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ILEMBE DISTRICT MUNICIPALITY PUBLIC TRANSPORT PLAN (PTP) REPORT

JUNE 2005

TITLE: ILEMBE TRANSPORT PLANS

PUBLIC TRANSPORT PLAN

JUNE 2005

Prepared for:	**Prepared by:**	
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The Public Transport Plan report for Ilembe District Municipality comprise three stages:

a) Stage 1: Public Transport Status Quo including collection of data not included in the existing Current Public Transport Records (CPTR).
b) Stage 2: Development of Public Transport Vision, Goals and Objectives;
Analysis of Land Use and Public Transport Integration; and
Public Transport Proposals.
c) Stage 3: Final report including stage 1, stage 2, Rationalisation Plan, Operating licenses Strategy, Prioritised Public Transport Proposals, Implementation Programme and Financial Implications.

Terms of reference

The Siyazi Thula Joint Venture was appointed by the Kwa-Zulu Natal Province Department of Transport to compile the Public Transport Plan (PTP). The Siyazi Joint Venture consists of the following companies:

a) Siyazi Thula (Pty) Ltd that provides taxi-related input.
b) Transport Economic Support Services (TESS) that provides bus-related input.
c) Gaming for Future Enterprises that is involved with the financial analyses.

Although the Kwa-Zulu Natal Province Department of Transport appointed the Siyazi Thula Joint Venture it was stipulated that a strategy should be followed that would include all role players, with specific reference to the Ilembe District Municipality. It was also necessary to ensure that this Integrated Transport Plan would comply with all Local, Provincial and National Government requirements.

TABLED AT THE DEPARTMENT OF TRANSPORT IN KWAZULU NATAL AND APPROVED ON……

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Executive summary

The initial Current Public Transport Records (CPTR) has already been prepared for the Ilembe District Municipality.

Other plans and processes to be considered include –

a) National Land Transport Strategic Framework;
b) Provincial Land Transport Framework (PLTF);
c) Integrated Transport Plans (ITPs);
d) Integrated Development Plans (IDPs); and
e) the preparation of National and Provincial budgets.

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.

The scope and approach towards the formulation of a PTP for the IDM 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 IDM-PTP should contain the following areas or topics:

a) Chapter 1: Introduction
b) Chapter 2: Public transport vision, goals and objectives
c) Chapter 3: Public transport status quo (CPTR)
d) Chapter 4: Transport and land-use integration
e) Chapter 5: Public transport proposals (RATPLAN and OLS)
f) Chapter 6: Stakeholder consultation
g) Chapter 7: Prioritised public transport proposals and implementation programme
h) Chapter 8: Financial implications

The scope of the work covers the whole area of jurisdiction of the IDM. The four relevant local municipality areas covered are the –

a) Maphumulo Municipality;
b) KwaDukuza Municipality;
c) Ndwedwe Municipality; and
d) Endodakusuka Municipality.

The various input items provided for the PTP would be relevant for the period from July 2005 to July 2006.

At a Ilembe District Passenger Transport Forum meeting it was recommended that for the time being the provincial vision statements should be taken as guidance for the development of the

Ilembe Public Transport Plan (PTP).

The vision of the KwaZulu-Natal Department of Transport (KZNDOT) for Transport in KwaZulu Natal is captured in its corporate theme:

"Prosperity Through Mobility".

Each district municipality that is a planning authority is responsible in terms of the National Land Transport Transition Act (Act 20 of 2000) for preparing a Current Public Transport Record (CPTR) for its entire area. Based on the *Government Gazette* published on 24 July 2002 the purpose of the CPTR is to provide a record of public transport services, facilities and infrastructure, which will constitute the basis for the development of the operating licence strategies, rationalisation plans, public transport plans and integrated transport plans for the Ilembe District Municipality.

The Kwa-Zulu Natal Province Department of Transport appointed Iliso Consultants to prepare the Ilembe District CPTR. The study was completed in 2004. It was however necessary for Siyazi Thula Joint Venture to gather additional and more detailed information where gaps existed in order to proceed with the PTP.

It is important to take note of the following in terms of the CPTR recommendations:

It is recommended as part of the IDM-CPTR that:

a) As the results of the IDM-CPTR surveys indicate a general oversupply of taxis, no permits should be considered before the OLS has been compiled and approved.
b) The IDM-CPTR information that is available on the database should be used for developing an Operating Licensing Strategy (OLS) as guideline for the Operating Licence Board with regard to the issuing of new permits.
c) The IDM-CPTR information should furthermore be used for developing a Public Transport Plan, which would guide the implementation of Public Transport projects and strategies, and could serve as input into the Integrated Transport Plan (ITP).
d) For the 2006 update of the IDM-CPTR, consideration should be given to surveying the operations at the major ranks during Friday afternoons and Saturdays, so as to determine the utilisation of services.

The purpose of the OLS is to formulate a strategy which will enable the IDM to provide structured and informed responses to the applications for operating licences referred to it by the Kwa-Zulu Natal Operating Licence Board, and to achieve a balance between the effective and efficient supply and utilisation of public transport. The OLS for the IDM area was formulated based on the requirements of the NLTTA, Act 22 of 2000, Part 7, section 24 and the National Guidelines and Requirements for OLS's developed as part of the implementation of the NLTTA, 2000.

Based on all the findings, it should be noted that all existing routes are oversupplied and it is

recommended that the awarding of additional licences should not be contemplated by the IDM in the near future, unless there is clear evidence that the operating circumstances on such routes have changed significantly.

According to the regulation issued in Government Gazette 25245 dated 1 August 2003: "Each district municipality that has subsidised public transport services is responsible to prepare a rationalisation plan (RATPLAN) for its entire area, but this will not prevent an agreement that the relevant local municipalities will assist with such preparation, provided that the agreement is permissible in terms of applicable local government legislation."

Details regarding the average scheduled kilometres subsidised, passengers per trip and average unescalated subsidy paid to the subsidised operators are provided in the table below.

ANALYSIS OF SUBSIDDISED OPERATORS IN ILEMBE DISTRICT MUNICIPALITY					
Operator	**Area of Operations**	**Vehicles**	**Average km/month**	**Pass/trip**	**Average unescalated subsidy/mnth**
Darnall Motor Transport	Endondakusuka & Kwadukuza	11	29142	61.9	140396.56
Maphumulo Mail	Kwadukuza & Maphumulo	12	20940	62.6	110310.76
Washesha Bus Service	Endondakusuka	4	12127	67.4	76036.29
Total		**27**	**62209**	**63.9**	**326743.61**

As part of all projects identified in this report the following should always be taken into consideration:

a) Traffic and safety issues
b) Support for the recapitalisation project for taxis
c) All public transport facilities to be developed in the IDM should be user-friendly to disabled persons
d) The promotion of subsidised transport in areas that currently do not receive public transport subsidies
e) Creating an atmosphere conducive to the implementation of the National Government Recapitalisation project.

The following table provides a summary of costs in terms of the IDM:

a) Operating Licence Strategy
b) Rationalisation Plan
c) Public Transport Plan

SUMMARY OF COST FOR IDM FOR A FIVE YEAR PERIOD	
Item	**Estimated Cost**
Operating Licence Strategy	R28 151 153
Rationalisation Plan???	
Public Transport Plan	R34 230 000
Total	

It is assumed 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 was therefore followed during the development of this PTP.

To conclude it is important to note that all requirements relating to the road network are addressed as part of the report on the Integrated Transport Plan (ITP).

CONTENTS

1. INTRODUCTION 1

1.1 BACKGROUND 1
1.2 METHODOLOGY 1
1.3 PURPOSE OF PUBLIC TRANSPORT PLAN 2
1.4 SCOPE OF THE WORK 3
1.4.1 Area under consideration 4
1.4.2 Nature of services under investigation 4
1.4.3 Authority responsible for the preparation of the PTP 5
1.4.4 Period and date for the particular PTP 5

2. PUBLIC TRANSPORT VISION, GOALS AND OBJECTIVES 6

2.1 VISION 6
2.1.1 National Vision Statement for Transport 6
2.1.2 Transport Vision for KwaZulu-Natal 6
2.2 POLICY GOALS AND OBJECTIVES 7
2.2.1 National Strategic Objectives for Land Transport 7
2.2.2 KZN-DOT Policies and Objectives 8
2.3 AREAS OF POLICY CONFLICT 8
2.4 ALIGNMENT FOR THE ILEMBE DISTRICT MUNICIPALITY 8

3. PUBLIC TRANSPORT STATUS QUO (CPTR) 10

3.1 EXISTING CPTR AND COLLECTION OF ADDITIONAL DATA 10
3.2 DESCRIPTION AND ANALYSIS OF THE RESULTS OF THE CPTR 11
3.2.1 Facilities 11
3.2.2 Capacity utilisation of the facilities 15
3.2.3 Routes 15
3.2.4 Route utilisation 20
3.2.5 Waiting times for taxis 23
3.2.6 Operational vehicles 26
3.2.7 Public Transport Trip Purpose 27
3.3 PUBLIC TRANSPORT DEMAND 28
3.4 THE DESCRIPTION AND USE OF MAJOR PUBLIC TRANSPORT SUPPLY CORRIDORS AND MAJOR FACILITIES 28
3.4.1 Major public transport corridors 28
3.4.2 Major public transport facilities 31
3.5 PUBLIC TRANSPORT SERVICES OPERATING IN PARALLEL TO ONE ANOTHER AND COMPETING FOR THE SAME MARKET 31
3.6 ANY SIGNIFICANT REGULATORY ISSUES AND IMPEDIMENTS 32

4. TRANSPORT AND LAND-USE INTERGRATION 33

4.1 ILEMBE DISTRICT SPATIAL FRAMEWORK 33
4.2 INTEGRATED DEVELOPMENT PLAN 35
4.2.1 Ilembe District Municipality Integrated Development Plan 35
4.2.2 Ilembe Local Municipalities Integrated Development Plans 37
4.3 PROVINCIAL LAND TRANSPORT FRAMEWORK 48
4.4 RURAL TRANSPORT STRATEGY FOR SOUTH AFRICA 48

5. PUBLIC TRANSPORT PROPOSALS (OLS AND RATPLAN) 49

5.1 OPERATING LICENCE STRATEGY 49
5.1.1 Purpose and objective of the OLS 49

5.1.2 Roles of modes in the area ... 49
5.1.3 Preferred modes ... 49
5.1.4 Parallel subsidised services and commercial service contracts ... 50
5.1.5 Restructuring ... 50
5.1.6 Interventions ... 55
5.1.7 Conditions ... 55
5.1.8 Evaluations ... 55
5.1.9 Procedures within the IDM for disposing of licence applications ... 63
5.1.10 Other considerations ... 64
5.1.11 Future routes to be developed ... 64
5.1.12 Number of law enforcement officers available in the area, per taxi rank and/or position ... 65
5.1.13 The liaison structures operating in the area ... 66
5.1.14 Law enforcement targets and method of monitoring the achievement of such targets ... 67
5.2 RATIONALISATION STRATEGY ... 68
5.2.1 Background ... 68
5.2.2 Purpose ... 68
5.2.3 Principles for preparing rationalisation plans ... 69
5.2.4 Objectives ... 70
5.2.5 Scope of work ... 70
5.2.6 Assessment of existing subsidised services ... 70
5.2.7 Stakeholder Identification (Subsidised Operators) ... 71
5.2.8 Non-Stakeholder Identification (Non Subsidised Operators) ... 72
5.2.9 Inefficiencies identified in the IDM ... 73
5.2.10 Ineffectiveness identified in the Ilembe District ... 73

6. STAKEHOLDER CONSULTATION ... 80

6.1 STAKEHOLDER CONSULTATION ... 80
6.2 LIAISON WITH THE OPERATING LICENCE BOARD ... 82
6.3 TOURISM AND EDUCATIONAL SERVICE ... 85
6.4 LIAISON WITH NEIGHBOURING PLANNING AUTHORITIES ... 85

7. PRIORITIZED PUBLIC TRANSPORT PROPOSALS AND IMPLEMENTATION PROGRAMME ... 87

7.1 SUMMARY OF PROPOSED COST FOR OLS RELATED PROJECTS ... 88
7.2 SUMMARY OF PROPOSED COST OF PROJECTS RELATED TO THE RATIONALISATION PLAN ... 90
7.3 PROPOSED PTP-RELATED PROJECTS ... 90
7.4 SUMMARY OF COSTS ... 93

8. FINANCIAL IMPLICATIONS ... 94

9. BIBLIOGRAPHY ... 97

LIST OF TABLES

TABLE 2.2.2.1: PLAN OF ACTION FOR PUBLISHING THE REQUIRED POLICY UNDER SECTION 9(2) OF THE ACT

TABLE 3.2.1.1.1: TAXI FACILITY STATISTICS FOR THE IDM AREA

TABLE 3.2.3.1.1: DISTRIBUTION OF TAXI ROUTES PER LOCAL MUNICIPALITY IN THE ILEMBE DISTRICT

TABLE 3.2.3.1.2: SUMMARY OF ROUTES DISTANCES AND COSTS OF TRAVEL FOR TAXI ROUTES

TABLE 3.2.3.2.1: DISTRIBUTION OF SUBSIDISED BUS ROUTES PER LOCAL MUNICIPALITY IN THE ILEMBE DISTRICT

TABLE 3.2.3.2.2: SUMMARY OF ROUTES DISTANCES AND COSTS OF TRAVEL FOR BUS ROUTES

TABLE 3.2.4.1.1: AVERAGE NUMBER OF TAXI TRIPS PER TAXI IN THE ILEMBE DISTRICT BY LOCAL MUNICIPALITY

TABLE 3.2.4.2.1: BUS ROUTE UTILISATION RESULTS FOR STANGER BUS TERMINUS

TABLE 3.2.4.3.1: BAKKIE ROUTE UTILISATION RESULTS FOR MAPHUMULO BAKKIE RANK

TABLE 3.2.5.1: AVERAGE WAITING TIMES IN QUEUES AND IN VEHICLES FOR DIFFERENT TIME INTERVALS BY LOCAL MUNICIPALITY

TABLE 3.2.6.1: OPERATIONAL TAXIS IN THE ILEMBE DISTRICT MUNICIPAL AREA AND LOCAL MUNICIPALITIES

TABLE 3.2.7.1: DISTRIBUTION PERCENTAGE OF TRIP PURPOSES PER FACILITY FOR PEAK AND OFF-PEAK PERIODS

TABLE 3.4.1.1: MAJOR CORRIDOR ROUTES

TABLE 3.4.2.1: MAJOR PUBLIC TRANSPORT FACILITIES IN IDM

TABLE 4.2.1.1: TRANSPORT/ROADS-RELATED KEY ISSUES INDICATED AS PART OF THE IDM IDP

TABLE 4.2.2.1: TRANSPORT/ROADS-RELATED LOCAL STRATEGIES AS INDICATED AS PART OF THE MAPHUMULO IDP

TABLE 4.2.2.2: TRANSPORT/ROADS-RELATED LOCAL STRATEGIES AS INDICATED AS PART OF THE KWADUKUZA IDP

TABLE 4.2.2.3: TRANSPORT/ROADS-RELATED LOCAL STRATEGIES AS INDICATED AS PART OF THE ENDODAKUSUKA IDP

TABLE 4.2.2.4: TRANSPORT/ROADS-RELATED OBJECTIVES AS INDICATED AS PART OF THE NDWEDWE LOCAL MUNICIPALITY

TABLE 5.1.5.3.1.1: SUMMARY OF BUSIEST TAXI ROUTES IN THE IDM AREA

TABLE 5.1.10.1: PROCESS FOLLOWED WHEN DEALING WITH OTHER APPLICATIONS

TABLE 5.2.7.1: ANALYSIS OF SUBSIDISED OPERATORS IN ILEMBE DISTRICT MUNICIPALITY

TABLE 5.2.8.1: SUMMARY OF NON-SUBSIDISED BUS OPERATORS IN THE IDM

TABLE 7.1.1: IDM OPERATING LICENCE STRATEGY RELATED PROJECTS AND FINANCIAL IMPLICATIONS

TABLE 7.3.1: IDM IDENTIFIED PUBLIC TRANSPORT PLAN RELATED PROJECTS AND FINANCIAL IMPLICATIONS

TABLE 7.4.1: SUMMARY OF COST FOR IDM FOR A FIVE YEAR PERIOD

LIST OF FIGURES

FIGURE 1.2.1: THE KZN-DOT TRANSPORTATION PLANNING PROCESS
FIGURE 1.4.1.1: AREA UNDER CONSIDERATION
FIGURE 3.2.1.1: DISTRIBUTION OF PUBLIC TRANSPORT FACILITIES IN THE IDM AREA
FIGURE 3.4.1.1: MAJOR PUBLIC TRANSPORT CORRIDORS IN THE IDM AREA
FIGURE 4.1.1: IDM SPATIAL FRAMEWORK PLAN PREPARED DURING 2003
FIGURE 6.2.1: FLOW CHART OF APPLICATION PROCESS FOR OPERATING LICENCES

APPENDICES

APPENDIX A:	PUBLIC TRANSPORT STATUS QUO
APPENDIX A-1:	PUBLIC TRANSPORT FACILITIES
APPENDIX A-2:	CAPACITY UTILISATION OF FACILITIES
APPENDIX A-3:	PUBLIC TRANSPORT ROUTES
APPENDIX A-3.1:	TAXI ROUTES
APPENDIX A-3.2:	BUS ROUTES
APPENDIX A-4:	ROUTE UTILISATION
APPENDIX A-5:	WAITING TIMES
APPENDIX A-6:	OPERATORS INFORMATION
APPENDIX B:	OPERATING LICENCES RELATED INFORMATION
APPENDIX B-1:	NLTTA, 22 OF 2002 DEFINITIONS
APPENDIX B-2:	COMMUNICATION WITH THE KZN OLB PRO-FORMA FOR THE DISPOSAL OF APPLICATIONS FOR OPERATING LICENCES
APPENDIX B-3:	TYPE OF MODES OPERATING ON A SPECIFIC ROUTE FOR THE IDM AREA
APPENDIX B-4:	OPERATING LICENCES INFORMATION NOTE
APPENDIX B-5:	RECOMMENDATIONS ON ISSUING OF THE OPERATING LICENCES
APPENDIX B-6:	ROUTES AFFECTED BY NEIGHBOURING PLANNING AUTHORITIES
APPENDIX B-7:	EXECUTIVE SUMMARY, RURAL TRANSPORT STRATEGY FOR SOUTH AFRICA

ABBREVIATIONS

IDM:	ILEMBE DISTRICT MUNICIPALITY
ITS:	INTEGRATED TRANSPORT SYSTEM
IDP:	INTEGRATED DEVELOPMENT PLAN
PTP:	PUBLIC TRANSPORT PLAN
CPTR:	CURRENT PUBLIC TRANSPORT RECORDS
ITP:	INTEGRATED TRANSPORT PLAN
CBD:	CENTRAL BUSINESS DISTRICT
LDOs:	LAND DEVELOPMENT OBJECTIVES
IDTF:	ILEMBE DISTRICT TRANSPORT FORUM
OLS:	OPERATING LICENCE STRATEGY
LRTB:	LOCAL ROAD TRANSPORT BOARD (A FORMER INSTITUTION REPLACED BY OLBS)
LTPS:	LAND TRANSPORT PERMIT SYSTEM
MSA:	MOVING SOUTH AFRICA
NDOT:	NATIONAL DEPARTMENT OF TRANSPORT
NLTTA:	NATIONAL LAND TRANSPORT TRANSITION ACT, ACT 22 OF 2000
OLB:	OPERATING LICENSING BOARD
OLS:	OPERATING LICENCE STRATEGY
PLTF:	PROVINCIAL LAND TRANSPORT FRAMEWORK
RAS:	REGISTRATION ADMINISTRATION SYSTEM
TPR2:	A NATIONAL PLANNING DOCUMENT TITLED: TRANSITIONAL INFORMATION REQUIREMENTS FOR PUBLIC TRANSPORT

1. INTRODUCTION

Chapter 1 contains the following:

a) Background
b) Methodology
c) Purpose of Public Transport Plan
d) Scope of the work, including –

   i) area under investigation;
   ii) nature of services under investigation;
   iii) authority responsible for the preparation of the PTP;
   iv) period and date for the particular PTP.

1.1 Background

The initial Current Public Transport Records (CPTR) has already been prepared for the Ilembe District Municipality.

Other plans and processes to be considered include –

f) National Land Transport Strategic Framework;
g) Provincial Land Transport Framework (PLTF);
h) Integrated Transport Plans (ITPs);
i) Integrated Development Plans (IDPs); and
j) the preparation of National and Provincial budgets.

1.2 Methodology

Based on the Planning Guideline TPR 7 there has been a significant change in transport policy in recent years following the White Paper on National Transport Policy, 1996. Firstly, there has been a shift in focus from infrastructure development to public transport. In addition, there has also been a move from a supply-driven transport system to a demand-driven transport system, based on plans. The environment in which transport planning has to be done has also changed considerably.

Given this changing environment, the national Department of Transport (nDoT) adopted and is advocating a revised planning approach that –

a) focuses on essential matters for any particular area;
b) must be unique for any particular area;
c) gives priority to matters where planning can be transformed into delivery within a reasonable

time frame;

d) is developed incrementally; and

e) is reviewed annually.

The KZN-DOT in turn has embarked on a process to provide a provincial framework for the implementation of these plans in a practical and consistent manner. The KZN-DOT planning process is illustrated in **Figure 1.2.1**.

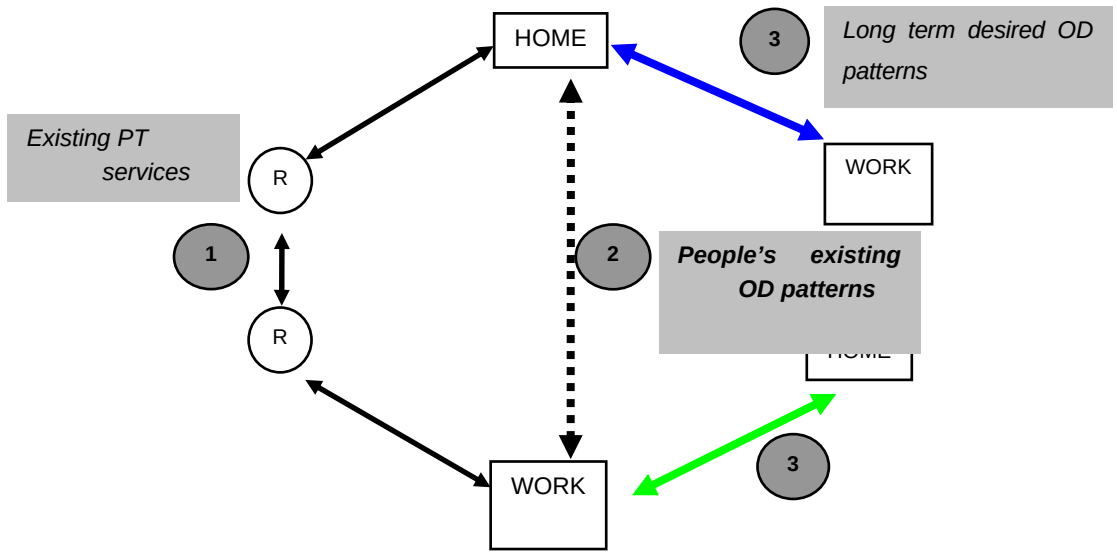

FIGURE 1.2.1: THE KZN-DOT TRANSPORTATION PLANNING PROCESS

The methodology used in preparing this Public Transport Plan for the Ilembe District Municipality followed the above outline.

1.3 Purpose of 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 –

a) 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

b) 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 must 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."

1.4 Scope of the work

The scope and approach towards the formulation of a PTP for the IDM are based on the requirements set out in the NLTTA, Act 22 of 2002, Part 7, section 26. The scope of the work should cover the whole area of jurisdiction of the IDM.

Based on the "National Transport Planning Guidelines and Requirements for the Implementation of NLTTA (Preparation of the Public Transport Plan)" the IDM-PTP should contain the following areas or topics:

i) Chapter 1: Introduction
j) Chapter 2: Public transport vision, goals and objectives
k) Chapter 3: Public transport status quo (CPTR)
l) Chapter 4: Transport and land-use integration
m) Chapter 5: Public transport proposals (RATPLAN and OLS)
n) Chapter 6: Stakeholder consultation
o) Chapter 7: Prioritised public transport proposals and implementation programme
p) Chapter 8: Financial implications

The subsections below elaborate on the following:

a) Area under consideration
b) Nature of services under consideration
c) Authority responsible for the preparation of the PTP
d) Periods and date for the particular PTP.

1.4.1 Area under consideration

The scope of the work covers the whole area of jurisdiction of the IDM. The four relevant local municipality areas covered are the –

e) Maphumulo Municipality;
f) KwaDukuza Municipality;
g) Ndwedwe Municipality; and
h) Endodakusuka Municipality.

None of the above-mentioned local municipalities has prepared or will prepare the PTP for its respective municipal area. Figure 1.4.1.1 indicates the location of main nodes and roads in the IDM.

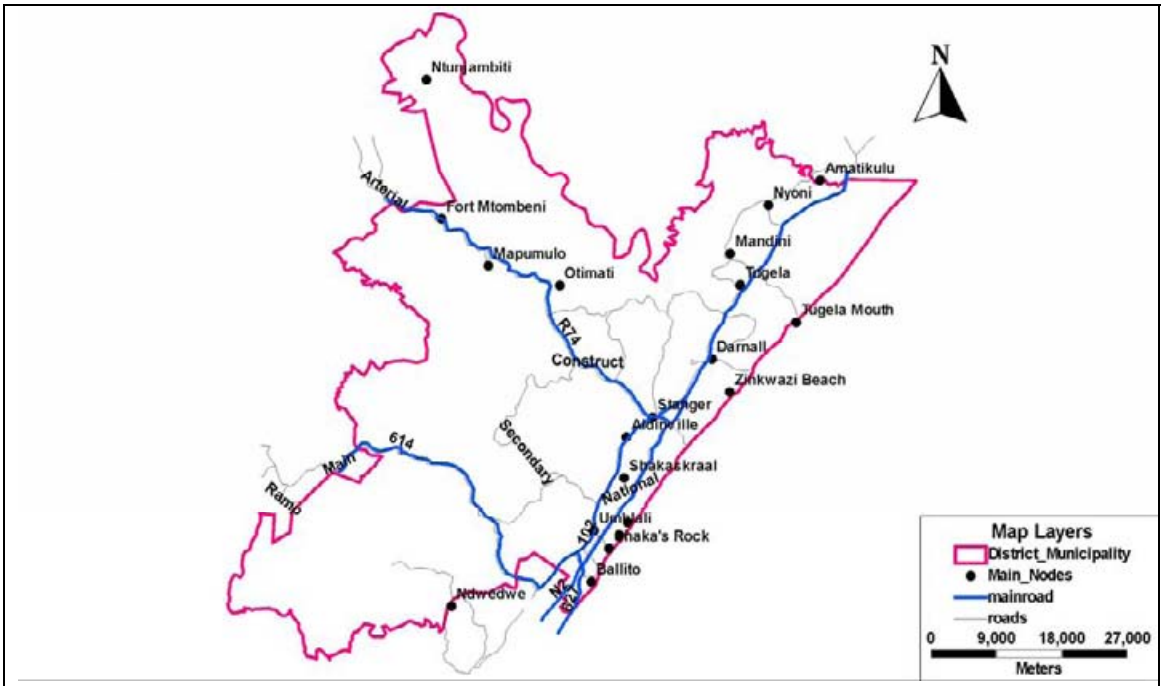

FIGURE 1.4.1.1: AREA UNDER CONSIDERATION

The Ilembe District Municipality is bordered by uThungula District in the northern side, Umzinyathi District in the north-western side, uMgungudlovu District in the south-western side, eThekwini Metropolitan Municipality in the southern side and Indian ocean in the eastern side, and its area of jurisdiction covers approximately 3 264 sq. km.

1.4.2 Nature of services under investigation

The major public transport services to be investigated are bus and taxi operations. There are currently a number of subsidised bus services in the IDM.

Although bakkie transport is illegal in accordance with current legislation, several bakkie

operators exist in the IDM. Bakkie operators mainly provide a public transport service to people within the deep rural areas where the road infrastructure is of such poor condition that other means of transport is not available. Bakkies are mainly concentrated in Maphumulo area, operating to Maphumulo hospital, Ekunqobeni, Kranskop, Menyezwayo as well as Stanger.

There are currently no daily commuters transported by rail services in the IDM area.

1.4.3 Authority responsible for the preparation of the PTP

The IDM is the planning authority responsible for preparing the PTP for its entire area, but the local municipalities in the IDM take part in the process by means of a Passenger Transport Forum, which has been established. The Kwa-Zulu Natal Department of Transport is, however, the financier as well as the provincial co-ordinator of the PTP preparation process and also attend the Passenger Transport Forum. For coordination purposes a steering committee was established consisting of representatives from the IDM, Siyazi Thula JV and the KZN DOT.

1.4.4 Period and date for the particular PTP

The various input items provided for the PTP would be relevant for the period from July 2005 to July 2006.

2. PUBLIC TRANSPORT VISION, GOALS AND OBJECTIVES

The development of a passenger transport system in the Ilembe District Municipality needs to be integrated with the neighbouring systems. In the same spirit is it necessary to take note of the vision statements of the provincial Department of Transport. At a Ilembe District Passenger Transport Forum meeting it was recommended that for the time being the provincial vision statements should be taken as guidance for the development of the Ilembe Public Transport Plan (PTP).

This chapter deals briefly with the approach to a common transport system in order to obtain a brief understanding of the following:

a) Vision
b) Policy goals and objectives
c) Areas of Policy Conflict
d) Alignment for the Ilembe District Municipality

2.1 Vision

2.1.1 National Vision Statement for Transport

The vision statement of transport as stated in the National White Paper for transport, is to –

"PROVIDE SAFE, RELIABLE, EFFECTIVE, EFFICIENT AND FULLY INTEGRATED TRANSPORT OPERATIONS AND INFRASTRUCTURE WHICH WILL BEST MEET THE NEEDS OF FREIGHT AND PASSENGER CUSTOMERS AT IMPROVING LEVELS OF SERVICE AND COST, IN A FASHION WHICH SUPPORTS GOVERNMENT STRATEGIES FOR ECONOMIC AND SOCIAL DEVELOPMENT WHILST BEING ENVIRONMENTALLY AND ECONOMICALLY SUSTAINABLE"

2.1.2 Transport Vision for KwaZulu-Natal

The vision of the KwaZulu-Natal Department of Transport (KZNDOT) for Transport in KwaZulu Natal is captured in its corporate theme:

"Prosperity Through Mobility".

The transport vision of the Department:

> *This vision aligns the Department to a mighty purpose, which is to ensure that the way in which we deliver services and fulfil our responsibilities improves the quality of life for all citizens of KwaZulu-Natal. Prosperity encompasses more than wealth; it looks at all*

aspects of quality of life including safety, access to opportunity, personal development and the ability to participate in decision-making. Every aspect of work undertaken in the Department of Transport impacts on the community and individual citizens. Our actions determine if interaction adds value or entrenches imbalance and prejudice. Our actions can dramatically change the prosperity of every citizen.

Turning the Vision of the Department into reality can only be achieved by focussing attention and energy of all employees and stakeholders on actions that will produce the required results.

Three key strategic focus areas have been identified:

***Saving Lives** by:*

Reducing fatalities resulting from road collisions
Ensuring that the road network is safe
Ensuring the occupational health and safety of our employees
Facilitating accessibility to critical services
Ensuring safe public transport

***Development of People, Economy and Infrastructure** by:*

Addressing the skills within the Transport industry
The provision of infrastructure, which opens economic opportunity
Facilitating economic development

Value for Money by:

Becoming an industry leader in all that we do
Instilling a culture of data-driven decision-making
Implementing sufficient controls

2.2 Policy goals and objectives

2.2.1 National Strategic Objectives for Land Transport

Some of the national strategic objectives for land transport in terms of public transport as stated in the "National Land Transport Strategic Framework 2002 to 2007" are as follows:

a) To promote public transport over private transport
b) To develop transport plans in all three spheres of government
c) To promote transport authorities in selected municipalities
d) To provide efficient and effective regulatory services through the provincial licensing board
e) To have safer public transport services for passengers
f) To upgrade the selected public transport infrastructure

g) To introduce appropriate information systems
h) To formalise and regulate the taxi industry, and recapitalise the minibus-taxi fleet
i) To provide all subsidised road-based passenger transport services in terms of tendered or negotiated contracts
j) To introduce effective performance regulation for rail, and to clarify ownership and competition issues as they affect the three spheres of government.

2.2.2 KZN-DOT Policies and Objectives

Currently the KZNDOT does not have a provincial land transport policy published under section 9(2) of the NLTTA. The KZNDOT also does not have a published white paper or green paper on transport, which sets out the policies and objectives of the department. The KZNDOT will drive the development of a green paper on transport. In developing this provincial strategy and policy the KZNDOT will ensure that there is consultation with all interested and affected parties.

In April 2004 provincial and national parliamentary elections are held in KwaZulu-Natal. The development of a provincial policy of transport needs to take account of the expected change in political leadership of the KwaZulu-Natal Department of Transport. Table 2.1.2.1 below, provides the plan of action indicating time frames for publishing the required policy under section 9(2) of the Act.

TABLE 2.2.2.1: PLAN OF ACTION FOR PUBLISHING THE REQUIRED POLICY UNDER SECTION 9(2) OF THE ACT	
TASK	**COMPLETION DATE**
Establish steering & drafting committee	Feb 04
Complete draft for discussion	July 04
Consultation process	Sept 04
Complete final draft	Nov 04
Publish in Gazette	March 05

2.3 Areas of Policy Conflict

Although the KZNDOT has not published an integrated land transport policy it has pursued the implementation of programmes based on a provincial interpretation of national policy. There are no areas of policy conflict between the policies of the KZNDOT and the national policies.

2.4 Alignment for the Ilembe District Municipality

Taken into account the vision statement of the provincial department of transport the impact and guidance to the IDM are as follows:

a) The vision of **"Prosperity Through Mobility"** is general but still give guidance to what the

general principles are that need to be followed by the development of the PTP.

b) The key strategic focus areas that were identified by the province can also be applied on district level. For example saving lives, development of people, economy and infrastructure and value for money.

c) What needs to happen is for the PTP proposals and solutions to address these strategic key focus areas.

3. PUBLIC TRANSPORT STATUS QUO (CPTR)

This chapter contains the following information:

a) Existing CPTR and collection of additional data
b) Description and analysis of the results of the CPTR
c) Public transport demand
d) Description and the use of major public transport supply corridors and major public transport facilities
e) Whether there are public transport services operating in parallel to one another and competing for the same market
f) Any significant regulatory issues and impediments.

3.1 Existing CPTR and collection of additional data

Each district municipality that is a planning authority is responsible in terms of the National Land Transport Transition Act (Act 20 of 2000) for preparing a Current Public Transport Record (CPTR) for its entire area. Based on the *Government Gazette* published on 24 July 2002 the purpose of the CPTR is to provide a record of public transport services, facilities and infrastructure, which will constitute the basis for the development of the operating licence strategies, rationalisation plans, public transport plans and integrated transport plans for the Ilembe District Municipality.

The Kwa-Zulu Natal Province Department of Transport appointed Iliso Consultants to prepare the Ilembe District CPTR. The study was completed in 2004. It was however necessary for Siyazi Thula Joint Venture to gather additional and more detailed information where gaps existed in order to proceed with the PTP.

The scope of the work for the Ilembe District Municipality CPTR covers the whole area of jurisdiction of the Ilembe District Municipality, which includes the four local municipal areas, namely the Maphumulo Municipality; KwaDukuza Municipality; Ndwedwe Municipality; and Endodakusuka Municipality.

The process followed during the collection of additional CPTR data includes consultation and liaison, site visits, surveys, database development, the capturing, dissemination and storage of data, and the preparation of the report.

The following role players were consulted as part of the preparation of the extension of the IDM-CPTR:

a) Kwa-Zulu Natal Province Department of Transport.

b) Kwa-Zulu Natal Province Department of Transport – Registrar of Taxis.
c) Kwa-Zulu Natal Province Department of Transport – Operating Licence Board.
d) Ilembe District Municipality – Community Service Department.
e) Ilembe Regional Taxi Council and Executive.
f) Local municipalities.
g) Bus industry.
h) Other role players represented on the Ilembe District Passenger Transport Forum.

Site visits were arranged to the different local public transport facilities, so that the members of the study team could acquaint themselves with the conditions, circumstances, operational practices and all practical issues that would be essential for the planning process.

Once all the necessary arrangements and liaison had been completed, planning to execute the surveys commenced. The planning process was communicated and discussed with the IDM and with the role players in the relevant public transport industries.

The surveys were executed in accordance with the Ilembe District Municipality's Terms of Reference for the preparation of a Public Transport Plan Annexure B and C (June 2004).

The following surveys were conducted:

a) Facilities
b) Routes determination
c) Rank utilisation
d) Route utilisation
e) Waiting times.

A database was also compiled to assist with the interpretation of data. The purpose of the database was to complement this report, reduce the volume of the report and provide a tool that could easily be updated from time to time.

3.2 Description and analysis of the results of the CPTR

3.2.1 Facilities

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

a) Provide multimodal public transport facilities at the main nodes of commercial activities in the respective local municipalities
b) Provide public transport transfer facilities along the respective corridors and at other strategic

points

c) Provide loading and off-loading facilities for public transport at strategic points in the villages

The following basic prioritisation technique was developed to determine which facilities on the list of feasible projects should be given priority and implemented:

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. A factor was calculated to indicate the number of passengers in relation to the total number of passengers at all the facilities in the IDM area and this factor was expressed as a percentage
b) The second key indicator was determined by calculating the existing utilisation of a specific facility in relation to the utilisation of the sum of all facilities in the IDM area. Furthermore, if no public transport facility currently existed at a specific point but it was envisaged that the relevant public transport facility would be active in the near future, it was assumed that the facility would be 80% utilised. When no information was available about facility utilisation, it was assumed that the facility would also be 80% utilised
c) To obtain a combined weighting factor in order to prioritise the public transport facilities it was assumed that the first key indicator should have a weight of 80% and the second key indicator should have a weight of 20%. The reason for these weights is that there is generally an over-supply of taxis in the area at present and the rank utilisation is not always a good indication of the actual need for public transport. However, the number of passengers provides a much more realistic result.

The facility surveys were conducted for the following types of facilities:

a) Taxi ranks
b) Bus termini
c) Bakkie ranks

The results of the surveys on the above-mentioned facilities are given in summarised form in the subsections below. Appendix A-1 contains detailed information about the existing and required public transport facilities in the sequence of importance for the IDM. More detailed information about the public transport facilities is available in the IDM – CPTR database.

3.2.1.1 Taxi ranks

The results from the facility surveys conducted for the Ilembe District Municipality as represented in Table 3.2.1.1.1 show that the IDM has a total of 45 taxi facilities. Table 3.2.1.1.1 furthermore shows the number of taxi facilities situated in the different local municipality areas, the percentage of formal taxi facilities and the percentage of taxi facilities per municipal area in

relation to the total number of taxi facilities in the Ilembe District Municipality. Table 3.2.1.1.1 indicates that more than 42% of the ranks in the IDM are in the KwaDukuza LM followed by Maphumulo with just more than 26%.

TABLE 3.2.1.1.1: TAXI FACILITY STATISTICS FOR THE IDM AREA			
Local Municipality	**Number of taxi facilities**	**% Formal**	**% in relation to IDM**
Maphumulo	12	0,0	26,7
KwaDukuza	19	5,3	42,2
Ndwedwe	4	0,0	8,9
Endodakusuka	10	10,0	22,2
Total for IDM	**45**	**4.4**	**100**

In terms of taxi facilities in the Ilembe District Municipal Area, the following information is also relevant:

a) 95,6% of taxi facilities are informal facilities
b) 0% of taxi facilities have lighting
c) 15,6% of taxi facilities are paved
d) 2% of taxi facilities have public telephones
e) 2,2% of taxi facilities have offices
f) 4,4% of taxi facilities have shelters
g) 2,2% of taxi facilities have ablution blocks

3.2.1.2 Bus termini

Bus facilities in the Ilembe District Municipality are limited to one main bus terminus namely, Stanger bus terminus and then the many loading and off-loading bus stops through the district. The bus terminus is in general not well provided with facilities.

3.2.1.3 Bakkie ranks

There are few informal bakkie ranks in the IDM. Due to time and financial constraints, Siyazi Thula only managed to conduct surveys at Maphumulo bakkie rank. The rank is situated in Maphumulo and operates to Maphumulo hospital, Ekunqobeni, Kranskop, Menyezwayo as well as Stanger.

In conclusion, Figure 3.2.1.1 indicates the distribution of public transport facilities in the IDM area.

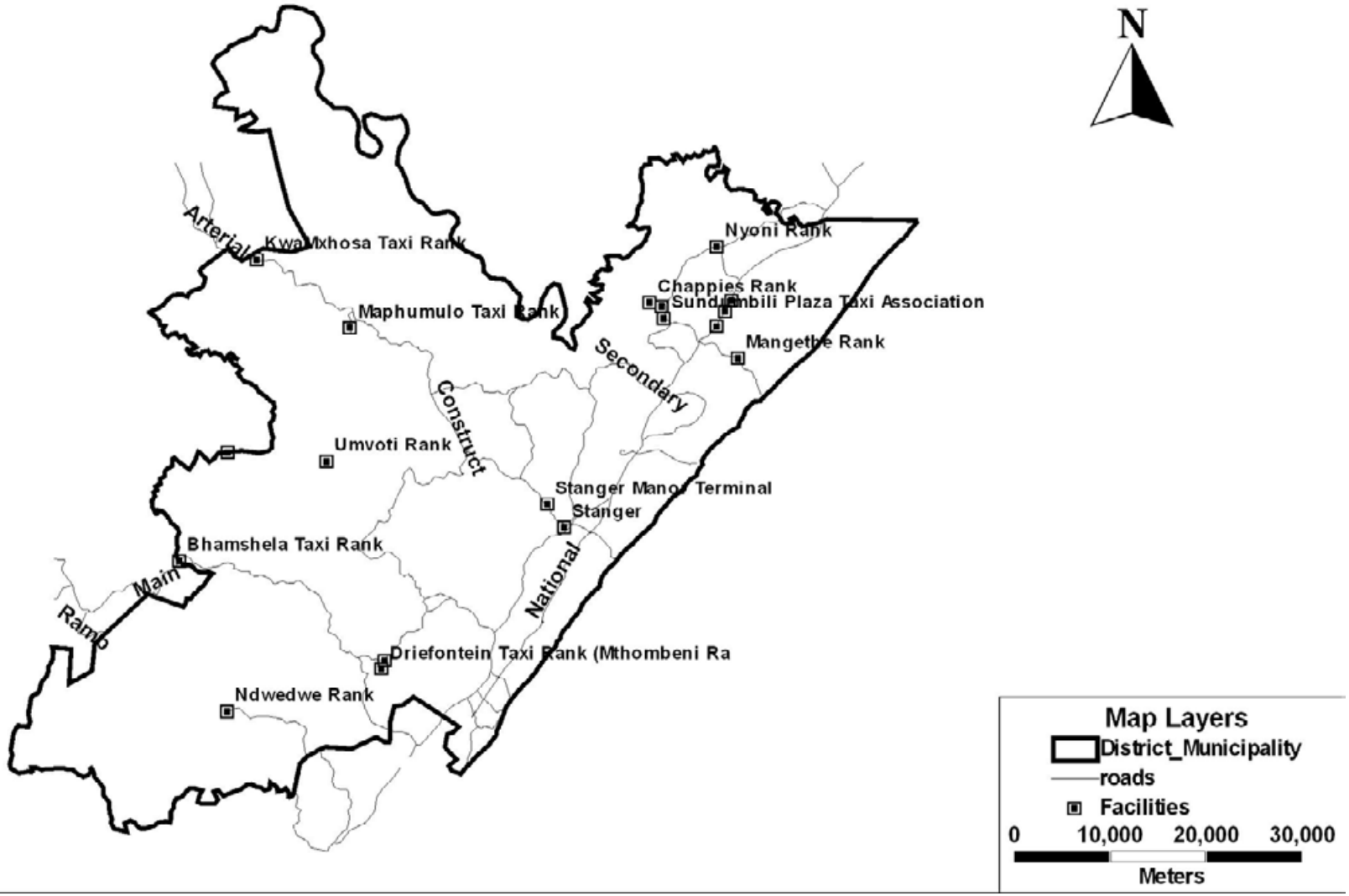

FIGURE 3.2.1.1: DISTRIBUTION OF PUBLIC TRANSPORT FACILITIES IN THE IDM AREA

3.2.2 Capacity utilisation of the facilities

Facility utilisation is described in terms of the following parameters:

a) **Frequency**, which implies the number of vehicles using the facility in specified morning or evening peaks for each type of public transport service or off-peak periods for stand-alone holding facilities.
b) **Facility capacity**, which implies the number of loading bays available.
c) **Utilisation,** which implies the average number of bays occupied in the facility.

It is extremely important to realise that a high number of facilities in the Ilembe District Municipality are informal facilities. In practice, this implies that it is virtually impossible to determine the facility utilisation. In order to indicate the burden that an informal facility places on the public transport system, the capacity of informal facilities was indicated as 1. Table A-2 indicates the average capacity utilisation of the facilities respectively for the –

a) AM Peak between 06:00 and 09:00
b) MID Peak between 09:00 and 14:00
c) PM Peak between 15:00 and 18:00

The higher the percentage capacity utilisation above 100%, the greater the overload on the facilities. From Table A-2 of Appendix A-2, it is possible to note that the facilities that experience more stressful conditions (more than 100% utilisation) are as follows:

a) Stanger (Maphumulo) Taxi Rank
b) Stanger Long Distance Taxi Rank
c) Stanger Local Taxi Rank
d) Maphumulo Bakkie Rank
e) Sudumbili Long Distance Taxi Rank

It is also clear that Mxhosa (Maphumulo) Taxi Rank experiences least stress in terms of utilisation by vehicles.

More detailed information per 15-minute interval is available in the IDM-CPTR database.

3.2.3 Routes

An important element of the minibus-bus taxi and bakkie utilisation is the distance between an origin and destination linked by a straight line against the actual assessed distance as measured along the physical road. These were done using the GIS established for this project. It is, however, important to note that the GIS information provided to Siyazi Thula as part of the IDM CPTR was limited.

In order to determine the user cost of the public transport service the KZNDOT in association with Prof Del Mistro developed a cost model taking into account several parameters. The user cost is determined for each public transport route and averaged for the district. The cost per kilometre travelled was calculated using the actual road distances captured with the GIS system.

Route surveys were conducted for the following types of modes:

a) Taxi
b) Bus

These modes are discussed in more detail in the subsequent subsections of this report.

3.2.3.1 Taxi routes

Based on the surveys conducted for the IDM-CPTR it is crucial to realise that socio-economic factors in the province make it completely uneconomical to restrict a taxi operator to one particular road in order to fulfil his commitments as service provider. The typical socio-economic factors influencing the operational methods of the taxi industry are as follows:

a) The widespread distribution of villages
b) The level of income in villages
c) The employment level in the Kwa-Zulu Natal Province, with specific reference to villages.

The taxi industry implemented a rotation system to ensure that all operators could earn a living. It is, however, important that taxi operators should only be permitted to operate between an A and B point, although it should be possible for them to operate on different roads to maintain the route.

The findings of the route surveys that were conducted show that there were 100 taxi routes in the Ilembe District but the forward and reverse routes were separately described. Table 3.2.3.1.1 indicates that just over 47% of the routes were in the KwaDukuza Local Municipality, followed by 22% of the routes in the Maphumulo and Endodakusuka Local Municipalities each. Table 3.2.3.1.1 provides a more detailed breakdown of the routes per local municipality.

TABLE 3.2.3.1.1: DISTRIBUTION OF TAXI ROUTES PER LOCAL MUNICIPALITY IN THE ILEMBE DISTRICT		
Local Municipality	**Number of routes**	**% in relation to IDM**
Maphumulo	22	22
KwaDukuza	47	47
Ndwedwe	9	9
Endodakusuka	22	22
Total IDM	**100**	**100**

Table A-3.1 of Appendix A-3 of this report contains a summary of taxi routes in the Ilembe District, indicating the following:

a) Route number
b) Association
c) Point A
d) Point B
e) Local Municipality
f) Straight line plan distance
g) Estimated road distance
h) Distance range
i) Fare
j) Average cost per kilometre

Table 3.2.3.1.2 gives the summary of routes distances and costs of travel for taxi routes per local municipality.

TABLE 3.2.3.1.2: SUMMARY OF ROUTES DISTANCES AND COSTS OF TRAVEL FOR TAXI ROUTES					
Local Municipality	**Range of O-D Distances**	**Average Straight Line Distance**	**Average Road Distance**	**Number of routes**	**Average Cost per Kilometre**
Maphumulo Local Municipality	0 – 5km	N/A	3	2	R1,33
	5 – 15km	N/A	13	5	R0,50
	15 – 30km	N/A	25	6	R0,24
	>30km	N/A	49,9	9	R0,25
Per Maphumulo Local Municipality				**22**	**R0.58**
KwaDukuza	0 – 5km	N/A	3	4	R0,83

TABLE 3.2.3.1.2: SUMMARY OF ROUTES DISTANCES AND COSTS OF TRAVEL FOR TAXI ROUTES					
Local Municipality	**Range of O-D Distances**	**Average Straight Line Distance**	**Average Road Distance**	**Number of routes**	**Average Cost per Kilometre**
	5 – 15km	N/A	11,7	18	R0,37
	15 – 30km	N/A	26,5	4	R0,24
	>30km	N/A	53,7	21	R0,28
Per KwaDukuza Local Municipality				**47**	**R0.43**
Ndwedwe Local Municipality	0 – 5km	N/A	0	0	R0,0
	5 – 15km	N/A	0	0	R0,0
	15 – 30km	N/A	0	0	R0,0
	>30km	N/A	54,3	9	R0,20
Per Ndwedwe Local Municipality				**9**	**R0.20**
Endodakusuka Local Municipality	0 – 5km	N/A	4	1	R0,88
	5 – 15km	N/A	10,25	13	R0,35
	15 – 30km	N/A	25	1	R0,40
	>30km	N/A	78,2	7	R0,35
Per Endodakusuka Local Municipality				**22**	**R0.48**

More detailed information is available as part of the IDM-CPTR Database.

3.2.3.2 Bus routes

As the bus industry is formalised, route information was easily available. The information about routes for subsidised services was quite accurate.

Three operators in the Ilembe District Municipality area currently provide subsidised bus services. These services are provided in terms of tendered contracts concluded between the KwaZulu-Natal Department of Transport and the operators. The contract of Darnall Motor Transport (Contract ZNT1169) lapse at the end of June 2005 and the contract of Maphumulo Mail (Contract ZNT1170) at the end of July 2005. A contract also exists between the KwaZulu-Natal Department of Transport and Washesha Bus Service based in Eshowe, which also provides services in the Ilembe DM area.

Based on the bus route information, there are 36 subsidised bus routes into the Ilembe District of which 33% have destinations in the KwaDukuza LM and 61% in the Endondakusuka LM. Two routes originate in the Ilembe DM and end in the area of the Uthungulu DM. Table 3.2.3.2.1 provides a more detailed breakdown of the bus routes per local municipality in the Ilembe District.

TABLE 3.2.3.2.1: DISTRIBUTION OF SUBSIDISED BUS ROUTES PER LOCAL MUNICIPALITY IN THE ILEMBE DISTRICT		
Local Municipality	**Number of routes**	**% in relation with IDM**
Maphumulo	0	0
KwaDukuza	12	33
Ndwedwe	0	0
Endodakusuka	22	61
Other	2	6
Total for IDM	**36**	**100**

Table A-3.2 of Appendix A-3 of this report contains a list of subsidised bus routes in the Ilembe District, indicating the following:

a) Route number
b) Operator
c) Point A
d) Point B
e) Local municipality
f) Straight line plan distance
g) Estimated road distance
h) Distance range
i) Fare
j) Average cost per kilometre

Table 3.2.3.2.2 gives the summary of routes distances and costs of travel for bus routes per local municipality.

TABLE 3.2.3.2.2: SUMMARY OF ROUTES DISTANCES AND COSTS OF TRAVEL FOR BUS ROUTES					
Local Municipality	**Range of O-D Distances**	**Average Straight Line Distance**	**Average Road Distance**	**Number of routes**	**Average Cost per Kilometre**
Maphumulo Local Municipality	0 – 5km	0	0	0	R0,00
	5 – 15km	0	0	0	R0,00
	15 – 30km	0	0	0	R0,00
	>30km	0	0	0	R0,00
		Per Local Municipality		**0**	**R0,00**
KwaDukuza Local Municipality	0 – 5km	0	0	0	R0,00
	5 – 15km	0	13,5	1	R0,37
	15 – 30km	0	22,6	5	R0,28

TABLE 3.2.3.2.2: SUMMARY OF ROUTES DISTANCES AND COSTS OF TRAVEL FOR BUS ROUTES					
Local Municipality	**Range of O-D Distances**	**Average Straight Line Distance**	**Average Road Distance**	**Number of routes**	**Average Cost per Kilometre**
	>30km	0	39	6	R0,20
			Per Local Municipality	**12**	**R0,25**
Ndwedwe Local Municipality	0 – 5km	0	0	0	R0,00
	5 – 15km	0	0	0	R0,00
	15 – 30km	0	0	0	R0,00
	>30km	0	0	0	R0,00
			Per Local Municipality	**0**	**R0,00**
Endodakusuka Local Municipality	0 – 5km	0	0	0	R0,00
	5 – 15km	0	0	0	R0,00
	15 – 30km	0	27,8	6	R0,21
	>30km	0	37,2	16	R0,22
			Per Local Municipality	**22**	**R0,22**

More detailed information is available as part of the IDM-CPTR Database with specific reference to the timetables and fare structures.

3.2.4 Route utilisation

In order to conduct the route utilisation survey, the following figures from the route utilisation data were calculated for a specific route for a specific time interval:

a) Number of passengers
b) Number of seats
c) Percentage utilisation of seats
d) Number of trips
e) Average occupation per vehicle
f) Unique number of taxi trips
g) Average number of trips per taxi

Route utilisation surveys were conducted for the following types of modes:

a) Taxi
b) Bus
c) Bakkie

These modes are discussed in more detail in the subsequent subsections of this report.

3.2.4.1 Route utilisation for taxis

Route utilisation surveys for the taxis were conducted for the all captured main routes for the following peaks:

a) AM Peak from 06:00 to 09:00
b) PM Peak from 15:00 to 18:00

Tables A-4.1 and A-4.2 of Appendix A-4 of this report respectively provide the taxi route utilisation results for the above-mentioned peaks for all captured main routes:

Table 3.2.4.1.1 provides the average number of trips per taxi for each municipality in the Ilembe District for the AM and PM peaks respectively.

TABLE 3.2.4.1.1: AVERAGE NUMBER OF TAXI TRIPS PER TAXI IN THE ILEMBE DISTRICT BY LOCAL MUNICIPALITY

Local Municipality	AM PEAK (06:00 to 09:00)	PM PEAK (15:00 to 18:00)
Maphumulo	1,00	1,00
KwaDukuza	1,00	1,01
Ndwedwe	1,00	1,00
Endodakusuka	1,00	1,02

To conclude, it is possible to determine the route utilisation for any time period by means of the database, and therefore much more detailed information is available as part of the database.

3.2.4.2 Route utilisation for buses

Route utilisation surveys for the buses were conducted at the Stanger bus terminus. The surveys were conducted for the following peaks:

a) Midday Peak from 10:00 to 14:00
b) PM Peak from 15:00 to 18:00

Table 3.2.4.2.1 provides the bus route utilisation results for Stanger bus rank for midday and PM peaks respectively:

TABLE 3.2.4.2.1: BUS ROUTE UTILISATION RESULTS FOR STANGER BUS TERMINUS							
Origin	Destination	No of Passengers	Capacity	Percentage utilisation of seats	Number of trips	Average occupation per vehicle	Average No of Trips per Bus
MIDDAY PEAK							
Stanger	Maphumulo	275	280	98.2	4	68.8	1.0
Stanger	Mandeni	262	210	124.8	3	87.3	1.0
Stanger	Grendane	144	140	102.9	2	72.0	1.0
Stanger	Tombeni	85	70	121.4	1	85.0	1.0
Stanger	Dunkop	160	210	76.2	3	53.3	1.0
Stanger	Qabavu	85	70	121.4	1	85.0	1.0
Stanger	Esenembe	76	70	108.6	1	76.0	1.0
Stanger	Nyangane	60	70	85.7	1	60.0	1.0
Stanger	Emabuthela	100	70	142.9	1	100.0	1.0
Stanger	Balito	136	140	97.1	2	68.0	1.0
Stanger	Kranskop	67	70	95.7	1	67.0	1.0
Stanger	Mabhobhane	110	70	157.1	1	110.0	1.0
Stanger	Tongaat	87	70	124.3	1	87.0	1.0
PM PEAK							
Stanger	Mandeni	245	210	116.7	3	81.7	1.0
Stanger	Madundube	100	70	142.9	1	100.0	1.0
Stanger	Tombeni	110	70	157.1	1	110.0	1.0
Stanger	Nyangane	110	70	157.1	1	110.0	1.0
Stanger	Balito	162	140	115.7	2	81.0	1.0
Stanger	Esenembe	170	140	121.4	2	85.0	1.0
Stanger	Qabavu	110	70	157.1	1	110.0	1.0
Stanger	Dunkop	90	70	128.6	1	90.0	1.0
Stanger	Hydepark	60	70	85.7	1	60.0	1.0

3.2.4.3 Route utilisation for bakkies

Route utilisation surveys for the bakkies were conducted at the Maphumulo bakkie rank. The surveys were conducted for the following peaks:

a) AM Peak from 06:00 to 09:00
b) Midday Peak from 10:00 to 14:00
c) PM Peak from 15:00 to 18:00

Table 3.2.4.3.1 provides the bakkie route utilisation results Maphumulo bakkie rank for AM, Midday and PM peaks respectively:

TABLE 3.2.4.3.1: BAKKIE ROUTE UTILISATION RESULTS FOR MAPHUMULO BAKKIE RANK							
Origin	Destination	No of Passengers	Capacity	Percentage utilisation of seats	Number of trips	Average occupation per vehicle	Average No of Trips per Bakkie
AM PEAK							
Maphumulo	Maphumulo Hospital	60	60	100.0	6	10.0	2.0
Maphumulo	Ekunqobeni	27	30	90.0	3	9.0	1.0
MIDDAY PEAK							
Maphumulo	Maphumulo Hospital	36	40	90.0	4	9.0	1.3
Maphumulo	Ekunqobeni	30	30	100.0	3	10.0	1.0
PM PEAK							
Maphumulo	Ekunqobeni	40	40	100.0	4	10.0	1.0
Maphumulo	Kranskop	4	10	40.0	1	4.0	1.0
Maphumulo	Menyezwayo	9	10	90.0	1	9.0	1.0
Maphumulo	Stanger	19	10	190.0	1	19.0	1.0

3.2.5 Waiting times for taxis

Detailed calculations were done on waiting times, using the surveyed information. The following is typical of the information available per main route for a specific time interval:

a) Survey size
b) Maximum waiting time for passenger in queue
c) Average waiting time for passenger in queue
d) Maximum waiting time for passenger in vehicle
e) Average waiting time for passenger in vehicle
f) Maximum total waiting time for passenger
g) Average total waiting time for passenger
h) Maximum number of passenger left in queue
i) Average number of passenger left in queue
j) Maximum number of vehicles remaining in queue
k) Average number of vehicles remaining in queue

The above-mentioned detailed waiting-time calculations were conducted for each local municipality. Tables A-5.1 to A-5.4 of Appendix A-5 of this report contain the respective results for the following:

a) Table A-5.1: Maphumulo Municipality
b) Table A-5.2: KwaDukuza Municipality

c) Table A-5.3: Ndwedwe Municipality
d) Table A-5.4: Endodakusuka Municipality

Table A-5.5 of Appendix A-5 was prepared to indicate the results for the Ilembe District.

The level of service (LOS) can be described as the average delay passengers experience at the different public transport facilities. The average delay is an indication of the efficiency of the public transport service. There are passenger delays of more than one hour especially for the longer distance trips.

On the basis of the above-mentioned delay times, the following levels of service are suggested:

- Level of Service A - < 5 min
- Level of Service B - 5 – 10 min
- Level of Service C - 10 – 30 min
- Level of Service D - 30 – 60 min
- Level of Service E - > 60min

Level of Service A represents in reality "No Delay" and a Level of Service E represents an "Unacceptable Delay". Table A-5.6 of Appendix A-5 indicates the average level of service experienced at each facility.

In conclusion, the IDM-CPTR database contains all the detailed information about waiting times by specific routes.

Table 3.2.5.1 presents a summary of the data for the average waiting times in the queues and in the vehicles for the time intervals between 15:00 and 18:00 for the different local municipalities. Table 3.2.5.1 clearly indicates that there is generally an over-supply of minibus-taxi services in the Ilembe DM. Take for example the Maphumulo LM where the waiting time in the queue is 3 or 2 minutes, whereas the average waiting times in the vehicles are 20 minutes for the hours starting at 15:00 and 22 minutes for the hour starting at 16:00. People wait for this long time in the vehicle though very few people arrive in the queues and there are between 2 and 7 vehicles queuing to load. This is generally the case for minibus-taxi services in all the local municipalities. The demand for services on Saturdays and Friday afternoons could justify more vehicles but this would have to be investigated for each route during the update of the CPTR in 2006. The waiting time information will be utilised in more detail when developing the OLS for the Ilembe District Municipality.

TABLE 3.2.5.1: AVERAGE WAITING TIMES IN QUEUES AND IN VEHICLES (TAXIS) FOR DIFFERENT TIME INTERVALS BY LOCAL MUNICIPALITY

Time Interval	Maphumulo				KwaDukuza				Ndwedwe				Endodakusuka			
	Waiting Time in		Number left in		Waiting Time in		Number left in		Waiting Time in		Number left in		Waiting Time in		Number left in	
	Queue	Veh.	Queue	Veh.	Queue	Veh.	Queue	Veh.	Queue	Veh.	Queue	Veh.	Queue	Veh.	Queue	Veh.
15:00-16:00	0:03:38	0:20:11	1	2	0:23:00	0:46:00	4	2	0:00:00	0:16:00	4	3	0:00:11	0:07:49	7	4
16:00-17:00	0:02:07	0:22:07	3	2	0:02:00	0:26:00	4	1	0:01:00	0:11:00	0	2	0:00:51	0:06:39	6	4
17:00-18:00	0:00:00	0:00:00	0	0	0:00:00	0:00:00	0	0	0:00:00	0:00:00	0	0	0:01:40	0:09:20	7	1
Sample size	20				159				5				142			

3.2.6 Operational vehicles

One of the most frequently asked questions concerns the number of operating vehicles for a specific area. It is important to realise that the numbers determined as part of this report only reflect the information obtained in the field for a specific day and peak period, as part of the IDM-CPTR, with specific reference to the minibus-taxi industry. It is therefore possible that for various reasons a taxi operator might not have operated on the day when the survey was conducted and therefore such an operator would not have been included in the calculations.

Information about the number of operational vehicles is therefore available for –

a) Minibus-taxi operators
b) Bus operators, and
c) Bakkie operators

Table 3.2.6.1 below shows the total number of different taxis operating in the Ilembe District for each of the local municipalities. The table shows that 476 taxi vehicles were observed in the IDM area during the survey, of which 351 vehicles were noted in the KwaDukuza LM. The lowest number was observed in the Ndwedwe LM, namely 58 vehicles. It is important to note that some of the vehicles were observed in more than one local municipality because the A and B points of the routes are in different local municipal areas. The result is that the sum of the operational vehicles for all the respective municipalities is higher than the number of operational vehicles in the IDM.

TABLE 3.2.6.1: OPERATIONAL TAXIS IN THE ILEMBE DISTRICT MUNICIPAL AREA AND LOCAL MUNICIPALITIES

Local Municipality	Number of taxis
Maphumulo	96
KwaDukuza	351
Ndwedwe	58
Endodakusuka	202
Ilembe DM	**476**

There are 26 subsidised buses in operation in the IDM.

There are 11 bakkies that were identified during the surveys operating from Maphumulo bakkie rank. The other bakkies ranks were not surveyed.

The following information about operators appears in Appendix A-6 of the report:

a) Table A-6.1: Taxi associations operating in the Ilembe District.

b) Table A-6.2: Subsided and non-subsidised bus operators in the Ilembe District.

3.2.7 Public Transport Trip Purpose

The purpose of public transport trips within the Ilembe area is summarised in Table 3.2.7.1 and is based on the interviews conducted at the facilities. The purpose of these trips has been calculated for work and non-work purposes.

For Ilembe, the trip purpose surveys information provided to Siyazi Thula was only for the facilities in Table 3.2.7.1. The surveys conducted at the above mentioned facilities indicated that only 17,08% of all public transport trips are work related trips.

Table 3.2.7.1 indicates the distribution percentage of trip purposes per facility for peak and off-peak periods. The peak periods were established as follows:

a) AM Peak from 06:00 to 09:00
b) Midday Peak from 10:00 to 14:00
c) PM Peak from 15:00 to 18:00

TABLE 3.2.7.1: DISTRIBUTION PERCENTAGE OF TRIP PURPOSES PER FACILITY FOR PEAK AND OFF-PEAK PERIODS

Facility Name	Work Trips (%)			Non-Work Trips (%)		
	Am Peak	Midday Peak	Pm Peak	Am Peak	Midday Peak	Pm Peak
Sundumbili Taxi rank	43,80	10,79	17,38	56,20	89,21	82,62
Reckens Taxi Rank	12,50	0,0	9,09	87,50	100,00	90,91
Tugela Beach	0,0	-	-	100	-	-
Slengeni Village	10,00	-	25,00	90,00	-	75,00
Makhwaneni Village	11,11	0,0	55,56	88,89	100,00	44,44
Machibini Village	44,44	-	-	55,56	-	-
Average	**20.31**	**3.60**	**27.34**	**79.69**	**96.40**	**72.66**
Overall average	**17,08**			**82,92**		

Less than 30% of the work purpose trips are made within the peak periods. As expected, the majority of non-work trips are made within the off-peak period.

It is important to take note of the following in terms of the CPTR recommendations:

It is recommended as part of the IDM-CPTR that:

e) As the results of the IDM-CPTR surveys indicate a general oversupply of taxis, no permits should be considered before the OLS has been compiled and approved.
f) The IDM-CPTR information that is available on the database should be used for developing an Operating Licensing Strategy (OLS) as guideline for the Operating Licence Board with regard to the issuing of new permits.
g) The IDM-CPTR information should furthermore be used for developing a Public Transport Plan, which would guide the implementation of Public Transport projects and strategies, and could serve as input into the Integrated Transport Plan (ITP).
h) For the 2006 update of the IDM-CPTR, consideration should be given to surveying the operations at the major ranks during Friday afternoons and Saturdays, so as to determine the utilisation of services.

3.3 Public transport demand

The demand for public transport was based on the route utilisation surveys conducted at the different public transport facilities throughout the district. From the surveys, it was possible to determine the number of passengers departing from each public transport facility. The numbers of passengers were compared with the available seats of vehicle trips made during the surveys. It was also important to assess the status of the public transport facilities, as well as the type of facility to be provided. This was discussed in section 3.2.1 of this report. Table A-1 of Appendix A-1 indicates the public transport demand and requirements in terms of public transport facilities.

3.4 The description and use of major public transport supply corridors and major facilities

The subsections below elaborate on the following:

a) Major public transport corridors
b) Major public transport facilities.

3.4.1 Major public transport corridors

Table 3.4.1.1 and Figure 3.4.1.1 respectively indicate the major corridor routes, as obtained from the IDM-CPTR.

TABLE 3.4.1.1: MAJOR CORRIDOR ROUTES	
CORRIDOR ROUTE	**ROUTE CODE**
a) Bhamshela to Tongaat	KZN-R0043FR-I
b) Stanger to Mandeni	KZN-R0026FR-I
c) Stanger to Tongaat	KZN-R0056FR-I
d) Stanger to Durban	KZN-R0010FR-I
e) Stanger to Shakaville	KZN-R0018FR-I
f) Sundumbili to Isithebe	KZN-R0051FR-I
g) Sundumbili to Chappies	KZN-R0054FR-I
h) Stanger to Ntshawini	KZN-R0034FR-I
i) Reckens to Machibini	KZN-R0008FR-I
j) Stanger to Madundube	KZN-R0027FR-I
k) Stanger to Doringskop	KZN-R0031FR-I
l) Stanger to Balito	KZN-R0033FR-I
m) Stanger to Grootville	KZN-R0029FR-I
n) Stanger to Maphumulo	KZN-R0040FR-I
o) Reckens to Dendethu	KZN-R0005FR-I

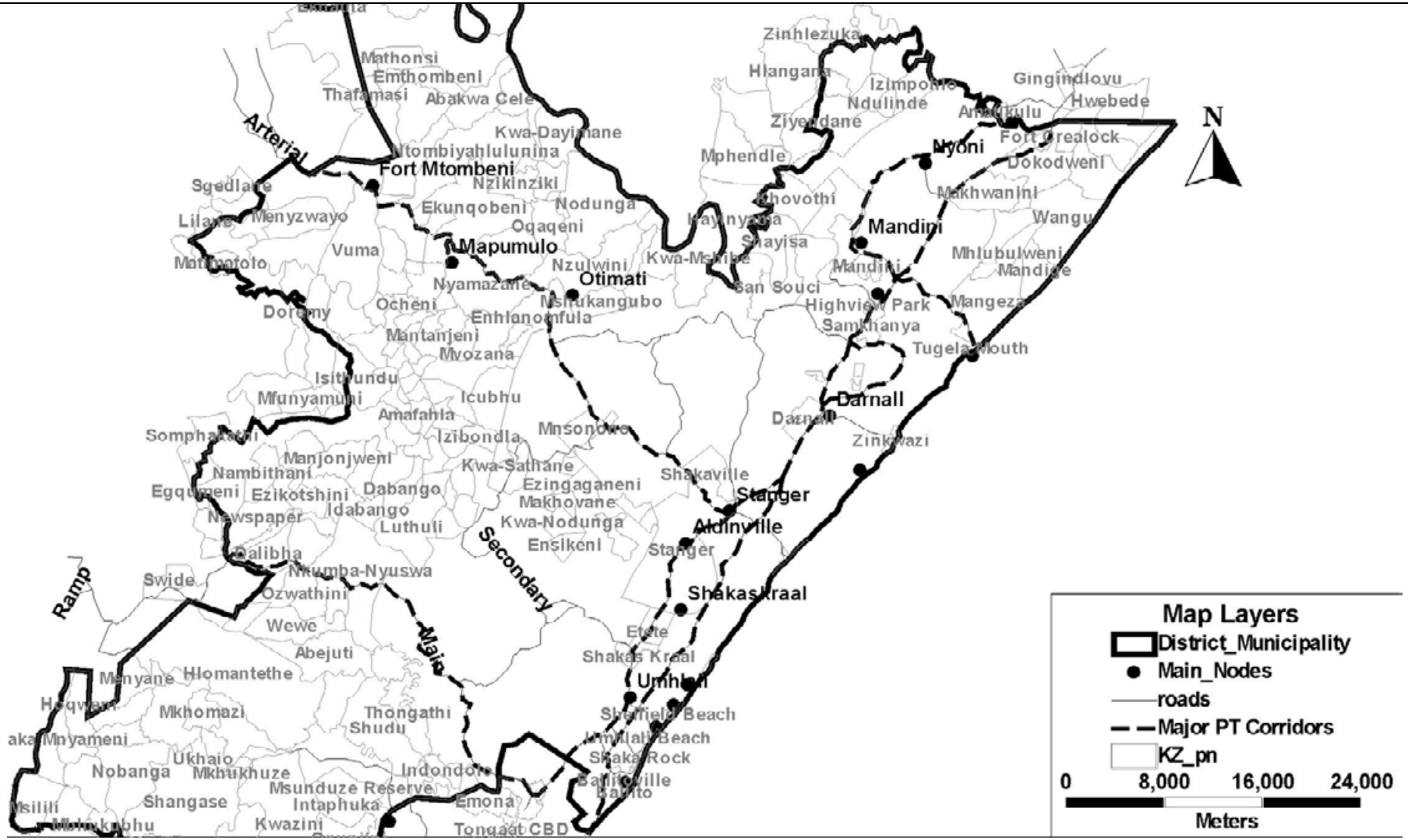

FIGURE 3.4.1.1: MAJOR PUBLIC TRANSPORT CORRIDORS IN THE IDM AREA

3.4.2 Major public transport facilities

Section 3.2.1.1 indicates that there is a lack of facilities for public transport operators, as more than 95% of taxi facilities in the IDM area are informal. The following figures illustrate the state of the ranks in the IDM area:

a) 95,6% of taxi facilities are informal facilities
b) 0% of taxi facilities have lighting
c) 15,6% of taxi facilities are paved
d) 2% of taxi facilities have public telephones
e) 2,2% of taxi facilities have offices
f) 4,4% of taxi facilities have shelters
g) 2,2% of taxi facilities have ablution blocks

Table 3.4.2.1 indicates the major public transport facilities in the IDM area as identified by means of the IDM-CPTR.

TABLE 3.4.2.1: MAJOR PUBLIC TRANSPORT FACILITIES IN IDM

FACILITY NAME	STATUS: FORMAL/INFORMAL	FACILITY ID NUMBER
a) Renckens Taxi Rank	Informal	KZN-F0004I
b) Stanger (Maphumulo) Taxi Rank	Formal	KZN-F0005I
c) Stanger Long Distance Taxi Rank	Informal	KZN-F0011I
d) Stanger Local Taxi Rank	Informal	KZN-F0012I
e) Stanger Bus Rank	Informal	KZN-F0013I
f) Sundimbili Local Taxi Rank	Informal	KZN-F0006I
g) Sundumbili Long Distance Taxi Rank	Informal	KZN-F0015I

The IDM-CPTR contains a full list of the public transport facilities in the IDM area together with the relevant CPTR-ID number for each facility.

3.5 Public transport services operating in parallel to one another and competing for the same market

Parallel services are services operating during similar time periods and of comparable quality and cost to the passenger, serving passengers of whom the majority has the same origin and destination. Where more than one mode makes up the parallel service, transfer between modes should be integrated and not be time-consuming.

There are currently no subsidised public transport services operating parallel to each other and competing for the same market in the IDM.

Table 3.5.3.1 indicates eleven (3) subsidised bus operators as identified in the IDM area as part

of the IDM CPTR. These operators operate services in the areas of the KwaDukuza, Maphumulo, and Endodakusuka local municipality areas with various origins but limited overlapping destinations in these local municipalities.

TABLE 3.5.3.1: SUBSIDISED BUS OPERATORS IN THE IDM		
Operator	**Area of Operations**	**Vehicles**
a) Darnall Motor Transport	From and to Kwadukuza and Endondakusuka	11
b) Maphumulo Mail Transport	From and to Kwadukuza and Maphumulo	12
c) Washesha Bus Service	From and to Endondakusuka	3

The IDM Rationalisation Plan/Strategy contains a detailed plan of action concerning the strategy that should be followed to address the above-mentioned parallel routes.

3.6 Any significant regulatory issues and impediments

In terms of significant regulatory issues and impediments, the following are relevant:

a) Poor law enforcement in terms of operating licences and also the lack of transport-related by-laws including the rank management mechanisms that should be provided by government.
b) Route colour coding for taxis together with the relevant law enforcement with scanners should be implemented as soon as possible to ensure peace and stability in the minibus-taxi industry in the IDM area.
c) When operating licences are awarded, careful consideration should be given to ensure that the starting point of the proposed route-based operating licence is the same as the existing radius-based permit, unless the taxi industry together with the community recommends otherwise.
d) The metered-taxi industry is not formalised at local municipality level.

4. TRANSPORT AND LAND-USE INTERGRATION

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.

The three above-mentioned underlying factors would support the public transport system in the IDM area. 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) Ilembe District Spatial Framework;
b) Integrated Development Plan (IDP);
c) Provincial Land Transport Framework (PLTF);
d) Rural Transport Strategy for South Africa.

4.1 ILEMBE DISTRICT SPATIAL FRAMEWORK

The Spatial Framework for Ilembe District Municipality was prepared as part of the IDP during 2003. The last mentioned report elaborates on the following issues in terms of spatial in the IDM:

a) Topographic Structure
b) Movement
c) Settlement
d) Land use activities
e) Environment.

Figure 4.1.1 indicates a graphical presentation the spatial framework prepared for the IDM during 2003

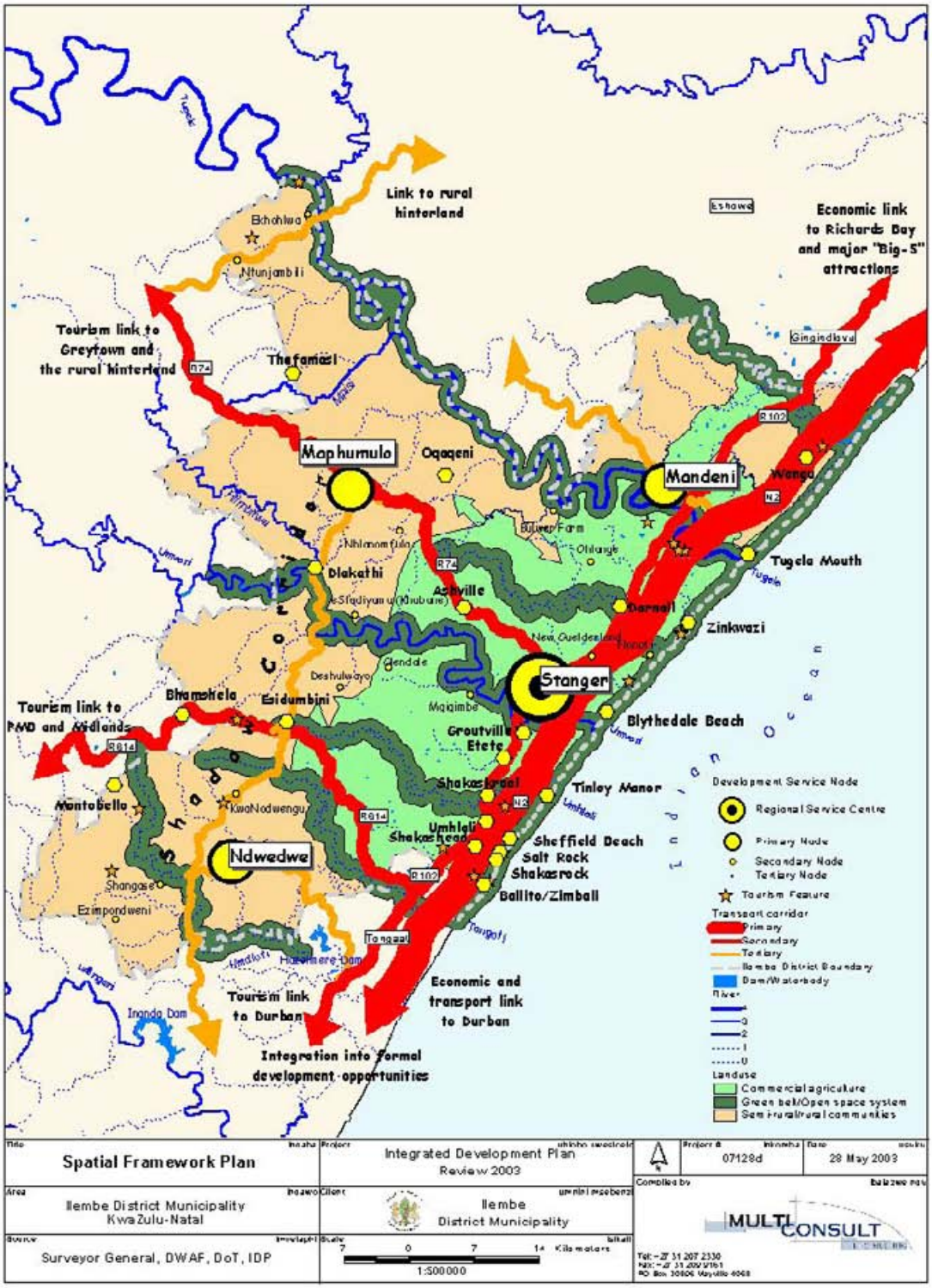

FIGURE 4.1.1: IDM SPATIAL FRAMEWORK PLAN PREPARED DURING 2003

4.2 INTEGRATED DEVELOPMENT PLAN

This section of the report contains the information obtained from the IDP, as prepared for the Ilembe District Municipality.

4.2.1 Ilembe District Municipality Integrated Development Plan

The transport/roads-related output in terms of the Ilembe District Municipality is shown in Table 4.2.1.1. This output comprises the overarching strategies for the district and it is therefore fairly broad. To conclude the IDP input from a district perspective, it should be mentioned that not enough emphasis is placed on public transport. The fact that no provision for certain public transport facilities was included in the IDP proves the latter point.

TABLE 4.2.1.1: TRANSPORT/ROADS-RELATED KEY ISSUES INDICATED AS PART OF THE IDM IDP				
Key Issues	**Causes**	**Constraints**	**Opportunities**	**Strategies**
a) Local roads are local municipalities responsibility b) Local roads failing due to lack of funding c) Rural access roads require grant funding d) District and Provincial roads are the responsibility of DoT e) National roads – NRA Funding of National roads in Municipalities f) DM to act as conduit to funds from DoT to distribute to LM g) Subsidisation required for provincial roads through towns	a) DoT centralised policy	a) Lack of funds and capacity at DM	a) DoT resources can be seconded to DM b) Funds must be tied to responsibility to maintain	a) DM to act as conduit for funds from Dot to distribute to LM on an equitable basis b) DM to lobby for Subsidisation of Provincial roads through towns c) DM to act as cross LM co-ordinator

4.2.2 Ilembe Local Municipalities Integrated Development Plans

The major source of information about transport for the respective local municipalities was their respective Integrated Development Plans (IDP). Tables 4.2.2.1 to 4.2.2.4 show the transport/roads-related local strategies or projects indicated as part of the IDP respectively for the following:

a) Maphumulo Municipality
b) KwaDukuza Municipality
c) Endodakusuka Municipality
d) Ndwedwe Municipality.

TABLE 4.2.2.1: TRANSPORT/ROADS-RELATED LOCAL STRATEGIES AS INDICATED AS PART OF THE MAPHUMULO IDP				
Development Context	**Goals and Objectives**	**District Municipality Goals and Objectives**	**Strategy to achieve minimum acceptable standards:**	**Powers and Functions**
a) The present lack of appropriate access has contributed to the lack of social, economic, institutional development. Unlocking the development potential of the Municipality will require the construction and/or upgrading roads on a strategic basis.	a) Encourage development of internal roads – particularly to re-inforce existing potential nodes (Khabane, Nhlanomfula and Ntunjambili) and identify new development areas. b) Upgrade existing roads so that all weather access for public transport to within 5km of every settlement. c) Acknowledging that the development of the internal road network is essential in providing the basis for economic development. d) Prepare a Municipal Transport Management Plan by March 2003.	a) Prepare and adopt a Transport Management Plan that will inform all future infrastructure development and service delivery. b) Identify specific service delivery objectives emanating from the above plan.	a) Ensure that roads that realise economic potential and facilitate access to basic services are prioritised. b) Work together with the Department of Transport, District Council and Local Municipality to identify roads to be constructed or upgraded. c) Identify a rural roads programme to improve access to Maphumulo's interior, by September 2002	a) District Municipality (District and Provincial Roads). b) Local Municipality (Local Access Roads).

TABLE 4.2.2.2: TRANSPORT/ROADS-RELATED LOCAL STRATEGIES AS INDICATED AS PART OF THE KWADUKUZA IDP	
KEY PERFORMANCE AREA [infrastructure and services]	
PRIORITY ISSUE 9	Roads and storm water
OBJECTIVE	Ensure all citizens of KwaDukuza have reasonable access to roads and transportation systems within reasonable time frame
STRATEGY	Plan, construct, develop, maintain road and storm water services
PROJECTS	**PROJECT VALUE** CMIP 70-80%, Own 20-30%
Mdebeni Housing	1, 2, 5, 7, 8, 10, 11, 12, 13, 15, 16, 19, 20 - R135/m^2 road construction and

TABLE 4.2.2.2: TRANSPORT/ROADS-RELATED LOCAL STRATEGIES AS INDICATED AS PART OF THE KWADUKUZA IDP	
Darnall, Zinkwazi and Siyembezi	R300 per meter stormwater installation
	3, 4, 9 – R20 per m^2 road construction and R50/m storm water
Dendethu, New Guelderland	
Driefontein	6. R300/m stormwater and R500/m^2 road construction
Tinley Manor, Umhlali, Tafeni and Fox Hill, Shakashead	
Ballito, Zimbali, Compensation, Willard, Salt Rock, Chakas Rock, Umhlali, Thompsons Bay and Sheffield	
Shakaskraal, Etete (urban)	
Nkobongo,k Shakaskraal	
Etete *(rural), Groutville and Mgigimbe	To be determined
Aldenville	
Melville – Thembeni	
Mbekamuzi	
Blythedale Beach	To be determined
Glenhills	

TABLE 4.2.2.2: TRANSPORT/ROADS-RELATED LOCAL STRATEGIES AS INDICATED AS PART OF THE KWADUKUZA IDP	
Ntshawini **KwaDukuza central** **Groutville** **Stanger Heights** **Doesberg Stanger Manor and Lindelani** **Shakaville, Mbozamo** **Gledhow**	To be determined

TABLE 4.2.2.3: TRANSPORT/ROADS-RELATED LOCAL STRATEGIES AS INDICATED AS PART OF THE ENDODAKUSUKA IDP							
Project Number	**Priority Issue**	**Objective**	**Strategy**	**Project**	**Funding Source**	**Estimated cost at 31/3/2002**	**Timing**
LA 1	Transport Forum required	To establish a Forum for bus-, rail- and taxi operators in KZ 291, at which all transport-related needs, problems and issues can be discussed.	To approach all Taxi Associations, Bus Operators, the Department of Transport, Transnet and Transport Companies, serving KZ 291 to register for participation, together with the SAPS and the Chamber of Business.	To establish a Transport Forum to meet on a quarterly basis.	eNdondakusuka Municipality.	R6 000.00 p/a for secretarial services, printing, postage and refreshments during quarterly meetings.	Immediate.
LA 7	Better traffic law enforcement required.	To ensure that adequate traffic- and other local law enforcement can be undertaken.	Fill vacant staff positions, look at joint operations with other police- and security services, and to encourage reservists to register to assist the local law enforcement services.	To draw up a structured programme for proper law enforcement, based on a full complement of staff, including joint operations with the Road Traffic Inspectorate, the SAPS and other security services, and to establish a system of reservists from the community.	eNdondakusuka Municipality.	Operational.	2002/2003.

TABLE 4.2.2.3: TRANSPORT/ROADS-RELATED LOCAL STRATEGIES AS INDICATED AS PART OF THE ENDODAKUSUKA IDP							
Project Number	**Priority Issue**	**Objective**	**Strategy**	**Project**	**Funding Source**	**Estimated cost at 31/3/2002**	**Timing**
LA 8	Transport services support infrastructure required.	To provide adequate infrastructure, e.g. toilets, shelters, ranks, washing facilities and lay-byes for use by users and operators of transport services in KZ 291.	Transport Forum to determine priority needs and programme for transportation support infrastructure throughout KZ 291.	To put in place a programme for the upgrading of bus- and taxi ranks, the provision of lay-byes, shelters and washing facilities.	eNdondakusuka Municipality with external assistance Isiphephe, KZNPA & DOT.	R150 000.00	2002/2003.

TABLE 4.2.2.3: TRANSPORT/ROADS-RELATED LOCAL STRATEGIES AS INDICATED AS PART OF THE ENDODAKUSUKA IDP							
Project Number	**Priority Issue**	**Objective**	**Strategy**	**Project**	**Funding Source**	**Estimated cost at 31/3/2002**	**Timing**
LA 10	Local road maintenance.	To repair badly maintained local roads, which are potholed, in need of resurfacing, road marking, grading, stormwater protection and kerbing.	To put in place a road maintenance programme for all roads under Municipal control.	To establish a road maintenance programme for all local roads in KZ 291.	eNdondakusuka Municipality.	Operational.	2002/2003.

TABLE 4.2.2.3: TRANSPORT/ROADS-RELATED LOCAL STRATEGIES AS INDICATED AS PART OF THE ENDODAKUSUKA IDP							
Project Number	**Priority Issue**	**Objective**	**Strategy**	**Project**	**Funding Source**	**Estimated cost at 31/3/2002**	**Timing**
DC 1	Transportation infrastructure and pedestrian safety on R102 (M2).	To reduce the high number of pedestrian deaths along the R102 (M2) between, Ndondakusuka Hill and Nyathini Bottle Store.	To approach DC and Department of Transport for financial assistance in upgrading pedestrian- and transport facilities on this stretch of the R102 (M2).	To build safe stopping places/lay-byes along the R102 (M2) between the top of Ndondakusuka Hill and Nyathini Bottle Store, with associated pedestrian crossings, road marking and sign board To build a safe, unhardened pedestrian walkway alongside this stretch of road to reduce the number of pedestrians having to walk on the shoulder of the road.	DOT Ilembe DC Isiphephe.	R150 000.00	2002/2003.

TABLE 4.2.2.4: TRANSPORT/ROADS-RELATED OBJECTIVES AS INDICATED AS PART OF THE NDWEDWE LOCAL MUNICIPALITY IDP							
NO	**PROJECT NAME**	**PROJECT TYPE**	**FUNDING SOURCE**	**ALLOC**	**BUDGET**	**ANNUAL BUDGET**	**TIMEFRAME**
1.1.1	Road Upgrading: P100 Ndwedwe to Inanda	Capital project	Dept of Transport	No	R 2,867,012	R 0	2003/4
1.1.2	Road Upgrading: Ndwedwe to Qinisani	Capital project	Dept of Transport	No	R 6,892,895	R 0	2004/5
1.1.3	Road Upgrading: KwaNodwengu - Emona	Capital project	Dept of Transport	No	R 5,440,914	R 0	2005/6
1.1.4	Road Upgrading: KwaNodwengu - Ozwathini	Capital project	Dept of Transport	No	R 2,131,233	R 0	2005/6
1.1.5	Road Upgrading: Ozwathini to Bhamshela	Capital project	Dept of Transport	No	R 1,249,307	R 0	2006/7
1.1.6	Road Upgrading: Glendale - Deshulwayo - P712	Capital project	Dept of Transport	No	R 5,074,017	R 0	2006/7
1.1.7	Road Upgrading: Bhamshela to Deda	Capital project	Dept of Transport	No	R 2,239,169	R 0	Next IDP period
1.1.8	Road Upgrading: Nonoti to Ezimpondweni / P100	Capital project	Dept of Transport	No	R 4,579,114	R 0	Next IDP period
1.1.9	Road Upgrading: Ndwedwe to Osindisweni	Capital project	Dept of Transport	No	R 2,339,438	R 0	Next IDP period
1.1.10	Road Upgrading: Pondwane to Bamshela	Capital project	Dept of Transport	No	R 3,407,345	R 0	Next IDP period

TABLE 4.2.2.4: TRANSPORT/ROADS-RELATED OBJECTIVES AS INDICATED AS PART OF THE NDWEDWE LOCAL MUNICIPALITY IDP							
NO	**PROJECT NAME**	**PROJECT TYPE**	**FUNDING SOURCE**	**ALLOC**	**BUDGET**	**ANNUAL BUDGET**	**TIMEFRAME**
1.1.11	Road Upgrading: St Martins to R102 (Municipal boundary)	Capital project	Dept of Transport	No	R 3,165,299	R 0	Next IDP period
1.1.12	Road Upgrading: Makhuluseni to Kukhanyeni	Capital project	Dept of Transport	No	R 2,074,287	R 0	Next IDP period
1.1.13	Road maintenance programme	Capital project	Dept of Transport	No	Tbd	R 2,000,000	Ongoing activity

4.3 PROVINCIAL LAND TRANSPORT FRAMEWORK

The NLTTA requires the MEC (Member of the Executive Council) for transport in each province to prepare a Provincial Land Transport Framework (PLTF). The PLTF is intended to address the information needs of the Minister, the needs of provincial governments to co-ordinate transport within the province and the needs of the planning and transport authorities in guiding the planning function.

The PLTF must be prepared annually and must be in accordance with the minimum requirements prescribed by the National Minister of Transport. The National Department of Transport (NDoT) has prepared a set of minimum requirements for the Provincial Framework, which was enacted as regulations to the NLTTA (notice 291 of 2002).

According to these regulations the PLTF should deal with the full spectrum of land transport including public transport, provincial spatial plan, roads, tourism, freight and transport of hazardous materials and other transport related matters. It is also required that the PLTF be submitted to the Minister by no later than 31 December 2002.

The context in which these requirements are set is as follows:

- The province does not have a published policy on transport in the form of a White Paper. The PLTF is intended to provide a framework for guiding the implementation of the policies of this Department. The PLTF thus needs to be refined as part of the process of developing the provincial policy.
- The framework is cross-sectoral including transport, land use planning and development, local government and tourism. The Premier established the Economic Development Cluster of departments to co-ordinate the policies and programmes of the different provincial departments tasked with promoting economic development. The cross-sectoral elements of the PLTF must be developed on a joint basis through this forum to ensure broad acceptability.
- Reliable and useful data in the transport and development fields is lacking. This PLTF should not bind the province to programmes and approaches based on incomplete information and broad assumptions but should rather guide the investigation and development of data-driven and broadly consulted programmes of action to be included in later PLTFs.

The IDM-PTP was prepared strictly in line with the KwaZulu-Natal Land Transport framework.

4.4 RURAL TRANSPORT STRATEGY FOR SOUTH AFRICA

The Rural Transport Strategy for South Africa was taken in consideration when preparing the IDM PTP. See Appendix B-7 for a copy of the executive summary of the Rural Transport Strategy for South Africa.

5. PUBLIC TRANSPORT PROPOSALS (OLS AND RATPLAN)

This chapter deals with the following issues:

a) Summary of the Operating Licence Strategy
b) Summary of the Rationalisation Plan

5.1 OPERATING LICENCE STRATEGY

5.1.1 Purpose and objective of the OLS

The purpose of the OLS is to formulate a strategy which will enable the IDM to provide structured and informed responses to the applications for operating licences referred to it by the Kwa-Zulu Natal Operating Licence Board, and to achieve a balance between the effective and efficient supply and utilisation of public transport. The OLS for the IDM area was formulated based on the requirements of the NLTTA, Act 22 of 2000, Part 7, section 24 and the National Guidelines and Requirements for OLS's developed as part of the implementation of the NLTTA, 2000.

5.1.2 Roles of modes in the area

The role of the transport modes along specific corridors can only be decided upon in principle, and should then be implemented over a period of time. The role of modes largely depends on the availability of infrastructure and facilities, the distance travelled and the volume of passengers. If the mode that would be dominant along a certain route is below standard in quality, support for such a mode along a certain corridor should be made conditional on the upgrading of the quality of the mode by the transport operators.

5.1.3 Preferred modes

The major modes of public transport in the IDM area are currently taxis and buses.

The aim in the long term would be that the bus mode should provide bulk transport and that other modes should serve as feeder modes. However, it is important to note that a public transport service in a rural area differs from a public transport service in an urban area. Moreover it should be noted that the taxi industry currently provides job opportunities to a large number of drivers.

The planned future development of public transport in any particular area or corridor may require a complete reconsideration of the entire transport system in general, and in particular of the appropriate role of each mode in such a system. In this regard the specific requirement of the NLTTA and one that emphasises planning, is that the focus should be on addressing the needs of customers:

4(1)(a) Public transport services -

(i) are so designed that appropriate modes should be selected and planned for on the basis of where they have the highest impact on reducing the total system's cost of travel, and this decision should be informed by an appropriate assessment of the impact on the customer and anticipated customer reaction to such change;
(ii) should be planned so that customer needs would be met by facilitating customers' reaction to system changes in the planning process and by maximising the integration of such services.

Based on the planning guidelines for the OLS, such comprehensive planning will be required from all Planning Authorities, which have subsidised public transport and will typically be carried out as part of the development of their Rationalisation Plans and, eventually, their Public Transport Plans.

5.1.4 Parallel subsidised services and commercial service contracts

As regards subsidising the public transport system, it is mentioned above that there are currently no parallel routes being subsidised in the IDM area. Section 5.2 addresses the issue in detail.

5.1.5 Restructuring

The restructuring of the public transport system in the area of jurisdiction of the IDM is discussed in this section. It focuses on the following:

a) A broad perspective of the future development of the public transport system in practical terms
b) The rationalisation of subsidised services
c) The restructuring of unsubsidised services.

5.1.5.1 Broad perspective on future development of the public transport system

The users of the public transport system on the respective corridors leading to the relevant local municipalities need a reliable, safe and adequate public transport system. The public transport system should create an atmosphere for workers that would be conducive to higher productivity. However, it is

important that the transport system should cater for the transport of not only workers but also shoppers, scholars and disabled persons.

In broad terms, the three particular areas where public transport should be developed as part of a future multimodal integrated public transport system are as follows:

a) Main nodes in terms of commercial activities
b) Corridor routes
c) Public transport routes in the villages.

The next subsection elaborates on these three areas.

5.1.5.1.1 Main nodes in terms of commercial activities

The main nodes in terms of commercial activities in the IDM area are mainly related to the business districts of the respective local municipalities, namely:

a) Maphumulo Municipality;
b) KwaDukuza Municipality;
c) Ndwedwe Municipality; and
d) Endodakusuka Municipality.

It is extremely important for a viable public transport system that integrated multimodal facilities should be provided in the respective local municipalities in the course of time. This does not imply that all the facilities should be located at one specific site but it is essential to link the facilities in a practical and feasible way. In conclusion, the multimodal facility should make provision for the following:

a) Local taxis
b) Long-distance taxis
c) Local buses
d) Long-distance buses
e) Metered taxis
f) Hawkers.

To conclude this section, it is important for every local municipality to develop its business districts in a fashion that would make it safe, convenient and user-friendly.

5.1.5.1.2 Corridor routes

It is vital in terms of the corridor routes in the IDM area to provide facilities and public transport systems that would improve the local communities' accessibility to transport.

The following are typical elements that should be included in the public transport system along the corridor routes:

a) All major public transport facilities and major multimodal facilities should be located as near as possible to the main accessible roads, in other words the corridors
b) Special care should be taken at the public transport facilities to ensure that pedestrians can cross the road safely, especially the main corridor roads
c) Public transport transfer facilities should also serve all major towns in the region, as this would provide a link between the villages and the major towns
d) The feeder modes to public transport facilities from the respective passengers' homes could include buses, taxis, private vehicles, bicycles or walking
e) The aim should be for all facilities related to public transport to have the same theme and architectural design for a specific local municipality, as this would create an atmosphere of unity for public transport in the IDM area.

5.1.5.1.3 Public transport routes in the villages

Special attention should be given to providing public transport facilities on the rural roads in the IDM area. Such provision refers specifically to lay bays and shelters at loading and off-loading facilities.

5.1.5.2 Rationalisation of subsidised services

See Table A-3.2 of Appendix A of this report for information about the relevant subsidised services. Section 5.2 of this report contains detailed information about the rationalisation of subsidised services in the IDM area.

5.1.5.3 Restructuring of unsubsidised services

The following issues are an ongoing process and should receive serious consideration as part of the restructuring of non-subsidised public transport services:

a) The role of each transport mode

b) The use of public transport facilities
c) Avoidance of wasteful competition
d) A balance between the demand for and supply of transport services
e) The bottlenecks in infrastructure which result in congestion on the major corridors
f) The needs of passengers
g) The role of the minibus-taxi services
h) Improvement in the viability of minibus-taxi services.

It should be emphasised that the taxi industry should utilise the concept of co-operatives so that the industry could become competitive in the provision of public transport in the area. An example of the latter is that when tenders are advertised for the transport of workers, it can be expected that the bulk of the transport would require buses. As a co-operative the taxi industry would be able to tender for such a service, and this would prevent conflict in the long term. The provincial taxi co-operative in relation with district co-operatives should therefore become involved in the restructuring of unsubsidised services.

Concerning the guidelines for the preparation of the OLS, the following two operational matters should be dealt with in the Operating Licensing Strategy in the restructuring of non-subsidised services:

a) The taxi recapitalisation project
b) The conclusion of commercial service contracts.

The subsections below elaborate on these operational matters.

5.1.5.3.1 Taxi recapitalisation

In terms of the guidelines for the implementation of the OLS, routes should be identified for the employment of the recapitalisation vehicles in consultation with the minibus-taxi industry, clearly indicating the impact this may have on number of operating licences for any particular route.

Table 5.1.5.3.1.1 indicates the taxi routes that have more than 200 passengers and are consequently the busiest taxi routes in the IDM area. These busy routes were identified during the CPTR process and may be considered for taxi recapitalisation purposes.

TABLE 5.1.5.3.1.1: SUMMARY OF BUSIEST TAXI ROUTES IN THE IDM AREA								
Main route	**Main Route Description**	**No of passengers per peak**	**No of seats**	**% of active seats used**	**No of trips**	**Average occupation per vehicle**	**Unique No of taxis**	**Average No of trips per taxi**
KZN-R0051F-I	Sundumbili To Isithebe	772	754	102.4	51	15.1	45	1.13
KZN-R0054F-I	Sundumbili To Chappies	613	572	107.2	39	15.7	33	1.18
KZN-R0034F-I	Stanger To Ntsawini	485	463	104.8	32	15.2	32	1.00
KZN-R0008F-I	Renckens To Machibini	296	289	102.4	22	13.5	21	1.05
KZN-R0027F-I	Stanger To Madundube	257	245	104.9	17	15.1	15	1.13
KZN-R0031F-I	Stanger To Doringkop	244	220	110.9	16	15.3	15	1.07
KZN-R0018F-I	Stanger To Shakaville	217	190	114.2	13	16.7	13	1.00

5.1.5.3.2 Conclusion of commercial service contracts

As commercial service contracts are generally closely related to metropolitan areas, this form of public transport is not considered at this stage for the IDM area.

5.1.6 Interventions

Another determinant requiring consideration in assessing applications for operating licences is that the future structure of the entire public transport system in an area should be in line with the vision for public transport for such an area. This could include factors such as modal integration, the development of transfer facilities and the introduction of feeder services to and from such facilities.

5.1.7 Conditions

In addition to any other condition identified in the process, the Transport or Planning Authority may recommend further conditions, which in its opinion should be attached to the issuance of an operating licence for a particular service or combination of services.

The following conditions are recommended for the IDM area:

a) Proof of insurance cover for passengers
b) Registration with SARS
c) Identification documents of ownership of vehicle
d) Detailed description of proposed loading/off-loading point(s)
e) Special equipment where required, such as meters for the metered taxis
f) The proposed fare structure for the relevant service.

5.1.8 Evaluations

The following criteria were considered as part of the analysis of corridors and routes for the purpose of formulating recommendations on the disposal of applications for operating licences:

a) Primary criteria:

   i) Capacity utilisation per route
   ii) Trips per vehicle within a peak period, in comparison with the potential number of trips that could be operated
   iii) Passenger waiting times
   iv) Capacity utilisation at origin rank
   v) Capacity utilisation at destination rank
   vi) Parallel and/or preferred modes.

b) Secondary considerations:

   i) Quality of parallel services
   ii) Potential to bring about interventions in the public transport system
   iii) Routes for consideration if the taxi recapitalisation process commences
   iv) Validity periods to be linked to operating licences
   v) Other conditions.

The following issues should be considered during the analysis of operations of public transport services on bus corridors:

a) Capacity utilisation on bus services during the peak periods
b) Frequency of bus services
c) Punctuality of the bus compared with the published timetable.

The following issues were considered during the analysis of operations of public transport services in taxi corridors:

a) Capacity utilisation of services and facilities
b) Frequency of the services
c) Waiting times and queue lengths for minibus-taxi users, when available
d) The provision and accessibility of transfer facilities
e) Competitive modes on route/corridor:

   i) Volume
   ii) Frequencies
   iii) Waiting time for passengers and vehicles
   iv) Quality of the transfer (distance between modes and waiting time).

The section below contains a discussion on evaluating for the IDM area the

information captured in the IDM-CPTR in order to draw conclusions about whether or not to support the awarding of additional operating licences on particular routes.

The evaluation of the information is based on the following:

a) Capacity utilisation per route
b) Capacity utilisation per rank
c) Vehicle and passenger queues and waiting times.

A description is also given of how to apply the conclusions drawn from the evaluation process, as part of the disposal of licence applications.

5.1.8.1 Capacity utilisation per route

As stated above, conclusions are drawn by evaluating the information on the IDM area, available on the IDM-CPTR database, according to the capacity utilisation per route. In the conclusions an indication is given in the following cases:

a) Additional services could be supported after a detailed investigation of the situation with regard to supply of and demand for transport on the route, at the time of receiving an application. The composition of such an investigation is outlined later in this section
b) If there is already an oversupply of services on a route and there is no need for additional licences.

Firstly the capacity utilisation per route was evaluated because taxi operations are not scheduled services and vehicles depart when they are "full". In cases where the number of people inside the vehicle exceeds the number of seats, this may be an indication of overloading and not necessarily of undersupply.

Therefore, in an effort to utilise and broaden the available data more effectively, certain assumptions were made about the characteristics of the trips by minibus-taxi operators along certain routes. These assumptions were made in order to compare the estimated possible trips per taxi per peak period with the actual average trips per taxi per peak period as observed during the process of collecting the CPTR data. In order to estimate the number of trips that a vehicle can undertake within a peak period on a specific route, the following

assumptions were made:

a) Average operating speed for minibus-taxis:

   i) To allow for the possibility that operating speeds may differ on the different routes, the following was assumed:

      - Short-distance routes (< 5 km) = 50 km/h
      - Medium distance routes (> 5 km <30 km) = 60 km/h
      - Long distance routes (> 30 km) = 90 km/h

b) To allow for the time taxis wait at the rank before loading, the following was assumed:

   i) Short-distance routes (< 30 km) = 15 minutes
   ii) Long-distance routes (> 30 km) = 30 minutes.

The above assumptions and information available from the database were then utilised to calculate the estimated number of trips that a taxi could make during a specific survey period on a specific route. For the purpose of this OLS an operating period of 2 hours was taken for making the necessary route utilisation calculations.

Based on these assumptions, the estimated number of trips for each of the routes was calculated and compared for a specific peak with the actual average number of trips recorded during the CPTR data collection process.

The rationale in this regard is as follows:

a) If the average actual number of trips per taxi per route is smaller than the estimated number of trips per taxi to make that route viable, there is no need to issue further licences. In order to give the taxi industry the benefit of the doubt, a built-in safety factor of 20% was allowed. The safety factor also includes the uncertainty around the expected growth in the demand for taxis. The safety factor therefore implies that if the average actual number of trips per taxi is greater than 80% of the estimated number of taxi trips, issuing an operating licence could be considered. As the information would become more accurate over time the buffer should be reduced accordingly to at the end only represent the growth factor.

b) If the average actual number of trips per taxi per route is equal to the estimated number of trips per taxi, the implication is that the provision of public transport on the route is balanced.
c) Theoretically the number of recorded trips should not be higher than the estimated number of trips. The following are possible reasons why the actual taxi trips could be higher than the estimated taxi trips:

   i) The distance, average speed and waiting times are not accurate enough
   ii) The operator does not travel the full route.

As part of such an investigation to determine whether additional licences should be awarded along a certain route, the following factors could for example be taken into account before making a final recommendation:

a) Route and rank capacity utilisation
b) Average waiting times for passengers in the queues and in the vehicles (short waiting times implies a sufficient supply of taxis whereas waiting times longer than 10 minutes in the queues implies a shortage of taxis while waiting times longer than 10 minutes in the vehicle because there is not enough passengers to depart implies an over supply of taxis)
c) Average lengths of passenger queues and vehicle queues (long vehicle queues and short passengers queues imply an oversupply of taxis).

Furthermore it should be mentioned that when the distance for a specific route is too long to travel outward and inward within the specified two-hour peak, it is assumed that the vehicle could conduct at most one trip during the peak, but the utilisation, waiting times and queue lengths as discussed above needs to be carefully monitored.

In conclusion, it is recommended that when the next CPTR for the area is conducted, selected routes should be surveyed over the weekend too, because an extremely high number of passengers in rural areas use the weekend public transport system.

Appendix B-5 of this report contains detailed information about the recommendations on issuing the operating licences.

5.1.8.2 Capacity utilisation at ranks

The information about ranks and their utilisation, as contained in the IDM-CPTR, was considered as part of the further evaluation of operations for the purpose of disposing of operating licence applications.

The purpose of rank utilisation surveys was to determine whether the rank had sufficient capacity to accommodate the taxis operating there. During these surveys, the following information was collected:

a) The total number of facility bays, i.e. loading, holding or combined
b) The count of the operational vehicles at the rank for specific time intervals (15 minutes).

The surveys were conducted for the morning (AM peak), midday peak and afternoon (PM peak) respectively.

It is extremely important to realise that a large number of facilities in the IDM area are informal facilities. In practice, this implies that it is virtually impossible to determine the rank utilisation accurately. The capacity of informal facilities is assigned a value of 1 to give an indication of the burden an informal facility places on the public transport system. Therefore the higher the percentage capacity utilisation above 100%, the greater the overload on the facilities.

It is generally accepted that when a rank is operating at capacity, an operating licence should not be issued. At this stage, as already indicated, there are few formal facilities in the IDM area. In practice this means that it would be difficult to apply the principle of not issuing an operating licence when a rank has reached a high percentage of capacity utilisation. Although the provision of public transport facilities should be a high priority, it is recommended that in the medium term the policy should be as follows:

Applications for licences should not be supported by the IDM, if the rank or ranks that would be used for operating the service as contemplated in terms of the application, have a utilisation of much greater than 100%, unless the IDM knows of plans or schemes to increase the capacity in the near future.

5.1.8.3 Calculations to determine allowable number of operating licences per route

The following formula was used when calculating the number of operating licences required for the respective AM and PM peak periods per route for 15, 18 and 35-seater vehicles respectively:

$$\text{Number of operating licences required per route per peak period} = \frac{\text{Number Of Passengers per Peak}}{\text{(Number of estimated trips per taxi for a specific peak period * size of the vehicle to be used)}}$$

<u>Whereas:</u>

$$\text{Number of estimated trips per taxi for a specific peak period} = \frac{\text{Assumed duration of the relevant peak period}}{\text{Estimated time required to complete one inward and outward trip including waiting times at ranks}}$$

The above-mentioned calculations were done for 15, 18 and 35-seater minibus-taxis. The following assumptions were also made in order to perform the calculations:

a) A peak period of two hours was assumed

b) Average operating speed for minibus-taxis:

i) To allow for the possibility that operating speeds may differ on the different routes, the following was assumed:

- Short-distance routes (< 5 km) = 50 km/h
- Medium-distance routes (> 5 km <30 km) = 60 km/h
- Long-distance routes (> 30 km) = 90 km/h

ii) To allow for the time taxis wait at the rank before loading, the following was assumed:

- Short-distance routes (< 30 km) = 15 minutes
- Long-distance routes (> 30 km) = 30 minutes.

Table B-5 of Appendix B-5 of this report contains a copy of the results of the above-mentioned calculations. It is extremely important to understand that it would not be possible to comment on the expected number of taxi operating licences that should be reduced per route. The reason is mainly that not all of the existing radius-based permits have been converted to route-based permits, implying that some vehicles are not linked to specific routes.

5.1.8.4 Results and recommendations

Table B-5 of Appendix B-5 contains a summary of the recommendations on issuing operating licences for specific taxi routes to taxi operators in the IDM area, based on the discussions above.

Based on all the findings, it should be noted that all existing routes are oversupplied and it is recommended that the awarding of additional licences should not be contemplated by the IDM in the near future, unless there is clear evidence that the operating circumstances on such routes have changed significantly.

To conclude this section, it should be mentioned that the taxi industry requested strongly that serious consideration should be given to the development of an economic model to determine the required minimum and maximum number of taxis per owner on a specific route in relation to the number of passengers, in order to make a reasonable profit. When applying the model, two principles should be used:

a) That not more than the maximum number of operating licences should be awarded to a specific operator
b) That the existing operators who had fewer than the calculated maximum number of operating licences should be given preference when new operating licences were to be issued for a specific route.

The above-mentioned issue requires extensive input by the operators who, in this case come predominately from the taxi industry. The Kwa-Zulu Natal Provincial Taxi Council with the assistance of SANTACO would be the key role - players in providing this input.

Typical factors that should be taken in consideration are as follows:

a) Distance

b) Number of passengers
c) Size of vehicle to be used
d) Operating costs.

5.1.9 Procedures within the IDM for disposing of licence applications

Chapter 6 contains detailed information regarding the consulting process to be followed in terms of the Operating Licence application disposing process.

Upon receiving an application for comment from the Operating Licence Administrative Body (OLAB), it is recommended that the local municipality should use the following procedure, as part of disposing of operating-licence applications:

a) The route relevant to the application and its status with respect to capacity utilisation should be identified from the OLS.
b) If further investigations are recommended, these should be carried out and It is recommended that the additional investigations referred to above should be correlated with the data observed on waiting times:

   The time that passengers wait in a queue for a taxi on a specific route during peak operations at the rank:
   - *if waiting times in queues are longer than 10 minutes, this would indicate that the route is probably undersupplied and that additional capacity is required.*
   - *If the passenger waits for longer than 10 minutes in the taxi for more passengers to arrive here is no need for more operating licences to be awarded.*

c) Records should be checked to determine whether applications for additional licences have been supported and licences awarded by the Operating Licence Board, since the approval of the OLS. If so, the impact of the additional capacity on such route should be assessed
d) If the above steps indicate that additional capacity on the route can be accommodated; the capacity utilisation of the relevant rank(s) should be assessed
e) Similarly, the route should be assessed in terms of the preferred mode and the restructuring of the public transport system in the respective local municipality, as discussed in Sections 5.1.3 and 5.1.5 respectively
f) The respective local municipalities should consider whether any conditions should be linked to a licence if awarded, as referred to in Section 5.1.8 of this report. Comments should be obtained from the

relevant district/regional taxi councils through their forum in cases where the route is located in a particular district

g) If all the above considerations indicate that additional capacity can be supplied on the route relevant to the application, the local municipality concerned should obtain support for the application through the local transport forum and or district transport forum.

h) The proposed *pro forma* document, attached in Appendix B-2, should be used for recording the respective local municipalities' support and comments.

i) If the OLB awards the relevant licence, the relevant local municipality, as well as the Ilembe District Municipality should record this.

5.1.10 Other considerations

The procedures set out in paragraph 5.1.9 above, mainly relate to applications for new operating licences. It is recommended that other applications should be dealt with as indicated in Table 5.1.10.1 below.

TABLE 5.1.10.1: PROCESS FOLLOWED WHEN DEALING WITH OTHER APPLICATIONS

Type of application	Action
Licence Transfer Applications	Impact on supply, treat in the same way as an application for a new licence
Change of particulars	Not related to supply, no need for comment by local municipality, can be dealt with by OLB
Additional vehicles	Impact on supply, treat in the same way as an application for a new licence
Application for educational service	Refer to paragraph 6.3 of this report
Application for tourism service	Refer to paragraph 6.3 of this report
Organised parties	Operator to apply for a temporary licence directly from the OLB

It is, however, strongly recommended that scholar transport should be formalised by the respective local municipalities. There is little information currently available because a high percentage of the operations are illegal.

5.1.11 Future routes to be developed

This section makes a distinction between the following:

a) Existing routes that are not in use
b) New routes.

The subsequent section will elaborate on these routes.

5.1.11.1 Existing routes that are not in use

It was not possible to determine the taxi routes that are currently not in use but were registered as a route during the route verification process in the IDM area due to lack of information. Reasons for not using the routes could be because of the –

a) low number of passengers; and
b) poor condition of the roads.

5.1.11.2 New routes

New routes should be identified on an ongoing basis as the area develops and new developments emerge.

However, it is important to transfer operators from oversupplied routes to the possible new or unused routes, instead of allowing new operators to provide transport services on these routes. The operators transferred to these routes should be members of the existing taxi association and no new associations should be formed as this might lead to conflict. Such transfers to other routes should be conducted with great caution and care.

5.1.12 Number of law enforcement officers available in the area, per taxi rank and/or position

There are only a limited number of law enforcement officers currently available to conduct law enforcement in terms of operating licences. Law enforcement is usually conducted during dedicated law-enforcement campaigns.

The IDM currently has 50 inward and 50 outward taxi routes. The inward route normally operates during the AM peak and the outward route during the PM peak. This implies that two shifts would be required to conduct the

necessary law enforcement. The following assumptions were therefore made in order to determine the required number of law enforcement officers:

a) Two law enforcement officers are required per point for safety reasons
b) The aim is to patrol a specific route at least twice a week.
c) Two different teams are required for the AM and PM peak periods
d) On average at least 5 routes could be targeted simultaneously.

$$\text{Number of Traffic Inspectors required} = \frac{\text{Number of routes * Number of traffic inspectors per point * Number of shifts required* number of times to patrol a route per week}}{\text{Available number of days per week to conduct law enforcement * Number of routes on which law enforcement could be conducted simultaneously}}$$

$$\text{Number of Traffic Inspectors required} = \frac{50 * 2 * 2*}{6*5}$$

$$= 14$$

The above-mentioned law enforcement officers should be co-ordinated at district level.

5.1.13 The liaison structures operating in the area

The most important line of communication with role players at grassroots level in the respective municipal areas is through the local transport forum. Any conflict between public transport operators and traffic officials should be submitted to the local transport forum. The chairperson of the forum and the traffic and safety subcommittee would assist in resolving the conflict. This would benefit both parties, as all parties have representatives in the forum.

The public transport operators could be informed at the local transport forum about the conduct that traffic officers would expect from them, and become involved in the traffic safety campaigns. The forum would play an independent role in any conflict that might arise between the public transport role players and the law enforcers, as the traffic department could not act simultaneously as the law enforcer and judge. Taxi conflict at local level would also be

referred to the district as well as Provincial Taxi Councils, for the necessary action.

5.1.14 Law enforcement targets and method of monitoring the achievement of such targets

The Kwa-Zulu Natal Province in its mission statement for traffic control and law enforcement, aspires to provide safe, secure and effective traffic conditions on the roads and other transport facilities and systems, through stringent law enforcement and traffic safety campaigns, in an attempt to safeguard all users of transport and to protect the expensive capital investments from misuse. Specific policy objectives with regard to traffic control and law enforcement relate to –

a) national policy priorities;
b) structuring of agencies;
c) special measures; and
d) training.

In general there are two types of law enforcement targets identified for the respective local municipalities, namely:

a) Broad targets
b) Specific targets.

5.1.14.1 Broad targets

The respective local municipalities have the following broad targets:

a) An integrated transport system with legal operators who are well informed
b) Law enforcement that ensures that the operators provide transport services on their specified routes
c) A safe and reliable transport system.

5.1.14.2 Specific targets

Law enforcement for public transport should be targeted at the following areas:

a) Taxi facilities
b) Main corridor routes.

The emphasis should be on –

a) the operating licence to operate on specific route;
b) the roadworthiness of the vehicle;
c) the fitness of the driver;
d) ensuring that taxis load and off-load passengers at the correct places at dedicated taxi ranks.

5.2 RATIONALISATION STRATEGY

5.2.1 Background

According to the regulation issued in Government Gazette 25245 dated 1 August 2003: "Each district municipality that has subsidised public transport services is responsible to prepare a rationalisation plan (RATPLAN) for its entire area, but this will not prevent an agreement that the relevant local municipalities will assist with such preparation, provided that the agreement is permissible in terms of applicable local government legislation."

As part of the Public Transport Plan, the IDM area must prepare a Rationalisation Plan for the region, which will form part of the Public Transport Plan and Integrated Development Plan (IDP). The area did compile Current Public Transport Records (CPTR) in 2004. The CPTR and additional information obtained will form the basis of this Rationalisation Plan.

5.2.2 Purpose

The purpose of the Rationalisation Plan is:

a) To eliminate inefficiencies within the subsidised bus system where possible.
b) To create a framework for the restructuring of tendered bus contracts, taking cognisance of the total public transport system and its modes, in order to obtain a more efficient and cost effective public transport system.

c) To in the longer term also address the restructuring of all modes forming part of the public transport system, including *inter alia* rail concessions and the recapitalisation of the taxi industry.

However, during the rationalisation and restructuring of land based public transport the impact on passengers should always be assessed and customer needs taken given priority.

5.2.3 Principles for preparing rationalisation plans

In the preparation of the rationalization plan the following principles should be kept in mind according to Clause 4. of the regulations:

"(1) In addition to the principles stated in the Act, the following principles apply to the preparation of RATPLANS -

(a) plans must pay due attention to the development of rural areas; and

(b) transport for special categories of passengers must receive specific attention.

(2) The development of the RATPLAN should have both .a short-term focus relating to subsidised interim contracts and current tendered contracts expiring in the near future, and a long-term focus relating to the overall restructuring of the subsidised public transport system as a whole, including rail.

(3) The development of the RATPLAN must take cognisance of the fact that rail is currently a national competency until devolved in terms of section 28 of the Act, and that in terms of Section 10(13)(f)of the Act subsidised bus services is a provincial competency until Transport Authorities are formed.

(4) The RATPLAN must be synchronised with other planning initiatives and it must indicate how it is integrated into the, municipal integrated development plan, the land development objective processes and the municipal budgeting process.

(5) The preparation of the RATPLAN must include the consultation and participation of interested and affected parties required for the preparation of Integrated Development Plans in terms of chapter 4 and section 29(l)(b) of the Local Government Municipal Systems Act, 2000 (Act No. 32 of 2000)"

5.2.4 Objectives

The objectives to be achieved through the development of the Rationalisation Plan are set out in NLTTA Clause 25(1), namely:

a) To rationalize within and between public transport modes;
b) To determine the extent of subsidisation of services;
c) To determine where and to whom subsidies should be targeted;
d) To minimise levels of subsidy;
e) To minimise competition between public transport services and operators;
f) To stimulate competitive bidding between public transport operators through the structuring of tenders;
g) To ensure that passenger demand is met effectively and efficiently;
h) To facilitate and promote modal integration.

5.2.5 Scope of work

The Rationalisation plan will mainly focus on the following key issues in the bus industry in the IDM area

a) Assessment of existing subsidised services (CPTR Report);
b) Collecting of additional information;
c) Policy framework;
d) Rationalisation, restructuring and evaluation;
e) Prioritised proposals and implementation programme;
f) Financial implications;

5.2.6 Assessment of existing subsidised services

The TPR 6 document makes it very clear that, in the short term, the assessment of the CPTR information should be based on issues such as duplication or competition between subsidised services (same market) or under- or over-utilisation of available capacity on the current supply of services.

The over- and undersupply of services by subsidised operators will provide the basis for concentrating our effort on those operations where the mismatch in

terms of supply and demand is the biggest.

If possible the forward (inbound – home to work) and return (out - work to home) should be rationalised between different operators if at all feasible.

As a first step any trip that carries less than 40% of capacity could be cut and the possibilities of integrating different bus services could be addressed on a very coarse level.

5.2.7 Stakeholder Identification (Subsidised Operators)

From the CPTR and other information three (3) subsidised bus operators were identified in the Kwadukuza, Maphumulo and Endondakusuka areas. No subsidised services are operative in the Ndwedwe area.

The information in the next table is based on information obtained from Transport and Economic Support Services (Pty) Ltd the monitoring firm appointed by the KwaZulu Department of Transport. The number of vehicles is based on existing operations. Efforts were made to obtain detailed information from unsubsidised operators in the IDM area with no success.

Details regarding the average scheduled kilometres subsidised, passengers per trip and average unescalated subsidy paid to the subsidised operators are provided in the table below.

TABLE 5.2.7.1: ANALYSIS OF SUBSIDDISED OPERATORS IN ILEMBE DISTRICT MUNICIPALITY					
Operator	**Area of Operations**	**Vehicles**	**Average km/month**	**Pass/trip**	**Average unescalated subsidy/mnth**
Darnall Motor Transport	Endondakusuka & Kwadukuza	11	29142	61.9	140396.56
Maphumulo Mail	Kwadukuza & Maphumulo	12	20940	62.6	110310.76
Washesha Bus Service	Endondakusuka	4	12127	67.4	76036.29
Total		**27**	**62209**	**63.9**	**326743.61**

5.2.8 Non-Stakeholder Identification (Non Subsidised Operators)

Non-subsidised operators in the IDM mainly consist of the operators as set out in the table below.

TABLE 5.2.8.1: SUMMARY OF NON-SUBSIDISED BUS OPERATORS IN THE IDM		
Operator	**Type of Operations**	**Vehicles**
Esenembe Bus Service	Unknown	Unknown
Vinolans Bus Service	Unknown	Unknown
Inkonjane Bus & Tours Ukophosa Kwenkozi Bus Service	Unknown	Unknown
Inkululeko Coach Lines	Unknown	Unknown

The information in the CPTR mainly concentrates on Subsidised Bus Operators, and information regarding Non-Subsidised Operators is therefore insufficient to make any conclusions.

However it is strongly recommended that an investigation should be done on the possibility of incorporating some or all if possible non-subsidised operators into the subsidised system.

The transport of scholar passengers also needs to be addressed in the longer term as a matter of urgency due to the problems created by these passengers especially in the peak periods, with possible assistance (subsidies) from the Department of Education.

5.2.9 Inefficiencies identified in the IDM

Efficiency refers to the optimum use of available assets in order to render an affordable service to the community.

(i) Duplication of Routes

An analysis of the CPTR and other information available indicated that no duplication of full length subsidised routes or operators occurred as these services are provided from different origins to various destinations, which might in some cases be the same. It was established that duplication of routes only occurs at almost the final destination (Isithebe area) of such routes where operators have to off load passengers at certain ranking facilities.

An under utilization of assets, in this instance buses, as well as excess kilometres operated therefore does not occur which may contribute to an inefficient transport operation.

Routes in the area served by unsubsidised operators could not be compared with that of subsidised operators also operating in the same area due to the fact that no information could be obtained from the unsubsidised operators.

5.2.10 Ineffectiveness identified in the Ilembe District

Effectiveness refers to service levels in accordance with demand, affordability, reliability, safety and reasonable travel times.

From the information available (CPTR) and consultation with the stakeholders, the following analysis can be made.

5.2.10.1 Demand

Passenger demand in the IDM prevails from the rural areas around Stanger and Isithebe. Population densities are focused in villages, which is situated around the mentioned towns. Demand consists for services to these towns (workers and shoppers), schools in the vicinity (scholars), Hospitals and other community centres (casual).

Passenger demand therefore consist of the following:

a) Worker Passengers
b) Casual Passengers
c) Scholars Passengers
d) Other passengers

(i) Worker Passengers

Worker passengers in the mentioned areas mainly commute to the various employment centres in Stanger, Isithebe and Mandeni. Commuting take place during the morning and afternoon peak hours, which basically consist of the following:

Morning peak: 05:00 – 08:00
Afternoon peak:17:00 – 18:00

This form of commuting basically determines the capital requirements (buses), infrastructure (termini) and efficiency (adhering to time schedules) of an operator.

This type of passenger transport is currently the main target of the subsidies of the Department of Transport. Future contracts and negotiated contracts will need to deal with worker passenger transport.

The current demand for worker passenger transport is basically met by the existing schedules operated by existing operators in the mentioned areas, and no need for additional operators exists. An increase in the demand can be accommodated through an increase of existing vehicles

(buses) and trips where required. This will lead to an increase in subsidies paid by the Department of Transport. However, control and monitoring of services, upgrading of vehicles, facilities and roads needs to be investigated.

As this type of commuting dominates the service delivery, the Rationalisation Plan will therefore focus on this form of commuting for possible rationalisation.

An observation made from the existing operations is that there is huge demand for the increase of services but that due the moratorium on the introduction of additional subsidised services this is not possible and therefore leading to overloading of vehicles on certain routes.

(ii) Casual Passengers

This form of passengers normally travels in the off-peak periods between morning and afternoon peaks. The Department of Transport do subsidise casual passengers if the route that is followed is classified as a worker route. Where routes only cater for casual passengers these routes are normally not subsidised.

Casual passengers basically travel to mentioned towns for shopping purposes, to visit hospitals and other community centres. The extent of services is determined by the availability of towns and facilities in the area.

The demand for casual passenger transport is met by the existing schedules operated by the existing subsidised and unsubsidised operators in the mentioned areas. An increase in the demand can be accommodated through an increase of trips where required. It is however not recommended as another mode of transport, taxis, mainly concentrates on this form of passenger transport. Competition between bus and taxi transport should be avoided as far as possible. Taxi mode should rather been seen as a supplementary to the bus mode transport, where bus transport caters for the high volume of worker passengers and taxi transport assist during off peak periods where demand

decreases to such an extent where it is not profitable for the bus mode to operate.

(iii) Scholar Passengers

This form of passengers are not directly subsidised by the Department of Transport although they use the current services being subsidised. A committee has been established by the Kwazulu Government to investigate the extent of scholar transport in the province and to determine ways to address the financial implications thereof.

Commuting by scholars takes place during the morning peak period and afternoon off peak period to schools in the whole of the IDM area. This type of passenger commuting usually creates difficulties to bus operators due to the following:

- A lower cash fare is usually charged
- Scholars commute during the morning peak period and during school terms only, which increase the demand for services and vehicles during the morning peak and certain periods during the year.

The demand for scholar passenger transport is currently met by the existing schedules operated by the operators in the area, although problems are sometimes experienced due to the banning of the use of "bakkies" to transport scholars in the province.

(iv) Other Passengers

This form of passengers consists of pensioners and disabled passengers. The demands for transport from these passengers are low, but do exist.

No provision is made for vehicles that will assist with the conveyance of old and disabled passengers.

5.2.10.2 Affordability

The poverty that exist in the IDM, require that the costs of public transport service provision be kept at an affordable level. Due to the low level of household income in most of the district, there is a history of continued pressure from the community to keep bus and taxi fares low.

The subsidised bus operators discuss annual fare increases at their respective passenger liaison committees before implementation.

It is recommended that the IDM establish a Transport Forum where aspects such as fares increases can be discussed to ensure that these fares provide sufficient income to continue operations, but also to ensure that it is kept at affordable levels.

5.2.10.3 Factors influencing fare structures

Various factors impact on the operating cost of transport operators and therefore the fares to be charged. These factors can be summarised as follows:

- The road conditions, mainly dirt roads in the area are in a poor condition, which results in a higher, operating cost (tyres, spares, units and a lower vehicle life time) to operators, which eventually will be transferred to the passengers and in the contract system, to the Department of Transport.
- Condition of vehicles. The existing age and condition of vehicles results in high maintenance costs. These costs have to be recovered in the same way as mentioned above.
- Duplication of routes by taxi operations, resulting in additional vehicles and kilometres.

The following remarks on existing fare structures can be made:

- That fare structures are not scientifically determined but rather on competitive principles.

- That profitability is based on survival (competitiveness) rather than business principles.

5.2.10.4 Reliability

Conditions that contribute to an unreliable service are:

- The age and condition of existing vehicles (also impacts safety)
- The poor road conditions and non-availability of certain facilities.

It is estimated that all of the existing subsidised bus fleet in the area do comply with the vehicle specifications (in terms of age) that are laid down by the contract system. The replacement of some of these vehicles will improve the quality of service provided but will have certain financial implications. As two of the current contracts lapse during June and July 2005 the replacement of the vehicles will be addressed in the calling for new tenders.

The above information clearly indicates that very limited rationalisation of subsidised routes will be possible as the operators serve very distinct origins and destinations in the IDM area. When rationalisation of services and routes are considered at all, cognisance must be taken of the following points:

(i) SMME'S

Basically all operators in the different areas are operators belonging to the previous disadvantaged group. Rationalisation should be done in such a way that these small operators would benefit from the system and not disappear.

(ii) Financial and Training Assistance

Financial and training assistance should be provided to small bus operators in respect of the increasingly better and newly developed information technologies that exist (Electronic ticket machine system,

management skills and cost control measures). This will allow them to offer more precise information for decision making, management and monitoring for IDM planning purposes.

6. STAKEHOLDER CONSULTATION

This chapter deals with the following issues:

a) Stakeholder consultation
b) Liaison with the Operating Licence Board
c) Liaison with the neighbouring Planning Authorities.

The subsequent sections of this report elaborate on the above-mentioned issues.

6.1 Stakeholder consultation

The consultation with stakeholders started with an initial workshop between the following stakeholders in preparation for the formation of the Ilembe District Municipality Passenger Transport Forum (IDMPTF). The members who attended the initial workshop were:

a) Ilembe District Municipality
b) KZN DOT
c) Members from the local Municipalities
d) Siyazi Thula Joint Venture the services Providers

At this workshop the composition of the membership of the IDMPTF were determined and the members from the local municipality were informed about the aims and objectives with the development of the PTP.

The composition of the membership of the IDMPTF were:

a) Ilembe District Municipality
b) KZN DOT
c) Members from the local Municipalities:

    i) Maphumulo Municipality
    ii) KwaDukuza Municipality
    iii) Ndwedwe Municipality
    iv) Endodakusuka Municipality

d) Siyazi Thula Joint Venture the services Providers
e) Bus operators
f) Taxi operators represented by the Ilembe Regional Taxi Council
g) SAPS

The IDMPTF meets approximately once a month to consider the progress but also to contribute to the development of the element of the PTP.

A Technical Committee that consists of the following members coordinates the IDMPTF:

a) IDM
b) KZN DOT
c) Siyazi Thula Joint Venture

The Technical Committee organised a tour through the district to visit the main facilities and travel the roads that form part of the public transport routes in the IDM. Other members from the IDMPTF also joined the tour. The tour highlighted the lack of passenger transport infrastructure and the condition of the roads in especially the Ndwedwe area.

During the tour of the facilities and routes members from the passenger and informal traders at the mayor ranks were invited to join the informative and consultative passenger transport workshop organised by the IDMPTF. The workshop took place on the 1 April 2005 and was attended by 40 people representing a wide range of people and organisations which included the following:

a) Members from the IDM Executive Committee (Eg. Speaker, other councillors)
b) Usual members of the IDMPTF:
    i) Ilembe District Municipality
    ii) KZN DOT
    iii) Members from the local Municipalities:
        - Maphumulo Municipality
        - KwaDukuza Municipality
        - Ndwedwe Municipality
        - Endodakusuka Municipality
    iv) Siyazi Thula Joint Venture the services Providers
    v) Bus operators
    vi) Taxi operators represented by the Ilembe Regional Taxi Council
    vii) SAPS
c) Members from the passengers
d) Members from the informal traders or hawkers
e) Members from the neighbouring Ethekwini Metropolitan Municipality.

What was really encouraging was the good attendance from the local municipalities who form such a crucial part of the development of practical solutions to the identified problems but also being centre of the implementation of the PTP together with the IDM.

A follow up workshop would be held to prioritise the proposed solutions proposed in the PTP before the PTP is finalised. In the meantime the usual meetings of the IDMPTF will continue.

6.2 Liaison with the Operating Licence Board

In order to ensure effective communication between the Operating Licence Board and the respective local municipalities, the following communication structure is proposed:

a) If the application for an operating licence is for providing transport within the borders of the IDM, the application should be handled as follows:

   i) Application is addressed to the Kwa-Zulu Natal Provincial Operating Licence Board.
   ii) The Provincial Operating Licence Board sends the application to the local municipality as well as the Kwa-Zulu Natal Registrar of Taxis for comments and a copy to the IDM for the records.
   iii) The local transport forum assists the local municipality to give comments.
   iv) Then the local municipality sends the comments of the municipality, including the comments of the local transport forum, to the Provincial Operating Licence Board for a final decision.
   v) A copy of the comments should also be forwarded to the IDM.
   vi) The Provincial OLB informs the applicant about the final decision.

b) If the application for an operating licence is from other Kwa-Zulu Natal districts, it should be handled as follows:

   i) Application is addressed to the Kwa-Zulu Natal Provincial Operating Licence Board.
   ii) The Provincial Operating Licence Board sends the application to the local municipality as well as the Kwa-Zulu Natal Registrar of Taxis for comments and a copy to the IDM for the records.
   iii) The local transport forum assists the local municipality to give comments.
   iv) Then the Local Municipality sends the comments to the Provincial Operating Licence Board for a final decision.
   v) A copy of the comments should also be forwarded to the IDM.
   vi) The Provincial OLB informs the applicant about the final decision.

c) If the application for an operating licence is from any other South African province, it should be handled as follows:

   i) Application is addressed to the applicant's Provincial OLB.
   ii) The applicant's Provincial OLB sends the application to the Kwa-Zulu Natal Provincial OLB.
   iii) Kwa-Zulu Natal Provincial OLB sends the application to the Local Municipality as well as the Kwa-Zulu Natal Province Registrar of Taxis for comments and a copy to the Ilembe District Municipality for the records.
   iv) The local transport forum assists the local municipality to give comments.

v) The local municipality sends the comments to the Provincial Operating Licence Board for a final decision.
vi) A copy of the comments should also be forwarded to the IDM.
vii) The Kwa-Zulu Natal OLB informs the applicant's Provincial OLB about the final decision.
viii) The applicant's Provincial OLB informs the applicant about the final decision.

Figure 6.2.1 illustrates the steps to be taken during the application and issuing of operating licences, as discussed in Section 6.2 above.

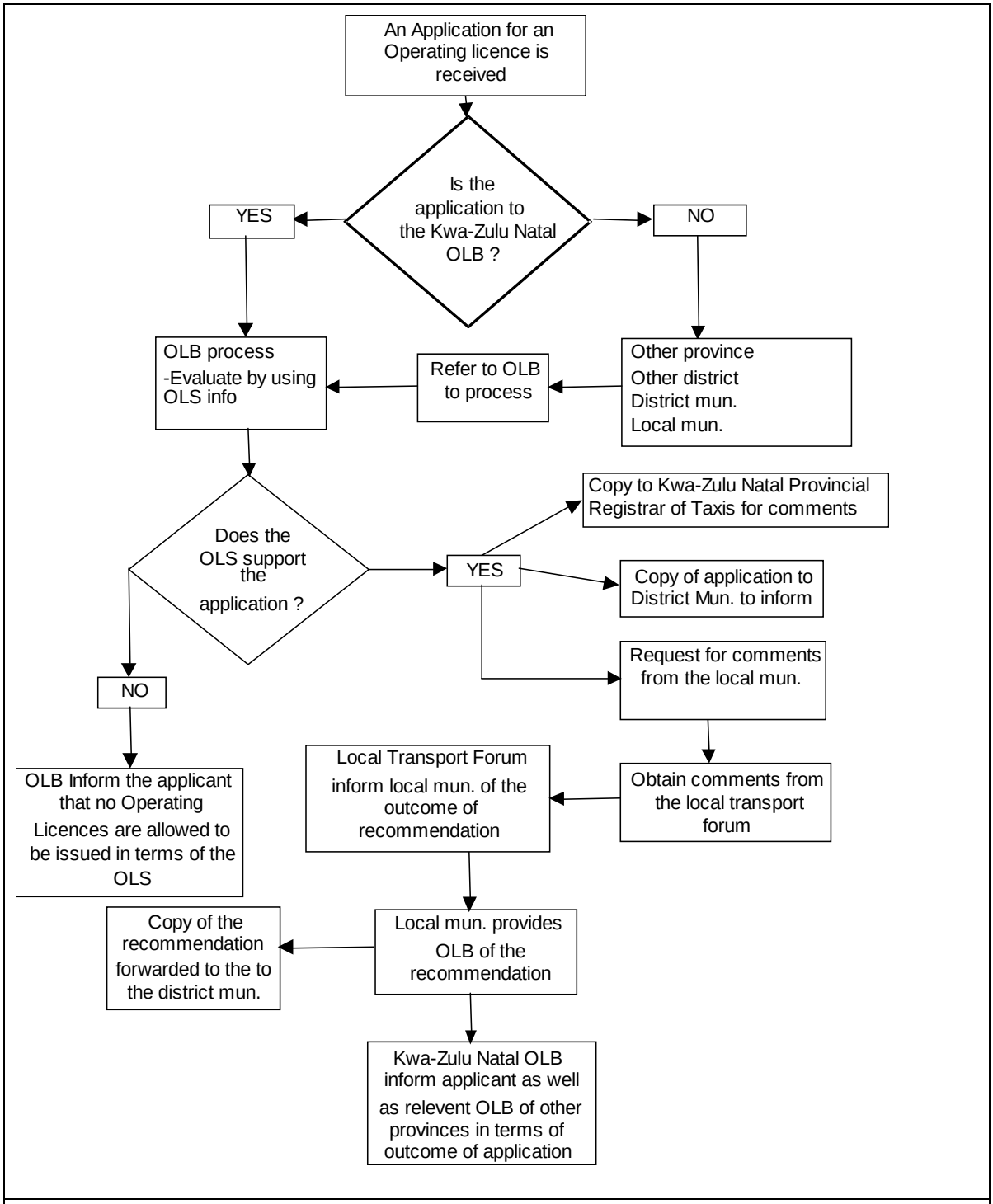

FIGURE 6.2.1: FLOW CHART OF APPLICATION PROCESS FOR OPERATING LICENCES

To conclude, it is extremely important that any operator applying for an operating licence from one district to another district should obtain the support of both district taxi councils in order to avoid conflict in the long term.

6.3 Tourism and educational service

If applications are received for the operation of tourism services where –

a) a "Tourist service" means a public passenger road transport service for the carriage of tourists to or from tourist attractions, where the tourists are accompanied by a tour guide registered under section 21 of the Tourism Act:
b) “no operating licence authorising tourist services may be granted unless the Board has obtained and considered recommendations from a tourism authority recognised by the MEC. The Board may proceed without such recommendations where such authority has not supplied them in the time specified in the Board's request.”

Similarly, in a case where applications are received for the operation of education services, where –

a) an "Education service" means a public passenger road transport service restricted to the scheduled conveyance of learners, students, pre-school children, and supervisors between their places of residence and educational institutions and on unscheduled trips to and from their educational institution, that are concerned exclusively with education-related activities, as referred to in section 11;

b) “before considering an application for the granting, renewal, amendment or transfer of an operating licence for education services, the Board must submit the application to the relevant school or other educational institution for comments and recommendations in the prescribed manner, and must consider any such comments and recommendations that are received.”

It is strongly recommended that a process should be initiated so that the metered-taxi industry as well as the scholar transport industry could be formalised in the respective municipal areas in the IDM area.

6.4 Liaison with neighbouring Planning Authorities

This section of the report highlights the need for liaison with neighbouring Planning Authorities, a description of services across the IDM’s borders to neighbouring areas in Limpopo, as well as long-distance services to other provinces.

The IDM will have to interact with neighbouring planning authorities for the purpose of disposing of

applications for licences, as services are operated from various local municipalities, district municipalities, provinces and neighbouring states.

a) The following local municipalities are relevant:

i) Umlalazi Local Municipality
ii) Nkandla Local Municipality
iii) Umshwati Local Municipality
iv) Umvoti Local Municipality

b) The following district municipalities are relevant:

i) Uthungula District Municipality
ii) Umzinyathi District Municipality
iii) uMgungudlovu District Municipality
iv) eThekwini Metropolitan Municipality

c) The following provinces are relevant:

i) There are no neighbouring provinces around the Ilembe District Municipality.

d) The following neighbouring countries are relevant:

i) There are no neighbouring countries around the Ilembe District Municipality.

The routes that are affected per neighbouring Planning Authority appear in Table B-6 of Appendix B-6. In principle, where routes go across the boundaries between neighbouring Planning Authorities, comments have to be received from all the authorities and taxi councils affected as well as the relevant District Taxi Council, as part of the disposal of licence applications on such routes.

It should be noted that services across provincial boundaries are not included in this first OLS, although comments had been given for routes originating from the IDM area, as such services (long-distance taxi services) were not specifically targeted as part of the data-collection process that preceded the formulation of the OLS. Therefore liaison with neighbouring Planning Authorities in adjacent provinces cannot be addressed at present.

7. PRIORITIZED PUBLIC TRANSPORT PROPOSALS AND IMPLEMENTATION PROGRAMME

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, but given in a summarised manner with less detail for Year Two to Year Five.

The following basic prioritisation technique was developed in consultation with the key role players, to determine which projects on the list of feasible projects should be given priority and implemented:

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. A factor was calculated to indicate the number of passengers in relation to the total number of passengers at all the facilities in the IDM area and this factor was expressed as a percentage
b) The second key indicator was determined by calculating the existing utilisation of a specific facility in relation to the utilisation of the sum of all facilities in the IDM area. Furthermore, if no public transport facility currently existed at a specific point but it was envisaged that the relevant public transport facility would be active in the near future, it was assumed that the facility would be 80% utilised. When no information was available about facility utilisation, it was assumed that the facility would also be 80% utilised
c) To obtain a combined weighting factor in order to prioritise the public transport facilities it was assumed that the first key indicator should have a weight of 80% and the second key indicator should have a weight of 20%. The reason for these weights is that there is generally an over-supply of taxis in the area at present and the rank utilisation is not always a good indication of the actual need for public transport. However, the number of passengers provides a much more realistic result.

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 IDM, with specific reference to the main commercial nodes, should attract investors through an efficient public transport system.
b) All facilities should be designed so that persons with disabilities could use them effectively
c) By-laws should be passed as soon as possible to ensure law and order
d) Safety of passengers

e) Disability awareness programmes
f) Transport of learners.

The philosophy should be to concentrate on infrastructure related to public transport for the first five years of operation and on providing the by-laws. After that it would be possible to focus on the other issues.

The remainder of this chapter elaborates on the following:

a) Summary of proposed cost of OLS-related projects
b) Summary of proposed cost of projects related to the Rationalisation Plan
c) Proposed PTP-related projects
d) Summary of all costs.

7.1 Summary of proposed cost for OLS related projects

Table 7.1.1 provides a summary of the identified projects related to the OLS. Table A-1 of Appendix A-1 of this report provides a detailed table of priorities for the provision of public transport facilities in the IDM area, including the type of ancillary facilities required, as well as the estimated cost of the facilities.

TABLE 7.1.1: IDM OPERATING LICENCE STRATEGY RELATED PROJECTS AND FINANCIAL IMPLICATIONS								
PROJECT	**YEAR**					**ESTIMATED BUDGET**		
	1	**2**	**3**	**4**	**5**	**YEAR 1**	**YEAR 2-5**	**TOTAL**
Project-1: Annual update of OLS		▬	▬	▬	▬	R0	R696 150	R696 150
Project-2: Vehicle verification process	▬					R150 000	R0	R150 000
Project-3: Establishment of provincial Operating Licence Offices at district municipality level. a) General application process b) Assist with eliminating illegal operators on existing routes c) Grant operating licences for the recommended additional routes d) Special operating licences for transportation at funerals, functions, etc. e) Replacement of vehicle f) Colour coding of routes	▬	▬	▬	▬	▬	R1 000 000	R 4 779 496	R5 779 496
Project 4: Law enforcement								
a) Appointment of law enforcement officers dedicated to inspecting operating licences as well as rationalisation issues.	▬	▬	▬	▬	▬	R2 320 000	R11 801 274	R14 121 274
b) Special law enforcement campaigns on problem routes for the respective local municipalities (once a month)	▬	▬	▬	▬	▬	R150 000	R716 924	R866 924
Project 5: Establishment of Ilembe Taxi Co-operative	▬					R50 000	R0	R50 000
Project 6: Maintenance of Ilembe Taxi Co-operative	▬	▬	▬	▬	▬	R500 000	R1 500 000	R2 000 000
Project 7: Implementation and maintenance of route colour-coding system for taxis.		▬	▬	▬	▬	R0	R700 000	R700 000
Project 8: Establishment and maintenance of local passenger transport forums.	▬	▬	▬	▬	▬	R480 000	R1 561 504	R 2 041 504
Project 9: Maintenance of the district passenger transport forum.	▬	▬	▬	▬	▬	70 000	335 805	R405 805
Project 10: Development of Rank Management skills.	▬	▬	▬	▬	▬	R350 000	R490 000	R 840 000
Project 11: Formalisation of the metered-taxi industry and scholar transport.		▬	▬	▬		R0	R500 000	R500 000
Total financial implications						R5 070 000	R23 081 153	R28 151 153

7.2 Summary of proposed cost of projects related to the Rationalisation Plan

Table 7.2.1 provides a summary of the proposed subsidy per annum per operator.

TABLE 7.2.1: SUMMARY OF PROPOSED COST PER ANNUM PER OPERATOR				
OPERATOR	**PROPOSED CONTRACT AMOUNT (R)**	**EXISTING SUBSIDY RECEIVED (R)**	**VARIANCE**	**RATE PER KM**
Magwaba Bus Service	R 10 108 800	R 11 035 038	R926 238	R8,20
Netshituni Bus Service	R 14 385 600	R 13 035 695	-R1 349 905	R8,70
Mukondeleli Bus Service	R 2 755 200	R 1 920 383	-R834 817	R12,20
Enos Bus Service	R 5 060 016	R 6 389 102	R1 329 086	R10,70
Mabidi Bus Service	R 3 499 200	R 1 852 300	-R1 646 900	R8,30
R. Phadziri Bus Service	R 3 888 000	R 3 719 529	-R168 471	R9,50
Swangis Bus Service	R 4 665 600	R 6 827 143	R2 161 543	R10,50
Mabirimisa Bus Service	R 4 665 600	R 2 756 312	-R1 909 288	R9,80
Mulaudzi Transport Service	R 6 220 800	R 6 296 375	R75 575	R8,40
G. Phadziri Bus Service	R 12 441 600	R 7 191 922	-R5 249 678	R8,60
Great North Transport	R 10 611 600	R 11 757 288	R1 145 688	R7,70
Malamulele Small Operators	R 5 374 700	R 550 000	-R4 824 700	R7,70
TOTAL	**R83 676 716**	**R73 331 087**	**-R10 345 629**	**R8,80**

Table 7.2.2 provides a summary of the total cost related to the IDM Rationalisation Plan.

TABLE 7.2.2: SUMMARY OF THE TOTAL COST RELATED TO THE IDM RATIONALISATION PLAN PER ANNUM	
Projects	**Estimated costs**
Negotiated contracts	R 83 676 716
Implementation of monitoring firms	R 650 000
Updating the Rationalisation Plan	R 120 000
Total	**R 84 446 716**

7.3 Proposed PTP-related projects

Based on the input for this Public Transport Plan the following projects are proposed for IDM:

a) **Project 1**: Determining an architectural theme that would be relevant for the IDM area

b) **Project 2:** Provision of multimodal public transport facilities for the respective main commercial nodes

c) **Project 3:** Provision of public transport transfer facilities in the IDM area on corridor routes

and other strategic points (see Table A-1)

d) **Project 4:** Provision of lay-by facilities in the IDM area with specific reference to the residential areas, including the villages (see Table A-1)

e) **Project 5:** Development of public transport related by-laws together with the IDM in order to ensure a stable and safe environment

f) **Project 6:** Training of drivers, operators and administrators as well as promoting awareness of road safety

g) **Project 7:** Disability awareness programme to make drivers aware of disabled persons' needs

h) **Project 8:** Non-motorised transport projects for learners (bicycles)

i) **Project 9:** Development of user-friendly walking lanes

j) **Project 10:** Implementation of control measurements at public transport facilities in order to prevent illegal operators from operating at the facilities.

Table 7.3.1 indicates summary of the identified projects related to PTP.

As part of all projects the following should always be taken into consideration:

f) Traffic and safety issues

g) Support for the recapitalisation project for taxis

h) All public transport facilities to be developed in the IDM should be user-friendly to disabled persons

i) The promotion of subsidised transport in areas that currently do not receive public transport subsidies

j) Creating an atmosphere conducive to the implementation of the National Government Recapitalisation project.

TABLE 7.3.1: IDM IDENTIFIED PUBLIC TRANSPORT PLAN RELATED PROJECTS AND FINANCIAL IMPLICATIONS								
PROJECT	**YEAR**					**ESTIMATED BUDGET**		
	1	**2**	**3**	**4**	**5**	**YEAR 1**	**YEARS 2 – 5**	**TOTAL**
Project 1: Determining an architectural theme that would be relevant for the IDM area						R30 000	R0	R30 000
Project 2: Provision of a public transport multimodal facilities for the respective main commercial nodes in IDM								
a) KwaDukuza Municipality						R0	R 10 000 000	R 10 000 000
b) Endodakusuka Municipality						R0	R 5 000 000	R 5 000 000
c) Maphumulo Municipality.						R0	R 3 000 000	R 3 000 000
Project 3: Provision of Public Transport Transfer Facilities on corridor routes and other strategic points in the IDM area						R0	R5 100 000	R5 100 000
Project 4: Provision of lay-by facilities in the IDM area						R0	R3 500 000	R3 500 000
Project 5: Development of public transport by-laws for the Ilembe District Municipality						R200 000	R100 000	R300 000
Project 6: Training of drivers, operators and administrators of public transport vehicles. Road safety awareness programmes.						R150 000	R700 000	R850 000
Project 7: Disability awareness programme to sensitise drivers and users of public transport to the problems of people with disabilities.						R150 000	R 300 000	R 450 000
Project 8: Non-motorised public transport projects (e.g. bicycles)						R500 000	R3 000 000	R3 500 000
Project 9: Development of a user-friendly pedestrian lanes						R0	R2 000 000	R2 000 00
Project 10: Implementation of control measurements at public transport facilities in order to prevent illegal operators to operate at the facility.						R0	R500 000	R500 000
Total financial implications						R 1 030 000	R 33 200 000	R 34 230 000

7.4 Summary of costs

Table 7.4.1 provides a summary of costs in terms of the IDM:

d) Operating Licence Strategy
e) Rationalisation Plan
f) Public Transport Plan

TABLE 7.4.1: SUMMARY OF COST FOR IDM FOR A FIVE YEAR PERIOD	
Item	**Estimated Cost**
Operating Licence Strategy	R28 151 153
Rationalisation Plan???	
Public Transport Plan	R34 230 000
Total	

It is assumed 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 was therefore followed during the development of this PTP.

To conclude it is important to note that all requirements relating to the road network are addressed as part of the report on the Integrated Transport Plan (ITP).

8. FINANCIAL IMPLICATIONS

Since the democratic elections in 1994, the new South African government has faced enormous challenges in addressing all the past irregularities and in endeavouring to provide equitable services to the whole country. The main focus so far has been on large cities with better resources and a greater possibility of achieving economies of scale. However, the focus on the rest of the country, particularly the rural areas, has been inadequate, especially in view of the fact that a large proportion of the population lives in these areas and these people are directly affected by poor service, inadequate infrastructure and limited resources, as well as being vulnerable to poverty.

The government introduced a number of frameworks and policies to address some of these challenges, such as GEAR and the RDP. Lately the president himself has pledged to ensure that the capacity of local government or municipalities is improved in terms of skills, resources and the right support from provincial and national departments. The role of local government cannot be underestimated as it is linked directly to people in the communities. It is for these reasons that President Mbeki has stressed the need for the proper monitoring and delivery of various core services to the poor. In the 2004 budget speech, the Minister of Finance and National Treasury also announced the good news that municipalities would receive an equitable increase in funding. This good news will go a long way toward alleviating the enormous backlogs facing local government.

Since then, these frameworks and policies have formed the basis for government departments or bodies to formulate dedicated policies in various sectors. These policies have in turn led to mechanisms aimed at improving services to all people in South Africa. The national, provincial and local tiers of government have furthermore initiated various programmes that have a direct impact on local municipalities, such as the IDP, MSP, LED, ISRDP, URP, CMIP, PIMSS, MIG and KSP. These programmes provide for various support mechanisms to enable local governments to deliver services. The national Department of Public Works recently launched the Expanded Public Works Programme (EXPWP) in Limpopo at the Sikhunyane village on 18 May 2004, aimed mostly at initiating labour-intensive projects in various sectors to provide jobs to people. All departments have confirmed they will contribute to the EXPWP by developing programmes and support structures, which will aid learning, directly create jobs and in this way improve expenditure on infrastructure as well as reduce the backlogs in service delivery.

With specific reference to the PTP the following are relevant:

The IDM area is mainly rural and has an enormous backlog in the provision of infrastructure. Therefore it is vital to ensure in general that all projects affecting service delivery are addressed in order of priority, and in particular that an efficient and effective transport system is provided. The PTP provides detailed information about the measures that have to be taken in order to provide proper transport facilities in any district.

For these reasons the national Department of Transport drew up a framework to assist provincial and local authorities with implementing proper public transport systems at provincial and local (municipal) levels. This framework relates to the CPTR, OLS, Ratplans, Public Transport Plans, Integrated Transport Plans, etc.

These plans provide guidelines on how these strategic plans should be implemented as well as ensuring proper control and management of the process. In addressing these challenges to formulate appropriate plans, Siyazi Thula Joint Venture conducted investigations that led to findings related specifically to the financial implications of implementing these transport plans. The strategic plans should include mechanisms for effective support for and continuous monitoring of these transport plans and mechanisms so as to enhance their functioning and ensure the success of the programme.

In addition, it was extremely important to implement the programme in a manner that would have the maximum benefit in the shortest possible time. Several important factors had to be taken into account in planning the implementation of the programme, as discussed below. It was assumed that the PTP would have to be refined and expanded in the course of time, so that it will eventually satisfy legislative as well as practical requirements. An incremental and flexible approach was therefore followed during the development of the PTP. The programme and financial implications cover a five-year planning horizon, with less detail shown for years two to five.

Consequently it is important for the IDM to implement the PTP properly, as outlined in the guidelines. Chapter 7 contains a proposed budget for the financial requirements to ensure the successful implementation and progress of the programme. The decision makers should understand what sources of revenue could be tapped, and should identify, confirm and dedicate a special budget for the approved plans. Some of the sources of funding that could be given further consideration in dealing with PTP and other plans are listed below:

a) Each district municipality receives a national allocation for its own municipality and its local municipalities to address the enormous backlogs in and challenges of service delivery to the people. At present this is the main source of funds.
b) The districts are also connected with the KwaZulu-Natal DoT, which has the main responsibility for focusing on the provincial transport system and currently provides a number of services to municipalities, owing to their lack of adequate capacity. The provincial government could be requested to set aside a secondary budget from its main budget, in order to implement the above-mentioned transport plans. However, there is no guarantee that the provincial DoT would make such funds available. This source of funds, if properly motivated, might provide some funding in the short term. Currently the Provincial Department of Transport concentrates on the provision of funds for planning purposes.
c) Another source of funds that would become available in the course of time would be the revenue generated by the district municipality or the local municipalities from the successful implementation of law enforcement processes, e.g. fines collected from operators who contravene the laws and by-laws.
d) The Minister of Finance, Mr Trevor Manuel, indicated that increased allocations would be made to municipalities in the country to address infrastructure backlogs and other key services. This could further augment the budgets of municipalities and help them establish the infrastructure required for taxi-rank facilities and the other factors related to the PTP. A special attempt should be made to obtain these funds.
e) Consideration could be given to exploring the Consolidated Municipal Infrastructure Programme (CMIP) of the Department of Provincial and Local Government (DPLG) as a source of funding.

The CMIP aims at providing basic services to impoverished disadvantaged communities, many of which are indigent and unable to contribute to the capital or operational costs of these services. In an effort to reduce municipal infrastructure backlogs and uplift the quality of life of these impoverished communities, the DPLG provides through the CMIP at least a basic level of services and facilities to low-income households in rural and urban areas. This programme could also be tapped to provide resources for dealing with the transport infrastructure.

f) The Department of Provincial and Local Government (DPLG) formulated a policy framework on municipal partnerships. The Green Paper on Municipal Service Partnerships (MSPs) was compiled to draft a clear policy framework within which municipalities could leverage resources from a wide spectrum of sectors, including public institutions, CBOs, NGOs and the private sector, in order to meet their constitutional obligation to provide municipal services. To assist municipalities to engage in structuring their arrangements to provide municipal services, the DPLG established the Municipal Infrastructure Investment Unit (MIIU) in 1998 with a mandate to leverage private-sector investment in municipalities. Since the establishment of the MIIU, the provision of improved municipal service has been boosted by contracts worth R6,7 billion. It is proposed below that the District should collaborate with other districts to form a committee that could pursue private-sector partnerships as a source of revenue. A proper strategy would have to be developed and more information obtained, before clearing the strategy with the DPLG.

g) Excess funds may be available in the recently launched EXPWP which the government uses people in communities (job creation) to build necessary infrastructure, particularly in labour-intensive jobs in the construction industry. Transport infrastructure falls in this sector hence municipalities could tap this government fund of more than R100 billion over a period of ten years, to upgrade the necessary transport infrastructure. It should be noted that as this programme requires proof of job creation and the utilisation of unemployed people in the country who would benefit, the municipalities would have to submit an acceptable business plan to the Department of Public Works in order to request funding.

h) Municipalities could, through the provincial government, also request a one-off budget from the National Department of Transport but the allocation of such funds would depend on the merits of each case.

i) For non-motorised transport it would be advisable to make use of the Shova Kalula

9. BIBLIOGRAPHY

1. NATIONAL LAND TRANSPORT TRANSITION ACT, ACT NO. 22 OF 2000, NATIONAL DEPARTMENT OF TRANSPORT, AUGUST 2000.
2. NATIONAL LAND TRANSPORT STRATEGIC FRAMEWORK, NATIONAL DEPARTMENT OF TRANSPORT, JUNE 2000.
3. KWAZULU-NATAL PROVINCIAL TRANSPORT FRAMEWORK, KWAZULU-NATAL DEPARTMENT OF TRANSPORT, 2004.
4. NATIONAL TRANSPORT PLANNING GUIDELINES AND REQUIREMENTS FOR THE IMPLEMENTATION OF THE NLTTA, 2000, TPR4 (NON METROPOLITAN CURRENT PUBLIC TRANSPORT RECORDS): NATIONAL DEPARTMENT OF TRANSPORT, APRIL 2001.
5. NATIONAL TRANSPORT PLANNING GUIDELINES AND REQUIREMENTS FOR THE IMPLEMENTATION OF THE NLTTA, 2000, TPR5 (OPERATING LICENSING STRATEGY): NATIONAL DEPARTMENT OF TRANSPORT, APRIL 2001.
6. NATIONAL TRANSPORT PLANNING GUIDELINES AND REQUIREMENTS FOR THE IMPLEMENTATION OF THE NLTTA, 2000, TPR6 (RATIONALISATION PLAN): NATIONAL DEPARTMENT OF TRANSPORT, APRIL 2001.
7. NATIONAL TRANSPORT PLANNING GUIDELINES AND REQUIREMENTS FOR THE IMPLEMENTATION OF THE NLTTA, 2000, TPR7 (PUBLIC TRANSPORT PLAN): NATIONAL DEPARTMENT OF TRANSPORT, APRIL 2001.
8. ILEMBE DISTRICT MUNICIPALITY CURRENT PUBLIC TRANSPORT RECORDS, PREPARED BY ILLISO CONSULTANTS, JUNE 2004.
9. GENERIC CURRENT PUBLIC TRANSPORT RECORDS FOR KWA-ZULU NATAL PROVINCE, PREPARED BY ILLISO, JUNE 2004.
10. ILEMBE DISTRICT MUNICIPALITY IDP REVIEW, PREPARED BY MULTICONSULT ENGINEERING, MAY 2003.
11. KWADUKUZA LOCAL MUNICIPALITY IDP, PREPARED BY DEPARTMENT OF URBANISATION AND DEVELOPMENT, AUGUST 2001.
12. MAPHUMULO LOCAL MUNICIPALITY IDP, PREPARED BY SiVEST ENVIRONMENT AND PLANNING, 2002.
13. NDWEDWE LOCAL MUNICIPALITY IDP, PREPARED BY IYER ROTHAUG PROJECT TEAM, MARCH 2002.
14. ENDODAKUSUKA LOCAL MUNICIPALITY IDP, PREPARED BY CHRISTINE PLATT CONSULTING TOWN PLANNERS, MAY 2002.
15. RURAL TRANSPORT STRATEGY FOR SOUTH AFRICA NATIONAL DEPARTMENT OF PROVINCIAL AND LOCAL GOVERNMENT; www.dplg.gov.za – PROGRAMMES
16. NATIONAL DEPARTMENT OF PUBLIC WORKS – www.ndpw.gov.za - EXPANDED PUBLIC WORKS PROGRAMME
17. SOUTH AFRICA, REPUBLIC OF. PARLIAMENT: MUNICIPAL FINANCE MANAGEMENT ACT, NO 56 OF 2003; GOVERNMENT PRINTER: PRETORIA.