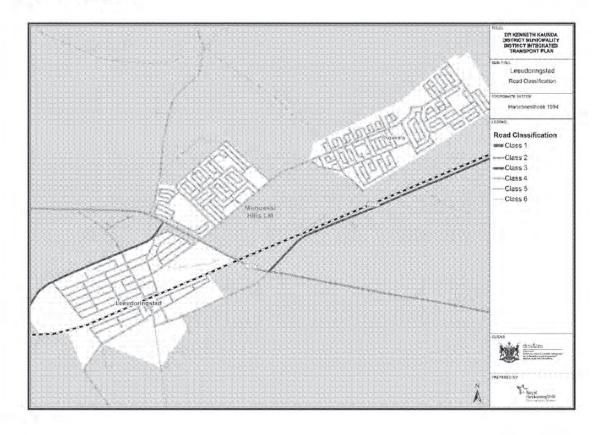
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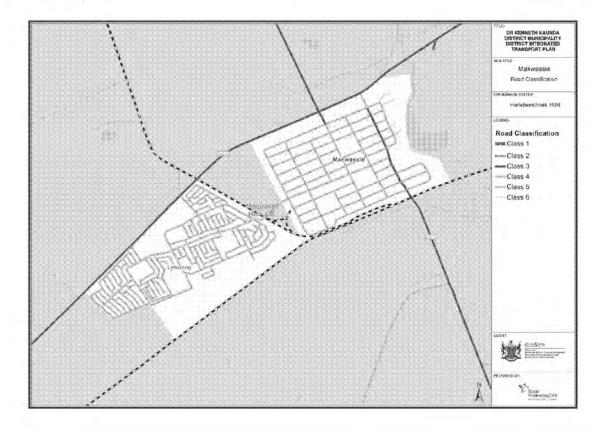
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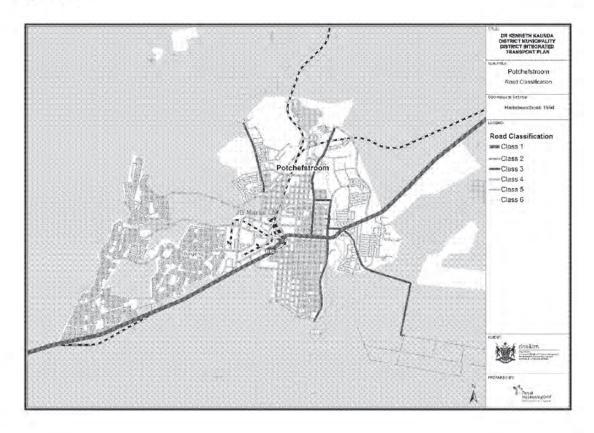
e) Leeudoringstad



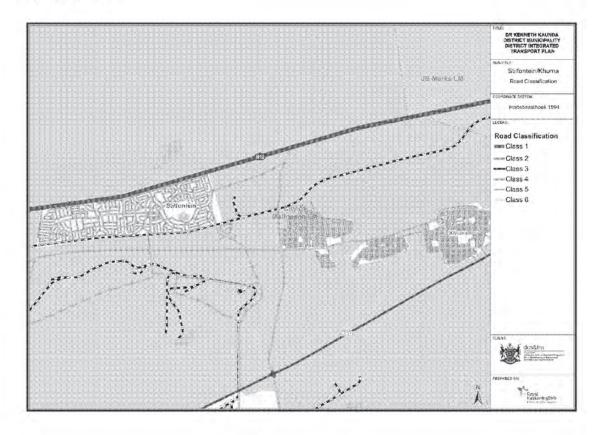
f) Makwassie



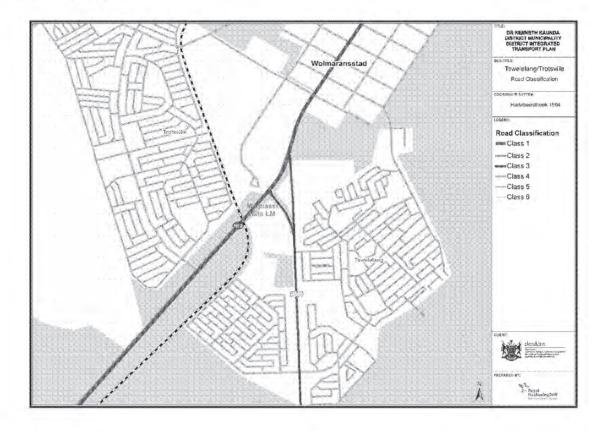
g) Potch



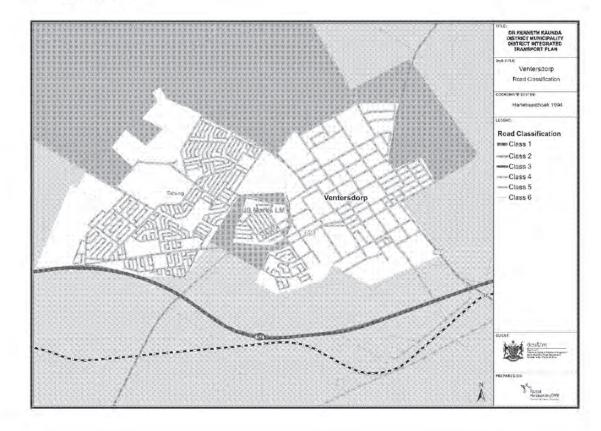
h) Stilfontein



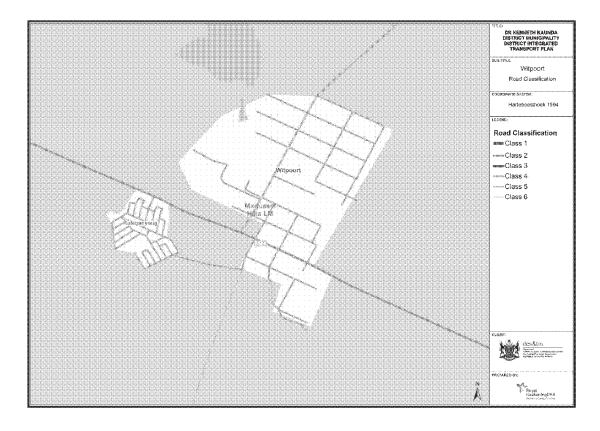
i) Tswelelang



j) Ventersdorp



k) Witpoort



I) Wolmaransstad

