# Limpopo Province: Department of Transport Tender PUDP7



# First Public Transport Plan for The Waterberg District Municipality

**Final Report** 

J24169A500

August 2004

# **CONTENTS**

| Chapter  | Desci  | ription   | Page                            |
|----------|--|---|---------------------------------|
|          | List of  | <sup>-</sup> Tables   | V                               |
|          | List of  | Figures   | vi                              |
|          | Apper  | ndices  | vi                              |
| EXECUTIV | /E SUMI  | MARY  | VII                             |
|          | 1.1  | Introduction  | vii                             |
|          | 1.2  | Status Quo  | vii                             |
|          | 1.3  | Method  | viii                            |
|          | 1.4<br>1.4.1<br>1.4.2<br>1.4.3<br>1.4.4<br>1.4.5 | Results  Measures to Promote Public Transport - Plan of Action  Needs of Persons with Disabilities - Plan of Action  Needs of Learners, Students, and Elderly - Plan of Action  (a) Non-Motorised Transport  (b) Pedestrian Travel  (c) Institutional Arrangement  (d) Subsidies for Learners, Students, and the Elderly  Modal Integration, Infrastructure, and Facilities - Plan of Action  Fare System for Public Transport - Plan of Action | viii viii ix x x xi xi xi xi xi |
|          | 1.5  | Conclusion  | xii                             |
| 2        | INTRO  | ODUCTION  | 2-1                             |
|          | 2.1  | Background  | 2-1                             |
|          | 2.2  | Background  | 2-1                             |
|          | 2.3  | Transparency  | 2-2                             |
|          | 2.4  | Capacity Building   | 2-2                             |
|          | 2.5  | Purpose of the Public Transport Plan (PTP)  | 2-2                             |
|          | 2.6  | Scope of work   | 2-3                             |
|          | 2.7  | Study Area  | 2-4                             |
|          | 2.8  | Deliverables  | 2-5                             |
|          | 2.9  | Implementation of the Public Transport Plan (PTP)   | 2-5                             |
| 3        | PUBL   | IC TRANSPORT VISION, GOALS, AND OBJECTIVES  | 3-6                             |
|          | 3.1  | White Paper on National Transport Policy  | 3-6                             |

|   | 3.1.1   | <b>,</b>  | 3-6<br>3-6   |
|---|---|---|--|
|   | 3.2<br>3.2.1  | National Land Transport Transition Act, Act 22 of 2000<br>Section 26 – Public Transport Plan (PTP)  | 3-7<br>3-9   |
|   | 3.3   | Moving South Africa – Status Quo of the Public Transport System   | 3-9  |
|   | 3.4<br>3.4.1<br>3.4.2<br>3.4.3                            | National Land Transport Strategic Framework 2002-2007<br>Taxi Mode<br>Bus Mode<br>Institutional Structures                                  | 3-10<br>3-10<br>3-10<br>3-11                                 |
|   | 3.5<br>3.5.1  | National Department of Transport 2003/2004 Business Plan<br>Manager – Bus and Rail Operations – Objective                                   | 3-11<br>3-11   |
|   | 3.6<br>3.6.1<br>3.6.2<br>3.6.3<br>3.6.4<br>3.6.5<br>3.6.6 | ,   | 3-11<br>3-11<br>3-12<br>3-12<br>3-12<br>3-13<br>3-13<br>3-13 |
|   | 3.7<br>3.7.1<br>3.7.2                                     | Strategic Framework – Accessible Transport Strategy The strategic objectives of the NLTSF are: Accessible Transport Strategy's Action Areas | 3-14<br>3-14<br>3-15   |
|   | 3.8<br>3.8.1<br>3.8.2                                     | Waterberg IDP 2003/2004 Review<br>Vision of the WDM<br>Mission of the WDM   | 3-15<br>3-15<br>3-15   |
|   | 3.9   | Paradigm Shift in the Planning of Public Transportation   | 3-16   |
|   | 3.10  | Funding and Subsidies   | 3-16   |
|   | 3.11  | Alternative/Innovative Funding  | 3-17   |
|   | 3.12  | Adoption of Policy  | 3-18   |
| 4 | PUBL  | IC TRANSPORT STATUS QUO (CPTR)  | 4-19   |
|   | 4.1   | Public Transport Surveys in the WDM   | 4-19   |
|   | 4.2   | Taxi Operations in the WDM  | 4-20   |
|   | 4.3   | Bus Operations in the WDM   | 4-20   |
|   | 4.4   | Rail Operations in the WDM  | 4-21   |
|   | 4.5   | Metered Taxis in the WDM  | 4-22   |
|   | 4.6   | Major Public Transport Corridors in WDM   | 4-22   |

|   | 4.7                 | In Summary  | 4-23     |
|---|---------------------|---|----------|
| 5 | PUBL                | IC TRANSPORT OPERATIONS – RATPLAN AND OLS   | 5-25     |
|   | 5.1                 | RATPLAN - Results & Recommendations   | 5-25     |
|   | 5.1.1               | Subsidies and Contracts   | 5-25     |
|   | 5.1.2               |   | 5-27     |
|   |                     | (a) Short Term  | 5-27     |
|   |                     | (b) Medium Term   | 5-28     |
|   |                     | (c) Long Term   | 5-28     |
|   | 5.1.3               | Land Use Development  | 5-28     |
|   | 0.1.0               | (a) Medium Term   | 5-28     |
|   |                     | (b) Long Term   | 5-29     |
|   | 5.1.4               | Persons with Disabilities   | 5-29     |
|   | J. 1. <del>-1</del> | (a) Short Term  | 5-29     |
|   |                     | (b) Medium Term   | 5-30     |
|   | 5.1.5               | Infrastructure and Facilities   | 5-30     |
|   | 5.1.5               | (a) Long Term   | 5-30     |
|   | 516                 | Law Enforcement   | 5-30     |
|   |                     | CPTR  | 5-30     |
|   | 5.1.7               | CFIR  |          |
|   | 5.2                 | Implementation and Associated Costs   | 5-31     |
|   | 5.2.1               | Review of Recommendations   | 5-31     |
|   | 5.2.2               | Bus Operations  | 5-32     |
|   | 5.2.3               | Cost for Additional Capacity  | 5-32     |
|   | 5.2.4               | Provision for Persons with Disabilities   | 5-33     |
|   |                     | (a) Project – Class 1 Improvements to Current Fleet   | 5-33     |
|   |                     | (b) Project – Data Capturing and Feasibility of Paratransit Service   | 5-33     |
|   |                     |   | 5-33     |
|   |                     | <ul><li>(c) Project – Non-Motorised Transportation for Learners</li><li>(d) Project – Design and Construction</li></ul> | 5-33     |
|   | 5.3                 | Alternative/Innovative Funding  | 5-33     |
|   | E 1                 | Cost Implications   | E 24     |
|   | 5.4                 | Cost Implications   | 5-34     |
|   | 5.5                 | OLS - Results & Recommendations   | 5-35     |
|   | 5.5.1               | Capacity Utilization at Ranks   | 5-35     |
|   | 5.5.2               | Transport Operating License Board   | 5-35     |
|   | 5.5.3               | Procedures Within the WDM for Disposing with License  | <b>!</b> |
|   |                     | Applications  | 5-36     |
|   | 5.5.4               | Exit Process  | 5-36     |
|   | 5.5.5               | Persons with Disabilities   | 5-37     |
|   | 5.5.6               | Law enforcement   | 5-37     |
|   |                     | (a) Determining the Number of Illegal Operations  | 5-37     |
|   |                     | (b) Identification of Legal Taxi Vehicles   | 5-38     |
|   |                     | (c) Public Transport Inspectorate   | 5-39     |
|   |                     | (d) Conflict Resolution   | 5-39     |
|   | 5.5.7               | Summary   | 5-40     |
| 6 | INTEG               | GRATED LAND USE AND TRANSPORTATION PLANNING   | 6-42     |
| - | 6.1.1               | Land Use Development  | 6-42     |
|   | 0.1.1               | (a) Develop a Guideline for Transport Impact Studies  | 6-43     |
|   |                     | (b) Transport Impact Studies for New Commercial   | 5 10     |
|   |                     | Developments  | 6-43     |
|   |                     | •   | -        |

|    |  | (c)<br>(d)  | Transport Impact Studies for New Residential Development By-Law for Transport Impact Studies for New  | 6-44   |
|----|--|---|---|--|
|    |  |   | Developments  | 6-44   |
| 7  | BROA   | AD PUE  | BLIC TRANSPORT STRATEGY   | 7-46   |
| 8  | SPEC   | IFIC P  | UBLIC TRANSPORT STRATEGY  | 8-47   |
|    | 8.1.3  | Brief a<br>Brief S<br>Speci<br>The F                      | SURES TO PROMOTE PUBLIC TRANSPORT Assessment of the Status Quo Summary of Relevant National and Provincial Strategies ific Principles and Objectives Proposed Strategy of Action  | 8-47<br>8-47<br>8-47<br>8-48<br>8-48                         |
|    | 8.2.4  | Brief A<br>Figur<br>Brief S<br>Speci<br>The F             | NEEDS OF PERSONS WITH DISABILITIES Assessment of the Status Quo re 8.1 – Number of Persons with Disabilities in WDM Summary of Relevant National and Provincial Strategies ric Principles and Objectives Proposed Strategy of Action  | 8-51<br>8-51<br>8-51<br>8-52<br>8-52<br>8-53<br>8-54         |
|    | 8.3<br>8.3.1<br>8.3.2<br>8.3.3<br>8.3.4<br>8.3.5 | Brief &<br>Brief &<br>Speci<br>The F                      | NEEDS OF LEARNERS, STUDENTS, AND ELDERLY Assessment of the Status Quo Summary of Relevant National and Provincial Strategies ific Principles and Objectives Proposed Strategy of Action Non-Motorised Transport Pedestrian Travel Institutional Arrangement Subsidies for Learners, Students, and the Elderly | 8-55<br>8-55<br>8-55<br>8-55<br>8-56<br>8-56<br>8-57<br>8-57 |
|    | 8.4.3<br>8.4.4                                   | Brief A<br>Brief S<br>Speci<br>The F                      | AL INTEGRATION, INFRASTRUCTURE, AND FACILITIES Assessment of the Status Quo Summary of Relevant National and Provincial Strategies Ific Principles and Objectives Proposed Strategy of Action   | 8-58<br>8-58<br>8-58<br>8-58<br>8-59<br>8-60                 |
|    | 8.5.3<br>8.5.4                                   | Brief a<br>Brief s<br>Speci<br>(a)<br>(b)<br>(c)<br>The F | Assessment of the Status Quo summary of Relevant National and Provincial Strategies ific Principles and Objectives Customer Related Financial Management Related Proposed Strategy  | 8-61<br>8-61<br>8-62<br>8-62<br>8-62<br>8-62<br>8-62         |
| 9  |  |   | of Action  NAL ARRANGEMENTS   | 8-63<br><b>9-64</b>  |
| 10 |  |   | CTION AND PROJECTS  | 10-65  |

| 11 | FUND   | ING  | 11-70   |  |
|----|--|--|---|--|
|    | 11.1   | Funding and Subsidies  | 11-70   |  |
|    | 11.2   | Current Funding for Public Transport   | 11-71   |  |
|    | 11.3   | Funding Mechanisms for Public Transport  | 11-71   |  |
| 12 | STAK   | EHOLDER CONSULTATION   | 12-73   |  |
|    | 12.1   | Introduction   | 12-73   |  |
|    | 12.2   | Submission and Publication of the PTP  | 12-73   |  |
| 13 | 12.3.1<br>12.3.2<br>12.3.3<br>12.3.4<br>12.3.5<br>12.3.6<br>12.3.7<br>12.3.8<br>12.4.1<br>12.4.1<br>12.4.2<br>12.4.3<br>12.4.4<br>12.4.5<br>12.4.6<br>12.4.7 | Functions of the Various Structures for the Preparation of District Transport Plans Limpopo Department of Transport Provincial Steering Committee District Municipality District Transport Forum District Project Monitoring Committee District Taxi Council District Bus Industry Service Provider  Progress to Date Steering committee Meeting Technical Committee Meeting Liaison with Registrar Liaison with Bus Operations Managers Liaison with Bus Operator Liaison with the District Transport Forum Recommendation  DGRAPHY | 12-75<br>12-75<br>12-75<br>12-75<br>12-76<br>12-76<br>12-76<br>12-77<br>12-77<br>12-77<br>12-77<br>12-77<br>12-77<br>12-78<br>13-79 |  |
|    |  | List of Tables   |   |  |
|    | Table 2.1 –  | Demographic Data for WDM   | 2-4   |  |
|    | Table 4.1 –  | Distribution of Taxi Routes per Local Municipality   | 4-19  |  |
|    | Table 4.2 –  | Statistics on Bus Terminals  | 4-20  |  |
|    | Table 4.3 –  | Public Transport Corridors in tge WDM  | 4-21  |  |
|    | Table 4.4 –  | Taxi Associations in WDM   | 4-22  |  |
|    | Table 5.1 -  | Cost of New Bus Services   | 5-31  |  |
|    | Table 5.2 -  | able 5.2 – Proposed Projects (RATPLAN)   |   |  |

| Table 8.1 – No. of Persons with Disabilities   |        |  |  |  |  |
|--|--------|--|--|--|--|
| Table 10.1 – Program and Financial Implications                                      | 10-66  |  |  |  |  |
| List of Figures  |        |  |  |  |  |
| Figure 3.1 – Hierarchy of Transport Plans  | 3-9    |  |  |  |  |
| Figure 8.1 – No. of Persons with Disabilities per Local Municipality                 | 8-50   |  |  |  |  |
| Figure 12.1 – Communication Structure 12-  |        |  |  |  |  |
|  |        |  |  |  |  |
| Appendices   |        |  |  |  |  |
| Appendix A: Map of Waterberg District Municipality                                   |        |  |  |  |  |
| Appendix B: Bus Routes and Taxi Routes   |        |  |  |  |  |
| Appendix C: Prioritisation of Facilities for Development                             |        |  |  |  |  |
| Appendix D: Conceptual Network for Feeder and Distribution Service and Taxi Combined | by Bus |  |  |  |  |
| Appendix E: Definitions  |        |  |  |  |  |

#### **EXECUTIVE SUMMARY**

#### 1.1 Introduction

The Limpopo Department of Transport appointed ARCUS GIBB (Pty) Ltd on 26 January 2004, to prepare the Public Transport Plan (PTP) for the Waterberg District Municipality (WDM), as required in terms of Section 26 of the National Land Transport Transition Act, No. 22 of 2000 as amended (NLTTA). The term "public transport" referred to in this document, includes all road based and rail based public transport infrastructure, facilities, and services.

The Local Government system in South Africa was introduced in the present form by the new Constitution of the country (Constitution Act No. 108 of 1996, as amended. Chapter 7 of the Constitution deals with matters related to Local Government. Therefore Capricorn District Municipality is also established in terms of this Constitution as well as the Municipal Demarcation Act and the Municipal Structures Act.

Part B of Schedule 4, read together with section 155(6)(a) and (7) of the Constitution, lists a number of functions that are to be performed by Local Government. Among the functions is municipal planning and municipal public transport services. Emanating from the mandate of the Constitution the Municipal Structures Act (No. 117) of 2003 was developed and state in section 81(1)(a) that District Municipalities should prepare Integrated Development Plans (IDP's).

The Public Transport Plan, as part of the Integrated Transport Plan constitutes a transport sector input into the IDP process.

On the other hand the National Land Transport Transition Act (NLTTA), No. 22 of 2000 provides for the preparation of the various types of transport plans; one of which is the PTP (Section 26). In operationalizing the NLTTA, the Minister of Transport published the minimum requirements for the preparation of the PTP (Regulation Gazette no. 25245 dated 1 August 2003). These requirements set the tone on the structure and contents of the PTP document and shall form the primary guide in the preparation thereof.

There was a data collection process, which preceded the PTP, and the aim of that process was to have an idea as to what was the current situation in the District in terms of the public transport usage. That data collection process was called the Current Public Transport Record (CPTR). The CPTR information was collected in 2003 and was prepared by Faranani Development Consultancy, and the client was the Limpopo Department of Transport. The survey included taxi operations at taxi ranks, and bus operations and facilities.

#### 1.2 Status Quo

The WDM shares a Provincial border with North-West Province and Gauteng Province, and an international border with Botswana.

The WDM is mostly rural. Most communities are sparsely populated in low-density villages. The relatively densely populated, semi-urban areas are Mokopane, Lephalale, Modimolle, and Bela-Bela. There are no Transport Authorities and Metropolitans Municipalities in the WDM.

There is gradual economic development specifically in agriculture, mining, and tourism. Mining is significant in the Lephalale and Thabazimbi Local Municipalities. The projected growth for the semi-urban areas in the WDM is 1.1% annually till 2006 and thereafter 1% annually till 2008.

The major public transport services relevant to the investigation are bus and taxi operations, and are addressed in detail in the RATPLAN and OLS respectively. There are no commuter rail services in the WDM.

The PTP is relevant for the period from June 2004 to June 2005, and the five-year implementation plan and budget will be reviewed annually.

#### 1.3 Method

Subsequently, the Operating License Strategy and the Rationalisation Plan for WDM were prepared by ARCUS GIBB (Pty) Ltd, and guides the preparation of the Public Transport Plan.

The planning document TPR7 describes the purpose of a PTP as follows:

"Generally, a PTP is considered as the mechanism by which an authority can plan for, develop, manage, integrate and promote public transport.

"More specifically, section 26(1) of the NLTTA states that a PTP must be prepared with a view to determining and specifying the public transport services, provided in terms of the matters listed in sections 23(3)(a) and (b) of the Act. The latter refer to –

- All the scheduled and unscheduled services that are operated in the area concerned, as well as the public transport services operating across the boundaries of neighbouring authorities; and
- All the facilities and infrastructure currently being developed, or already utilised.

The specific deliverable for the project is a report on the PTP for the Waterberg District Municipality, with recommendations on the following public transport strategies:

- Measures to promote public transport
- Needs of persons with disabilities
- Needs of learners
- Modal integration
- Fare systems for public transport

This is the first Public Transport Plan (PTP) for the WDM. It is accepted that the PTP will have to be refined and expanded over time, to eventually satisfy both legislative and practical requirements. An incremental and flexible approach is adopted during the development of the PTP. Consequently, all components of the PTP need not necessarily be developed comprehensively during the Year-One PTP, but can be developed in more detail in the Year-Two PTP.

The results and recommendations are not prescriptive, and this document should be considered a guideline and applied with discretion.

#### 1.4 Results

#### 1.4.1 Measures to Promote Public Transport - Plan of Action

The following are some specific projects that could be implemented in order to promote public transport in the WDM:

- a) Apply the recommendations of the OLS and RATPLAN
- b) Update the CPTR, OLS and RATPLAN every two years
- c) Identify a Public Transport aesthetic theme
- d) Prepare and implement a Passenger Charter
- e) Prepare a Memorandum of Understanding with service providers (bus, taxi, etc), and the Limpopo Province
- f) Develop a route coding system for intra-provincial taxi operations
- g) Transform all subsidy contracts to negotiated or tendered contracts
- h) Promote the formation of taxi co-operatives
- i) Encourage taxi co-operatives to tender for subsidised routes and as a result eliminate direct competition between taxis and buses
- j) Appoint an independent monitor for the subsidised service contracts
- k) Mandate all design and construction projects to accommodate the disabled, pedestrians, bicycles, and the New Taxi Vehicles
- Develop Key Performance Indicators in the public transport contracts (customer surveys, efficiency, reliability, etc.)
- m) The Provincial Taxi Council must address the need to provide long distance service on a fixed schedule. (The peak periods for taxi operations per route are in the OLS).
- n) Prepare and implement a communication strategy or marketing campaign
  - Guide to use the electronic fare equipment
  - Publicise security measures (security on board, at bus stops, etc.)
  - Transformation of the taxi industry, specifically the implementation of the New Taxi Vehicles
  - Fare price increases
  - Sensitise the public on the transportation of disabled persons

#### 1.4.2 Needs of Persons with Disabilities - Plan of Action

The following are relevant for the short-term plan of action:

# a) Class 1 improvements to current fleet

Currently, most buses have handrails. Buses should have high-contrast colours on steps and handrails to improve visibility. Therefore, the estimated cost for on-board improvements is minimal and is actually the standard vehicle specification, which should be addressed by the operator.

Taxi vehicles must comply with Class 1 improvements too.

#### b) Data capturing

There is need for data on the number of persons with disabilities, and the particular need on specific routes. The District Municipality must also identify the NGOs currently providing the service to persons with disabilities. The Limpopo Department of Transport should provide subsidies for such services where necessary and procure the services of operators including NGOs already supplying such services, to provide a specific service to persons with disabilities instead of major changes to the current bus fleet.

The data capturing of transportation needs for persons with disabilities should be prioritised in the preparation of the next CPTR. Hence, there should be no additional cost for this exercise.

#### c) Feasibility study for Paratransit service

The feasibility for a Para transit service should be an independent study. The Limpopo Department of Transport, and the Waterberg District Municipality should motivate a pilot project in the WDM with assistance from the National Department of Transport.

Where there are no current services for persons with disabilities at all, there is opportunity for contracted Paratransit service with the Limpopo Department of Transport. The DoT should consider this in the new subsidy contracts.

#### d) Design and Construction

The Local Municipalities should upgrade infrastructure such as sheltered and safe bus stops, ramps, and provide relevant information.

The WDM should mandate all Local Municipalities to design and construct all public transport facilities with provisions for persons with disabilities. The standard design guideline is available from the National Department of Transport.

#### 1.4.3 Needs of Learners, Students, and Elderly - Plan of Action

Due to financial constraints and the magnitude of the issue it is extremely difficult to find specific solutions that would have an immediate impact on the transport of learners in the short term.

#### (a) Non-Motorised Transport

Bicycles offer greater benefits in terms of lower costs and negative impacts as well as contribute to the liveability of an area or city. In context, bicycles are appropriate mode of transport for commuting distances less than five kilometres such as mining housing schemes, and learners' access to schools within the community. Nevertheless, to achieve optimal use of bicycles, the public should be educated about the relationships between modes; the rights as well as the responsibilities of bicyclists should be defined by regulation; and those regulations should be enforced. Further, the public should be informed of the social and personal benefits of bicycles relative to other modes for the relevant categories of trips.

Also, the Local Municipalities should encourage the provision of safe bicycle parking at schools, shopping centres, and even at the work place.

Bicycle paths and lanes are the main infrastructure element defining bicycle transportation as a distinct system. The Local Municipalities should prepare a plan to encourage the use of bicycles and provide the necessary infrastructure.

The Provincial Department of Transport should prepare a campaign to promote the use of bicycles as one mode of non-motorised transport and support the District and Local Municipalities in the implementation of bicycle facilities.

Contracted buses should incorporate bicycle racks to encourage commuters to utilise bicycles for part of their journey where possible.

The respective Provincial Departments of Transport, Education, and the District Municipalities should develop a non-motorised transport plan and implement the specific needs of learners where pedestrian facilities, bicycles, and donkey-cart transport are appropriate.

#### (b) Pedestrian Travel

Walking is the most ubiquitous though often overlooked mode of travel and activity in all human settlements. The quality of the pedestrian system and its facilities is important for public transport commuters. In most towns in the WDM pedestrian volumes are significant. Thus, there is need for the provision and maintenance of sidewalks. Paths and sidewalks are required for the basic safety and protection from motorised vehicles. Pedestrian planning should consider the enhancement of existing pedestrian systems or the provision of new ones. These consist of safe and attractive sidewalks, independent walkways, and, in recreational areas, campuses, and major developments networks of paths that are both functional and aesthetically appealing.

The Local Municipalities should prioritise the maintenance and development of sidewalks and paths on the respective towns and residential areas with support from the District Municipality.

#### (c) Institutional Arrangement

There is need for the respective Provincial Departments of Transport and Education to coordinate efforts and funding for learner and student transportation.

#### (d) Subsidies for Learners, Students, and the Elderly

Subsidies should be provided for school trips longer than 5km, provided that there is no school in the vicinity. All students and the elderly should also qualify for bus subsidies. These should be addressed in the drafting of the new bus contracts.

#### 1.4.4 Modal Integration, Infrastructure, and Facilities - Plan of Action

The plan of action is as follows:

- a) Develop new routes in line with the Operating Licence Strategy
- b) Develop public transport facilities along the following corridors:
  - R561 Setateng to Kopanang
  - R572 Rietfontein Route to Kopanang
  - Marapong to Koponang
  - N11 Tshamahansi to Mokopane
  - R101 Mahlwareng to Mokopane
  - R518 Mmalepeteke to Mokopane
- c) Develop inter-modal public transport facilities at the strategic nodal points, specifically at Lephalale, Mokopane, Thabazimbi, Bela-Bela, Modimolle, and Mookgopong.
- d) Implement low capital improvements (lighting, street furniture, passenger information, etc.) for some of the existing facilities as prioritised.
- e) The Local Municipalities should develop by-laws together with the Waterberg District Municipality in order to ensure a stable and safe environment, and the integration of the bus and taxi mode
- f) Develop an intra-provincial route coding system for taxi vehicles.

#### 1.4.5 Fare System for Public Transport - Plan of Action

The plan of action is as follows:

- a) The Limpopo Department of Transport should develop a unit fare for subsidised bus operations, including consistent demarcation of zones to apply zone-based fares.
- b) The Limpopo Department of Transport should apply subsidy/fare ratio of 1.5 in the subsidy contracts.
- c) For long distance operations and inter-provincial operations, the relevant Provincial Taxi Councils should determine a unit rate for taxi fares.
- d) All taxi operations should provide a ticket system for commuters.
- e) The Limpopo Department of Transport should engage employers to contribute to the cost of public transport tickets for its employees. There should be corporate finance incentives for employers that subsidise public transport fares. The Provincial DoT should motivate to National Treasury for such incentives.
- f) The operator and the Department of Transport should maintain an organised database. The SUMS database as a component of the National Transport Register should be implemented and applied before the implementation of the new subsidy contracts
- g) The Limpopo Department of Transport should ensure that automated fare payment mechanisms are implemented as mandated in the subsidy contracts, and operators should be penalised accordingly for non-compliance.
- h) The suggestions in the Proposed Strategy should be included in the subsidy contracts.
- i) The Limpopo Department of Transport should allow for concessions for learners, students, and the elderly in the subsidy contracts

#### 1.5 Conclusion

The approach of the first PTP is to concentrate on infrastructure related to public transport for the first five years of operation and on constituting the proposed by-laws. In the review of the PTP, there will be focus on the more detailed operational and institutional matters.

The way forward is to motivate the prioritised projects in the Integrated Development Plan. The construction and maintenance of public transport facilities is in most cases labour intensive, is an appropriate mechanism to accentuate **job creation**.

DOCUMENT APPROVED BY THE EXECUTIVE MAYOR OF THE WATERBERG DISTRICT MUNICIPALITY IN TERMS OF DELEGATED POWERS IN ACCORDANCE WITH SECTION 59 OF THE MUNICIPAL SYSTEMS ACT, ACT 32 OF 2000.

| DATE | EXECUTIVE MAYOR |
|------|-----------------|

#### 2 INTRODUCTION

# 2.1 Background

There has been a significant change in transport policy since the White Paper on National Transport Policy, 1996. There is recognition of the transportation imbalance, and the need to undo the practice of the Apartheid planning principles, that is, decentralized residential nodes with limited access and mobility to economic activity nodes mostly for the Previously Disadvantaged. The restructuring of the public transportation system is a process and one of the initial steps is the preparation of the **Public Transport Plan (PTP)**.

This strategy document is prepared for **Waterberg District Municipality (WDM)** and the recommends are applicable for a period of at most five years from the date that it will be first published in the Provincial Government gazette. The Operating License Strategy and the Rationalisation Plan complement this report for WDM.

# 2.2 Background

The Limpopo Department of Transport appointed ARCUS GIBB (Pty) Ltd on 26 January 2004, to prepare the Public Transport Plan (PTP) for the Waterberg District Municipality (WDM), as required in terms of Section 26 of the National Land Transport Transition Act, No. 22 of 2000 as amended (NLTTA). The term "public transport" referred to in this document, includes all road based and rail based public transport infrastructure, facilities, and services.

The Local Government system in South Africa was introduced in the present form by the new Constitution of the country (Constitution Act No. 108 of 1996, as amended. Chapter 7 of the Constitution deals with matters related to Local Government. Therefore Capricorn District Municipality is also established in terms of this Constitution as well as the Municipal Demarcation Act and the Municipal Structures Act.

Part B of Schedule 4, read together with section 155(6)(a) and (7) of the Constitution, lists a number of functions that are to be performed by Local Government. Among the functions is municipal planning and municipal public transport services. Emanating from the mandate of the Constitution the Municipal Structures Act (No. 117) of 2003 was developed and state in section 81(1)(a) that District Municipalities should prepare Integrated Development Plans (IDP's).

The Public Transport Plan, as part of the Integrated Transport Plan constitutes a transport sector input into the IDP process.

On the other hand the National Land Transport Transition Act (NLTTA), No. 22 of 2000 provides for the preparation of the various types of transport plans; one of which is the PTP (Section 26). In operationalizing the NLTTA, the Minister of Transport published the minimum requirements for the preparation of the PTP (Regulation Gazette no. 25245 dated 1 August 2003). These requirements set the tone on the structure and

contents of the PTP document and shall form the primary guide in the preparation thereof.

There was a data collection process, which preceded the PTP, and the aim of that process was to have an idea as to what was the current situation in the District in terms of the public transport usage. That data collection process was called the Current Public Transport Record (CPTR). The CPTR information was collected in 2003 and was prepared by Faranani Development Consultancy, and the client was the Limpopo Department of Transport. The survey included taxi operations at taxi ranks, and bus operations and facilities.

Subsequently, the Operating License Strategy and the Rationalisation Plan for WDM were prepared by ARCUS GIBB (Pty) Ltd, and guides the preparation of the Public Transport Plan.

# 2.3 Transparency

To the extent possible, the project operated transparently, and opened to scrutiny from all stakeholders. It is not necessary to obtain comment from the general public. Due to the consultative process, the bus and taxi industry in the WDM is aware of the recommendations. Nevertheless, the recommendations are considered confidential until approved by the WDM and the Limpopo Department of Transport.

# 2.4 Capacity Building

One of the components of the project was to build technical capacity at the respective Municipalities and internally for the consultant, by the involvement of officials and staff on the project.

ARCUS GIBB postgraduate team members utilized the project to attain better understanding on the planning procedures of the South African Transportation policies and re-development of the South African Transportation System, specifically in the Limpopo Province.

Limpopo Provincial, District, and Local Government officials were presented with planning procedures and principles, analysis of public transportation data, and the criteria in preparation of recommendations for the restructuring of the public transport system. This is considered empowerment to officials who are not Transportation Engineers and Planners by profession, but project managers at the respective Departments. It is accepted that most officials involved in this project now have a better understanding on the planning and preparation of a Public Transport Plan, and are able to provide stronger leadership in subsequent projects.

#### 2.5 Purpose of the Public Transport Plan (PTP)

The planning document TPR7 describes the purpose of a PTP as follows:

"Generally, a PTP is considered as the mechanism by which an authority can plan for, develop, manage, integrate and promote public transport.

"More specifically, section 26(1) of the NLTTA states that a PTP must be prepared with a view to determining and specifying the public transport services, provided in terms of the matters listed in sections 23(3)(a) and (b) of the Act. The latter refer to –

- All the scheduled and unscheduled services that are operated in the area concerned, as well as the public transport services operating across the boundaries of neighbouring authorities; and
- All the facilities and infrastructure currently being developed, or already utilised.

"Consequently, it is interpreted that a PTP should address the provision of both the public transport services and the infrastructure and facilities.

"Section 26(2) stipulates that a PTP should be prepared with a view to developing and implementing the integration of public transport services.

"This PTP reflects the national and provincial transport policies, for example, several sections in the NLTTA require that a PTP must be developed to enhance integrated transport and land use planning.

"Furthermore, in order to plan for the provision of public transport services and facilities, it is also necessary to address matters such as funding, institutional aspects, action plans, projects and performance monitoring.

"Finally, it may be perceived that the PTP facilitates the overall implementation of the NLTTA, as the focal point of the Act is on developing public transport and related matters."

Since this is the first PTP for the WDM, it is imperative not to overcompensate and dramatically transform the public transportation system in a short period of time, say within one year. The paradigm shift in the restructuring of the public transportation system should be gradual.

#### 2.6 Scope of work

The scope and approach towards the formulation of a PTP for the WDM are based on the requirements set out in the NLTTA, Act 22 of 2002, Part 7, Section 26.

Based on the "National Transport Planning Guidelines and Requirements for the Implementation of NLTTA (Preparation of the Public Transport Plan)" the PTP contains the following chapters:

Chapter 1: Introduction

Chapter 2: Public Transport Vision, Goals and Objectives

Chapter 3: Public transport Status Quo (CPTR)

Chapter 4: Operational aspects (RATPLAN and OLS)

Chapter 5: Integrated Land Use and Transportation Planning

Chapter 6: Broad Public Transport Strategy
Chapter 7: Specific Public Transport Strategies

Chapter 8: Institutional Arrangements
Chapter 9: Plan of Action and Projects

Chapter 10: Funding

Chapter 11: Stakeholder Consultation

Chapter 12: Bibliography

# 2.7 Study Area

The study area is the Waterberg District Municipality. The locality map is in **Appendix A**. The Census 2001 data provides the following statistics on the WDM:

There are six Local Municipalities

Thabazimbi

Modimolle

Lephalale

Mookgopong

Mogalakwena

Bela-Bela

The population of WDM is approximately 614 041, and the approximate population per Local Municipality is in **Table 2.1**.

The unemployment rate is approximately 31%

Table 2.1 - Demographic Data for WDM

| Local<br>Municipality | Popu   | lation | No. Of<br>Households | Employed | Unemployed | Living<br>below<br>MLL | Physical<br>Disabled |
|-----------------------|--------|--------|----------------------|----------|------------|------------------------|----------------------|
|                       | Urban  | Rural  |                      |          |            | %                      |                      |
| Bela-Bela             | 36901  | 22237  | 12279                | 14371    | 6965       | 51                     | 578                  |
| Lephalale             | 14810  | 82531  | 23401                | 28673    | 5274       | 71                     | 1163                 |
| Modimolle             | 32501  | 28468  | 17536                | 22799    | 6992       | 55                     | 832                  |
| Mogalakwena           | 123417 | 192476 | 68010                | 37089    | 33698      | 55                     | 3843                 |
| Mookgopong            | 20862  | 4622   | 6977                 | 11196    | 2647       | 54                     | 308                  |
| Thabazimbi            | 29276  | 37417  | 20280                | 26249    | 7045       | 59                     | 443                  |
| Total                 | 257767 | 367751 | 148483               | 140377   | 62621      |                        | 7167                 |

The WDM shares a Provincial border with North-West Province and Gauteng Province, and an international border with Botswana.

The WDM is mostly rural. Most communities are sparsely populated in low-density villages. The relatively densely populated, semi-urban areas are Mokopane, Lephalale, Modimolle, and Bela-Bela. There are no Transport Authorities and Metropolitans Municipalities in the WDM.

There is gradual economic development specifically in agriculture, mining, and tourism. Mining is significant in the Lephalale and Thabazimbi Local Municipalities. The projected growth for the semi-urban areas in the WDM is 1.1% annually till 2006 and thereafter 1% annually till 2008.

The major public transport services relevant to the investigation are bus and taxi operations, and are addressed in detail in the RATPLAN and OLS respectively. There are no commuter rail services in the WDM.

The PTP is relevant for the period from June 2004 to June 2005, and the five-year implementation plan and budget will be reviewed annually.

#### 2.8 Deliverables

The specific deliverable for the project is a report on the PTP for the Waterberg District Municipality, with recommendations on the following public transport strategies:

- Measures to promote public transport
- Needs of persons with disabilities
- Needs of learners
- Modal integration
- Fare systems for public transport

The list of definitions, maps, and prioritisation of facilities for development are attached as Appendices.

#### 2.9 Implementation of the Public Transport Plan (PTP)

This is the first Public Transport Plan (PTP) for the WDM. It is accepted that the PTP will have to be refined and expanded over time, to eventually satisfy both legislative and practical requirements. An incremental and flexible approach is adopted during the development of the PTP. Consequently, all components of the PTP need not necessarily be developed comprehensively during the Year-One PTP, but can be developed in more detail in the Year-Two PTP.

The results and recommendations are not prescriptive, and this document should be considered a guideline and applied with discretion.

# 3 PUBLIC TRANSPORT VISION, GOALS, AND OBJECTIVES

# 3.1 White Paper on National Transport Policy

The Vision for SA transport is of a system, which will:

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

The SA transportation system is inadequate to meet the basic accessibility needs (to work, health care, schools, shops), and many developing rural and urban areas. In order to meet basic accessibility needs the transport services offered should be affordable to the user. The transport system will aim to minimize the constraints to the mobility of passengers and goods, maximizing speed and service, while allowing customers choice of transport mode or combination of transport modes where it is economically and financially viable to offer a choice of modes. This demands a flexible transport system and transport planning process that can respond to customer requirements, while providing on-line information to the user to allow choices to be made. It also requires infrastructure to be tailored to the needs of the transport operators and end customers.

Government will seek a reduction in the cost to the state of the subsidization of transport operations, predicted on a more effective and efficient public transport system being developed.

#### 3.1.1 Strategic Objectives

To encourage more efficient urban land use structure correcting spatial imbalances and reducing travel distances and times for commuting to a limit of about 40km or one hour in each direction.

#### 3.1.2 Customer-based

- To ensure that passenger transport services address user needs, including those
  of commuters, pensioners, the elderly, scholars, the disabled, tourists, and long
  distance passengers.
- Walking distance to be less than 1km in urban areas.
- Commuters should be spending less than 10% of disposal income on transport.
- To replace operator permits with permissions issued in terms of approved transport plans.

# 3.2 National Land Transport Transition Act, Act 22 of 2000

Section 4 (1) (a) (iv) - The following principles apply with regard to the determination, formulation, development, and application of land transport policy – are so designed as to have appropriate modes selected and planned for on the basis of where they have the <u>highest impact on reducing the total systems cost of travel</u>, and this decision should be informed by an appropriate assessment of the impact on the customer and anticipated customer reaction to such change.

Section 4(1) (k) - The needs of special categories of passengers should be considered in planning and providing public transport infrastructure, facilities, and services, and these needs should be met as may be possible by the system provided for mainstream public transport.

Section 5(6) (b) - The Minister should set norms and standards of a general nature in respect of fares for subsidized public transport services by road and rail with a view to effective targeting of subsidy in terms of National policy, providing integrated fare and ticketing systems in public transport networks, and achieving cost recovery by operators.

Section 18 - Transport planning should be viewed as being a co-coordinated and continuous process. Land transport planning should be integrated with land development processes. Land transport planning should focus on the most effective and economic way of moving people. High priority should be given to public transport through, inter alia, developing high utilization public transport corridors, which are connected by development nodes within the corridors. Accessibility and utilization of public transport services, facilities, and infrastructure must be enhanced. The adverse impact of transport on the environment must be minimized. Co-ordination and integration within, and between, land transport modes should be ensured.

The chronological sequence of the policies described in this chapter indicates the interrelationship between the subsequent plans derived from the policies, and is described in **Figure 3.1**.

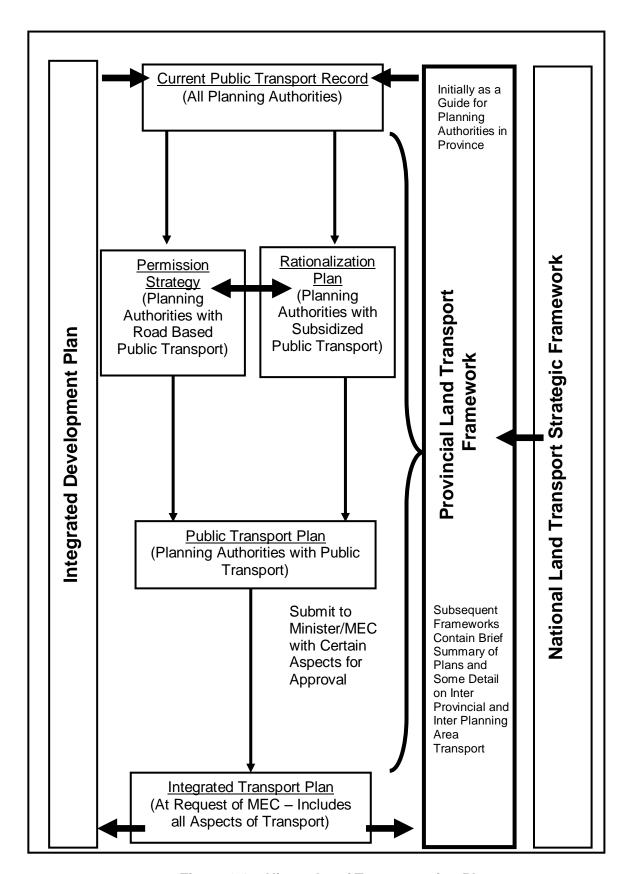


Figure 3.1 - Hierarchy of Transportation Plans

# 3.2.1 Section 26 – Public Transport Plan (PTP)

- 1. Every transport authority and core city, and every municipality required to do so by the MEC, should, by the date determined by the MEC, prepare a public transport plan with a view to determine and specifying the public transport services that it wishes to have provided in terms of the matters mentioned in section 23(3)(a) and (b).
- 2. The public transport plan should be prepared with a view to developing and implementing the integration of public transport services and should contain at least the following
  - (a) The planning authority's vision, goals and objectives for public transport in the area:
    - (b) The planning authority's strategies for-
      - (i) The needs of learners and persons with disabilities;
      - (ii) Modal integration and fare systems for public transport, the latter comprising fare structure, level and technology;
    - (c) An operational component, including-
      - (i) Provision of the rationalisation plan for contracted services and concessions; and
      - (ii) The operating licences strategy for all public transport services not covered under the subparagraph (i).
- 3. Public transport should be in accordance with the requirements, and in the manner and form, as generally prescribed by the Minister, in consultation with the MEC, but the MEC may prescribe the content of public transport plans in addition to such requirements.
- 4. The public transport plan should be submitted to the MEC for approval, which approval must relate only to matters mentioned in section 24(4)(b). Every planning authority should ensure that its public transport plan is updated at least once a year by a date determined by the MEC by notice in the Provincial Gazette.

# 3.3 Moving South Africa – Status Quo of the Public Transport System

The study identified six market segments and concluded that in the short to medium term the prioritised customers should be the poor and very poor rural and urban passengers, who are also considered as "stranded customers" and the "survival customers" who currently cannot afford transport or captive to the cheapest mode of public transport.

The current public transport system does not meet customer needs in terms of travel time, level of choice, and cost. Almost 50% of public transport users are dissatisfied with travel times, and only 10% of commuters have a choice of three modes. The system is of limited use for scholars, given its orientation around the need of commuters and the limited level of off-peak service.

Given the low level of road adequacy in most rural communities, *Moving South Africa* expected to find a high degree of customer dissatisfaction, especially with travel times. However, in the customer research process, rural passengers uniformly declared a

high level of satisfaction with travel times, regardless of the purpose of the trip. They gave these opinions despite travelling 40-45 minutes each way for work.

Overall, then, a portrait of relatively undemanding rural transport customers emerges, where people feel reasonably satisfied, even though they enjoy service levels far below the level available to urban public transport passengers. This may relate to the fact that many rural customers have not been exposed to higher levels of service in urban areas, and to the fact that their sense of the opportunity cost of their time is generally lower than that of their urban counterparts.

South African public transport is relatively high cost compared to international benchmarks: services cost users 32% more than world averages, primary because of the distance they travel. The result is higher system costs, deteriorating infrastructure, higher user costs, and poorer service for those users who are captive to system. More generally, ineffective public transport severely restricts labour mobility, impinges on worker productivity, and impedes social integration.

Part of the problem derives from unclear and fragmented institutional arrangements and lack of capacity at planning authorities.

The best example of the planning gap appears in the uneconomic role of the modes currently at work in South African cities. In most countries, rail, with the highest fixed cost and the lowest marginal cost of taking an additional passenger, carries a substantial base load of passengers. Buses carry the next band, and the peak-load traffic travels on taxi, which has the lowest fixed cost and the highest marginal cost of the three modes. In South Africa the typical modal roles are reversed, and taxis carry the base load of traffic.

The result is an additional system cost of at least R500 million per annum, the equivalent of almost 18% of the total annual direct subsidy to the system. This phenomenon is the direct consequence of a lack of integrated planning, because on many routes it allows taxi competition to reduce the ability of buses and trains to recover their higher fixed cost investments. The RDP recognised this modal warping, and recommended roles for each mode that more closely match their natural economics.

## 3.4 National Land Transport Strategic Framework 2002-2007

#### 3.4.1 Taxi Mode

Taxi operators should be encouraged (and assisted) to qualify as contractors so as to participate in subsidised service contracts which will be opened to all road-based public transport operators, **subject to the requirements of local transport plans.** 

The moratorium on the issuing of new operating licenses (where applicable) will be relaxed in a planned manner, after the special legalisation and conversion processes are completed.

#### 3.4.2 Bus Mode

Provincial and municipal bus operators should be corporative and all subsidised services should be provided in terms of tendered contracts that will be opened to all

road-based public transport operators, **subject to the specifications of local transport plans.** Some parastatal and municipal bus service will achieve tendered contract status via the bridging mechanism of negotiated service contracts.

All new buses in subsidised contracts will comply with Class 1 improvements (for example, step height, grab rails, signage, driver training, etc.). Where wheelchair accessible buses are included in bus contracts, they will preferably be deployed first in "strategic accessible corridors" to allow for the co-ordination of infrastructure upgrades.

#### 3.4.3 Institutional Structures

The co-ordination of institutional responsibilities relating to land transport must be promoted.

The effective implementation of the Provincial Appeal Body (where appropriate) should be ensured, and the efficient operation of the Provincial Operating Licensing Board, and Provincial Transport Registrar must be supported.

# 3.5 National Department of Transport 2003/2004 Business Plan

The Policy Objectives and goals emanate from the White Paper on National Transport Policy. The core objective of the Division of Public Transport is to manage public transport operations to best suit the needs of the public.

#### 3.5.1 Manager – Bus and Rail Operations – Objective

- Effective management and administration of the road-based public transport subsidy and adherence to the Public Finance Management Act.
- Provision of cost effective and affordable public passenger transport driven by the economics of competition in the market place, through negotiated contracts or competitive tendering.
- The restructuring of the parastatal or municipal owned bus companies and/or the promotion of Black Economic Empowerment (BEE).

# 3.6 Limpopo Province Land Transport Framework (Limpopo in Motion)

#### 3.6.1 Transportation Vision Statement for the Limpopo Province

The transportation vision is a safe, affordable, accessible, effective, efficient, and sustainable integrated transport system that meets the needs of stakeholders and customers.

#### 3.6.2 Transportation Mission Statement for the Limpopo Province

The transportation mission is to develop, co-ordinate, implement, and manage an integrated, multi-modal transport system by:

Effectively and optimally utilizing and developing available resources

Encouraging and providing a safe transport environment for all users

Planning and facilitating transport infrastructure provisioning and operations

Being transparent, accountable, and responsible

#### 3.6.3 Transportation Goals for the Limpopo Province

The transportation goals for the Province are:

To develop, co-ordinate, implement, and manage an integrated, multi-modal transport system

To support the process of democratisation, and reconstruction and development.

To act as a catalyst for social upliftment and economic growth

To ensure that the system is balanced, equitable, and non-discriminatory

To ensure that the system is reliable, effective, efficient, safe, accessible, affordable, and environmentally friendly

#### 3.6.4 Objectives for Transportation in the Limpopo Province

The relevant transportation objectives are:

To monitor the need in the Province, identify issues and set priorities for transport within the framework of social and economic reconstruction and development objectives in the Province.

To regulate and control the transport system to ensure that it's full potential can be achieved.

#### 3.6.5 Policy Principals for Transportation in the Limpopo Province

- Social needs and Priorities emphasis should be placed on the social needs of the disadvantaged communities, especially those in rural and other underdeveloped areas.
- Role of Government and the private sector The limited ownership profile of the transport providers requires restructuring in order to broaden and democratise the current dispensation. There is need to ensure wider participation by the disadvantaged communities in the provision and maintenance of the transport system.
- Economic the transport sector should be aimed at increased employment of the workforce.
- Financial Framework the extent of subsidization for public transportation and funding for infrastructure, and the priority and funding balance between them.
- Financial Framework the affordability problem for both the passengers in terms of fare levels and for the Government in terms of the budget requirements
- Land Transport service provision Subsidized services or any transport service for which public transport permits are required, should only be within the framework of an approved transport plan.

# 3.6.6 Limpopo Province Integrated Rural Development Framework

One of the mechanisms to achieve sustainable model integration is to ensure that the provision of public transport is business driven and based on sound business principles.

Rural areas are defined as the sparsely populated areas in which people farm or depend on natural resources, including the villages and small towns that are dispersed through these areas. They include the large settlements in the former homelands created by Apartheid removals, which depend for their survival on migratory labour system and remittances. They are characterized by high level of poverty and economic underdevelopment. These areas should serve as the immediate focus of rural development.

The Poverty Report (1998) reveals that in the Limpopo Province, almost 18-percent of the people live in rural areas and live below the poverty line.

Access to quality employment is a paramount aspect towards sustainable livelihoods and thereby reducing poverty and inequality. The lack of access to physical infrastructure such as electricity, clean water, proper roads, transportation, and housing are closely linked to poverty.

#### (a) Strategies Based on Policy

- Provide effective financial and economic support to public transport
- Promote the most cost-effective mode of transport
- Gradually phase out subsidies for services longer than a prescribed minimum (possibly 40km) to encourage densification in the urban nodes.
- To introduce subsidy mechanisms that will encourage the business sector to create employment opportunities closer to residential areas
- Implement measure to promote shorter travelling distances
- Implement incentives to operators for affordable tariffs
- Focus on prioritised economic activity nodes and transport nodes in the transport plans
- Identify minimum service levels of the public transport services serving economic activity nodes
- Identify and award sustainable bus contracts
- Use financial and economic support measures to promote sustainability in the bus industry
- Develop a holistic and integrated funding strategy focusing on maximizing the transport budget from the Provincial allocation, and by achieving efficiency gains through better utilization of available funds
- Explore the possibility of additional funding sources

#### (b) Projects Based on the Strategy

- Develop OLS, RATPLAN, PTP, and ITP
- Feasibility Study for Seshego Polokwane Rail Commuter System

- Feasibility Study for rail system along the Dilokong Corridor
- Implement the recommendations of the Public Transport Plan, Rationalization Plan, and Operating License Strategy.
- Determine transport needs of learners, elderly, and disabled
- Determine the routes where taxis play a more prominent role
- Investigate incentives for improved levels of efficiency and effectiveness of public transport services
- Investigate alternative funding options the role of Public Private Partnerships.
- Develop Key Performance Indicators to measure the performance of service providers

# 3.7 Strategic Framework – Accessible Transport Strategy

#### 3.7.1 The strategic objectives of the NLTSF are:

- Ongoing consultation will take place with the disability sector.
- Implementing authorities will be empowered to improve accessibility across all modes through the integrated planning process.
- "Reasonable accommodation" of persons with disabilities will be initiated by prioritising high-impact, lower-cost action and,
- Pilot projects will be launched in rural areas to test solutions and develop a rural accessibility strategy.

There are two primary strategic objectives to be met, which are:

- To integrate accessible transport into the public transport system
- To promote the provision of accessible transport across all modes of public and pedestrian transport.

Transport plays a significant role in the lives of ordinary citizen as a mechanism by which socio-economic opportunities can be accessed. Accessible transport is a basic need and it is constitutionally required to meet the rights of people with disabilities.

The implementation of the short-term strategy shall be practical and shall demonstrate accessible, affordable and connectivity to multi-modalism.

The objective of the strategy is to improve access to transport for people with disabilities, in a manner that promotes integration into the mainstream of public transport.

In addition, it promotes barrier free access in all modes of public transport and targets key access roads to ensure mobility on all elements of the travel chain.

A practical approach towards planning accessibility improvements shall be adopted to maximize the impact of accessible transport services. The short-term strategic actions intend to entrench this practice.

Integrated Transport Plans shall be conscious of integrating accessible transport actions that will promote seamless and hassle-free travel chain for disabled travellers.

Through a phased approach accessible transport shall be gradually integrated into a fully-fledged accessible public transport system.

#### 3.7.2 Accessible Transport Strategy's Action Areas

- Implement low-cost accessible features for ambulatory passengers. This will
  affect the exterior, entrance and interior designs of the three modes of public
  transport. Such accessible features are to be effected by reviewing the subsidy
  contract/tendering system and using it as leverage. This will be the case
  particularly with the bus and rail transport.
- Metropolitan municipalities shall facilitate the identification of accessible transport networks as well as corridors and link them to on-line infrastructure, in accordance with the guiding principles/recommendations of the NLTSF towards achieving "reasonable accommodation", as part of their transport planning processes. The same is applicable to non-metropolitan municipalities falling under category B (i.e. local) as well as those falling under category C (i.e. districts).
- Where accessible corridors cannot be created solely by introducing new vehicles with Class 1 improvements already built into them, existing vehicles already in operation will be retrofitted with Class 1 improvements to provide the required level of accessibility in the corridor.
- Safety features to be introduced when existing vehicles are redesigned and refurbished. These safety features refer to the additional ones for usage by passengers with disabilities. All land transport operators shall make provision of suitable storage facilities for both long and short distance travel passengers to store their supportive devices (such as crutches, walking sticks, wheel chairs, etc) on rail coaches, buses and taxis, in support of inter-connectivity in the travel chain.

#### 3.8 Waterberg IDP 2003/2004 Review

#### 3.8.1 Vision of the WDM

The vision of the WDM is to be a caring and responsive Municipality with excellent service delivery, sustainable environment and prospering people.

#### 3.8.2 Mission of the WDM

The mission of the WDM is: The WDM will through an inclusive and participatory process establish the needs of the its community and by the rendering of effective, efficient, and sustainable services, while maintaining present level of services address the backlogs in the infrastructure provision, socio-economic development and institutional capacity in order to ensure a better life for all.

Under the strategic plan for transport and related projects only road infrastructure is addressed. There are no plans and projects for the public transportation system, except for the upgrading of roads. The 2004/2005 IDP Review Process is aligned with the recommendation of the respective transport plans.

# 3.9 Paradigm Shift in the Planning of Public Transportation

There is a continuing decline in both the performance of the transportation system and the relevance of public transportation in meeting emerging needs. Reinvention in local public transportation is essential. Travel needs should not be viewed in engineering terms only. Transport is understood to be a 'derived demand'. Most people travel to satisfy fundamental needs – to reach activities ad opportunities to increase economic well-being, health, welfare, and personal security, and the quality of the environment.

The distinction between rural transportation needs and rural transportation demand must be defined. Demands are registered in a market and are therefore related to the user's income level. Those with low incomes, or no automobile, are less likely to demand travel.

Travel needs are a fixed amount of travel that is deemed necessary to provide an adequate standard of living, a quantity not affected by the price of travel. One may have a need to travel independent of the ability or willingness to pay.

In developing areas, public transport has a more significant role than first world and industrialised areas, because it economic efficiency is vital for large volumes of people without automobiles. Higher capacity public transport should be provided at reasonable levels of investment concurrently with developments, rather than after excessive street traffic has created chronic congestion.

With the increasing focus of environmental concerns, sustainability, and emphasis on quality of life and liveability, the role of public transport is likely to have more importance. To meet that role, public transport should be planned concurrently with streets and highways, and given the necessary priorities to achieve a desirable balanced use of public transport, cars, bicycles, pedestrians, and other modes of transportation.

Regardless of the degree of car ownership, there will always be a significant segment of the population who cannot use a private car. It is an advantage to create high quality public transportation and associated developments based on walking access.

Gary Lawrence, in *A Forum on the Future of Sprawl,* in The Amicus Journal, Fall 1996, page 23 indicates that: If we try to induce people to use transit through guilt, while the automobile industry is saying, 'if you drive this car you're going to get more and better sex,' it's not an equal contest. In transit coaches, there's no place to put groceries, there's no place to hang dry cleaning. Every time you get on a bus the message is: We assume you're going to vandalize this; we assume you are going to be dirty. And every time you get in the car the message is: We are going to pamper you the way you deserve to be pampered. As long as we have an 'alternative' that's not a real alternative psychologically, then the automobile is going to win. **It's not an issue of mobility. It's an issue of freedom and self-worth"** (emphasis added).

#### 3.10 Funding and Subsidies

Is public transport a Public service or is it market driven? Are subsidies an investment or a waste of taxes? What are the main social and economical objectives aligned with transport subsidies?

For the Limpopo Province, it is intuitive that public transport is a need, and subsidies are necessary to provide access mobility to ensure an adequate standard of living for most people in the Province. Thus, the current circumstances qualify subsidies as an investment in the Limpopo Province.

Public transportation is a service with reasonable economics, where the bottom line should not be the dictating factor. Transit does not outperform private mode in a free market environment. There are several non-monetary, non-tangible benefits to society. These benefits are not marketable. Reducing capital and operating costs by deregulation must still consider the basic needs of the passenger.

Availability of needed funds as a basic condition for implementing the permanent provision of attractive services that can respond to increasing demands for high quality, high volume public transportation. Similar to highways and other passenger transportation facilities, transit investments come mostly from public funds.

Where mass transit is a public service, the Public Sector must set the standards, funding, and fares, and Government must ensure transportation is a basic right for its citizens.

The Limpopo Department of Transport must guard itself from the "irresponsible supply cycle", where there is little or no control on the contracted operator. Where control is defective, the operator neglects the passenger needs, and passengers look for an alternative mode, which could result in the 'illegal' supply of public transportation, decreasing fare revenue, increasing operating cost, increasing subsidies, and possible conflict. Some passengers are captive, and are violated in their pursuit to accessibility and mobility.

The preferred modes of public transport are the bus and taxi. Currently, the higher capacity buses operate during the peak periods only, while the lower capacity taxi mode operates during the off-peak period on the same primary route. However, on some routes the taxi mode is in direct competition with the bus mode, and is not viable. There is potential for some routes to be converted to taxi routes only due to the low passenger volumes. There is potential also, for taxis operators to be contracted by the bus operator and effectively provide a subsidized service. The details of which are described in the results of the study.

The Limpopo Department of Transport must also resolve subsidies for learners, students, and elderly. The current data does not categorize the passengers as learners, students, disabled, or elderly. If these categories of passengers are included in the total number of passengers then they are subsidized at the same rate as commuters. There is need for a concession for these categories of passengers, and should be investigated further. There is also a need for a specific funding allocation for the provision of Class 1 improvements not only for contracted operators, but also for tourist bus operators too.

#### 3.11 Alternative/Innovative Funding

In addition to the fixed sum of bus subsidy from the National Department of Transport, the Provincial Department of Transport should research alternate funding mechanisms for public transportation. For example, advertising on buses is a lucrative generator of operating funds. The Department of Transport should correspond with the Department of Environmental Affairs and Tourism to obtain funds through the National

Environmental Management (Air Quality Management) Act to reduce emissions by upgrading the rolling stock. Similarly, the Department of Education must also contribute funds for the transportation of learners and students, and the Department of Social Development must contribute funds for the subsidisation of the elderly.

# 3.12 Adoption of Policy

In addition to the Provincial Land Transport Framework in the form "Limpopo in Motion", the policy framework compiled in this chapter provides particular guidance for the provision of a Public Transport Plan (PTP).

The WDM Transport Forum and the Limpopo Department of Transport are required to consider the policy framework for the Public Transport Plan (PTP) for endorsement.

# 4 PUBLIC TRANSPORT STATUS QUO (CPTR)

This section of the PTP contains a brief description of the public transport system in the WDM area of jurisdiction. The information contained below is based on the CPTR data collected in 2003 and will be updated in terms of the Current Public Transport Record (CPTR) information, as and when it becomes available.

This section doesn't attempt to duplicate the CPTR but provide a summary of the findings. If more detail is required the CPTR report dated May 2003 should be subscribed to.

# 4.1 Public Transport Surveys in the WDM

The assessment of the CPTR data identified the route details, timetable, capacity, and passenger volumes. However, the CPTR data only covers 'satisfied demand', and is not as representative as required for detailed planning.

The SUMS database confirmed some of the CPTR information and additional information such as routes and number of trips per day, total number of trips per month, total operating vehicle kilometres per month, the tender price (subsidy) per kilometre, the average number of passengers per month, and the subsidy claimed per month.

In general, the CPTR data was adequate to proceed with the basic analysis. However, there are several constraints in the database, as a result, the desired result is not comprehensive. The following constraints are identified.

- The bus routes should be described in greater detail
- There is no detail description of routes for non-subsidized bus operations
- Some routes only have the origin and destination
- The trip purpose is not quantified, for example, number of learners
- The routes numbers do not correspond to the route numbers in the SUMS database or with the guidelines in TPR5 – Operating License Strategy
- The CPTR data for Lowveld Bus service is in greater detail than the information in the SUMS database. As a result the routes were aggregated for the respective areas in the Lephalale Local Municipality.
- Cash fares are documented in increments of one cent; for example, the fare for a bus trip from Moshate to Mokopane is R2.09. This fare is not practical and contributes to delays. Therefore, it is highly likely that the fare is recorded incorrectly.
- There is no data on special needs passengers
- There are no GIS co-ordinates for the road network and public transport facilities
- There is no data on in-vehicle waiting time and queues, walking time, transfers, and en-route number of passengers boarding and alighting to determine the

real demand, reliability of the service, and to determine the holistic demand and supply

- There is no details on unproductive kilometres
- There is no data on the number of ticket passengers (weekly and monthly tickets) and cash passengers
- There is no data on weekend trips
- The road pavement condition is not adequately described

#### 4.2 Taxi Operations in the WDM

Within Waterberg District Municipality, there are several factors determining the nature, the distance, and utilisation of routes and operational methods of the taxi industry. Among other factors is the location of towns and villages, dominant economic activities in the area and employment status within Waterberg District Municipality. As a result of these factors, operation of the taxi industry in certain areas and the type of service provided are irregular – i.e. use is sometimes made of certain routes as a result of demand and the pavement conditions of the road. In mining areas such as Northam and Thabazimbi for example, certain routes particularly the long distance routes are provided on certain Fridays, month-end and long-weekends.

On the basis of the survey conducted, 140 taxi routes were identified in the Waterberg District Municipality. **Table 4.1** provides the number of routes per Local Municipality and its surface conditions.

Table 4.1 - Distributions of Taxi Routes per Local Municipality

| LOCAL MUNICIPALITY | TOTAL NUMBER OF ROUTES | CONDITIONS OF THE ROUTE –<br>SURFACED / GRAVEL |
|--------------------|------------------------|--|
| Bela-Bela          | 13                     | 50% Surfaced                                   |
| Modimolle          | 8                      | 50% Surfaced                                   |
| Mookgopong         | 2                      | 40% Surfaced                                   |
| Mogalakwena        | 64                     | 30% Surfaced                                   |
| Lephalale          | 12                     | 50% Surfaced                                   |
| Thabazimbi         | 41                     | 50% Surfaced                                   |
| TOTAL FOR WDM      | 140                    |  |

For the taxi industry, the total number of seats available in all taxis in WDM is 34 703. There are approximately 1040 taxi vehicles in the WDM.

#### 4.3 Bus Operations in the WDM

In the WDM, the Great North Transport (GNT) Bus Service provides subsidised service in the Mokopane area through a negotiated contract with the Limpopo Department of Transport. The Lowveld Bus Service provides subsidised service in the Lephalale area through a tendered contract with the Limpopo Department of Transport. Lowveld Bus Service also provides a service from Thabazimbi to the mines in Northam and Amandelbult. The mines contract the service. PUTCO and North West Star are also subsidised operators serving one route each to Modimolle and Bela-Bela respectively. The CPTR identified 60 subsidised bus routes in the WDM. The total supply of subsidised capacity for buses in WDM is 14 232 seated, and 4432 standing.

The dominant travel pattern of passengers from home to work in the morning and return trip in the evening. On most routes the demand peaks during the morning forward trip and evening return trip.

The Limpopo Department of Transport is the custodian for bus subsidies in the WDM. The current tendered contract with Lowveld bus service expires in June 2004, and will be renewed on a monthly basis until the new contracts are prepared. The GNT Bus Service expires in September 2006.

There are some private non-subsidised bus operations in the Lephalale area that operate without a fixed schedule, and as a result are in conflict with the taxi mode.

The current bus operation may be described as the conventional fixed route, fixed schedule system. It is evident that commuter travel is the main travel pattern in the WDM for the subsidized bus service. There are some very long routes (from 40km to 110km), and intuitively the journey time is in excess of two hours. Some buses depart as early as 3:40am. These factors question the standard of living for many people commuting long distance.

There is also speculation of a high demand for weekend travel. Most people in the rural areas tend to do business in the towns on Saturday only. It is highly likely that weekend demand may even supersede the weekday peak period for some routes. The bus schedules indicate morning and afternoon commuter trips on Saturdays. The need for additional service on weekends is assessed.

The road conditions are generally very poor, especially in the rural areas. Most villages in the Mogalakwena and Lephalale Local Municipalities are not accessible during wet weather. Such road conditions are a significant factor on the operating life of the rolling stock, operating costs, and level of service to the passenger.

The CPTR indicated that WDM has a total of 9 bus terminals. **Table 4.2** indicates the number of terminals (formal and informal) in each Local Municipality.

**Total Number Total Number Total Number** Local of Bus of Formal Bus of Informal Bus Municipality **Terminals** Terminals **Terminals** Bela-Bela 1 0 1 Modimolle 1 0 1 0 Mookgopong 0 0 Mogalakwena 4 4 0 Lephalale 3 3 0 Thabazimbi 0 0 0 Total 3 6

**Table 4.2-Statistics on Bus Terminals** 

#### 4.4 Rail Operations in the WDM

The TPR2 – Rail Report, March 2001, indicates an existing double line from Pretoria North to Pienaarsrivier in the WDM, and is partially a commuter line in the Gauteng Province.

The CPTR indicates that the whole rail network in the WDM is owned and operated by Spoornet, and that the rail service only serves long distance passengers. Also, the available infrastructure is in relatively good condition and the rail stations in Mogalakwena, Modimolle and Bela-Bela are the main stations serving mainline passengers only.

There was a commuter rail service from Polokwane to Dikgale from Monday to Saturday. The service was cancelled and buses and taxis became the more attractive mode.

Passenger demand/need dictates the need for rail commuter service. Technically, passenger volumes greater than 40 000 passengers per day per directions justifies commuter rail. Currently, there seems to be relatively low need for rail commuter services, considering the relative number of passengers currently travelling by bus and taxi. The rationalization will confirm this hypothesis.

Currently, there are no other existing commuter rail services in the WDM.

# 4.5 Metered Taxis in the WDM

There is no data in the CPTR. Hence, information on metered taxis should be reported in the next CPTR effort.

## 4.6 Major Public Transport Corridors in WDM

The public transport corridors identified in the WDM are described in **Table 4.3**. The average daily passengers per direction include bus and taxi passengers. It is evident that the passenger volumes on the dominant corridors justify the bus and taxi modes.

The corridors identified according to passenger volumes per peak period per direction, support road infrastructure with partial priority for public transport. The trunk line should be served by bus mode with feeder and distribution service by bus or taxi modes. During the off peak period the appropriate public transport mode is a smaller capacity vehicle such as the taxi vehicle. Thus, there is need to prioritise the upgrading of roads, and other safety improvements, with specific attention for public transport vehicles.

| Local<br>Municipality | Town     | Corridor                           | Corridor<br>Length | Ave. daily passengers per direction |
|-----------------------|----------|------------------------------------|--------------------|-------------------------------------|
| Lephalale             | Kopanang | R561 Setateng to Kopanang          | 40km               | 11 109                              |
|                       |          | R572 Rietfontein Route to Kopanang | 60km               | 13 315                              |
|                       |          | Marapong to Kopanang               | 27km               | 11 473                              |
| Mogalakwena           | Mokopane | N11<br>Tshamahansi to Mokopane     | 25km               | 14 800                              |
| Mogalakwena           | Mokopane | R101<br>Mahlwareng to Mokopane     | 14km               | 12 600                              |
| Mogalakwena           | Mokopane | R518 Mmalepeteke to Mokopane       | 25km               | 21 000                              |

Table 4.3 – Public Transport Corridors in the WDM

# 4.7 In Summary

- The Waterberg District Municipality's population is unevenly distributed within its six local municipalities. It is evident from the findings of the CPTR survey that the Mogalakwena Local Municipality has over 50% of the District population and as a result contains most of the public transport facilities, which are located within the Waterberg District Municipality.
- 2. It was also discovered during CPTR process that the Waterberg Taxi Associations have been sub-divided into two major Regional Councils, namely; the Bushveld Region Taxi Council and the Western Region Taxi Council. **Table 4.4** provides a list of all Taxi Associations according to their affiliation.

Table 4.4 - Taxi Associations in Waterberg District Municipality

| BUSHVELD TAXI COUNCIL           | WESTERN REGION TAXI COUNCIL     |
|---------------------------------|---------------------------------|
| Ellisras Local Taxi Association | Bakenburg Taxi Association      |
| 2. Kudu Taxi Association        | 2. Great North Taxi Association |
| 3. Lephalale Taxi Association   | 3. Lebowa West Taxi Association |
| 4. Northam Taxi Association     | 4. Mahwelereng Taxi Association |
| 5. Regorogile Taxi Association  | 5.Mapela Taxi Association       |
| 6. Swartklip Taxi Association   | 6.Matlala Taxi Association      |
| 7. Warmbath Taxi Association    | 7.Mokopane Taxi Association     |
| 8. Waterberg Taxi Association   | 8. Steilloop Taxi Association   |
|                                 | 9.Zebediela Taxi Association    |

- 3. According to the National trend, the peak hours are normally recorded as 06h00 08h00 AM for the morning peak and 16h00 18h00 PM for the afternoon peak. The survey conducted at the Smeshblock Taxi Rank reflected a different scenario. For instance, the morning peak hour for the Smesh Block area, which is mainly a mining community, starts at 02h00AM and the afternoon peak is mainly at night around 10h00PM. The area does not have electricity or any alternative power supply.
- 4. Capacity utilisation of the ranks differs significantly. Although most of the ranks in the Waterberg District Municipality are informal without any facilities such as shelters, paving, toilets, etc., the measurements were based on the actual area currently under utilisation by taxis or buses. It is crucial to also note that there are a few taxi ranks in the Waterberg District Municipality which are mainly active during off peak hours, such as Smesh Block, Platina and Molantje Taxi Ranks. These taxi ranks are mainly servicing the mining population, which utilises public transport during unusual hours.
- 5. Nine taxi ranks, which were only surveyed during the facility audit survey, namely; Matlala Taxi, rank, Matshitshileng Taxi Rank, Nkgoru, Tiberius etc. These taxi ranks are generally inactive throughout the day.
- 6. LDVs are generally used as public transport in some areas of the Waterberg District Municipality, especially in deep rural areas and farming areas, such as Ga-Seleka and Steilloop. There are also LDVs with Operating Licenses, especially in the mining areas. This scenario of granting the LDVs with Operating Licenses has been a major source of conflict in the Waterberg District Municipality.
- 7. In some areas Animal Drawn Vehicles (ADVs) are used as an alternative mode of public transport, especially in areas such as Mokopane, Mogalakwena, Steilloop, etc. It

- is crucial to note that, in some areas in the Waterberg District Municipality, the ADVs have been registered or formalised as a recognised mode of transport.
- 8. Road network in some areas is generally very poor, especially in the rural areas. Most villages under the Mogalakwena Local Municipalities are highly inaccessible, especially during rainy seasons.
- 9. With regard to public transport facilities, there is general lack of proper facilities in Waterberg District Municipality, as more than 80% are informal (41 informal and 10 formal).
- 10. With respect to Operational Vehicles, the route utilisation survey noted approximately 1040 taxis that provided services to the WDM of which 50% is in the Mogalakwena Local Municipality.

# 5 PUBLIC TRANSPORT OPERATIONS – RATPLAN AND OLS

ARCUS GIBB (Pty) Ltd prepared the Operating License Strategy (OLS) and the Rationalisation Plan (RATPLAN) as separate studies. This chapter includes the recommendations and detailed operations proposals developed in the RATPLAN and OLS respectively. For more details, the respective documents should be referred to.

#### 5.1 RATPLAN - Results & Recommendations

The socio-economic circumstances and current public transport inefficiencies in the WDM dictates the recommendations. Specifically, the unemployment rate in the WDM is approximately 31%, approximately 55% of the residents live below the minimum living level, and the average household income is approximately R2500 per month. Currently, the average proportion of disposable income spent on commuter travel is 7%. There is no direct subsidy for learners, students, and the elderly, and subsidized provisions for persons with disabilities. Thus additional services and subsidies are necessary to empower and enhance the quality of life for the people of WDM.

#### 5.1.1 Subsidies and Contracts

The short-term rationalization process has limited efficiencies gains, mainly intraoperator. Interim contracts provide very limited scope for major restructuring and large gains in financial effectiveness. Tendered bus contracts provide an opportunity for major restructuring of bus services and bringing about substantial savings in subsidy.

The detailed breakdown of operating cost data is not available due to the sensitivity of the information. Otherwise, the net cost contract model could have been used to determine the sensitivity of fares and subsidies. Nevertheless, the results indicate that the bus service is effective but little inefficiency is evident. The subsidy per passenger in the urban areas (<40km) is relatively lower than the national average, while the subsidy per passenger in the rural areas (>40km) is exceedingly higher than the national average.

Most commuters in the WDM are lower income persons. Therefore the bus service is a need and not a demand, and should be continued. However, there is need for improvements to the current bus service. The subsidy per revenue kilometre in the urban areas should be increased. Assuming the number of commuters remain constant, the subsidy per passenger in the urban areas will increased at least in the order of the national average of R198 per person per month.

From the analysis of the subsidy data, the following is recommended:

- Discounted fares should be provided for students and the elderly
- Learners and pensioners should be subsidized too
- The subsidy per revenue kilometre in the urban areas should be increased
- Only bus journeys exceeding 10km should qualify for a subsidy
- For all subsidised contracts, in addition to subsidies for weekly and monthly tickets, cash fares should also be subsidized.

- The option of increasing fares may be considered, as it is a mechanism to raise revenue and subsequently reduce subsidies. To the contrary, the service to the passenger should not be compromised considering the socio-economic circumstances of the passengers.
- There is need for additional subsidized services on some routes. If minibuses
  are considered for fixed routes, the operating cost of a minibus and a standard
  bus is common driver's wage, fuel, shorter life span versus initial cost, unless
  the volumes are consistently low and terrain dictates. Articulated buses should
  also be considered on routes with consistently high passenger volumes.
- Subsidies should be allocated only for the optimal mode
- There is need for subsidised services from Thabazimbi to the Amandelbult mine, and Thabazimbi to the Northam Platinum mine

Also, to ensure effective and efficient service, the bus contracts should be monitored and audited regularly. For example, buses older than 15 years are not allowed to operate on tendered contracts. Hence, the following recommendations should be addressed in the next round of tendered contracts, and are consistent with the recommendations from the NDOT Study – Report on the Optimisation of Subsidies, October 2002.

 Tendered contracts should be drafted with flexibility over the duration of the contract. Such flexibility should allow for the rationalization and restructuring of routes and services. Such flexibility could create uncertainty and risk for the operator and as a result increase tender price. Therefore, the client should have a defined plan for the restructuring of the public transport through this Rationalization Plan, and should incorporate the recommendations into the tendered contract.

The budget must include escalation, contingencies, variations, and complimentary services

The longer the contract duration, the lower the risk of short-term macro-economic fluctuations has an impact on service delivery. This implies that the risk of the variability of external factors (e.g. exchange rates, fuel price) to the operator should, in theory, reduce in the longer period for which the contract is awarded.

Contracts should be at least 7 years

The contract should specify the minimum level of service conditions

Contracts should be performance based. Thus, the operator should be required to embark on an aggressive marketing exercise and apply innovative business practices to increase patronage. For example, revenue may be generated from advertising space on buses. Subsidy incentives should be provided for increased patronage, increasing operating speed and decreasing journey time, etc.

Current interim and negotiated contracts should be converted to tendered contracts and all contracts should be based on the net cost model, where the sensitivity of fares and subsidies are tested.

There should be incentives to tender with smaller capacity vehicles (such as taxi cooperatives) to provide feeder services and midday services

Contracts should make provision for complimentary services, for example, elderly people travel free of charge

Make provision for automated fare collection, passenger information service (provision of routes maps, time tables, etc.)

Contracts should include measures for accessible transport for persons with special needs.

Internally, the Provincial Department of Transport should employ staff to monitor and audit effectiveness and efficiency of the bus contracts.

There is concern that the National Department of Transport already set a budget for subsidies, while there is need for additional subsidized services in the WDM. The WDM and Limpopo Department of Transport should engage with the NDOT for additional funds to upgrade and add subsidized services in the WDM. Further, pilot projects for the provision of transport to special needs passengers should be investigated and funded by the NDOT.

The National Department of Transport, and Limpopo Department of Transport should correspond with the Department of Environmental Affairs and Tourism to obtain funds through the National Environmental Management (Air Quality Management) Act, to upgrade the rolling stock, justified by the reduction of particulate matter.

Similarly, the Department of Education should also contribute funds for the transportation of learners and students, and the Department of Social Development must contribute funds for the subsidisation of the elderly.

# 5.1.2 Route Optimisation

### (a) Short Term

On several routes, there is need for mid-day services, and there is need for additional capacity in the form of articulated buses in the peak period. Off-peak bus service may not be feasible due to the low demand. However, smaller capacity vehicles are an option for midday service.

Similarly, there is need for additional services on weekends, at least on Saturdays.

Particularly, the routes identified for additional service on weekends are:

- Reitfontein to Kopanang Routes
- Melkbosch to Kopanang
- Olifant to Kopanang
- Shongoane 1, 2, 3 to Kopanang
- Grootestryd to Kopanang
- Lesodi to Mokopane
- Ga-Matlou to Mokopane
- Nkidikitlane to Mokopane
- Vianen to Mokopane
- Moshate to Mokopane
- Sterkwater to Mokopane

Further, the WDM Transport Forum identified farm workers transported to towns by the farmers, mostly at month end. There is need for bus service to be organized especially for the month end activity of farm workers. Such trips should also be subsidized. The

bus operator and WDM should identify such routes and motivate the need for additional subsidies to the Provincial Department of Transport.

Thus there is need to expand services in the current bus contracts, and redesign the bus contracts to incorporate the new routes and services, and to revisit the specifications for an improved level of service.

#### (b) Medium Term

Bus operators should procure the services of the taxi industry to provide scheduled services during the off peak period. The Limpopo Department of Transport should encourage the formation of a consolidated taxi company to tender for routes as a joint venture with the bus companies. This process provides opportunities for emerging enterprises.

The cumulative boarding time for all passengers is approximately half the journey time. There is need to improve the efficiency of the service and the level of service for the passengers. To reduce the boarding time, and journey time, a prepaid fare collection system should be implemented. Also, buses should be modified so that there is a separate door for boarding and alighting passengers, or a wider door to allow free flow, higher volumes of boarding and alighting passengers.

### (c) Long Term

Some routes should be re-designed to feeder and distributor type service. Specifically, the bus services in the Reitfontein area in the Lephalale Local Municipality, where all buses merge on the trunk road from Seleka to Rooipoort, and from Rooipoort and southwards to the R561, are prospective trunk routes for the bus service. The feeder service vehicles may be higher frequency taxi vehicles. As a result, an inter-modal facility is proposed at Rooipoort and Setateng. This concept and proposal should be investigated further.

# **5.1.3 Land Use Development**

In general, residential densification in the urban areas should be the ultimate objective of integrated planning. Currently the long distance subsidy is in the order of R520 per person per month, which is approximately three times greater than the national average. Improving the quality of life, by travelling shorter distances on a daily basis (<40km or one hour), and maintaining the monthly travel cost below 10% of disposal income is dependant on the value to time of the passenger. Nevertheless, it is assumed that the value of time for the economically active passenger is relatively higher.

#### (a) Medium Term

It was found that, in the *Manual for Traffic Impact Studies (RR93/635), National Department of Transportation*, there are no explicit guidelines for the proactive measures in supplying public transportation in a new trip generator (township establishment, industrial area, etc).

According to RR93/635, Town Planning engages in "Forward Planning" and "Development Control". Forward Planning is the formulation of development strategies, policies and plans to guide the physical development of regions, towns or cities. Development Control is public control over the development and use of land in order to achieve the aims of planning and to ensure order.

Considering the dynamic changes to public transportation and the emphasis thereto in the National Land Transport Transition Act, it is equally necessary for the District and Local Municipalities to initiate the following concept.

Every new township establishment should have an appointed public transportation operator, through a tendered process, or the new route/s should be added to an existing contract in proximity of the new development. This avoids destructive competition, the induced conflict among operators, over-supply of public transport services, and a fragmented public transport system in the area.

Thus, there is need for continuous liaison and coordination between Town Planning, Provincial Department of Housing, and Transport Planning including the OLB and Registrar, to ensure control in public transport supply in new developments.

There are several new mining and residential developments in the WDM. The current bus operators are supplying new services or additional services on existing subsidized routes. The new services are not subsidized. Specifically, there are new developments in Marapong, Masodi, Mahwelereng, Sterkwater (PPL mine), and Motlohotlho. Some of the mines already provide a bus service for mineworkers only, for example Lowveld Bus Service from Thabazimbi to the Amandelbult mine.

However, there is need for subsidised services from Thabazimbi to Amandelbult mine and Northam.

# (b) Long Term

Ideally, the rural population should relocate to the urban area to attain densification. However, it is not practical and job opportunities in the urban areas dictate the desire to relocate from the deep rural areas to the urban areas. The relocation of the economically active people from the rural to the urban areas is progressive. Currently, many people travel long distances from the Rietfontein area to Lephalale mainly from home to work and back. Therefore, Town Planning in the Lephalale and Mokopane towns should plan suburban housing developments, and not perpetuate the planning practices of the Apartheid regime.

However, the cost of living in the urban areas is relatively higher and a disincentive for rural residents to relocate to the suburbs. Nevertheless, town planning should consider lower cost housing to promote densification, and as a result reduce travel time, the cost of travel and subsidies.

#### 5.1.4 Persons with Disabilities

#### (a) Short Term

Subsidized Transport for persons with disabilities should be addressed through the Class 1 improvements in the short to medium term. Further, there is need for data on the number of person with disabilities, and the particular need on specific routes. The District Municipality should also identify the NGOs currently providing the service to persons with disabilities. The Limpopo Department of Transport should provide subsidies for such services where necessary and procure the services of operators including NGOs already supplying such services, to provide a specific service to persons with disabilities instead of major changes to the current bus fleet. Also, all buses in the current contracts must have Class 1 improvements.

Where there are no such services for persons with disabilities at all, the bus operators in the tendered and negotiated contracts could introduce paratransit service with customized vehicles at a marginal cost.

The WDM should ensure that all public transport facilities are designed and constructed with provisions for persons with disabilities. The standard design guideline is available from the National Department of Transport.

### (b) Medium Term

In the medium to long term the Department of Transport should implement Class 2 improvements where necessary, through the tendered and negotiated contracts. Again, it is feasible for the operator to supply a Paratransit service instead of transforming the whole bus fleet.

#### 5.1.5 Infrastructure and Facilities

The short term and medium term improvements to public transport infrastructure and facilities is addressed in more detail in the Public Transport Plan. Several existing formal and informal inter-modal facilities require renovation and upgrading, and are also addressed in greater detail in the Public Transport Plan.

# (a) Long Term

There is indication that the poor condition of the rolling stock is attributed to the poor conditions of the road network. Also, the poor road conditions contribute to the longer journey time. Thus there is need to upgrade roads to ensure an efficient public transport service, and in general, improved access and mobility for all residents in the respective region.

Specifically, in the Lephalale Local Municipality, the road from Rooipoort to the R561 should be paved.

In the Mogalakwena Local Municipality the District road from Nkidikilana to Mokopane should be investigated for upgrade. The WDM should consult with the Road Agency Limpopo to prioritise these roads for upgrading.

There is need for inter-modal facilities at various locations on the public transport network. In the Lephalale LM, where feeder and distribution service is recommended in the Reitfontein area, an inter-modal facility is needed at Rooipoort and Setateng. Also, there is need for an in inter-modal facility in Marapong.

In the Mogalakwena LM, there is need for an inter-modal facility at Mahlwelereng. Also, in the town Modimolle, there is need for an inter-modal facility.

#### 5.1.6 Law Enforcement

There is need for consistent law enforcement to monitor compliance to specifications and regulations. The ultimate objective is to ensure the safe transit of passengers, and a safer road environment. Buses should be tested and inspected every six months for roadworthiness and renew its operating permit annually. Bus drivers should be in possession of the code EC driver's license and a professional driver's permit.

Therefore, law enforcement officers should monitor buses and drivers at the depot for the applicable licenses and permits. It is not practical to inspect the vehicle during operations, as passengers could be delayed, unless the vehicle is overloaded.

There is also a need for law enforcement officers to be trained in the application of public transport policies and regulations.

#### 5.1.7 CPTR

The CPTR 2003 did not have adequate data to assist in the preparation of a comprehensive analysis. Therefore the next CPTR should be designed according to the requirements of the CPTR guideline TPR 4, Rationalization Plan, Operating License Strategy, and the Public Transport Plan.

For example, there are bus services contracted by mines. There is no data in the CPTR to confirm the routes and schedules of non-subsidized bus services, to compare with the current subsidized services. It is likely that non-subsidized bus operations are in direct competition with the subsidized services, or there could be a duplication of service that cannot be detected, etc.

Further, the CPTR data only reflects the weekday operations. There are significant operations during weekends that are not reflected in the CPTR. Therefore, weekend operations should also be surveyed.

Therefore, there is need for stringent control and management from WDM, when compiling the new CPTR for 2005.

# 5.2 Implementation and Associated Costs

#### 5.2.1 Review of Recommendations

The extent of the public transport system is complex and the rationalization and restructuring of the public transport system should be implemented gradually, to avoid a sudden change in the system, and cause inconvenience to the passenger and operator. Thus, a flexible and phased approach in the rationalization and restructuring of the public transport system is recommended.

The short-term focus is on optimising the subsidized bus service and balancing the supply and demand for public transport, and eliminating direct competition between modes and operators. The medium term focus is directed at establishing a framework for rationalization and restructuring of the public transport system as a whole.

The implementation of infrastructure projects is addressed in detail in the Public Transport Plan, and subsequently in the Integrated Transport Plan, and the Integrated Development Plan Review 2004/2005.

#### 5.2.2 Bus Operations

There are no major changes in the current bus operations. However, there is need for additional capacity on many routes. On several routes, there is need for mid-day services, and there is need for additional capacity in the form of articulated buses in the peak period. Off-peak bus service may not be feasible due to the low demand. However, smaller capacity vehicles are an option for midday service.

There is need for additional subsidies for the bus operations in the WDM. **Table 5.1** describes the bus operations and the additional subsidy required. The proposal is the minimum service needed in the peak periods, and excludes midday trips.

| Local<br>Municipality   | No. of<br>Trips/mth<br>Needed | Total<br>km/mth | Current<br>Subsidy/mth<br>(R) | Tendered<br>Contract<br>(R) | Total<br>Subsidy<br>(R) |
|-------------------------|-------------------------------|-----------------|-------------------------------|-----------------------------|-------------------------|
| Mogalakwena             | 244                           | 12 172          | 560 759                       | 187 100                     | 747 859                 |
| Lephalale               | 44                            | 1188            | 685 524                       | 10 181                      | 695 705                 |
| Bela-<br>Bela/Modimolle |                               |                 | 25 040                        |                             | 25 040                  |
| Thabazimbi              | 264                           | 11220           | 0                             | 172 500                     | 172 500                 |
| Total                   | 552                           | 245 580         | 1 271 323                     | 369 781                     | 1 641 104               |

Table 5.1 - Cost of New Bus Services

The GNT Bus Service is currently in the process of restructuring. Therefore, it is likely that the parastatal could become an agency and its funding ring fenced. As a result, the subsidy implication for the Province could be negated.

#### 5.2.3 Cost for Additional Capacity

The total subsidy for additional capacity, as recommended for the above-mentioned routes, is approximately R1.6 million, providing subsidised service for workers only.

Since there is only one route each in Modimolle and Bela-Bela, there is no need to convert the interim contract.

In addition to the subsidies, there is need for monitoring of contracts and auditing of the monthly payments certificates by an independent service provider. Monitoring could be implemented manually or electronically. The capital cost for the electronic mechanism is glorified and expensive. Nevertheless, the electronic mechanism is more effective. For the interim contracts the estimated cost for start-up, manual monitoring, auditing, and project management is 5% of the subsidy contract value, that is, R1250 bimonthly.

For the tendered contract, the estimated cost for start-up, electronic monitoring, auditing, and project management is 10% of the subsidy contract value, that is, R75 000 per month for services in Mogalakwena LM, and R87 000 per month for services in the Lephalale and Thabazimbi LM.

#### 5.2.4 Provision for Persons with Disabilities

### (a) Project - Class 1 Improvements to Current Fleet

Subsidized Transport for persons with disabilities should be addressed through the Class 1 improvements in the short to medium term.

# (b) Project – Data Capturing and Feasibility of Paratransit Service

There is need for data on the number of persons with disabilities, and the particular need on specific routes. The District Municipality should also identify the NGOs currently providing the service to persons with disabilities. The Limpopo Department of Transport should provide subsidies for such services where necessary and procure the services of operators including NGOs already supplying such services, to provide a specific service to persons with disabilities instead of major changes to the current bus fleet.

The data capturing of transportation needs for persons with disabilities should be prioritised in the preparation of the next CPTR. Therefore, there is no specific cost for this effort. However, the feasibility for a paratransit service should be an independent study. The pilot study should be funded by the NDOT.

# (c) Project – Non-Motorised Transportation for Learners

Where schools are within a 5km radius, there is potential for non-motorised transportation such as bicycles and donkey carts for learners, including safer walkways. This will be addressed in more detail in the Public Transport Plan.

# (d) Project - Design and Construction

The WDM should ensure that all public transport facilities are designed and constructed with provisions for persons with disabilities. The standard design guideline is available from the National Department of Transport.

# 5.3 Alternative/Innovative Funding

In addition to the fixed sum of bus subsidy from the National Department of Transport, the Provincial Department of Transport should research alternate funding mechanisms for public transportation. For example, advertising on buses is a lucrative generator of operating funds. The Department of Transport should correspond with the Department of Environmental Affairs and Tourism to obtain funds through the National Environmental Management (Air Quality Management) for the upgrading of rolling stock. The primary motivation is based on the reduction of pollution through new vehicles, while the secondary motivation is based on the improved level of service to the passengers.

Similarly, the Department of Transport should correspond with the Department of Education to obtain funds for the subsidisation of learners and students, and the Department of Social Development should contribute to the subsidisation of the elderly.

Innovative funding is addressed in the Public Transport Plan. However, the Limpopo Department of Transport needs to research this subject, with the objective of improving and expediting service delivery, specifically in transportation.

# 5.4 Cost Implications

The total cost implication for the WDM is in **Table 5.2**, and is categorised according to the implementation schedule, which are, short term (2005-2006), and medium to long term (2006-2013). The GNT bus service is currently in the process of restructuring, and funding for the enterprise could be ring fenced. Therefore, a major part of the envisaged cost could be for the new enterprises, instead of the Provincial Government.

Table 5.2 – Proposed Projects and Cost Implications

| Project  | Time Frame | Estimated Cost (R/annum)                         | Action               |  |  |  |  |
|--|------------|--|----------------------|--|--|--|--|
| Short Term   |            |  |                      |  |  |  |  |
| Review CPTR  | 2005       | R0.4m  | WDM                  |  |  |  |  |
| Review Rationalisation Plan  | 2005       | R0.12m   | WDM                  |  |  |  |  |
| Feasibility Study for Paratransit Service (including data collection)                              | 2005       | R0.4m  | WDM                  |  |  |  |  |
| Study Innovative Funding for Transportation in Limpopo   | 2005-2006  | Already Identified in PLTF                       | Limpopo DoT          |  |  |  |  |
| Non-Motorised Transport Plan   | 2005-2006  | R0.3m  | WDM<br>Limpopo DoT   |  |  |  |  |
|  | Medium To  |  |                      |  |  |  |  |
| Provide additional subsidies for new routes  | 2006-2008  | R4.07m   | Limpopo DoT          |  |  |  |  |
| Monitoring and Auditing  | 2006-2008  | R1.0m  | Limpopo DoT          |  |  |  |  |
| Class 1 Improvements   | 2006-2008  | R0.3m  | NDOT                 |  |  |  |  |
| Implement non-<br>motorised Transport<br>Plans   | 2006-2008  | R1m  | WDM<br>Limpopo DoT   |  |  |  |  |
| Long Term  |            |  |                      |  |  |  |  |
| Implementation of new tendered contracts & Implement concessions for learners, students, & elderly | 2008-2013  | R20m excluding contingencies, escalation and VAT | Limpopo DoT<br>Mines |  |  |  |  |
| Monitoring and Auditing (electronic)   | 2008-2013  | R2.0m  | Limpopo DoT<br>Mines |  |  |  |  |

There are several externalities to be addressed by the public sector, such as, the provision of inter-modal facilities, upgrading of roads, and training of law enforcement officers in public transportation, and integrated land-use planning. The Public Transport

Plan and Integrated Transport Plan address some of these externalities that could enhance public transportation, and optimise subsidies.

#### 5.5 OLS - Results & Recommendations

In general it can be conclude that there is a huge over-supply of taxis and in the interim no new licenses be approved. Steps must be taken to reduce the number of vehicles and licenses.

The route verification process was also investigated to obtain the final routes for taxi services in the WDM. The routes are not yet gazetted, since the process is ongoing for WDM. However, the most recent list of routes was obtained and compared with the CPTR information. There are several new routes identified, but there are no passenger volumes and utilisation to determine the number of licenses to be issued.

Also several routes in the CPTR do not correspond with the routes description in the verification process. All routes are documented, and these omissions and irregularities should be resolved in the next CPTR.

#### 5.5.1 Capacity Utilization at Ranks

The information on ranks and their utilisation, as contained in the CPTR, was considered as part of the further evaluation of operations for the purpose of assessing operating license applications.

The purpose of rank utilisation surveys was to determine whether the rank had sufficient capacity to accommodate the taxis operating there.

It is extremely important to realise that a large number of facilities in the WDM area are informal facilities. In practice, this implies that it is virtually impossible to determine the rank utilisation.

It is generally accepted that when a rank is at capacity, an operating License should not be issued. At this stage, as already indicated, there are few formal facilities in the WDM area. In practice this implies that it would be difficult to apply the principle of not issuing an operating license when a rank has reached a high percentage of capacity utilisation. Travel demand must not be suppressed in the rural areas because no or inadequate facilities are available.

#### 5.5.2 Transport Operating License Board

The Head of the Limpopo Department of Public Transport should designate one or more departmental officials to be stationed at the offices of each Local Municipality to fulfil the functions of the OLB, in the manner prescribed.

The OLB should receive completed application forms for operating licenses in respect of services commencing in its Local Municipalities together with the application fees, and all the necessary accompanying documentation from the Taxi Association. The local offices should check the validity and legitimacy of the information, and enter details of the applications into the OLS.

The OLB should then submit the applications to the relevant Local Municipality, for recommendations in the prescribed manner.

In making recommendations, Local Municipalities planning departments should ensure that the application is in accordance with relevant transport plans, i.e. its Operating License Strategy and other relevant transport and land use plans and consider factors such as demand or needs on a route basis, availability of ranking space, etc.

Where the destination of the routes is in another Province, the OLB of the destination Province should also comment on the application.

If no forum or liaison committee exists in respect of a route or area at the relevant time, the OLB may make a unilateral decision based on the recommendations in this OLS.

Similarly, where a Board of another Province has referred an application to the Limpopo OLB for comment, the Limpopo Province OLB should refer to the recommendations in this OLS for guidance and direction.

# 5.5.3 Procedures Within the WDM for Disposing with License Applications

Upon receiving an application, it is recommended that the WDM follow the following process, as part of making a recommendation on applications for operating Licenses:

- The route applicable to the application and its status with respect to capacity utilization should be identified.
- If the indication in terms of records is that further investigations are required, such further investigation should be carried out. (The further investigations are discussed below).
- Records should be checked to determine whether applications for additional licenses are supported and awarded on the same route by the Operating License Board, since the approval of the OLS. If so, the impact of the additional capacity on such a route should be assessed.
- If the above steps indicate that additional capacity on the route can be accommodated, the capacity utilization of the relevant rank(s) should be assessed. Rank capacity should not be the critical factor.
- Similarly, an assessment of the route should be done in terms of the preferred mode and the restructuring of the public transport system in the WDM.
- The WDM should consider whether any conditions should be linked to a license if awarded.
- If all the above considerations indicate that additional capacity can be supplied on the route relevant to the application, the WDM should support the application.

### 5.5.4 Exit Process

The oversupply of taxi vehicles in the WDM is evident in this study. According to the NLTTA section 51, as a result of an existing non-contracted public transport service that is no longer required, the planning authority must use its best endeavours to offer the holder of the operating license or permit in question any viable alternative service or services in the place of the existing service.

There are various other issues to be addressed in the exit/withdrawal of licenses strategy. Currently, the National Department of Transport is preparing an exit/withdrawal strategy for the implementation of the Taxi Recapitalisation Program and should be applicable to the Limpopo Province as well.

The Limpopo Province should adopt and customize the withdrawal strategy currently being prepared by the NDoT. Further, the OLB should adhere to the OLS recommendations regarding the issuing of operating licenses. If excessive licenses are approved, and if it is not practical for operators to accept the alternative routes during the rationalisation process, and prefer to exit/withdraw licenses, then the process will be very costly to Government.

Also, 'suitcase' permits should be converted to route based permits, and then upgraded to an operating license. The concept of permanent permits should be abolished and operating licenses should be issued for a specific duration of three to five years, consistently with the requirements of the NLLTA.

#### 5.5.5 Persons with Disabilities

Taxi vehicles should comply with Class 1 improvements in the short to medium term. Further, there is need for data on the number of person with disabilities, and the particular need on specific routes. The District Municipality must also identify the NGOs currently providing the service to persons with disabilities. The Limpopo Department of Transport must provide subsidies for such services where necessary and procure the services of operators including NGOs already supplying such services, to provide a specific service to persons with disabilities instead of major changes to the current taxi vehicles or the New Taxi Vehicles.

Where there are no current services for persons with disabilities at all, there is opportunity for contracted paratransit service with the Limpopo Department of Transport. The Limpopo Department of Transport must consider this in the new subsidised bus contracts.

The WDM should ensure that all public transport facilities are designed and constructed with provisions for persons with disabilities. The standard design guideline is available from the National Department of Transport.

### 5.5.6 Law enforcement

The PLTF (Limpopo in Motion) identifies the current challenges in Law Enforcement specifically to address public transport needs.

- Limited human resources and equipment
- Illegal passenger transport operators
- Conflict resolution procedures are not instituted
- Corruption

There is need for consistent law enforcement to monitor compliance to specifications and regulations. The ultimate objective is to ensure the safe transit of passengers, and a safer road environment.

### (a) Determining the Number of Illegal Operations

A taxi vehicle and operator not registered with the Registrar and in possession of a legitimate route based permit or operating license, constitutes an illegal operator/vehicle.

It is not practically possible to determine the number of illegal taxi vehicles, since the vehicle registration numbers in the CPTR is not comprehensive and subsequently the information in the Land Transport Permit System is relatively outdated. The Registrar

indicated that some vehicles might have relocated to another jurisdiction. Further, there are operators currently awaiting the decision of the Board through the BLC process.

It is therefore recommended that the methodology on determining the number of illegal taxi vehicles focus on the current demand and supply, by issuing operating licenses to current route based permit holders, while illegal operators are identified through effective law enforcement on the ground.

### (b) Identification of Legal Taxi Vehicles

The OLS will determine the number of OL to be issued per route. The operator/driver of the taxi vehicle should be in possession of a valid copy of the operating license with a legitimate identification on the vehicle. The Taxi Directorate of the Department of Transport and the OLB must address the development of intra-provincial operation identity tags/markers in the form of a sticker. The tag should have at least the following information:

- Name and address of the operator.
- Colour coded routes and route numbers.
- The original symbols on current motor vehicle registration plates should be adopted for consistency in identifying the base Province of the operator.
- The origin, destination, and possibly intermediate destinations.
- Vehicle Registration number
- Operator's (association or non-member) provisional or full registration number
- Date of expiry of operating license or permit
- Operating license or permit number
- Provision for persons with disabilities totem
- Maximum number of seated passengers, which also determines the maximum legal loaded weight of the vehicle.

The development of inter-provincial markers is currently being addressed by the National Department of Transport.

The NLTTA Section 85 specifies the detailed description of the route or routes on which, or, where applicable, the particular area in which the vehicle is to be used for the operation of the service to which the operating license relates, through specification of the relevant street names, road numbers, beacons, or land marks for each city, suburb, town, village or settlement, the authorized ranks or terminals, and other points for picking up and setting down passengers where applicable, on the operating license.

The NLTTA Section 93 requires the holder of an operating license for the operation of any public transport service in the Province, to submit data such as number of passengers conveyed during the month, the distance, and the number of passengers per trip. The effective date is not yet determined by the MEC.

Taxi vehicles should be tested and inspected every six months for roadworthiness and renew its operating license every three to five years. Also, taxi drivers should be in possession of the code C1 driver's license and a professional driver's permit. The number of passengers and goods in the vehicle should indicate the legal maximum load on the vehicle.

# (c) Public Transport Inspectorate

Considering the above requirements, law enforcement officers should monitor taxis and drivers for the applicable licenses and permits. It is unfortunate that vehicle inspections occur during operations, and cause delays to the passengers.

Most traffic officers lack the necessary skills in public transport law enforcement as required in the NLTTA. There is no uniformity and coordination on the delegation of powers at Provincial and District Level.

The MEC approved the formation of the Public Transport Inspectorate, which comprises of one department manager, two Provincial Inspectors, and 50 Principal Inspectors. There are no appointments yet. The cost to appoint 50 officers at least in one financial year is extremely costly, possibly in the region of R7.5m per annum in salaries only.

It is therefore recommended that, instead of forming a new inspectorate, the current law enforcement officers under the Department of Transport – Traffic and Road Safety Directorate, should be trained in the application of the requirements for the Taxi Recapitalisation Program and the application of operating Licenses. The program should include the Taxi Recapitalisation, advanced driving (consistent with the Occupational Health and Safety Act), validation of vehicle inspection, and management.

As a result, the need for fixed and operational equipment (office space, furniture and equipment, vehicles, etc.) for the "inspectorate" is marginal, while the implementation is optimised. There is also a need for law enforcement officers to be trained in the application of general public transport policies and regulations (including the bus mode, Animal drawn vehicles, LDVs, etc), and cross border requirements.

The Province and the NDoT should expedite the installation of the NTR and NaTIS information management system off site (office) and on site (in-vehicle).

The Limpopo Taxi Provincial Council and Traffic Department should maintain constant liaison to ensure that the taxi industry complies with the minimum requirements of the law, until the rollout of the proposed NTV.

### (d) Conflict Resolution

The current practice to address conflicts evolves around the Registrar. There is no formal structure in the Province to address conflicts in the taxi industry. Nevertheless, the Limpopo Provincial Taxi Council and the District Taxi Council structures have conflict resolution committees and correspond with the panel of assessors of the Registrar.

There was concern that the Registrar does not impose penalties. The standard Constitution provides direction on penalties. Therefore, the recognised taxi authority, Limpopo Provincial Taxi Council and the District Taxi Council, are the appropriate bodies to impose penalties.

There is no Provincial Memorandum of Agreement between the Provincial Taxi Council and the Provincial Department of Transport that specifically deals with conflict resolution, and there is no formal guideline in the Province to address conflicts.

To reduce the possibility of conflict occurring, Memorandums of Agreement should be in place between the Government and the taxi industry at both National and Provincial level.

In order to hear appeals concerning inter-Provincial transport, and intra-Provincial transport if no Provincial Transport Appeal Body is established, the Transport Appeal Tribunal Act 1998 (Act No 39) should be made functional. The Provincial Transport Appeal Body (TAB) exists in the Limpopo Province.

Thus, the following is recommended to address conflict resolution in the WDM:

- The Limpopo Department of Transport and Provincial and District Taxi Councils must develop a Memorandum of Agreement with guidance from the draft National memorandum;
- The Limpopo Department of Transport and Provincial and District Taxi Councils need to formalise procedures to respond to conflicts thereby promoting a continuous process of resolution of issues and eventual eradication of conflict.
- Law Enforcement (SAPS and Traffic) must be included on the conflict resolution committee.
- The standard Constitution provides direction on penalties. Therefore the recognised taxi association should impose penalties where necessary.
- Penalties should be reported to the NTR. Therefore, the relevant taxi association should correspond with the Registrar when penalties are imposed on operators.

# **5.5.7 Summary**

The following recommendations are made in terms of public transport in the WDM:

- 1. The Operating Licensing Strategy should be accepted and approved by all the role players and be implemented through a facilitation process.
- 2. The Operating Licensing Strategy should be updated on an annual basis, and the recommended number of operating licenses per route is valid only until April 2006.
- 3. It is recommended that no further Licenses be issued due to the huge over supply of taxi services. Operators should be encouraged to transfer operations from over-supplied routes to new routes and under-supplied routes. Alternatively, the moratorium could be relaxed for new routes. This approach should be negotiated with the respective stakeholders.
- 4. Where new routes are introduced, the OLB must investigate the capacity and need for that particular route before issuing any new operating licenses, and should also consider transferring operators from oversupplied routes to the new routes.
- 5. The CPTR information should be updated in an attempt to address the gaps in the information.
- 6. The law enforcement strategy should be prioritised to ensure peace and stability in the area.
- 7. Taxi co-operatives should be developed to benefit the local community and ensure local black economic empowerment, and tendering for subsidised routes.

- 8. Incorporate the donkey-cart mode in the non-motorised transport plan especially in the deep rural areas, and document standard specifications.
- 9. Assess the routes applicable for LDVs as public transport vehicles, and the MEC must act on NLTTA section 31.
- 10. Expedite the installation, training, and operation for the Registration Administration System and the Operating License Administration System.
- 11. 'Suitcase' permits should be converted to route based permits, and then upgraded to an operating license. The concept of permanent permits must be abolished and operating licenses must be issued for a specific duration of three to five years, consistently with the requirements of the NLLTA.

### 6 INTEGRATED LAND USE AND TRANSPORTATION PLANNING

This section of the report contains the strategies and procedures to ensure integrated land-use and transport planning. The main aim is to fulfil the requirements of the NLTTA. The focus was therefore on the following:

- a) Densification
- b) Infilling
- c) Mixed land-use
- d) Rationalisation of transport and housing strategies

The three above-mentioned underlying factors would support the public transport system in the WDM. In order to promote the integration of land-use and transport, the strategies of this PTP were formulated in a fashion that would support the development of existing corridors and nodes.

The PTP should therefore be prepared in context with the -

- a) Spatial Development Framework;
- b) Integrated Development Plan (IDP);
- c) Provincial Land Transport Framework (PLTF)

The OLS and RATPLAN were developed according to the development nodes identified in the Spatial Development Framework.

### 6.1.1 Land Use Development

Under the strategic plan for transport and related projects only road infrastructure is addressed in the IDP 2003/2004. There are no plans and projects for the public transportation system, except for the upgrading of roads. The 2004/2005 IDP Review Process is not yet aligned with the recommendations of the current transport plans.

In general, residential densification in the urban areas should be the ultimate objective of integrated planning. Currently the long distance subsidy is in the order of R520 per person per month, which is approximately three times greater than the national average. Improving the quality of life, by travelling shorter distances on a daily basis (<40km or one hour), and maintaining the monthly travel cost below 10% of disposal income is dependant on the value to time of the passenger. Nevertheless, it is assumed that the value of time for the economically active passenger is relatively higher.

Ideally, the rural population should relocate to the urban area to attain densification. However, it is not practical and job opportunities in the urban areas dictate the desire to relocate from the deep rural areas to the urban areas. The relocation of the economically active people from the rural to the urban areas is progressive. Currently, many people travel long distances from the Rietfontein area to Lephalale mainly from home to work and back. Therefore, Town Planning in the Lephalale and Mokopane towns should plan suburban housing developments, and not perpetuate the planning practices of the Apartheid regime.

However, the cost of living in the urban areas is relatively higher and a disincentive for rural residents to relocate to the suburbs. Nevertheless, town planning must consider lower cost housing to promote densification, and as a result reduce travel time, the cost of travel and subsidies.

# (a) Develop a Guideline for Transport Impact Studies

It was found that, in the *Manual for Traffic Impact Studies (RR93/635), National Department of Transportation*, there are no explicit guidelines for the proactive measures in supplying public transportation in a new trip generator (township establishment, industrial area, etc).

According to RR93/635, Town Planning engages in "Forward Planning" and "Development Control". Forward Planning is the formulation of development strategies, policies and plans to guide the physical development of regions, towns or cities. Development Control is public control over the development and use of land in order to achieve the aims of planning and to ensure order.

Considering the dynamic changes to public transportation and the emphasis thereto in the National Land Transport Transition Act, it is equally necessary for the District and Local Municipalities to initiate the following concept.

Every new township establishment should have an appointed public transportation operator, through a tendered process, or the new route/s should be added to an existing contract in proximity of the new development. This avoids destructive competition, the induced conflict among operators, over-supply of public transport services, and a fragmented public transport system in the area.

Thus, there is need for continuous liaison and coordination between Town Planning, Provincial Department of Housing, and Transport Planning including the OLB and Registrar, to ensure control in public transport supply in new developments.

There are several new mining and residential developments in the WDM. The current bus operators are supplying new services or additional services on existing subsidized routes. The new services are not subsidized. Specifically, there are new developments in Marapong, Masodi, Mahwelereng, Sterkwater (PPL mine), and Motlohotlho. Some of the mines already provide a bus service for mineworkers only, for example Lowveld Bus Service from Thabazimbi to the Amandelbult mine.

However, there is need for subsidised services from Thabazimbi to Amandelbult mine and Northam.

### (b) Transport Impact Studies for New Commercial Developments

Considering the dynamic changes to public transportation and the emphasis thereto in the National Land Transport Transition Act, it is equally necessary for the District and Local Municipalities to initiate the following concept.

Every new development should provide a Traffic Impact Study, if the development has a potential of generating more than 150 peak hour trips. The traditional Traffic Impact Study focused on mitigating the impact of the private car, and identifying bus stops along the road network. The guideline mandates the developer to provide access for private vehicles and commercial vehicles, and also requires the developer to finance its traffic impact on the local road network. Although the current guideline prioritises the integration of public transportation and development, the developer is not obligated to provide public transport facilities; neither are public-private partnerships for the development of public transport facilities encouraged. Rather, public transport facilities are considered as bulk services from the local authority. (Public transport facilities includes, direct vehicle and passenger access, including lay-bys, stairs, ramps,

pedestrian crossings, protected walkways from the lay-by into the commercial centre, traffic calming in the periphery of the development, etc.).

Although the upgrading and improvement of the basic infrastructure is the responsibility of the local authority, the developer can as a result of the impact study, be instructed to implement specific mitigation measures. Where a development is large enough to warrant public transport facilities the developer is required to design and construct the facilities.

The developer should acknowledge that a public transport facility is in the interest of its commercial function, when social externalities like safety and comfort of its captive commuters/employees are accommodated.

In effect, a public-private partnership is conceived where the developer provides the necessary facilities and the local authority provides the shelter, sidewalks, route maps and schedules, and the necessary street furniture to enhance liveable communities.

### (c) Transport Impact Studies for New Residential Development

Every new township establishment should have an appointed public transportation operator, through a tendered process, or the new route/s should be added to an existing subsidy contract in proximity of the new development. This avoids destructive competition, the induced conflict among operators, over-supply of public transport services, and a fragmented public transport system in the area.

Thus, there is need for continuous liaison and coordination between Town Planning, Provincial Department of Housing, and Transport Planning including the OLB and Registrar, to ensure control in public transport supply in new residential developments.

(There are several new mining and residential developments in the WDM. The current bus operators are supplying new services or additional services on existing subsidized routes. The new services are not subsidized yet.)

### (d) By-Law for Transport Impact Studies for New Developments

The development of residential, retail, and office space are opportunities to improve the standard of public transport facilities with the support of the futuristic ideas of the developer. The location of the public transport facilities should be strategically orientated so that access, mobility, and road capacity for both public and private transportation are optimised. The integrated public transport facility should ensure a safe and convenient pedestrian access into the development.

Concurrently, the planning and design of an integrated facility should consider the aims and objectives of the affected operators (taxi and bus), the desire lines of pedestrians, and the proposed developer's responsibility towards public transportation.

Although the upgrading and improvement of the basic infrastructure is the responsibility of the local authority, the developer can as a result of the impact study, be instructed to implement specific mitigation measures. The guideline should obligate the developer to pay for the mitigation measures for private vehicles, and public transport vehicles where appropriate.

The developer should mitigate the impact of its development, and therefore, where a development is large enough to warrant a public transport facility for one or more public transport vehicles; the developer is required to design and construct the facility

as part of its development. The Jane Furse Plaza rank in the Sekhukhune District Municipality is a worthy example of transit-oriented development.

The developer is also required to design and construct immediate accesses from the facility into the development, including stairs, ramps, pedestrian crossings, protected walkways, shelters, and traffic calming, where physically possible.

The guideline should also specify parking requirements for private vehicles. <u>Instead of requiring a minimum number of parking spaces for each new development, a maximum number of parking spaces must be provided.</u> Thus, a ceiling on the supply of parking is introduced to meet two major objectives:

- To increase the use of transit and other modes
- To prevent an excessive concentration of vehicles in an area that should be human-oriented

### 7 BROAD PUBLIC TRANSPORT STRATEGY

The broad public transport strategies for the WDM are as follows:

- a) Enhance accessibility to and the use of public transport through planning to ensure that the different modes of transport are integrated and co-ordinated
- b) Enhance the effective functioning of the WDM area, including the rural areas, through planning transport services and infrastructure in the context of the Integrated Development Plan as well as Land Development Objectives
- c) Direct economic activity, mixed land-use and high-density residential development into high utilisation public transport corridors that would connect development nodes, and discourage the urban sprawl that tends to make public services inadequate
- d) Give priority to infilling and densification along public transport corridors
- e) Give higher priority to public transport than to private transport and discourage the use of private vehicles by means of Travel Demand Management
- f) Enhance accessibility to public transport for persons with disabilities
- g) To develop, co-ordinate, implement, and manage an integrated, multi-modal transport system
- h) To ensure that the system is reliable, effective, efficient, safe, accessible, affordable, and environmentally friendly
- i) Promote the most cost-effective mode of transport
- Focus on prioritised economic activity nodes and transport nodes in the transport plans.
- k) Identify minimum service levels of the public transport services serving economic activity nodes.
- Develop a holistic and integrated funding strategy focusing on maximizing the transport budget from the Provincial allocation, and by achieving efficiency gains through better utilization of available funds
- m) Explore the possibility of additional funding sources

### 8 SPECIFIC PUBLIC TRANSPORT STRATEGY

The specific public transport strategies to be addressed are:

- a) Measures to promote public transport
- b) The needs of persons with disabilities
- c) The needs of learners
- d) Modal integration
- e) Fare systems for public transport
- f) Public Transport Infrastructure and Facilities

#### 8.1 MEASURES TO PROMOTE PUBLIC TRANSPORT

#### 8.1.1 Brief Assessment of the Status Quo

Historically, the provision of Public Transport was to provide the basic minimum. Subsidised bus service was designed to transport commuters from the 'townships' to the towns, in the apartheid regime. Most commuters' are captive to the bus and taxi modes of transportation. Hence, there was no need to market public transport, to improve services, infrastructure, rolling stock, and facilities. Due to the history of socioeconomic struggles for most people in the WDM, the level of service was not a priority, but the mere availability of service was important. The same group of people are now accustomed to the basic services and are not aware of a better and improved level of service due to the lack of knowledge.

Gary Lawrence, in *A Forum on the Future of Sprawl,* in The Amicus Journal, Fall 1996, page 23 indicates that: If we try to induce people to use transit through guilt, while the automobile industry is saying, 'if you drive this car you're going to get more and better sex,' it's not an equal contest. In transit coaches, there's no place to put groceries, there's no place to hang dry cleaning. Every time you get on a bus the message is: We assume you're going to vandalize this; we assume you are going to be dirty. And every time you get in the car the message is: We are going to pamper you the way you deserve to be pampered. As long as we have an 'alternative' that's not a real alternative psychologically, then the automobile is going to win. **It's not an issue of mobility. It's an issue of freedom and self-worth"** (emphasis added).

In the marketing of public transport in the WDM there is need for the development and implementation of a Passenger Charter, constant Market Research (Customer Care and Passenger Information), the development of an aesthetic theme for public transport facilities where people identify with and take ownership of public transportation. A major focus in promoting public transport is primarily for road based public transport.

# 8.1.2 Brief Summary of Relevant National and Provincial Strategies

The National Strategy is briefly summarised as follows:

a) For the purpose of land transport planning and the provision of land transport infrastructure and facilities, public transport must be given a higher priority than private transport. This will entail the implementation of effective Travel Demand Management (TDM) measures to promote the more efficient use of private cars and to free up resources for the upgrading and promotion of public transport.

All spheres of government have to promote public transport and the efficient flow of inter-provincial transport and cross-border road transport.

Land transport planning and provision should give greater attention to promoting the safe and efficient use of non-motorised transport modes, such as walking and cycling.

b) The basis of the new policy is a change from a supply-driven to a demand-driven land transport system. For this reason, transport planning integrating all three spheres of government, as provided for in the National Land Transport Transition Act (NLTTA), should be the lever for change from a supply-driven to a demanddriven or needs-driven transport system.

The Limpopo Province Transport Strategy is briefly summarised as follows:

- a) Reduce the cost of transport to people
- b) Support and develop the bus industry
- c) Support and develop the taxi industry
- d) Assist Municipalities with the provision of facilities
- e) Provide an improved quality of service (safe, efficient, reliable, integrated, etc.)
- f) Enhance non-motorised transport (pedestrian facilities, donkey carts, bicycles, etc.)

# 8.1.3 Specific Principles and Objectives

The following are some measures intended to promote public transport:

- a) The provision of adequate public transport infrastructure, facilities and services
- b) The increased utilisation of public transport services
- c) The improvement of the image and acceptability of public transport, including:
  - service quality and reliability:
  - safety and security; and
  - affordability.
- d) The integration of transport and land-use in a way that will enhance the accessibility and utilisation of public transport
- e) A higher priority to public transport than to private transport
- f) The marketing of public transport services in general; for example by publishing information about routes, tariffs and timetables
- g) Training, skills development and capacity building in the public transport industry
- h) Modal integration
- i) Discourage direct competition between bus and taxi modes

# 8.1.4 The Proposed Strategy

The proposed strategy to promote public transport in the WDM is to address the following components of Public Transportation:

- a) Public Transport Service Improvements
  - Improve on-time performance
  - Provide schedules and enhance timetable availability
  - Decrease travel time
  - Improve cleanliness of the vehicles
  - Improve availability of information at ranks and stops

- Maintain comfortable temperature in the vehicle
- b) Resolve institutional arrangements between planning authorities
- c) Market Research and Customer Satisfaction Surveys
- d) Form a Transport Forum for the WDM
- e) Expedite the formalisation of the taxi industry
- f) Research Feeder and Distribution type services (bus and taxi modes) and design transfers on routes where a single bus does not serve both trip origin and destination, with a small surcharge
- g) Develop non-motorised transport
- h) Develop facilities (section 7.3)
- i) Automated Fare Control Implementation (section 7.4)
- j) Long distance taxi trips should be on a fixed time table to ensure reliability and convenience for the passenger
- k) Policy on Design and Art for Community Projects The inclusion of quality design, photography, and art are intended to motivate and inspire the community. Further, quality design not only adds social value to a project, but also improves the aesthetic value of the facility. The attractive environment provides a sense of comfort and security, which are elements of a liveable community. Specifically, impressive design and art can improve the appearance and safety of a facility, give vibrancy to its public spaces, and patronises people.

To create facilities that are integral components of communities, information about the character, makeup, and history of the neighbourhood should be developed and local residents and business could be involved in generating ideas for the project. Artists should be encouraged to interact with the community and may even choose to work directly with residents and business on a project. Buses, and taxis are more attractive through distinctive interior and exterior designs. Architects or artists should be included in the design of bus shelters and landscaping of integrated public transport systems, like public transport facilities at shopping centres.

I) Embark on a marketing campaign

There is need for an extensive information campaign by the Department of Transport and the District Municipality to educate and sensitise passengers, by distributing flyers through employers, notices in buses, press releases, etc. The marketing plan, goals and objectives must be measurable. Part of the strategy should include selling available seats during weekends and holidays, such as "buy one get one free ride", children under 16 years of age may ride free with a fare paying customer, etc. Similarly, slogans such as "routes to knowledge" for trips to academic institutions, "wheels of economic development" and "wheels to freedom", etc., should be used in advertising campaigns.

#### 8.1.5 Plan of Action

The following are some specific projects that could be implemented in order to promote public transport in the WDM:

- a) Apply the recommendations of the OLS and RATPLAN
- b) Update the CPTR, OLS and RATPLAN every two years
- c) Identify a Public Transport aesthetic theme
- d) Prepare and implement a Passenger Charter
- e) Prepare a Memorandum of Understanding with service providers (bus, taxi, etc), and the Limpopo Province

- f) Develop a route coding system for intra-provincial taxi operations
- g) Transform all subsidy contracts to negotiated or tendered contracts
- h) Promote the formation of taxi co-operatives
- i) Encourage taxi co-operatives to tender for subsidised routes and as a result eliminate direct competition between taxis and buses
- i) Appoint an independent monitor for the subsidised service contracts
- k) Mandate all design and construction projects to accommodate the disabled, pedestrians, bicycles, and the New Taxi Vehicles
- I) Develop Key Performance Indicators in the public transport contracts (customer surveys, efficiency, reliability, etc.)
- m) The Provincial Taxi Council must address the need to provide long distance service on a fixed schedule. (The peak periods for taxi operations per route are in the OLS).
- n) Prepare and implement a communication strategy or marketing campaign
  - Guide to use the electronic fare equipment
  - Publicise security measures (security on board, at bus stops, etc.)
  - Transformation of the taxi industry, specifically the implementation of the New Taxi Vehicles
  - Fare price increases
  - Sensitise the public on the transportation of disabled persons (section 7.2)

### 8.2 THE NEEDS OF PERSONS WITH DISABILITIES

#### 8.2.1 Brief Assessment of the Status Quo

Based on the information obtained from the Waterberg District CPTR the current public transport system does not seem to be user-friendly for disabled persons. The general lack of public transport infrastructure in the area is the main reason for this problem. It may even be stated that there are basically no public transport facilities available for disabled persons in the area.

The demographic data in **Figure 7.1** indicates the number of persons with disabilities in the WDM, and implies the need for transformation in the current public transport operations, with specific attention to persons with disabilities.

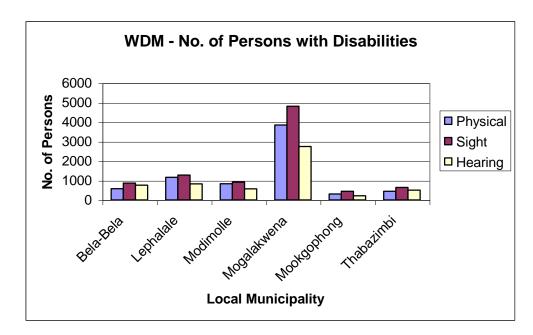


Figure 8.1 - Number of Persons with Disabilities in WDM

The CPTR and IDP/Census data does not indicate the economically active among the disabled. Nevertheless, there are a significant number of persons with disabilities in the especially in the Magalakwena Local Municipality.

**Table 8.1** compares the number of persons with disabilities in the Province and the District Municipality.

| Disability | Waterberg DM | Limpopo Province | RSA Total |
|------------|--------------|------------------|-----------|
| Sight      | 11971        | 113088           | 1 091 022 |
| Hearing    | 5438         | 51416            | 383 408   |
| Physical   | 5577         | 60052            | 557 774   |
| Mental     | 2316         | 22578            | 192 553   |
| Multiple   | 1798         | 16019            | 154 236   |

Table 8.1 - No. of Persons with Disabilities

(Source: WDM IDP 2004/2005 Review)

# 8.2.2 Brief Summary of Relevant National and Provincial Strategies

Section 4(1)(k) of the NLTTA requires the following with regard to the needs of persons with disabilities and of learners:

- a) That their needs should be considered in the planning and provision of public transport; and
- b) That their needs should as far as possible be met by the system provided for the mainstream public transport.

Persons with disabilities are defined in the Act as all persons whose mobility is restricted by temporary or permanent physical or mental disability, and includes the very young, the blind or partially sighted, and the deaf or hard of hearing.

Section 18(3)(e) of the Act further states that transport plans (including the PTP) have to be developed so as to enhance accessibility to public transport services and facilities, and transport functionality in the case of persons with disabilities.

The Accessible Transport Strategy (NDOT) indicates the following minimum requirements:

- a) Implement low-cost accessible features for ambulatory passengers. This will affect the exterior, entrance and interior designs of the three modes of public transport. <u>Such accessible features are to be effected by reviewing the subsidy contract/tendering system and using it as leverage</u>. This will be the case particularly with the bus and rail transport.
- b) Metropolitan Municipalities shall facilitate the identification of accessible transport networks as well as corridors and link them to on-line infrastructure, in accordance with the guiding principles/recommendations of the NLTSF towards achieving "reasonable accommodation", as part of their transport planning processes. The same is applicable to non-metropolitan municipalities falling under category B (i.e. Local) as well as those falling under category C (i.e. Districts).
- c) Where accessible corridors cannot be created solely by introducing new vehicles with Class 1 improvements already built into them, existing vehicles already in operation will be retrofitted with Class 1 improvements to provide the required level of accessibility in the corridor.
- d) Safety features to be introduced when existing vehicles are redesigned and refurbished. These safety features refer to the additional ones for usage by passengers with disabilities. All land transport operators shall make provision of suitable storage facilities for both long and short distance travel passengers to store their supportive devices (such as crutches, walking sticks, wheel chairs, etc) on rail coaches, buses and taxis, in support of inter-connectivity in the travel chain.

#### 8.2.3 Specific Principles and Objectives

The following are the specific principles and objectives that have to be achieved as part of the development of a strategy addressing the needs of persons with disabilities:

- a) Proper information systems and communication structures (before and during the iourney)
- b) Specialist transport services (e.g. dial-a-ride type services)
- c) The design of vehicles/rolling stock so as to allow for people with disabilities (special and normal vehicles)
- d) Customised design of public transport facilities, including ablution facilities

e) Ensuring access to public transport facilities and vehicles for the mobility impaired

At least Class 1 improvements, which are provisions for the blind and deaf, are mandatory for new buses, and in new bus contracts. Class 1 improvements are features that increase the accessibility of a transport system to all life cycle and impairment passengers, but not those who use wheelchairs. Such improvements include small design changes in vehicles (such as installing sufficient grab-rails, or using high-contrast colours on steps and hand-holds to improve visibility), improved infrastructure (such as sheltered and safe bus stops), and improved operational practices (such as keeping the vehicle stationery until elderly and disabled passengers are seated).

Class 1 improvements could also include the training of drivers to be sensitive to the needs of the blind and the hearing impaired. For example, when the blind passenger boards, the driver should note the alighting point of the passenger.

Class 2 improvements are features that allow wheelchair users to board and ride vehicles in their chairs. This is usually achieved through a combination of vehicle and infrastructure improvements, such as low-floor buses with sufficient kerbs, high-floor buses with wayside platforms.

# 8.2.4 The Proposed Strategy

The following strategy is relevant for persons with disabilities:

- a) Sensitise the public on disabled persons, with specific focus on transportation of disabled persons
- b) A member of the disabled community should be represented on the Transport Forum
- c) Research the specific needs per route and design the provision of services accordingly, including the type of service, for example, dial-a-ride.
- d) Determine the need to transform all bus and taxi vehicles to accommodate Class 2 type service
- e) As there are currently little or no public transport facilities for people with disabilities, a strategy should be followed to ensure that the planning and development of all new public transport facilities would consider the needs of disabled persons.

Subsidized Transport for persons with disabilities should be addressed through the Class 1 improvements in the short to medium term. Further, there is need for data on the number of person with disabilities, and the particular need on specific routes. The District Municipality should also identify the NGOs currently providing the service to persons with disabilities. The Limpopo Department of Transport must provide subsidies for such services where necessary and procure the services of operators including NGOs already supplying such services, to provide a specific service to persons with disabilities instead of major changes to the current bus fleet. Also, all buses in the current contracts should have Class 1 improvements.

Where there are no such services for persons with disabilities at all, the bus operators in the tendered and negotiated contracts could introduce paratransit service with customized vehicles at a marginal cost.

The WDM should ensure that all public transport facilities are designed and constructed with provisions for persons with disabilities. The standard design guideline is available from the National Department of Transport.

In the medium to long term the Department of Transport should implement Class 2 improvements where necessary, through the tendered and negotiated contracts. Again, it is feasible for the operator to supply a paratransit service instead of transforming the whole fleet.

#### 8.2.5 Plan of Action

The following are relevant for the short-term plan of action:

#### e) Class 1 improvements to current fleet

Currently, most buses have handrails. Buses should have high-contrast colours on steps and handrails to improve visibility. Therefore, the estimated cost for on-board improvements is minimal and is actually the standard vehicle specification, which should be addressed by the operator.

Taxi vehicles must comply with Class 1 improvements too.

# f) Data capturing

There is need for data on the number of persons with disabilities, and the particular need on specific routes. The District Municipality should also identify the NGOs currently providing the service to persons with disabilities. The Limpopo Department of Transport should provide subsidies for such services where necessary and procure the services of operators including NGOs already supplying such services, to provide a specific service to persons with disabilities instead of major changes to the current bus fleet.

The data capturing of transportation needs for persons with disabilities should be prioritised in the preparation of the next CPTR. Hence, there should be no additional cost for this exercise.

# g) Feasibility study for Paratransit service

The feasibility for a paratransit service should be an independent study. The Limpopo Department of Transport, and the Waterberg District Municipality must motivate a pilot project in the WDM with assistance from the National Department of Transport.

Where there are no current services for persons with disabilities at all, there is opportunity for contracted paratransit service with the Limpopo Department of Transport. The DoT should consider this in the new subsidy contracts.

#### h) Design and Construction

The Local Municipalities should upgrade infrastructure such as sheltered and safe bus stops, ramps, and provide relevant information.

The WDM should mandate all Local Municipalities to design and construct all public transport facilities with provisions for persons with disabilities. The standard design guideline is available from the National Department of Transport.

# 8.3 THE NEEDS OF LEARNERS, STUDENTS, AND ELDERLY

#### 8.3.1 Brief Assessment of the Status Quo

The current bus subsidies budget makes little provision for learner transport. Subsidized buses serve mainly peak hour commuters and offer limited off-peak services to learners, students, and the elderly. Students and learners are a significant number in the morning peak periods. In the WDM, students and the elderly do not even qualify for concession fares, and pay the full adult fare. In the Lephalale LM, the Lowveld Bus Service provides discounted fares for learners but the operator is not subsidised for learner trips. The Department of Transport policy does not allow for the subsidisation of learners, students, and the elderly.

At present there is no official public transport system for learners in the WDM. Most learners travel on foot or by public transport, private transport, and private school buses or privately arranged special transport.

The average household income in the WDM is R2500. The results from the Report on the Optimisation of Subsidies 2002 by the NDOT, reveals the average income spent on transport is 7% (less than the proposed maximum of 10%). However, if one or two learners per household travel by bus, then the household spending on transport is significant.

### 8.3.2 Brief Summary of Relevant National and Provincial Strategies

One of the objectives of passenger transport strategies for the development of social services and mobility in the Limpopo Province is to improve passenger transport for learners, the elderly and persons with disabilities.

There is no specific and clear policy on the subsidisation of learners, students, and the elderly at National and Provincial Government. The bus operators in the WDM are considering a discounted fare for learners, but is not formalised or implemented yet.

### 8.3.3 Specific Principles and Objectives

The principles and objectives for the transportation of learners, students, and the elderly in WDM are as follows:

- a) To make commuting affordable and as a result requires subsidisation
- b) To make public transport accessible
- c) To enable learners and students to be punctual
- d) To implement and maintain non-motorised transport for learners
- e) To limit to less than 5 kilometres the distance learners have to walk to and from school
- f) To provide comfortable transport (to a lesser extent).

### 8.3.4 The Proposed Strategy

Primarily transportation of learners is a transportation matter and not an education matter and should be addressed by the Provincial Department of Transport. The planning of schools by the Provincial Department of Education should involve a transport planner and the Provincial Department of Transport, to ensure schools are developed in proximity of learners, and appropriate walkways, traffic safety, etc., are addressed pro-actively in the planning and design of the school.

- Where schools are within a 5km radius, there is potential for non-motorised transportation such as bicycles and donkey carts for learners, including safer walkways.
- Subsidies should be provided for school trips longer than 5km, provided that there
  is no school in the vicinity
- The planning of schools should be within walking or cycling distance of the majority of learners.
- Transport assistance should be directed to learners from low-income homes. (Most learners in the WDM are from low-income homes.)
- Assistance to learners should include the provision of bicycles where appropriate
- Although the strategy for the transport needs of learners should focus more on the learner than on the mode of transport, for reasons of safety and suitability it is necessary to give attention to the type of vehicles to be used. Addressing the needs of learners should also promote modal integration. The MEC for Transport in the Limpopo Province should declare the specific conditions for the use of open vans (bakkies) and trucks for the transportation of learners, according to the NLTTA Section 31.
- The current interim contracts should include a subsidy for learners, students, and the elderly (Discounted fares should be categorized for learners, students, and the elderly)
- The respective Provincial Departments of Transport and Education should coordinate efforts and funding for learner and student transportation

#### 8.3.5 Plan of Action

Due to financial constraints and the magnitude of the issue it is extremely difficult to find specific solutions that would have an immediate impact on the transport of learners in the short term.

#### (a) Non-Motorised Transport

Bicycles offer greater benefits in terms of lower costs and negative impacts as well as contribute to the liveability of an area or city. In context, bicycles are appropriate mode of transport for commuting distances less than five kilometres such as mining housing schemes, and learners' access to schools within the community. Nevertheless, to achieve optimal use of bicycles, the public should be educated about the relationships between modes; the rights as well as the responsibilities of bicyclists must be defined by regulation; and those regulations should be enforced. Further, the public should be informed of the social and personal benefits of bicycles relative to other modes for the relevant categories of trips.

Also, the Local Municipalities should encourage the provision of safe bicycle parking at schools, shopping centres, and even at the work place.

Bicycle paths and lanes are the main infrastructure element defining bicycle transportation as a distinct system. The Local Municipalities should prepare a plan to encourage the use of bicycles and provide the necessary infrastructure.

The Provincial Department of Transport must prepare a campaign to promote the use of bicycles as one mode of non-motorised transport and support the District and Local Municipalities in the implementation of bicycle facilities.

Contracted buses should incorporate bicycle racks to encourage commuters to utilise bicycles for part of their journey where possible.

The respective Provincial Departments of Transport, Education, and the District Municipalities should develop a non-motorised transport plan and implement the specific needs of learners where pedestrian facilities, bicycles, and donkey-cart transport are appropriate.

#### (b) Pedestrian Travel

Walking is the most ubiquitous though often overlooked mode of travel and activity in all human settlements. The quality of the pedestrian system and its facilities is important for public transport commuters. In most towns in the WDM pedestrian volumes are significant. Thus, there is need for the provision and maintenance of sidewalks. Paths and sidewalks are required for the basic safety and protection from motorised vehicles. Pedestrian planning should consider the enhancement of existing pedestrian systems or the provision of new ones. These consist of safe and attractive sidewalks, independent walkways, and, in recreational areas, campuses, and major developments networks of paths that are both functional and aesthetically appealing.

The Local Municipalities should prioritise the maintenance and development of sidewalks and paths on the respective towns and residential areas with support from the District Municipality.

### (c) Institutional Arrangement

There is need for the respective Provincial Departments of Transport and Education to coordinate efforts and funding for learner and student transportation.

# (d) Subsidies for Learners, Students, and the Elderly

Subsidies should be provided for school trips longer than 5km, provided that there is no school in the vicinity. All students and the elderly should also qualify for bus subsidies. These should be addressed in the drafting of the new bus contracts.

# 8.4 MODAL INTEGRATION, INFRASTRUCTURE, AND FACILITIES

#### 8.4.1 Brief Assessment of the Status Quo

In general there is a lack of public transport facilities in the area and the existing public transport facilities are in a poor condition due to the lack of monitoring and maintenance. Bus and taxi are the two main modes of public transport in the WDM. Intuitively, bus and taxi are in direct competition especially in the peak periods. However, it is perceived that there is a specific market for each mode. There are a few examples of established facilities such as the taxi ranks in Lephalale, Vaalwater, Modimolle, and Mokopane.

The WDM is geographically well covered by bus and taxi routes, but the pavement conditions of the public transport routes are in a poor condition. (The pavement is deteriorating rapidly due to the recent exponential increase in heavy vehicles from the mines.)

In the WDM, the bus service provider is expected to install bus shelters along the route. This is not mandatory for the operator, and is certainly the responsibility of the Local Municipality. As a result, passengers and vehicles have little or no protection from the elements. Nevertheless, the Lephalale LM is currently installing bus shelters along the routes in Rooipoort and Shongoane.

Hence, there is need to address not only the integration of modes but also public transport infrastructure and facilities. The CPTR data indicates the existing facilities and the physical condition, and the availability of utilities at each facility. This planning process also determines the compliance of the existing facilities to the proposed New Taxi Vehicles (according to the CSIR design guideline drafted for the NDOT in August 2001). The status quo of facilities is in **Appendix C.** 

#### 8.4.2 Brief Summary of Relevant National and Provincial Strategies

Modal integration is defined as the integration of some or all of the different public transport modes (mainly the minibus-taxi, bus and train modes) into the public transport system. These modes should be integrated in a way that would allow them to operate as a seamless public transport system, while providing an effective, efficient and affordable service to the user. The integration of public transport modes with other modes, such as the private motorcar, bicycle, metered taxi, tourist services or walking should also receive attention.

The more important Provincial transport strategies are:

- To promote modal integration and all modes of transport in a holistic manner
- To provide public transport facilities and infrastructure
- To assist District Municipalities to develop public transport transfer facilities of regional significance in urban areas

# 8.4.3 Specific Principles and Objectives

The primary elements considered for the modal integration process include the following:

- a) Integrated network of routes
- b) Integrated schedules (timetables)
- c) Integrated transfer facilities

- d) Integrated ticketing
- e) Integrated tariff structures
- f) Integrated information systems

Ideally, the focus areas of Modal Integration include:

- a) Legislation (including Provincial legislation and / or regulations or by-laws)
- b) Funding (including preference for providing financial assistance to modal integrated services and facilities, the involvement of the Private sector and financial incentives)
- c) Coordinated planning processes at Provincial as well as Local Government level (including the PTP and planning guidelines)
- d) Institutional structures that are coordinated (including modal integration committees)
- e) The necessary implementation and monitoring (including pilot projects, a phased approach where preference is given to high-impact and low-cost projects)
- f) Regulation and control (including the formalisation of the taxi industry and the regulation of all modes of public transport, with suitable law enforcement)
- g) Consultation, marketing and training (including a marketing strategy and ensuring that all role players are suitably informed and supportive)
- h) Guidelines, norms and standards (including conforming with certain standards and Provincial guidelines)

This is the first PTP for the WDM and the status quo indicates the poor and uncoordinated public transportation system. To achieve the elements described above is progressive and may be achieved over the next five or ten years hence. Nevertheless, the primary goal is to restructure the existing public transportation system in terms of basic facilities and infrastructure, optimising routes by eliminating parallel services, and providing equitable subsidies in the WDM.

Hence, the short-term proposals address the basic provisions for public transportation in the WDM, and the long-term proposals addresses the ideal public transport system in terms of the elements described above.

#### 8.4.4 The Proposed Strategy

In the short term there is need for the provision of basic infrastructure such as lay-bys with adequate passenger shelters en-route (mostly in residential areas and the CBD), inter-modal facilities at high density nodes at the origin and destination end of the route (to avoid vehicles traversing minor streets), including basic amenities and utilities such as a kiosk, ticket vending machines, rank management, lighting, ablution, water, seating, protection from the elements, security, provision for the disabled, and passenger information (maps, routes, timetables, notices, etc.). These basic provisions should be monitored and maintained by the Local Municipality. The WDM and practitioners should refer to the Guideline for the Control and Management of Kombi Taxi Facilities (NDOT RR91/207), to enhance the management of facilities. The guideline is available from the National Department of Transport.

In the long term, the Roads Agency Limpopo should prioritise public transport routes in terms of passenger volumes instead of vehicle volumes, for upgrade and maintenance. It is evident that gravel roads and poorly maintained surfaced standard roads contribute significantly to the demise of the public transport rolling stock.

Further, in the long term there is need for design feeder and distribution services, where the smaller capacity vehicles such as the taxi provides a high frequency service

at either end of the route, while the higher capacity vehicle such as the bus provides a trunk line service. The potential route for feeder and distribution service is from Seleka and Shongoane to Lephalale. A graphic description of such networks is in **Appendix D**. Such inter-modal service requires taxi cooperatives and bus operators to tender for subsidised routes as joint venture entrepreneurs.

The following priorities should be addressed:

- a) The Local Municipality should construct lay-bys and shelters en-route (including urban and rural areas)
- b) Low capital improvements include providing lighting, and standard street furniture and passenger information signs. The prioritised list of facilities is in **Appendix C**. The prioritisation of facilities is based on the utilisation in terms of passengers and vehicles.
- c) All facilities should be designed according to the CSIR design guideline (Report No. CR-2001/57) to accommodate the proposed New Taxi Vehicles, until the new guideline is available from the NDOT.
- d) All inter-modal facilities (especially in the CBD) should include the basic amenities and utilities, including a kiosk, and should accommodate taxi, bus, and metered taxi vehicles
- e) All upgraded and new facilities should be designed with a specific architectural theme to configure inter-modal operations
- f) An intra-provincial route coding system should define public transport routes, and public transport vehicles should display a corresponding distinguishing marker.
- g) Focus development at nodal points such as Lephalale, Bela-Bela, Mokopane, Vaalwater, Thabazimbi, Modimolle, Onverwacht, Marapong, Tshamahansi, Mahlwareng, and Mookgopong.
- h) Design for pedestrian safety by segregating space for people from vehicles
- i) Facilities should be located at a centralised area that is within walking distance (500m 1000m) to the economic activities
- j) All facilities should be designed with supporting pedestrian and bicycle infrastructure such as walkways and bicycle tracks

#### 8.4.5 Plan of Action

The plan of action is as follows:

- a. Develop new routes in line with the Operating Licence Strategy
- b. Develop public transport facilities along the following corridors:
  - R561 Setateng to Kopanang
  - R572 Rietfontein Route to Kopanang
  - Marapong to Koponang
  - N11 Tshamahansi to Mokopane
  - R101 Mahlwareng to Mokopane
  - R518 Mmalepeteke to Mokopane
- c. Develop inter-modal public transport facilities at the strategic nodal points, specifically at Lephalale, Mokopane, Thabazimbi, Bela-Bela, Modimolle, and Mookgopong.
- d. Implement low capital improvements (lighting, street furniture, passenger information, etc.) for some of the existing facilities as prioritised in **Appendix C**
- e. The Local Municipalities should develop by-laws together with the Waterberg District Municipality in order to ensure a stable and safe environment, and the integration of the bus and taxi mode

f. Develop an intra-provincial route coding system for taxi vehicles (repeated)

Chapter 9 provides details of the programme and the budget for new facilities and upgrading of existing facilities.

#### 8.5 FARE SYSTEM FOR PUBLIC TRANSPORT

#### 8.5.1 Brief Assessment of the Status Quo

Currently, the bus operator provides 5-day, 6-day, 22-day and 26-day tickets. The tickets are zone based from 15km up to 60km for the GNT Bus Service. Technically, the fare structure for the Lowveld Bus Service in the WDM is also a flat fare system, because the spatial location of passengers is such that all passengers reside at one node. The trip length for each node varies, and fares vary accordingly. For example, in the Lephalale LM for the Lowveld Bus Service, Marapong is one zone, Seleka is another, and so on.

Most passengers are concentrated in an area, and most bus routes are residential to CBD. There is no significant number of passengers en-route. Therefore, the fare structure is relatively simple, which is, a flat fare from the residential area to the CBD.

All fare collection is manual, and there is no electronic fare payment system, as it is not mandatory in the interim contracts. (Currently all negotiated and tendered contracts include electronic/automated fare paying systems.) Most passengers buy weekly tickets instead of monthly tickets for fear of loss.

The taxi mode uses a cash only flat fare for each route. The fare system for the taxi industry is inconsistent, because the rate (fare/trip) is based on estimates instead of empirical analyses. As a result the fare is not equitable. The Taxi Association indicated that it is not practical to implement a unit rate due to the competition from subsidized buses. Also, earning power differs from the rural area (farm workers) and the urban areas.

The average household income in the WDM is R2500. The results from the Report on the Optimisation of Subsidies 2002 by the NDOT, reveals the average income spent on transport is 7% (less than the proposed maximum of 10%). However, if one or two learners per household travel by bus, then the real financial burden per household is significant.

## 8.5.2 Brief summary of Relevant National and Provincial Strategies

Section 26(2)(b)(ii) of the Act provides for the development of a strategy for fare systems for public transport, comprising fare structures, level and technology. Section 5(6)(b) and (c) indicates that the Minister may, after consultation with the MECs, set norms and standards of a general nature in respect of fares for subsidised public transport services by road or rail with a view to providing integrated ticketing and fare systems in public transport networks. It may further prescribe requirements for integrated fare systems comprising fare structures, levels and technology, to ensure compatibility between such systems.

Section 25, dealing with the Rationalisation Plan, also discusses different aspects of subsidies for public transport.

According to the Moving South Africa Strategy, the proposed maximum spending on travel should be less than 10% per household.

# 8.5.3 Specific Principles and Objectives

The Department of Transport, and the operators should prioritise the following fare policy goals:

#### (a) Customer Related

- Minimize revenue loss
- Maximise social equity
- Increase fare options
- Reduce complexity

## (b) Financial

- Increase revenue
- Reduce fare evasion
- Improve revenue control
- Reduce fare collection costs
- Reduce use of cash

## (c) Management Related

- Improve data collection
- Improve modal integration
- Increase pricing flexibility
- Maximise ease of implementation
- Improve operations
- Earn interest on prepaid revenues

Flat fares are simple and make collection easy, but is not equitable and forfeits potential revenue for longer routes. Zone based fares are cumbersome and confusing to the driver and customers, and slows down operations. Zone based fares may be simplified with technological intervention, and is currently mandated in the tendered contracts.

# 8.5.4 The Proposed Strategy

The taxi industry in the WDM, and specifically the Local Municipalities, needs to function as co-operatives to achieve market related fares. The Provincial Taxi Council must determine a unit rate for taxi fares, and a ticket system for commuters.

Transfers should be designed to improve the quality of service. The cost to transfer should be free of charge for the first 10km, and the normal rate for the rest of the trip. The operators need to consider the following measures in terms of fares, to enhance public transportation:

- a) Simplify cash fares. Cheaper fares (less than R10) should be designed in increments of twenty cents; for example, R3.20 is easier to process than R3.15, and R5.00 relative to R4.90. More expensive fares (greater than R10) should be designed in increments of fifty cents, for example, R10.20 should rather be R10.00, and so on.
- b) Passengers should be encouraged to purchase prepaid tickets. Students and learners should obtain a fifty percent discount, while pensioners travel free of charge.

- c) The prominent employers in the WDM are the mines, Government offices, and shopping centres. Weekly and monthly tickets may be available at the offices of the employers for convenience and to reduce transaction time if tickets are sold on the bus or at other locations.
- d) Ticket machines at transfer facilities, shopping centres, Government offices, and place of employment, should be maintained and protected.
- e) Concurrently, employers should contribute to the cost of public transport tickets for its employees. There should be some form of corporate finance incentives for employers to contribute to public transport fares. The Provincial DoT should motivate to National Treasury for such incentives.
- f) Introduce discounts or free ride incentives for passengers to buy a two-week pass, instead of a weekly pass. Incentives should be realistic, for example, a saving of R5 on a R200 ticket is not significant.
- g) The fare system should be consistent for all subsidised contracts in the Limpopo Province to ensure equity among operators and the passengers. Similarly, the analysis shows that on average the subsidy and fare ratio is 1. The preferred subsidy to fate ratio should be 1.5.

#### 8.5.5 Plan of Action

The plan of action to address fares is as follows:

- a) The Limpopo Department of Transport should develop a unit fare for subsidised bus operations, including consistent demarcation of zones to apply zone-based fares
- b) The Limpopo Department of Transport should apply subsidy/fare ratio of 1.5 in the subsidy contracts.
- c) For long distance operations and inter-provincial operations, the relevant Provincial Taxi Councils should determine a unit rate for taxi fares.
- d) All taxi operations should provide a ticket system for commuters.
- e) The Limpopo Department of Transport should engage employers to contribute to the cost of public transport tickets for its employees. There should be corporate finance incentives for employers that subsidise public transport fares. The Provincial DoT should motivate to National Treasury for such incentives.
- f) The operator and the Department of Transport should maintain an organised database. The SUMS database as a component of the National Transport Register should be implemented and applied before the implementation of the new subsidy contracts
- g) The Limpopo Department of Transport should ensure that automated fare payment mechanisms are implemented as mandated in the subsidy contracts, and operators should be penalised accordingly for non-compliance.
- h) The suggestions in the Proposed Strategy should be included in the subsidy contracts.
- i) The Limpopo Department of Transport should allow for concessions for learners, students, and the elderly in the subsidy contracts

# 9 INSTITUTIONAL ARRANGEMENTS

This Chapter is not mandatory in the first Public Transport Pan. However, there are significant issues to be addressed as a matter of urgency.

- a) There is need for consistent meetings by the WDM Transport Forum, to evaluate projects, network, and motivate potential projects progressively.
- b) The WDM should ensure that the development of the various strategic plans, for example, the Spatial Development Framework, be coordinated with the preparation of the Integrated Transport Plan.
- c) There is need for satellite offices for the OLB and Registrar at Lephalale and Mokopane.
- d) There is need for the respective Provincial Departments of Transport and Education to coordinate efforts and funding for learner and student transportation.
- e) There is need for Transportation Planning staff at the Local Municipalities
- f) There is need for coordinated efforts between the respective Departments of Transport and the Road Agency Limpopo to address the upgrading of roads based on public transport volumes.

# 10 PLAN OF ACTION AND PROJECTS

This chapter of the PTP contains a description and programme of the prioritised public transport planning and implementation projects / actions, together with the five-year budgets for each project / action. The five-year budget is detailed for Year One, and addressed as a consolidated schedule with less detail for Year Two to Year Five.

The transport plans should be updated bi-annually. However, the CPTR should be updated annually to determine the changes in the transportation system, and impacts primarily the issuing of operating licenses. In addition to the current method of collating CPTR data, surveys should be carried out at major nodes during Friday afternoons and Saturdays.

It is recommended that no further Licenses be issued due to the huge over supply of taxi services. Operators should be encouraged to transfer operations from over-supplied routes to new routes and under-supplied routes. Alternatively, the moratorium could be relaxed for new routes. This approach must be negotiated with the respective stakeholders.

In addition to the formalisation of the mini-bus taxi, there is need for the formalisation of the metered taxi mode, to enhance tourism, and prevent conflict with the mini-bus taxi and bus operations.

The following basic prioritisation technique was developed to prioritise projects:

- a) The key indicator to determine whether public transport facilities should be provided is linked to the number of passengers that currently utilise a specific facility or alternatively expect to use the facility in the near future. Due to the lack of data on many facilities, prioritisation was based either on passenger utilisation or by intuition based on the location.
- b) Some informal facilities were visited to determine the extent of operations. Hence, new facilities are proposed based on site visits.
- c) Also, upgrading of existing facilities is based on the conditions of the basic infrastructure, utilities, and amenities.

In conclusion, when projects are being prioritised the following principles should be always kept in mind so as to ensure a complete public transport system:

- a) The Local Municipality should install lay-bys and shelters en-route (including urban and rural areas). Shelters should be adequate to accommodate all peak period passengers.
- b) Lay-bys should be designed to accommodate at least two buses
- c) All facilities should be designed to accommodate persons with disabilities, the New Taxi Vehicle, with adequate seats for waiting passengers, passenger information signs, A0 size timetables and route maps.
- d) The design of facilities should be aesthetically appealing
- e) Public transport facilities should be integrated with commercial buildings, for example, the provision of sheltered walkways from the lay-by into the office block or shopping centre.
- Facilities should be designed for pedestrian safety by segregating space for people from vehicles
- g) The design of all facilities should refer to the OLS and RATPLAN

The approach of the first PTP is to concentrate on infrastructure related to public transport for the first five years of operation and on constituting the proposed by-laws.

In the review of the PTP, there will be focus on the more detailed operational and institutional matters.

**Table 10.1** is a summary of the projects related to the taxi mode and the subsidised bus service in the WDM. **Appendix C** provides a detailed list of public transport facilities in the WDM (existing formal and informal), including the type of ancillary facilities required, as well as the estimated cost of the facilities.

Lay-bys and shelters are a priority to ensure passenger safety and improve traffic flow, and must adequate to accommodate peak period volumes. The planning and design of the facilities should be done in consultation with the operators. Lay-bys should be located downstream of an intersection and pedestrian crossings, to minimise conflict with traffic and pedestrians. Also, there is need for lay-bys at mid-block at parks, schools, and medical centres.

Also, sidewalks should be 2.2 metres to 2.6 metres wide where street furniture, and commuter queues are necessary.

The basic design for drainage at lay-bys and sidewalks should always ensure that water flows away from the pedestrian.

There is need for a multi-modal facility at Lephalale, Mokopane, Thabazimbi, Bela-Bela, Modimolle, and Mookgopong, and to integrate all modes of public transport, and rationalise the existing ancillary facilities at a centralised point, and as a result obtain control and maintenance of one facility. Additionally there is need for Transfer Facilities, and Lay-by, bicycle, and pedestrian facilities along public transport corridors in the WDM. Additionally, there is need for secure bicycle parking facilities at the multi-modal facilities, and the provision for hawkers should be formalised and not in conflict with pedestrian movements.

The marketing campaign should be coordinated between the bus and taxi operators and the respective Provincial and Local Government offices.

For Local Government to qualify for funding from the Municipal Infrastructure Investment Unit (MIIU), Local Government should prepare and apply a Policy on Public Private Partnerships.

All requirements relating to the road network are addressed as part of the Integrated Transport Plan (ITP).

The way forward is to motivate the prioritised projects in the Integrated Development Plan. The construction and maintenance of public transport facilities is in most cases labour intensive, is an appropriate mechanism to accentuate **job creation**.

| TABLE 10.1: PROGRAM   | Responsibility | Project Duration |  |             |             |             |             |            |                |                  |
|---|----------------|------------------|--|-------------|-------------|-------------|-------------|------------|----------------|------------------|
| PROJECT   |                |                  |  |             |             | ESTIMATE    | D BUDGET    |            | Responsibility | Project Duration |
| FROJECT   |                | 2 3 4 5          |  | 5           | YEAR 1      | YEAR 2-5    | TOTAL       |            |                |                  |
| TAXI MODE (OLS)   |                |                  |  |             |             |             |             |            |                |                  |
| Project 1: Vehicle Verification   |                |                  |  |             |             | R200 000    | In-house    | R200 000   | DoT/Registrar  | 6 months         |
| Project 2: Routes for LDV & apply NLTTA S31   |                |                  |  |             |             | R200 000    |             | R200 000   | DoT            | 3 months         |
| Project-3: Annual update of OLS   |                |                  |  |             |             | R200 000    | R800 000    | R1 000 000 | LM/DoT         | 2 months         |
| <u>Project 4</u> : Implementation and maintenance of colour coding system for taxis.                    |                |                  |  |             |             |             | R 400 000   | R 400 000  | DoT/Registrar  | 3 months         |
| Project-5: Establish/Upgrade the Satellite Operating Licence Office in Lephalale, Mokopane, & Modimolle |                |                  |  |             |             | R 1 000 000 | R 1 500 000 | R2 500 000 | DoT            | On-going         |
| Project 6: Formalise metered taxi operations  |                |                  |  |             |             | R 100 000   | In-house    | R 100 000  | DoT/Registrar  | 6 months         |
| <u>Project 7</u> : Development of Rank Management Skills  |                |                  |  |             |             | R 100 000   | R 200 000   | R 300 000  | DoT            | On-going         |
| <u>Project 8</u> : Establishment of Taxi Co-operative for Waterberg District                            |                |                  |  |             |             |             | R 200 000   | R 200 000  | DoT            | 12 months        |
| Total   |                |                  |  | R 1 800 000 | R 2 700 000 | R 4 500 000 |             |            |                |                  |

| TABLE 10.1 continued: PROGRAM AND FINANCIAL IMPLICATIONS                     |  |   |   |   |   |     |             |              |              |        |          |
|--|--|---|---|---|---|-----|-------------|--------------|--------------|--------|----------|
| PROJECT  |  | 2 | 3 | 4 | 5 | 6 7 | YEAR 1      | YEAR 2-5     | TOTAL        | Action | Duration |
| BUS MODE (RATPLAN)   |  |   |   |   |   |     |             |              |              |        |          |
| <u>Project-1:</u> Implement Tender or negotiated subsidy contracts (7-years) |  |   |   |   |   |     | R20 000 000 | R 80 000 000 | R100 000 000 | DoT    | 7 years  |
| <u>Project-2:</u> Monitoring and Auditing of Project 10 (7-years)            |  |   |   |   |   |     | R2 000 000  | R 8 000 000  | R10 000 000  | DoT    | 7 years  |
| Project-3: Implement Class 1 Improvements                                    |  |   |   |   |   |     |             | R 300 000    | R 300 000    | DoT    | 1 year   |
| Project-4: Review Rationalisation Plan                                       |  |   |   |   |   |     |             | R 300 000    | R300 000     | DoT/DM | 2 months |
| Total  |  |   |   |   |   |     | R22 000 000 | R88 600 000  | R110 600 000 |        |          |

| TABLE 10.1 continued: PROGRAM AND FINANCIAL IMPLICATIONS  |     |     |     |   |   |             |              | Responsibility | Project Duration |           |
|---|-----|-----|-----|---|---|-------------|--------------|----------------|------------------|-----------|
| PROJECT   |     |     | _   |   | _ | V545.4      | \\_\\_\      |                |                  |           |
|   | 1 2 | 2 : | 3 4 | 4 | 5 | YEAR 1      | YEAR 2-5     | TOTAL          |                  |           |
| PUBLIC TRANSPORT PROJECTS (PTP)   |     |     |     |   |   |             |              |                |                  |           |
| Project-1: Review CPTR  |     |     |     |   |   | R 500 000   | R 2 000 000  | R2 500 000     | Dot/DM           | 4 months  |
| Project-2: Review Public Transport Plan   |     |     |     |   |   | R200 000    | R 800 000    | R1 000 000     | DoT/DM           | 3 months  |
| Project 3: Maintenance of the Transport Forum   |     |     |     |   |   | R 50 000    | R200 000     | R250 000       | DM               | On-going  |
| Project-4: Lay-bys, bicycle, and pedestrian facilities per Local Municipality   |     |     |     |   |   | R 1 500 000 | R 3 500 000  | R5 000 000     | DM               | On-going  |
| Project-5: Facilities (Appendix C)  |     |     |     |   |   | R5 000 000  | R 15 000 000 | R20 000 000    | DM               | On-going  |
| Project-6: Policy for subsidy for learners, Students, and the elderly   |     |     |     |   |   | In-house    |              |                | DoT              | 6 months  |
| Project 7: Law enforcement campaigns  |     |     |     |   |   | R1 000 000  | R4 000 000   | R5 000 000     | DoT/DM           | On-going  |
| <u>Project-8:</u> Address NLTTA Section 31 – use of 'bakkies' as public passenger vehicle                                   |     |     |     |   |   | R100 000    |              | R100 000       | DoT/DM           | 18 months |
| Project-9: Policy for Public Private Partnership  |     |     |     |   |   | R100 000    |              | R100 000       | DM               | 2 months  |
| Project-10: Non-Motorised Transport Plan per Local Municipality   |     |     |     |   |   | R200 000    | R400 000     | R600 000       | DoT/DM           | 3 months  |
| Project-11: Policy on uniform Fare Structures for SDM   |     |     |     |   |   | R200 000    |              | R200 000       | DoT              | 3 months  |
| Project-12: Engage with SANTACO & Provincial Taxi Councils to develop a unit rate for taxi fares (long distance), & tickets |     |     |     |   |   | R100 000    | R 100 000    | R200 000       | DoT              | 3 months  |
| Project-13: Study Innovative Funding Mechanisms for Transportation (PLTF)   |     |     |     |   |   | R100 000    |              | R100 000       | DoT              | 3 months  |
| Project-14: Upgrade SUMS database   |     |     |     |   |   | In-house    |              |                | DoT              | 6 months  |
| Project-15: Feasibility Study for Paratransit Service   |     |     |     |   |   |             | R200 000     | R200 000       | DM               | 3 months  |
| <u>Project-16:</u> On-Street Parking Strategy (private vehicles) (Corresponding with ITP), and implementation in towns      |     |     |     |   |   |             | R1 000 000   | R1 000 000     | DM               | 3 Years   |
| <u>Project-17</u> Investigate Feeder and Distribution Service along corridors   |     |     |     |   |   |             | R100 000     | R100 000       | DoT              | 3 months  |
| <u>Project-18:</u> Align Passenger Charter & Memorandum of Understanding with NDOT  |     |     |     |   |   |             | R100 000     | R100 000       | DoT              | 2 months  |
| Project-19: Marketing Campaign (operators and DoT)  |     |     |     |   |   |             | R500 000     | R500 000       | DoT/DM           | On-going  |
| <u>Project-20:</u> Develop Policy on Traffic Impact Studies (private and public transport)                                  |     |     |     |   |   |             | R 200 000    | R200 000       | DoT/DM           | 6 months  |
| <u>Project-21:</u> Engage employers to subsidise fares, and provide tax incentives  |     |     |     |   |   |             | In-house     |                | DoT/DM           | On-going  |
| Project-22: Implement Non-Motorised Transport Plan (infrastructure)   |     |     |     |   |   |             | R1 000 000   | R1 000 000     | DoT/DM           | On-going  |
| Project-23: Prepare Policy on Design and Art for Community Projects   |     |     |     |   |   |             | R100 000     | R100 000       | DoT/DM           | 3 months  |
| <u>Total</u>  |     |     |     |   |   | R9 050 000  | R 29 200 000 | R38 250 000    |                  |           |

# 11 FUNDING

# 11.1 Funding and Subsidies

Is public transport a Public service or is it market driven? Are subsidies an investment or a waste of taxes? What are the main social and economical objectives aligned with transport subsidies?

For the Limpopo Province, it is intuitive that public transport is a need, and subsidies are necessary to provide access mobility to ensure an adequate standard of living for most people in the Province. Thus, the current circumstances qualify subsidies as an investment in the Limpopo Province.

Public transportation is a service with reasonable economics, where the bottom line should not be the dictating factor. Transit does not outperform private mode in a free market environment. There are several non-monetary, non-tangible benefits to society. These benefits are not marketable. Reducing capital and operating costs by deregulation should still be considering the basic needs of the passenger.

Availability of needed funds as a basic condition for implementing the permanent provision of attractive services that can respond to increasing demands for high quality, high volume public transportation. Similar to highways and other passenger transportation facilities, transit investments come mostly from public funds.

Where mass transit is a public service, the Public Sector should set the standards, funding, and fares, and Government should ensure transportation is a basic right for its citizens.

The Limpopo Department of Transport should guard itself from the "irresponsible supply cycle", where there is little or no control on the contracted operator. Where control is defective, the operator neglects the passenger needs, and passengers look for an alternative mode, which could result in the 'illegal' supply of public transportation, decreasing fare revenue, increasing operating cost, increasing subsidies, and possible conflict. Some passengers are captive, and are violated in their pursuit to accessibility and mobility.

The preferred modes of public transport are the bus and taxi. Currently, the higher capacity buses operate during the peak periods only, while the lower capacity taxi mode operates during the off-peak period on the same primary route. However, on some routes the taxi mode is in direct competition with the bus mode, and is not viable. There is potential for some routes to be converted to taxi routes only due to the low passenger volumes. There is potential also, for taxis operators to be contracted by the bus operator and effectively provide a subsidized service.

The Limpopo Department of Transport should also resolve subsidies for learners, students, and elderly. The current data does not categorize the passengers as learners, students, disabled, or elderly. If these categories of passengers are included in the total number of passengers then they are subsidized at the same rate as commuters. There is need for a concession for these categories of passengers, and should be investigated further. There is also a need for a specific funding allocation for the provision of Class 1 improvements not only for contracted operators, but also for tourist bus operators too.

# 11.2 Current Funding for Public Transport

Each District Municipality receives a National allocation for its own Municipality and its Local Municipalities. At present this is the main source of funds. The District is also assisted by the Limpopo DoT with the preparation of transport plans, bus subsidies, and some capital projects. Effectively, the Limpopo Department of Transport provides the major portion of public transport funding in the WDM.

There are no funds allocated for transport planning and public transport capital expenditure in the IDP for the WDM, possibly since no transport plans were prepared yet.

The essence of the mission of the Limpopo Department of Transport to develop, coordinate, implement, and manage an integrated, multi-modal transport system, and vision of the WDM to be a custodian of integrated sustainable service delivery in partnership with Local Municipalities and communities, are not fulfilled, and indicates the reality of the backlog in the delivery of public transportation. Just as much needs to be delivered, proportionate funding is also needed.

# 11.3 Funding Mechanisms for Public Transport

It is not practical to maintain the status quo in terms of funding for public transportation in the WDM, and in general in the Limpopo Province. There is need for increased funding from National and Provincial Government, and possibly Private Sector. However, additional funds will be used to address the existing inefficiencies and backlog in public transportation, and progressively achieve the stated objectives.

Irrespective of the funding source and the quantity of funds available, there is need to prioritise projects and expenditure. The three most significant priorities are the recommended projects in the Rationalisation Plan, Operating License Strategy, and the facilities prioritised in the Public Transport Plan. The WDM should not only focus on existing facilities, but also address new facilities as prioritised in this study.

The following funding mechanisms and sources are identified:

- a. National and Provincial Government is the conventional source for public transportation planning and implementation. However, increased funding is needed and justified by transport plans.
- b. Municipal Infrastructure Grant (MIG) The District and Local Municipalities should motivate for funding from the Department of Provincial and Local Government through the MIG fund, especially for flagship projects such as inter-modal facilities, non-motorised transport projects, and para-transit projects.
- c. The WDM should enter into partnership with the Private Sector to develop facilities, specifically inter-modal facilities, and engage with the Municipal Infrastructure Investment Unit for bridging funds.
- d. The Provincial DoT and WDM should motivate to the National Department of Transport for funding pilot projects, specifically for non-motorised transport and paratransit initiatives.
- e. Projected revenue from traffic fines should be ring-fenced for the sustainability of law enforcement.
- f. The NLTTA specifies that public transport should attain higher priority than private transport. Therefore, with the support of the policy on Traffic Impact Studies, where the maximum number of parking spaces should be applied instead of the minimum number of parking spaces per development, employee discounts should be provided for employees travelling by public transport. Concurrently, law

- enforcement should aggressively deal with illegal parking. This is another source of traffic fines to sustain law enforcement.
- g. Engage with operators to pursue advertising on buses to generate operating revenue, and contain operating subsidies. Advertising space includes vehicles, terminals, fare cards, maps, schedules, in-vehicle dynamic message signs, etc.
- h. Joint Development among Government Departments for Liveable Communities (RDP):
  - Department of Transport and Department of Local Government and Housing to coordinate land use developments
  - Department of Transport and Department of Environmental Affairs and Tourism to obtain funds through the National Environmental Management (Air Quality Management) Act with motivation to reduce emissions by upgrading the rolling stock.
  - Department of Transport and Department of Education should address the subsidisation of learners and students.
  - Department of Transport and Department of Social Development should address the subsidisation of the elderly.

# 12 STAKEHOLDER CONSULTATION

#### 12.1 Introduction

The relevant section of the NLTTA, including sections 4(1), 10(13), 19(5) and 29; and also in accordance with the National Public Participation Guidelines / Requirements. Of particular importance is the publication of a notice in two local newspapers making known that the Public Transport Plan has been completed and is available for public inspection at a place stated in the notice.

### 12.2 Submission and Publication of the PTP

On approval of the PTP by the relevant MEC, Section 29(1) of the NLTTA requires that the prescribed particulars of the PTP be published in the Provincial Gazette by the planning authority. It can be an approved summary of the Plan, sufficiently describing the main features of the Plan, or if not to comprehensive, the whole plan.

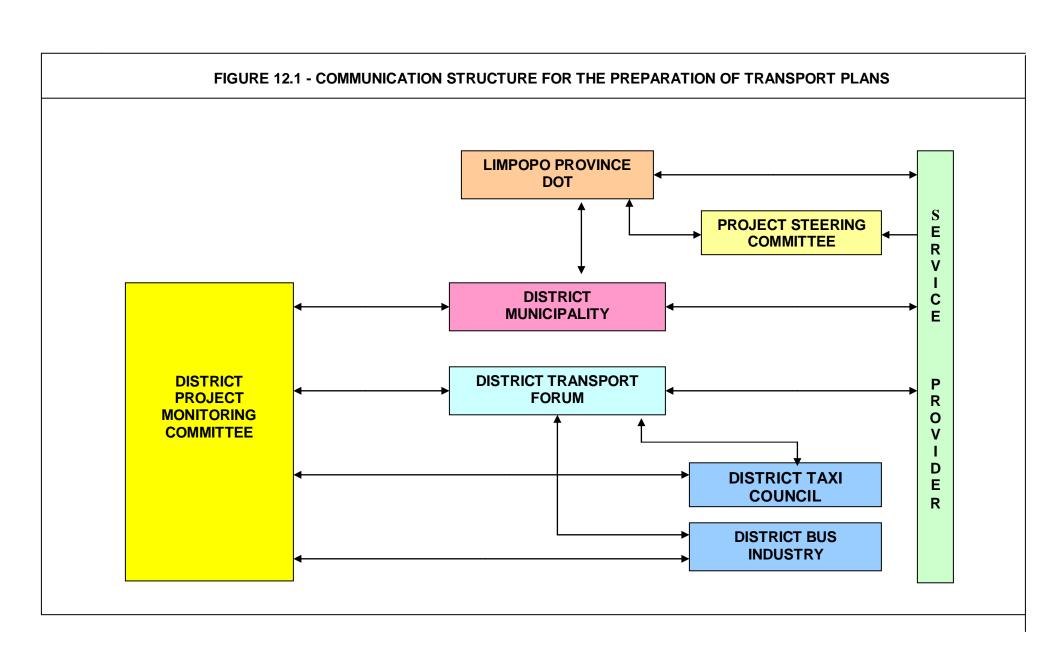
The success of the consolidation of the transport plans is significantly dependent on the interaction with the relevant stakeholders. It is extremely important to involve all role players to ensure that the process is acceptable and reliable. Interested and affected parties were identified with the assistance of the District Municipality. An introduction meeting and subsequent presentations were planned with the stakeholders.

Representatives from the District Municipality, Local Municipalities, Transport Forums, and NGOs, formed the District Transport Forum, and are effectively the technical committee for the project.

The communication and liaison structure, and the respective functions were guided by the Limpopo Department of Transport, and are described in **Figure 12.1**.

Consultation and liaison are an integral part of the process to confirm and validate data, and to determine the transportation needs as deduced from the data. The users of the system should have confidence in the process as well as in the results. The following role players were identified to be part of the District Transport Forum:

- Limpopo Province Department of Transport Public Transport Division
- Limpopo Province Department of Transport Registrar of Taxis.
- Limpopo Province Department of Transport Operating License Board.
- Waterberg District Municipality Economic Development and Planning Division
- Transport Manager of each Local Municipality
- Bus Operator (Great North Transport, and Lowveld Bus Service)
- Regional Taxi Council
- Law Enforcement
- Commuter Forum



# 12.3 Functions of the Various Structures for the Preparation of District Transport Plans

# 12.3.1 Limpopo Department of Transport

(a) Politicians

Project financers and responsible for payment of the Service Provider.

Provincial Project Coordinator

Liase with the Provincial Steering Committee

Liase with the District Municipality

## 12.3.2 Provincial Steering Committee

- (a) Representative of National Department of Transport
- (b) Representatives from the Provincial Department of Transport
- (c) Representatives from the District Municipalities
  - Recommend payments of Service Provider
  - Evaluate and recommend approval of the reports
  - Liase with the Provincial Department of Transport
  - The Provincial Steering Committee liase with Service Provider

# 12.3.3 District Municipality

- (a) Officials
- (b) Politicians
  - Liase with Provincial Department of Transport.
  - Liase with District Transport Forum
  - Liase with the District Project Monitoring Committee
  - Liase with the Service Provider

#### **12.3.4 District Transport Forum**

(a) All public transport role players

To ensure involvement on grass root levels Report to their respective structures

# 12.3.5 District Project Monitoring Committee

- (a) Representative of the District Municipality
- (b) Representative of the Local Municipalities
- (c) Representative of the Provincial Transport Department on District level
  - Liase with the District Municipality
  - Liase with the Transport Forum
  - Monitor the progress of the project
  - Liase with Bus and Taxi Liaison Structures

#### 12.3.6 District Taxi Council

- (a) Representatives of the District Taxi Council
  - Work together with the Service Provider and the Project Monitoring Committee to ensure the plan is accepted by Taxi Industry.
  - Liase with the Taxi Industry such as Taxi Associations as well as the Provincial Taxi Council.

# 12.3.7 District Bus Industry

- (a) Representatives of Bus Operators
  - Work together with the Service Provider and the District Project Monitoring Committee to ensure that the product would be acceptable for the Bus Industry.

#### 12.3.8 Service Provider

- (a) ARCUS GIBB
  - Prepare Public Transport Plan
  - Liase with all the structures
  - Consult with the Provincial Department of Transport, Provincial Steering Committee, District Municipality, District Project Monitoring Committee, District Transport Forum, District Taxi Council and Bus Industry.

# 12.4 Progress to Date

## 12.4.1 Steering committee Meeting

The Limpopo Province Department of Transport is effectively the primary client for the project. There was consistent liaison with the project manager Mr. Walter Raedani and project director, Ms. Mihloti Hetisani, at the Department of Transport.

The presentation of the draft PTP with the steering committee that comprises of officials from the Provincial Department of Transport, District Municipalities, National Department of Transport, Provincial Taxi Council, and Operating Licensing Board, was scheduled for 30 June 2004.

# 12.4.2 Technical Committee Meeting

There was no meeting with the Transport Forum due to time constraints. However, the draft PTP is scheduled for presentation to the WDM Planning Department in July 2004 as part of the Integrated Transport Plan.

### 12.4.3 Liaison with Registrar

There was consistent liaison with the office of the Registrar and specifically with Mr D Makgahlela, Mr. Jalani, and Ms. Mary Sathege. There were several requests for taxi route data, and vehicle registration details. The data was not available in electronic format, and was obtained in hard copy. One of the aims was to use the information obtained from the existing RAS information system to verify the CPTR data. The verification process is still in progress with the Limpopo Department of Transport.

There was consultation with Mr. S Nkanyani at the DoT office in Modimolle, who guided a tour to some of the facilities in Modimolle.

# 12.4.4 Liaison with Bus Operations Managers

Mr. H De Beer, at the Limpopo Department of Transport was consulted for SUMS data.

#### 12.4.5 Liaison with Bus Operator

There were several random telephonic discussions with the GNT bus service and Lowveld Bus Service, and one meeting at Lephalale with Lowveld Bus Service. The supervisor at Lowveld Bus Service also guided a tour to the various facilities in Lephalale.

#### 12.4.6 Liaison with the District Transport Forum

The draft PTP was submitted to the Capricorn District Municipality. The PTP was presented to the District Transport Forum on 29 July 2004. At this meeting the District Transport Forum commented on the PTP, and facilities were selected for prioritisation.

#### 12.4.7 Recommendation

- 1. The District Municipality before adoption by the Provincial Departments of Transport must endorse the final document for each Transport Plan. The process is ongoing.
- 2. The South African Police Service should be represented on the District Transport Forum.
- 3. Transport Forums should also have representation from Persons with Disabilities.
- 4. There is also a need for Local Municipalities to establish Transport Forums.
- 5. A copy of the final OLS should be distributed to the OLB and Registrar.
- 6. A copy of the final RATPLAN should be submitted to the Director of Bus Operations and Subsidies.
- 7. A copy of the final PTP should be distributed to the Transport Planning Divisions of the District and Local Municipalities.

# 13 BIBLIOGRAPHY

- 1. Bush S.J., Research Based Transit Marketing in South-eastern Wisconsin, Transport Research Record 1669, paper no. 99-0865.
- 2. City of Johannesburg Integrated Transport Plan 2003/2008 Executive Summary, May 2003.
- 3. Federal Transit Administration Circular 9400.1
- 4. George Gray and Lester Hoel. Public Transportation, 2<sup>nd</sup> edition, Prentice Hall. New Jersey, 1992, chapter 14.
- 5. Hurwitz, E.P., and Jennifer S. Williamson. Marketing and Fare Nexus Applied in San Diego, Transport Research Record 1669, paper no. 99-0744.
- 6. Lee, D.A. Introducing Fare Simplification and New Convenience Fares at Connecticut Transit, Transport Research Record 1669, paper no. 99-0472.
- 7. Limpopo Department of Local Government and Housing, The Northern Province Integrated Rural Development Framework
- 8. Limpopo Department of Transport, Limpopo In Motion Provincial Transport Strategy Executive Summary, 2003.
- 9. Limpopo Provincial Land Transport Framework (Limpopo In Motion), Final Report, July 2003
- 10. Minimum Requirements for Preparation of Public Transport Plan (PTP), Government Gazette 25245, August 2003
- 11. National Department of Transport, Moving South Africa Strategy, Draft for Discussion, September 1998.
- 12. National Department of Transport, National Land Transport Strategic Framework 2002-2007
- 13. National Department of Transport, Short Term Strategic Framework on Accessible Transport 2<sup>nd</sup> Draft, July 2003
- 14. National Department of Transport, White Paper on National Transport Policy, September 1996
- 15. National Department of Transport Business Plan 2003/2004
- 16. National Department of Transport, National Land Transport Transition Act No. 22 of 2000, August 2000.
- 17. National Department of Transport, National Transportation Planning Guidelines and Requirements and Requirements –for the Implementation of the NLTTA, TPR5 (Public Transport Plan (PTP)) Final Draft, April 2001.
- 18. National Department of Transport, National Transportation Planning Guidelines and Requirements and Requirements –for the Implementation of the NLTTA, TPR6 (Rationalisation Plan) Final Draft, April 2001.
- 19. National Department of Transport, Formulation of the Taxi Recapitalisation Business Processes: Taxi Facility Audit and Assessment, CR-2001/57, September 2001.
- 20. Pieterse Du Toit & Associates Town and Regional Planners, Limpopo Province Spatial Rationale, Final Document Section 2A and 2B, November 2002
- 21. Pillay K, An Investigation into Funding Mass Transit, Master of Engineering Thesis, Texas A&M University, December 1998.
- 22. Policy on Public Passenger Transport Lay-bys, City of Joburg, July 2003
- 23. Sekhukhune IDP Review 2003/2004 & 2004/2005
- 24. Siyazi Limpopo (Pty) Ltd, Greater Tubatse Local Municipality input for the Sekhukhune District Municipality Public Transport Plan (PTP) as part of the Public Transport Plan for the Sekhukhune District Municipality, Draft Version1.0, 2004.
- 25. Strategic Framework Accessible Transport Strategy (NDOT)

| <ol> <li>Weinstein A, et.al. Transit Prepayment Challenges Factors Influencing<br/>Customers' Willingness to Purchase High-Value Tickets, Transport Research<br/>Record 1669, paper no. 99-1210.</li> </ol> |  |
|---|--|
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |