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# **Development of the Limpopo Rural Transport Strategy**





Original

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# 1. INTRODUCTION

In September 2008 Africon, currently trading as Aurecon South Africa (Pty) Ltd was appointed by the Limpopo Provincial Department of Roads and Transport to develop a Rural Transport Strategy for the province.

#### <u>Background</u>

The Limpopo Province is dominated by rural areas, which are characterized by relatively high unemployment and poverty. The rural population that is employed are mainly involved in mining or agricultural activities. Rural communities, as elsewhere in the country, have limited access to basic social services and economic activities. As a result of the above, the Department of Roads and Transport have identified the need to develop a Rural Transport Strategy for the Limpopo Province that will address and ensure the implementation and evaluation of projects that are aimed at rural transport development.

#### Study Objectives

The primary study objective is the development of a Rural Transport Strategy for the Limpopo Province. Through this, the secondary objectives are to address the following:

- Mobility changes of the rural communities;
- Inequalities in rural living standards;
- Access to basic services between rural and urban areas;
- Encouragement of investment in indigenous transport technological solutions;
- Improvement of access to affordable and reliable transport infrastructure and services for economic development activities and rural households;
- Alignment with the Integrated Sustainable Rural Development Program and Integrated Development Plans;
- Provision of a regulatory framework for rural transport operations and safety;
- Stimulation and acceleration of women and youth development;
- Promotion of high-leverage rural transport initiatives projects and programmes;
- Funding and institutional arrangements.

#### Outline of this Report

The outline of this report is as follows:

- Section 1 (this section) provides a brief introduction to the study, background as well as the study objectives;
- **Section 2** sets out our approach and methodology for the project in general, including the execution of the desktop review study;
- **Section 3** introduces the province providing it locality, demographic and socioeconomic information;
- Section 4 sets out the current position with respect to rural transport planning within the province;



- Section 5 provides findings of different surveys and assessment that have been conducted at national as well as regional level to ensure rural transport planning is achieved.
- Section 6 concludes the report with remarks on the findings of the Desktop Study. .

# 2. APPROACH AND METHODOLOGY

The approach and methodology for the study consist of the following main phases:

- Phase 0: Mobilization
- Phase 1: Status Quo Analysis
- Phase 2: Proposed Intervention Strategy
- Phase 3: Development of an Implementation Plan

This report represents the first part of Phase 1, namely the Desktop Study. For the purposes of the Desktop Study the following relevant source documentation were identified to establish the nature and extent of governing legislation pertaining to rural transport as well as planning for rural transport development:

- Limpopo Transport Policy;
- Limpopo in Motion;
- Provincial Land Transport Framework;
- Provincial Growth and Development Strategy;
- Integrated Development Plans;
- District Spatial Development Frameworks;
- Integrated Transport Plans of the 5 districts;
- Current Public Transport Records of the 5 districts;
- Road Network Management System (report Needs Analysis Reports, maps);
- Any other relevant planning documents that have been completed by the Department that will impact on rural transport planning (Rationalisation Plans, Public Transport Plan, ect).

The following key documents were obtained:

- Key results of National Household Travel Survey Limpopo;
- National Transport Master Plan 2005-2050 Ph1 Inventory Report Limpopo Chapter;
- Mopani DM Draft Reviewed IDP 2006-2011;
- Lepelle-Nkumpi LM IDP 2008/9 Draft;
- Vhembe DM 2008/9 IDP Review Approved Version;
- Waterberg DM Reviewed IDP 2008-09 Fin Yr;
- Capricorn DM ITP Executive Summary;
- Vhembe DM ITP Executive Summary;
- Sekhukhune DM ITP Executive Summary;
- Mopani DM ITP Executive Summary;
- Waterberg DM ITP Executive Summary; and
- Greater Sekhukhune District Roads Master Plan.

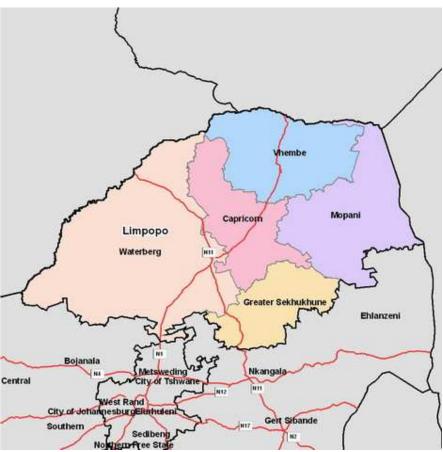
# 3. PROVINCIAL INTRODUCTION

## 3.1 **Provincial Overview**

Limpopo Province is one of the nine provinces of South Africa. The province is bounded on the north by Zimbabwe and Botswana, on the east by Mozambique and on the south and west by the provinces of Mpumalanga, North West and Gauteng. The province consists of five district municipalities and 23 local municipalities. The district municipalities are as follows:

- Vhembe District Municipality;
- Capricorn District Municipality;
- Mopani District Municipality;
- Greater Sekhukhune District Municipality and
- Waterberg District Municipality.

A map of the province showing the different district municipalities is indicated in Figure 1.



# Figure 1: Limpopo Province Locality Map

Source: Municipal Demarcation Board, <u>www.demarcation.org.za</u>

Limpopo Province is the second poorest province in the country, with approximately 77 % of the population living below the poverty income line. For this reason it is essential that poverty issues be addressed, of which one way to do so is through means of the development of transport infrastructure, and specifically the rural road transport network.

# 3.2 Demographical Profile

The 2001 *Census* recorded the Limpopo provincial population estimate as 5 273 655 persons. Between 2001 and 2005 the population growth rate of Limpopo was estimated as 1.2%, *with most rural towns experiencing close to zero growth rate due to migration and the impact of HIV/AIDS*.

According to the Limpopo Transport Master Plan 2050 the following salient demographic details exist for the province for 2005:

- The population of Limpopo is approximately 5,3 million (represents 11.3% of the national total), and the distribution per District Municipality is shown in **Table 1**.
- Unemployment rate is approximately 49%, with literacy level in Limpopo still low with one third of the population with no schooling.
- 82% (2,4 million) of the population still walk to work.

DISTRICT MUNICIPALITY	POPULATION	NO. OF HOUSEHOLDS	EMPLOYED	UNEMPLOYED
Capricorn	1 237 959	334 085	197 026	186 977
Waterberg	661 252	179 634	189 585	84 426
Vhembe	1 303 228	349 611	190 015	238 041
Mopani	1 140 267	306 404	225 595	182 768
Sekhukhune	995 781	265 882	97 789	160 013
Total	5 338 487	1 435 616	900 010	852 225

#### Table 1: Demographic Profile of Limpopo Province

Source: Limpopo Transport Master Plan 2050, 2007

The 2004-2014 Limpopo PGDS together with the Department of Finance and Economic Development projected that the population growth in Limpopo would have declined to 1.0% by 2008, which also took cognisance of the new district boundaries of Sekhukhune and Bohlabela and the impact of HIV/AIDS.

Limpopo province is mostly rural characterised by sparsely populated in low density areas, which results in excessively long travelling time and distances to work places and other destinations.

As far as the population distribution is concerned, 96% (1,1 million) of the total population in Limpopo is black and 53% (2,8 million) is younger than 20 years. Overall, the population of Limpopo is younger than that of the country as a whole. This implies a *unique educational, recreational and developmental interventions challenge*, but also offers an opportunity for growth.

# 3.3 Socio-Economic Profile

#### 3.3.1 Households and Population by Income (2005)

According to Table 2, extracted from the Limpopo Transport Master Plan 2050, it is evident that:

- 61% of all households earn < R1 000 per month
- 25% households earn a medium income (R1 001 R6 000)
- only 13% households earn > R6 000 per month

The low income earners represent 3.4 million people, which clearly reflects a very poor population. This is also a further indication of the rural nature of the province.

DISTRICT		HOUSEHOL	D BY INCOME		POPULATION BY INCOME			
MUNICIPALITY	LOW	MEDIUM	HIGH	TOTAL	LOW	MEDIUM	HIGH	TOTAL
	INCOME	INCOME	INCOME		INCOME	INCOME	INCOME	
Sekhukhune	167, 592	68, 410	29, 880	265, 882	661, 987	253, 119	80, 675	995, 781
Mopani	188, 481	77, 377	40, 546	306, 404	744, 498	286, 296	109, 473	1, 140, 267
Vhembe	216, 416	88, 759	44, 436	349, 611	854, 843	328, 407	119, 978	1, 303, 228
Capricorn	201, 763	83, 727	48, 595	334, 085	796, 962	309, 789	131, 208	1, 237, 959
Waterberg	105, 423	44, 462	29, 749	179, 634	416, 423	164, 508	80, 321	661, 252
Total	879, 675	362, 735	193, 206	1, 435, 616	3, 474, 713	1, 342, 119	521, 655	5, 338, 487

#### Table 2: 2005 Provincial Households and Population by Income (2005)

Source: Limpopo Transport Master Plan 2050, 2007

#### 3.3.2 Employment Status (2005)

**Table 3** shows the 2005 employment status by District Municipality. The total number of economically active persons in the province equals 3.58 million - 67 per cent of the provincial population. The percentage of employed people is 51%, whilst 49% are unemployed.

The majority of the unemployed persons reside in Sekhukhune DM (62%) and Vhembe DM (56%).

DESCRIPTION	EMPLOYED	NOT ECONOMICALLY ACTIVE	UNEMPLOYED	UNEMPLOYMEN T RATE
Sekhukhune	97, 789	740, 979	160, 013	62%
Mopani	225, 595	731, 905	182, 768	45%
Vhembe	190, 015	875, 172	238, 041	56%
Capricorn	197, 026	853, 956	186, 977	49%
Waterberg	189, 585	387, 241	84, 426	31%
Limpopo	900, 010	3, 589, 253	852, 225	49%

#### Table 3: 2005 Limpopo Provincial Employment Status (2005)

Source: National Transport Master Plan, 2007

# 3.3.3 Employment by Industry (2005)

Employment by Industry for 2005 is presented in **Table 4** (on the next page). Employment sectors in the province are vast, with the wholesale and retail sector being the predominant employer (28% of the provincial workforce), followed by the Service sector (20%). The least contributor to the provincial workforce includes the "transportation, storage and communication" sector (3%) and the "electricity, gas and water" sector (1%).

Employment in agriculture is third dominant in the province (17%). It is however more significant in Waterberg (2<sup>nd</sup> dominant employment sector with 19%) and Mopani (2<sup>nd</sup> dominant employment sector with 20%).

# 3.3.4 Concluding Remarks

The following concluding remarks are drawn from this chapter:

- Limpopo is the second poorest province, with approximately 71% of the population (3.8 million people) living below the poverty line.
- Moreover, 61% of households (875 000 of the 1.4 million households in the province), majority found in rural areas earn less than R1000 per month.
- Limpopo is characterised by sparsely populated rural areas that have low densities.
- Population growth in rural areas in Limpopo is declining due to
  - Migration from rural areas to urban areas;
  - Impact of HIV / AIDS and
  - Lack of growth in the rural areas.
- Over 60% of households earn less that R1000 per month, with a further 25% of households earning between R1000 and R3000.
- 67% of the population was economically active with 49% not being employed.
- The agricultural sector employed 17% of the workforce in the province. This sector is one of the main activities in Waterberg and Mopani districts.

	MAIN INDUSTRY										
DISTRICT MUNICIPALITY	AGRICULTURE	<b>DNINI</b> W	MANU- FACTURING	ELECTRICITY, GAS AND WATER	CONS-TRUCTION	WHOLESALE AND RETAIL	TRANSPORT, STORAGE AND COMMUNI- CATION	FINANCIAL	SERVICES	PRIVATE HOUSEHOLDS	TOTAL
Sekhukhune	15, 540	5, 472	4, 442	784	5, 527	29, 542	3, 345	3, 638	18, 870	7, 630	94, 790
%	16	6	5	1	6	31	4	4	20	8	100
Mopani	46, 215	8, 668	19, 223	1, 893	15, 088	59, 860	7, 809	10, 807	42, 791	13, 240	225, 594
%	20	4	9	1	7	27	3	5	19	6	100
Vhembe	29, 041	2, 117	10, 536	1, 962	15, 602	55, 699	6, 106	9, 481	45, 720	13, 750	190, 014
%	15	1	6	1	8	29	3	5	24	7	100
Capricorn	21, 449	1, 435	13, 143	1, 753	15, 023	58, 868	7, 814	14, 057	46, 202	17, 282	197, 026
%	11	1	7	1	8	30	4	7	23	9	100
Waterberg	36, 722	16, 851	12, 553	1, 746	13, 887	43, 611	4, 817	8, 173	27, 680	23, 545	189, 585
%	19	9	7	1	7	23	3	4	15	12	100
Limpopo	148, 967	34, 543	59, 897	8, 138	65, 127	247, 580	29, 891	46, 156	181, 263	75, 447	897, 009
%	17	4	7	1	7	28	3	5	20	8	100

#### Table 4: Limpopo Employment by Industry (2005)

Source: National Transport Master Plan, 2007

# 4. POLICY AND LEGISLATIVE FRAMEWORK GUIDING RURAL TRANSPORT PLANNING IN SOUTH AFRICA

This chapter gives the framework within which rural transport planning within the Limpopo Province will be based on. It interprets various national and provincial policy documents as well as Southern African regional focussing on issues and opportunities relevant to rural transport planning in the province.

## 4.1 SADC Regional and National Rural Transport Perspective

#### 4.1.1 United Nations Millennium Development Goals (1990's)

The United Nations in 1990s prepared the Millennium Development Goals (MDG), which has as its basis the alleviation of poverty world-wide. The South African Government, through its National Spatial Development Perspective, has subscribed to the transportation recommendations of the MDG, which provide precedence to the rural development issues.

Moreover, the National Road Infrastructure Strategic Framework and the National Rural Transport Development Strategy have taken this concept further to set the scene for the provincial governments to work out the detail of each.

The following are some of the salient issues from the **ten recommendations** of the MDG.

- National and regional strategies to alleviate poverty should be in place by 2006.
- Public investment in capacity building, resource mobilisation, official development and assistance should be developed. Issues needing specific attention relate to connectivity planning (multi-purpose service delivery centres) and labour intensive road development projects.
- Poverty reduction strategies should be transparent and be inclusive of civil society, private sector and international partners. In the North West Province the IDP and ITP processes are functioning in this way on Provincial, District and Local Levels.
- International donors should identify countries for "fast track" programs. With a comprehensive list of projects, the North West Provincial Government can approach International Funding Agencies and donors for assistance.
- Launch of projects and programs to build experience at community level. Building experience of local officials are transport planning and implementation management and monitoring.
- Regional Development Programs should be used as a starting block for more detailed projects.
- Development Assistance to support Millennium Development Goals. Again the Rural Transport Strategy should be used to motivate to National Government to obtain funding for rural transport projects.
- Support for scientific research and development to address needs of the poor such as health, agriculture, natural resource and environmental management.
- United Nations should expand their base and agencies, funds and programs at country level to support the goals set.

#### 4.1.2 The National Constitution (1996)

**Table 5** provides the Constitutional competencies of each sphere of government pertaining to transport planning.

NATIONAL	PROVINCIAL	MUNICIPAL
Regional Planning &	Regional Planning &	
Development	Development	
Urban and Rural Development	Urban & Rural Development	Municipal Planning
Public Transport	Public transport	Municipal Public Transport
Road Traffic regulation	Road Traffic Regulation	Municipal Traffic & Parking
Vehicle licensing	Vehicle licensing	
National roads	Provincial roads & Traffic	Municipal Roads

#### **Table 5: Constitutional Competencies**

According to the Constitution, the province is responsible for regional planning and development, which include urban and rural development, yet there is no direct responsibility assigned to the provision of the rural transport services or the deliverance of local rural roads.

# The Constitution does not directly refer to rural roads or rural transport.

#### 4.1.3 White Paper on National Transport Policy (1996)

The National Government's transport policies, as well as overall framework within which all other policies, strategies and projects should be developed are outlined in the White Paper.

For a rural transport perspective, the White Paper sets out a number of relevant policy principles, which include:

- To promote the use of public transport over private car travel
- To provide an appropriate and affordable standard of accessibility to work, commercial and social services in rural areas
- To ensure that public transport is affordable, with commuters spending less than 10 percent of disposable income on transport
- To ensure that passenger transport services address user needs, including those of commuters, pensioners, the aged, scholars, the disabled, tourists, and long distance passengers
- To promote rural development that will improve access to opportunities by ensuring that rural workers are housed in close proximity to their work locations and services, thereby reducing the need to travel
- To encourage, promote and plan for the use of non-motorised transport where appropriate
- To provide appropriate institutional structures, which facilitate the effective and efficient planning, implementation, funding, regulation and law enforcement of the passenger transport system, devolved to the lowest competent level
- To ensure sustainable and dedicated funding for passenger transport infrastructure, operations, and law enforcement.



## 4.1.4 Moving South Africa (1999)

The Moving South Africa – the Action Agenda is a 20 year strategic framework to deliver on the long term vision for transportation in South Africa, with the Chapter 9 outlining the vision, strategic challenges and rural transport strategy and key targets earmarked to lead in improvement of rural transport service for all.

The rural transport vision for 2020 includes provision of transport infrastructure and services in rural areas that will provide basic means of access and mobility to ensure integration of sustainable rural communities. Some of the strategic challenges identified during MSA include:

- Communities needed more or better rural roads that what they had in 1999.
- Provision of rural road infrastructure in a sustainable manner.
- Lack of adequate data;

Some of the actions identified in the formulation of the rural transport strategy included:

- Developing a coordinated framework across national government to ensure a guided infrastructure investment in rural areas;
- Funding of social or non-economic infrastructure in a transparent manner;
- Generating better rural transport data.

#### 4.1.5 National Spatial Development Perspective (1999) - NSDP

The key objectives of the NSDP are to:

- Supply a framework were discussion on the future development of the national space economy can be undertaken. The discussion is enabled by reflecting the localities of severe deprivation and need, of resource potential, of infrastructure endowment and of current and potential economic activity by describing the key social, economic and natural resource trends and issues shaping the national geography.
- Act as a common reference point for national, provincial and local governments to analyse and debate the comparative development potentials of localities in the country.
- Identify key areas of tension and/or priority in achieving positive spatial outcomes with government infrastructure investment and development spending.
- Provide national government's strategic response to the above for a given time frame.

National government is committed to economic growth, employment creation, sustainable service delivery, poverty alleviation and the eradication of historic inequities. In order to meet these objectives in the most cost-effective, sustainable and equitable way, the National Spatial Development Perspective proposed the following *normative principles* to be used as a guide by all spheres of government when making decisions on infrastructure investment and development spending:

- Economic growth is a prerequisite for the achievement of other policy objectives, key among which would be poverty alleviation.
- Government spending on fixed investment, beyond the constitutional obligation to provide basic services to all citizens (such as water, electricity as well as health and educational facilities), should therefore be focused on localities of economic growth and/or economic potential in order to attract Private-sector investment, stimulate sustainable economic activities and/or create long-term employment opportunities.
- Efforts to address past and current social inequalities should focus on people not places. In localities where there are both high levels of poverty and development potential, this could include fixed capital investment beyond basic services to exploit the



potential of those localities. In localities with low development potential, government spending, beyond basic services, should focus on providing social transfers, human resource development and labour market intelligence. This will enable people to become more mobile and migrate, if they choose to, to localities that are more likely to provide sustainable employment or other economic opportunities.

 In order 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 link the main growth centres. Infrastructure investment and development spending should primarily support localities that will become major growth nodes in South Africa and the Southern African Development Community region to create regional gateways to the global economy.

#### 4.1.6 National Integrated Sustainable Rural Development Strategy (2000)

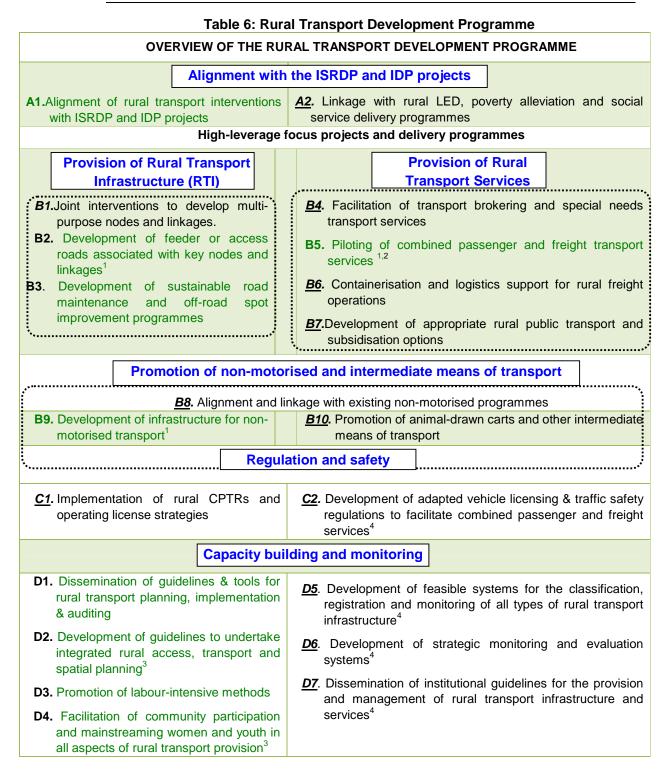
Recognising that the co-ordination of sectoral activities is a precondition for the efficient allocation of resources and effective delivery, the South African Cabinet mandated the Independent Development Trust (IDT), University of Pretoria and the World Bank to develop the National Integrated Sustainable Rural Development Strategy (ISRDS).

The Minister of Provincial and Local Government (DPLG) was appointed as the Cabinet's overall co-ordinator, because of the Department's role as the Government's focal point for local governance, thus enabling local level implementation to be linked to the IDP's of local authorities. DPLG is also the driver of the Urban Renewal Project (URP).

The ISRDS and the URP along with the Poverty Relief Fund, can be considered as the Government's major strategies for rural and urban development and poverty reduction.

The process of implementing the objectives of the ISRDS was given impetus in February 2001 by President Mbeki. The ISRDS is aimed at the co-ordinated delivery of integrated bundles of services and anchor development projects in terms of a prioritised set of rural development nodes (13 at present).

One of these nodes was partially located in Limpopo Province prior to 2006, which was the Greater Sekhukhune District Municipality. The district has subsequently been completely handed over to the Limpopo Province.



#### General guide to notation:

All the actions that are indicated in bold only (e.g. **A1**) are specified in the NLTSF (albeit phrased differently). All underlined and italicised actions (e.g. <u>A2</u>) are supplementary actions.

Specific explanatory notes (see superscripted numbers):

- 1. Actions in terms of which the NLTSF has specified particular targets for the ISRDP nodes.
- 2. Substantially rephrased and/or extended NLTSF recommendations.
- 3. Combination of two of the NLTSF recommendations.
- 4. Actions that overlap substantially with general transport institutional arrangements and regulations, and that would therefore require substantial co-ordination between rural transport and other functional areas.

Source: National Integrated Sustainable Rural Development Strategy (2000)

On district level, areas for intervention have also been identified in various studies and will be explained later in the report.

Key programs to be implemented in these areas include those addressing issues such as:

"...housing, water, sanitation, health including HIV/AIDS, pension pay-outs, household food security and nutrition, poverty alleviation including the provision of certain amounts of free services, Home Affairs services, education and training, sports and culture..."

Fundamental to the provision of each of the above-mentioned services is the issue of access. Without the provision of the appropriate transport infrastructure and services, the delivery of the ISRDS will be severely compromised.

The Limpopo Department of Roads and Transport has a critical and fundamental support role to play to ensure that rural dwellers have access to the basic services and development projects for which they have been targeted.

#### 4.1.7 White Paper on Spatial Planning and Land Use Management (2001)

The policy provisions of the White Paper on Spatial Planning and Land Use Management are the key instruments shaping current spatial planning and development in rural areas. Currently, the management of spatial development and land use in the rural areas of the Limpopo Province vests with all three spheres of government, and is defined by an evolving framework of policies and laws.

The provisions of these policies and laws apply to all laws promulgated by provincial and local spheres of government. Legislation pertaining to the environment, transport, land reform, water, and minerals has spatial and land use management implications of its own. Its application forms an integral part of the land use management system.

The Department of Constitutional Development in its Rural Infrastructure Investment Framework (RIIF) identified four types of communities:

- (a) Villages: Population between 500 5000 with densities of less than 5 households per hectare. The economic base consists of primarily pensions, public sector services and some agriculture.
- (b) **Dense rural settlements:** Population above 500, higher density, with and economic base dependent on pensions, public sector services and remittances.
- (c) **Farming:** Population up to 500, with wages and agriculture income forming the economic base.



(d) **Scattered settlements:** Population up to 500, with similar economic profile to villages. Some residents live on communal lands.

#### 4.1.8 National Land Transport Strategic Framework (2002)

The National Land Transport Strategic Framework (NLTSF) is a legal requirement in terms of Clause 21 of the National Land Transport Transition Act (No. 22 of 2000) (NLTTA). It provides the overarching, national five-year (2002 to 2007) land transport strategy, where approaches within 15 functional areas are outlined in terms of actions and outputs.

The framework discusses broad strategies on land transport, including those that have a bearing on rural transport. They include:

- The promotion of a more efficient and sustainable balance between the provision and use of public, private and non-motorised transport modes;
- The establishment of a needs-driven basis to assist the CBRTA Regulatory Committee in making decisions on the allocation of cross-border permits;
- The implementation of a decisive freight transport strategy;
- The development of rural transport;
- The safe operation of the public (and freight) transport industry;
- The promotion of the normalisation of people with disabilities and their inclusion in society;
- The creation of a sustainable land transport system and ensuring that the country is in line with international environmental initiatives;
- The support of tourism so that it can best serve the transport needs of the domestic and international segments of the tourist industry; and
- The integration of transport with land-use planning.

#### 4.1.9 Road Infrastructure Strategic Framework for South Africa (2005)

The National Government realised that the road infrastructure is faced with some challenges, which have to be addressed if road transport is to play a meaningful role as a catalyst for development, which also include rural development. The following are some of the aspects, which have bearing on this Rural Transport Plan:

- A functional road classification system (6 classes) is proposed of which rural roads and tracks are one and non-motorised access ways are another. In this document it is also mentioned in more than one instance that all roads are the responsibility of the municipal authority except where a road is declared as a Provincial or National function.
- Development of suitable performance indicators should be continued.
- The need for training on various levels and functions are stressed.
- The need for monitoring and evaluation to keep improving on service delivery is paramount if we what to advance.
- The need for adequate funding at national level for road infrastructure should be integrated with the financing of public transport systems. Access roads development financing should be integrated with labour intensive construction and poverty alleviation and motorised transport initiatives should be integrated with non-motorised transport initiatives.

The bulk of the unclassified roads fall in the "municipal backlog" category and their elimination will need detailed and accurate information. The Framework therefore recommends that a municipal road network assessment be undertaken, which can be part of or a component of the proposed roads needs study to determine the extent of the municipal road network; condition of



the road network; breakdown of the unclassified roads per municipality and the required associated funding requirements to improve the condition of the network and to eliminate backlogs.

#### 4.1.10 National Rural Transport Strategy for South Africa (2005, revised in 2008)

The National Rural Transport Strategy (NRTS) gives a composite view of the national perspective towards rural transport.

The NRTS encompasses the rural transport component of the National Land Transport Strategic Framework (NLTSF) and identifies strategic challenges, thrusts, operational aims and programmes and actions, as listed below.

#### 4.1.10.1 Strategic Challenges

One of the key challenges is to overcome the "big jump" in access opportunities from the village (and its ubiquitous store or local school) to the nearest town centre. This problem affects economic access (to markets, or the economic mainstream) as well as access to education and social services.

Addressing this problem requires a *co-ordinated set of nodal and linkage development initiatives*. In the first instance, there is a need for spatial co-ordination of, and investment in nodal infrastructure (e.g. in multi-purpose centres) to support the development of a "logical spatial hierarchy" of nodes and linkages. In addition, there is a need to develop viable transportation services from the village to the nearest multi-purpose centre and/or market.

A second set of challenges concerns the need to increase the overall level and transform the pattern of investment in rural transport infrastructure and services, given the backlogs and current needs. Besides general transport infrastructure and services, linkage infrastructure and services should include scholar transport and various other sector-specific transport services to address special needs (e.g. the needs of HIV-AIDS patients), non-motorised transport infrastructure and services, as well as rural freight and postal services, rural logistical services and the full range of ICT-based services (i.e. services based on information and communication technologies).

There is also an urgent need to re-evaluate *and develop appropriate regulatory mechanisms* for light delivery vehicles (i.e. the vehicles being used for 'bakkie operations'). On the one hand, there is a need to facilitate the flexible, combined passenger and freight services currently being offered by most of these operators, whilst, on the other hand, ensuring compliance with the road safety standards and licensing regulations that apply to minibuses and other normal public transport services.

Another set of main challenges concerns *institutional arrangements* – in particular how to redress the overly complex and uncoordinated rural roads planning and procurement process that is the result of the current multitude of roads procuring agencies and funding sources. Because of the strong inter-dependence with institutional rationalisation and financing options that are currently being considered for the roads delivery sector as a whole, comprehensive recommendations emanating from the exercise will be incorporated into the strategy document. Suffice to note that due cognisance would need to be given, not only to constitutional requirements, but also to the existing technical and managerial weaknesses of at the Municipality.

The final strategic challenge relates to *capacity building and monitoring*. The ability of a province or a local authority to chart and maintain a sustainable development agenda is

predicated upon the capacity of its people, its institutions and its resources. Clearly, there is an absence of a critical mass of the requisite skills and methodological approaches at the various levels of the decentralised system, which necessitates the development and implementation of massive capacity building initiatives. For this capacity building exercise to be manageable, affordable and accessible, technology needs to be co-opted as a development partner. However, significant improvements in capacity building, requires long-term, broad-based efforts to improve rural governance (i.e. the integration of political, administrative, and developmental support needed to achieve a more equitable allocation of power, wealth and development). For provincial and local authorities therefore, leadership is decisive and learning is capital.

#### 4.1.10.2 Strategic Thrusts

The strategy identifies two main strategic thrusts. **Firstly**, to promote co-ordinated rural nodal and linkage development, which should ideally be pursued within the context of strengthened IDPs, rural transport, and rural spatial planning procedures, and support the aims of the ISRDP, rural LED and poverty alleviation programmes. The main practical aim should be to develop an effectively inter-linked network of multi-purpose nodes and linkages.

The development of a balanced rural transport system requires the following:

- Investment in access roads
- Improvement of other forms of rural transport infrastructure (RTI) such as local connector or district roads, suspension bridges, pontoons, paths, tracks, trails and public transport interchanges
- Concerted actions to redress the relative neglect of all non-motorised as well as intermediate motorised transport (such as tractor-trailers)
- Strengthening as well as regulating the role of the bakkie sector as a viable, demandresponsive means to address a variety of rural freight and passenger transport needs

**Secondly**, is the need to develop demand-responsive, balanced and sustainable rural transport systems. The need for a *sustainable* rural transport system relates mainly to the need to establish sustainable funding channels and procurement systems, address neglected road maintenance requirements, and develop improved structures for the management of storm water (which is the major cause of deteriorating road conditions in most "deep" rural areas). The need for sustainability also requires that attention be given to the impacts of the rural transport system on the wider social, economic and biophysical environment.

#### 4.1.10.3 Operational Aims

In order to achieve the objectives of the rural transport strategy, the main operational aims and rationale of the national rural transport strategy are, firstly to achieve improved strategic guidance and co-ordination – both within the transport sector and within the broader cluster of key rural service delivery sectors – and secondly, to facilitate accelerated service delivery in neglected geographical and functional areas.

Because of the complex variety of rural transport service delivery agents, funding sources and mechanisms within the transportation sector – much of which involves the private and SMME sectors, and rural communities – improved guidance and co-ordination is particularly important.

Within the broader cluster of main rural service delivery sectors, the main rationale for improved guidance and co-ordination is simply to promote co-ordinated nodal and linkage development.



#### 4.1.10.4 Development Programmes and Actions

It is accepted that the delivery of most rural transport infrastructure and services will increasingly be a local government responsibility, funded through consolidated capital grants, the equitable share mechanism and transfers of monies in terms of the NLTTA. Although some provinces may still have a strong direct delivery role in the short to medium term, the long-term focus of all provinces – together with that of the national sphere – will be on the facilitation, co-ordination and strengthening of service delivery.

To guide and support this, and serve as the principal short-, medium- and long-term mechanism for the implementation of the rural transport plan, a Rural Transport Development Programme (RTD programme) will be established. Some of the actions suggested for inclusion in this programme form part of the Gazetted rural transport strategic actions specified in the NLTSF. In January and February 2002, workshops were undertaken in all provinces at which comments on the strategic actions were solicited from provincial representatives.

Seen together with the NLTSF, the RTD programme will be the principal guiding mechanism in terms of which the national and provincial spheres of government will perform their short-, medium- and long-term delivery, facilitation and co-ordination roles.

The RTD programme comprises 20 strategic actions. Nine of the strategic actions are Gazetted NLTSF commitments. Several of the additional actions are intended to support or extend the implementation of the Gazetted NLTSF actions. Because of substantive overlap with transport policies and initiatives in other functional areas, the implementation of some of these will require close co-operation with the relevant policy and delivery champions in these other areas.

To ensure coherence and facilitate easy reference to the actions the strategic actions were grouped and annotated in terms of the following list of "action areas":

- Alignment with ISRDP and related initiatives.
- High-leverage focus projects and programmes, broken down into three components, namely:
  - High-leverage RTI projects and programmes, (dealing with the provision of rural transport *infrastructure*);
  - High-leverage RTS projects and programmes, (dealing with the provision of rural transport *services*);
  - Promotion of non-motorised and intermediate transport
- Regulation and safety.
- Capacity building and monitoring.

Given the inevitable limitation of resources and capacities, there is a need to prioritise the 20 actions that are included in the proposed programme, and establish a coherent package for the short-to-medium term. In this regard, the 11 actions outlined in the NLTSF are a starting point. Priorities will have to be assessed within the context of annual and medium-term budget constraints, and with reference to the budgetary implications of the different actions.

#### 4.2 **Provincial Policy Framework – Rural Transport Perspective**

#### 4.2.1 Limpopo White Paper on Provincial Transport Policy (2000)

The policy was not available during the drafting of this report.

#### 4.2.2 Limpopo in Motion (2005)

The Limpopo in Motion constitutes transport strategy for the province, which was driven by the national White Paper on National Transport Policy. The Limpopo Provincial Transport Strategy identified the following strategies that impact on rural transport planning:

- Improving the general mobility of Limpopo people;
- Improving passenger transport to learners, elders and disabled;
- Promote accessible transport to support economic development and job creation;
- Promote the uses of non-motorised transport in both rural and urban areas.

#### 4.2.3 Provincial Land Transport Framework (2007)

The Provincial Land Transport Framework (PLTF) is a legal requirement in terms of Clause 21 of the National Land Transport Transition Act (No. 22 of 2000) (NLTTA). It provides the overarching, provincial five-year (2002 to 2007) land transport strategy, where approaches within 11 functional areas are outlined in terms of strategies and actions.

The framework discusses broad strategies on land transport, including those that have a bearing on rural transport. They include:

- Formation of the Limpopo Transport Coordination Committee (LIMTCC) to coordinate aspects and transport initiatives in the province;
- Establishment of the Transport Advisory Committee under the chairmanship of the MEC;
- Coordination of inter-provincial long-distrance and short distance public transport services;
- Improvement of public transport services through improvement of on-time performance, provision of schedules; decreasing of travel times; improvement of cleanliness of vehicles and improvement of availability of information at public transport facilities;
- Expediting the formalisation and subsidisation of the taxi industry;
- Development and promotion of NMT;
- Development of public transport facilities;
- Implementation of automated fare control system;
- Subsidisation of long-distance taxi trips;
- Fare system to be consistent with subsidised contracts in Limpopo Province;
- Implementation of simplified cash fares;
- Consider provision of subsidy for long distance operations;
- Installation of lay-bys and shelters along public transport routes;
- Segregation of pedestrians from vehicle movement;
- Implementation of discounted fares for learners, students and the elders;
- Promotion of bicycle and pedestrian movement through the implementation of appropriate infrastructure;
- Research specific needs per route and design the provision of adequate public transport service;
- Ensuring the planning and development of all new public transport facilities consider the needs of persons with disability;
- Regulate and control public transport operations;
- Development of the rail network for long distance passengers.

#### 4.2.4 Provincial Growth and Development Strategy (2007)

#### 4.2.4.1 Objectives

The Limpopo Provincial Growth and Development Strategy (PGDS) represent both



development opportunities as well as provincial challenges, and identify a 5-year multi-sectoral growth and development strategic plan of the Provincial Government.

In terms of the PGDS the provincial development objectives are the following:

- Improvement of the quality of life of the Limpopo population;
- Growing the economy of the province, sustainable job creation, innovation and competitiveness;
- Improvement of the institutional efficiency and effectiveness of Government;
- Addressing the priorities that cut across the three objectives above, such as Black Economic Empowerment, HIV/AIDS-TB, poverty reduction, issues of Land and Environment etc, and;
- Attaining regional integration.

The above objectives are aimed towards facilitating economic growth and capital investment that will address the low absorption rate of the labour force into the economy as a matter of priority. The objectives set for the growth and development strategy for the Limpopo Province should also address the concern that the economy of Limpopo has been growing at a rate double that of the national average, while unemployment and poverty persist.

The essence of the PGDS is to achieve improved quality of life by growing the economy, made possible by the institutional efficiency of government, as symbolized by the following key components:

- Improvement of quality of life of the Limpopo population;
- Growing the economy towards sustainable job creation, innovation and competitiveness;
- Improvement of the institutional efficiency and effectiveness of government;
- Attainment of regional integration.

#### 4.2.4.2 Improvement of Quality of Life of the Limpopo Population

Improved quality of life is linked to the ability to acquire goods and services arising from such development. Improved quality of life means the elimination of poverty and unemployment, improved literacy levels, improved life expectancy and improved access to basic services and a reduced dependency ration in the context of a growing economy.

#### 4.2.4.3 Growing the Economy towards Sustainable Job Creation, Innovation and Competitiveness

Growing the economy to create jobs and wealth is a necessary condition towards the sustainable development in Limpopo. The importance of creating jobs and wealth is derived from the fact that it impacts directly on the quality of life, self-reliance, the distribution of resources and empowerment. Improved access to technology and knowledge-based activities is a necessary condition towards an information society.

The platform for increased economic growth is based on the ability of the society to compete globally. The Provincial Government shall enhance traditional constituency of manufacturing activities by creating incentives for these activities. It is therefore essential to unlock the knowledge in tertiary institutions within the province and establish centres of excellence, an important intervention in the form of policies to address issues related to intellectual property and indigenous knowledge systems. The Limpopo Province will also derive in the short term a strategy as part of a national initiative that responds to the World Summit in Information Society resolutions to bridge the digital divide and thus build an information society in support of the provincial objectives in order to ensure sustainable socio-economic development in a global economy that is increasingly characterised by information and knowledge as the major production factors.

#### 4.2.4.4 Improvement of the Institutional Efficiency and Effectiveness of Government

It is essential that priority attention be given to service delivery improvement, addressing the needs of the citizens and improved accountability for results and output within the public service, meeting the targets set in the plans within the planned period and allocated budgets.

#### 4.2.4.5 Attainment of Regional Integration

This objective is focussed on the improvement of the Limpopo Province's strategic location as gateway to Africa towards achieving the objectives of the New Partnership for Africa's Development (NEPAD).

#### 4.2.4.6 Strategies and Programmes

The National Government has committed itself to the general growth and development of the Limpopo Province. The commitment is based on a strategy of seven development industrial clusters<sup>1</sup> following the value-chain approach adopted in a development summit, as a vehicle to



<sup>&</sup>lt;sup>1</sup> Development clusters are critical masses, spatially concentrated and of unusual competitive success in a particular field. They encompass an array of linked industries, from suppliers and providers of infrastructure to down-stream activities and service

create employment opportunities, to raise the international competitiveness and investment rating of the province, to combine public and private sector contributions to development and to align the interventions of various public development institutions for greater impact. The seven development clusters are the following:

- Platinum mining cluster on the Dilokong Corridor between Polokwane and Burgersfort (Sekhukhune District) and also in the Waterberg district;
- Coal mining and petrochemical cluster at Lephalale on the East-West Corridor (Waterberg District);
- Fruit and vegetable (horticulture) cluster in Vhembe, Mopani and Bohlabela;
- Logistics cluster in Polokwane (Capricorn District);
- Red and white meat cluster on all the corridors (all districts);
- Eight tourism sub-clusters at a number of high-potential destinations;
- Forestry cluster in the Mopani and Vhembe districts.

Promoting cluster formation will require policies to be refined to focus on:

- Improvement of education and skills;
- Provision of essential infrastructure;
- Building capacity in technology;
- Opening access to capital markets; and
- Improving institutions and institutional efficiency.

#### 4.3 Local Perspective

#### 4.3.1 Integrated Development Planning (IDP)

The Integrated Development Plan (IDP) process is the main mechanism for local rural infrastructure and service delivery within the local sphere. The institutionalisation of the IDP process is only one of a range of significant reforms that have been instituted in terms of Municipal Systems Act and other legislation that has sought to give proper effect to the constitutional powers and responsibilities of the local sphere of government. Other recent reforms and developments include:

- Significant decentralisation of governance and service delivery responsibilities to the local sphere of government, coupled with direct fiscal transfers from the national treasury in terms of an "equitable share" formula
- Establishment of a mandatory link between the development priorities specified in the IDP, and the allocation of a local authority's capital investment budget
- Introduction of special [transitional] grants for the training and appointment of local government officials
- Initiatives to investigate the establishment of rural service centres that can be used as conduits and catalysts to stimulate growth-with-equity with a view to produce balanced and focused development in rural areas by the Department of Development Planning and Local Government [DDPLG]. This argument could be extended to rural towns.

The IDP has been designated as the nerve centre of co-ordinated service delivery and development processes at the local sphere. Transport components of the various IDP documents reflect these shortcomings. Participation of the Department of Roads and Transport in addressing these shortcomings should provide important two-way communication - from the Province to municipalities and from municipalities to Province, assisting them to work together



organizations. They also include training, research and governmental institutions. Competitive advantage within these clusters is driven not so much be the source and cost of inputs as by the productive use of inputs, which requires continuous innovation.

to align their respective development activities. The Limpopo Department of Roads and Transport could, for example:

- Provide input regarding existing infrastructure, service backlogs and available resources into the analysis phase of the IDP;
- Participate in district-level strategy workshops and provide specialised transport sector input as members of IDP Project Task Teams;
- Participate in IDP Representative Forum meetings of district and local municipalities wherever possible;
- Ensure that the IDP process of district and local municipalities takes the Provincial Land Transport Framework (PLTF) on board.

#### 4.3.2 District Spatial Development Frameworks

Over and above the Provincial Spatial Development Framework, districts are also encouraged to draft their own SDFs – with the main aim of integrating urban and rural land development at local level.

These SDFs to some extent consider land use aspects in relation to transport planning. The District SDFs basically establishes the preconditions for viable transport and offers spatial details that will essentially work towards the development of transport strategies.

#### 4.3.3 Legislative Mandates

#### 4.3.3.1 Municipal Structures Act (1998)

The Municipal Council must strive within its capacity to achieve its constitutional obligations, namely:

- to provide democratic and accountable local government;
- to ensure the provision of services to communities in a sustainable manner;
- to promote social and economic development;
- to promote a safe and healthy environment; and
- To encourage the involvement of communities and community organisations in matters of local government.

The Municipal Council must review annually:

- the needs of the community;
- its priorities to meet these needs;
- its process for involving the community;
- the organisational and delivery mechanisms necessary to meet the needs of the community; and
- Its overall performance in meeting its objectives.

#### 4.3.3.2 Public Finance Management Act (1999)

The Public Finance Management Act, Act 1 of 1999, as amended by Public Finance Management Amendment Act, Act 29 of 1999, is used to regulate financial management in the national government and provincial governments with the following specific aims:

• To ensure that all revenue, expenditure, assets and liabilities of such governments are managed efficiently and effectively;

- To provide for the responsibilities of persons entrusted with financial management in those governments; and
- To provide for matters connected therewith.

#### 4.3.3.3 Municipal Systems Act (2000)

The Municipal Systems Act, (Act 32 of 2000), provides core principles, mechanisms and processes that are necessary to enable municipalities to become developmental. Development, as defined in the Act, includes integrated social, economic, environmental, spatial, infrastructural, institutional, organisational and human resources upliftment of a community.

The upliftment needs to improve the quality of life of its members with specific reference to the poor and other disadvantaged sections of the community.

The Act also touches on the following:

- Co-operative government, describing the rights and duties of structures as well as rights of communities, residents and ratepayers, who are encouraged to participate in the local affairs of the municipality, as well as receive training and capacity building.
- Partnerships between stakeholders and the municipality's political and administrative structures.
- A simple and enabling framework for the core processes of planning, performance management, resource mobilisation and organisational change that underpin the notion of developmental local government.
- A performance management system for local government and requires annual reporting to its citizens and other spheres of government.
- A clear regulatory framework for municipal service partnerships and implementation of credit control measures.

#### 4.4 Concluding Remarks

There is substantial backbone to rural development and rural transport planning from a policy and legislative point of view. The existing frameworks provide adequate guiding principles, however it is evident physical manifestation of the principles contained in the policies that are lacking.

This Rural Transport Strategy therefore will form the backbone of rural transport planning in the province. The philosophy and implementation thereof will inform the PLTF as well as the Integrated Development Plans at district and local level.

# 5. RURAL TRANSPORT PLANNING IN LIMPOPO

This chapter provides an overview of rural development and the extent of rural transport planning in Limpopo Province. It takes into account meaning documentations that best describes the extent of rural development in the province, namely provincial and districts developmental planning documents.

#### 5.1 **Provincial Spatial Development – A Rural Perspective**

The Limpopo Province is made up of approximately 2 470 settlements that are varying in size, with majority of them concentrated in the former homelands areas (i.e. Gazankulu, Venda and Lebowa).

The spatial pattern in the province was determined by political processes rather than economic forces causing these settlements to have little economic base. **Table 7** below summarises some of the salient aspects that the Spatial Development Framework outlined per district. The following observations are made:

- The acceptable level of income per household in Limpopo Province is R15, 600. It is however recorded that over 70% of households in all the districts earn less than R19, 300 per annum.
- The general level of infrastructure provision is very low:
  - Between 50% (Waterberg DM) and 70% (Sekhukhune and Vhembe DMs) of the population do not meet RDP standard for provision of sanitation infrastructure;
  - Over 50% of the population in Waterberg and Mopani DMs do not meet RDP standard for provision of water infrastructure.
  - o Many of the rural settlements do not have electricity infrastructure; and
  - Road conditions in rural settlements are poor.

Furthermore, the provincial spatial development framework of 2007 indicated that most of the rural settlements in Limpopo Province are not natural settlement from an economic and demographic point of view. The lack of natural settlement from an economic and demographic point of view resulted into low level of income and lack of skills at village level, causing lack of growth in these villages. Population in the rural settlements are therefore forced to survive by migration to other provinces or by commuting to nearby towns.

Other elements that have influenced the current rural settlement pattern include:

- Inequitable distribution of land ownership;
- Lack of security of tenure;
- Unsustainable use of land and
- The slow release of land for development.

#### Table 7: Provincial Spatial Development Framework

DISTRICT	CAPRICORN	SEKHUKHUNE	MOPANI	VHEMBE	WATERBERG
Approximated Rural Settlements	583 settlements, with an average of 2300 people per settlement	539 settlements, with an average of 2185 people per settlement	348 settlements, with an average of 3565 people per settlement	772 settlements, with with an average of 1783 people per settlement	229 settlements, with with an average of 2980 people per settlement
Rural Settlement Administration		Majority o	f settlements in trust of tribal an	d community authorities.	
Level of Poverty	80% of the households in the district municipality area earned less than R19 200/year	85% of the households in the district municipality area earned less than R19 200/year	82% of the households in the district municipality area earned less than R19 200/year	81% of the households in the district municipality area earned less than R19 200/year	73% of the households in the district municipality area earned less than R19 200/year
General level of infrastructure provision	Low	Low	Low	Low	Low
Level of sanitation infrastructure provision	67% of population not meeting level of sanitation	72% of population not meeting level of sanitation	66% of population not meeting level of sanitation	73% of population not meeting level of sanitation	49% of population not meeting level of sanitation
Level of Water Infrastructure Provision	Not mentioned	Not mentioned	75% of population not meeting level of water provision	Not mentioned	56% of population not meeting level of water provision
Level of Electricity Infrastructure Provision		Mar	ny settlements are without elect	ricity infrastructure	
Road Condition	Poor condition	Poor condition			
Public transport service Provision			Difficult, due to scattered se	ettlements	

Source: Individual District Spatial Development Framework prepared as part of the Provincial Spatial Development Framework, 2007



# 5.2 District Perspective

In the remainder of this chapter, the rural development perspective at district level is presented by reviewing district documentations collected during data mobilisation phase. The existing status quo pertaining to the current rural transport planning in the Limpopo Province was reviewed in terms of the following documentation:

- Integrated Development Plans of the following 5 districts:
  - Waterberg DM (Reviewed IDP 2008-2009);
  - Mopani DM (Draft Reviewed IDP 2006-2011);
  - Sekhukhune DM ( $2^{nd}$  Draft IDP 2006 2011);
  - Vhembe DM (2008/09 IDP Review Approved Version);
  - Capricorn DM (2007 2011 IDP.
- District Spatial Development Frameworks;
- Integrated Transport Plans Executive Summaries of the 5 districts;
  - Waterberg DM;
  - o Mopani DM;
  - Sekhukhune DM;
  - o Vhembe DM;
  - Capricorn DM.
- Current Public Transport Records of the 5 districts;
- Non Motorised Plan of Greater Sekhukhune District Municipality
- Road Network Management System / Needs Analysis Report and Maps).

The afore-mentioned documentations are reviewed below.

# 5.2.1 Integrated Development Plans of the 5 Districts

#### 5.2.1.1 Waterberg District Municipality (WDM)

According to the WDM Reviewed IDP 2008/2009 spatial development in the WDM is characterised by distinctive differences in the spatial patterns of development between the six local municipalities. In general, the urban areas dominate the district urban settlement pattern. Apart from the dominant urban centres, the district is characterised by a number of smaller towns, so-called communal land areas where dispersed rural settlements are the dominant pattern and areas where extensive commercial agricultural land holdings are the norm.

Six townships or smaller towns in the district have been identified as municipal growth points for investment to boost capacities of existing infrastructure. Roads and linkages for both economic and commuter usage is inadequate and not suited to meet the needs of economic expansion opportunities in the area. The rural nature of the district and historical legacies of settlement distribution make service planning and provision a substantial challenge.

The IDP lists the following *key challenges* that face the WDM with respect to public transport and roads infrastructure:

- Lack of funding for implementation of projects identified in the WDM Integrated Transportation Plan;
- Huge backlog of 4 043 km (numbered roads only) road infrastructure;
- Lack of funds to maintain, upgrade and rehabilitate roads;
- Insufficient funds to built new roads;

- Misalignment of integrated environmental management plan with the implementation of Integrated Transportation Plan; and
- No road safety improvements mechanisms.

#### 5.2.1.2 Mopani District Municipality (MDM)

The MDM Draft Reviewed IDP 2006-2011 states that there is limited accessibility to most villages due to inadequate access to roads and internal street networks.

Several settlements have been identified as district growth points in the district including Namakgale, Gravelotte, Mageva, Ga-Kgapane, Nkowankowa and Lenyenye. To ensure economic development in these settlements however basic services and social services need to be improved. Although these settlements are small they play an important role in several sectors such as mining (Gravelotte), retail trade (Namakgale and Ga-Kgapane) and manufacturing (Nkowankowa).

Lulekani, Xawela, Senwamokgope, Haenertsburg, Burgersdorp and Letsitele have been identified as Municipal Growth Points in the district. These growth points have a relatively small economic sector providing some employment to a smaller number of people. These settlements have very few social services and no government offices. People living in these areas have to travel to larger settlements to obtain these services. Two of these growth points play an important role in the economy of the area. Letsitele is one of the most important areas where citrus fruit is produced while Haenertsburg and its surrounds has been identified as a very important tourism area. Both these sectors demand proper basic services of which roads (transport for fruit and tourist traffic) are the most important.

The Mopani District area has 3 135.55 kilometers of roads. The following table indicates the breakdown of roads:

MUNICIPALITY	TARRED (KM)	GRAVEL (KM)	TOTAL (KM)
Greater Tzaneen	439.56	593.44	1 033.00
Greater Letaba	150.5	535.65	657.15
Greater Giyani	113	605.8	718.8
Ba-Phalaborwa	223.66	266.2	489.86
Maruleng	48.4	188.7	237.54
TOTAL	975.06	2 149.79	3 124.85

#### Table 8: Mopani District Road Classification

It is clear that most roads, leading to where the majority of the district population is, are not tarred. The state of the roads has an impact on the economic development of the area – it *hinders the proper transportation of people, good and services* to these areas if it is not in a proper condition.

Surfaced roads are continuously maintained while other areas are serviced by re-graveled roads, gravel roads, low volume surfacing and rural roads. *Most of the gravel roads are not maintained regularly*. In addition to that, *some of the roads in the district do not have route names and numbers*. They also *do not have appropriate road signs as well as signs indicating distances between destinations*. Another issue that creates problems on the district roads is that, in most areas, *fencing along the routes has been removed*. The impact is wild and



domestic animals wandering on the roads with serious detrimental impacts on motorists.

The lowly serviced areas are mainly found in Greater Tzaneen Municipality and Greater Giyani Municipality. In Greater Tzaneen Municipality, the affected areas are the Boyne / Sedan areas and also Julesburg. Another area of concern is the Nwamitwa area. In Greater Giyani Municipality the affected areas are the Nkomo and Matsotsosela areas. The majority of rural streets are not well serviced.

Rural communities are burdened with enormous travel distances to places of employment and commercial centres, which also give rise to very high travel costs. Rural areas are also characterised by inadequate public transport despite the fact that the majority of the population is reliant on busses.

#### 5.2.1.3 Vhembe District Municipality (VDM)

According to the VDM 2008/09 IDP Review the district settlement patterns in the VDM are largely rural with  $\pm$  770 dispersed villages and 35 towns.

Rural challenges in the Thulamela and Mutale Local Municipalities within the VDM that need to be addressed include *redirecting growth and development towards the previous disadvantaged areas and areas of economic opportunity, the prevention of illegal occupation of land* and *the relocation and prohibiting of informal settlements in flood line areas, addressing the issue of land ownership* and *alleviating poverty* and *creating economic opportunities* within the rural areas.

In the Makhado Local Municipality rural challenges include the cluster of rural settlements are around the Domboni which have *poor access to basic services*. These settlements are dormitory residential areas with limited supporting land uses. The vast area of low population densities within the more rural areas of the municipalities, i.e. western area, combine to make the potential provision and maintenance of infrastructure and other municipal services very costly. Future settlement development should be concentrated in a few locations where bulk infrastructure is already available and where services can be maintained in as cost-effective a way as possible. There is poor accessibility to social and economic activities for rural populations and rural settlements tend to be of a clustered nature and sparely distributed outside of the eastern portion, within the municipality.

In terms of the VDM IDP there is a *serious backlog in road networking*. Some municipal roads will be transferred to the VDM. VDM owned 4 043.76 km of road networks of which 1 337.35 km is tarred and 2 706.41 km is gravel and others are dirt.

The VDM IDP states that the *current transport system in VDM is inadequate to meet the basic needs and accessibility to work, healthcare, schools, shopping etc and too many developing rural and urban areas.* To meet the basic needs of accessibility the transport system must:

- Ensure that passenger transport services meet the needs of users, including commuters, pensioners, the elderly, scholars, the disabled, tourists and long-distance passengers.
- Walking distance must be less than 1 km in urban areas. Commuters should be spending less than 10 % of their disposable income on transport.
- To replace operator permits with permission issued in terms of approval transport plan.



• Improve road infrastructure and other public transport facilities as prioritized.

The planning objectives with respect to public transport planning, roads and storm water infrastructure development are to ensure that passengers transport services meet the needs of users, including commuters, elderly, scholars, disabled, tourists and long-distance passengers and to improve accessibility through the upgrading of roads in the District.

The strategies to address these planning objectives are the development of multi-nodal infrastructure, the identification and prioritisation of roads that need upgrading through consultative process and the development of non-motorised infrastructure.

#### 5.2.1.4 Capricorn District Municipality (CDM)

The 2007 – 2011 IDP for CDM indicated that the Road agency Limpopo has transferred all district roads to the district. The IDP also indicated that:

- Taxi operations in the district are affected by location of villages, dominant economic activities and employment status;
- There are 107 public transport facilities, with 80% of them being informal;
- There are 285 taxi routes, with 50% found in the Polokwane LM;
- Utilisation of taxi routes show high volumes during the weekend;
- There are 180 subsidised bus routes in CDM, with 196 buses operating these route;
- Bus facilities are limited to main bus terminus and loading/off-loading stops throughout the district;
- There is no rail commuter rail in the district a Monday to Saturday commuter service was discontinued between Dikgale and Polokwane;
- CDM has implemented bicycle projects through the "Namela le Setshaba" project, where bicycle shops were established in Lepelle- Nkumpi and Bluberg LMs.

The district is preparing projects for mapping of donkey cart operations and a strategy for donkey-cart safety.

The IDP document further outlines the following transport planning objectives with regard to the infrastructure cluster:

- To have 4% of the district routes tarred by 2011;
- To improve access of district roads by re-gravelling 4% of the roads by 2010 and
- To improve access to public transport to !00% by 2009.v

## 5.2.1.5 Grater Sekhukhune District Municipality (GSDM)

According to the 2008 - 2011 IDP the most common for of public transport in the district is buses and taxis. Factors that impact on the nature, distance and utilisation of routes as well as operational methods of the taxi industry include (1) location of village; (2) dominant economic activities in the area and (3) employment status of locals.

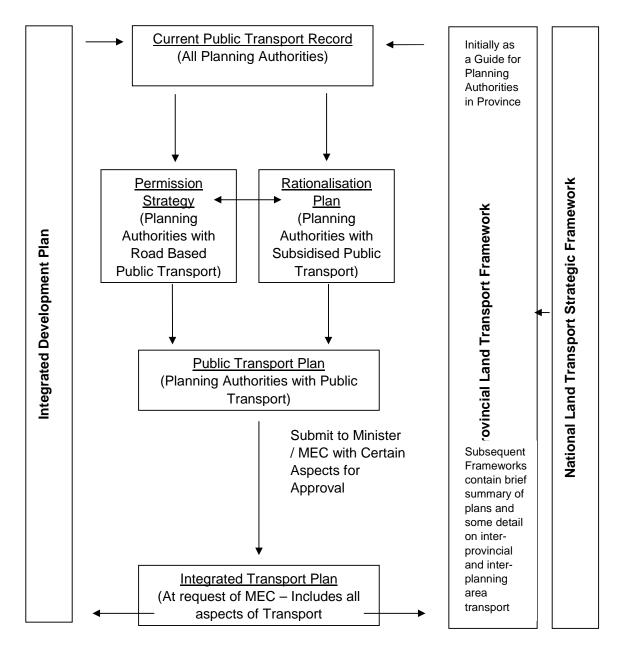
The IDP recognised that the district is characterised by gravel roads, particularly in scattered villages and population concentration points. The roads are deteriorating due to poor maintenance and local storm water problems. This is resulting in limited transport routes to villages.

## 5.2.2 Integrated Transport Plans for the 5 Districts

The preparation of the ITPs for the respective District Municipalities is guided by the Operating License Strategy (OLS), Rationalisation Plan and Public Transport Plan (PTP). The National Land Transport Transition Act 22, 2000 provides guidance for the preparation of transport plans. The figure on the following page indicates the hierarchy of transportation plans that guide the policy framework in the Limpopo Province.

The ITP policy addresses the following key aspects:

- Land transport policy are so designed as to have appropriate modes selected and planned for on the basis of where they have the highest impact on reducing the total systems cost of travel;
- The needs of special categories of passengers must be considered in planning and providing public transport infrastructure, facilities and services and these needs should be met as may be possible by the system provided for mainstream public transport;
- General norms and standards must be set with respect to fares for subsidised public transport services by road and rail with a view to effective targeting of subsidy in terms of National policy, thereby providing integrated fare and ticketing systems in public transport networks, and achieving cost recovery by operators;
- Transport planning must be viewed as being a co-ordinated and continuous process. Land transport planning must be integrated with land development processes. Land transport planning must focus on the most effective and economic way of moving people. High priority should be given to public transport through, *inter alia*, developing high utilisation public transport corridors, which are connected by development nodes within the corridors. Accessibility and utilisation of public transport services, facilities and infrastructure must be enhanced. The adverse impact of transport on the environment must be minimised. Co-ordination and integration within, and between, land transport modes must be ensured.



## Figure 2: Hierarchy of Transportation Plans

In terms of the ITPs that have been compiled for the respective District Municipalities the district road networks, including the rural road network, are described as follows:

## 5.2.2.1 Waterberg District Municipality (WDM)

With respect to roads management in WDM, the provincial and district road network is currently the responsibility of the Roads Agency Limpopo (RAL) and the Department of Public Works. The RAL utilise the Road Management System (RMS) as a tool for assisting with road network management. With respect to rural roads these local roads are gravel and predominantly



utilised by buses and taxis. The condition of these roads is below standard. They require upgrading, improved storm water management, lighting, parking and other road furniture. There are also internal village streets and these are generally in a bad state. The Local Municipality is responsible for the maintenance of all internal roads in residential areas and villages. These internal roads do not have specific road numbers.

One of the main concerns is that there is currently no pavement management data, traffic data, etc, to prioritise the upgrading of roads in the WDM. However, the Road Agency Limpopo, South African National Roads Agency Limited (SANRAL), Limpopo in Motion, Limpopo 2020 Infrastructure Study, Public Transport Plan as well as correspondence with the Transport Forum realised a list of roads that should be prioritised.

In terms of the ITP the following key issues were identified in transport for the WDM:

- Public transport should be prioritised but effective delivery is hindered by:
  - Lack of transport infrastructure particularly in rural areas;
  - Poor condition of roads;
  - Missing road links;
  - Lack of formal public transport stops;
  - Lack of formalisation of public transport operators, particularly minibus taxis;
  - Limited funding to subsidise public transport services;
  - Lack of information and awareness;
  - Negative perception of public transport as an effective mode.
- Transport should support local and economic growth in the district, but is limited due to:
  - Lack of transport infrastructure particularly road condition and missing links in rural areas;
  - Few strategic routes i.e. road and rail, are suitable for freight;
  - Poor transport services limit access to social services and economic opportunities;
  - Limited provision for informal trading or businesses at public transport facilities.
- Rural areas in particular need focus because of:
  - Lack of transport infrastructure;
  - Poor condition of roads and lack of connections;
  - Poor quality of life for rural population, particularly high unemployment and poverty.
- Non-motorised transport should have greater priority but is hampered due to:
  - o Lack of awareness of the role of non-motorised modes of transport;
  - Lack of funding and other basic transport infrastructural needs force NMT to a secondary concern.
- Institutional issues exist around:
  - o Clarity of responsibilities of the various authorities in terms of transport;
  - Lack of capacity within the transport sector impedes delivery.
- Road safety should be prioritised by addressing the following problems:
  - Fencing on major roads;
  - Improved signage;



• Improvement of pedestrian environment.

The WDB currently does not have an Infrastructure Development Plan. It is envisaged that this Plan will be developed during the 2008/2009 financial year.

## 5.2.2.2 Mopani District Municipality (MDM)

For the MDM Transport Plans the following documentation have been prepared:

- Current Public Transport Record (CPTR), June 2003;
- Final Operating Licence Strategy (OLS), April 2004;
- Final Rationalisation Plan (RATPLAN), April 2004;
- Final Public Transport Plan (PTP), October 2004;
- Final Integrated Transport Plan (ITP), October 2004.

No specific description of the MDM road network is provided in the ITP Executive Summary.

## 5.2.2.3 Grater Sekhukhune District Municipality (GSDM)

The GSDM ITP Executive Summary provided a summary of proposed strategies for (1) public transport; (2) needs of persons with disabilities; (3) needs of learners, students and elders; (4) NMT; (5) modal integration, infrastructure and facilities and (6) fare system for public transport that are similar to those mentioned in Section 4.2.3.

Furthermore, the ITP Executive Summary provided the following summary regarding the road network and transportation in the district:

- The Road agency Limpopo is the custodian of all provincial roads, with the process of transferring roads considered to be district roads in process;
- Local municipalities have the responsibility of maintaining all internal and access roads to villages.
- Local access roads are mainly gravel and are predominately being used by buses and taxis.
- The conditions of these local access roads are below standard. The roads require (1) upgrading; (2) improvement of storm water; (3) lighting and (4) other road furniture.
- Internal village streets are generally in bas state.

## 5.2.2.4 Vhembe District Municipality (VDM)

For the VDM Transport Plans the following documentation have been prepared:

- Current Public Transport Record (CPTR), 2003;
- Final Operating Licence Strategy (OLS), March 2004;
- Final Rationalisation Plan (RATPLAN), March 2004;
- Final Public Transport Plan (PTP), June 2004;
- Final Integrated Transport Plan (ITP), August 2004.

No specific description of the VDM road network is provided in the ITP Executive Summary.



## 5.2.2.5 Capricorn District Municipality (CDM)

Within the jurisdiction if CDM majority of local access roads are gravel and predominantly utilised by buses and taxis. The rural roads are poorly designed and not maintained with specific attention to storm water drainage. The condition of the rural roads is below standard and they require upgrading, improved storm water management, lighting, parking and other road furniture. There are also internal village streets and these are generally in a bad state.

However there are some of initiatives being taken by the district, including:

- CDM is in the process of preparing a Road Master Plan;
- CDM possesses a road GIS database;
- CDM is in the process of re-classification of its roads; and
- CDM is in the process of developing Roads Development and Management System

Furthermore other initiatives the CDM has identified include (1) implementation of road safety programmes; (2) upgrading of road signs and posting of emergency numbers; (3) integrated land and transport model for Polokwane; (4) development of an NMT plan and (5) Tourism Plan.

## 5.2.3 Current Public Transport Records (CPTR)

The CPTRs made the following key recommendations for the 5 District Municipalities:

- 1. No operating licenses should be considered before the OLS has been compiled and approved.
- 2. CPTR information as available should be used for developing an OLS as guideline for the issuing of new permits.
- 3. CPTR information should be used for developing a Public Transport Plan.
- 4. For CPTR updates operations at major ranks should be considered to determine utilisation of services, and route utilisation for busses should also be considered.

## 5.2.4 Road Network Management System / Needs Analysis Reports and Maps

The Limpopo Needs Analysis Report for their provincial and district roads was not available during the drafting of this report. However the consultant reverted to reviewing of district road transport plans. Sekhukhune is the only district with a Road Master Plan.

## Sekhukhune Road Master Plan

The primary objectives of the project were twofold, namely (1) development of a Roads Master Plan (RMS) for the district and (2) investigating alternative internal service delivery mechanisms on provision of roads, stormwater and public transport services. The Road Master Plan made the following conclusions with regard to rural network provision and maintenance in the district:

- Greater Sekhukhune district is responsible district roads as well as municipal roads in Fetakgomo LM.
- GSDM is specifically responsible for (1) periodic maintenance of gravel roads; (2) periodic maintenance on paved roads and (3) routine maintenance.
- GSDM is responsible for the management of systems to deal with stormwater in builtareas in Tubatse, Makhuduthamaga and Fetakgomo Local Municipalities.

The status quo assessment of road infrastructure in the district is as follows:

- **Road Classification:** The road hierarchy and road categories in the Sekhukhune District were proposed as follows:
  - Provincial roads (P-roads);
  - District roads (D-roads) and School roads (S-roads);
  - Municipal roads (M-roads):
  - **Rural collectors** (typically linking access roads to district roads or provincial roads, and collecting traffic within relatively dense agricultural development, such as smallholdings and rural agricultural settlements; typically provide access to developments such as individual farms and smallholdings, schools, clinics, churches, community halls, shops and other facilities);
  - *Rural access roads* (provide direct vehicular access to individual properties in rural agricultural settlements or villages).
- **Road Ownership:** The road ownership in Sekhukhune District was summarised as follows:

ROAD TYPE	ROAD OWNERSHIP
Provincial roads	RAL
District roads	GSDM
Municipal roads in Fetakgomo LM	GDSM
All other municipal roads	Local Municipality

Source: Sekhukhune Road Master Plan, 2007

- **Extent of Road Ownership:** The extent of roads under ownership of GSDM was identified through the following sources:
  - Provincial Gazette no. 1041, dated 28 September 2004;
  - GIS road database from RAL;
  - Discussions with RAL;
  - o List of rural collector roads submitted by Fetakgomo Local Municipality;
  - o 1:50,000 maps of Fetakgomo Local Municipality;
  - Field investigations with Fetakgomo Local Municipality.

The extent of road network under ownership of GSDM is summarised below.

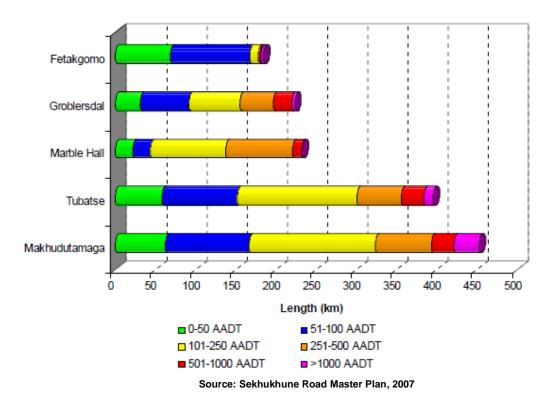
LENGTH OF ROAD NETWORK (KM)			
PAVED	UNPAVED	TOTAL	
80.40	1 342.80	1 423.20	
-	72.99	72.99	
80.40	1 415.79	1 496.19	
	<b>PAVED</b> 80.40	PAVED         UNPAVED           80.40         1 342.80           -         72.99	

Source: Sekhukhune Road Master Plan, 2007

**Traffic Volumes:** In total, about 356 000 vehicle kilometres are travelled each day on the GSDM road network (of which about 25% are travelled on the paved road network). In terms of Average Annual Daily Traffic (AADT), the biggest portion of the network (about 32%) falls in the category of 101 to 250 veh/day. The highest AADT recorded on the network is 4,365 veh/day, on road D4169 in Greater Tubatse Local Municipality. The distribution of AADT on roads per Local Municipality (based on km) is indicated in **Figure 3**.

Figure 3: Distribution of AADT on Roads per Local Municipality (based on km)

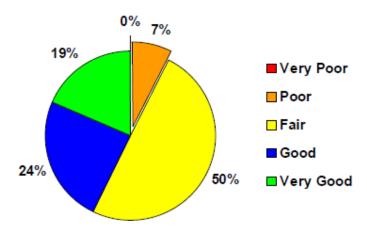




In terms of heavy vehicle traffic, the biggest portion of the network (about 46%) falls in the category of 0 to 10 AADTT, showing that most of the road network carries very little heavy vehicle traffic. Currently, about 81 km of road (5% of the road network) carries more than 80 AADTT.

For public transport, the biggest portion of the network (about 58%) falls in the category of 0 to 10 public vehicles per day, showing that most of the road network carries very little public transport traffic. Currently, about 120 km of road (8% of the road network) carries more than 80 public transport vehicles per day.

**Pavement Assessment:** the current average network VCI, based on the 2006 assessments, was calculated as 69, which means that the total paved network is in a "fair" condition. According to the 2006 visual assessments, none of the paved roads are in a very poor condition, 7% of the total paved network is in a poor condition, and 50% of the network is in a fair condition, while 43% of the paved network is in a good or very good condition (see **Figure 4**).



### Figure 4: Condition distribution of the Paved Network for GSDM for 2006

Source: Sekhukhune Road Master Plan, 2007

The current average network VGI was calculated as 42, which means that the total unpaved network is in a "poor" condition. According to the 2006 visual assessments 62% of the total unpaved network is in a poor condition, 31% of the network is in a fair condition and only 7% is in a good condition (see **Figure 5**). The high percentage of gravel roads in a poor condition points to a high need for regravelling projects, and a considerable backlog. Furthermore, the very high percentage roads in fair condition are discerning, pointing to extensive problems on the unpaved road network.

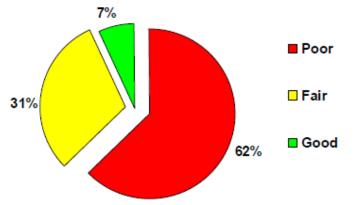


Figure 5: Condition Distribution of the Unpaved Network for GSDM for 2006

Source: Sekhukhune Road Master Plan, 2007

• Stormwater Structures Assessment: stormwater structures were divided into three categories, namely bridges associated with the roadway, major culverts (including drifts) and minor culverts (including drifts). A total of 24 bridges were identified on the road network under ownership of GSDM.

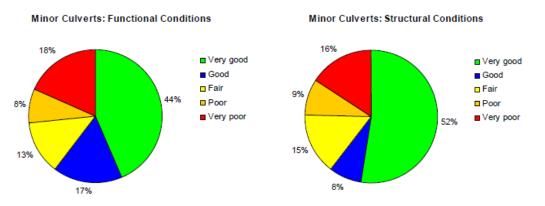
The condition assessment of bridges showed that about 29% of bridges are in a very good condition, 25% in a good condition and 38% in a fair condition. Only about 8% (or 2 bridges) are currently in a poor or very poor condition. A total of 79 major culverts were identified on the road network under ownership of GSDM. The condition



assessment of major culverts indicated that about 47% of major culverts are in a very good condition, 25% in a good condition and 24% in a fair condition. Only about 4% (or 3 major culverts) are currently in a poor or very poor condition.

A total of 929 minor culverts were identified on the road network under ownership of GSDM. The condition assessment of minor culverts showed that about 52% of minor culverts are in a very good structural condition, 8% in a good condition and 15% in a fair condition. About 25% are currently in a poor or very poor structural condition.

The functional conditions were very similar to that of the structural conditions. The condition assessment of minor culverts is indicated graphically in **Figure 6**.



#### Figure 6: Condition Distribution of Minor Culverts in GSDM for 2006

 Road Signs and Marking Assessment: a total of 1832 non-intersection road traffic signs were identified on the road network under ownership of GSDM. In addition, a total of about 207 traffic signs at intersections were identified on the road network under ownership of GSDM, as indicated below.

	NUMBER OF ROAD TRAFFIC SIGNS				
LOCAL MUNICIPALITY	NON- INTERSECTION	INTERSECTION	TOTAL		
Greater Marble Hall	430	41	471		
Makhuduthamaga	429	74	503		
Greater Groblersdal	408	45	453		
Greater Tubatse	402	39	441		
Fetakgomo	163	12	175		
Total	1 832	211	2 043		

Source: Sekhukhune Road Master Plan, 2007

However, for intersection road traffic signs, about 71% are in a very poor condition, or not present at all.

## 5.2.5 Non-Motorised Transport Plans (NMT Plans)

The only existing Non Motorised Transport Plan within the Limpopo Province is the one prepared by the Department of Roads and Transport on behalf of Greater Sekhukhune District Municipality. The plan was not available during the drafting of this report.

## 5.3 Concluding Remarks

An observation made is that roads delivery function by districts and local municipalities within their jurisdiction requires the most attention. The province needs to consider robustly the delivery of municipal road network at local level to ensure proper and prioritised provision of access to settlements.

# 6. FINDINGS OF THE INVESTIGATION ON THE STATUS QUO OF RURAL TRANSPORT IN LIMPOPO

Numerous rural transport data has been collected at both national and provincial level. In this chapter, identified transportation information that will impact on rural transport planning in the province is provided.

## 6.1 Census 2001

In 2001, Statistics South Africa collated demographic and socio-economic profile of the country, at provincial and district level. Part of the information collected included travel patterns information in the form of mode of transport used by members of the community to various destinations.

Table 9 presents the findings, and they are summarised as follows:

- Walking (82%) dominates all mode of transport, with 82% of residents in Limpopo Province walking to various destinations.
- The minibuses or taxis and buses are also prominent as a choice of mode, with 6% and 9% people in the province respectively.
- Trains use is insignificant in the province, (<1%).
- The Waterberg District reported 13% of the people use their private cars. In the Capricorn District most people use taxis and buses with usage comprising 10%.

ΤΟΤΑΙ	- POPULATION	MOPANI	VHEMBE	CAPRICORN	WATERBERG	SEKHUKHUNE CROSS BORDER	BOHLABELA	TOTAL LIMPOPO	SOUTH AFRICA
		964, 231	1, 199, 895	1, 154, 703	614, 161	745, 469	595, 196	5, 273, 655	44,819,778
		18%	23%	22%%	12%	14%	11%	100%	
ort	On foot	82	83	79	75	89	88	82	59
Mode of Transport (%)	By bicycle	1	1	1	2	0	0	1	1
an	By motorcycle	0	0	0	0	0	0	0	0
f Tr: (%)	By car as a driver	3	3	4	6	2	2	3	10
0	By car as a passenger	4	4	5	7	2	3	4	9
pd	By minibus/taxi	5	5	6	5	3	4	5	11
ž	By bus	4	4	4	4	3	2	4	6
	By train	0	0	0	0	0	0	0	3
	Other	1	0	0	1	0	0	0	1
	Total	100	100	100	100	100	100	100	100

### Table 9: Limpopo 2001 Travel Patterns

Source: Statistics South Africa, 2001



## 6.2 Market Survey in Rural Areas of South Africa (2000)

Africon Engineering International and Markinor conducted a study "Undertaking a Market Survey and Analysing the Findings in Rural Areas in South Africa for Use in a Rural Transport Strategy" during 2000 for the National Department of Transport (DOT). The need for the study arose from an initiative launched by the DOT to develop a rural transport strategy for South Africa. The aim of the study was to establish what the rural customer needs are in terms of transport, in order to focus the development and provision of transport related infrastructure.

## 6.2.1 Methodology

The surveys were conducted for different typologies of rural areas in South Africa (a typology represented a group of rural areas with similar characteristics). Twelve such typologies were developed by CSIR during a previous study commissioned by the NDOT. AFRICON and Markinor, in collaboration with the DOT, used six typology groups for their surveys, as follows:

- **Typologies 2 and 4:** displaced metro fringe and severely displaced semi-urban areas. Intensive farming areas close to major markets. Major towns with significant semiurban hinterlands and medium to long distance commuting.
- **Typologies 5 and 6:** mining-based towns and other mining areas with significant semi-urban hinterlands and medium to long distance commuting.
- **Typologies 7 and 8:** low / medium potential deep rural areas, and low / medium potential subsistence and commercial farming with significant semi-urban hinterlands.
- **Typology 9:** high potential deep rural areas (subsistence farming).
- **Typology 10:** high potential subsistence and commercial farming with significant semiurban hinterlands and medium to long distance commuting.
- **Typologies 11 and 12:** low, medium and high potential / intensity commercial farming.

The surveys were conducted in 6 of the 9 provinces (all provinces except Gauteng, Western Cape and Northern Cape). A total of 1200 surveys were conducted in total, with between 6 and 20 surveys per allocated town. Rural areas / settlements were selected by accumulation from the census where possible. Where no information was available, these areas were determined by selecting a village / city / town that has a high proportion of non-urban population as stated in the census, and instructing interviewers to conduct interviews within a certain radius of the town (in most cases 20km).

The selection of the person in the household for participation in the survey was done on a random basis. The final sample showed a fairly equal distribution between male and female (47% and 53% respectively) and between age groups (ranging from 16 years to 60 years and over). In terms of race, the majority (98%) of the sample was black. Surveys took the form of face-to-face interviews. The survey period was 27 March 2000 to 20 April 2000.

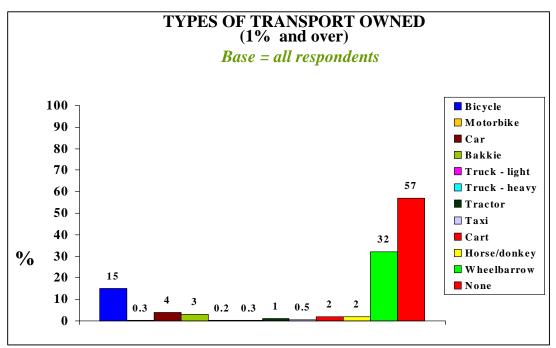
## 6.2.2 Summary of Main Findings

## Transport Types Owned

The respondents were asked if they, or any member of their household, owned a means of transporting goods or people. The main results are shown in **Figure 7**. A total of 57% of respondents, including the members of their household, owned no means of transporting



goods or people. The most common means of transportation owned was a wheelbarrow or hand-held cart (32% of households owned at least one unit of this type). A bicycle was the next means of transportation that was most widely owned by someone in the household (15% of households owned at least one bicycle).





## Monthly Expenditure on Transport

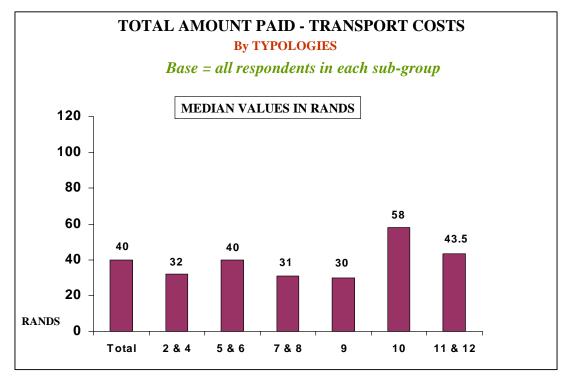
The respondents were asked what their expenditure on transport had been in the previous month. Their expenditure on transport was calculated as the total of the following:

- Fares bus, train, taxi for self;
- Fares bus, train, taxi for other household members, e.g. children etc.;
- Transporting people other than on a bus, train, taxi;
- Transporting goods / livestock, i.e. paying someone else to transport goods / livestock;
- Petrol / diesel for a vehicle used for transporting people / goods / livestock.

The median rand values of the amounts spent on transport in the previous month are shown in **Figure 8**, on the next page. For all respondents, this value was R40 for the month.

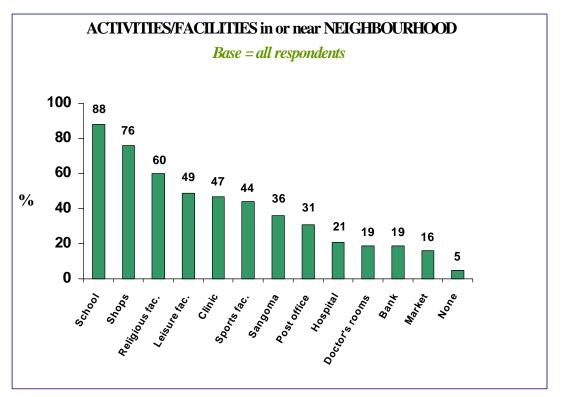
## Main Facilities in / near Neighbourhood

The respondents were asked which of a list of twelve facilities were in their village or neighbourhood. The results of this question are shown in **Figure 9**, on the next page.



### Figure 8: Total amount Paid on Transport Costs (2000 values)

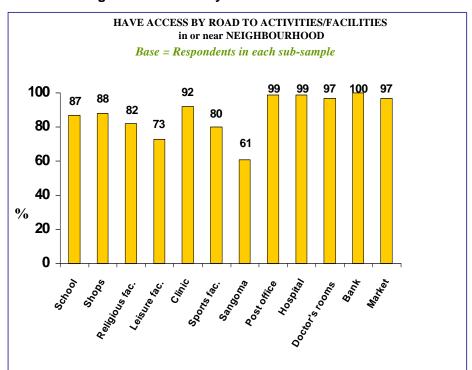
Figure 9: Activities / Facilities in or near Neighbourhood



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Respondents were also asked whether they have access by road to the mentioned twelve facilities. The results of this question are shown in **Figure 10**. For the respondents in total, a school was the facility that was most commonly present in the village or neighbourhood, followed by shops and religious facilities. Most of the respondents had access by road to the mentioned facilities. The three facilities that were least accessible by road were leisure and sports facilities and a sangoma.

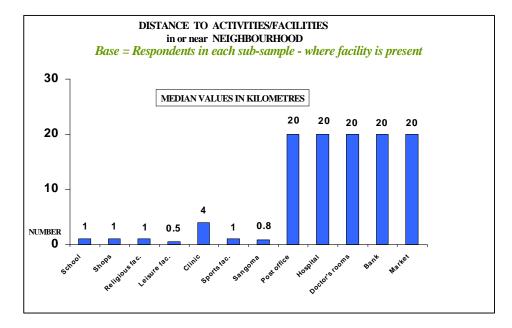




#### Distance to Facilities

For each facility the respondents claimed to have in their neighbourhood, they were asked where it was, i.e. in which village or area, whatever assisted the most in establishing an approximate distance in kilometres. The median for each of the twelve facilities is shown in **Figure 11**.

The closest facilities were leisure facilities and the sangoma, while the more formal establishments e.g. the post office, bank, hospital and doctor's room were the most furthest.



## Figure 11: Distance to Activities / Facilities

### Perceptions of Roads

Six statements to do with the condition of roads were read to the respondents and they were asked if, thinking of the roads in their area, they agreed or disagreed with the statements. The statements and the results (percentage in agreement with the statement) are shown in **Figure 12**.

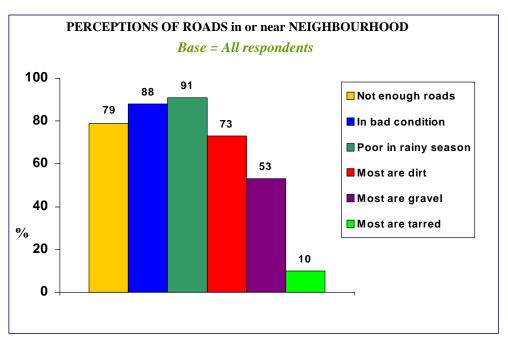


Figure 12: Perceptions of Roads in or near Neighbourhood

Attitudes towards roads in the respondent's areas were largely negative. By far the majority of

the respondents felt that there are not enough roads in their area, and the roads that they do have are mostly in bad condition, particularly in rainy weather.

#### Weekday Travel

The respondents were asked if, between Monday and Friday the previous week, they had left their home or village for any reason, on an excursion that had taken over 15 minutes. The excursion or journey was defined as anywhere within or beyond the respondent's village or area, whether transport was used or the person had walked all of the distance.

A total of 54% of respondents indicated that they have travelled, during the previous week, at least once for over 15 minutes. The destination of their travel, the method of transport used, the travel time (including the walking time and the time spent on whatever means of transport was used, but excluding the waiting time for transportation) and the frequency of travel is indicated in **Figure 13** to **Figure 16**.

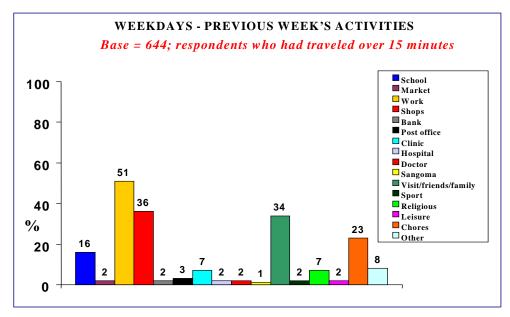
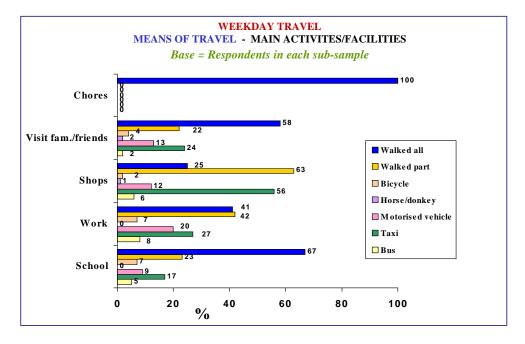


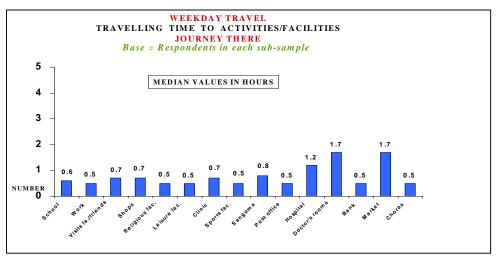
Figure 13: Destinations for Weekday Travel – Previous Week's Activities



### Figure 14: Weekday Travel – Means of Travel to Main Activities / Facilities

## Figure 15: Weekday Travel – Travelling Time to Activities / Facilities

(for the journey there)



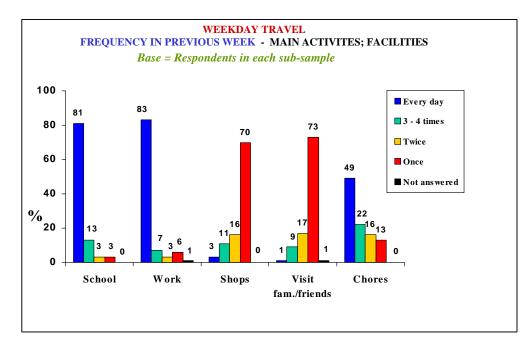


Figure 16: Weekday Travel – Frequency to Main Activities / Facilities

The most frequent destinations for weekday travels were for work, followed by shops, visits to friends or family, and household chores (such as collecting water or wood). Walking all the way was the most common method for the majority of those who went to school and to visit family and friends, and to do household chores. Travel to work and to the shops tended to entail, to a large part, walking part of the way and a trip on a taxi. Activities that were done every day, by the majority of the respondents involved in those activities, were going to school and to work, and to a lesser extent, doing household chores.

#### Weekend Travel

The respondents were asked if, during the previous weekend (Saturday and Sunday), they had left their home or village for any reason, on an excursion that had taken over 15 minutes. The excursion or journey was defined as anywhere within or beyond the respondent's village or area, whether transport was used or the person had walked all of the distance. A total of 47% of respondents indicated that they had travelled at least once for over 15 minutes during the previous weekend. The destination of their travel, the method of transport used, the travel time (including the walking time and the time spent on whatever means of transport was used, but excluding the waiting time for transportation) and the frequency of travel is indicated in **Figure 17** to **Figure 20**.

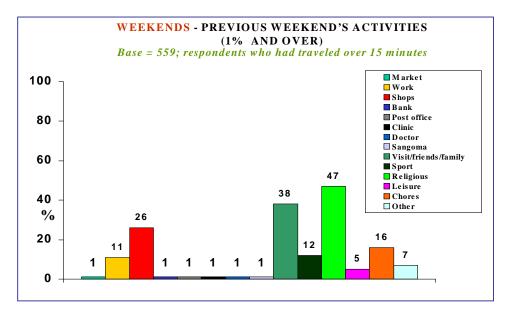
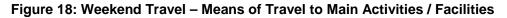
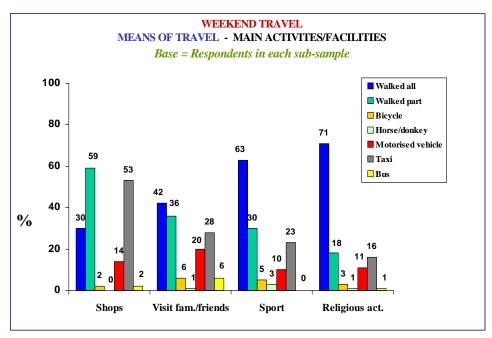
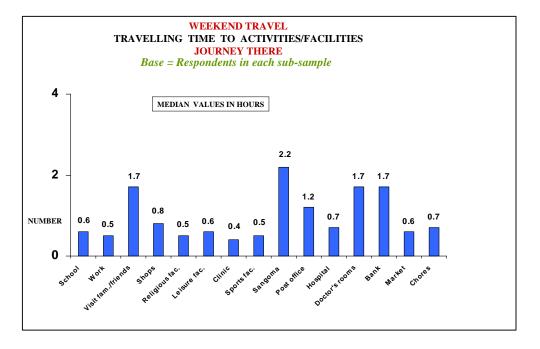


Figure 17: Destinations for Weekend Travel – Previous Week's Activities



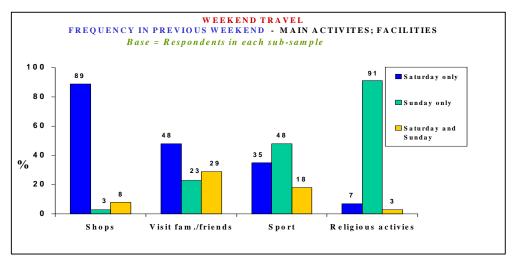


## Figure 19: Weekend Travel – Travelling Time to Activities / Facilities



#### (For the journey there)

Figure 20: Weekend Travel – Frequency to Main Activities / Facilities



The most frequent destinations for weekend travels were for religious activities, followed by visits to friends and family and shops. Walking all the way was the most common method for the majority of those who went to religious functions and to play or watch sport, and to do household chores. Travel to work, to shops and to visit family and friends was mainly walking all or part of the way and, if the latter, catching a taxi.

Going to the shops and visiting family and friends were done mainly on Saturdays. Going to religious services was predominantly a Sunday activity as was watching or participating in

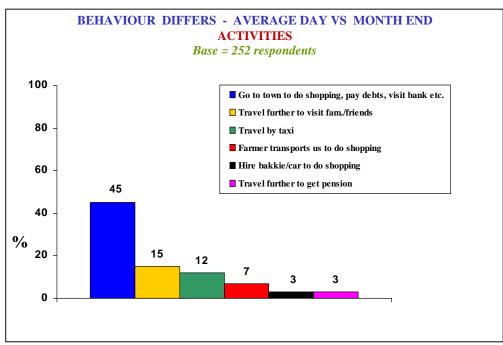
sports.

### Travel Patterns (i.e. month end travel, method of payment etc.)

The respondents were asked if their travel needs, or patterns, were different at the end of the month to what they were at other times. Respondents were also asked how they had paid for the transport they had used the previous week, either for travelling on a weekday or during the weekend. The result of this question is indicated in **Figure 21** and **Figure 22**.

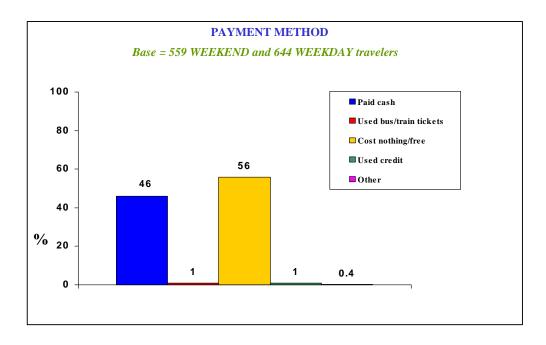
A total of 21% of the respondents claimed that their travel patterns differed at the end of the month. The majority of these respondents went to town to shop, pay debts, bills, accounts, and to go to the movies and to meetings. The next common difference was visits to family and friends who live further than the ones they visit more frequently.

A total of 56% said that their transport did not cost them anything, while the next highest level was payment by cash at 46%.



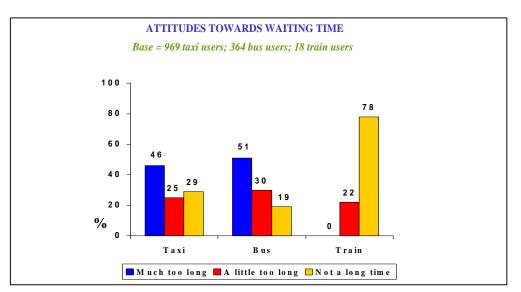
#### Figure 21: Behaviour Difference between Average Day and Month End Activities

Figure 22: Payment Method



#### Attitudes towards Waiting Times

The respondents were asked how they felt about the amount of time they usually spent waiting for a taxi, and / or a bus, and / or a train. Respondents were also asked if there were any particular days of the week or the month, and any particular days of the year, that they had to wait longer than usual for transport. The results are shown in **Figure 23** to **Figure 25**.



#### Figure 23: Attitudes towards Waiting Time

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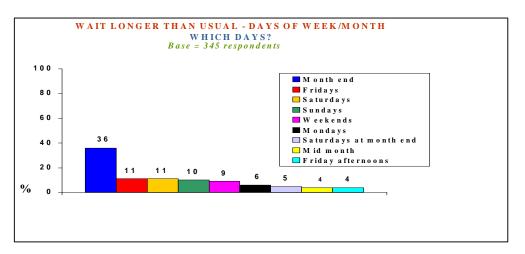
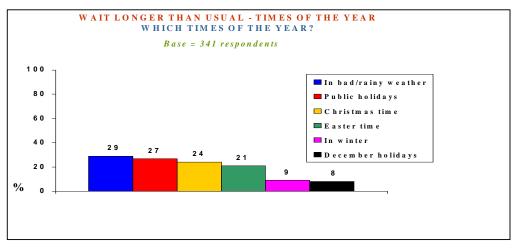


Figure 24: Longer Waiting Times than Usual (days of week/month)





Bus passengers were least satisfied about time spent waiting (81% felt they had to wait much, or a little, too long). For taxis and trains the comparative figure was 71% and 22%. A total of 29% of respondents indicated that there are specific days of the week or month where they had to wait longer than usual for transport. Most of these (36% of total) indicated this to be the end of the month. Similarly, 29% of respondents indicated that there are specific times of the year where they had to wait longer than usual for transport. These times were generally in bad weather conditions and on public holidays and at Christmas and Easter.

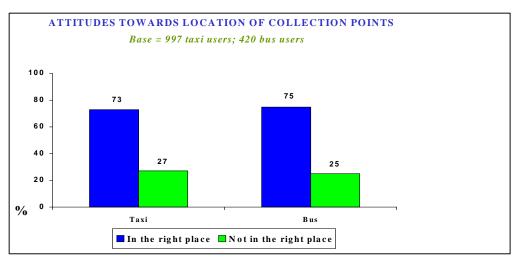
## Attitudes towards the Location of Collection Points

The respondents who used taxis, buses and trains were asked if they felt that the collection points for these types of transportation were in convenient places or not. The results of this question are indicated in **Figure 26**.

Approximately three quarters of the users of taxis and buses felt that the collection points were in convenient places. Main reasons why respondents were not happy with the location of collection points for taxis and buses were the following:



- Collection points were too far away;
- Taxis and buses stop anywhere (and not always in the right place);
- Collection points were at an inconvenient place (e.g. at the main road);
- There is no shelter at the place where they stop;
- It is not safe at collection points.

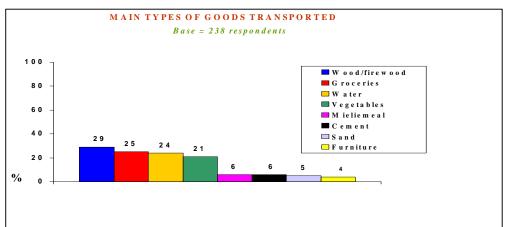


### Figure 26: Attitudes towards Location of Collection Points

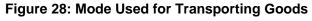
## **Transportation of Goods**

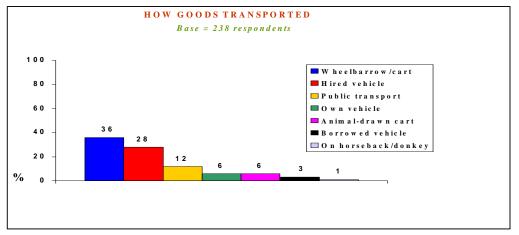
The respondents were asked if they ever transported goods of any kind from place to place. For those who did, the question was asked what types of goods, what type of transport was used and the main problems experienced. The results are indicated in **Figure 27** and **Figure 28**, on the next page.

A total of 20% of respondents said that they transport goods. The four main goods transported were wood / firewood, groceries, water and vegetables. The main means of transporting goods was a wheelbarrow or hand-held cart. Thereafter a hired vehicle or public transport was most commonly used. A total of 50% of respondents indicated that they did not experience any problem. The main problems experienced were roads being in a poor condition, transport costs being very high, and goods being damaged.



### Figure 27: Main Types of Goods Transported





#### **Travel Potential**

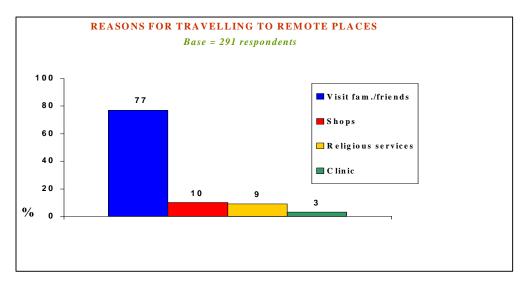
The respondents were asked if there were places in their area that they would like to travel to but were not able to get to easily, or at all.

A total of 24% of respondents said that there were placed of this type in their area. The main reasons for travelling to such remote places, and the intended frequency of travel to these places, are indicated in **Figure 29** and **Figure 30**.

The most commonly obstacles to travel to these remote places were the following:

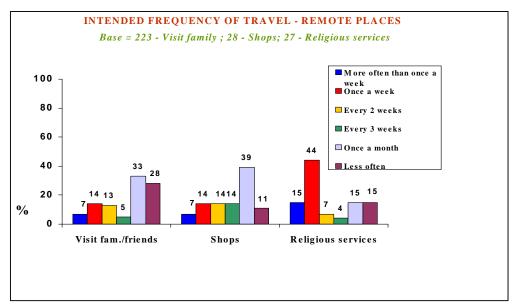
- There is no public transport;
- The fare on public transport is too expensive;
- Roads are in a poor condition;
- In the rainy season roads are impassable;
- No road exists.





## Figure 29: Reasons for Travelling to Remote Places

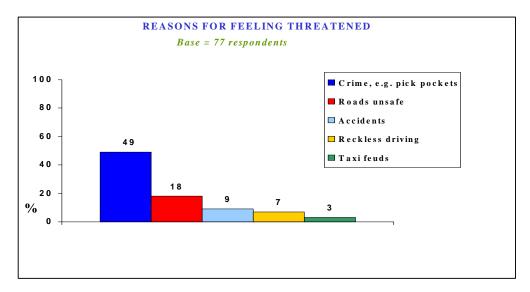




#### Safety and Transportation

The respondents were asked if, in the past month, there had been any incidents that threatened their safety of the safety of any of their family members. The respondents were asked to focus on incidents that may have occurred at, or around, their nearest collection point or when they were travelling to their destination.

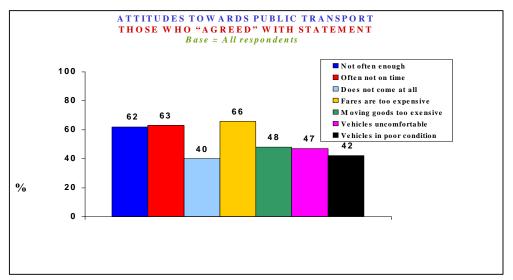
A total of 6% of the respondents said that there had been threatening incidents. The main reasons for feeling threatened are indicated in **Figure 31**.



## Figure 31: Reasons for Feeling Threatened

#### Attitudes towards Public Transport

The respondents were asked if they agreed or disagreed with 14 statements regarding public transport. These statements and the responses (in terms of percentage agreeing with the statements) are indicated in **Figure 32**.



#### Figure 32: Attitudes towards Public Transport

#### Problems Experienced with Walking as a Means of Transport

The respondents were asked what problems they experienced while walking in their areas. A total of 55% of respondents said they did not experience any problems when walking in their area. Among those who indicated that they do experience problems, the most common problem was indicated as roads being in a poor condition.

### Transport Preferences

The respondents were asked to consider the different types of transport available and to say which one they preferred, and which one they considered to be the safest. The result is indicated in **Figure 33**. Taxis were the transport type that was preferred by 68% of the respondents, followed by buses (50%). The least preferred transport mode was trains. Buses were considered as the safest transport mode by 41% of respondents, followed by taxis (27%).

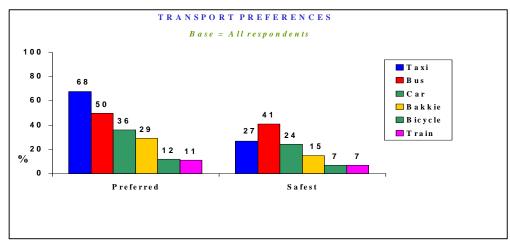


Figure 33: Transport Preferences

#### Potential for Bicycle Use

The respondents were asked to what extent they felt that men and women in certain age groups, and children, would be interested in using bicycles to travel around on every day. The result is indicated in **Figure 34** and **Figure 35**.

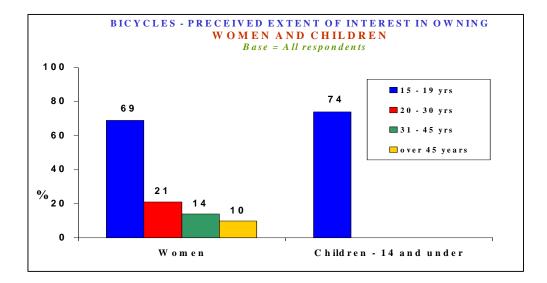
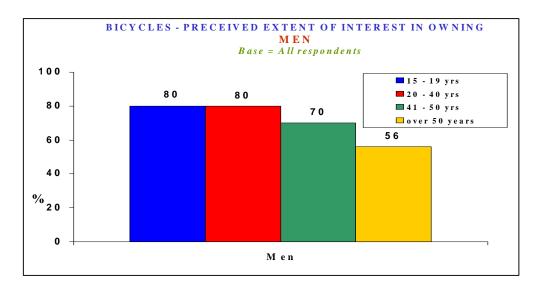


Figure 34: Perceived Extent of Interest in Owning Bicycles (women and children)



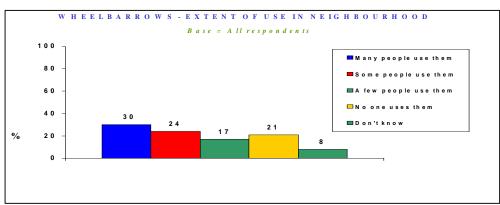


## Figure 35: Perceived Extent of Interest in Owning Bicycles (men)

There was a marked difference in the expected interest between men and women. The general perception was that there would be a significant drop in interest in travelling bicycle among women from the age of 20 onwards, while the drop in interest among men would be less notable. For children, the expected interest was high at 74% of the respondents.

#### Potential for Wheelbarrow Use

The respondents were asked certain questions related to the transport of goods by wheelbarrow. The questions and the respondents' replies are indicated in **Figure 36**.





A total of 54% of respondents indicated that, in their neighbourhoods, wheelbarrows were used by many or some of the people to transport goods.

## 6.3 National Household Travel Survey (2003) – Limpopo's Perspective

The National Household Travel Survey (NHTS) was carried out with the following primary objectives in mind:

- To assist in the evaluation and targeting of public transport subsidies;
- To identify transport disadvantaged regions and communities;
- To measure key performance indicators (KPIs) as required by the National Land Transport Transition Act and the National Land Transport Strategic Framework;
- To understand the transport needs of households and travellers;
- To ascertain the cost of transport and assess whether households can afford to pay for the mobility which is essential for their survival;
- To assess attitudes towards transport services and facilities;
- To measure the availability and use of motor cars;
- To understand the travel choices of different market segments;
- To assess households' access to activities such as work and education; and services such as markets and medical, police and welfare services.

This section provides a summary of the key findings of the NHTS with respect to household travel patterns in the Limpopo Province that is deemed applicable for the purposes of this study.

### Access to Public Transport Services

The following table indicate reported walking times in intervals to the nearest train station for the different areas.

The following is revealed regarding access to stations in Limpopo:

- Only 8 per cent of all households had access to a train station, most of those were in Waterberg;
- In Limpopo as a whole, only 3 per cent had access to a train station within a 15 minute walk;
- Among 92 per cent of households there was the perception that no train service was available;
- Train accessibility was the highest in Waterberg with 8 per cent;
- All households in Sekhukune reported that there were no accessible train stations in the district.

	PERCENTAGE OF HOUSEHOLDS					
AREA	1-15 MINS	16-30 MINS	31-60 MINS	61+ MINS	NO SERVICE	
Sekhukhune Cross Border	0.0	0.0	0.0	0.0	100.0	
Bohlabela	11.5	8.6	0.9	1.0	78.1	
Mopani	0.0	0.0	0.3	0.7	99.0	
Vhembe	2.0	1.0	0.8	0.0	96.1	
Capricorn	0.8	2.5	2.4	0.5	93.8	
Waterberg	8.4	10.2	2.9	1.2	77.3	
Limpopo	3.1	3.2	1.3	0.6	91.8	

#### Table 10: Access to train stations in Limpopo

Source: National Household Travel Survey 2003

The following table shows the reported walking times in intervals to the nearest bus stop for the different areas.

	PERCENTAGE OF HOUSEHOLDS					
AREA	1-15 MINS	16-30 MINS	31-60 MINS	61+ MINS	NO SERVICE	
Sekhukhune Cross Border	54.7	8.1	0.3	0.0	36.9	
Bohlabela	67.5	15.0	3.9	1.0	12.7	
Mopani	66.5	19.7	3.2	0.2	10.3	
Vhembe	82.5	9.2	0.6	0.0	7.7	
Capricorn	70.0	14.1	4.0	0.4	11.5	
Waterberg	24.1	6.3	2.0	0.7	66.8	
Limpopo	63.8	12.4	2.4	0.3	21.1	

#### Table 11: Access to bus stops in Limpopo

Source: National Household Travel Survey 2003

It appears that for the majority of households, bus stops were either within relatively close proximity (15 minutes or less) or did not exist in the vicinity of the households. Sixty four per cent of all households could access a bus stop within 15 minutes of their homes, whereas 21 per cent claimed that there was no available bus stop. The service seems to be better developed in some areas than others. The area with by far the greatest proportion of households living within 15 minutes of a bus stop was Vhembe (83%) followed by Capricorn (70%).

The following table shows the reported walking times in intervals to the nearest taxi service for the different areas.



	PERCENTAGE OF HOUSEHOLDS					
AREA	1-15 MINS	16-30 MINS	31-60 MINS	61+ MINS	NO SERVICE	
Sekhukhune Cross Border	83.2	15.2	1.3	0.0	0.3	
Bohlabela	74.1	17.0	5.2	1.0	2.7	
Mopani	76.5	19.5	2.6	0.1	1.3	
Vhembe	80.3	9.6	1.5	0.0	8.6	
Capricorn	73.7	16.7	5.0	0.4	4.1	
Waterberg	61.7	17.5	8.6	1.1	11.0	
Limpopo	75.1	15.6	3.9	0.4	5.0	

### Table 12: Access to taxi services in Limpopo

Source: National Household Travel Survey 2003

Only 5 per cent of households in the province indicated that they did not have access to a taxi service. The district with the worst access to taxi services was Waterberg where 11 per cent of households claimed that they did not have access to taxi services. The table reveals the taxi mode as an accessible form of public transport. Three quarters of all households had a taxi service within about one kilometer of their homes (less than 15 minutes' walking time). The highest taxi accessibility was in Vhembe where 80 per cent could reach a taxi within 15 minutes.

#### Access to Activities and Services

The following table shows the percentage of households which could access these services within either 30, or 60 minutes of their homes. Considering that these services are required relatively infrequently, such as once a month or less, it appears that this aspect of accessibility should not be of major concern to transport authorities.

	% OF HOUSEHOLDS			
SERVICE	WITHIN 30 MINUTES	WITHIN 60 MINUTES		
Medical	75.2	94.9		
Welfare	60.9	90.0		
Police Station	65.6	92.6		

#### Table 13: Accessibility to essential services

Source: National Household Travel Survey 2003

**Table 14** shows the access times to services and amenities by households. Households indicating that they did not need or desire accessibility were excluded from the analysis.

FACILITY	1 - 15 MINS	16 - 30 MINS	31 - 60 MINS	> 60 MINS	CANNOT GET THERE
Food shop	86.9	9.6	2.6	0.8	0.1
Other shop	21.3	31.2	33.1	14.1	0.2
Traditional healer	34.5	21.3	19.6	10.7	13.9
Medical service	37.8	37.4	19.7	5.1	0
Post office	41.0	35.8	18.3	4.2	0.7
Welfare office	25.5	35.4	29.1	8.9	1.1
Police station	26.6	39.0	27.0	7.1	0.3
Municipal office	23.8	31.8	28.0	11.0	5.5
Tribal authority	48.2	29.5	13.9	4.0	4.4

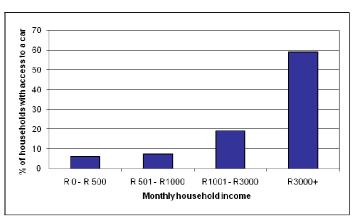
#### Table 14: Travel time to various services

Source: National Household Travel Survey 2003

The majority of households could get to most of these services within 30 minutes. The most accessible service appears to be food shops. For Limpopo as a whole, 97 per cent of households claimed they could access food shops within 30 minutes of their homes.

#### Car Availability and Use

Seventeen per cent of households in Limpopo had access to a motor car. The adjacent figure shows that income is an important factor in car access. In households where monthly income exceeds R 3 000, almost 60 per cent had access to one or more cars. On the other hand, households that earned less than R3 000 per month had minimal car access.



The following table indicates that the level of ownership varied a great deal from one district to another. In Vhembe, 23 per cent of households had access to a car, compared with only about 12 per cent in Capricorn.

AREA	% OF HOUSEHOLDS WITH CAR ACCESS	NO. OF CARS PER HOUSEHOLD*
Sekhukhune Cross Border	12.3	0.2
Bohlabela	8.5	0.1
Mopani	18.8	0.2
Vhembe	23.0	0.3
Capricorn	11.9	0.2
Waterberg	21.9	0.3
Limpopo	17.2	0.2

#### Table 15: Household car ownership by area

\* Include Household car and Company car, but not combis Source: National Household Travel Survey 2003

#### Extent of Travel on a Typical Weekday

The following table reveals that 80 per cent of the Limpopo population (5.3 million people) travelled at least once from their homes on travel day. The table indicates that Sekhukhune had the lowest trip rate (69%) which is much lower than the average of 80 per cent. Mopani (85%) had the highest percentage of trip-makers on a typical weekday. Gender and age were determining factors in trip-making. Men were more mobile than women, as 84 per cent of males compared with only 76 per cent of females travelled at least once from their homes on travel day.

AREA	% OF ALL PEOPLE
Sekhukhune Cross Border	68.7
Bohlabela	89.1
Mopani	85.3
Vhembe	84.0
Capricorn	74.0
Waterberg	77.3
Limpopo	79.9

 Table 16: Percentage of people making one or more trips on a weekday

Source: National Household Travel Survey 2003

The following table shows weekday trip-making by age group.

AGE	% ALL OF PEOPLE
0 - 6 years	60.6
7 - 14 years	98.3
15 - 19 years	92.9
20 - 25 years	79.6
26 - 40 years	78.2
41 - 65 years	73.7
> 65 years	48.7

## Table 17: Weekday trip-making, by age group of household members

Source: National Household Travel Survey 2003

A very high proportion of household members in the 7-19 year age group made weekday trips, while fewer of the youngest and the oldest groups made trips. The greatest number of trip makers was, among children of school going age and the economically active age group (26-65 years).

The following table reveals that the main reasons for undertaking weekday trips were to attend educational institutions, to visit friends, to go shopping or to go work. The importance of educational trips is clear.

% OF THOSE HOUSEHOLD MEMBERS WHO MADE AT LEAST ONE TRIP							
AREA EDUCATION SHOPPING VISITING WOR							
Sekhukhune Cross Border	63.7	18.6	16.3	6.9			
Bohlabela	50.4	46.9	45.1	11.7			
Mopani	49.9	22.8	31.0	13.9			
Vhembe	49.3	15.7	32.8	13.8			
Capricorn	56.3	16.0	17.8	14.3			
Waterberg	38.1	20.8	14.9	38.4			
Limpopo	51.2	21.9	27.0	15.8			

Table 18: Main trip purposes on weekdays, by district or metro type

Source: National Household Travel Survey 2003

The major purpose in all areas was the trip to education. Waterberg had the highest proportion of people making trips to work.

The following table shows the minibus-taxi as the most commonly used motorised travel mode in Limpopo. Eighteen per cent of the population made use of the minibus-taxi at least once in the week (7 days) prior to survey day. Minibus-taxi use was the highest in Vhembe (18%), followed by Capricorn and Mopani (17%).

	PERCENTAGE OF ALL PEOPLE						
AREA	TRAIN	BUS	METERED TAXI	MINIBUS- TAXI	SEDAN TAXI	BAKKIE TAXI	CAR
Sekhukhune Cross Border	0.1	2.9	0.7	15.2	0.2	1	3.5
Bohlabela	0.2	5.6	0.4	23.2	1.4	0.6	3.4
Mopani	0.1	6.7	0.5	17.2	0.2	0.9	7.8
Vhembe	0.0	8.6	0.5	17.9	0.1	0.4	7.8
Capricorn	0.3	4.3	0.9	17.4	0.2	0.6	6.9
Waterberg	0.0	3.4	0.5	16.0	0.2	0.6	17.1
Limpopo	0.1	5.6	0.6	17.7	0.3	0.7	7.7

### Table 19: Transport modes used in the week prior to survey day, by area

Source: National Household Travel Survey 2003

The second most frequently used travel mode was the car. Car use was highest in Waterberg (17%). Car use was low in all other districts, the lowest in Sekhukhune Cross (4%). The only other mode which experienced significant use was buses. Bus use was highest in Vhembe (9%). The train, metered taxi, sedan-taxi and bakkie-taxi use were not at all significant. It should be noted that this table excludes walking as a mode because the NHTS wanted to determine the extent of the use of public transport, motorised transport and mechanical means of travel, during the course of a typical week.

#### **Quality of Public Transport Services**

The following table shows the major problems mentioned in each district. The following issues stand out: (1) in Limpopo as a whole, as well as in most areas, the main problem mentioned by respondents was that transport was not available or too far. This was most evident in Waterberg (66%) and Vhembe (66%); (2) the affordability of transport was a problem in the province and in all districts; and (3) safety and driver behavior was a problem in the province and in all districts.

AREA	TYPE OF PROBLEM	% OF HOUSEHOLDS
Sekhukhune Cross	Too expensive	50.6
Border	Safety/ Driver behaviour	41.2
Duidei	Not available/ Too far	32.8
	Not available/ Too far	49.2
Mopani	Too expensive	19.1
	Safety/ Driver behaviour	12.9
	Not available/ Too far	65.7
Vhembe	Too expensive	40.6
	Safety/ Driver behaviour	27.9
	Not available/ Too far	61.4
Capricorn	Too expensive	29.2
	Safety/ Driver behaviour	17.6
	Not available/ Too far	66.3
Waterberg	Safety/ Driver behaviour	28.8
	Too expensive	24.8
	Not available/ Too far	57.4
Limpopo	Too expensive	33.8
-	Safety/ Driver behaviour	23.6

#### Table 20: Transport problems by area

Source: National Household Travel Survey 2003

#### **Travel Choice Factors**

The following table indicates perceptions regarding factors to be considered when traveling.

AREA	FACTORS	% OF PEOPLE 15 OR OVER
Sekhukhune	Travel time	27.7
Cross Border	Travel cost	27.2
	Safety from accidents	26.9
	Safety from accidents	37.3
Bohlabela	Travel cost	31.5
	Travel time	13.9
	Safety from accidents	35.5
Mopani	Travel time	19.5
	Travel cost	18.5
	Safety from accidents	52.3
Vhembe	Travel time	17.4
	Travel cost	13.3
	Safety from accidents	38.8
Capricorn	Travel time	20.6
	Travel cost	16.0
Waterberg	Safety from accidents	45.5

 Table 21: Travel Choice Factors



AREA	FACTORS	% OF PEOPLE 15 OR OVER		
	Travel cost	29.4		
	Travel time			
	Safety from accidents	40.7		
Limpopo	Travel cost	20.7		
	Travel time	19.8		

Source: National Household Travel Survey 2003

Persons in all areas but Sekhukhune indicated that the most important factor to consider when travelling was safety from accidents. The two traditional mode choice factors (time and cost) were important in all areas.

#### Main Mode of Travel to Work

The following table indicate the main mode of travel to work:

		PERCENTAGE OF TRIPS							
AREA	TRAIN	BUS	ΤΑΧΙ	CAR DRIVER/ PASSENGER	WALK	OTHER			
Sekhukhune Cross Border	0.0	5.3	19.3	21.0	48.1	6.2			
Bohlabela	0.0	5.2	14.4	10.2	62.4	7.8			
Mopani	0.0	14.6	23.1	26.8	28.1	7.4			
Vhembe	0.0	16.1	17.7	12.1	50.6	3.4			
Capricorn	0.0	12.8	20.8	22.7	39.0	4.7			
Waterberg	0.0	3.2	7.6	21.6	61.0	6.7			
Limpopo	0.0	10.1	16.1	19.6	48.3	5.8			
Number	-	71 000	106 000	138 000	339 000	47 000			

#### Table 22: Main mode to work

Source: National Household Travel Survey 2003

Walking plays a significant role for travel to work, in particular in Waterberg. Considering these modal choices, it would appear that neither commuters' concern about safety nor their dissatisfaction with the taxi services were affecting their choice of the minibus-taxi for trips to work. Twenty six per cent of commuters used public transport. The following figure shows the modes used by the public transport commuters.

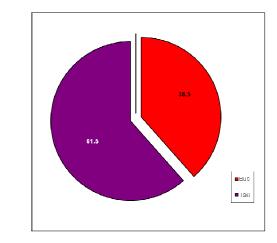


Figure 37: Public transport modes used for work trips

There were approximately 177 000 public transport commuters, with 106 000 taxi commuters accounted for 62 per cent of public transport trips to work. Bus services accounted for the balance.

The following table shows the percentage of public transport commuters per district.

	PUBLIC TRANSPORT MODE				
AREA	TRAIN	BUS	ΤΑΧΙ		
Sekhukhune Cross Border	0.0	21.7	78.3		
Bohlabela	0.0	26.5	73.5		
Mopani	0.0	38.6	61.4		
Vhembe	0.0	47.6	52.4		
Capricorn	0.0	38.0	62.0		
Waterberg	0.0	29.6	70.4		
Limpopo	0.0	38.5	61.5		

 Table 23: Main mode to work by public transport

Source: National Household Travel Survey 2003

As mentioned before, taxis transported 62 per cent of public transport commuters. Taxi use was highest in Sekhukhune Cross Border (78%), followed by Waterberg (70%). Bus use was significant in Vhembe, where it accounted for 48 per cent of all public transport trips to work.

The following figures show the proportion of commuters in the different total travel time categories.



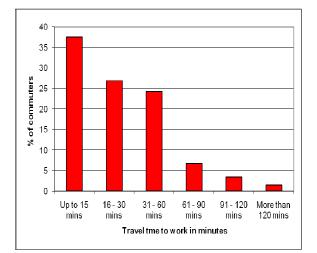
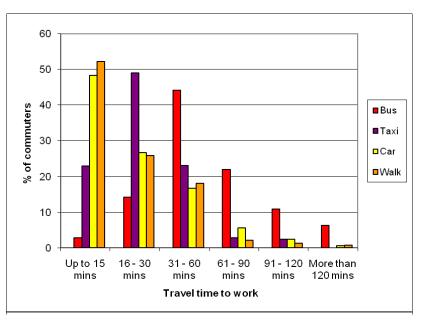
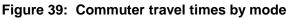


Figure 38: Travel times to work in minutes

**Figure 38** indicates that approximately 89 per cent of commuters could get to work in an hour or less. The longest travel times were reported in Vhembe where three per cent of commuter trips were longer than two hours. Travel times differ considerably when different modes are compared. Travel times to work by different modes are depicted in the following figure:



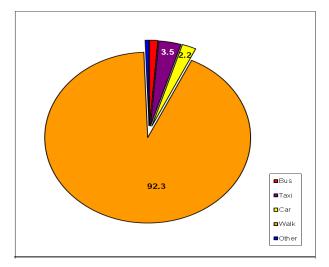


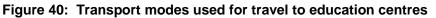
Seventy eight per cent of walk trips and 75 per cent of car trips were 30 minutes or shorter. The shortest public transport trips were by taxi with 72 per cent being 30 minutes or shorter. Only 17 per cent of bus trips were 30 minutes or shorter with 39 per cent longer than an hour.

Source: National Household Travel Survey 2003

### **Travel to Educational Centres**

Trips to educational centres comprise a large portion of the total trips during the course of peak hours on typical weekdays. About 2.2 million people in Limpopo travel regularly to educational centres. The following figure and table depict the travel mode used in each of the districts.





Source: National Household Travel Survey

	PERCENTAGE OF TRIPS						NUMBER OF
AREA	TRAIN	BUS	ΤΑΧΙ	CAR	WALK	OTHER	TRIPS
Sekhukhune Cross Border	0.0	0.9	1.5	0.5	96.7	0.3	292 000
Bohlabela	0.0	0.0	2.0	1.1	96.6	0.3	258 700
Mopani	0.0	0.4	4.0	2.0	92.5	1.1	428 000
Vhembe	0.1	1.9	4.4	2.4	91.0	0.1	546 000
Capricorn	0.0	1.9	3.5	3.3	90.6	0.7	502 000
Waterberg	0.0	2.8	4.9	3.7	87.1	1.6	191 000
Limpopo	0.0	1.3	3.5	2.2	92.3	0.6	2 218 000

#### Table 24: Mode to education

Source: National Household Travel Survey

The majority of scholars and students walk to their educational destinations. Unfortunately 393 000 of those learners spend more than one hour a day walking to and from educational centres.



# Cost of Transport

The following figure indicates the expenditure on public transport:

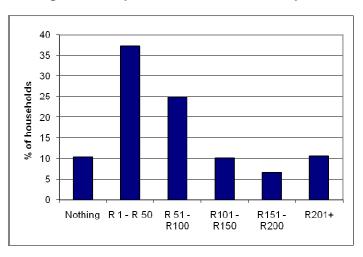


Figure 41: Expenditure on Public Transport

The figure indicates that ten per cent of households spent nothing on public transport. This is because they used private means of transport such as cars or motorcycles to travel to work and other destinations or because they travelled on foot.

The following figure indicates travel costs for public transport trips per mode to education centres.

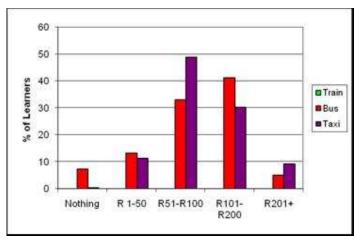


Figure 42: Travel costs for public transport trips to education per mode

Source: National Household Travel Survey 2003

Most bus users (41%) spent between R101 and R200 per month, whereas taxi users (49%) spent between R51 and R100 per month on public transport to educational centres



The following figure shows the costs of commuting by public transport.

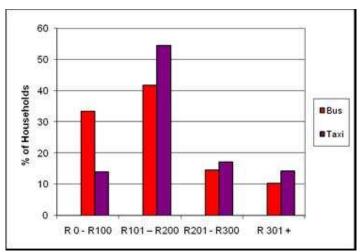


Figure 43: Cost of commuting by public transport

Source: National Household Travel Survey 2003

The most serious concerns about the cost of transport are related to the cost of travel to work, particularly for low-income earners. Forty two per cent of bus commuters and 55 per cent of taxi commuters spent between R51 and R100 per month. Fourteen per cent of taxi commuters spent more than R300 per month. There were differences in travel costs between areas. In Capricorn, 21 per cent of commuters spent more than R300 per month on public transport, followed by Waterberg with 18 per cent. In other districts this varied between 7 and 9 per cent.

#### Affordability of Transport

The following table shows the percentage of household income spent on public transport by district.

	PERCENTAGE OF HOUSEHOLDS						
AREA	0%	1 - 5%	6 - 10%	11 - 20%	> 20%		
Sekhukhune Cross Border	3.8	30.2	26.0	11.1	29.0		
Bohlabela	4.7	33.4	28.9	13.1	19.9		
Mopani	11.9	25.4	27.3	14.2	21.3		
Vhembe	8.2	35.1	28.9	7.8	19.9		
Capricorn	9.6	26.5	28.4	14.6	20.9		
Waterberg	28.8	42.4	16.5	4.6	7.6		
Limpopo	11.4	31.7	26.4	11.0	19.6		

 Table 25: Percentage of household income spent on public transport

Source: National Household Travel Survey 2003

The above table reveals which districts had households spending more than 10 per cent of their income on public transport. In Sekhukhune Cross Border 40 per cent of households spent



more than 10 per cent and 29 per cent spent more than 20 per cent of their income on public transport. Only Waterberg had a small proportion (12%) of households spending more than 10 per cent of their income on public transport. All other areas had a large proportion (28% or more) of their households spending in excess of 10 per cent of income on public transport.

The following table shows the percentage of household income spent in relation to household income.

MONTHLY	PERCENTAGE OF HOUSEHOLDS				
HOUSEHOLD INCOME	0%	1 - 5%	6 - 10%	11 - 20%	> 20%
Up to R500	9.0	0.0	29.9	11.7	49.4
R501 – R1000	7.0	43.6	28.2	11.0	10.2
R1001 – R3000	7.1	46.9	28.0	13.9	4.1
> R3000	38.0	49.1	9.5	3.4	0.1

 Table 26: Household income spent on public transport in relation to income

Source: National Household Travel Survey 2003

More than 60 per cent of all households that earned R500 or less spent more than 20 per cent of their income on public transport. Thirty eight per cent of households earning in excess of R3 000 per month spent nothing on public transport.

The following table indicate spending more than 20 per cent of income on public transport.

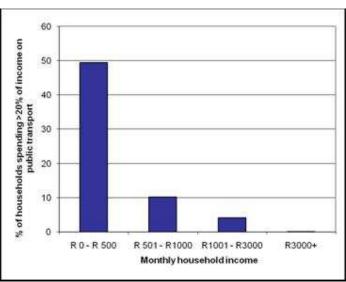


Figure 44: Households spending more than 20 per cent of income on public transport

The above figure shows the relationship between monthly household income and the households that spend more than 20 per cent of income on public transport. The graph shows the dramatic effect of the cost of transport on low-income groups in respect of the proportion of



household income consumed on travel. For Limpopo as a whole, 20 per cent of households spent more than 20 per cent of income on transport. The benchmark used in the White paper on National Transport Policy (DoT, 1996) to assess whether transport costs are creating hardship for households or individuals was 10 per cent of disposable income.

# 6.4 Benchmarking Targets for Land Passenger Transport Strategic Objectives

The White Paper on National Transport Policy published in 1996 by the DOT provided indicators for land passenger transport, which were based on service delivery to customers. These indicators were later translated into key performance indicators by the DOT in its Draft National Land Transport Strategic Framework for the period 2002 to 2007. In brief, the indicators related to the following: (1) satisfaction of user needs; (2) improved accessibility to transport services; (3) affordable accessibility to work and services; (4) affordable transport costs; and (5) Safe and secure transport.

The National Land Transport Strategic Framework set certain targets for these indicators as follows:

- average travel time to work should be less than about 1 hour;
- affordable public transport with commuters spending less than about 10 per cent of disposable income on transport;
- in urban areas, access to public transport within 1 kilometre (about a 15 minute walk); and
- in rural areas access to a regular public transport service within a 2 kilometre walk (about 30 minutes); and
- A ratio of 80:20 between public transport and private car use.

**Table 27** provide an indication of the performance of the transport system in the North West from a customer perspective in 2003, as measured by the NHTS.

		LIMPOPO RESULTS				
KPI	TARGET	% NOT WITHIN TARGET	NUMBER NOT WITHIN TARGET			
Travel time to work	Less than 1 hour	12% of commuters	80 000 commuters			
Travel time for work trips by public transport	Less than 1 hour	39% of bus commuters; and 14% of taxi commuters	27 000 bus commuters; and 16 000 taxi commuters			
Travel time for educational trips	Not specified (suggest less than 31 min)	21% longer than 30 minutes; and 3% longer than 60 minutes	451 000 longer than 30 minutes; and 70 000 longer than 60 minutes			
Urban walking times to public transport	15 min (about 1 km)	17% of urban households	36 000 urban households			
Rural walking times to public transport	30 minutes	4% rural households	44 000 rural households			
Percentage of households spending more than 10% of income on public transport	A maximum of 10% was suggested	31% of households	397 000 households			

### Table 27: Key Performance Indicators

Source: National Household Travel Survey 2003 (Table based on perceived walking times from homes to services).



In summary, the following points are noteworthy from the NHTS:

- Some 80 000 commuters travel for longer than one hour to work; of these 43 000 travel by public transport;
- 451 000 children or students spend more than 30 minutes on travel to education. They spend more than one hour each day travelling, if the trip home is also taken into consideration;
- Only 15 per cent of urban households are beyond the 15 minute access time to public transport;
- Only 4 per cent of rural households are beyond the 30 minute access time to public transport;
- 31 per cent of households spend more than ten per cent of their income on public transport;
- Only 52 per cent of motorised trips to work are by public transport, thus the ratio 52: 48 falls well short of the 80:20 target.

# 7. CONSOLIDATION OF DESKTOP REPORT FINDINGS

The findings of the desktop study are summarised as follows:

- Limpopo is the second poorest province, with approximately 71% of the population (3.8 million people) living below the poverty line.
- Moreover, 61% of households (875 000 of the 1.4 million households in the province), majority found in rural areas earn less than R1000 per month.
- Limpopo is characterised by sparsely populated rural areas that have low densities. Population growth in rural areas in Limpopo is declining due to (1) migration from rural areas to urban areas; (2) impact of HIV / AIDS and (3) lack of growth in the rural areas.
- Over 60% of households earn less that R1000 per month, with a further 25% of households earning between R1000 and R3000. it is recorded that over 70% of the households in all districts earn less than R19, 300 per annum.
- 67% of the population was economically active with 49% not being employed.
- The agricultural sector employed 17% of the workforce in the province. This sector is one of the main activities in Waterberg and Mopani districts.
- Rural transport development and planning has considerable support from existing policy and legislative frameworks.
- Limpopo Province has over 2000 rural settlements, with each settlement accommodating between 1 700 to 3 500 persons in the settlement.
- The general level of infrastructure provision is very low:
  - Between 50% (Waterberg DM) and 70% (Sekhukhune and Vhembe DMs) of the population do not meet RDP standard for provision of sanitation infrastructure;
  - Over 50% of the population in Waterberg and Mopani DMs do not meet RDP standard for provision of water infrastructure.
  - Many of the rural settlements do not have electricity infrastructure; and
  - Road conditions in rural settlements are poor.
- The existing provincial frameworks provide adequate guiding principles, however it is evident physical manifestation of these principles is long overdue.
- Status of rural transport in the province can be summarised as follows:
  - Travelling Patterns:
    - Majority of the population main purpose of travelling during a weekday is work, school and visiting family / friends. Mode of transport to these destinations included some walking. There is an element of strong combination of walking and taxi mode for these trip purposes. The less accessible facilities included other shops, municipal offices and sangoma.

- During the weekend people tend to take shopping, visiting of friends and religious trips. The mode of transport for these trip purposes is mainly walking combined with the taxi mode.
- Month end trips are mainly shopping trips.
- Easter, Christmas and days with bad weather were outlined as the most uncomfortable days to travel during the year.
- Transportation Cost:
  - In 2003 values, approximately 30% of the households in the province spent more than 10% on public transport. Waterberg had 13% of households psending more than 10% on public transport cost, whilst Sekhukhune had more than 40% of households psending more than 10% of their income on public transport.
  - In 2003 values, 10% of households spent nothing on public transport. Of concern however, is that the cost of travelling to work particularly for low income earners is high.
- Perception of Public Transport Services:
  - Rural people in general have no means of transporting their goods. The four main goods transported were wood / firewood, groceries, water and vegetables.
  - The most used transport means included wheelbarrows and hand-held carts.
  - The most commonly obstacles to travelling included lack of public transport services and expensive public transport services. Physical barriers include poor road conditions or non-existent infrastructure.
  - Users of public transport are also concerned with safety of public transport. Attributes include crime (from being mugged), unsafe roads and accidents.
  - Taxi mode is the preferred mode of transport, followed by the bus mode. However, the bus mode is perceived as being the safest when comparing the two modes. Train mode is not popular amongst public transport users – its role needs to be revaluated.
- Attitude towards Non-Motorised Transport (NMT):
  - Walking is the predominant NMT mode in the province 4% of rural households walk for more than 30 minutes. Majority of walkers do not have a problem with walking, however the infrastructure supporting this mode is either not in a conducive state or non-existent.
  - The bicycle as a mode is preferred by men and children (younger than 14 years). Women older than 20 years do not prefer this mode as a means of transportation.
  - Wheelbarrows are also another major means of NMT.

# 8. CONCLUSIONS

This report is deliverable one of four from Phase 1, namely the Desktop Study. It provides information collated and assessed to determine status of rural transport development and planning in Limpopo. The Desktop Study Findings Report is a guideline to the Development of a Framework for Field Investigation, which will guide the collation of rural transport development and planning information in the province.

From the presented information in this document, it is evident that to ensure increased access of rural communities and vulnerable groups to basic services to which they are entitled, precise and area based information need to be collected.

Information that will be collected will include:

- Transport needs:
  - Passenger transport;
  - Transport for people with disabilities;
  - Transport for subsistence farming;
  - Bulk freight transport.
- Description of transport usage in terms of:
  - Modes of transport used;
  - Frequency of travel;
  - Major origins and destinations per sample town;
- Service levels experienced:
  - o Availability;
  - o Reliability;
  - o Cost;
  - o Safety;
  - o Infrastructure available and its condition;
  - Accommodation of special needs;
  - Travel distance and time.
- Service levels required and transport problems experienced.

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