Rural Transport Strategy for South Africa

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transport

Department:
Transport
REPUBLIC OF SOUTH AFRICA

FOREWORD BY THE MINISTER

It is with great pleasure that the Department of Transport has developed the Rural Transport Strategy for South Africa. The aim of this strategy is to provide strategic guidance to all the 3 spheres of government in an ongoing effort to address mobility and access challenges experienced by our rural communities in an integrated, aligned and coordinated manner. Transport is a basic necessity for sustainable social and economic development. Transport can also play a catalytic role in addressing poverty and development needs as well as correcting spatial distortion. It follows from these that the rural transport implementation plan is responding to the priorities and the needs of district municipalities and provinces.

To overcome the challenges in rural areas and to ensure equitable distribution of resources government departments, NGOs and the business community are acting collectively to respond to social and economic crisis facing our country. The National Spatial Development Plan (NSDP); the Integrated Sustainable Rural Development Programme (ISRDP), Integrated Development Plans (IDPs), land use and transport plans are some of the key tools for to support nodal and linkage development both in urban and rural areas.

The strategy is aimed at developing a balanced and sustainable rural transport systems by supporting local infrastructure and services. The emphasis is to improve access roads, develop passable roads, address neglected infrastructure and corridors, which are linked to markets and other social services. For instance, agriculture and farming are seen as the main sources of economic development in rural areas and have to be strengthened by providing freight logistical support to boost their productivity.

Rural transport implementation plan on the other hand is strengthening our public and private transport system by complementing it with alternative modes of transport such as cycling and animal drawn carts and intermediate means of transport (IMT). Appropriate infrastructure for non motorized transport including off road infrastructure such as tractor tracks, cycle tracks, footpaths and footbridges have been identified as pillars to sustain these modes because of the low operating costs and lower demands for infrastructure. In this regard the Shova Kalula bicycle projects has proved to be a viable alternative for a low cost mobility solution, which benefits scholars and low-income households in both urban and peri-urban areas. Animal drawn transport on the other hand is gaining recognition and needs to be adapted according to new technological designs. It is believed that all these initiatives will also contribute to rural tourism and recreational activities.

Safety forms an integral part of transport and all road based transport modes will be regulated to meet the safety standards. Appropriate technologies, which have proven to be suitable to South African circumstances, will be promoted and regulated accordingly.

The rural transport implementation plan is focusing on key deliverables which include rural transport development programme (RTDP). RTDP has 5 pillars namely, rural transport infrastructure, rural transport services, non-motorized transportation, safety and regulations as well as capacity building and monitoring. An action plan has been developed to facilitate the implementation of the programme.

M**inister of Transport**
J.T. Radebe, MP

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1. Context

The plight of rural people has been highlighted by numerous policy studies and other strategic interventions in rural areas. Whereas 50% of the population of South Africa is rural, the rural areas contain 72% of those members of the total population who are poor. Compared to their urban counterparts, rural people also have vastly inferior access to basic social services and the economic mainstream. Given this context, the delivery of rural transport infrastructure and services can be a significant catalyst for sustainable economic development, improved social access and poverty alleviation in South Africa's rural areas.

2. Scope of the sub-sector

The delivery of rural transport infrastructure and services includes the following main categories and related delivery actors:

- *Rural transport infrastructure* – not only access roads, but also district roads, public transport interchanges, tracks and other non-motorised transport infrastructure – provided mainly by the provincial and local spheres of government, the Department of Public Works (DPW) and the South African National Roads Agency (SANRAL) – all of which are directly or indirectly involving communities and creating local construction-related jobs
- *Village-level or intra-farm transportation,* where communities – particularly women – and farmers themselves provide transport services that involve head loading, as well as the use of non-motorised and intermediate means of transport (such as tractor-trailers), trucks and light delivery vehicles (LDVs)
- *Rural passenger and (small-volume) freight transport services to and from "deep", rural areas,* where operators of LDVs (the so-called "bakkie sector") and animal-drawn carts are the main service providers
- *Passenger transport services along the main connector routes* (to towns, clinics and other facilities), served mainly by combi-taxis, converted LDVs and – in some areas – subsidised bus services
- *Special needs transportation services* – to address the needs of persons with disabilities, the elderly, trauma and non-emergency patients, learners and tourists – provided, either in-house by the relevant sectors or on an out-sourced basis
- *Bulk freight transportation* to and from processing plants, distribution centres, markets and suppliers– provided mainly by commercial producers and transport operators

3. Strategic thrusts

The draft national rural transport strategy described in this document has two main strategic thrusts:

- Promote coordinated rural nodal and linkage development.
- Develop demand-responsive, balanced and sustainable rural transport systems.

On the other hand, the coordinated development of rural service nodes and transportation linkages should ideally be pursued within the context of strengthened integrated delivery programmes (IDPs), rural transport, and rural spatial planning procedures, and support the aims of the National Spatial Development Perspective (NSDP) and Integrated Sustainable Rural Development Programme (ISRDP), rural local

economic development (LED) and expanded public works programme (EPWP). The main practical aim should be to develop an effectively interlinked network of multi-purpose nodes and linkages.

4. A layout of the strategy document

Chapter 1: Introduction provides a situational analysis of the plight of rural people which has been highlighted by numerous policy and feasibility studies. The chapter reports that whereas 50% of the population of South Africa is rural, the rural areas contain 72% of those members of the total population who are poor. Compared to their urban counterparts, rural people also have vastly inferior access to basic social services and the economic mainstream. General strategic issues and thrusts ;operational aims and rationale; scope and linkage with other policies and strategies are dealt with in this chapter.

Chapter 2: Legislative and Policy Context provides strategic direction and takes direct facilitating actions to address service delivery priorities and develop the requisite planning and implementation capacity in the provincial and local spheres of government. As envisaged in the Constitution of the Republic of South Africa Act, 1993 (Act 200 of 1993) replaced by the Act of 1996 (Act 108 of 1996), the chapter shows the Department of Transport's (DOT) responsibility with regard to the contribution of transport to the economic and social development goals of society by providing fully integrated transport operations and infrastructure.

Chapter 3: Strategic Challenges deals with the rural transport component of the National Land Transport Strategic Framework (NLTSF), which, in turn is a legal requirement in terms of Clause 21 of the National Land Transport Transition Act (Act 22 of 2000), (NLTTA). However, the rural transport strategy maps out sustainable programmes of action for the short, medium *and* long term (i.e. up to 20 years), whereas the NLTSF is only focused on the next five years (2006- 2011).

The chapter focuses of the governments stated commitments and interventions to uplifting the material conditions of rural communities, such as National Spatial Development Perspective (NSDP), Expanded Public Works Programme (EPWP), Joint Initiative for Priority Skills Acquisition (JIPSA) and Accelerated Shared Growth Initiative for South Africa (ASGISA). It also highlights the need to improve transport efficiency and sustainability by way of policy, institutional reform, capacity building and monitoring within the ambit of the Integrated Sustainable Rural Development Strategy (ISRDS). The rural transport interventions will be coordinated with and will incorporate the objectives of the ISRDS and Municipal IDP's.

Chapter 4: Rural Transport Development focuses on delivering rural transport infrastructure and services. It provides guideline linking the rural road and transport planning processes with the emphasis on special rural transport initiatives such as intermediate means of transport, animal drawn carts and other low technology transport solutions. Non- Motorised Transportation such as bicycle and pedestrian walkways and bridges are promoted.

To ensure coherence and facilitate easy reference to the 11actions of the RTDP, the actions have been grouped and annotated in terms of the following list of "action areas":

A. Alignment with IDPs, ISRDP and related initiatives.

B. 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
C. Regulation and safety.
D. Capacity building and monitoring.

Chapter 5 : Institutional Arrangement provides a guiding framework aimed at clarifying inter-sphere mandates and responsibilities with respect to service delivery. The inter-relatedness with other sector departments is highlighted in pursuance of social cohesion and sustainable livelihoods. It also proposes the establishment of transport forums and presents guidelines on possible institutional arrangements. The Intergovernmental relations structures are also seen as pivotal in strengthening coordination and alignment of programmes.

Chapter 6: Funding Sustainability reports on the current state of transport funding across the three spheres of service delivery. It considers the Provincial Infrastructure Grant (PIG) and Municipal Infrastructure Grant (MIG) allocation with respect to rural transport. It also looks at the Public Transport Infrastructure Grant (PTIF) as well as SANRAL's Community Development Programme. The National Treasury through the equitable share allocation mainly allocates funding for national, provincial and municipal road authorities. Provinces and municipalities receive supplementary funds through provincial and municipal conditional grants. These funds are channelled through National Treasury and the Department of Provincial and Local Government (DPLG) respectively. Funding levels for roads have however been below the desired levels due to competing demands on the fiscus and the focus on education, health and social services. Provinces also raise own revenue from vehicle licence fees, while municipalities raise extra income through rates and taxes.

Chapter 7: **Action Plans** shows the intervention areas with proposed projects and timelines, which are comprised of the following outputs:
1) Rural Public Transport Action Plan
2) Rural Freight Logistics Action Plan
3) Non-Motorised Transport Action Plan
4) Rural Access Road Action Plan

The Rural Transport Strategy Action Plan responds to the overall goal of NSDP, ASGISA, EPWP, PGDP's and Second Economy Interventions. The chapter also prioritises six rural district municipalities as identified in the Public Transport Strategy and Action Plan.

Chapter 8: Conclusion concludes that Rural South Africa is characterised by poor infrastructure, large distances, dispersed demand and low incomes. Because of this, and historical backlogs in service delivery, rural people also have poor access to basic social services and the economic mainstream. The chapter makes broad recommendations, which are set out in the Action Plan.

1. INTRODUCTION

1.1 Situational analysis

Rural poverty is pervasive and difficult to address. Improving mobility can reduce poverty by facilitating communities to social services and facilitate their participation in political, economic activities. Mobility requires a combination of appropriate transport infrastructure, improved transport services and affordable means of transport, both motorised and non-motorised. Market facilitation tends to suffer in areas with low demand as a result innovative and integrated approaches are essential to mainstream rural population into the economy.

The plight of rural people in South Africa has been highlighted by numerous policy studies and considerable public awareness has been created via the media. Whereas 50% of the population of South Africa is rural, the rural areas contain 72% of those members of the total population who are poor. Compared to their urban counterparts, rural people also have vastly inferior access to basic social services and the economic mainstream. Given this context, the delivery of rural transport infrastructure and services can be a significant catalyst for sustainable economic development, improved social access and poverty alleviation in South Africa's rural areas.

In practice, responsibilities for the delivery of rural transport infrastructure fall mainly on the municipal and provincial spheres of government, assisted by the Department of Public Works (DPW) and the South African National Roads Agency (SANRAL). The focus of rural infrastructure projects managed by these agencies has been on rural district and access roads. In terms of rural passenger and freight transportation, small and micro-enterprises are performing a large – but often unacknowledged – role. The so-called "bakkie sector", together with operators of animal-drawn carts, now form the mainstay of transport operations in most "deep" rural areas. On the other hand, the main connector routes to towns, clinics and other facilities are mainly served by kombi-taxis and subsidised bus services. According to the National Household Travel Survey (NHTS, 2003), walking and cycling makes 23 percent of modal share. A significant finding of the survey is that 76 percent of the scholars including students, walk to education resource centres and 3 million of them spend more than an hour walking to and from places of learning.

In the context of these findings, there is no doubt that NMT can play a key role to improve the current means of mobility for a large portion of our society. This challenge is much more pressing in the context of learners in rural and remote resource poor areas who walk long distances to get to and from school and often getting to school tired and unable to fully concentrate and comprehend on learning. This has an effect on their results and progress at school and in life. Furthermore, studies conducted indicate that where children walk long distances to get to and from school, they often start school at older age than normal in order to be able to cope with walking long distances. Studies also indicate that the level of school drop-outs is often as a result of poor access and mobility to get to schools. These challenges call for drastic measures to promote NMT as an important component of the transportation system, especially because it offers low cost means of mobility.

By bringing rural produce to processing plants, distribution centres and markets, commercial freight transport operators are making a significant contribution to the development and maintenance of viable supply chains in South African agriculture, forestry, mining and other primary sectors. This is naturally also contributing to the spatial integration and development of rural economies.

1.2 A perspective of the rural transport strategy

It has been noted that many rural communities lack adequate and affordable access to transport infrastructure and services. Poor access can constrain both social and economic development. The rural transport strategy seen as a stimulant to social development and economic growth of the rural areas, which would in turn grow the economic resource of the district municipalities, as alluded by the Local Economic development (LED) programme.

The key question, however, is whether these delivery activities are sufficiently responsive to the critical access needs of rural communities and enterprises; and, if so, achieving a sufficient range and magnitude of developmental outcomes. A related question, by implication, is what interventions may be needed to develop a sufficiently *balanced*, *developmentally effective* and *sustainable* rural transport system.

Seen from an integrated rural development perspective, there are also questions that may be asked about the spatial coordination of rural infrastructure and service delivery. Besides strengthening the role of integrated development plans (IDP) in this regard, other coordinating interventions may be needed to improve the "spatial logic" and ensure the coordinated development of rural service nodes and transportation linkages.

Against this background, the national rural transport strategy described in this document has two main strategic thrusts:

- Promote coordinated rural nodal and linkage development
- Develop balanced and sustainable rural transport systems.

1.3 Operational aims and rationale

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 coordination* – 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.

Within the transportation sector, improved guidance and coordination are especially needed because of the complex variety of rural transport service delivery agents, funding sources and mechanisms, much of which involves the private and SMME sectors, and rural communities.

Although the main responsibility for local rural roads and the regulation of rural public transport operations now falls upon local government, the national sphere of government is legally required to formulate overarching policies and strategies, and to ensure that there is sufficient alignment with the government's general service delivery priorities and programmes. Currently, this applies particularly to the government's Integrated and Sustainable Rural Development Programme (ISRDP) as well the NSDP and sector departments' planning frameworks.

The rural transport strategy has to be managed within the framework of NLTTA, NSDP, PGDS, Provincial Land Transport Planning Framework as well as the Integrated Transport Planning system, to ensure effective spatial development and transport planning within the context of rural transport development programme.

Within the broader cluster of main rural service delivery sectors, the main rationale for pursuing improved guidance and coordination is to promote coordinated nodal and linkage development.

1.4 Relationship and intra-sectoral linkages

The national rural transport strategy encompasses the rural transport component of the National Land Transport Strategic Framework (NLTSF), which, in turn is a legal requirement in terms of Clause 21 of the National Land Transport Transition Act (Act 22 of 2000). However, the rural transport strategy maps out sustainable programmes of action for the short, medium *and* long term (i.e. up to 20 years), whereas the NLTSF is only focused on the next five years.

Because of the high degree of overlap between *rural transport* and allied transport functional areas (e.g. road infrastructure, public transport, non-motorised transport and freight transport) and because of the many different functional definitions of *rural areas*, there is no clear, generally accepted specification of scope of a rural transport strategy.

In the 1998-1999 Moving South Africa (MSA) investigation, the implied scope of a rural transport strategy was restricted to the provision of "Level 4 roads" that would link rural communities to the primary road network. MSA identified three actions as part of a rural transport strategy, namely:

- Action 1: Develop a coordinated framework across national government that will guide infrastructure investment in rural areas on the basis of a shared definition of rural sustainability
- Action 2: Fund social or non-economic (transport) infrastructure in a transparent manner
- Action 3: Generate better rural transport data

The scope of the present rural transport strategy is much wider – i.e. as including at least all of the *transport-related determinants of rural accessibility*[1] shown in Table 1.

Table 1: Key rural accessibility determinants

Transport-related	Other
• Extent and quality of *rural transport infrastructure* (including roads as well as off-road infrastructure such as tracks, pedestrian bridges, etc.) • Availability and range of *rural transport services* • Affordability of travel to facilities	• Extent and condition of communications • Citing of facilities and markets relative to rural settlements

In terms of the delivery of rural transport infrastructure and services, the scope of the strategy includes the following main categories and related delivery actors:

- *Rural transport infrastructure* – not only access roads, but also district roads, public transport interchanges, tracks and other non-motorised infrastructure – provided mainly by the provincial and local spheres of government, DPW and

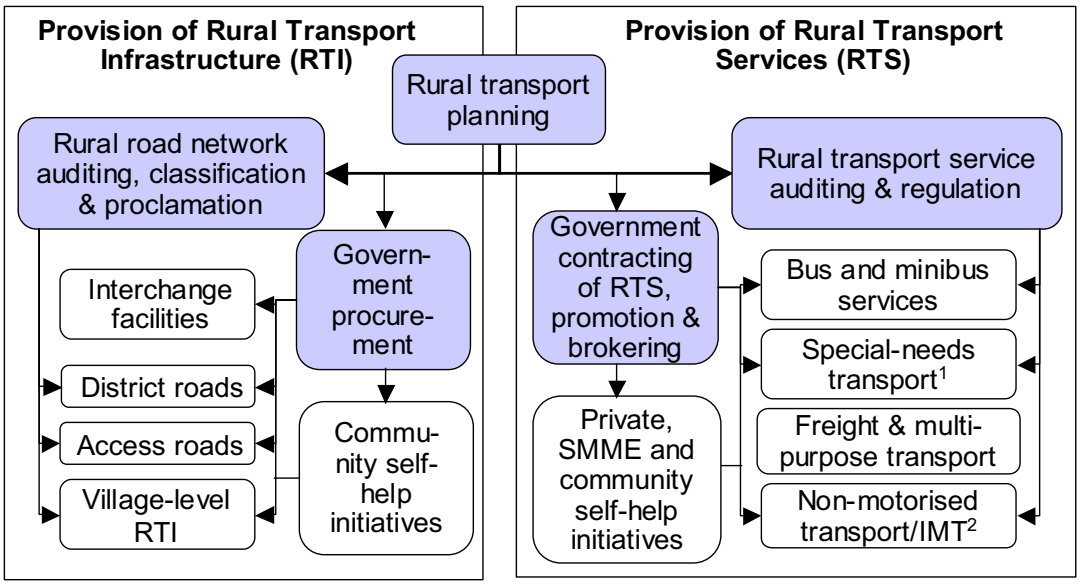
[1] Rural accessibility may be defined as the accessibility of basic social and economic services to persons in dispersed rural homesteads and settlements. The World Bank technical paper No: 525

SANRAL – all of which are directly or indirectly involving communities and creating local construction-related jobs.

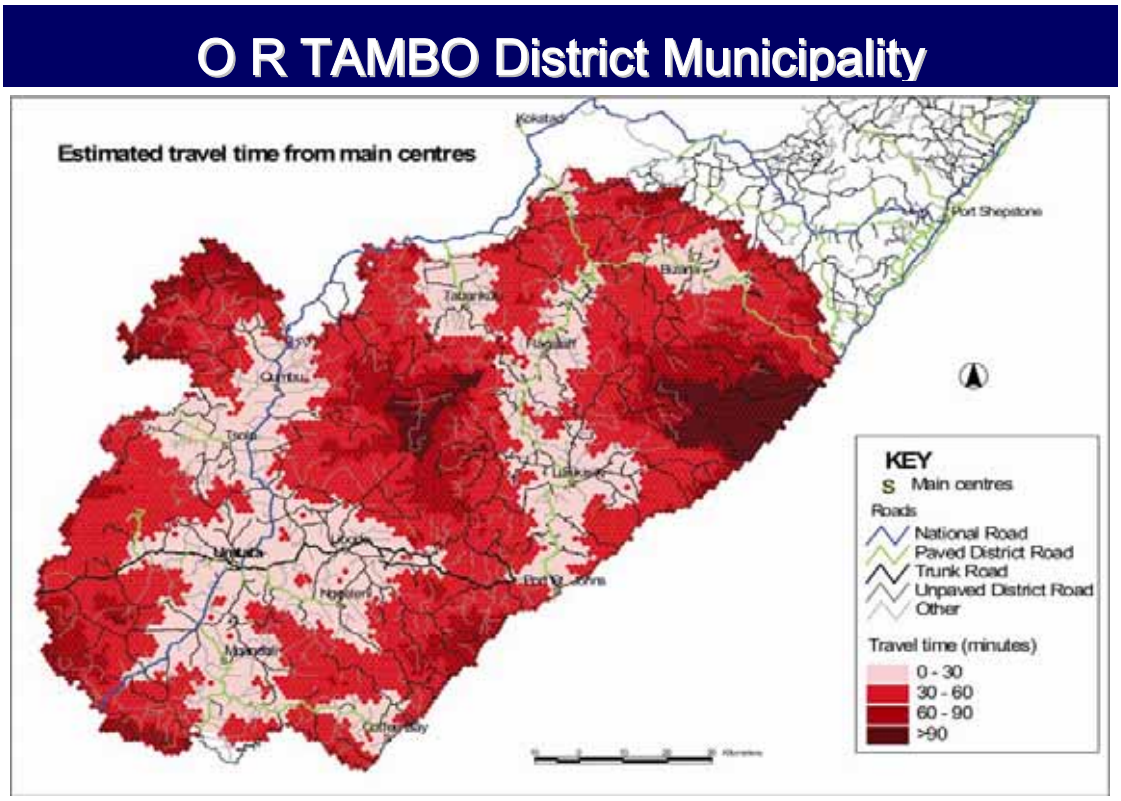
- *Village-level or intra-farm transportation,* where communities – particularly women – and farmers themselves provide transport services that involve head loading, as well as the use of non-motorised and intermediate means of transport (such as tractor-trailers), trucks and light delivery vehicles (LDVs).
- *Rural passenger and (small-volume) freight transport services to and from "deep", rural areas,* where operators of LDVs (the so-called "bakkie sector") and animal-drawn carts are the main service providers.
- *Passenger transport services along the main connector routes* (to towns, clinics and other facilities), served mainly by combi-taxis, converted LDVs and – in some areas – subsidised bus services.
- *Special needs transportation services* – to address the needs of persons with disabilities, the elderly, trauma and non-emergency patients, learners and tourists – provided, either in-house by the relevant sectors or on an out-sourced basis.
- *Bulk freight transportation* to and from processing plants, distribution centres, markets and suppliers– provided mainly by commercial producers and transport operators.

Besides the procurement or contracting of rural transport infrastructure and services, the scope of government intervention in this sub-sector also includes transport planning; the auditing, classification and proclamation of the rural road network; and the auditing and regulation of rural transport services. In some cases, it may also involve the promotion of certain modes of transport, transport brokering and other actions to improve information flows and the general operation of the market for rural transport services. This is illustrated by Figure 1.

Figure 1: Scope of government intervention in the provision of rural transport infrastructure and services



Notes:
1. This includes the transportation of special categories of users – e.g. transportation of the elderly, handicapped and "non-emergency" patients (e.g. AIDS sufferers) – and all specially contracted services for non-work and non-shopping purposes,– especially scholar transport.
2. Intermediate means of transport (such as tractor-trailers)



1.5 Definition of key concepts

The principal definitional issue relates to the definition of *rural areas* and the associated definition of *rural transport.* Given the wide diversity of rural areas in South Africa, it was decided to define the primary focus as "deep" rural areas (see Appendix B). This term is meant to signify both of the following conditions:

- Limited access to any means of travel and (freight) transport other than walking, head loading, and minimal provision of both conventional and "off-road" transport infrastructure
- A high degree of spatial isolation and marginalization

Rural transport can be defined as follows:

> "…*The movement of persons and goods for any conceivable purpose (including collection of water or firewood), by any conceivable means (including walking and head loading) on various types of infrastructure (including unproclaimed roads, tracks and footpaths).* "[2]

[2] BRYCESON & Howe, 1992. **African rural households and transport: Reducing the burden on women.** International Institute for Infrastructural, Hydraulic and Environmental Engineering (IHE) Working Paper IP-2, The Netherlands.

This implies that:

(a) the mode of travel does not necessarily need to be motorised or conventional (but should be suitable, cost-effective and environmentally sustainable);

(b) a wide variety of mode choices and trip purposes have to be considered during rural transport planning and service delivery.

It is nevertheless assumed that the origins of all "deep rural" transport trips are from dispersed rural homesteads and settlements, and that these trips exclude regular home-to-work commuting to main urban employment complexes – as occurs from many so-called peri-urban settlements in South Africa.

All of the main components of rural transport have already been listed (see page 3), but it is also useful to categorise these into the following two main groups:

- Rural transport *infrastructure (RTI).* This includes all transport-related infrastructure, ranging from proclaimed district or feeder roads, to village-level roads and non-motorized infrastructure such as tracks, trails, paths and footbridges, most of which are often not proclaimed or registered.
- Rural transport *services (RTS).* This includes services provided by users themselves (e.g. head loading, private vehicular transport) and by operators of all modes of motorised and non-motorised transport.

1.6 Background on process

This strategy is one of the outputs of the Rural Transport Audit and Strategy Development Project, which was a Joint Venture between the National Department of Transport and the CSIR-Transportek (project JV B8 of 2002).

The first phase of this project was referred to as the *Rural Access Project* and was undertaken in the period November 2000 to April 2001. The main aims of the first phase were to:

(a) clarify the core rural transport and related access problems in South Africa's deep rural areas;

(b) formulate a preliminary strategic response; and

(c) (c) develop guidelines on procedures, support systems and intervention options.

At the beginning of the second phase, which started in November 2001, a revised executive summary and a compact disk (CD) was produced of the key findings of the first phase. These were used in several bilateral and focus group interactions with relevant national, provincial and local stakeholders in the period January to March 2002. The main purpose of the interactions were to:

- Obtain inputs and comments on the preliminary strategy recommendations (as summarised in the Rural Access Project)
- Identify perceived gaps and priorities relating to transport and infrastructure provision
- Clarify the rural transport and accessibility requirements of different service delivery sectors, local communities and enterprises

As a parallel exercise, the project team undertook a strategic audit of current transport development patterns, issues and priorities in the 13 priority rural development nodes identified as part of the Integrated and Sustainable Rural Development Strategy (ISRDP).

Most of the strategy recommendations developed during the project were also incorporated into the rural component of the National Land Transport Strategic Framework (NLTSF) (see Appendix A). These were discussed with, and comments were obtained from provincial representatives during visits to all the provinces in January and February 2002.

This process was further concretised by another extensive consultations with major stakeholders. The project team had focussed meetings with the 13 district municipalities, and sector departments at provincial levels to confirm their priorities as indicated in the IDPs. High-level interactions were held to produce the draft rural transport strategy.

These consultations were also followed up with two national workshops, which were held in the middle of 2003 and early in 2004. This opportunity was also used to modify strategic priorities in the action plan. The rural transport strategy was adopted, by Transport Lekgotla, in 2005 together with am implementation model called an Integrated Rural Mobility and Access (IRMA) project.

However in July 2006, the Cabinet raised the following concerns, which are addressed in this revised Rural Transport Strategy for South Africa (RTSSA).

- The need for the Strategy to be aligned with other programmes of the Government such as National Spatial Development Perspective (NSDP) and the Integrated Delivery Programmes (IDP).
- The need for the document to articulate clearly the objectives and the implications of the Strategy as well as its target audience.
- The need to incorporate as core elements of the strategy issues related to the empowerment of women, the disabled and the youth.
- Certain sections of the draft Rural Transport Development Strategy document need to be updated to reflect the most recent information.
- The need for the Department of Transport to participate in the Inter-, Ministerial Committee on Infrastructure Development chaired by the Minister for Provincial and Local Government.

2. LEGISLATIVE AND POLICY CONTEXT

2.1 Legislative mandates

As envisaged in the Constitution of the Republic of South Africa Act, 1993 (Act 200 of 1993) replaced by the Act of 1996 (Act 108 of 1996), the Department of Transport (DOT) is responsible for maximising the contribution of transport to the economic and social development goals of society by providing fully integrated transport operations and infrastructure.

In terms of the Constitution, the National Department of Transport is not directly responsible for the delivery of local rural roads, or the provision of rural transport services (see Table 2 below). The Department's main roles are developing policies, strategies and guidelines, and ensuring that the provisions of the White Paper on National Transport Policy (1996), the National Land Transport Transition Act (NLTTA, 2000) and other legislation (including the National Road Traffic Act and the National Roads Act) are implemented. Depending on the provisions of the relevant legislation, it provides strategic direction and where necessary arranges for transfer of monies or takes direct facilitating actions to address service delivery priorities and develop the requisite planning and implementation capacity in the provincial and local spheres of government.

Table 2: Constitutional competencies in land transport and related functional areas[1]

NATIONAL	PROVINCIAL	MUNICIPAL
Regional Planning & Development	Regional Planning & Development	District –wide development plans
Urban & 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 Strategy	Vehicle Licensing	Vehicle licensing
National roads	Provincial Roads & Traffic	Municipal Roads

Note:
1. It should be noted that this classification of competencies does not deal explicitly with responsibilities for rural access roads, tracks, trails and other forms of "off-road" rural transport infrastructure.

The DOT also has a key role to play in terms of the national government's stated commitment to uplifting the material conditions of rural communities, within the ambit of the National Spatial Development Perspective (NSDP) and Integrated and Sustainable Rural Development Programme (ISRDP).

2.2 The Integrated and Sustainable Rural Development Programme

The Integrated and Sustainable Rural Development Programme (ISRDP) is being developed and managed by the Department of Provincial and Local Government. The main objective of the ISRDP is to ensure that the rural development strategy is implemented in a coordinated and integrated manner to ensure sustainability and effectiveness of development initiatives.

A special Inter-Departmental Task Team (IDTT) has been established under the auspices of the Department of Provincial and Local Government to implement this programme, which is currently focused on identifying major anchor projects with considerable development spin-offs in each of 13 high-priority rural development nodes.

2.3 National Spatial Development Perspective (NSDP)

Cabinet has approved the NSDP as an indicative tool for national development planning. The national planning perspective aims to facilitate alignment of strategic development priorities and approaches in all budgeting processes, facilitate a shared vision and agreement on the utilisation of the geographic space for economic stimulation and sets strategic principles for infrastructure investment and development spending. The rural transport strategy shares the same vision and to align it's resources and planning processes with the thread of the NSDP and district-wide planning systems.

In keeping with the demographical profiles of various provinces and the trend of migration to urban areas, the rural transport strategy fully embraces the principles of the NSDP where rural infrastructure investment has to be based on the economic potential of the rural areas as well as viability of future spatial developments. Areas with low potential of sustainability shall benefit from the hinterlands or clustered service centers in the district. Thus in rural transport planning social trends and factors for development integration are given a high consideration.

2.4 An integrated Development Planning (IDP) process

The IDPs are viewed as a vital planning tool, which aims to coordinate and prioritise municipal service delivery. They are recognized as government planning mechanism, which if developed adequately could harmonise sector strategies and implementation programmes. It is however, regrettable that most of these IDPs are not reflective of strategic priorities and not inclusive enough to form a comprehensive picture.

In the same light spatial development frameworks (SDFs) and integrated transport plans (ITPs) are crucial in informing rural development and investment. This requires an inclusive assessment of different intervention options in terms of overall development goals

The Department of Transport has become proactive in the review process to ensure conformity with national priorities and flagship projects. It would also be desirable to use this integrated planning approach to inform the locations of social infrastructure such as schools, clinics settlements, etc which are often inaccessible from the main

road network. Providing access after these facilities have been developed can present major problems in that terrain configurations, soil conditions and remoteness can make the design, construction and financing of roads very difficult and unsafe.

In other cases services, settlements, etc are clustered around high order and high-speed roads without the necessary pedestrian facilities being provided. This results in major traffic safety problems, which often cannot be solved. As a result it critical that transport implications of any development should be taken care of at the earliest possible stage in the planning process. The Department is using the IDP process to also incorporate rural transportation requirements. The IDPs remains as the base sector planning and a guideline for (local) rural infrastructure and services.

2.5 TRANSPORT POLICIES AND STRATEGIC FRAMEWORKS

2.5.1 White Paper on National Transport Policy (1996)

Seen from a rural transport perspective, the White Paper on National Transport Policy (1996) sets out a number of relevant policy principles. The most important of these are the need to promote the use of public transport over private transport, and to ensure that public transport services address user needs, including those of commuters, learners, tourists and persons with disabilities, including the development of rural transport system. To this effect the rural transport strategy is responding to the demands and need of the rural communities. Various strategic documents such as accessible transport for people with disability were developed. Subsequent projects such as Dial-A-Ride are being implemented to address the transportation needs of all users including people with disability.

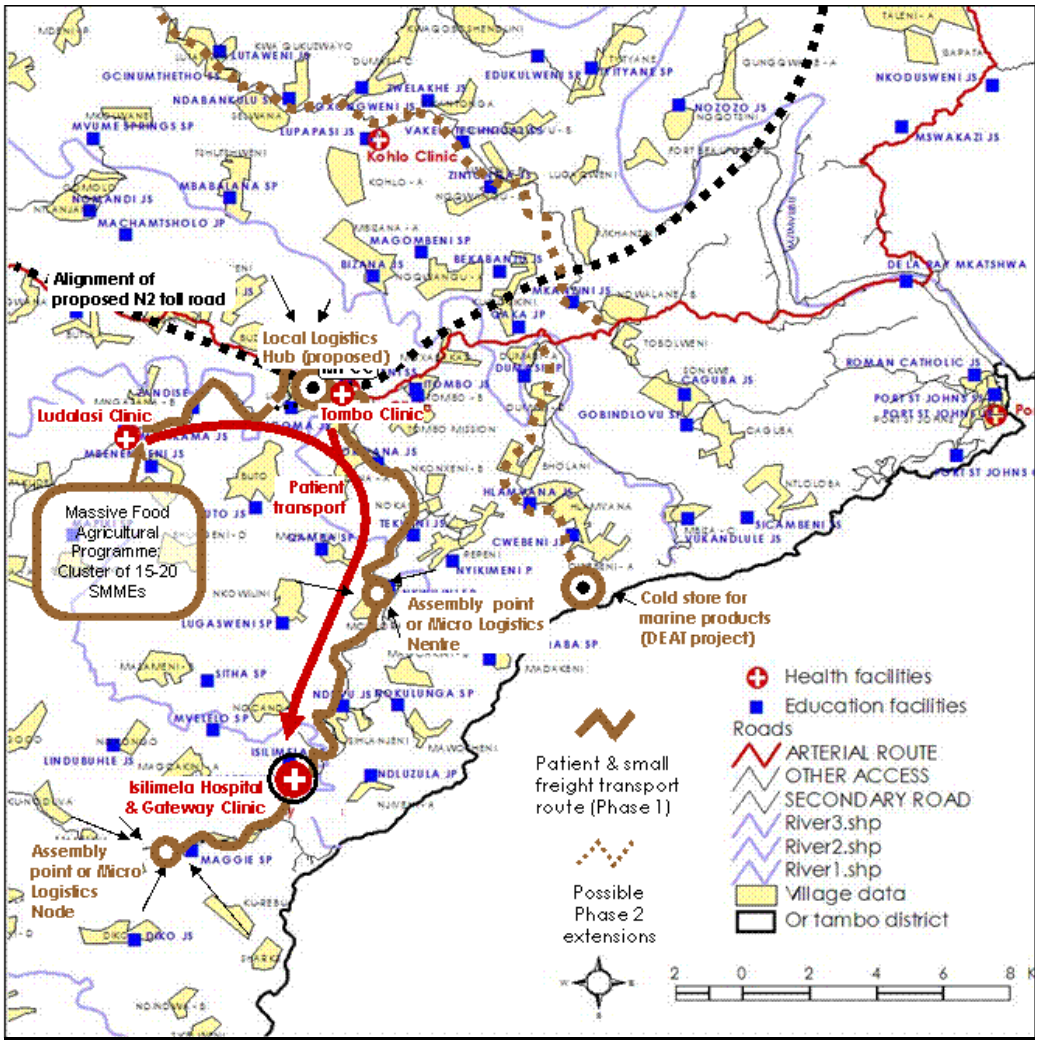
2.5.2 National Land Transport Strategic Framework

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 embodies the overarching, national five-year (2006 to 20011) land transport strategy, which gives guidance on transport planning and land transport delivery by national government, provinces and municipalities over the five-year period. Strategies within 15 functional areas are outlined in terms of actions and outputs. The rural transport strategy's action plans are in line with the NLSTF and the strategy's development programme would facilitate the achievement of the set strategic actions as outlined in the framework.

2.5.3 National Freight Logistics Strategy

The National Freight Logistics Strategy is a response to the failure of the freight system to fulfill the demand for cargo movement at prices, levels of service, quality of service and at acceptable levels of reliability in a manner that supports the national developmental strategies. The strategy also targets the second economy, which lies mostly outside of the core commercial corridors, and is largely rural in orientation and is characterized by economic and geographical marginalisation. This Strategy signals a shift toward demand side driven delivery of freight logistics services, rather than a supply side approach**.** The strategy is very critical in facilitating rural freight and logistical services.

A proposed Isilimela-Tombo-Ludalasi small freight & patient transport services



2.5.4 National Transport Master Plan

The National transport Master Plan provides an integrated mechanism for land use patterns and how people could effectively interact with various modes of transportation of people. It is framework for transport systems planning, implementation, maintenance, operations and investment as well as a monitoring tool for decisions for all modes. It is thus vital for the rural transport interventions in line with the NSDP principles and other planning regimes, including the spatial planning.

2.5.5 Road Infrastructure Strategic Framework for South Africa

Cabinet approved the Road Infrastructure Strategic Framework for South Africa (RISFSA) in October 2006. The Action Plan for roads is being implemented under the guidance of the Roads Co-ordinating Body. The main purpose is to eliminate unclassified roads and increase road maintenance and improvement.

Road infrastructure studies were undertaken to determine the extent of the road network. This study was further complemented by an rural transport audits to establish the condition certain rural access roads in areas where the rural Transport Development Programme is going to rolled-out. This investigation also audited the extent of the EPWP implementation. At the end of then investigations a report was produced and has recommended amongst others the development of the pavement road management system, which requires human resource to manage this routine maintenance soft ware. The investigations were undertaken in Sekhukhune and OR Tambo district municipalities only. However to have a detailed assessment on the conditions of rural access roads in other rural municipalities is essential to inform the rural transport network planning and linkages of the district network to provincial and high order roads.

In addition this network assessment would also guide the mainstreaming of rural freight to corridor roads.

2.5.6 Public Transport Strategy for South Africa

The Public Transport Strategy aims to radically accelerate the improvement in public transport by focusing on modal upgrading and establishment of Integrated Rapid Public Transport Networks (IRPTN), which will introduce Priority Rail Corridors, and Bus Rapid Transit in metropolitan cities. The strategy is supported by the Public Transport Action Plan, which focuses on the implementation of passenger transport services incrementally. It maps out a (2007-2010) program to fast track implementation that targets the initial development of high quality, Integrated Rapid Public Transport Networks (IRPTNs) in at least the 2010 host cities. Twelve municipalities and six rural districts would be assisted with public transport planning skills. The implementation in rural areas would be covered by the roll-out of the rural transport development programme.

2.5.7 National Road Transport Act

The Act focuses on road safety of users and regulations for law enforcement. The implementation of this Act would ensure a proper facilitation of rural transport technologies in terms of road safety operational standards and in promoting other intermediate means of transport such as animal drawn carts, bicycling, pedestrian safety measures and so forth. Conformity of these low-cost modes of transport would ensure smooth integration into the transport system as licensing and permits would be required for movement of goods and passengers.

2.5.8 Provincial Land Transport Frameworks

Clause 22 of the NLTTA requires each province to annually prepare a provincial land transport framework for a five-year period. The initial provincial land transport framework (PLTF) must serve to guide land transport in the province, including intra-provincial, inter-provincial and cross-border transport. Any subsequent provincial land transport frameworks must also include summaries of the local plans within the province.

The DOT has initiated a process, and provided funding to facilitate the development of PLTFs in each province. Since many provinces have also embarked on rural transport development strategies, these would need to be aligned and integrated with their PLTF.

2.5.9 LINKAGES WITH OTHER GOVERNMENT SECTORS AND DEPARTMENTS

In order to ensure that the Rural Transport Strategy responds to the needs of other sectors and also contributes towards integrated service delivery across all sector Department's, consultation and ongoing partnerships will be held through Inter-Departmental Task Teams and Social Sector Cluster Some of the critical Departments in the implementation of the Rural Transport Strategy are the following Departments:

A pilot project with on the National Spatial Development Perspective

The Department has already included in its rural transport development programme the joint implementation of Cacadu project in testing the holistic integration on provincial and district municipalities' harmonisation agreements. The implementation of this project has already being approved by the Department. The current IGR mechanisms would be utilised in coordinating various sector programmes and monitor the implementation thereof.

Department of Education

The Department of Education is one of the critical role players and partner with regard to access to education for rural scholars. Getting to school in rural areas is costly in time, energy and money. Drop out rates are high and attracting and retaining quality teaching staff in rural schools is difficult. The distance between home and school, the lack of appropriate, affordable, safe and infrastructure services to make the journey limits the achievement of the universal primary education goal.

The Department of Transport will work closely with the Department of Education to ensure that the Rural Education Strategy is effectively implemented. The Shova Kalula bicycle project, which serves as a basic means of transport is tailored to address the mobility challenges on scholars who walk long distances to education resource centers. The rural transport strategy promotes periodic transport to support inter-facility movements and would be vital for inter-school activities.

Departments of Social Development and Health

The role of transport in poverty alleviation programmes is critical in improving access and mobility to basic essential services for people in remote and resource poor areas. In support of food security programme and the distribution of food parcels to various locations, convenience and easy movement for transportation of these is crucial and should not be limited by impassable access roads and improper coordination of transport operations.

The rural transport strategy is of utmost importance for support services in this regard. In the same vein the department of Health would require usable rural access roads in moving around in various villages and between hospitals and clinics. Transportation of patients is also critical to reach medical service centres on time to save lives. In furthering the objectives of mobile clinics supportive interventions by the Department of Transport are paramount for facilitating basic health services. Another technology that would be appropriate is the introduction of animal drawn carts services for mobile laundry services for families that are mostly affected by terminal illness and have little or no care of home-based health services.

The Department of DTI an d Labour

These Departments are important in the development of entrepreneurial programmes in rural areas in support of the interventions of the rural transport development programme. The manufacturing of NMT vehicles and establishment of manufacturing sites and maintenance of the NMT components are crucial in sustaining the rural transport system. In accordance with the industrial policy of the Department of Trade and Industry measures to discount importation of NMT goods and incentives for NMT manufacturers are under consideration. This strategic measure has extensive spin-off with regard to poverty alleviation and job creation.

Many departments would benefit from this process such as Youth Development Programme, Skills Development programme of the Department of Labour the Department of Science and Technology with regard to innovative NMT products. In relation with JIPSA programme some of these skilled would be enhance to expand the motor and non-motor manufacturing industry.

The Departments of Home Affairs

The Department of Home Affairs would equally benefit from the rural transport development programme with regard to infrastructure of Home Affairs service stations in rural areas. The provision and management of all weather rural road networks would assist in decision-making of where these permanent social infrastructures should be located. In addition a passable and regularly maintained feeder rural road network would cut the travel time short and thereby add-value to operational efficiency of other sector departments including SAPS and the transport operators.

Department of Public Works

The development and construction of access roads in rural areas is one of the most pressing priorities facing all the 3 spheres of government. The Department of Public Works, through the Expanded Public Works Programme as well as other programmes, will be a critical partner to improve access and mobility of people in rural areas. The implementation of the National Infrastructure Management Strategy's objectives shall be enhanced through the Rural Transport infrastructure and related rural facility interventions.

Department of Provincial and local government (DPLG)

The Implementation of Rural Transport Strategy involves all the spheres of Government. Therefore DPLG will play a key role as a stakeholder in the rollout of the rural transport development programme, especially to ensure alignment to the Integrated Sustainable Rural Development Programme (ISRDP). The strategy is pivotal in advancing rural transport provision, planning and management, as part of basic needs programme. Capacity building of municipalities in executing the rural transport action plan would be ensured in all processes of the projects. A hand-on approach would be adopted in the transference of technical skills.

The implementation of Project Consolidate also finds a home in the implementation of the rural transport strategy programme.

Department of Science and Technology and Department of Communications

One of the key strategic focus areas of the Rural Strategy is the development of nodal linkages in rural areas. The development of nodal linkages will include a concept of transport brokering services to facilitate access and periodic transport services. The implementation of the transport brokering service requires information and communication technology. A pilot project to test the feasibility of the concept is under way in the Eastern Cape. The Department of Science and Technology will be a critical partner to take such initiatives forward.

The digital door-pad and cellular-phone network are being considered in strengthening the logistics of the rural transport strategic intervention. A task team is in place to kick-start this process. In addition the Department of Science and Technology would be instrumental in guiding the designs of rural transport technologies. This would also be done in collaboration with the South African Bureau of Standards (SABS).

Department of Housing

In line with the Housing and Human settlements strategy, the Rural Transport strategy will provide supportive mechanisms with regard to access roads to ensure effective movement between residential areas and social and economic centres.
A partnership agreement has to be developed in support of a housing settlement project in Elliot. The interaction of the Department would also be based on optimising the infrastructure investment grant mechanism for sustainable livelihoods.

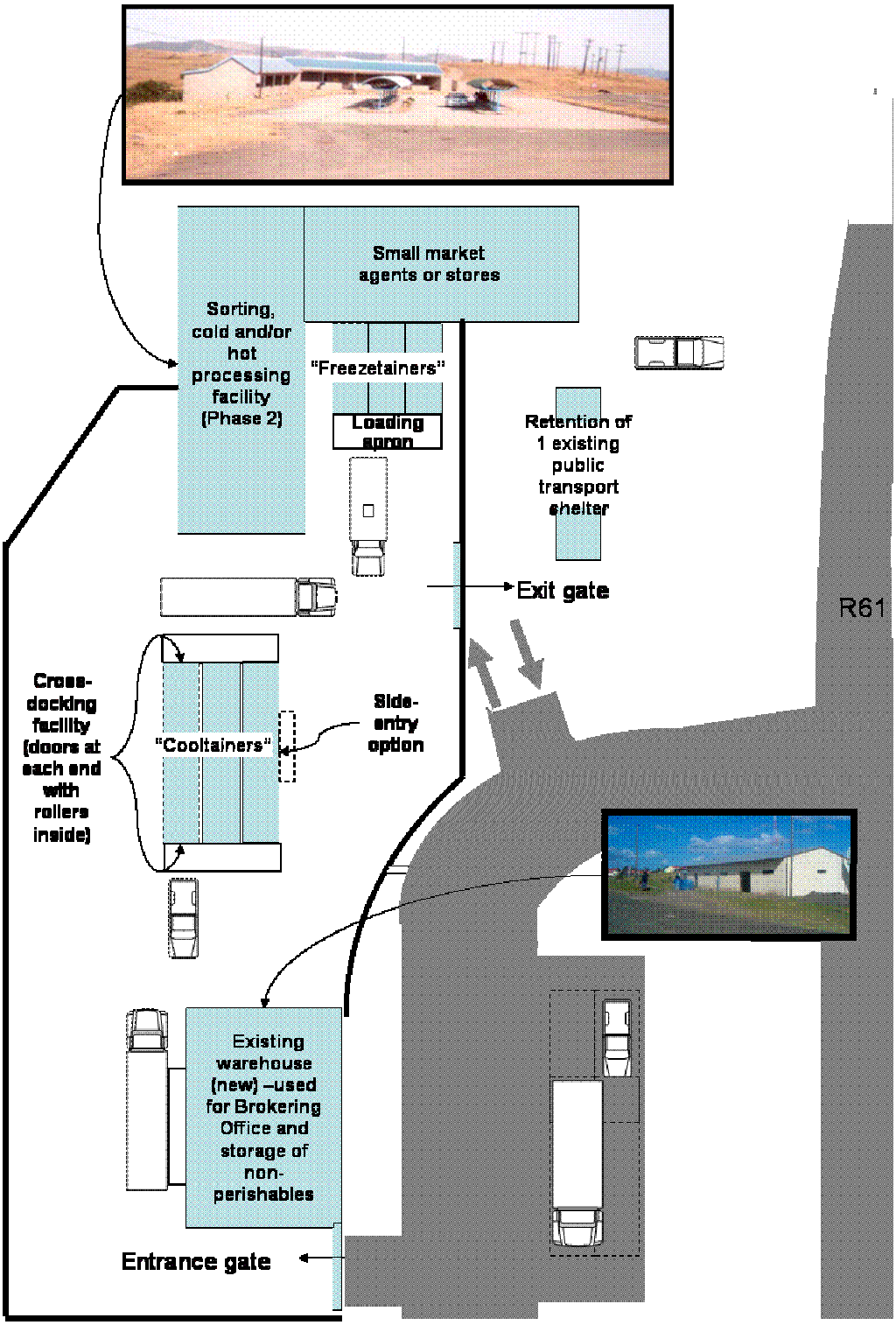
Department of Agriculture

The movement of freight in the farms and rural areas is one of the key challenges to be addressed as part of the second economy interventions. The Department of Agriculture's Agro-logistics strategy will inform the Rural Transport Strategic interventions to ensure that all roads that provide access to farming areas are prioritised and addressed.

In support of social and human development as well as Agri-BEE and emerging farmer's development programmes, the transport freight strategy clearly articulates high order supply chain management in growing the economy. At a micro level the rural transport development programme will facilitate the movement of large to medium size bulk agro-products to and from processing plants, distribution centres, markets and suppliers.

The IRMA implementation model for RTDP promotes the consolidation of agro-loads, which shall be collected and delivered through periodic transport operations. The intended output of the rural freight and logistical support services is to strengthen the role of freight in areas with small volumes. The NMT interventions are critical in providing cargo transportation. The maximisation of Thusano Service centres (MPPC) could be used as a district logistics hub / center where agro-products and related commodities could be stored and off-loaded for local supplies. This facility has cold-room to preserve perishable goods.

Logistics Facilities at Tombo

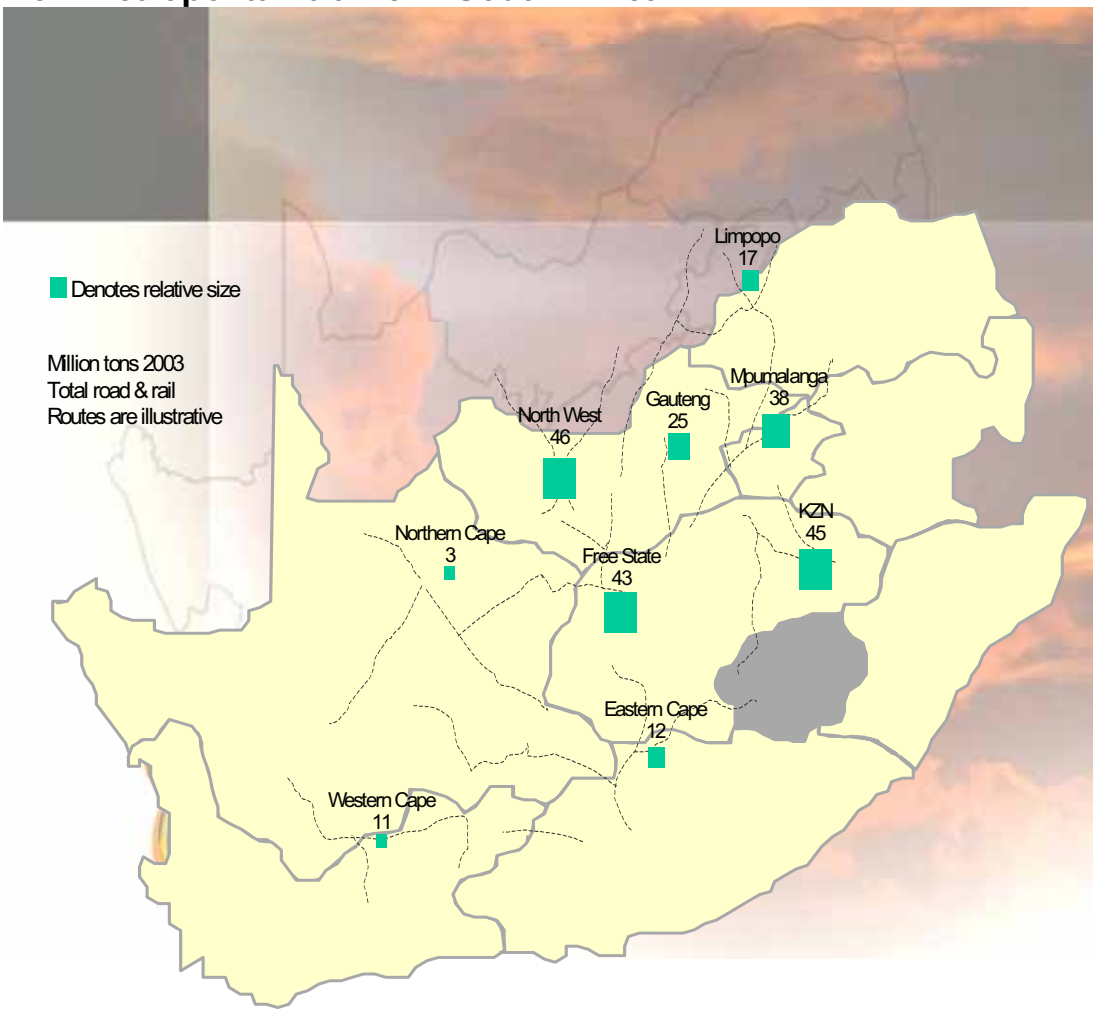


With a well coordinated transport network and properly managed rural access road network the RTDP aims to expand the feeder-connections to the high order or primary transport corridors. The trade relations between districts and neighbouring regions would best be serviced by this intervention.

It is however noted that road and rural railway operations are critical for the movement of higher volumes of cargo. To ensure a quick turnaround time multi-modal freight solutions are critical to meet the uniqueness and different agro-logistics needs. In addition the multi-modal transport operations would also benefit the agricultural villages programme.

In the same vein the level of traffic has serious consequences on the turnaround time on the transportation of agro-products. It is essential that an integrated freight and logistical approach embraced in transport planning, infrastructure investment and management to enhance synergies of this industry. Safety also forms an integral part of freight logistics.

Non-metropolitan traffic in South Africa



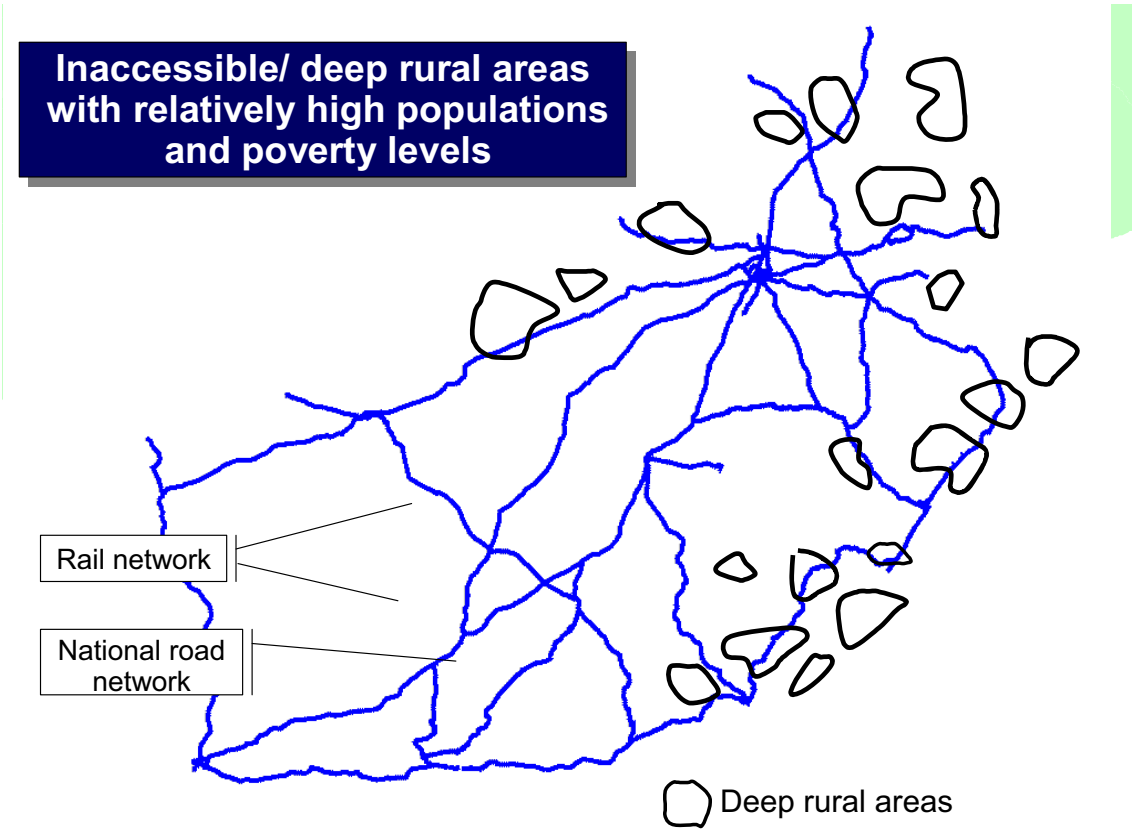
3. STRATEGIC CHALLENGES

3.1 General rural service delivery and development challenges

The need to achieve accelerated service delivery as well as sustainable social and economic development in South Africa's rural areas poses a number of formidable challenges. Some of these stem from the inherent diversity of South Africa's rural areas – which span a number of widely different climatic regions – but most are simply a result of the relatively unique combination of historical legacies, "typical rural conditions", and cross-cutting local governance and transformation requirements which characterise South Africa's rural areas at this point in time.

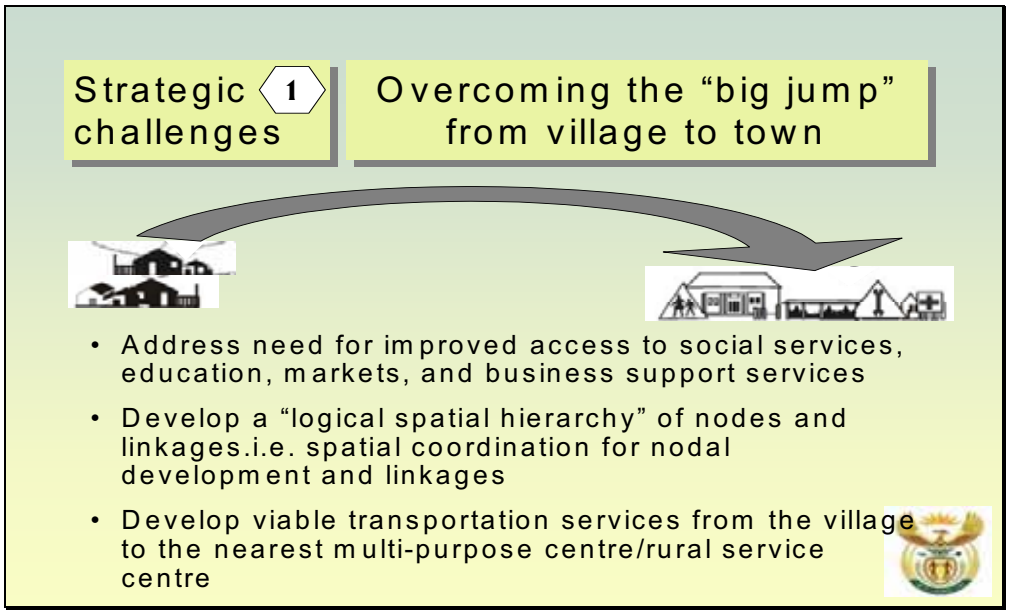
The following is a brief summary of some of the key challenges:

- Wide diversity of rural areas characterised by widely varying climatic differences, population densities and a combination of *structural* differences between the former white *platteland* and the former *homelands*
- *Historical backlogs* and continuing under-investment in certain areas and types of infrastructure, whilst other areas have more infrastructure than can be viably maintained
- *Reactive responses to the historical backlog problem* – especially the provision of reticulation or domestic infrastructure such as streets, basic water reticulation, electricity and sanitation – some of which tend to reinforce semi-urban rural settlement patterns that are neither economically nor environmentally sustainable
- *High incidence of rural poverty*, and the effect of related barriers (such as the digital divide) on perpetuating the spatial-economic marginalisation and social welfare dependence of many rural areas
- Sheer *physical remoteness and low population densities* of some areas, and the attendant transport provision, accessibility and logistical difficulties such as long distances, vast networks of poor, low-volume roads and low demand thresholds
- *Spatial dispersal* of investment in central-place or nodal facilities (e.g. schools, clinics, multi-purpose centres) transport and telecommunications, thereby aggravating the logistical difficulties of service delivery
- *Low economies of scale/high operating overheads*, manifested by, for example, clinics that are built but are not staffed, and tele-centres that are built and operated for a short while, but then have to be closed down
- *Increasing proportion of resources that are needed to deal with the effects of the HIV-AIDS pandemic*, which is often additional to disaster relief requirements (such as addressing flood-related damage to roads) and are placing extraordinary, increasingly unsustainable demands on local resources, social support networks and other traditional coping mechanisms.
- Need to ensure effective *bottom-up participation and information empowerment*, as well as attend to a number of crosscutting *transformation imperatives*
- Existing *technical and managerial weaknesses* of most rural district councils and many rural municipalities, which are, in turn, presenting formidable *capacity-building requirements*



3.2 Overcoming the “big jump” from village to town

A number of spatial and transport-related factors are contributing to the so-called “big jump problem” and the related problem which is often referred to as the “missing middle” (see box below). In essence, this concerns 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. For example, for most small or embryonic enterprises that do not have their own transport and telephone (e.g. LDV and cell-phone) the combined transport and transaction costs are often too great to viably deliver (and sell) any surplus produce. Similarly, for many youths or adults who may have had no or poor schooling, or wish to invest in the development of improved business and other skills, the "jump” to FET (Further Education and Training) or specialist training centres in the nearest town is typically also too great.



A coordinated set of interventions is needed to address this problem. On the one hand, there is a need for the spatial coordination of, and investment in nodal infrastructure (e.g. in Thusano service centres) to support the development of a "logical spatial hierarchy" of nodes and linkages – typically with bigger/higher-order facilities located at centrally located nodes, hubs or high-demand areas, linked to smaller, lower-order nodes and periodically operated facilities serving the peripheral or low-demand areas.

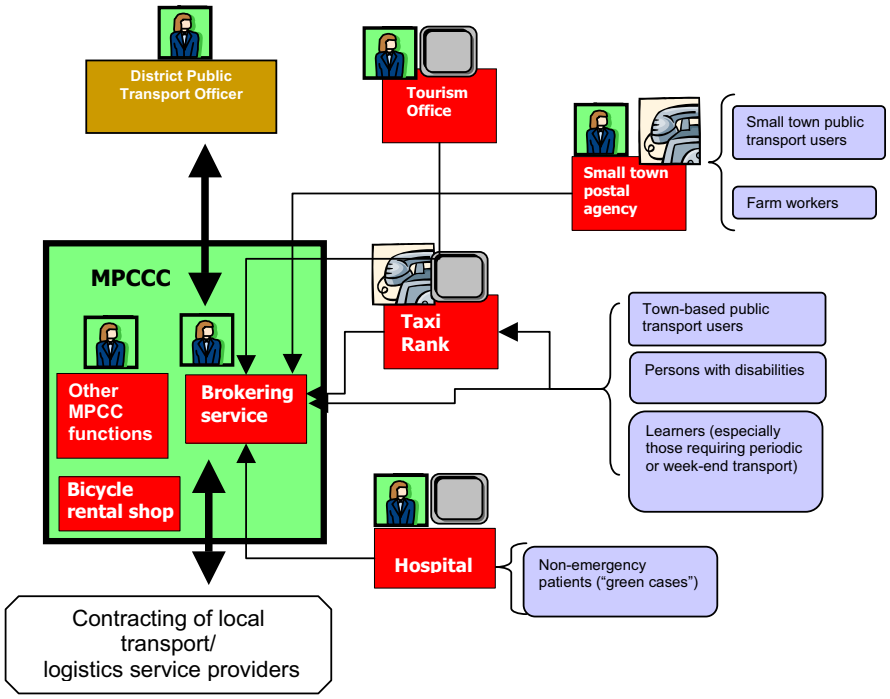
In addition, there is a need to develop viable transportation services from the village to the nearest Thusano service centre, market, and/or education resource centre, therefore addressing the problem of the missing middle (see box below). One of the options is to promote a range of periodic access services, which could include periodic scholar bus services (e.g. to bus learners on alternate days from surrounding schools to a resource centre with specialised tuition facilities), as well as other periodic services which are synchronised with pension pay-outs and aimed at supporting access to the associated periodic markets.

The missing middle

In sub-Saharan Africa, much of rural transport involves walking or carrying. In some areas, handcarts are used for very short distance transport, while bicycles and animal-drawn carts provide wider circles of transport. Long-distance transport by buses, lorries, pickups and 'bush-taxis' may be available on the main roads, although such motorised options are generally overcrowded and expensive relative to local incomes. Moving people and goods over intermediate distances (say 20-50 km) can be particularly difficult and lack of access to appropriate medium-distance transport can constrain people from meeting, marketing, trading and producing efficiently.

Website of the World Bank's Sub-Saharan Africa Transport Policy programme:
http://www.worldbank.org/afr/ssatp/pubs.htm

Mobility Brokering Service/ Network



Another set of supporting interventions would be to effectively harness the ongoing rapid advancements in *information and communication technologies* (ICT) to create a range of hub-satellite arrangements with ICT linkages between the hub and satellite centres. This can be complemented with the provision of storage, transport brokering and logistical services that operate at and between the hub and satellite centres. This intervention can best facilitate mobile services offered by many departments and would feed into the operational arrangement of other sectors for transport services.

3.3 Increasing and adjusting the allocation of rural transport investment

This set of challenges concerns the need to increase the overall level and transform the pattern of investment in rural transport infrastructure and services.

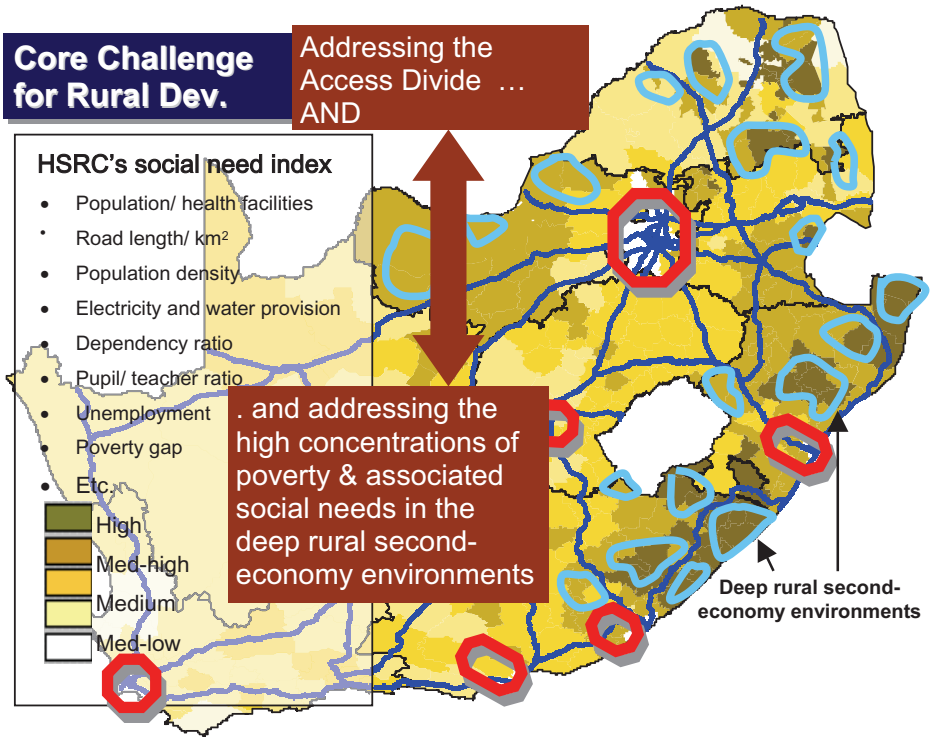
Although there are instances where the overall level of investment in rural transport infrastructure and services is in excess of what can viably be maintained, most communities in the "deep" former homeland areas are still suffering from insufficient investment in, and maintenance of rural roads and transport services. Part of the reason may be an inherent bias of IDP processes and associated funding mechanisms (such as MIG) towards the provision of housing-related infrastructure – such as streets, basic water reticulation, electricity and sanitation – some of which could be reinforcing semi-urban rural settlement patterns that are neither economically nor environmentally sustainable. Whether or not there is indeed this bias in the allocation of MIG and related funds would need further investigation.

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.

Non-motorized transport infrastructure is very crucial, in particular intermediated transport to support farming and non-farming activities. Off road infrastructure that caters for a wide range of NMT / IMT e.g. tractor–tracks, pedestrian infrastructure, bicycle and animal drawn carts is necessary. It is of utmost importance that improvements to allow mobility and accessibility of services for people with disability be highlighted in integrated transport plans.

The rural transport strategy would facilitate alternative and cost effective measures such as mobile ramps, hydro-powered lift on high-volume transportation vehicles such as buses and railway coaches. In small volume vehicles such as taxis personal assistance would be extended to passengers with disability. The negotiated bus

tender contracts have set conditions for people with disabilities where high contrast colours and wider openings of these vehicles are prescribed. The latter applies on new busses for specific designs. These measures are intended to minimize access gap/ divide between well served urban passengers and rural based transport users.



There also needs to be greater awareness of neglected rural access needs – especially those of women, the poor and the disadvantaged – and the corresponding imperative to transform and achieve a more balanced pattern of investment in rural transport infrastructure and services. Consistent with the experience in most sub-Saharan African countries, the delivery of rural transport infrastructure and services in South Africa has been characterised by:

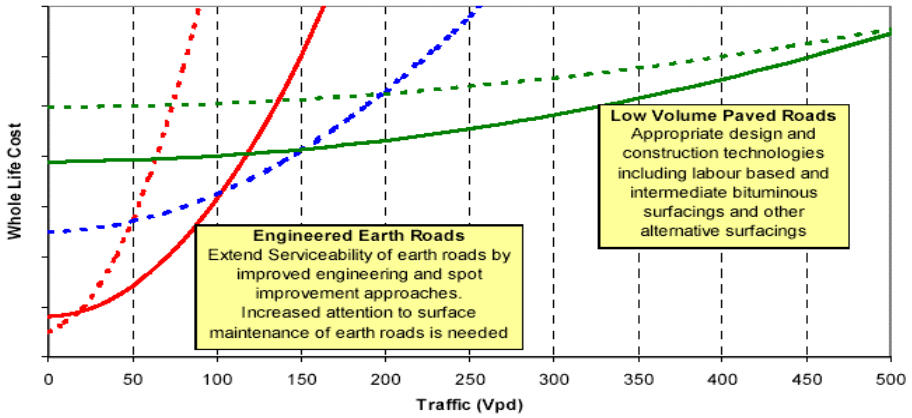
- A bias towards roads, motorised transport and male-defined travel needs, and the corresponding relative neglect of "off-road infrastructure" such as paths and tracks, non-motorised transport modes (bicycles, donkeys, etc.) and the access needs of women and people with disability.
- Emphasis on capital works at the expense of maintenance, and ill-defined arrangements for ownership and responsibility.
- Relative neglect of intermediate, medium-distance transport.

Transport solutions should reflect the conditions, needs and preferences of transport users. Important issues to examine when planning transport interventions include gender differences in transport needs, disadvantaged and other groups with disability needs, occupation or task, population density and income as well as tradition and culture. Some measures such as promoting women's groups and targeting project activities and credit schemes to female farmers.

Other successful projects include women in planning and rural transport operations. However wit the advent of non-motorised transport (NMT) roll-out plan by the Department of Transport multi- projects on building / manufacturing bicycle components, assembling of bicycles and maintenance thereof would open –up economic opportunities for women, youth and people with disability. In addition the promotion and mainstreaming of animal drawn carts, which require manufacturing and maintenance capacity, stand to benefit this target groups. The operations of NMT vehicles in another added job creation stimulator in the sector.

In South Africa, a number of policies and other factors have also caused a bias in favour of *urban-* and/or *commuter-oriented* travel requirements. The bus transport subsidy system, for example, is almost exclusively focused on high frequency, moderate-to-high volume worker/passenger movements on roads with reasonable-to-good riding quality. On the other hand, rural travel patterns are often characterised by a low density of demand, a high proportion of non-work trips (including emergency trips, "special need" trips, and freight transport trips), and poor road conditions. The emergence of an extensive, virtually unregulated "bakkie-transport" sector to address these typical rural transport requirements and conditions is symptomatic of this neglect.

A schematic representation of routine road management illustrates measures such as spot improvement and appropriate cost effective material to extend the life-span of the earth road. The Department of Public Works in collaboration with the Department of Transport are promoting the EPWP through various labour intensive programmes. Zibambele is a provincial programme, which started spearheading this intervention, and may provinces have as a result adopted a similar approach to transfer skills and create jobs for the local communities.



Rural transport depends on appropriate infrastructure(paths, roads, waterways, bridges, railway tracks and associated maintenance and traffic management systems). The infrastructure includes paths, trails, tracks, access or feeder roads, secondary roads and primary trunk roads. These may vary in quality, depending on weather, season, construction and maintenance, as some means of transport require certain infrastructure standards to operate effectively. Operations that happen on this road infrastructure vary in terms of modes, for example, passenger transport and freight transport. The positive spillover effects of usable earth roads is on lowering the cost of transport by keeping operational and overheads costs of the operators low.

3.4 Regulating rural transport operations and safety

As part of the implementation of the NLTTA, local authorities are tasked with, and receiving support to prepare Current Public Transport Records (CPTRs). This will then be used to prepare Operating Licence strategies (OLSs), which are aimed at licensing and regulating all public passenger transport. In addition, a Driving Licence Testing System – with testing centres in all rural areas – is being implemented to ensure regular testing of vehicles and improving the general roadworthiness of vehicles in line with the Road Safety Strategy (2006).

There is an urgent need to re-evaluate the 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 must be ensured.

It has also been suggested that the implementation of the combi-taxi re-capitalisation programme need to be adapted in accordance with the requirements for multi-purpose, robust transport vehicles to serve "deep" rural areas.

3.5 Institutional alignment and transformation in the rural roads sector

As mentioned, the provinces, local authorities, and the NDPW have collectively, been spending considerable amounts on rural district and access roads, resulting in significant job creation and poverty alleviation.

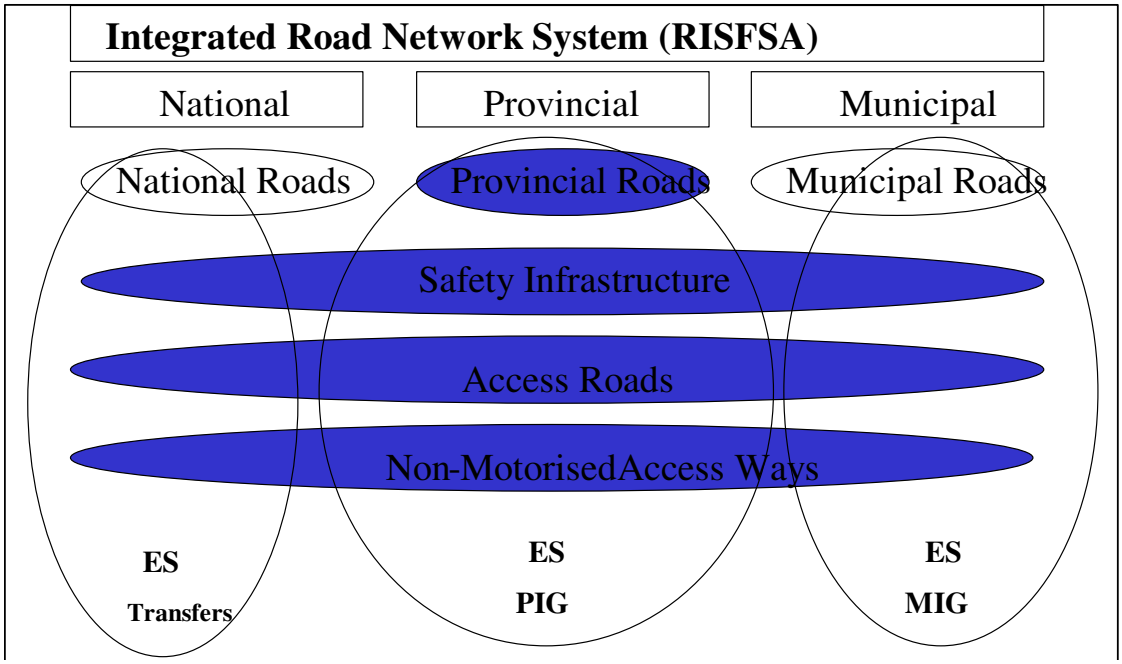
However, the multitude of roads-procuring agencies and different funding sources has resulted in an overly complex and un-coordinated rural roads planning and procurement process. As shown by Figure 2, these complexities are also caused by:

- Different development processes and initiatives, many of them resulting in competing road project proposals
- Different forums and channels for interacting with communities (not all of which are yet coordinated in terms of IDP processes)
- Different contract types, procurement mechanisms and protocols
- Different design standards and approaches

Given that there are also considerable variations in institutional arrangements between different provinces, and that many of the arrangements are possibly unconstitutional (i.e. failing to vest the local sphere of government with the primary responsibility for local rural roads), it is clear that there is a need for at least some institutional alignment and transformation.

Since there is a national investigation underway to examine these and related issues in the roads sector (i.e. the investigation into a Road Investment Strategic Framework), it should 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 most rural district councils.

Figure 2: Complexity of the rural roads planning and procurement process



It should however be noted that coordination of rural access roads and budgetary provisions a re left to the discretion of provinces and municipalities. Most of the times this low level of roads / trunk roads are not even planned into the IDP process, and if included in the IDP they account for a very low proportion of the MIG fund.

While the re-classification of rural access roads is still being awaited to give a complete picture on the rural road network provisioning and management, the neglect and the level of backlog tend to isolate the rural poor from social improvement and economic stimulation as the vicious circle of poor transport services is still recurring.

3.6 Aligning rural transport and interlinked functional areas

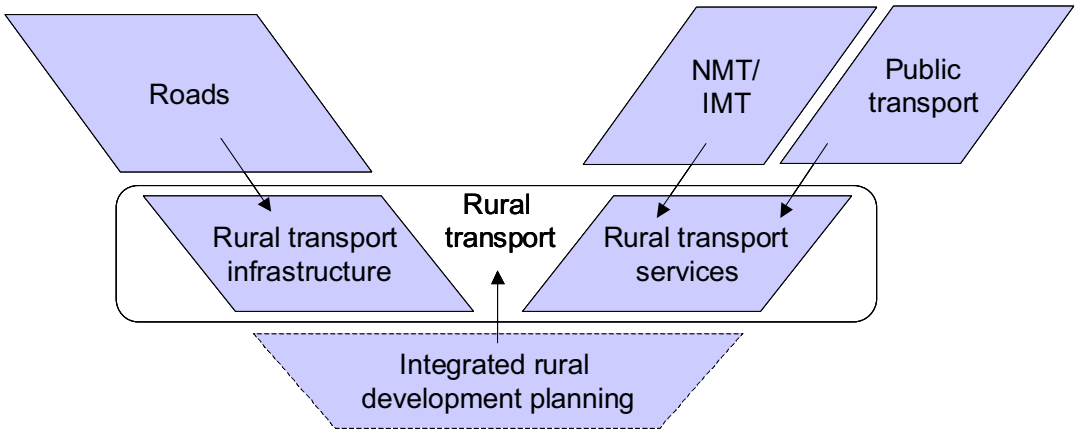
Another strategic challenge that needs to be highlighted is the need to ensure sufficient alignment between the policies, strategies, institutional arrangements, funding and service delivery priorities in the rural transport field and interlinked functional areas. Figure 3 indicates some of these. For obvious reasons, policy and strategy decisions concerning the interlinked functional areas could have a significant impact on the strategic options in the rural transport area, and vice versa.

In the same vein proper support mechanisms have to be put in place to enhance the role of transport in relation to other sectoral policies, strategies and programmes. Both social and physical infrastructure and service are imperative to strengthen the performance of other departments such as Agriculture, Housing, Environmental Affairs and Tourism, Telecommunications services, etc.

In support of sector strategies, best practice has indicated that efficient transport system can rely on good communications for matching vehicles and loads in support of rural freight and logistical services. A good communication system requires a brokerage system, to facilitate freight flows and thus coordinating various transport operations for long- haul freight or for irregular needs of rural communities. In addition an improved information exchange can add value in scheduling complementary road improvement schemes and other transport services by booking such services in advance. This measure serves also to cut costs on futile trips such as going to see a medical doctor and upon arrival one finds that the doctor has not turned up.

It is critical that all rural transport interventions, whether sponsored by governments, NGOs, the private sector or donors should address a complete transport picture by looking at mobility in an integrated solution. An inclusive participatory approach tin determining infrastructure priorities, appropriate location of facilities and suitable means of transport are best achieved through a multidisciplinary approach. Based on this participatory process, governments and project planners would ensure financial regulatory and complementary actions to promote the involvement of private provision of rural transport services. The positive results of this multi-sectoral approach are that it would yield rewards on diverse interventions.

Figure 3: Linkage between rural transport and other functional areas



3.7 Capacity building and monitoring

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. Capacity building involves training of personnel in functional areas, improving organisational efficiency or formal and informal institutional strengthening. The term also refers to the capacity of individuals to actively transform themselves and their organisations with a view to managing the process of change in their every day lives in their local contexts. In this regard, the transfer of skills and knowledge to enable communities to control development processes, which affect them, is paramount. 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. These initiatives should seek to harness and consciously enhance all resources to ensure organisational effectiveness. Thus capacity building for development thus needs to be centred on the following central themes:

- Strengthening and building on existing knowledge bases and capacities
- Building infrastructures to manage and maintain development at the individual and organisational level
- Addressing community needs, particularly those relating to the poorest
- Maximising the participation of all stakeholders in the process of change.

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.

While most development endeavours include a capacity building component, many do not have clear measurable indicators to ascertain the degree of capacity built. Thus monitoring and evaluating evidence of capacity building, people's skills and agencies responsible for building capacity to unravel the gaps with a view to developing countermeasures, cannot be over-emphasised.

4. RURAL TRANSPORT AND DEVELOPMENT STRATEGIC FRAMEWORK

4.1 General guiding principles

As a general, cross-cutting principle, it is important to reiterate the constitutional requirement that rests on all government bodies, but local government in particular, to ensure that all service delivery is focused on achieving *sustainable development outcomes.* In order to achieve this within the context of rural transport, the following guiding principles have been established:

a) *Inclusiveness with respect to all critical rural access needs,* focusing particularly on the economic and social access needs of the rural poor and other disadvantaged groups;

b) *Alignment and linkage with integrated development initiatives*, focusing particularly on the ISRDP, local IDPs, and all other interlinked service delivery and local economic development (LED) initiatives.

c) C*ohesion between allied transport policies, strategies and regulatory frameworks,* including local, national and provincial road investment strategies, public transport plans, and traffic and safety regulations.

d) *Developmental effectiveness,* referring to both the *direct* impacts of rural roads and transport delivery on job creation, enterprise development and general capacity building among rural and/or previously disadvantaged communities, and the *indirect* impacts thereof on the mainstreaming of rural economies and the creation of sustainable rural livelihoods.

e) *Sustainability Refers to* the transport system itself and of its impacts on the wider social, economic and biophysical environment.

f) *Action-orientation: Means* the need to move beyond strategising and planning, and ensure more rapid, “on-the-ground” delivery.

4.1.1 Main rural transport strategic thrusts

As noted, the rural transport strategy has two main strategic thrusts, defined as follows:

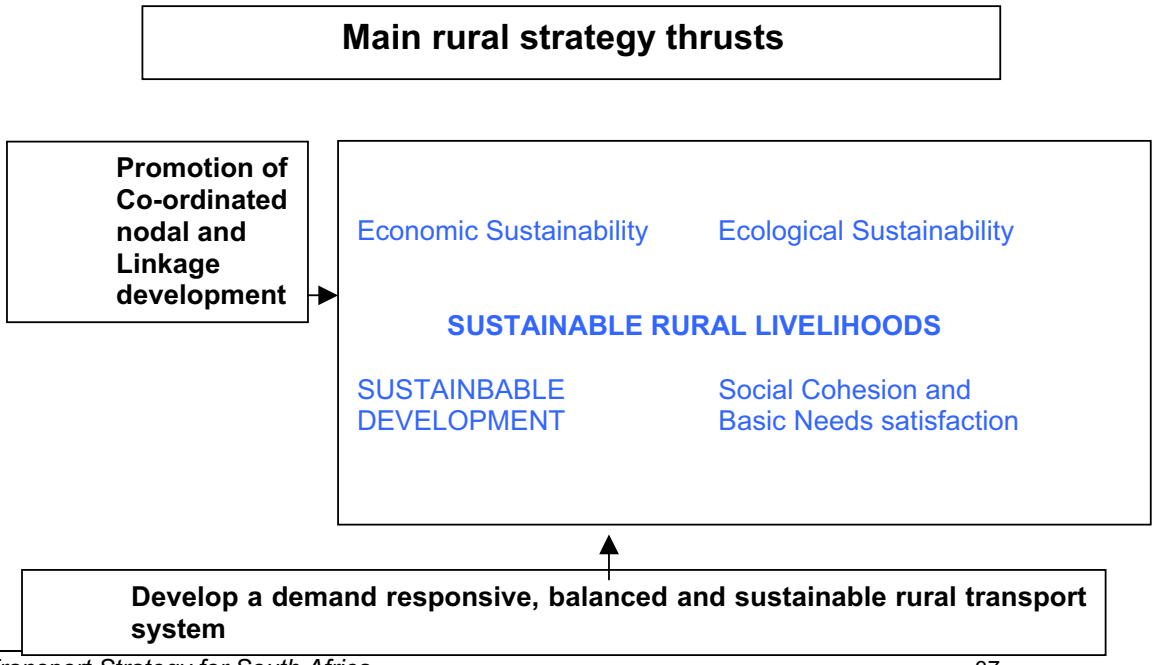


Table 3: Main rural transport and development strategic thrusts	
Thrust	**Explanation and motivation**
1) Promote coordinated rural nodal and linkage development	The main practical aim should be to develop an effectively interlinked network of multi-purpose nodes and linkages, supported by actions such as: • Establishment of transport brokering and logistical services; • Coordination of transport, periodic service provision and market schedules; • The exploitation of advancements in information and communication technologies (ICT) to create linkages between hub and satellite nodes; • Coordinated planning and development of transport linkages, including a system of periodic access services.
2) Develop balanced and sustainable rural transport systems	Besides investing in access roads, the development of a balanced rural transport system requires that actions be taken to also improve other forms of rural transport infrastructure (RTI) - such as local connector or district roads, suspension bridges, pontoons, paths, tracks, trails and public transport interchanges. Similarly, it requires concerted actions to redress the relative neglect of all non-motorised as well as "intermediate" motorised transport (such as tractor-trailers), and strengthen as well as regulate the role of the "bakkie sector" as a viable, demand-responsive means to address a variety of rural freight and passenger transport needs. 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.

4.1.2 Overview of rural transport delivery 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 Municipal Infrastructure Grants, the equitable share mechanism and transfers of monies in terms of the National Treasury Regulations. 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 – should be on the facilitation, coordination and strengthening of service delivery.

Besides the rural transport strategy, which needs to map out sustainable programmes of action for the short, medium *and* long term, the gazetted rural transport strategic actions specified in the NLTSF are the principal guiding mechanism in terms of which the national and provincial spheres of government should perform their short-, medium- and long term delivery, facilitation and coordination roles. There will thus be alignment between the rural component of the NLTSF and the rural transport strategy.

As mentioned elsewhere, the NLTSF contains two strategic objectives for rural transport. These are:

1. The 13 nodes identified in the Integrated Sustainable Rural Development Strategy (ISRDS) will be provided with improved transport infrastructure and services.
2. Capacity building will be implemented and tools will be provided for rural transport planning, implementation and auditing.

The NLTSF also commits the government to 11 specific rural transport-related actions, with six of them linked to the first objective, and five to the second (see Appendix A). The second group of actions, however, also includes one that can be interpreted as *general* rather than *specific,* stated as follows:

> *A rural transport development programme will be introduced as an implementation framework for the rural transport strategy.*

Whilst recognising that this formulation of the notion of a rural transport development programme (RTD programme) places the emphasis on the support aspect (and *can* therefore be interpreted to be quite specific), the preferred view is to define the RTD programme more comprehensively, namely as the principal short, medium-to-long term delivery mechanism for the implementation of the rural transport strategy.

Table four provides an overview of 20 specific actions comprising this programme. Nine of them are gazetted NLTSF commitments (reduced from 11 because some have been combined). Several of the additional actions (see notations in the explanatory notes to the table) are intended to support or extend the implementation of the gazetted NLTSF actions. Others are of a more general, long-term nature. Because of substantive overlap with transport policies and initiatives in other functional areas, the implementation of some of them will require close cooperation with the relevant policy and delivery champions in these other areas.

To ensure coherence and facilitate easy reference to the actions, they have been grouped and annotated in terms of the following list of “action areas”:

A. Alignment with the NSDP, ISRDP, IDPs and related initiatives.
B. 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
C. Regulation and safety.
D. Capacity building and monitoring.

Table 4: Overview of the rural transport development programme

Alignment with the NSDP, ISRDP and IDP projects

A1. Alignment of rural transport interventions with ISRDP and IDP projects

A2. Linkage with rural LED, poverty alleviation and social service delivery programmes.

9 High-leverage focus projects and delivery programmes

B1. Joint interventions to develop multi-purpose nodes and linkages

Provision of Rural Transport Infrastructure (RTI)

B2. Development of feeder or access roads associated with key nodes and linkages[1]

9.1.1 B3. Development of sustainable road maintenance and off-road spot improvement programmes

Provision of Rural Transport Services (RTS)

B4. Facilitation of transport brokering and special contracting services

B5. Piloting of combined passenger and freight transport services [1,2]

B6. Containerisation and logistics support for rural freight operations

B7. Development of appropriate rural public transport and subsidisation options

Promotion of non-motorised and intermediate means of transport

B8. Alignment and linkage with existing non-motorised programmes

B9. Development of infrastructure for non- motorised transport[1]

B10. Promotion of animal-drawn carts and other intermediate means of transport

Regulation and safety

C1. Implementation of rural CPTRs and operating license strategies

C2. Development of adapted vehicle licensing & traffic safety regulations to facilitate combined passenger and freight services[4]

Capacity building and monitoring

D1. Dissemination of guidelines & tools for rural transport planning, implementation & auditing

D2. Development of guidelines to undertake integrated rural access, transport and spatial planning[3]

D3. Promotion of labour-intensive methods

D4. Facilitation of community participation and mainstreaming women and youth in all aspects of rural transport provision[3]

D5. Development of feasible systems for the classification, registration and monitoring of all types of rural transport infrastructure[4]

D6. Development of strategic monitoring and evaluation systems[4]

D7. Dissemination of institutional guidelines for the provision and management of rural transport infrastructure and services[4]

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.* ***A2****) are supplementary actions.*

Specific explanatory notes (see superscripted numbers):

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

4.2 ALIGNMENT WITH THE NSDP, ISRDP AND IDP PROJECTS

A number of specific actions need to be taken to ensure sufficient alignment with the ISRDP, as well as with the spatial development frameworks and projects that are formulated as part of local IDP processes. Particular attention needs to be given to anchor or lead projects, and to projects that are part of the government's Local Economic Development (LED) programme.

Actions should also be taken to align and develop synergies with the social service delivery programmes in the health, education and social welfare sectors.

4.2.1 Alignment of projects in terms of the NSDP, ISRDP, local IDPs and the national rural transport strategy

Most of the rural transport interventions identified in terms of the ISRDP and IDP processes are focused on infrastructure projects. Three existing "levels" of projects can be distinguished, described as follows:

- The NSDP projects which intends to integrate all government planning frameworks with the strategic principles for infrastructure investment and development spending.
- *Anchor projects*, which are mainly aimed at addressing critical missing links in the secondary or district road network, or the transport component of a major integrated development initiative
- *Local or IDP-related projects,* which can include anything ranging from projects to improve local taxi ranks to the construction of access roads or off-road transport infrastructure such as pedestrian suspension bridges

Using existing monitoring and inter-departmental liaison mechanisms – and supplementing them if necessary – the DOT and its provincial counterparts should undertake an extended and periodically updated strategic audit of all the relevant transport-related projects in rural areas. Gaps or unbalanced portfolios should be highlighted, both with respect to the objectives of relevant integrated development (i.e. that of the ISRDP, provincial rural development strategies and local IDPs), and with respect to the objectives of the Rural Transport Strategy. In the latter regard, particular emphasis needs to be placed on the requirements for a balanced, sustainable and developmentally effective rural transportation system.

Since most of the current portfolio of ISRDP anchor projects are focused on the development or upgrading of trunk, or district roads, it is likely that most of the identified gaps and priorities will pertain to more local scale or village-specific projects.

The strategic actions to be undertaken in this regard can be summarised as follows:

Strategic action	**A1. Alignment of rural transport interventions with the ISRDP and IDP lead projects**
Related NLSTF action: Rural transport interventions will be co-ordinated with and will incorporate the objectives of the ISRDP, and the transport sector components of the IDPs of rural municipalities will be integrated into the ISRDP and IDPs.	
Supporting and/or qualifying actions • Review of the current portfolio of transport-related ISRDP anchor projects and IDP lead projects in terms of the objectives of the ISRDP, IDP's and other rural development strategies and programmes in accordance with National Rural Transport Strategy for South Africa (RTSSA) and development programme. • Facilitation of a more balanced portfolio of rural transport system through integration with other sectors and role-players (where possible) • Facilitation of strategic transport audits in all rural municipalities and integration into the transport plans.	

4.2.2 Linkage with general economic and social development programmes

One of the main aims of engaging the health, education and social welfare sectors would be to ensure that pension payout schedules are better coordinated with transport services, periodic markets and other periodic social services. Similarly, better linkages with the LED programme will ensure that rural transport will make a more cost-effective contribution to the internal linking of rural markets as well the linking of rural economies to the economic mainstream.

The strategic actions to be undertaken in this regard can be summarised as follows:

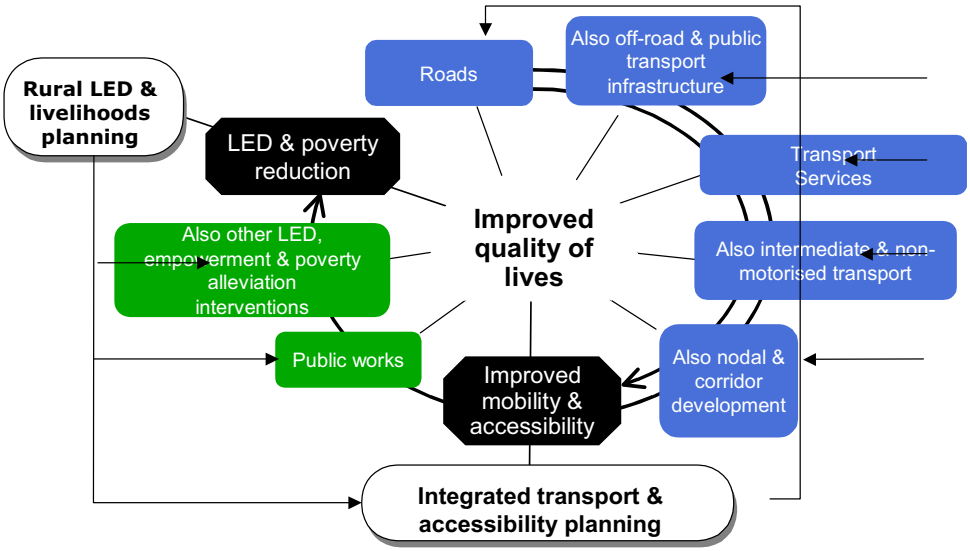
Strategic action:	A2. Linkage with rural LED, poverty alleviation and social service delivery programmes

Supporting and/or qualifying actions

- Liase with the social sector cluster and support relevant existing and new provincial-level fora, IDP assessment panels, IDTT monitoring and evaluation task groups
- Establish improved linkages with the LED programme being managed by DPLG, and develop strategic guidelines on how to address the transport and logistical difficulties that may be hampering the current portfolio of rural LED projects
- Engage the health, education and social welfare sectors to develop joint strategic responses to social service access issues in rural areas
- Monitor and liase with NDPW on rural transport projects within the Expanded Public Works Programme (EPWP).
- Provide tourism-related transport infrastructure and services
- Strengthen the supply chain and product linkages through an effective and flexible logistical and low transaction costs within the freight transport chain.

A shared vision and common purpose has greater impact on the delivery

Improving integration of services



4.3 HIGH –LEVERAGE FOCUS PROJECTS AND DELIVERY PROGRAMMES

This section describes the core set of actions aimed at leveraging and enhancing the delivery of rural transport infrastructure and services. Besides responding to the need to address spatial imbalances and support the implementation of the ISRDP and other integrated rural development initiatives, the main aims are to redress imbalances in the provision of rural transport and services, and provide practical demonstrations of how a more balanced rural transport system can be developed. By implication, the interventions should be firmly guided by the twin strategic thrusts of the national rural transport and development strategy outlined in the text.

To avoid cutting across, or duplicating existing delivery programmes, the interventions should also be guided by the results of the strategic audits and other monitoring mechanisms discussed under Action A1 above (also see Actions D6 and D7). As noted, this should highlight gaps or unbalanced project portfolios, and enable the national and provincial delivery programmes to be appropriately targeted. The following general guidelines should also apply:

3 Cost-effective *leveraging and enhancement* of existing public-, private- and community-based service delivery activities.

4 *Strong linkage and alignment* with respect to anchor projects and multi-purpose service delivery initiatives.

5 Short-term *prioritisation* of projects with catalytic and pro-poor development outcomes.

6 *Relevance and responsiveness* to typical rural conditions and trip purposes, and the needs of special categories of users.

The first of the general guidelines above is particularly important. As the delivery of rural transport infrastructure will increasingly be a local government responsibility, it will take time to build the requisite technical, managerial and financial capacities in all provinces and rural municipalities (see Section 8 for specific capacity building recommendations). There is an obligation on the national and provincial spheres to institute and facilitate the building of requisite skills to strengthen the capacity of municipalities. Deployment and secondment of staff from national and provincial government should be considered to fast-track delivery at a local level. In addition national and provincial government should continue providing partial funding for the selected “high-leverage” projects and programmes discussed in this section.

Possible funding and institutional arrangements – which may include special matching funds and/or transitional institutional arrangements – are discussed in Section 5 and 6

4.3.1 Comprehensive integrated projects

The first (and most comprehensive) category of high-leverage projects should ideally follow from the exploration of linkages with the NSDP, ISRDP, rural LED, poverty alleviation and social service delivery programmes (i.e. from Action A2 and A3), and contain a sufficient “critical mass” of interlinked activities, such as outlined in Action plan. The main practical aim should be to develop an effectively interlinked network of multi-purpose service points/ nodes and linkages (see Action B1 below). The outcome will be significantly improved access to rural social services, especially joint access to a basic range of social and retail services (as provided by Thusano Service Centres), and access to HIV+AIDS care and schooling.

Strategic action:	B1. Joint interventions to develop multi-purpose nodes and linkages

Supporting and/or qualifying actions

- Liase with the National Inter-Sectoral Steering Committee (NISSC) of the Government's Central Communications and Information Service (GCIS) – which is specifically tasked to facilitate and co-ordinate the roll-out of Thusong Service Centres initiatives
- Promote the coordinated development of Thusong Service Centres, other nodal facilities, transport, telecommunications and logistical services as part of an integrated rural service network
- Strengthen rural IDP, and harmonising the NSDP principles with spatial and transport planning processes through the dissemination of integrated rural access planning guidelines (see Action D2). These guidelines should indicate practical ways of coordinating initiatives such as locating new public facilities in poorly served areas, developing decentralised market facilities, constructing access roads, and investing in rural information and telecommunication networks.
- Harness information and communication technologies as well as special needs transport services (see Action B4) to provide improved linkages between hub and satellite facilities (e.g. hospitals and clinics)

Other sector departments such as Land Affairs would see better integration of their beneficiaries of the land restitution programme, land redistribution for agricultural and communal purposes, by accessing transport services in their constituencies. . These benefits would spillover to multiple of stakeholders and other departments, which are affected by the land reform programmes.

4.3.2 High-leverage RTI projects and programmes

The good progress that has been made in some provinces and municipalities to develop access roads[3], using labour-intensive methods and small contractors, should be recognised. However, as discussed in Section 3, the general situation is still characterised by considerable backlogs, under-spending on maintenance, neglect of off-road transport infrastructure, and uncoordinated procurement and management.

Regardless of the improved funding and institutional arrangements that are obviously required to address these problems (discussed further in Section 5&6), much can be achieved simply through improved monitoring, information sharing, promotional activities and targeted, "gap-filling" infrastructure delivery. The following two specifically targeted delivery programmes – funded by general programmes such as MIG and/or specific transfers of monies in terms of the NLTTA – should be instituted as a matter of urgency:

- Development of feeder or access roads associated with key nodes and linkages, and

[3] Rural access roads may be defined as those roads, which do not qualify as district or higher order roads, but provide access from a proclaimed road to public infrastructure such as schools and clinics, or provide access to a settlement of a minimum of 50 persons or at least five homesteads.

- Development of road and off-road maintenance programmes, for non-motorized transport infrastructure, including spot improvements

In both programmes, the criteria for allocating financial and other forms of assistance will be designed in such a way that a fine balance is struck between the need to address gaps or backlogs, and the need to reward pro-active local initiatives, good practices, and track records (especially regarding infrastructure maintenance and the involvement of local communities). Similarly, a careful trade-off will have to be made between the need for focussed investment in support of the 13 ISRDP nodes, other key nodes and linkages and the investment requirements in other areas.

Road Classification

The classification of roads into different operational systems, functional classes, or geometric types is necessary for communication among engineers, administrators and the general public. Different classification schemes have been applied for different purposes in different rural and urban regions. Classification of roads by design type, based on the major geometric features (e.g., freeways or conventional two-lane single carriageway roads) is the most helpful one for road location and design procedures. Classification by route numbering is the most helpful for traffic operations. Administrative classification (e.g., National Road System) is used to denote the levels of government responsible for, and often the method of financing road facilities.

Functional classification, the grouping of roads by the character of the service they provide, was developed for transportation and network planning purposes. Comprehensive road network planning, an integral part of total economic and social development, uses functional classification as its basis of network analysis and formulation, and this system has emerged as the predominant method for the grouping of roads.

In much of Africa, including South Africa, the majority of the poor live in isolated rural areas. Transport there is characterized by female porterage, treacherous river crossings, seasonal access and an occasional visit by a motorized vehicle. Only with great difficulty can the typical rural household gain access to the most basic services, such as local and regional markets, agricultural extension centres, health clinics, and schools. Mobility and ease of transport are essential to their everyday life and to breaking their isolation and poverty.

Community roads, tracks, paths and footbridges make up the local transport infrastructure system on which rural dwellers gain access to markets and social services, and women transport their loads, such as firewood and water, for household needs. Farmers walk to and from their fields on paths and these paths constitute the first and last leg of most trips to the market and towns. Yet, although these modest infrastructures are the major circulatory system in rural Africa and provide an essential link with the designated network, transport planners in government road authorities often do not consider them part of transport system because they are beneath, or outside, the direct responsibility of government, which tends to overlook the importance of designing an institutional framework for their provision and upkeep.

It should also be noted that, in respect of the administrative classification of roads in South Africa, all roads are the exclusive and original competency of the municipality charged with administering a specific area. Since the entire land area of South Africa comprises contiguous local municipalities, all roads in South Africa are in essence

municipal roads. However in terms of provincial and national legislation certain of these roads are declared as either national or provincial roads.

The new strategic road classification system seeks to translate government's economic and social development policies into an effective instrument, within the roads sub-sector, that will enable transport to fulfil its role of enabling mobility and access; thus enabling and enhancing the growth of the economy.

This functional classification system is high level and does not seek to replace the administrative, technical and road safety classification systems of the road network that are implemented by roads authorities. It rather seeks to establish a uniform and integrated strategic classification system for South Africa, which will underlie and inform any other form of classification that exists.

The new classification system promotes:-

- An integrated road network system;
- Full consultation among roads authorities with respect to ownership and administrative responsibility for the road system;
- Appropriate allocation of responsibility for the entire road network;
- The eradication of road backlogs and unclassified roads; and
- A standard approach towards the prioritisation and allocation of funding for roads in order to ensure that all the necessary criteria, consistent with government policy, are considered prior to decision-making.

In determining the classification, the following aspects were considered to determine the relative functions and importance of the different road types:

- The overall route from a national strategic value importance perspective, so as to broaden the understanding of the value of a road;
- The importance of roads in contributing to government's service delivery objectives, both economic and social;
- The importance of roads in connecting areas and nodes e.g. economic centres, ports, Industrial Development Zones (IDZs), Spatial Development Initiatives (SDIs), the Urban Renewal Programme (URP), the Integrated Rural Sustainable Development Programme (ISRDP), and corridor development initiatives;
- The role of roads as conduits for development in support of SADC and NEPAD;
- The influence and contribution of roads towards centres of economic activity and human settlement patterns
- Cross border passenger and freight flows; and
- Traffic volumes and types on the different roads.

Table5 : Strategic Functional Road Classification System.

CLASS	STRATEGIC FUNCTION	NATURE OF ROADS
1 Primary distributor	High mobility roads with limited access for rapid movement of large volumes of people, raw materials, manufactured goods, and agricultural produce of national importance	Public roads: • between and through regions of national importance. • between provincial capitals and key cities; and between major city nodes, which have significant economic or social road traffic. • between South Africa and adjoining countries which have significant national economic or social transport interaction. • for access to major freight and passenger terminals including major ports and airports.
2 Regional distributor	Relatively high mobility roads with lower levels of access for the movement of large volumes of people, raw materials, manufactured goods, and agricultural produce of regional importance in rural and urban areas	Public roads: - • between and through centres of provincial importance. • between provincial capitals, large towns and municipal administration centres. • between class 1 roads and key centres which have a significant economic, social, tourism or recreational role. • between South Africa and adjoining countries which carry limited economic or social road traffic. • for access to transport hubs of regional importance.
3 District distributor	Moderate mobility with controlled higher levels of access for the movement of people, raw materials, manufactured goods, agricultural produce in rural and urban areas of regional importance	Public roads: - • between centres, towns, and rural residential areas and villages. • between centres, towns and industrial/ farming areas. • between residential areas and local industrial/commercial areas. • between large residential areas. • which provide linkages between a Class 2 and/or Class 1 routes. • which provide linkage between centres, towns, rural residential, industrial/farming areas and Class 2 or Class 1 routes.
4 District Collector	High levels of access and lower levels of mobility for lower traffic volumes of people, raw materials, manufactured goods, agricultural produce in rural and urban areas of local importance	Public roads: - • between villages, farming areas and scattered rural settlements and communities, which primarily serve local social services as well as access to markets. • within a commercial, residential, industrial areas. • linking Class 3 roads.
5 Access roads	High access and very low mobility routes for the movement of people and goods within urban and rural areas.	Public roads: • within a residential community. • from a Class 3 or 4 to a residential community. • to provide direct access to industries and businesses. • to provide access to specific destinations such as heritage sites, national parks, mines, forests etc.
6 Non motorized access ways	Public rights of ways for non-motorized transport providing the basic and dedicated movement	Public right of way: • to provide safe access and mobility for pedestrians, cyclists and animal drawn transport. • for social, recreational and economic access.

Strategic action:	**B2. Development of feeder and access roads associated with key nodes and linkages**
Related NLSTF action: The development of *rural access roads*, associated with key nodes and linkages, will be improved. The initial implementation will target at least three of the 13 nodes and some of areas falling outside the nodes. It is envisaged that a further rollout will take place that will go beyond the 13 nodes.	
Supporting and/or qualifying actions • Facilitate key access and district road projects identified through IDP and ISRDP processes, with an initial focus on the ISRDP nodes • Develop and disseminate a strategic planning support system for the assessment and prioritisation of access roads, based on the so-called CARNS methodology[4] • Develop and disseminate appropriate road design standards, giving particular attention to improved structures for the management of storm water	

Besides routine road maintenance in terms of the lengthman system, spot improvement programmes involving mobile teams, can make a highly cost-effective contribution to the all-year "trafficability" of different types of rural roads, as well as off-road transport connections (such as village-level, and inter-village tracks and footpaths). Spot improvements can be highly effective because in most situations, problems tend to occur over relatively short road lengths of upwards of half a kilometre, especially where drainage is poor. Road failure is most likely to occur on steep hills, dips in the road and in low-lying flat areas. Interventions could include spot drainage works such as simple culverts, drifts, footbridges, side drains and road camber.

Strategic action:	**B3. Development of road maintenance [including spot improvements] programmes.**

[4] The CARNS methodology was originally developed in KwaZulu-Natal as part of the Community Access Road Needs Study. It consists of a map-based multi-criteria analysis as well as fieldwork-based interactions with community representatives to assess the population and facilities that would be served by local roads. The method was also demonstrated in the Eastern Cape as part of the Moving South Africa investigation, and used by CSIR: Transportek as the basis for developing a GIS-based planning support system.

Supporting and/or qualifying actions

- Document and disseminate guidelines on local and international good practices, focusing especially on KZN's Zibambele programme[5] and the lengthman system
- Provide start-up or matching funds for the development of provincial and or district-level road maintenance and spot improvement programmes
- Ensure effective involvement of youth, women and women-headed households in both the planning and provision of rural road infrastructure

4.3.3 High-leverage RTS projects and programmes

The focus of the interventions under this category should be to support and improve the functioning of the market for rural transport services. The key market deficiencies and related conditions to be addressed include:

- Neglect of special categories of passengers, i.e. the sick (including persons with HIV+AIDS), persons with disabilities, learners, the aged, pregnant women and those who are limited in their movements by young children with or without pushchairs
- Neglect of small-volume freight transport and associated logistical requirements
- Poor information flows between transport operators and customers – which in rural areas are exacerbated by the dispersed pattern of demand and the relatively large number of dispersed, independent operators

A related focus is to improve or adapt the current set of government interventions in the market for rural transport services. Currently these interventions – such as public transport regulation, subsidisation and re-capitalisation – are mainly focused on the peri-urban commuter catchment areas around towns and on the needs of regular worker/ commuters. Besides the limited range of government-sponsored initiatives to promote non-motorised transport (see Section 6.4 below), comparatively little is being done to improve the availability of affordable, demand-responsive and sustainable transport services in "deep" or low- density rural areas.

Simply extending the network of subsidised bus services to also cover deep rural areas is unlikely to be sustainable. Indeed, in view of their distorting effects on rural settlement and activity patterns, and their neglect of non-work and freight transport needs, subsidised long-distance passenger transport services routes should be reduced and gradually withdrawn.

Similarly, given the dispersed, erratic nature of most categories of special transport needs (e.g. that of the sick and the aged), and given the stringent budget constraints faced by most of the relevant government departments (e.g. health and social welfare), it is unlikely that extended networks of dedicated, in-house special needs transport services would be viable options for any but a few, high-density rural areas. Moreover, it should not be assumed that the needs of special categories of passengers should necessarily be addressed by dedicated or specially contracted services. In the NLTTA, it is specifically stated that these needs should be met as far as may be possible by the system provided for mainstream public transport. The same applies to scholar transport.

[5] This programme, which won the Impumelelo Innovation Award in 2000, is specifically targeted on involving destitute families with no income – especially women-headed households – in road maintenance activities.

Given that small operators using LDVs and combi-taxis actually provide most of the mainstream public transport operations in rural areas, one of the challenges is to leverage and improve the contribution of this sector to the meeting of a fuller range of rural transport needs – including those of special categories of passengers. Another, related challenge, is to overcome the low spatial densities of demand through improved synchronisation and linking of key rural service delivery and market activities, special events and transport movements.

In this regard, there is a range of innovative, cost-effective, high-leverage options that should be further explored, piloted and implemented. Examples include:

a) *Transport brokering services*. This can improve linkages between potential users and suppliers, and help to establish an inter-linked range of demand-responsive rural transport services. Transport brokers can also assist with the outsourcing of services by public entities, and the provision of tourism transport services.

b) *Periodic Scholar Transport Services*. This would bring pupils on alternate days from surrounding schools to use centre facilities (IT; TV and science laboratories) to obtain specialised tuition.

c) *Periodic Public Transport Access Service*. This could be used for the whole district. It can operate on a roving basis to transport people to and from surrounding areas for one or more days, when a periodic market, and pension payout, etc. are scheduled for a particular centre.

Other examples of innovative, high-leverage interventions are discussed in relation to the specific set of strategic actions recommended below:

Strategic action:	**B4. Facilitation of transport brokering and special needs transport services**
Supporting and/or qualifying actions • In partnership with other role players, pilot a number of *rural transport brokering services* aimed, *inter alia*, at providing an inter-linked set of demand-responsive transport services for addressing the full range of rural passenger and freight transport needs, including selected special needs categories – also see Actions B5 and B6 • Facilitate the development of a single provincial or district "hub" for transport brokering services – possibly in the form of a toll-free Public Transport Call Centre • Establish an inter-governmental forum for special needs rural transport services • Work with key sectors such as education, health[6] and social welfare to explore, for example, the development of a voucher-based or user-side subsidy system for the procurement of special needs transport services • Develop relevant vehicle specifications and accreditation criteria (e.g. for adapted LDV, or truck-chassis vehicles that can transport sick people in a semi-reclining position) – also see Action C2	

[6] Discussions with the National Department of Health have indicated that a reliable and affordable system for non-emergency health transportation can make a major contribution to the freeing-up of hospital beds (i.e. reduce the number of convalescing patients who are waiting to return to clinics or home care, or who are staying at the hospital even though they require full hospitalisation only sporadically).

Strategic action:	**B5. Promotion of combined passenger and freight services**
Related NLSTF action: Special rural transport initiatives focusing on intermediate means of transport using appropriate technology for both passenger and freight services (involving pick-ups, buses, light delivery vehicles, etc.) will be piloted in at least three of the 13 nodes	
Supporting and/or qualifying actions • Investigate and address relevant safety and regulation issues – see Action C2 • Explore the possibility of introducing adapted rural/ multi-purpose vehicles – see Action B7 • Establish an acceptable term for these services (e.g. "omnibus" services), and prepare relevant contract specifications • Pilot projects on multi-purpose vehicles in partnership with relevant sectors.	

Strategic action:	**B6. Containerisation and logistics support for rural freight operations**
Supporting and/or qualifying actions • Develop guidelines for establishing integrated rural logistical services, giving particular attention to complementary actions such as establishing periodic market systems and extending the logistical role of Thusong Service Centres / Rural Development Centre (RDC) • Consider the development of mini-containers (possibly a wire-mesh construction) and facilitate an SMME-focussed production, marketing and distribution strategy together with the Department of Trade and Industry • Develop storage and communications facilities at micro-nodes (see Appendix D) as well as multi-purpose centres • Facilitate enterprise development support (e.g. proposed mechanised units like in the Eastern Cape) • Involve organised agriculture (cooperatives, etc), in the establishment of logistics support services for small farmers	
Strategic action	**B7. Development of appropriate rural public transport and subsidisation options**
Supporting and/or qualifying actions • Assess the grants and loans that are likely to be provided to rural transport operators • Explore the possibility of introducing appropriate technologies such as adapted rural/ multi-purpose vehicles • Assess the current pattern, level and beneficiaries of those subsided public transport operations that originate from within deep rural areas • Highlight the "worker/ peri-urban bias" of the current public transport subsidy system and promote the consideration of subsidisation options	

(including capital- and user-side subsidies) that would be more responsive to typical rural conditions, poverty-levels and trip purposes

- Investigate a supplementary or new form of subsidy system that is aimed at providing set-up funds or subsidised credit for
  - i) developing appropriate means or transport (e.g. NMT – see Action B10), and/or
  - *ii)* various types of support services (transport brokering, storage and logistical support, repair services, etc.)

4.3.4 Promotion of non-motorised and intermediate modes of transport

Actions to promote non-motorised and intermediate means of transport can be broadly divided into two categories, namely, infrastructural and operational set of actions. There will thus be considerable complementarities with the RTI- and RTS-related actions discussed in the previous two sections. Additional, specifically targeted interventions are however required to overcome the socio-cultural and other barriers that are inhibiting the sufficiently widespread acceptance and effective deployment of non-motorised and intermediate modes of transport.

Strategic action	B8. Alignment and linkage with existing non-motorised transport programmes

Supporting and/or qualifying actions

- Link with, and extend current projects and other initiatives that the NDOT has been undertaking to promote the use of non-motorised modes of transport (e.g. the Shova Kalula National Bicycle Partnership Programme) and other intermediate means of transport (such as tractor-trailers)
- Document lessons from the Shova Kalula National Bicycle Partnership Programme, the animal-drawn NMT pilot project and similar initiatives on bicycles projects with a view to informing rollout to other areas
- Support provincial and local authority initiatives and embark on a road show in these jurisdictions to promote appropriate IMT modes
- Develop norms and standards for NMT/IMT vehicles
- Facilitate the rollout of successful demonstration projects

Strategic action	B9. Provision of infrastructure for non-motorised transport

Related NLSTF action:

Initiation of projects to provide *Infrastructure for non-motorised transport*, including improved paths and tracks, as well as bicycle supply depots, suspension bridges will be actively considered

Supporting and/or qualifying actions

- Assess and adjust current funding for NMT infrastructure
- Build the capacity of local authorities to plan, construct and maintain IMT infrastructure, using labour-based methods focused on the employment of youth, persons with disabilities and women
- Develop planning guidelines for safe non-motorised infrastructure
- Support the development of community-based construction entrepreneurs, and build the capacity of communities to plan, construct and maintain NMT and IMT infrastructure (see D4)

Strategic action	B10. Promotion of animal-drawn carts and other intermediate means of transport

Related NLSTF action:

Animal-drawn carts and other low-technology transport solutions will be promoted, with the aim of improving the mobility of vulnerable groups

Supporting and/or qualifying actions

- Promote international findings and examples, linking especially with the Sub–Saharan Africa Transport Policy Program (SSATP), and the International Forum for Rural Transport and Development (IFRTD).
- Undertake pre-feasibility studies, and then select and actively promote a small, coherent set of modes in a few selected localities, with a view to building the critical mass of users that is usually necessary to overcome socio-cultural inhibitions, and make it viable to establish supporting repair and other services.

4.4 REGULATIONS AND SAFETY

In line with the Road Safety Strategy (2006), in order to ensure safe transport practice in the rural areas, the Driving Licence Testing System (DLTS) will be set up in the rural areas (either at a Thusong Service Centres, Business Development Centre or rural towns) to ensure regular testing of vehicles and roadworthiness of the transport operations.

There is an urgent need to re-evaluate the regulatory mechanisms for light delivery vehicles (lorries/trucks) to ensure compliance with road safety standards of all the vehicles providing an alternative to normal public transport services. These mechanisms are essential to regulate the heavy freight as well.

Transport Forums will be established in rural areas to identify and prioritise rural road upgrading/maintenance programmes, as well as promoting safety training in the process of improving rural road quality and visibility.

The national, provincial and local governments, in conjunction with TETA (Training and Education Transport Authority), will undertake community needs assessments, safety audits, planning and implementation of community driven safety methods and technologies, in terms of enhancing access, mobility and safety.

Strategic action	**C1. Implementation of rural Current Public Transport Records (CPTRs) and operating license strategies (OLSs).**
Supporting and/or qualifying actions • Provide training and financial assistance for preparing rural CPTRs, OLSs *(*see Action D1) and Provincial Land Transport Planning Frameworks. • Ensure consistency and compatibility with the Rural Transport Strategy for South Africa (RTSSA) and Development Strategy and with relevant provincial strategies and planning processes.	
Strategic action	**C2. Development of adapted vehicle licensing and traffic safety regulations to facilitate combined passenger and freight services**
Supporting and/or qualifying actions • Promote specially designed vehicles for passenger and cargo safety • Build capacity to manage operating licenses and enforce regulations • Facilitate the provision of credit to mechanics to set up rural workshops	

Modified lorry for passenger transport for deep rural areas with difficult road conditions

A technology shown above has to be certified by the SABS for safety and must conform to the road transport operational standards. Other improvements could be done on this vehicle for multi-purpose activities, in particular for cargo.

4.5 CAPACITY BUILDING AND MONITORING

The range of capacity building actions that need to be undertaken to strengthen and – where necessary – redirect the provision of rural transport infrastructure and services is quite extensive. This is not only because of the technical and managerial weaknesses of some of the key governmental service delivery agents – especially rural district councils and municipalities – but also because of the historical neglect of rural transport planning and regulation, and the need for significantly enhanced community, women and SMME participation in both the planning and the delivery of rural transportation.

Many of the capacity building actions involve the improved auditing of current conditions, and the development of improved information bases and documented plans, that will also assist with the monitoring and inter-governmental coordination of service delivery. However, there are also specific monitoring actions that should be taken to assess alignment with national and provincial transport strategies, and evaluate progress in terms of service delivery targets. Improved alignment with IDPs should also be pursued through the development of compatible rural transport and spatial planning procedures.

At a national level, the Accelerated Shared Growth Initiative (AsgiSA) and the Joint Initiative for Priority Skills Acquisition (JIPSA) with regard to skills in the transport sector, will inform the interventions needed to ensure the effective implementation of the rural transport strategy.

Strategic action	**D1. Dissemination of guidelines and tools for rural transport planning, implementation and auditing**
Related NLSTF action: *Action 1:* Capacity-building will be implemented and tools will be provided for rural transport planning, implementation and auditing *Action 2*: The NDOT will disseminate requirements, guidelines and planning-support tools for rural transport planning	
Supporting and/or qualifying actions • Provide training and financial assistance for preparing rural CPTRs, using the guideline on Non-metropolitan Current Public Transport Records (TPR4) as a basis • Adapt the Requirements for the Preparation of an Integrated Transport Plan (TPR3) with reference to rural transport conditions and strategic directions • Develop a streamlined strategic auditing mechanism that will obtain automatically updated information on transport-related IDP projects from the IDP Nerve Centre and other inter-departmental monitoring and evaluation initiatives - see Action D7.	

Despite all the intense effort that has been recently devoted to the production of district and municipal IDPs, it is evident that there is no consistent “spatial logic” underlying the prioritised IDP projects. The IDP spatial frameworks are in most instances far too general to ensure coordinated spatial targeting of infrastructure and service delivery. There is clearly a need for s*trengthened or adapted rural spatial*

planning procedures to support the development of a "logical hierarchy" of nodes and linkages—typically with bigger/higher order facilities located at centrally located nodes, hubs or high-demand areas, linked to smaller, lower order nodes and periodically operated facilities serving the peripheral or low-demand areas.

Strategic action	**D2. Development of guidelines to undertake integrated rural access, transport and spatial planning**[7]
Related NLSTF action: *Action 1.* A guideline linking the rural road, in particular intermediate road infrastructure and transport planning processes will be developed. This will aim to strengthen the integration of rural transport plans and IDPs *Action 2.* Capacity-building for integrated rural access planning will be implemented among the municipalities, institutions and relevant entities responsible for service delivery	
Supporting and/or qualifying actions • Capacitate PIMMS Centres[8] in each rural district with guidelines and training for the integration of rural transport planning in the IDP process • Liase with the Department of Land Affairs with regard to a coordinated set of guidelines for rural spatial and transport planning • Issue each rural local and district authority with a comprehensive a CD-ROM-based guide or a toolkit on Rural Access Planning[9], and provide supporting training sessions, which are linked to a (pilot) project. • Launch a promotional campaign built around the theme of **Sustainable Rural Access**, aimed at showcasing and promoting applicable "best practices"(see D4)	
Strategic action	**D3. Promotion of labour-based methods of infrastructure provision**
Related NLSTF action: Various *labour-based methods* will be promoted as part of the rural transport development programme to facilitate job creation and poverty reduction	

7 Given that rural spatial planning is not one of the DOT's core responsibilities, the strategy initiatives in this area should link closely with the relevant initiatives of DPLG and the Department of Land Affairs, as well as those of provincial spatial, rural and/or regional planning departments.

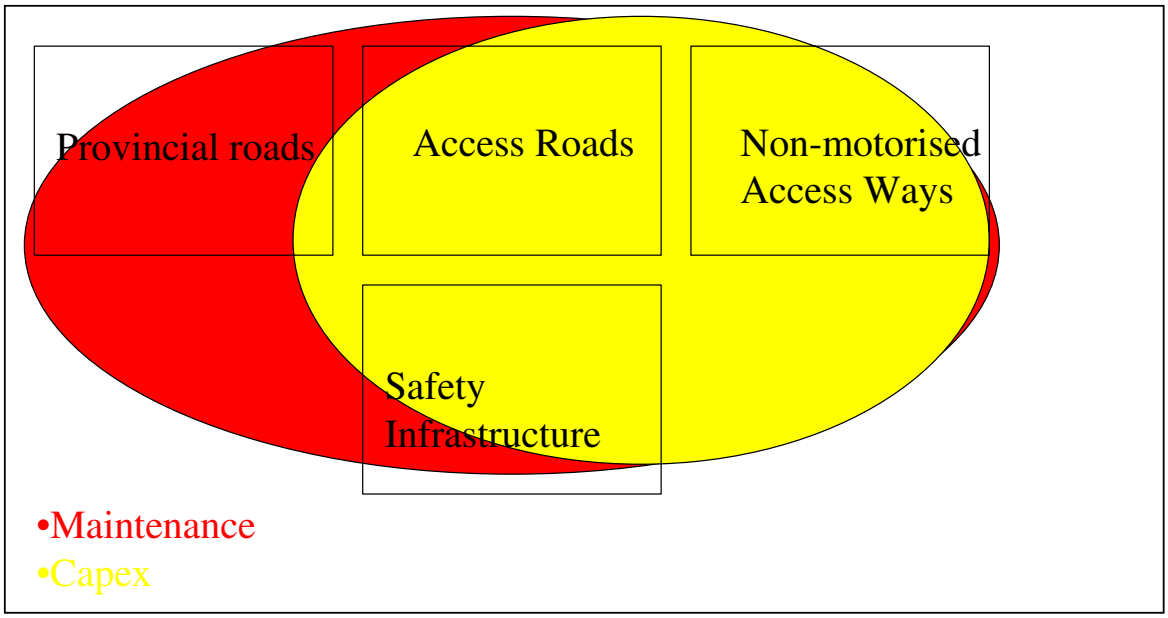
8 The Planning and Implementation Management Support System (PIMSS) is an initiative by the Department of Provincial and Local Government (DPLG), supported by CSIR technology and funding from the Department for International Development (DFID). The main components of the PIMSS are: i) district-level Centres (PIMS-Centres); and ii). PIMSS.NET - a system designed to assist municipalities with information in support of Municipal IDP and Implementation Management.

9 The draft CD contains strategic guidelines and an inventory of innovative rural transport development initiatives that can be customised for different circumstances. Some simplification and adaptation is required. It has also been proposed that the revised CD should include good links to relevant international websites.

Supporting and/or qualifying actions

- Develop the capacity of districts to fund and implement labour-based provision of transport infrastructure
- Partner with local universities to develop materials on labour-based methods
- Undertake workshops with local authorities on labour-based methods

Scope of application of labour intensive construction and maintenance methods



It must be emphasised that the focus on safety infrastructure and rural access roads (including low-volume provincial and municipal roads) is based on the relatively low levels of investments currently taking place in these types of infrastructure and their suitability to labour-intensive construction and maintenance. This does not mean that labour intensive construction should not be applied to more highly trafficked provincial roads. In fact, this is seen as a natural progression from the initial focus to the application of this approach across all types of road infrastructure. For instance provinces such as KwaZulu-Natal and Limpopo, among others, are already using Vukuzakhe and Gundo-Lashu labour intensive construction programmes in the provision of higher volume road infrastructure, not limiting these to access roads development only.

South African National Roads Agency Limited's (SANRAL) Community Development Programme

Community development Programme is one of the SANRAL's important performance goals, with the emphasis being on creating access and mobility in rural areas. The expenditure under this programme is aimed at adding value for the users f road infrastructure and improving access to facilities in the rural poverty nodes. The projects under this programme involve upgrading of rural access roads, pedestrian facilities and minor bridge construction. The identified projects include five (5No) projects in the O.R. Tambo District Municipality of which four (4No.) are as a result of the research done by the Human Science Research Council (HSRC).

Rural Access (Social) Roads

A significant proportion of the rural population is adversely affected by poor accessibility and mobility. This reflects the skewness of resource allocation in the country and impacts on the quality of life in rural communities. Personal travel consumes a substantial amount of time in such areas and negatively affects potential productivity. Access to shops, post offices, schools, clinics and the greater road network are important. Improved roads in remote areas allow local produce to be sold at the markets. Taxis and buses can provide mobility and health costs can be reduced because of improved access to clinics and for emergency vehicles. Mobile and special needs services can also be introduced. The government has identified a number of deep rural areas where such accelerated service delivery has been given priority.

Access roads are/have been funded through a number of funding streams across the spheres of government including Poverty Relief allocation to SANRAL, the Community Based Public Works Programme, Conditional Infrastructure Grants at provincial and municipal levels and equitable share allocations in support of key government programmes such as the Integrated Sustainable Rural Development Programme (ISRDP), the Urban Renewal Programme (URP) and the Expanded Public Works Programme (EPWP). Whilst useful, these funding streams are not (or have not been) sufficient to deal with the demands for access roads development across the country, particularly in remote rural communities and urban fringes.

The DOT in partnership with roads authorities is planning to establish an access roads development programme that will be used as a vehicle to target resources towards the elimination of access road backlogs. This programme will be spread across the country focusing on areas of poverty, remote rural communities, and settlements in urban fringes. This process will be integrated with the current initiative that promotes the development of labour intensive construction programmes in each of the provinces; and the maximisation of labour intensity in the delivery of road infrastructure for both capital and maintenance programmes and projects.

Strategic action	**D4. Facilitation of community participation including gender mainstreaming in all aspects of rural transport provision**

Related NLSTF action:
SMMEs in the rural transport sector, particularly new entrants from previously disadvantaged communities, will be nurtured

Supporting and/or qualifying actions

- Facilitate the sensitisation of communities and their organizations in respect of self-help works on community transport infrastructure. Establish a rural transport and development fora.
- Facilitate the provision of technical assistance to communities and their organizations for planning, prioritising, funding and management of un-proclaimed transport infrastructure.
- Facilitate training on integrated low cost rural accessibility engineering solutions, for sustainable earth roads and drainage management programme.
- Develop guidelines on low cost engineering techniques for the provision and management of sustainable rural accessibility by identifying projects with a high labour-absorbing capacity and implement them by using labour intensive techniques.
- Facilitate the contracting of construction, maintenance and rehabilitation of transport infrastructure to locals

Strategic action	**D5. Development of feasible systems for the classification, registration and monitoring of all types of rural transport infrastructure**

Supporting and/or qualifying actions

- Develop an inclusive rural transport infrastructure classification system
- Develop and disseminate guidelines for the use of remote sensing and other innovative methods to record information on the alignment and condition of access roads, tracks, bridges, etc., focusing initially on an inventory of “trouble spots”
- Link with inter-departmental, provincial and municipal initiatives to develop inclusive infrastructure auditing and management systems

Strategic action	D6. Development of strategic monitoring and evaluation systems.
Supporting and/or qualifying actions • Link with the inter-departmental monitoring and evaluation initiative for assessing performance in terms of the ISRDP and IDPs. • Establish links with the IDP Nerve Centre[10] and undertake regular audits of rural transport projects identified in terms of local IDP processes • Link with, and obtain information on rural public transport operations from the National Transport Register Incorporate the information from the above sources and from infrastructure information systems (see Action D6) in terms of a strategic rural transport monitoring and evaluation system.	

5. FUNDING SUSTAINABILITY

5.1 Overview

In the past the infrastructure grants were managed by different departments, uncoordinated and fragmented. Municipalities were often not in control of infrastructure projects within their area of jurisdiction. This defeated the purpose of cost effective and integrated service delivery.

It is important to ensure that there is a real demand for the Rural Transport Projects and that the benefits of the projects age maximised. Projects need to be properly planned and must involve all relevant stakeholders particularly community members who are the users of the services. The sustainability of funding starts with the Integrated Development Planning process and ensuring that a project is feasible.

5.2 Transport Lekgotla Resolutions

Transport Lekgotla Framework for Convergence has made the following resolutions with regard to Rural Transport Development Programme:

- Implementation of the rural transport strategy by June 2005 (start date);
- Incorporate rural accessibility planning into spatial development and transport planning in line with Millennium Development Goals;
- Integrate existing transport initiatives into rural development programmes and non-motorised infrastructure; and
- Align budget for intervention for the current MTEF Cycle.

[10] DPLG is in the process of establishing an "IDP Nerve Centre". This will provide a coordinated bottom-up flow of IDP project information that can be used to monitor and assess the degree of alignment with provincial and national government infrastructure investment and development priorities.

Additional funding of R30 million per year over the MTEF period be approved to implement the Integrated Rural Transport Strategy, with a focus on non-motorised transport projects, co-ordination of rural transport operations and strengthening of rural freight and logistical services. The outcome of the Rural Transport Strategy will contribute to the overall government objective of having a single comprehensive and integrated service delivery plan. This will strengthen other programmes such as sustainable human settlements, the acceleration of rural infrastructure delivery particularly regarding the maintenance of rural access roads, the social sector's priorities of making essential basic services more accessible and stimulating the rural economy.

Detailed Implementation plans for the integrated rural mobility and access project (IRMA) were developed and are being piloted in three integrated rural development programme (ISRDP) nodes: Sekhukhune, OR Tambo and Umkhanyakude. Projects include the upgrading of rural access roads, designing a transport brokerage system to co-ordinate passenger transport and rural freight services, improving public transport facilities, designing and construction of non-motorised infrastructure, supplying of bicycles to schools and designing SABS approved Animal Drawn Carts.

5.3 Municipal Infrastructure Grant (MIG)

The Municipal Infrastructure Grant (MIG) is a new municipal infrastructure funding arrangement. It combines all the existing capital grants for the municipal infrastructure into a single consolidated grant. It is a consolidation of a number of previous infrastructure grants and is intended to eliminate backlogs to basic services in communities. This intervention will have significant impact in reducing the backlog of access roads within communities. What remains however are access roads that link deep rural communities, and access roads that link communities with the main road network. To address this challenge and complement other funding streams. . The MIG funds can only be used for basic level of service for the following categories.

- Households *(Electricity, water supply, sanitation, stormwater management, municipal roads, refuse removal and street lighting)*
- Public Municipal Facilities *(Municipal Public Transport Facilities, Municipal Airports, pontoons, pedestrians and bicycle paths)*
- Emergency Services such as fire stations
- Community Services *(child care facilities, beaches and amusement facilities, cemeteries, local sports facilities and municipal health services)*

The MIG has the following service coverage targets

- Access to basic services
- Decentralised service delivery
- Poverty Alleviation
- Local Economic Development
- Empowerment of Municipalities
- Consolidating funding arrangements

The DPLG is responsible for managing MIG and it co-operates with other departments associated with municipal infrastructure through the MITT such as

- Department of Public Works
- Department of Water Affairs and Forestry
- Department of Transport
- Department of Sports and Recreation South Africa
- Department of Minerals and Energy
- Department of Housing
- Department of Environmental Affairs and Tourism

A Technical Task Team called Municipal Infrastructure Technical Task Team (MIT3), which composed of the same departments mentioned above, supports MITT.

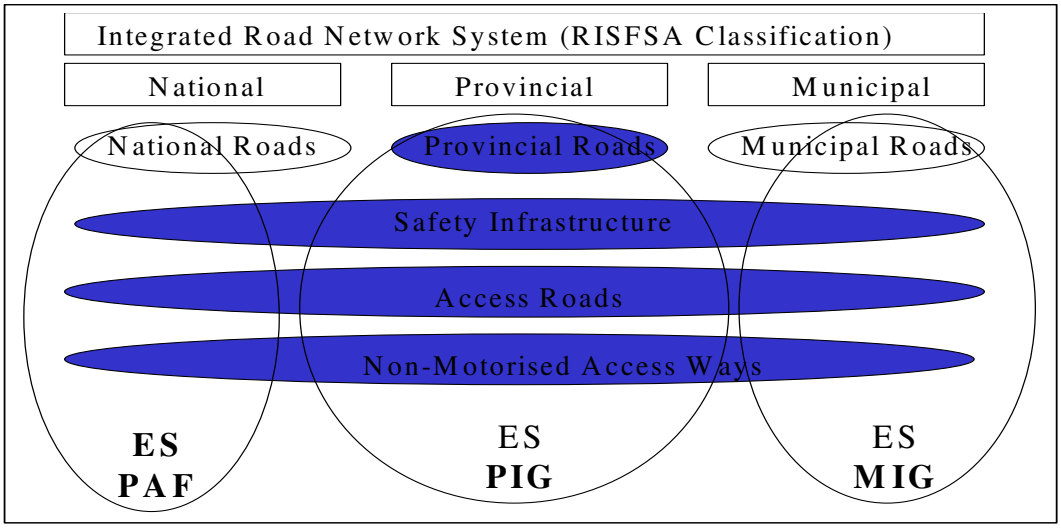
As for with other National Departments the Department of Transport together with Provincial transport counterparts retain the policymaking and regulatory functions in terms of the municipalities. The DOT also retains the constitutional right to intervene and support municipalities. The Department of Transport specific responsibility in terms of the MIG includes the following,

- Policymaking including setting norms and standards for the sector.
- Provide sector-planning support to municipalities
- Monitor the performance of municipalities in the provision of sector infrastructure and compliance with sector conditions.
- Ensure that funds allocated for sector infrastructure are properly spent.

5.4 Scaling-up of EPWP

Beyond capital expenditure there is significant scope for increasing the EPWP in the maintenance of infrastructure. As the asset base of provinces and municipalities increases, there is a growing need to meet the maintenance needs of these assets. However, there is a general problem of insufficient budgetary allocations for maintenance across all three spheres of government. Without adequate provision for maintenance, the sustainability of the assets created is threatened.

Additional allocations for maintenance of roads through the scaling-up of the EPWP will be a starting point in addressing the challenge of maintenance. The added advantage lies in the fact that there is more potential for longer-term, more sustainable employment periods for members of the community in maintenance than in construction, where employment is only for a limited duration. A case in point is the Zibambele routine road maintenance programme in KwaZulu-Natal, which offers long-term, renewable maintenance contracts.



The focus in terms of funding will be on the Provincial Infrastructure Grant (PIG) as a funding mechanism for scaling up the EPWP in the roads sector. Provincial roads authorities will also be encouraged to focus their equitable share expenditure on this approach, in order to maximise their contribution potential to the Government objective of job creation. It is however felt that the PIG framework should be enhanced to target funds to the roads sector, based on the potential demonstrated in this proposal for achieving large-scale employment creation.

The MIG should play an equally critical role at municipal level and there is a pressing need to increase the percentage share of roads funding in view of the potential demonstrated in this proposal.

However, given the widespread ranges in capacity at municipal level to absorb additional funding, it is proposed that at this stage the municipalities should apply for funds for scaling up the EPWP through the provinces. At national level, SANRAL will be required to allocate more resources from their fiscal allocations to job creation through labour- intensive methods. The MIG allocated to municipalities by a formula mechanism. The basic elements for calculating is summarised below.

- $MIG_{(F)} = B + P + E + N + M$

- **P** Public municipal service infrastructure (new and rehabilitated) 15%

- **B** Basic residential infrastructure (new and rehabilitated) 75%
  Proportional allocations for water supply and sanitation (72%), electricity (0%), roads (23%) and 'other' (5%) (Street lighting and solid waste removal)

- **E** Allocation for social institutions and micro-enterprises infrastructure 5%

- **N** Allocation to all nodal municipalities 5%

- **M** Negative or positive allocation related to past performance of each municipality relative to grant conditions

Note that the **P component** of the formula caters for the Public Transport Facilities, Pedestrian paths, pedestrian footbridges, bicycle paths and parking areas and safety Infrastructure. It remains a challenge for municipalities to identify and implement these types of projects.

Below shows that labour-intensive road maintenance can be applied through the entire spectrum of road infrastructure at provincial level. For technical reasons, labour-intensive construction is focused on the areas of safety infrastructure, access roads, low-volume provincial and municipal roads and non-motorised access ways.

5.5 Rural Rail Branch lines

Rail Branch lines are critical for connecting rural areas with main corridors, thus stimulating growth in areas of under-investment. These lines also referred to as the low and light density lines (LLDL), have been a lifeline of some agriculture and forest products. They also include diverse small and infrequent loads, also serving as a connecting service between rural hinterland and main corridors. The use of rail branch-lines for the penetration of rural areas should be investigated in terms of feasibility, and feeder roads to larger and more developed routes should also be developed to encourage greater levels of system integration.

The discussion on the restructuring of branch lines occurs, and should take cognizance of the broader discussion of the restructuring of the vertically integrated, publicly owned (Spoornet) rail sector as well as the national freight and inter modal strategies. The primary focus of Spoornet has been on the main or core network, that is, the high-density lines, lines of strategic and / or operational importance, international lines and connections to other parts of the country's infrastructure, such as ports. It should however be recognized that branch lines may need to operate in ways that differ substantially from operations on the main rail network.

Provision of funding and/or subsidisation for service provision technologies to be employed in the movement of goods and people should be considered on a case-by-case basis and as part of integrated development projects in rural areas. Such technologies would include “bakkies”, lorries and other motorised forms of transport, as well as non-motorized transport, such as donkeys, oxen, horses and carts. Non-motorised modes of transport could enable farmers to move their produce to a central depository where larger and faster modes of transport are available to transfer farmers and their goods to higher order centres.

Focus on creating awareness and attracting attention of both public and private sector funds is critical considering potential scenarios from branch line restructuring. These include:

- Possibility of no or limited bidder competition (not a lot of buyers to drive prices up)
- High risk in predicting revenue (previous underperforming and closed lines)
- Poor awareness and capacity to finance transactions: No/limited previous private sector railway experience

In the absence of further investigations and specific estimates as outlined above, the following table provides a preliminary outline of possible funding sources, types of expenditure and possible levels of expenditure (in terms of broad “orders of magnitude”). It also provides a basis for linking the capacity building and other supportive initiatives to the main categories of rural transport delivery projects and programmes.

5.6 Public Transport Strategy and Action Plan

The Public Transport Strategy and Action Plan has estimated about R3bn for the implementation of Phase 1 of the Integrated Public Transport Network in six (6No) rural districts. The rural transport development programme’s action plan, which will be guided by the Integrated Rural Mobility and Access(IRMA) concept is focussing on the following strategic interventions

- Upgrading and Maintenance of Rural Access Road Corridors
- Development of Non-Motorised Transport Infrastructure Network
- Rural Freight and Logistics Support
- Provision of Periodic scheduled District Public Transport Service
- Provision of Public Transport Facilities

It should however be noted that the Public transport Action plan does not cover funding requirements for the implementation of the rural transport strategy or its rural implementation programme. It has only provided for the technical planning of the six rural district municipalities for rural access network connection.

Table 6 : Rural Transport Strategy Cost Estimate (One Rural District)

STRATEGIC INTERVENTIONS	Year 1	Year 2	Year 3	TOTAL
Key access road connection	R 6 M	R 6 M	R 7 M	R 19 M
Maintenance and operations	R 3 M	R 3 M	R 3 M	R 9 M
Ensuring NMT infrastructure	R 6 M	R 6 M	R 6 M	R 18 M
Human capacity development programmes	R 2 M	R 2.5M	R 3 M	R 7.5 M
E-enables SMME cluster and networks	R 3 M	R 3 M	R 2 M	R 8 M
Rural freight and logistical support	R 2 M	R 4 M	R 3.3 M	R 9.3 M
To t a l	R 22 M	R 24,5 M	R 24.3 M	R 70. 8 M

The above cost estimates would apply to all rural district municipalities in the ISRDP and non-ISRDP nodes. This figure does not include the supply of 1 million bicycles in support of scholar transport.

5.7 Summary of Infrastructure Capital Finance through Grants

Public Transport Infrastructure & Systems Fund (PTIF), The purpose is to provide for accelerated planning, establishment, construction and improvement of new and existing public transport and non-motorised transport infrastructure and systems. The PTIF is dedicated to Public Transport and at this stage the allocations are based on applications and priority statements in support of the FIFA Soccer World Cup in 2010. This arrangement makes it difficult for the municipalities to plan their Public Transport systems over a long period.

Provincial Infrastructure Grant, (PIG), The purpose is to fund the construction, maintenance, upgrading and rehabilitation of new and existing infrastructure in education, roads, health and agriculture.

Municipal Infrastructure Grant (MIG), The purpose is to supplement capital finance for basic municipal infrastructure for poor households, micro enterprises and social institutions. The MIG is paid to all municipalities and is distributed by formula and is intended to provide basic infrastructure to the poor. The MIG includes a funding window for public municipal services, which includes public transport.

Both the **PTIF** and **MIG** roles in regard to Public Transport Infrastructure need to be clarified. The MIG formula is currently being reviewed and the provision of Public Transport Facilities (taxi and bus ranks), Non-Motorised Transport Infrastructure (Pedestrian and Bicycle Paths and Bridges) can be taken to consideration.

Table 7: Summary of Infrastructure Capital Finance through Grants

Grant	2007/08 (R'000)	2008/09 (R'000)	2009/10 (R'000)
PTIF	1,174,000	3,170,000	2,325,000
PIG	6,164,025	6,846,707	7,996,707
MIG	7,548,564	8,053,090	9,130,230
Totals	**14,886,589**	**18,069,797**	**19,451,937**

6. INSTITUTIONAL ARRANGEMENTS

6.1 Institutional guidelines

The involvement of civil society is viewed as essential to address social, developmental and economic issues, all of which are related to the transport sector. Partnership with civil society will therefore be promoted at each sphere of government or with transport authorities through the establishment of transport forums and transport advisory committees that represent the providers and beneficiaries of the overall transport system as well as any other stakeholders or statutory bodies which may have an interest in, or are affected by the transport system.

Department of Transport proposes the establishment of transport forums at Local and District Municipalities by providing standard guidelines.

A District Transport Forum is to be established in each of the forty six (46) district municipal areas of the country to serve as an advisory body to the District Municipality. The District Transport Forum will comprise members who shall be nominees from the Local Transport Forums. The primary objectives for the establishment of Transport Forums are:

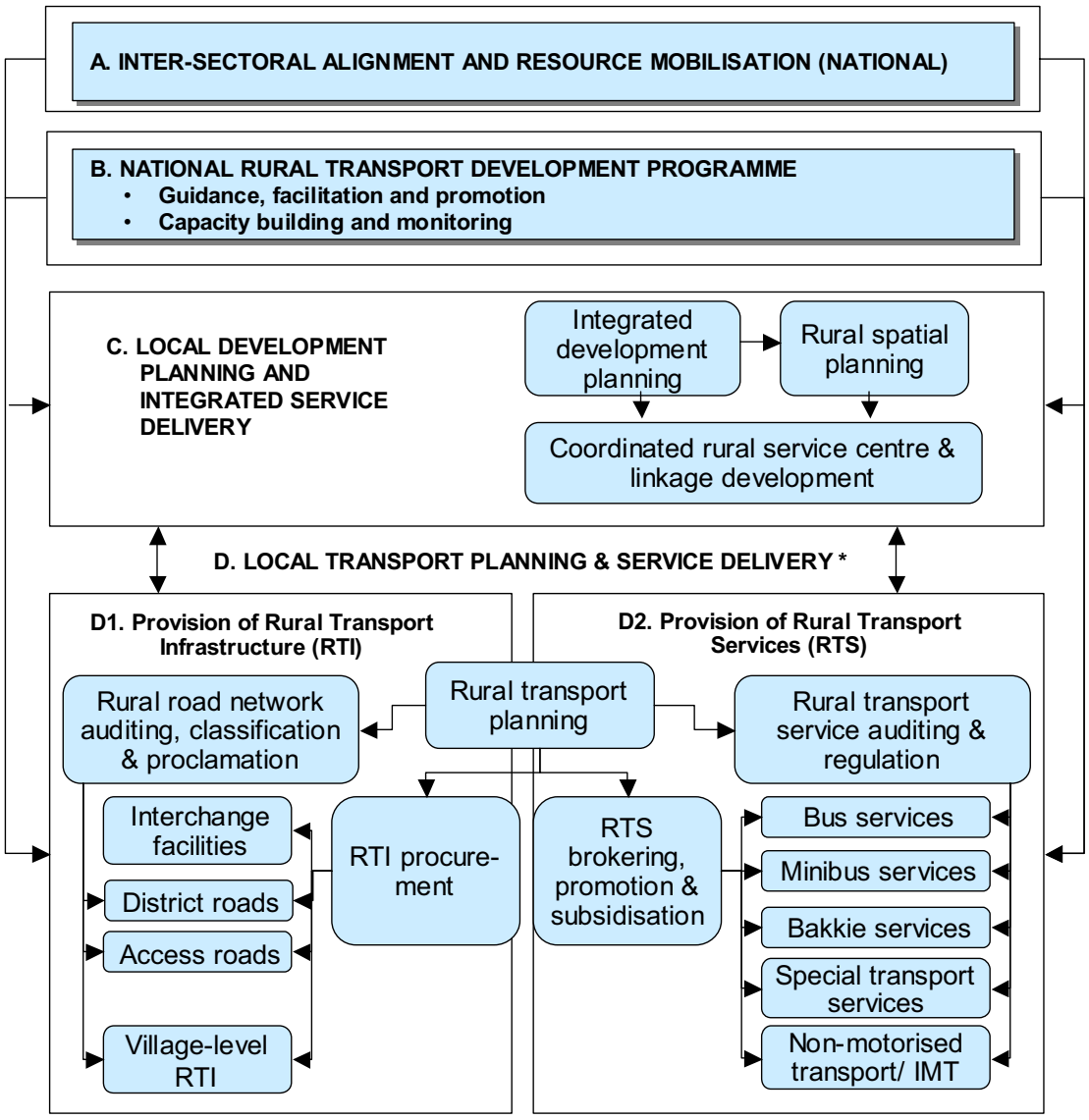
- To ensure continuous communication and promote sound working relations amongst all the relevant role players (especially public transport operators and transport users) and the various levels of government.
- To eliminate all forms of violence in the transport industry by promoting unity and integration.
- To eliminate unfair, unsafe and predatory business practices that may lead to conflict in the transport industry.
- To co-ordinate the provision of transport facilities and the orderly use thereof.
- To facilitate the planning, implementation and monitoring of an effective and co-ordinated public transport system.
- To advise the appropriate Department within the Government on transport matters and to ensure that good working relations continue between the public transport operators, transport users, businesses and government authorities.
- Identify and prioritise public transport infrastructure needs and requirements
- Making recommendations with regards to permit applications.
- Mediating conflicts within the transport industry and investigating grievances regarding the transport industry
- Facilitating human resource development and capacity building in the transport industry
- Assisting authorities to implement the Dept of Transport legislation and regulations.

6.2 Clarification of institutional responsibilities

Figure 4 is a preliminary guiding framework aimed at clarifying inter-governmental mandates and responsibilities with respect to rural transport. The different "levels" can be explained as follows:

- At Level A, the DOT will be mainly to engage with other national departments, and to facilitate the establishment of relevant provincial coordinating clusters.
- Main focus of NDOT funding promotion and delivery facilitation activities will be at Level B.
- Most of the planning and service delivery activities at Levels C and D, will be undertaken jointly with other agencies, allowing for different roles to be performed by different partners.

Figure 4: Framework for Inter-governmental alignment of rural transport and developmental interventions



6.3 Service Delivery Trends

Land transport service delivery is undergoing a huge change from historically distorted, supply-driven system to a demand or needs driven system that caters for the basic needs of its users. Whilst in general governments worldwide, based on perceived benefits, are moving towards a greater role for the private sector in the provision of government services, there is evidence that if inefficiencies in the government system are removed, governments can provide services of similar quality to the private sector. Where the private sector is appointed to provide services, careful consideration needs to be given to its role and the amount of risk that will be transferred. As custodians of public interest, government should always ensure that the benefits of communities and road users are maximised, while risks and costs are minimised. A decision to involve or not involve the private sector in the provision of road infrastructure and/or services should be informed by the affordability of that service, the capacity to provide the specific service, efficiency in providing the service, meeting customer requirements and the sustainability of the model being considered.

The primary responsibility of the public sector is the development of policies and regulations. In addition, government develops frameworks, strategies and plans for the implementation of policies and is also responsible for the facilitation of the implementation of the policies. Depending on the adopted service delivery model i.e. government, commercial public entity or private sector delivery, such facilitation of implementation can vary from direct participation in delivery processes to delivery management and oversight. Generally it has been found that the private sector gets more involved in the delivery of economic infrastructure and services while government has direct responsibility for the provision of social infrastructure and services.

In the case of public sector road service delivery, co-ordination among the spheres becomes very important in order to integrate roads development planning and implementation. To achieve this, the roads sector has the Committee of the Minister and MECs of Transport (MINMEC), which is supported by technical sub-structures.

This structure was created with the intention of encouraging co-operative governance, integrated planning and coordination of processes. The MINMEC sub-structures have however recently experienced several challenges, which have led to a number of the substructures being immobilized (or discontinued). This has had a negative impact on the co-ordination of roads development planning and delivery, which in turn has resulted in the duplication of functions and the fragmentation of processes. It would be useful to review the institutional structure of MINMEC and its sub-committees in order to strengthen its undoubtedly critical role towards the integration of service delivery within the transport environment.

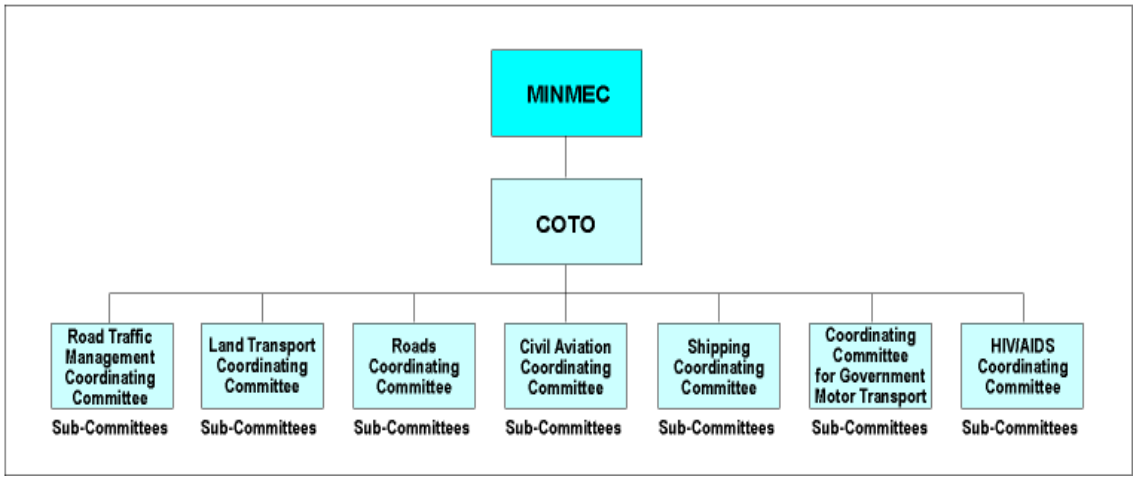


Figure5: MINMEC Structure

The current institutional capacity for the delivery of roads in South Africa is variable, but in the main, dysfunctional. The three main spheres of government, namely, national, provincial and municipal, manage approximately 752 700 km of rural and urban road network (classified and unclassified)[11].

National roads are the responsibility of central government's Department of Transport. However, the DOT does not possess an in-house implementation arm. Act No. 7 of 1998 established the South African National Roads Agency Limited (SANRAL) as a statutory company responsible for the planning, design, construction, operation, management, control, maintenance and rehabilitation of national roads in South Africa. SANRAL operates in four regions under the leadership of a CEO, who is directly accountable to the Minister of Transport. Delivery of roads is carried out through outsourcing to the private sector through a variety of service delivery models.

Provincial roads. Eight of the nine provinces operate on a traditional public service delivery model of road authorities. The road authority carries out all the road delivery functions, such as policy formulation, performance management, contracting and service delivery. The road authorities outsource most of their delivery functions to the private sector (e.g. design and construction), but routine and special maintenance are generally conducted in-house. Limpopo Province has switched to a combination of the traditional road authority structure for its maintenance arm, and a Roads Agency structure for the remainder of its functions – while still keeping the Works Department, responsible for construction activities, separate.
The delivery of provincial roads is extremely variable in execution. In some provinces, such as Gauteng and the Western Cape, the only barrier towards an effective delivery of the provincial roads network is a chronic shortage of funds. On the other hand, there are other provincial authorities in which conditions, such as bloated, unskilled and inefficient staff structures, and a lack of professional, managerial and technical skills prevail.

[11] Classified = Numbered = Proclaimed =Declared = Gazetted = Formal

Municipal roads. The roads delivery function in this sphere of government perhaps requires the most attention in terms of institutional arrangements. Much confusion exists regarding the co-ordination of and responsibility for the planning and delivery of the primary metropolitan road networks. There are several reasons for this situation – one of which is the fact that road networks must perforce act in an integrated fashion and, with many municipal road networks having both provincial and national road components within their jurisdictions, the "higher" spheres of government have tended to dominate.

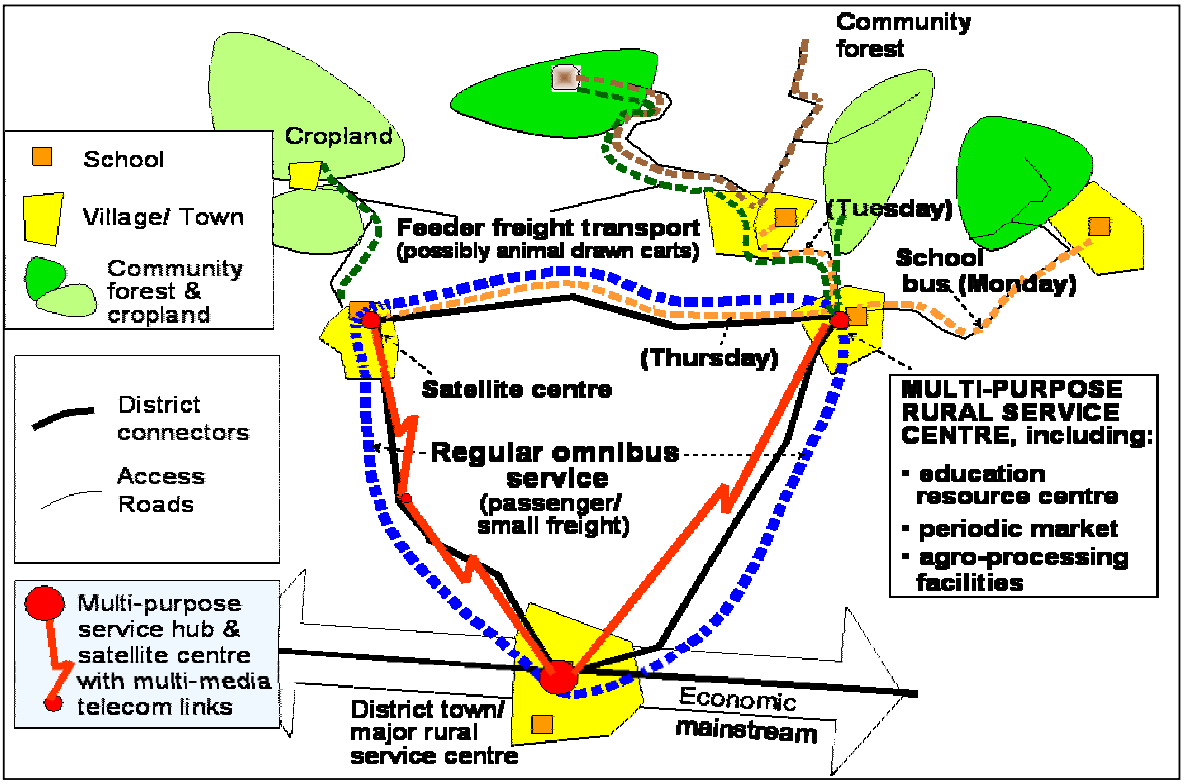
Once again, there are various approaches to the delivery of municipal road networks. Most municipal roads authorities have a traditional roads authority structure under ownership of the Council. Some have stronger maintenance teams that can handle light construction activities, while others outsource all but routine maintenance activities. The City of Johannesburg Metropolitan Municipality has established a Roads Agency as its delivery arm, under the guidance of a Roads Agency Board. The ownership of roads still resides with the City, but the Johannesburg Roads Agency is responsible for the delivery of roads, based on a performance contract that it has with the City's contracting unit.

Given this context, guidelines are needed to capacitate provincial and local officials to deal with operator associations, as well as the interests of different user groups and regulators.

Strategic action	**D7. Dissemination of institutional guidelines for the provision of rural transport infrastructure and services**
Supporting and/or qualifying actions • Develop and disseminate guidelines on different institutional options for the provision of rural transport infrastructure, focusing specifically on the interface between provincial and municipal authorities • Undertake a strategic review of the range, inclusiveness and practices of rural transport operator associations • Provide guidelines on mechanisms for consulting and negotiating with all the key rural transport operator associations, user groups and regulators • Develop and disseminate guidelines on possible institutional arrangements for establishing community-based organisations for rural transport infrastructure development and maintenance.	

7. RURAL TRANSPORT STRATEY ACTION PLAN (2007- 2014)

The Rural Transport Strategy for South Africa (RTSSA) specifically indicates a need to "move beyond roads" and start exploring innovative and/or integrated interventions to address rural access and mobility needs in a sustainable manner. The figure below illustrates the original guiding concept that underpins South Africa's Rural Transport Strategy.



The Rural Transport Strategy Concept Diagram

The diagram illustrates the typical South African rural context of:

- A district town linked to the "economic mainstream".
- A poorly connected set of villages and hinterlands with under-utilised human capital and physical resources (e.g. croplands or community forests).

7.1. Intervention map

In order to test this conceptual framework, the Department of Transport (DOT) initiated pre-implementation studies as a basis for implementing the RTSSA, under the banner of the ***Integrated Rural Mobility and Access (IRMA)*** demonstration projects. This process is guided by a set of spatial prioritisation criteria:

- Types of settlements (i.e. deep rural, clustered, farming or mining areas, etc)
- Average travelling distance
- Existence of public transport
- Existence of non-motorised transport
- Basic minimum level of infrastructure
- Cell phone signal coverage
- Dominant economic activities
- Local municipality support and understanding (capacity)

The intervention areas will accordingly comprise the following outputs:

- Rural Public Transport Action Plan
- Rural Freight Logistics Action Plan
- Non-Motorised Transport Action Plan
- Rural Access Road Action Plan

7.2 RURAL PUBLIC TRANSPORT ACTION PLAN

7.2.1 Problem Statement

Rural areas in Africa in general and also in South Africa are going through a process of economic and social restructuring, partly characterised by de-agrarianisation and diversification of livelihood strategies. Poor people's livelihoods increasingly straddle rural and urban locations, and the significance of rural trade and agro-processing is growing.

Accompanying this is an emerging transport service sector, connecting the rural trade centres or satellites to other higher order settlements within a region. In many cases however, transport links between the rural trade centres and the rural hinterland remains extremely unreliable, rendering access to services and emerging opportunities difficult, and thereby trapping communities in downward spiralling poverty

7.2.2 Strategic Objectives

The Department of Transport is currently piloting the Rural Transport Strategy under the banner of **Integrated Rural Mobility and Access (IRMA)** demonstration projects in three Nodal District Municipalities namely, Sekhukhune District Municipality in Limpompo Province; Umkhanyakude District Municipality in KwaZulu Natal Province and O.R. Tambo District Municipality in the Eastern Cape Province.

In addition to the above the DOT's Public Transport Action Plan (Phase 1: 2007-2010) has identified six rural district municipalities which form part of the Government's Integrated Sustainable Rural Development Programme (ISRDP) and include the IRMA District Municipalities as stated above. In terms of the National Spatial Development Perspective (NSDP), these rural district municipalities are characterized as areas with high social need index and simultaneously areas of development potential or in close proximity to economic opportunities. The six rural district municipalities are hereby given below,

- Sekhukhune District Municipality in Limpompo;
- Umkhanyakude District Municipality in Kwa Zulu- Natal Province;
- O.R. Tambo District Municipality in Eastern Cape Province;
- Ehlanzeni District Municipality in Mpumalanga Province;
- Thabo Mofutsanyane District Municipality in the Free State Province;
- Kgalagadi District Municipality in the Northern Cape Provinces

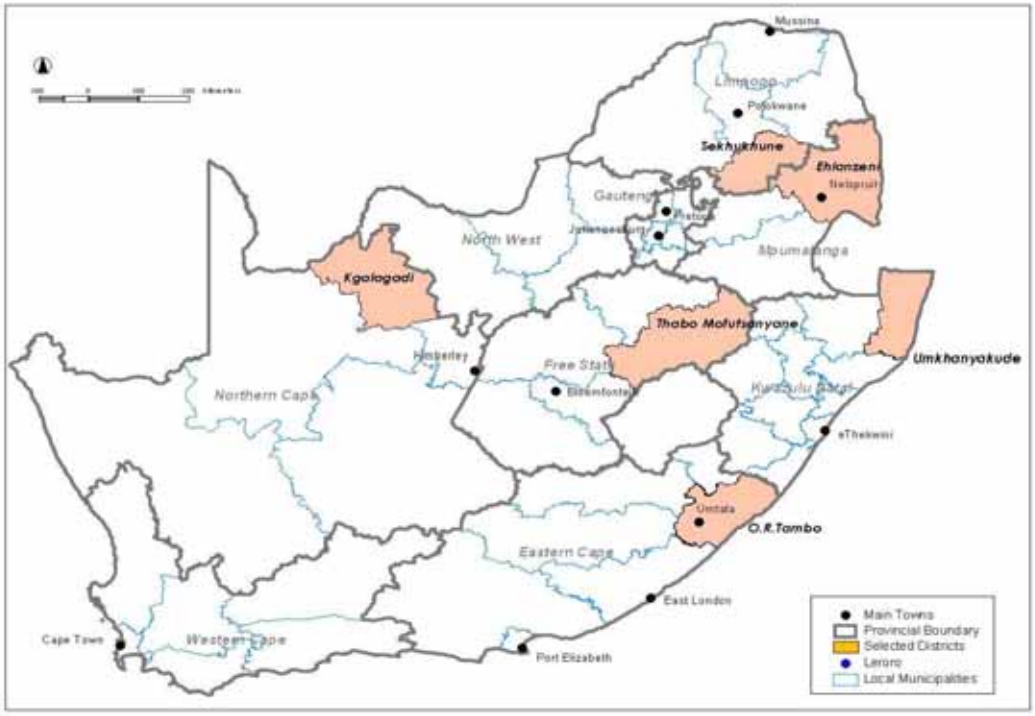


Figure 6 : The Six District Municipalities Earmarked for Rural Public Transport Action Plans and Interventions for Phase 1 ((2007-2010)

Intervention Area	Proposed Projects	Benefits to other sectors	Timelines
Development of appropriate rural public transport and subsidisation options	Assess the grants and loans that are likely to be provided to rural transport operators Explore the possibility of introducing appropriate technologies such as adapted rural/ multi-purpose vehicles Assess the current pattern, level and beneficiaries of those subsided public transport operations that originate from within deep rural areas Highlight the "worker/ peri-urban bias" of the current public transport subsidy system and promote the consideration of subsidisation options (including capital- and user-side subsidies) that would be more responsive to typical rural conditions, poverty-levels and trip purposes Investigate a supplementary or new form of subsidy system that is aimed at providing set-up funds or subsidised credit for developing appropriate means or transport (e.g. NMT and various types of support services (transport brokering, storage and logistical support, repair services, etc.	Improved access and mobility to Education, Health and economic opportunities.	2007-2010
Transport Brokering Service and Special needs contracting services	Pilot a number of *rural transport brokering services* aimed, *inter alia*, at providing an inter-linked set of demand-responsive transport services for addressing the full range of rural passenger transport needs, including selected special needs categories Develop a single provincial or district "hub" for transport brokering services – possibly in the form of a toll-free Public Transport Call Centre Establish an inter-governmental forum for special needs rural transport services Work with key sectors such as education, health[12] and social welfare to explore, for example, the development of a voucher-based or user-side subsidy system for the procurement of special needs transport services Develop relevant vehicle specifications and accreditation criteria (e.g. for adapted LDV, or truck-chassis vehicles that can transport sick people in a semi-reclining position)	Transport services for agriculture; access to health primary health care; access to Thusong Centres (MPCCS), etc	2007-2010

Promotion of combined passenger and freight services	Investigate and address relevant safety and regulation issues Explore the possibility of introducing adapted rural/ multi-purpose vehicles in terms of the Taxi Recapitalisation Programme Establish an acceptable term for these services (e.g. "omnibus" services), and prepare relevant contract specifications Issue contracts for pilot projects on multi-purpose vehicles in partnership with relevant sectors on a competitive tendering basis		2007-2010

7.3 NON- MOTORISED TRANSPORT (NMT) ACTION PLAN – SHOVA KALULA

7.3.1 Problem Statement

Poverty and geographical isolation has perpetuated the level of marginalisation of many communities living in abject poverty. The spatial fragmentation and dislocation come at a high transport cost that also limit the movement of people and goods. Micro-accessibility and threshold problems to main markets, ports, etc, have also been aggravated by the uncoordinated spatial dispersal of central places of economic activities.

The country's spatial development and town planning has left many rural and peri-urban communities in the cold, without any links between them and the urban settlements. The current city setting is predominantly designed to meet the needs of private cars with little room to promote the co-existence between the various modes of transportation. According to the National Travel Household Survey, walking and cycling make up 23% of the modal share, that is, a significant group of commuters walk and cycle to work. The study further indicated that 76% of scholars, including students, walk to education resource centres. Three million learners spend more than an hour walking to and from their places of learning. It has been indicated that 53% of the rural population rely on walking long distances to get to essential services and the most affected category is low-income households.

7.3.2 Strategic Objectives

To redress this isolation, especially from a developmental and access- oriented perspective, there are core problems and issues, which transport policies, strategies and related interventions must respond to:

- Rural poverty and underdevelopment in most urban areas, endemic inaccessibility and spatial-economic marginalisation from the economic mainstream;

- Historical backlogs and continuing under-investment in rural transport and related access infrastructure; and

- Bias towards roads, motorized transport and male-defined travel needs and a relative lack of "off-road infrastructure" such as paths and tracks for non-motorized transport modes, access needs of women and affordability issues.

The Department of Transport's Shova Kalula Programme aims to promote and maximize the use of Non-Motorised Transport (NMT) to enable communities to access social and economic opportunities at a lower cost. Shova Kalula also aims to create an enabling

environment that will mainstream bicycle transport into public the transport system through the provision of institutional support mechanisms. The main focus of this project is to promote cycling as a low cost mobility solution to low-income households, targeting mainly scholars, rural women and farm workers. Shova Kalula also incorporates the establishment of micro-businesses, which sell, repair and maintain the bicycles to ensure the sustainability of the project. This creates employment and entrepreneurial opportunities for people in our communities.

Department of Transport broadened Shova Kalula into a more comprehensive Non-Motorised Transport and Intermediate Means of Transport programme that incorporates cycling, animal drawn carts, NMT infrastructure, safety issues and the promotion of these initiatives.

Intervention Area	Proposed Projects	Benefits to other sectors	Timelines
Procurement of bicycles	Supply and Distribute 200 000 bicycles *(One million bicycles by 2010)*	Improved access to Education, Health, etc)	2007/2008 financial year;
Alignment and linkage with existing non-motorised transport programmes	Link with, and extend current projects and other initiatives that the DOT has been undertaking to promote the use of non-motorised modes of transport (e.g. the Shova Kalula National Bicycle Partnership Programme) and other intermediate means of transport (such as tractor-trailers) Document lessons from the Shova Kalula National Bicycle Partnership Programme, the animal-drawn NMT pilot project and similar initiatives on bicycles projects with a view to informing rollout to other areas Support provincial and local authority initiatives and embark on a road show in these jurisdictions to promote appropriate IMT modes Develop norms and standards for NMT/IMT vehicles Facilitate the rollout of successful demonstration projects		2007-2010
Provision of infrastructure for non-motorised transport	Assess and adjust current funding for NMT infrastructure Build the capacity of local authorities to plan, construct and maintain IMT infrastructure, using labour-based methods focused on the employment of youth, persons with disabilities and women Develop planning guidelines for safe non-motorised infrastructure Support the development of community-based construction entrepreneurs, and build the capacity of communities to plan, construct and maintain NMT and IMT infrastructure		2007-2010
Promotion of animal-drawn carts and other intermediate means of transport	Undertake pre-feasibility studies, and then select and actively promote a small, coherent set of modes in a few selected localities, with a view to building the critical mass of users that is usually necessary to overcome socio-cultural inhibitions, and make it viable to establish supporting repair and other services.	Improved access to Health care, education, social services and economic opportunities	2007-2010

7.4 RURAL FREIGHT ACTION PLAN

7.4.1 Problem Statement

Besides enhancing the competitiveness of South Africa's first economy, a key national imperative is to reduce the economic access divide between South Africa's first and second economies. The second economy lies mostly outside of the core commercial corridors, is largely rural in orientation and is characterised by economic and geographical marginalisation. For many emerging farmers and rural SMMEs, freight logistics and related services are unreliable, ineffective and/or very expensive. This is related to low production densities, poorly developed road networks and uncoordinated supply chain volumes in rural areas. Thus, there is a lack of accessible and scale efficient support services and infrastructure. As can be seen in the diagram below, the major rail and road network elements largely bypass the rural nodes that have been identified as super-marginalised and in need of development attention.

Unlike the logistics system for the first economy, where commercial incentives can be created to drive reforms and general efficiency improvements, enhancement of the rural logistics system will require greater levels of active intervention and support from Government. Improved rural logistics – encompassing freight logistics as well as allied information and business development support – can make a significant contribution towards the 'mainstreaming' of second economy supply chains, as well as rural economic development and employment creation. It must be clearly articulated that the building of bridges between the first and second economies by transport infrastructure is inappropriate and largely destines rural production to remain uncompetitive. The interventions in the strategy implementation need to integrate the existing first economy transport network with that of 2nd economy production centers, to allow them to produce at levels and at cost structures that will ensure that the debate on 2nd economy is a transitory debate that must lose its relevance over time.

For the development of rural logistics to be viable, there is a need for traffic consolidation to increase access to markets and reduce transport costs. This would involve the use of available infrastructure as well as the development of improved infrastructure, in spatially integrated and efficient ways. It must be emphasised that these facilities are not capable of being provided on a sustainable basis without capital subsidies of some sort. A range of interventions to achieve this first and second economy integration from a freight logistics system perspective are required and need to be commenced immediately, at least from a planning and design perspective.

7.4.2 Strategic Objectives

The range of interventions required include:

Institutional support, as there are no existing government institutions or programmes dealing specifically with rural or developmental logistics, the relevant roles and functions should be clearly defined, and appropriate institutional arrangements established. As a general guiding principle, there should be good organisational linkages with existing provincial and municipal transport, Local Economic Development (LED) interventions, and enterprise development functions.

Logistics infrastructure must be prioritised for maintenance and development in the various poverty nodes of South Africa. The use of rail branch-lines for the penetration of rural areas should be investigated in terms of feasibility, and feeder roads to larger and more developed routes should also be developed to encourage greater levels of system integration. The

logistics system disjuncts with the rural development needs must be removed by a sustained programme of infrastructure planning and delivery that reverses the trend toward marginalisation and ensures integration into the logistics system, not mere linking.

Direct support for selected rural logistics initiatives should be fostered through local and provincial implementation institutions. Provision of funding and/or subsidisation for service provision technologies to be employed in the movement of goods and people should be considered on a case-by-case basis and as part of integrated development projects in rural areas. Such technologies would include “bakkies”, lorries and other motorised forms of transport, as well as non-motorized transport, such as donkeys, oxen, horses and carts. Non-motorised modes of transport could enable farmers to move their produce to a central depository where larger and faster modes of transport are available to transfer farmers and their goods to higher order centres.

Development of Standardisation in packaging and standards for the sizing of micro and mini containers, and thereby facilitating the development of compatible transportation, storage, and handling equipment, that is both cheap and capable of modular integration for smaller parcel sizes (and non-motorised transport) and eventual traffic consolidation. The establishment of “one-stop” logistics and transaction support centres, possibly linked to the expanding network of multi-purpose rural services centres should also be considered.

Empowerment and facilitation of a range of informal logistics service providers. This could include the organising of individuals and communities into cooperatives capable of generating commercially viable freight loads. Associated with this is the empowerment and capacity building of women around logistics for rural development, as women constitute a sizeable percentage of the population in rural areas. Information sharing and business support could aid the development of viable strategies by these cooperatives.

The development of a better understanding of rural logistics requirements. There is a strong case to be made for research into the logistical requirements of those rural SMMEs that have been, and are likely to continue operating outside the economic mainstream, and therefore focus mainly on food security and basic livelihood objectives.

Enhancing social and economic development hinges on providing infrastructure to support or sustain the development of SMMEs in areas outside of the first economy. This may apply to areas that are geographically distant from the mainstream economy or to enterprises that because of their size struggle to gain access to mainstream freight transport infrastructure.

In these cases infrastructure providers will need to actively promote the following objectives:

To promote social accountability by cross subsidising some components of the infrastructure network in order to provide access to smaller, more marginal players.
To develop stronger linkages between the first and second economies by actively supporting sustained infrastructure provision and access to such infrastructure in areas where it is justifiable from a developmental perspective.
To balance urban and rural development and linkages between different corridors and modes such as to promote an integrated network serving all geographic areas in South Africa.
To increase access for small operators and customers such that they may benefit from the mainstream freight logistics sector.

It is proposed that these objectives be actively addressed through direct government funding support and subsidisation of infrastructure from a common pool generated within each infrastructure entity over the medium to long term. The size of the pool will be determined from the freight sector investment plan and would be generated through the pricing strategy

applied to different elements of the "commercially viable" infrastructure network, thus sustaining a managed and transparent form of infrastructure cross-subsidy. In the interim, Government needs to clearly take a leadership role in effecting the development and funding of necessary infrastructure links that tie more rural communities and production centres into the first economy freight logistics system.

Intervention Area	**Proposed Projects**	**Benefits to other sectors**	**Time lines**
Transport Brokering Service	Pilot a number of *rural transport brokering services* aimed, *inter alia*, at providing an inter-linked set of demand-responsive transport services for addressing the full range of rural freight transport needs, Develop a single provincial or district "hub" for transport brokering services – possibly in the form of a toll-free Public Transport Call Centre Establish an inter-governmental forum for special needs rural transport services Work with key sectors such as education, health[13] and social welfare to explore, for example, the development of a voucher-based or user-side subsidy system for the procurement of special needs transport services Develop relevant vehicle specifications and accreditation criteria (e.g. for adapted LDV, or truck-chassis vehicles that can transport sick people in a semi-reclining position)	Improve agro-logistics; Provision of scheduled referral system for health care Access to education; employment opportunities ,etc	2007-2010
Promotion of combined passenger and freight services	Investigate and address relevant safety and regulation issues Explore the possibility of introducing adapted rural/ multi-purpose vehicles in terms of the Taxi Recapitalisation Programme Establish an acceptable term for these services (e.g. "omnibus" services), and prepare relevant contract specifications Issue contracts for pilot projects on multi-purpose vehicles in partnership with relevant sectors on a competitive tendering basis	Improved safety for all transport users. Availability of public transport services	2007-2010
Containerisation and logistics support for rural freight operations	Develop guidelines for establishing integrated rural logistical services, giving particular attention to complementary actions such as establishing periodic market systems and extending the logistical role of Thusong Centres / Rural Development Centre (RDC) or Sustainable Villages.	Access to markets and improved agro-logistics. Access to services.	2007-2010

	Consider the development of mini-containers (possibly a wire-mesh construction) and facilitate an SMME-focussed production, marketing and distribution strategy together with the Department of Trade and Industry Develop storage and communications facilities at micro-nodes as well as multi-purpose centres Facilitate enterprise development support (e.g. proposed mechanised units like in the Eastern Cape) Involve organised agriculture (cooperatives, etc), in the establishment of logistics support services for small farmers		

7.5 RURAL ACCESS ROAD ACTION PLAN

7.5.1 Problem Statement

A significant proportion of the rural and urban population that is confined to settlements on the urban fringes is adversely affected by poor accessibility and mobility. This reflects the dis-apropriationate focus and allocation of resources in the country, which negatively impacts on the quality of life in these areas. Personal travel consumes a substantial amount of time and money in such areas and thus reduces the amount of productive time. Access to economic opportunities e.g. industrial areas and markets and social services e.g. including schools, clinics and pension payouts points are limited. In addition, communities are often confined to their homes for days in rainy seasons without any mobility due to impassable roads. Furthermore, public transport services are not available to communities, with many in such a situation resorting to the use of light delivery vehicles for public transport.

7.5.2 Strategic Objectives

Focusing on access roads development will help to address these shortcomings and ensure that rural and marginalized communities in urban fringes live better lives. Strategically such an intervention will:

- Connect remote and secluded communities with the road network system in order to improve mobility and provide access to opportunities;
- Strengthen rural spatial planning and consolidate development initiatives in order to increase economies of scale and attract development opportunities;
- Streamline the development of access roads as a critical element of Local Economic Development
- Align the elimination of road service delivery provision shortfalls with the broader MIG process basic service backlog elimination.

Intervention Area	Proposed Projects	Benefits to other sectors	Time lines
Promote labour intensive construction best practice	Use the Roads Co-coordinating Body to promote labour intensive best practice	Poverty alleviation and employment creation. Acquisition of skills.	On-going
Promote the development of capital expenditure and maintenance labour intensive programmes	Establish labour intensive maintenance programmes in • All provinces • All district municipalities Promote labour maximization in capital expenditure projects Ensure Transport Sector support for EPWP, ISRDP, URP etc.	Poverty alleviation and employment creation. Acquisition of skills.	
Implement an Access Roads Delivery Programme	Focus government conditional grant funding on access road development: Provincial projects through Provincial Infrastructure Grant Municipal projects through Municipal Infrastructure Grant	Improved access to social and economic opportunities for communities.	07/08 financial year and in the next MTEF period.
Investigate and develop appropriate social appraisal models for gravel roads	Review existing appraisal models and develop a suitable social appraisal model for gravel roads	All weather access to travel needs Eradication of rural isolation.	
Development of road maintenance [including spot improvements] programmes.	Document and disseminate guidelines on local and international good practices, focusing especially on KZN's Zibambele programme[14] and the lengthman system Provide start-up or matching funds for the development of provincial and or district-level road maintenance and spot improvement programmes Ensure effective involvement of youth, women and women-headed households in both the planning and provision of rural road infrastructure	Job creation and poverty alleviation.	
Development of feeder and access roads associated with key nodes and linkages	Facilitate key access and district road projects identified through IDP and ISRDP processes, with an initial focus on the ISRDP nodes		

8. CONCLUSION

Rural South Africa is characterised by poor infrastructure, large distances, dispersed demand and low incomes. Because of this, and historical backlogs in service delivery, rural people also have poor access to basic social services and the economic mainstream. In view of the foregoing, this rural transport strategy document sets out to:

- Create a greater general appreciation of the potential *catalytic development role of rural transport infrastructure and services*, and the need to mobilise additional resources for this purpose
- Provide the strategic guidance that is needed to ensure that the delivery of rural transport infrastructure and services is, indeed, *sustainable*, *sufficiently responsive* (i.e. in relation to typical rural conditions and transport demands), and *developmentally effective* (i.e. succeeding in addressing the economic and social access needs of the rural poor and other disadvantaged groups, *and* contributing to general job creation and economic upliftment in rural areas)
- Highlight how greater *alignment and developmental synergies* can be achieved, especially with those sectors that must serve a dispersed population from centrally located nodes, facilities and markets (e.g. health, education, and business support services) and those sectors involved in the provision of linkage infrastructure and service (especially telecommunications and other ICT-based services)
- Indicate some of the actions to be undertaken within the ambit of the *rural transport development programme*

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. The 11 actions outlined in the NLTSF are a guideline in this regard. 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.

At the same time, the prioritisation process should ensure coherence with, and contribute to the achievement of the two main strategic thrusts of the [draft] national rural transport and development strategy, namely:

- Promotion of coordinated rural nodal and linkage development
- Development of a demand-responsive, balanced and sustainable rural transport system

Cost-effective progress in respect of the first thrust will require the prioritisation of actions that will result in better-coordinated IDP-, rural transport-, and rural spatial planning procedures. It also requires that priority be give to the successful piloting of at least a few high-impact integrated projects.

Given the inherently difficult operational environment posed by most rural areas, and the vast range of imbalances that would need to be corrected, it would be unrealistic to expect overly rapid progress in terms of the second thrust over the short-term. There is, nevertheless, a critical mass of existing public, private and community-based service delivery activities that could be leveraged to – indeed – achieve significant, high-impact results over a relatively short period.

One of the high-leverage set of actions that could build effectively on existing capacities, involves strengthening and regulating the role of the “bakkie sector” as a viable, demand-responsive means to address a variety of rural freight, passenger

transport and special transport needs. Besides improved regulation, there are a number of vehicle improvement-, enterprise development-, transport brokering- and service contracting actions, which could form part of the core action package to achieve this.

Another set of high-leverage actions would be to build on the good progress that has been made in some provinces and municipalities to identify and construct access roads, using labour-intensive methods and small contractors. These programmes could form the basis for also addressing other neglected rural transport infrastructure (RTI) and NMT infrastructure - such as suspension bridges, pontoons, paths, tracks, and trails. By implication, this means that the access road programmes would then be transformed into *wider RTI programmes*.

Current non-motorized transport (NMT) projects and related initiatives have to be supported and further roll-out of bicycle and animal drawn carts projects shall be implemented in other areas. However, lessons learnt from the evaluation of Shova Kalula bicycle programme can be used to guide and sustain new projects. Linking NMT in particulate animal carts transport services to current and new public transport system is very vital as this mode can complement public transport services at a lower cost, whilst as the same time it performs other transport tasks at a village-level.

APPENDIX A: ACKNOWLEDGEMENTS

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Presidency
Department of Home Affairs
Department of Public Works
Department of Provincial and Local Government
Department of Health
Department of Education
Department of Labour
Department of Science and Technology
Department of Sport and Recreation
Department of Social Development
Department of Trade and Industry
Department of Agriculture
Department of Minerals and Energy
Department of Communications
Department of Land Affairs
Department of Environment Affairs and Tourism
Department of Housing
Department of Housing
Provincial Roads and Transport Departments
District Municipalities
South African Local Government Association,

APPENDIX B: LIST OF ABBREVIATIONS

CARNS	Community Access Needs Roads Study
CMIP	Consolidated Municipal Infrastructure Programme
EPWP	Expanded Public Works Programme
CPTR	Current Public Transport Records
DBSA	Development Bank of South Africa
DLTS	Driving Licence Testing System
DPLG	Department of Provincial and Local Government
FET	Further Education and Training
ICT	Information and Commercialisation Technologies
IDP	Integrated Development Planning
NSDP	National Spatial Development Perspective
PGDS	Provincial Growth and Development Strategies
IDTT	Inter-Departmental Task Team
IMT	Intermediate Means of Transport
ISRDP	Integrated and Sustainable Rural Development Programme
KZN	KwaZulu-Natal
LED	Local Economic Development
LDV	Light Delivery Vehicle (Bakkie)
MSA	Moving South Africa
NDA	National Development Agency
DOT	Department of Transport
DPW	Department of Public Works
NLTSF	National Land Transport Strategic Framework
NLTTA	National Land Transport Transition Act
RTSSA	Rural Transport Strategy for South Africa
NMT	Non-Motorised Transport
OLS	Operating Licence Strategies
PIMSS	Planning and Implementation Management Support System
PLTF	Provincial Land Transport Framework
RTD	Rural Transport Development
RTI	Rural Transport Infrastructure
RISFSA	Road Infrastructure Strategic Framework for South Africa.
SANRAL	South African National Roads Agency Limited
SMME	Small Medium Micro Enterprise
SSATP	Sub-Sahara African Transport Programme
TETA	Training and Education Transport Authority

APPENDIX C: NLTSF RECOMMENDATIONS ON RURAL TRANSPORT

Strategic Objective 1:

The 13 nodes identified in the Integrated Sustainable Rural Development Strategy (ISRDS) will be provided with improved transport infrastructure and services.

- Rural transport interventions will be co-ordinated and will incorporate the objectives of the ISRDS, and the transport sector components of the IDPs of rural municipalities will be integrated into the Integrated Sustainable Rural Development Programme (ISRDP).
- A guideline linking the rural road, in particular intermediate road infrastructure, and transport planning processes will be developed. This will aim to strengthen the integration of rural transport plans and IDPs.
- The development of rural access roads, associated with key nodes and linkages, will be improved. The initial implementation will target at least three of the 13 nodes. It is envisaged that a further rollout will take place that will go beyond the 13 nodes.
- Special rural transport initiatives focusing on intermediate means of transport using appropriate technology for both passenger and freight services (involving pick-ups, buses, light delivery vehicles, etc.) will be piloted in at least three of the 13 nodes.
- Infrastructure for non-motorised transport, including improved paths and tracks, as well as bicycle supply depots, will be provided in each of the 13 nodes. Suspension bridges will also be considered where appropriate.
- Animal-drawn carts and other low-technology transport solutions will be promoted, with the aim of improving the mobility of vulnerable groups.

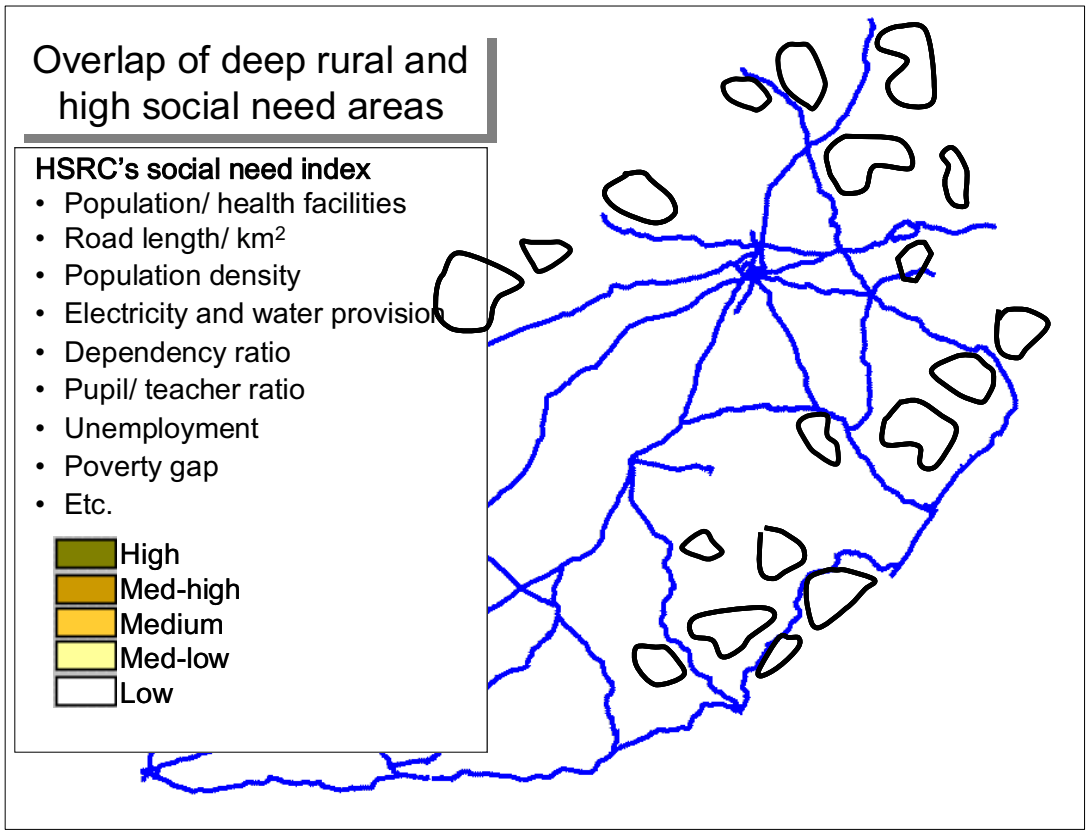
Rural Transport and Development		N	P	M
The 13 nodes identified in the Integrated Sustainable Rural Development Strategy (ISRDS) will be provided with improved transport infrastructure and services.	Rural transport interventions will be co-ordinated and will incorporate the objectives of the ISRDS.	✓✓	✓	✓
	A guideline linking rural road and transport planning processes will be developed.	✓		
	The development of rural access roads will be improved.	✓✓	✓	✓
	Special rural transport initiatives focusing on intermediate means of transport will be piloted in at least three of the 13 nodes.	✓✓	✓	✓
	Infrastructure for non-motorised transport will be provided in each of the 13 nodes.	✓✓	✓	✓
	Animal-drawn carts and other low-technology transport solutions will be promoted.	✓✓	✓	✓
Capacity building will be implemented and tools will be provided for rural transport planning, implementation and auditing.	The DoT will disseminate requirements, guidelines and planning support tools for rural transport planning.	✓		
	Capacity building for integrated rural access planning will be implemented among the municipalities and consultants responsible for service delivery.	✓		
	SMMEs in the rural transport sector, particularly new entrants from previously disadvantaged communities, will be nurtured.	✓✓	✓	✓
	A rural transport development programme will be introduced as a support mechanism for the rural transport strategy.	✓		
	Various labour-intensive methods will be promoted as part of the rural transport development programme.	✓		

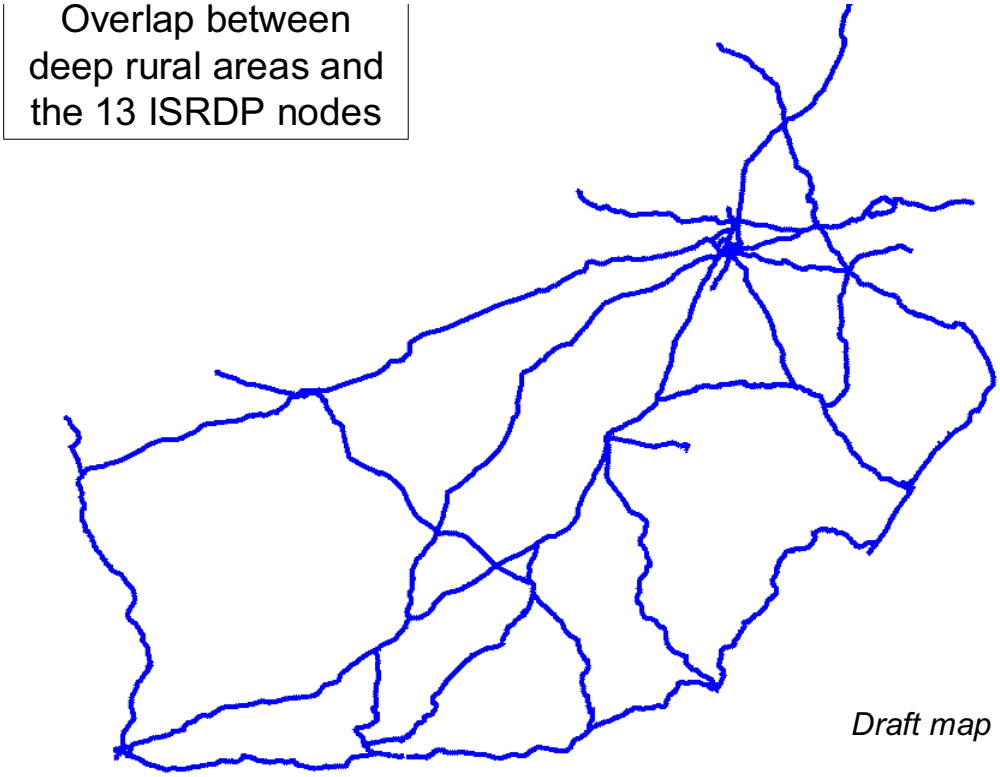
Strategic Objective 2:

Capacity-building will be implemented and tools will be provided for rural transport planning, implementation and auditing

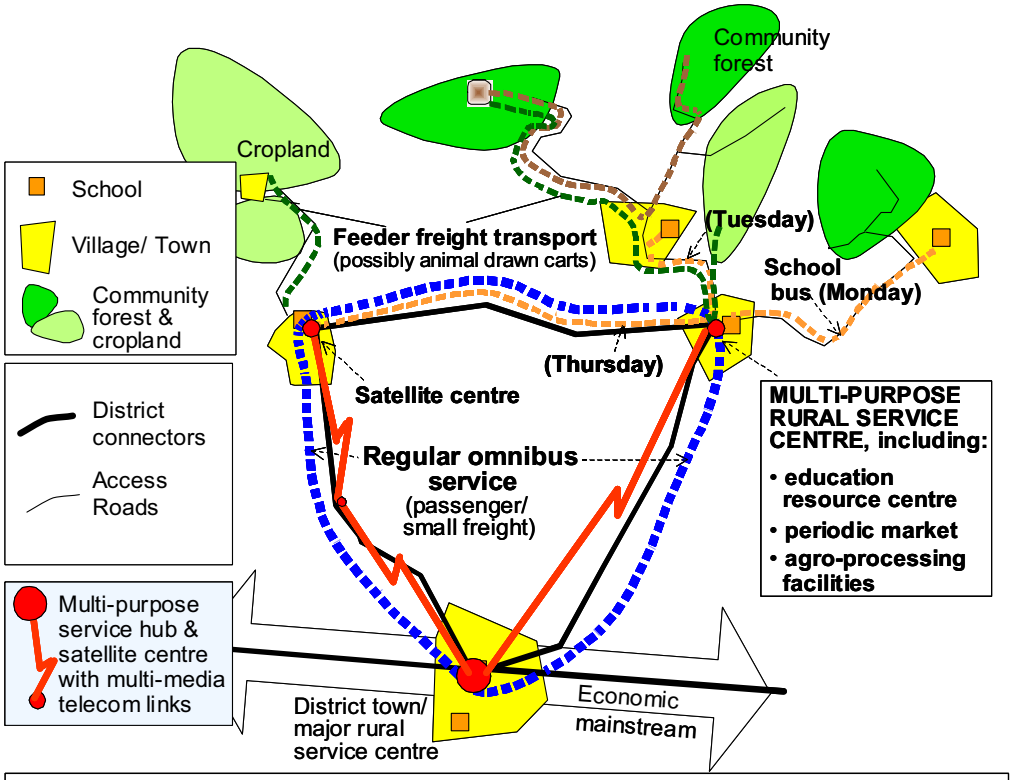
- The DOT will disseminate requirements, guidelines and planning-support tools for rural transport planning.
- Capacity building for integrated rural access planning will be implemented among the municipalities and consultants responsible for service delivery.
- SMMEs in the rural transport sector, particularly new entrants from previously disadvantaged communities, will be nurtured.
- A rural transport development programme will be introduced as a support mechanism for the rural transport strategy.
- Various labour-intensive methods will be promoted as part of the rural transport development programme to facilitate job creation and poverty reduction.

APPENDIX D: MAPS OF SOUTH AFRICA'S DEEP RURAL AREAS AND THE 13 ISRDP NODES





APPENDIX E : EXAMPLE OF A COORDINATED PROGRAMME TO IMPROVE ACCESS TO SERVICES AND MARKETS IN RURAL AREAS



❶ Sustained investment in, and maintenance of district and access roads;

❷ Establishment of multi-purpose service hub and satellite centres, linked with multi-media telecom links; and supported by the development of periodic markets, education resource centres, etc;

❸ Strengthening of the logistical role of MPCs, in particular through the construction of storage facilities, and the establishment of *logistics procurement and coordinating agencies*;

❹ Transformation of current (passenger) bus services into *omnibus*, or mixed passenger and freight services, and introduction of special contracts for two types of *periodic access services*: namely:

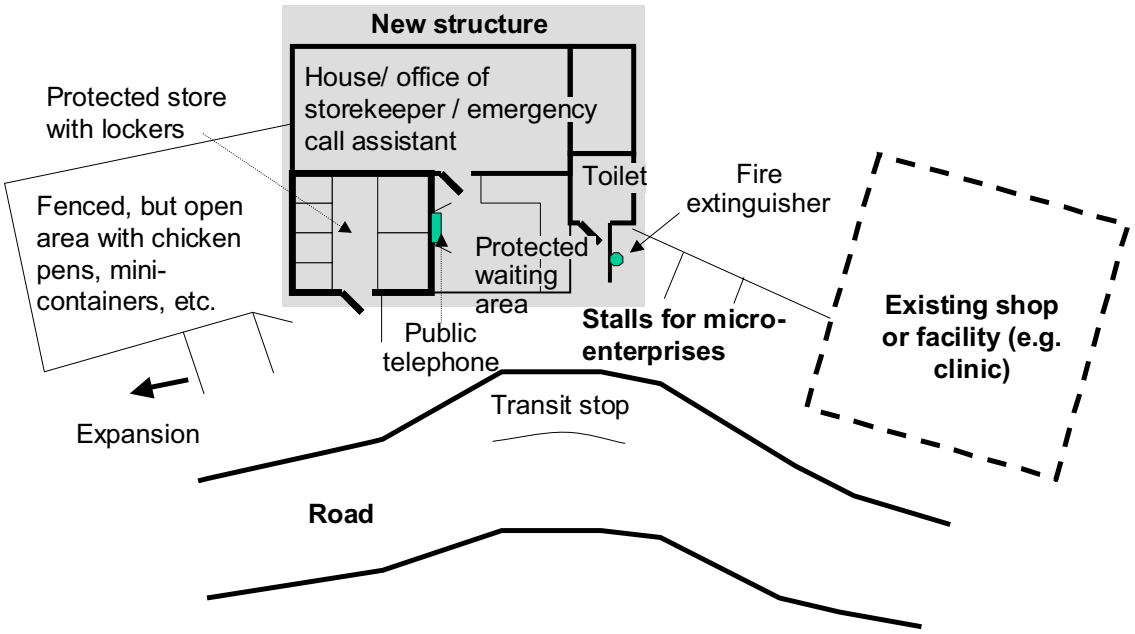
(i) a *periodic scholar bus service* that would bring pupils on alternate days from surrounding schools to the education resource centre;
(ii) *periodic market access service,* which would operate on a roving basis to transport people to and from surrounding areas for the one or more days when a periodic market is in operation.

❺ Promotion of multi-use *tractor-trailers,* or *other intermediate means of* hinterland–village transport and agricultural traction.

❻ Spot improvements to tracks and other off-road transport infrastructure (such as suspension bridges).

APPENDIX F : INFRASTRUCTURE INVESTMENT AT MICRO ACTIVITY NODES

Conceptual design of a multi-purpose structure aimed at providing basic storage, ablution and communication support at a micro-activity node



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