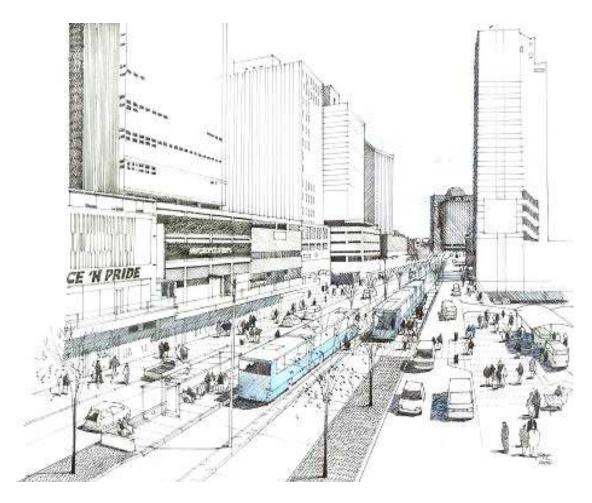


# PUBLIC TRANSPORT PLAN 2006



**Final Report** 

May 2006

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NMBMM obtained consulting assistance in the development of the PTP from SWECO International and Stewart Scott International, with BKS and Zamani assisting with the consultation process.

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#### **ABBREVIATIONS**

CBD Central Business District

CPTR Current Public Transport Record
DOT Department of Transport (National)

ECDRT Eastern Cape Department of Roads and Transport

IDP Integrated Development PlanIDZ Industrial Development ZoneITP Integrated Transport Plan

MEC Member of the Executive Council
NATIS National Traffic Information System

NLTSF National Land Transport Strategic Framework

NLTTA National Land Transport Transition Act

NMBMM Nelson Mandela Bay Metropolitan Municipality

OLS Operation Licenses Strategy

PLTF Provincial Land Transport Framework

PTP Public Transport Plan

SARCC South African Railway Commuter Corporation
SANRAL South African National Roads Agency Limited

SDF Spatial Development Framework

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# **EXECUTIVE SUMMARY**

# The Public Transport Plan

The Nelson Mandela Bay Metropolitan Municipality (NMBMM) has prepared this Public Transport Plan (PTP) to be the framework for the development of the public transport system in the NMBMM area. The PTP includes a proposed long-term strategy for the public transport system and a proposed phased implementation plan. The PTP will be integrated with the ITP and will provide a comprehensive multi-modal solution for the future transport needs of the metropolitan area.

#### The mission

"To provide an efficient, safe, affordable, sustainable and accessible multi-modal public transport system which supports social and economic development to ensure optimal mobility and improved quality of life for the residents and users of the transport system in the metropolitan area".

# Strategies for public transport development

The long-term strategies are based on these important principles:

- Customer oriented transport system
- Integrated transport system
- Densification of transport corridors
- Contracts for public transport services operation
- Phased introduction in co-operation with the industry
- Regulatory framework supporting public transport

# **Conclusions from scenario analysis**

The long-term development proposals for the public transport system are based on the results from an analysis of several possible scenarios. The conclusions from the scenario analysis are as follows:

- An integrated public transport system with scheduled services will best serve NMBMM –
  a non-intervention development of the existing situation should not be accepted.
- A system based on trunk bus route corridors and local bus and minibus-taxi services will best serve NMBMM for the next 10 years.
- The Khulani Corridor (Motherwell Njoli Korsten CBD) will be the backbone of the future public transport system.
- An expanded railway system will not attract enough passengers in the next 10 years to justify large investments in rail, unless a concentration of development takes place along the rail corridors.

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# The long-term public transport system

The long-term public transport system will be characterised by some important qualities; which are summarised as follows:

Integrated and regulated public transport system

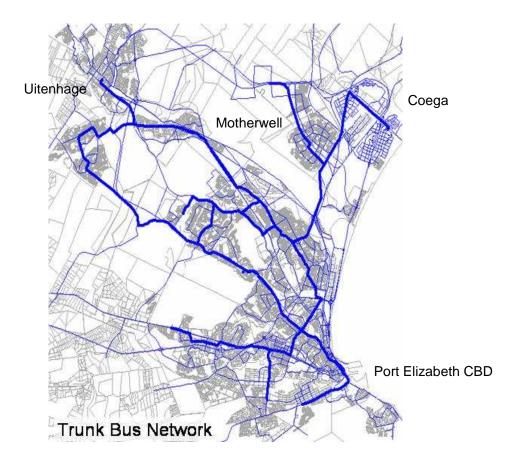
The long-term development should include a modern and attractive public transport system offering seamless travelling with an integrated and scheduled service. This will include a system with contracted operators and through ticketing.

Public transport corridors with high density development

High density development along the public transport corridors will be served with a high frequency public transport service which will attract more people to use the public transport system. The public transport corridors will be important corridors for dense land use development.

Scheduled services on a trunk bus network

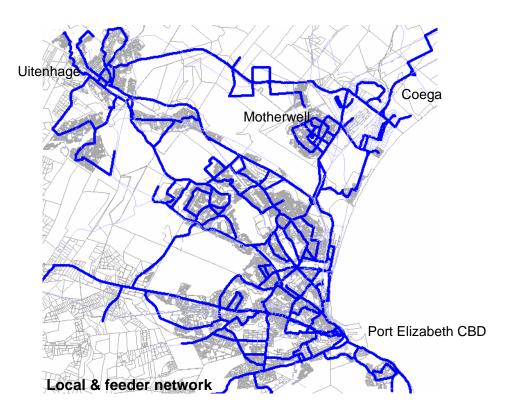
The introduction of a modern public transport system will be based on scheduled service with high frequency along defined routes. The back-bone of the system will be the trunk bus network in the public transport corridors and these trunk bus routes will have a high patronage that justifies the use of articulated and normal buses.



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#### Feeder and local public transport routes

For the low demand network and for feeder bus routes there will be an extensive network operated by normal buses, midibuses and minibus taxis and the vehicle to use is dependent on the patronage of the route. The local and feeder services should be operated along defined routes and with a scheduled service, but for sparse areas an area-based operation could be used.



### Interchanges as part of the city development

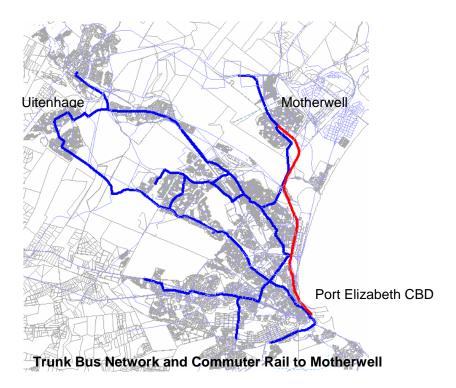
A system based on trunk bus and feeder operations needs to have attractive interchanges where transfers can be made that are safe and secure. The interchanges will also be important nodes of attraction and should be located close to suburban business activities and in the city centre.

#### Reserves for future of railway services

Until the long-term role of the railway service is clarified the possibility of developing the system to include an extended railway service should be guaranteed. The current rail service between Port Elizabeth and Uitenhage should be kept and supported until long-term development is clarified. New public transport routes should not be implemented parallel to the existing railway service. The results from the SARCC regional railway study should be incorporated in the next revised PTP.

The NMBMM scenario analysis for a 10-15 year horizon up to 2020 concluded that an extended railway service will not be justified within the next 10 years except a possible extension to Motherwell. Introducing a new railway service could be done by a spur through Motherwell along the central corridor. The reserve for the railway alignment should be kept. The reserve through Motherwell will either be used for a rail service or a trunk bus service.

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The current railway service between Port Elizabeth and Uitenhage operates as a morning and afternoon peak service only. The future role of the PE - Uitenhage railway and an alternative alignment along the Standford Road Corridor is being analysed in more detail as part of the SARCC regional railway plan, which has a longer planning horizon (2030).

#### Phased implementation

An integrated and modern public transport system will be implemented over a long period of time. The implementation will be dependent on the reform of the current public transport system as well as funding for investment in public transport infrastructure and subsidies for the operation of the system. Phased implementation will be necessary and a first step will be establishing a pilot route along the Khulani Corridor and a scheduled service to Coega IDZ. Continued development with extension of the scheduled route operation along the public transport corridors could follow over a 10 year period until a fully developed public transport system will serve NMBMM.

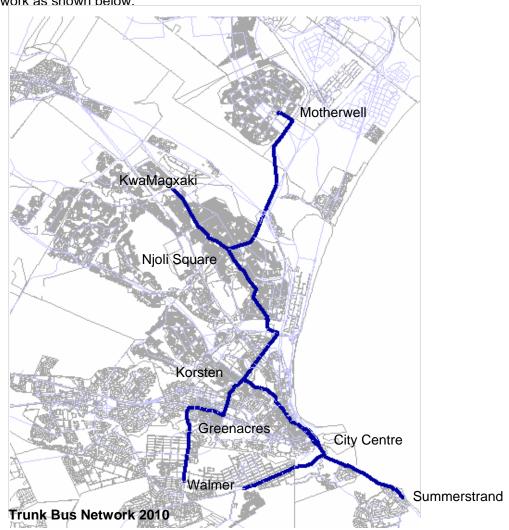
A trunk bus route in the Khulani Corridor will be the first example of a modern integrated public transport system. The route will connect Motherwell and the PE CBD with a scheduled all day service via Njoli Square and Korsten.

A scheduled public transport service will be introduced gradually into the Coega IDZ as it develops. It will initially be a distribution system connecting to the trunk bus route in Motherwell. The route alignments will be detailed in the Coega public transport plan and will be part of the integrated public transport system for NMBMM.

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#### Introduction of scheduled service

After the first trunk bus route has been established, further bus routes connecting the Khulani Corridor to major nodes at Greenacres and Walmer will be introduced. A network connecting the major tourism nodes will follow the first phase implementation and will be an important part of the public transport service to serve the world cup soccer championship in 2010. The scheduled trunk bus service to be implemented by 2010 could comprise a network as shown below.



#### 2010-2015

During the period 2010 – 2015 the public transport system will develop with the introduction of scheduled bus services and reformed minibus-taxi operations for the entire NMBMM area.

# 2015-2020

During the period 2015-2020 the expansion of the trunk bus network will be completed and if there is dense development along the central corridor in Motherwell a new commuter rail service could be introduced.

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#### After 2020

For the period after 2020 the trunk bus network could be extended and/or new railway services will be developed. This has to be analysed in more detail and will be part of a revised public transport plan to be prepared in 5 year's time.

#### Strategies for scheduled public transport service contracts

The implementation of a scheduled public transport service needs a structure for contracts, procurement and financing. The strategies proposed as part of the PTP include:

#### Phased implementation in co-operation with current operators

The provision of the services on the trunk bus, major bus and certain strategic feeder services must be planned by NMB, and decisions made on the timing of initiating these contracts. The decisions should be guided by an extensive consultation process with the current operators.

#### Negotiated contract for route operations

The introduction of routes to be operated under new contracts is proposed to be achieved by a negotiation process to allow minibus-taxi and bus operators currently operating along a corridor to form an operating entity and be part of a contract. The strategy will be to support current mini-taxi operators and Algoa Bus Company to form a new mutually owned entity that will be the basis of a contract between NMB and the entity. If these negotiations do not result in acceptable contracts, an open tender process will be used.

#### Recapitalisation of minibus-taxis

The recap process will be part of the transformation of the current system and minibus-taxi operators who are part of new contracts are proposed to be given priority in the use of subsidy funds for new recap vehicles.

#### Formalisation of current services

The current mini-bus taxi operators will play an important role as part of a future integrated public transport system. It is essential that the formalisation process be carried out in a way that supports the implementation of the PTP.

#### Define operating areas not served by route operations

The urban area will be subdivided into local and feeder operating areas, with unscheduled public transport based on operating licenses for vehicles operating within these areas, prescribing the points at which passengers may be picked up and set down.

#### Withdrawal of unlicensed vehicles

A process must be undertaken whereby unlicensed vehicles are withdrawn from operation. The vehicles that are identified as unlicensed will be withdrawn from operation by enforcement actions.

#### Monitoring and enforcement of operations

Throughout the duration of public transport contracts the services must be monitored both regarding the service offered and the patronage. This is necessary to ensure that the entity operates according to contract conditions and to protect the contracted operators from illegal operations. A process will be implemented whereby the compliance of operators with conditions of their operating licenses are checked on an ongoing basis. This will be a task falling under the general responsibility for monitoring public transport services, which also includes bus contract monitoring.

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Infrastructure investments

To establish an attractive public transport system, improved infrastructure is needed to give a safe and secure public transport service with short travel times, convenient transfers and priority for public transport vehicles. This includes new bus stops and passenger facilities, as well as separate lanes for public transport vehicles and priority at intersections.

The backbone for the road-based public transport system will be the Khulani Corridor, developed to meet the needs of a high frequency public transport service. Along the spine, high density residential, commercial and business areas will develop, supported and served by the trunk bus operation. Important nodes, like Njoli Square and Korsten, will be developed as modal interchanges where local buses and taxis will serve both as local operations and as feeders to the trunk bus system.

The budget required for the planning activities and projects to implement the first phase of the Public Transport Plan from July 2006 to June 2010 is summarised in the table below. Cost estimates are in thousands of Rands, excluding VAT.

No.	Activity/Project	2006/07	2007/08	2008/09	2009/10
1.	Statutory plan updates	1 000	1 000	1 000	1 000
2.	Public transport contract models	500			
3.	Business plans for phased operations	500	500	500	500
4.	Public transport marketing and information	500	1 000	1 000	1 000
5.	Establish Transport Authority	500			
6.	Operation of Transport Executive	200	1 500	1 500	1 500
7.	Safety and security monitoring	500	1 000	1 500	2 000
8.	Enforcement of operators	200	1 000	1 500	2 000
9.	Motherwell Terminus shelters	100			
10.	Tyinira Street bus stops and shelters	250			
11.	Dibanisa Road bus stops and bus lanes	100		7 000	
12.	Daku Road bus stops and bus lanes	350	3 000		
13.	Njoli Street bus stops and shelters	250	4 000		
14.	Ntshekisa Road bus stops and toilets	150			
15.	Sheya Kulati Drive bus stops and shelters	200			
16.	Kempston Road reconstruction with bus lanes and bus stops	3 500	8 000	8 000	8 000
17.	Harrower Road bus stops and bus lanes	700	3 000	5 000	
18.	Korsten Interchange upgrade	500	2 000		
19.	Govan Mbeki Avenue reconstruction with bus lanes and bus stops	800	15 000	15 000	15 000
20.	Russell Road Terminus Phase 1	100			6 000
	Total	10 900	41 000	42 000	37 000

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### 1. INTRODUCTION

# 1.1 Background

The Nelson Mandela Bay Metropolitan Municipality (NMBMM) commenced preparation of this Public Transport Plan (PTP) simultaneously with the Integrated Transport Plan (ITP). Volume 1 of the ITP (March 2005) addressed the future infrastructure needs in respect of road traffic demand, non-motorised transport (cycles and pedestrians) and the accessibility needs of people with disabilities. The PTP includes a proposed long-term strategy for the public transport system in NMBMM and a proposed phased implementation plan. The PTP will be integrated with the ITP to provide a comprehensive multi-modal solution for the future transport needs of the metropolitan area.

# 1.2 Study Area

The Nelson Mandela Bay Metropolitan Municipality (NMBMM) was established in 2000 by joining the local authorities of Port Elizabeth, Uitenhage, Despatch and several smaller adjacent local authorities into one metropolitan municipality with a new demarcated boundary. The boundary is shown in Figure 1.1, which is the study area for the Public Transport Plan. The size of the metropolitan area is about 1 950 km² and the population was recorded as 1 003 790 in the national 2001 census.

Figure 1.1 Nelson Mandela Bay Metropolitan Transport Area



# 1.3 Planning Process

The PTP planning process consisted of 3 elements, namely the preparation of a Long Term Strategy, a Short Term Implementation Plan and a Funding Plan. The PTP is based on NMBMM's vision, goals and priorities, contained in the Integrated Development Plan (IDP) and takes into account national and provincial transport policies and applicable legislation.

The provision and usage of current public transport services was determined and analysed from a household interview survey sample of about 10 000 persons. This information and future projections of population and employment in the study area were used to evaluate various public transport system scenarios for a planning period up to 2020. These scenarios involved various combinations of rail, bus and taxi routes and services. A preferred strategy was selected from the results of the evaluation and in consultation with the various affected stakeholders. This recommended long-term strategy was then developed into a short-term implementation plan, including proposed routes and estimates of vehicles and frequencies. Finally, a budget was prepared for implementing the PTP over the next 5 years (2006 – 2010), including preparational planning and infrastructure investments. The need for subsidies has not yet been determined and will be part of the preparation of business plans for first phase implementation.

# 1.4 Principles for Public Transport Systems

The design of a future public transport system must include the physical structure, the operational prerequisites as well as the institutional and the legal framework to support the public transport system. The contrast between two fundamentally different operational concepts is one of the most important factors to consider when strategic options for future public transport in the NMB area are assessed.

The first concept refers to a situation where medium or high capacity vehicles are operated in fleet operation providing an integrated network of services. A group of vehicles, whether they represent bus or rail technology, thus constitutes an entity from the point of view of passenger service and operating economy. The driver is employed and does not depend on passenger volumes for income.

The second concept represents the contrasting principle of individual vehicle operation. Here, each vehicle is a profit centre, owned by an investor or, alternately by the driver himself. Often, the vehicle owner "leases" the minibus on a daily basis to a driver for a fixed fee. The driver is dependent on the revenues from his vehicle and has to do everything he can to get passengers. This is the way minibus taxis are currently operating in the NMBMET area.

What is the "best" or appropriate system? In technical and economical terms, it is logical to conclude that when the demand is high, there should be a case for high-capacity vehicles. From this point of view, it would seem logical and efficient to introduce a system based on high capacity vehicles (buses/rail) where demand is high, and low capacity vehicles (minibuses) where demand is low.

The only realistic direction for development of the public transport sector is a gradual development towards a multi modal system where different types of vehicles have different roles, providing trunk routes and feeder lines. However, a development towards such a system requires strong political will and guidance in combination with an efficient system for planning, systems design and monitoring together with institutional strength.

# 2. VISION, GOALS, POLICIES AND STRATEGIES

# 2.1 National Policy and Legislation

A comprehensive review of national transport policy was undertaken by the South African Department of Transport in 1995, which culminated in the publication of the White Paper on National Transport Policy in 1996. The main public transport policy principles contained in the White Paper are summarised as follows:

- Public transport services must be affordable to the public and responsive to customer needs. They must be designed to integrate different modes of transport, to be cost efficient, to achieve service quality, to use available resources optimally, to use the most cost-effective modes (bearing in mind customer needs), to be safe and to do the least possible harm to the environment.
- Subsidies must be aimed to assist marginalized users and those with poor access to social and economic activity.
- An effective land transport system must be achieved through integrated planning, provision and regulation of services and infrastructure, with diligent, effective law enforcement.
- Law enforcement must be promoted as vital to managing and regulating land transport, and the efforts of all involved must be co-ordinated to prevent duplication.
- Public transport must be given higher priority than private transport, and all spheres of government must promote public transport.
- The needs of special categories of passengers (such as learners, tourists and people with disabilities) must be met as far as possible by the system provided for mainstream transport.

The policy principles were included in the National Land Transport Transition Act (NLTTA) published in 2000 and became statutory planning obligations for all municipalities in the preparation of an Integrated Transport Plan as a sub-component of the Integrated Development Plan (IDP) which is a requirement in terms of the Municipal Systems Act, also published in 2000.

The NLTTA requires municipalities to prepare the following sequence of plans leading to the ITP as a sub-component of the comprehensive IDP.

- Current Public Transport Record (CPTR)
- Operating Licences Strategy (OLS)
- Rationalisation Plan (RP)
- Public Transport Plan (PTP)
- Integrated Transport Plan (ITP)

The NMBMM has prepared and recently (2004) updated a CPTR and is in the process of preparing an OLS. The Rationalisation Plan for subsidised services will be included in the business plans for first phase implementation of the PTP.

# 2.2 National Vision for Public Transport

The Moving South Africa Action Agenda provides the National Department of Transport's 20-year strategic framework for the transport sector in South Africa and is based on the draft report *Towards a Transport Strategy for 2020* and the *White Paper on National Transport Policy of 1996*. The MSA Action Agenda focuses on the following transport issues: urban passenger transport, rural passenger transport, tourist and long-distance customers, special needs customers and freight transport.

The goal for urban passenger transport is to put public transport first. It is envisioned that by the year 2020 a public transport network having as much citywide coverage as possible will enable all urban transport customers to fully participate in the various activities of city life. The goal to provide affordable, safe, secure, fast and frequent public transport services must be realised.

Poor public transport service stems mainly from a dispersed pattern of land use. A core public transport system operating along a densified corridor where public transport is the priority mode is aimed for. Through densification, high volume and high frequency public transport services can be achieved, thereby meeting the customer needs of reduced trip duration and waiting times.

Mainstream public transport operations must meet the needs of all customer groups (previously disadvantaged, disabled, scholars, etc.) and the possibility of differentiated customer services can ultimately be realised. An improved public transport system and restrained private car use is aimed to entice selective customers from private cars over to public transport. An effective public transport system will attract sufficient ridership levels to ensure that fares are affordable and that the operations are sustainable.

The vision for transport in South Africa by the year 2020 can briefly be summarised as follows:

"It will meet the needs of freight and passenger customers for accessible, affordable, safe, frequent, high quality, reliable, efficient and seamless transport operations and infrastructure. It will do so in a constantly upgrading, innovative, flexible and economically and environmentally sustainable manner. In so doing, transport will support and enable government strategies, particularly those for growth, development, redistribution, employment creation and social integration, both in South Africa and in the Southern African region."

The general pattern emerging through the MSA Action Agenda points to a transport system that is customer based (hence customer needs are the foundation of the action agenda), sustainable with low system costs and provides room for service levels to be continually upgraded and expanded in the future.

# 2.3 Provincial White Paper on Transport

The Eastern Cape Provincial White Paper on Transport for Sustainable Development was published in the Provincial Gazette on 24 July 2001. It contains the policy of the Province on the role and responsibility of transport in promoting sustainable development in the Province. The following policy objectives have been extracted from the White Paper as being relevant to the preparation of the NMBMM Public Transport Plan.

#### **Transport Modes**

- Promote the use of public transport over private car travel.
- Ensure the integration of modes with respect to scheduling, routes and ticketing.
- Plan for the use of non-motorised transport where appropriate.

#### **Public Transport Operators**

- Facilitate registration of operators as formalised commercial entities.
- Replace operator permits with route operating licenses issued in terms of approved public transport plans.
- Implement a system of regulated competition for public transport routes.
- Empower and assist emerging operators to participate meaningfully.
- Promote the development of human resources and technology.
- Promote acceptable and fair labour practices.

#### **Public Transport Users**

- Provide readily accessible information regarding the details of available public transport.
- Promote safe, secure, reliable and sustainable public transport.
- Improve accessibility and affordability to users.
- Address the needs of special categories of users, such as scholars and disabled people.

#### **Public Transport System Management**

- Foster a stable investment environment.
- Ensure sustainable and dedicated funding.
- Ensure that operations are economically efficient.
- Provide appropriate institutional structures to facilitate effective management.
- Encourage a professional approach to the management and operation of the system.
- Ensure efficient use of resources through integrated planning of land use and public transport.

# 2.4 Vision, Goals and Strategies of NMBMM

The mission for the NMBMM Public Transport Plan is based on the vision contained in the NMBMM IDP and ITP, stated as follows:

"To provide an efficient, safe, affordable, sustainable and accessible multi-modal public transport system which supports social and economic development to ensure optimal mobility and improved quality of life for the residents and users of the transport system in the metropolitan area".

# **Public Transport Goals**

The achievement of the vision for public transport will require a reformed public transport system based on a number of goals that need to be met in order to satisfy the demand. They have been formulated as follows:

#### • Increased mobility

Increased mobility will make it easier to travel to and from work, school, and community services and to recreational areas. Increased mobility should be the overall goal that the public transport system has to support. The need for a passenger demand approach is obvious in contrast to the current supply-driven situation.

#### • Affordable transport

Travel is often a financial burden for many households and for the lower income groups the cost of travel can be as much as 1/3 of the total household income. This will have a major influence on the ability to have a job outside the living area, to have an education etc. It is important to develop a transport system that is affordable to most households.

#### • Improved accessibility

When discussing the outline for a future public transport system it is necessary also to discuss the location of industrial areas, schools and services. An integrated approach is important to ensure that the land use structure supports an efficient and thus affordable public transport system. When discussing accessibility, the special needs for special groups of people, i.e. learners and disabled persons must not be forgotten. The public transport system must in the future be accessible to *all* people.

#### • Support social and economic development

A well functioning public transport system that gives good access to activities in the community will have a positive impact on the possibilities for social and economic development.

#### Improved safety

The current minibus taxi situation is characterised by low traffic safety and personal security. Improved public transport, with roadworthy vehicles and a safer environment, will contribute to the overall increased safety of the passenger.

#### • Sustainable transport system

The transport system has to be sustainable, both from an environmental as well as from an economic point of view. An improved public transport system with increased ridership also has the advantage of decreased emissions from vehicles by:

- a) improved utilisation of vehicles
- b) shifting people from private to public transport.

#### Improved quality of life

An improved public transport system will also contribute to a more attractive city – a city not dominated by roads, congestion, pollution and lack of access and mobility. The public transport facilities should also be attractive for the establishment of businesses, service industries and the creation of tourism and job opportunities. This is however also dependent on an integrated planning approach i.e. spatial, housing and local economic development.

# **Strategies for Public Transport Development**

The development of a future public transport system requires the implementation of strategies to achieve the overall goals. The strategies identified in the IDP include, not only elements which will form the basis for reforming public transport, but also guidelines for spatial planning, housing policies and local economic development.

#### Customer oriented transport system

The future public transport must be a customer-oriented system with a focus on the needs of the passengers. Measures and solutions that meet the demands of the passengers should be prioritised when implementing new services and facilities. Public transport must not be governed by the interests of the current operators.

#### • Integrated transport system

To meet the demand, the system should be integrated, with the integration of time-tables/schedules and facilities making it easy to change between modes of transport as well as between routes operated by different operators. Part of the integration of the system will involve integrated fares to make the cost of travelling independent of the number of transfers.

#### Densification of transport corridors

To support the public transport system, the development of mixed land use by densification along public transport corridors (e.g. Khulani Corridor) should be made a priority.

#### • Spatial development prioritising public transport

Spatial planning and development in the NMBMM must support the public transport system and visa versa and public transport must also support economic development.

#### Regulatory framework supporting public transport

A regulatory framework encompassing an Operating Licenses Strategy has to be implemented to support the overall goals for the public transport system.

#### Contracts and tendering system for private services operation

Public transport operations will be part of an integrated system and operated by independent operators under a tendering system. The operators should be appointed or given concessions in line with the overall system approach and this should be done by a contract and/or licensing system after a tender process. The public transport industry must have viable operations and if profitable operations are not possible (after using cross-subsidies within contracts or licenses) for the services specified, there will be a need for subsidies to be provided by the authority.

#### • Phased introduction in co-operation with the industry

The introduction of a reformed system must be done in co-operation with the industry to ensure sustainable and profitable operations for the industry and also that services are provided according to the mobility needs of the community. Implementation should be stepwise and in close co-operation with the industry making transition to new requirements possible in a practical manner.

#### Establish a transport authority to manage public transport

To implement, support and monitor a public transport system an appropriate institutional structure will need to be introduced (Transport Authority). This is a prerequisite for implementing a reformed public transport system.

#### Improved transport infrastructure

The provision of supporting infrastructure for public transport operations should be part of the development of the reformed public transport system.

The above strategies form the basis for developing a future public transport system and were considered when evaluating the Scenarios for the long-term development of public transport in the NMBMET area.

# 2.5 NMBMM Integrated Development Plan

The latest review of the NMBMM IDP contains a vision for the year 2020 which focuses on sustainable environmental, social and economic development to improve the quality of life of all its communities in a secured, safe and tourist friendly environment. The IDP is a document guided by political mandate which must be used to pursue the vision and strategies that will achieve sustainable and effective local government.

The strategic objectives stated in the NMBMM IDP with specific reference to the development of the transport sector are as follows:

- To prepare an Integrated Transport Plan for the planning, management, implementation, financing and regulation of transport infrastructure, public transport services and urban traffic control.
- To improve public transport infrastructure planning.
- To prepare and develop a comprehensive preventative approach to transportation safety.
- To prepare an overall plan for the tarring of gravel roads and the maintenance and upgrading of tarred roads.
- To prepare an overall plan for the provision of sidewalks and cycle paths along major routes.

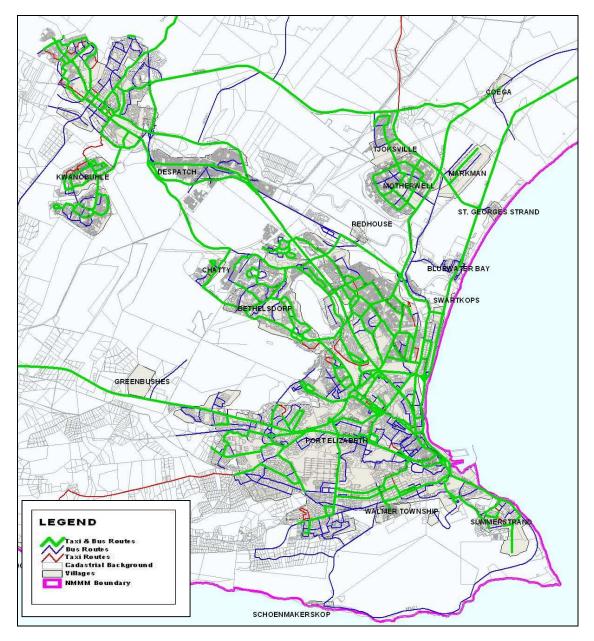
A local policy document which forms part of the IDP is the Spatial Development Framework (SDF) which identifies areas for future residential and industrial development to accommodate city growth. The SDF takes into account housing needs, the availability of land, availability and cost of municipal services and an assessment of the transportation network required to serve residential and commercial developments over a projected 20 year period. The SDF emphasises the importance of corridor development with land use intensification supporting the public transport system.

### 3. PUBLIC TRANSPORT STATUS QUO

# 3.1 CPTR Overview

Buses and minibus taxis are the predominant public transport service providers in the NMBMM area, while there is a commuter rail service between Port Elizabeth and Uitenhage which is only accessible to a relatively small number of residents within walking distance of the stations. This is because the railway was originally constructed as a freight line away from the residential areas. The current public transport routes are shown on Figure 3.1.

Figure 3.1 Current Public Transport Routes in NMBMM



Surveys of the usage of the public transport modes, carried out at taxi ranks, bus stops and train stations over the past 10 years, which are shown in Table 3.1, indicate that there has been an increase in the ridership on minibus taxis, bus usage has remained almost the same and rail commuter patronage has decreased.

Table 3.1	<b>Public Transport Mode Usage (1996 – 2001)</b>
	(Passengers per day boarding vehicles)

Mode	1996	%	2001	%	Change	%
Taxi	105 480	59	118 746	62	+13 266	+13
Bus	62 620	35	64 485	34	+ 1 865	+3
Train	9 930	6	7 392	4	-2 538	-26
Total	178 030	100	190 623	100	+ 12 593	+7

From the above table it can also be seen that the total public transport usage has increased by 7% over 5 years, i.e. at about 1,4% per annum, which is approximately the same as the annual population growth rate for the metropolitan area, according to the census statistics from SSA. However, the annual growth rate of private vehicles on the metropolitan road network has been increasing at an annual rate of about 2,5% per annum. Thus the national government's policy objective of increasing the use of public transport more than private transport use is not being achieved in the NMBMM area.

# 3.2 Taxi Operations

Taxi operations in the metropolitan area vary considerably in nature, depending on the area or type of service being provided, and can generally be categorised into the following types of services:

#### Minibus taxi's operating between places of residence and work opportunities

This type of service is recognised as the conventional 16-seater minibus taxi service, with vehicles generally being in fair condition and commuters being transported mainly between the low to middle income residential areas and places where work opportunities exist.

Over the past three years, minibus taxi operations have changed from the conventional "rank-to-rank" method of operation where transfers occurred at central ranks. Now, because passengers are reluctant to transfer, most services are direct and very little transferring occurs. This has resulted in a proliferation of informal peak-hour ranking areas, where minibus taxis queue on sidewalks or in the road reserve during the morning peak period. The afternoon peak period is different, in that taxis mainly operate from the few large ranks in the CBD area and in Korsten and North End. Although minibus taxis operate mainly from designated ranking areas, the last number of years has also seen the introduction of the "sweeper" taxi, especially in the Northern Areas and along the Govan Mbeki Avenue and Standford Road corridors. These sweepers mainly operate independently and do not belong to any recognised taxi association.

#### • Minibus and sedan taxis providing feeder or distribution services in residential areas

In the New Brighton/Zwide area and in Motherwell, feeder or distribution services are provided by taxis known as "Jikeleza's" (a Xhosa word, meaning "to circulate"). These are generally 16-seater vehicles or sedans which are in such poor condition (and probably are

not in possession of a Certificate of Roadworthiness) that they do not operate into the CBD area. They cruise around the streets looking for passengers who want to travel within the townships.

# <u>Sedan taxis providing connector services between Motherwell and Zwide /</u> Kwazakhele

The commuter service between Motherwell and the Zwide / Kwazakhele area is provided by sedans. It is not known whether these operators have valid permits to provide a public transport service, but it is highly unlikely. Many of these vehicles also operate long distance routes to destinations in the Grahamstown area and to Peddie.

There are ten (10) registered Taxi Associations (TA) based in the Nelson Mandela Bay metropolitan area, although there are many more that operate into the area from the surrounding towns in the Eastern Cape, most of which are affiliated to Border Alliance TA (BATA) or Uncedo Service TA (USTA). These ten associations shown in Table 3.2.1 claim a total membership of 2 696 operators yet the EC Taxi Registrar only has a total of 1 542 registered operators for these associations. Similarly, of the 2 846 vehicles which the associations claim belong to their members, only 2 294 could be verified as existing vehicles in the National Traffic Information System (NATIS).

Table 3.2.1 Taxi Associations, Membership and Vehicles in NMBMM (2001)

Association	Abbreviation	Claimed Members	Claimed Vehicles	Verified Vehicles (NATIS)
Algoa TA	ATA	279	226	211
Border Alliance TA	BATA	804	877	640
East Cape Long Distance TA	ECLDTA	81	43	41
Northern Areas Taxi Operators Ass	NATOA	83	95	74
Norwich Long Distance TA	NOLDTA	114	144	100
Uitenhage & District TA	UDTA	236	311	252
Uncedo Service TA (PE)	USTA(PE)	501	630	493
Uncedo Service TA (Uitenhage)	USTA(Uit)	564	466	437
Uitenhage TA	UTA	N/a	-	-
Western Suburbs TA	WESTA	34	54	46
Total		2 696	2 846	2 294

Estimating the actual size of the minibus taxi fleet is a contentious matter, as there is an extremely poor correlation between the various vehicle data sources available. The Port Elizabeth Road Transportation Board has issued a total of 1768 minibus taxi permits within the NMBMM area.

The taxi associations claim that their members own a total of 2846 vehicles. However, a detailed analysis of membership and vehicle ownership revealed that 265 of these vehicles are registered with one or more association, and that a further 161 vehicles have been linked to more than one owner. After removing all possible duplicates, the total vehicle ownership is reduced to 2 485 vehicles, but only 2294 of these could be verified on NATIS.

**Table 3.2.2 Estimated Taxis in NMBMM** 

Source / Records	Vehicles in Database	Confirmed in NATIS	
LRTB Permits (LTPS)	1768	1721	
Eastern Cape Taxi Registrar	1800	1675	
Taxi Associations	2846	2294	
Surveys	2835	2835	
Estimated Number of Taxi's in NMBMM 2 300 – 2 600			

Taking into account the various sources shown in Table 3.2.2, it is estimated that there are approximately between 2 300 to 2 600 minibus taxis operating in the NMBMM, of which at least 400 and, possibly as many as 800 may be illegal operators.

Of particular concern regarding the mini-bus taxi fleet in the Nelson Mandela Bay Metropole, is the fact that the average vehicle age is approaching 12 years. The average vehicle age of sedan taxis is more than 16 years, which explains the dismal condition that most of these vehicles are in. In view of the aging vehicle fleet, roadworthiness should be a top priority in terms of law enforcement in future.

Surveys conducted at the 49 taxi ranks in the NMBMM area for the 2001 CPTR found that about 119 000 passengers daily boarded taxis which served 258 routes (destination).

The busiest ranks in order of passenger turnover were Griffin Street, Cleary Park and Durban Road (Uitenhage). Approximately 46 000 passenger trips originated from these ranks each day. The surveys indicate that, on average, minibus taxis only undertake 3.1 trips per day. This statistic alone is surely an indication of the current over-supply of taxis in the metropolitan area - one of the core reasons for the severe competition between associations for routes and ranks.

Furthermore, the results of the rank surveys indicate that passenger waiting times at taxi ranks, in general, do not exceed 15 to 30 minutes, with only about 5% of all commuters waiting for longer than 30 minutes at a taxi rank. The longer waiting times obviously occur during the off-peak periods when it takes longer for taxis to fill up.

Fares are determined by the taxi associations and, generally, passengers are not consulted when new fares are determined. A linear regression analysis indicates that the following linear relationship can be applied between fare and trip length for minibus taxi routes:

Fare = 
$$R0,11 \times Trip Length (km) + R2,44$$

# 3.3 Bus Operations

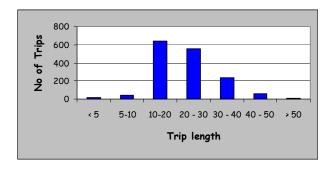
The Algoa Bus Company is the only subsidized bus operator providing commuter passenger services in the Nelson Mandela Bay metropolitan area, operating approximately 265 buses during the weekday peak periods.

The two main termini in the Metropolitan area are Norwich Terminus in Strand Street and Bay Station, which is situated beneath the Settlers Way Freeway in Victoria Quay. There are a further 21 smaller bus facilities (not embayments) situated throughout the NMBMM area and these seem to adequately serve the needs of the bus company and commuters.

The 259 bus routes served by the Algoa Bus Company comprise roughly 630 km of the NMBMM road network - 415 km of which is shared with taxi routes. These 259 routes consist of a core of 19 main routes, with various permutations and variations to these routes making up the remaining 240.

As can be seen from the figure below, the majority of bus routes are between 10 and 30 km long, with very few trips exceeding 40 km in length. The average bus trip length is 22 km, which is nearly double that of the average taxi trip length.

Figure 3.2 Bus Trip Length Distribution



The results of the Wayfarer analysis and on-board surveys conducted for the 2001 CPTR indicated that the Algoa Bus Company transports approximately 65 000 passengers per day (during the 1561 daily trips). Slightly more passengers are transported during the AM period than in the afternoon, even though 20 more trips are provided during the afternoon period. Representatives of the bus company have confirmed that the current passenger volumes are still of the same order, indicating that bus ridership volumes have remained static over the past three years.

Table 3.3 Average Weekday Bus Vehicle & Passenger Trips (2001)

Period	Vehicle Trips	Passenger Trips
AM Period	770	33 380
PM Period	791	31 105
Total per Day	1561	64 485

# 3.4 Rail Operations

Commuter rail services are currently provided between Port Elizabeth and Uitenhage, via eleven train stations situated along this line. On weekdays (Monday to Friday) the commuter rail service is only operated in the morning peak (departure times from 05:30 to 07:50) and afternoon peak (departure times from 14:25 to 18:15). Twelve train trips per day are operated on weekdays. No train service is provided on Saturdays, Sundays or on public holidays.

A summary of the number of passengers boarding and alighting at all stations obtained from SARCC surveys in 2004 is provided in Table 3.4 below for the AM and PM periods, respectively. These figures show that the number of passenger trips by train on the Port Elizabeth – Uitenhage line is currently about 5 000 per day. Train patronage has been as high as 24 000 passengers per day in the past, but has steadily declined over the last 15 years. Surveys conducted in April 1996 indicated daily ridership of almost 10 000 passengers. The 2004 surveys therefore indicate a drop of about 50% since 1996. The reasons for this decline have been shorter travel times by bus and taxi (eliminating transfers) and security problems on trains.

Survey Period	Boarding	Alighting	Average
AM Period	2 825	2 537	2 681
PM Period	2 025	2 441	2 233
Daily	4 850	4 978	4 914

Table 3.4 Train Passenger Counts – All Stations (2004)

# 3.5 Travel Survey

An assessment of the public transport demand from the CPTR information indicated that there was a substantial underestimate of the number of people who are actually using public transport modes. This is because the surveys of passengers using the bus and taxi modes were only undertaken at the main bus stops and taxi ranks, while a significant number of passengers are likely to board and alight buses and taxis along the routes. This is particularly the case with illegal taxis, whose numbers may exceed the legal taxis and who do not use the main formal ranks where the surveys were conducted.

Another problem with the boarding surveys is that they do not indicate the actual origin and destination of each passenger trip, only the point at which passengers board the public transport vehicle and the destination of the vehicle trip.

In order to be able to forecast future public transport demand for use in planning the best long-term public transport system strategy, it is important to have reliable information on the current volumes of passengers using public transport modes, as well as the actual travel patterns in respect of the origins and destinations of trips, from home to work, etc. This is necessary to optimise the planning of public transport services.

It was thus decided by NMBMM in consultation with SIDA and SWECO to undertake a travel survey of a randomly selected 1% sample of the metropolitan population and obtain details of transport use by questionnaires completed during home interviews. The respondents were asked to provide details of their previous day's trips from origin to destination, describing modes and routes used, transfer points, fares paid, time taken and reasons for

mode choice. This information was captured on a zonal basis and factored pro rata to the zonal 2001 population to obtain a current travel pattern for the whole metropolitan area.

The travel survey indicates as estimated total of 1,4 million person trips per day in the NMBMET area, of which about 33% are by walking, 41% by private transport and the remaining 26% by public transport modes. When looking at motorised trips only (i.e. excluding walk trips) private transport makes up 60% of these trips and public transport 40%. The public transport trips (380 000 per day) are split between the modes as follows: taxis carry 75%, buses carry 23% and trains carry 2%. The trips per mode obtained from the travel survey are shown in Table 3.5.

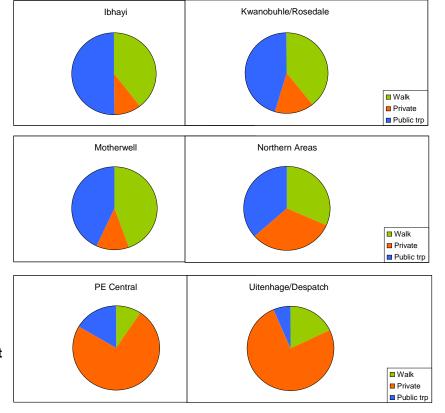
Mode	Davage Tring	0/ /All modes)	%	%
Mode	Person Trips  % (All mod	% (All modes)	Private/Public	Public Modes
Walk	460 000	33	-	-
Private vehicle	572 000	41	60	-
Taxi (all types)	286 000	20		75
Bus	89 000	6	40	23
Train	5 000	0,4		2
Total	1 412 000	100	100	100

Table 3.5 Person Trips per day (2004 Travel Survey)

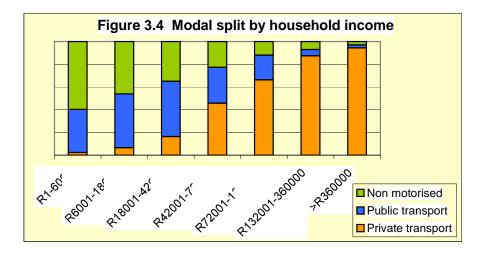
The number of persons using taxis as reported in the travel survey is more than double the number of persons counted boarding taxis at ranks in the CPTR survey. This gives an indication of the number of sweeper and illegal taxis.

It is also significant to note how mode use varies according to the income of users. Figure 3.3 illustrates that walking is the predominant mode of travel in the low income areas of Ibhayi, Kwanobuhle/ Rosedale and Motherwell. while private transport is the predominant mode used in the PE central suburbs and Uitenhage/Despatch. In the Northern Areas (Gelvandale/Bethelsdorp) there is an almost equal modal split between walking, private and public transport.

Figure 3.3 Modal Split by Area in NMBMM



The greatest potential to increase the use of public transport is in the low income areas, where walking is currently the predominant mode. Figure 3.4 from the travel survey results illustrates that as household income increases for low income categories, there is a shift from walking to use of public transport, which is the dominant mode in the R18 000 – R42 000 per annum category, whereafter private transport use becomes increasingly dominant.



#### **Travel Time**

The average trip travel time for the different transport modes obtained from the household travel survey is shown in Table 3.6 below. The average trip time for all trip purposes is 24 minutes, with walking trips to a transport facility taking the shortest time (11,2 minutes average) and train trips taking the longest time (40,8 minutes average). The approximate distance travelled for a walking trip of 22,5 minutes at 5 km per hour is about 2 km. Train trips from Uitenhage to Port Elizabeth which take about 40 minutes, including station stops, cover a distance of 33 km.

Table 3.6 Average Trip Time per Mode (2004 Travel Survey)

Mode	Average Trip Time (Minutes)
Waling (to transport facility)	11,2
Walking trip	22,5
Car (as driver)	23,8
Car (as passenger)	27,9
Minibus taxi	28,8
Bus	39,4
Train	40,8
Average (all trips)	24,1

The walking time it takes to get from home to a public transport facility is about the same for bus and taxi users (10,5 minutes walk trip) but considerably longer for train users (19,5 minutes walk time). The longer walk required for train users is because train stations are located far from most of the residential areas in NMBMM.

The average waiting time reported by public transport users at a bus stop or taxi rank was almost identical for both modes, being approximately 8 minutes. Waiting times at train stations are shorter, because trains operate to a timetable and passengers plan their arrival at the station to be just before the scheduled departure time of the train.

#### Trip Cost

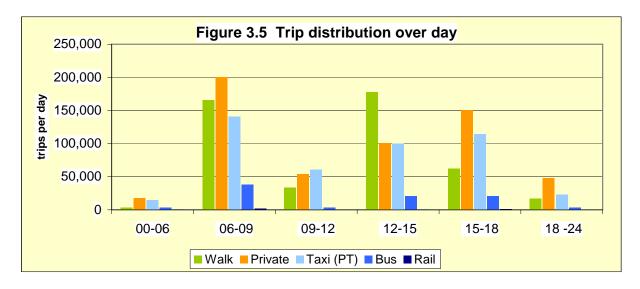
The reported trip costs by respondents in the travel survey showed that, on average, a public transport trip (one-way) costs approximately R4,00. Although a train trip is more expensive than a bus or taxi trip, the cost per km is lowest by train, at 17 c/km compared to 19 c/km by bus and 34 c/km by minibus taxi.

Mode	Average Trip Cost	Average Trip Length	Average Cost/km
Jikileza taxi	R3,50	8 km	44c
Minibus taxi	R4,03	12 km	34c
Bus	R4,20	22 km	19c
Train	R4,98	30 km	17c

Table 3.7 Average Trip Cost per Mode (2004 Travel Survey)

#### **Trip Distribution**

The time of day when most trips are made is important in designing the capacity of the transport system to cope with the peak demand. The time distribution of trips by mode was extracted from the travel survey results and has been grouped into three-hour periods during the day, as shown in Figure 3.5. The morning commuting period (06:00 - 09:00) has the highest concentration of trips for all modes, except for the walk mode, which is predominant in the mid-afternoon period (12:00 - 15:00).



#### 4. NEEDS ASSESSMENT

# 4.1 SWOT Analysis of current operations

A SWOT analysis was undertaken to assess the strengths, weaknesses, opportunities and threats in respect of the current multi-modal public transport system, as well as with regard to each individual mode. The findings from the SWOT analysis are summarised below.

#### Overall system

<u>Strengths</u>: All 3 modes have strong organisational structures for delivering reliable services. The physical infrastructure (roads, railways, terminals and ranks) is generally adequate and in good condition. The Metropolitan Transport Forum is supported by all operators.

<u>Weaknesses</u>: Each mode operates independently with no co-ordination between the services. There is no institutional structure responsible for ensuring inter-modal co-ordination and for supplying of information to passengers about the services available.

<u>Opportunities</u>: Modal co-ordination and integrated ticketing can improve the travel standard and increase patronage, leading to more income for the operators. Land use development and business opportunities can be created at inter-modal transfer facilities. Rationalisation of parallel subsidized services and under-utilised services is needed.

<u>Threats</u>: The increase in illegal operators threatens economic sustainability of legal operators through destructive competition. Lack of enforcement leads to increasing lawlessness and more accidents.

#### Taxi Mode

<u>Strengths</u>: Demand responsive with flexible routes and stops to maximise passenger accessibility. Frequent service with large fleet. Job creation in the informal sector. No government subsidy. Good road infrastructure and many rank facilities.

<u>Weaknesses</u>: Driven by profit motive rather than customer satisfaction. Minimum maintenance expenditure on vehicles. Drivers overload passengers and speed to maximise the number of loaded trips per day, resulting in unsafe traffic operations. Lack of law enforcement, vested interests (some government officials own taxis) and bribery. Poor working conditions and long hours for drivers. Long waiting times for passengers during off-peak periods.

<u>Opportunities</u>: Formalise operations with route licenses (OLS). Contract services with bigger vehicles in support of government recapitalisation programme. Organise intermodal co-ordination and integrated ticketing as feeder services in subsidised contracts. Training as professional service providers. Special services with accessible vehicles for disabled people with disabilities.

<u>Threats</u>: Oversupply of vehicles and unregulated competition may lead to unsustainable bus and taxi operations, causing lawlessness and violence in the fight for economic survival. Vested interests results in selective law enforcement. Passenger safety at risk from overloading and speeding. Mistrust of authorities planning by the taxi industry, because only bus and rail operators receive government subsidy.

#### **Bus Mode**

<u>Strengths</u>: Scheduled services with good area coverage. Bus company well organised, vehicles maintained, drivers trained, stable working conditions. Good road infrastructure and reasonable CBD bus termini with some facilities for passengers.

<u>Weaknesses</u>: Lack of information about services (no updated route maps and timetables published). Complex and inefficient route network in some areas with low utilisation. No subsidy for scholars. Lack of facilities for passengers at suburban termini (shelters, walkways, toilets).

<u>Opportunities</u>: Modal integration and integrated ticketing with feeder services. Rationalisation of services to increase efficiency and reduce travel time. Special services and accessible vehicles for people with disabilities, scholars, tourists. Marketing of services to attract passengers.

<u>Threats</u>: Destructive competition from the taxi industry leads to bus services becoming uneconomic and requiring more subsidy to sustain them. If bus services are withdrawn and taxis monopolize routes, fares could increase. Crime at bus terminals and on buses dissuades passengers from using service.

#### Rail Mode

<u>Strengths</u>: Adequate infrastructure with potential to carry large volumes of passengers at relatively low cost. Organised and trained staff. Government policy promotes rail expansion with funding support.

<u>Weaknesses</u>: Existing line has poor accessibility. Stops at 9 stations results in long journey time between Port Elizabeth and Uitenhage. No feeder services to stations. Poor travel comfort for passengers. Lack of published information about services.

<u>Opportunities</u>: Feeder services to stations with integrated ticketing. Development potential at stations with increased ridership. Possibility to reroute line through New Brighton and branch line from Aloes to Motherwell to attract new patronage.

<u>Threats</u>: Old equipment susceptible to service breakdowns, dissuades passengers from using rail. Insufficient security personnel, increased crime and fare evasion. Possible service closure if ridership decreases.

# 4.2 Accessibility Needs of People with Disabilities

The following needs assessment has been derived from personal interviews with an extensive variety of people and organisations concerned about the provision of accessible transport for people with disabilities and mobility disadvantaged people. Many of the interviewees were people with disabilities or who could be classified as mobility disadvantaged.

An underlying message that came from these people was the sincere wish that they be brought into the planning process and be given the responsibility of helping themselves with the support of the overall community.

A second significant message that was expressed was the perceived lack of action by Government, at all levels, towards physically addressing accessibility problems as compared to stating policies and giving empty promises.

A third, and maybe the most significant, statement emphasizes the two foregoing messages. When meetings have been called in the past to discuss accessibility for people with disabilities, no transport has been available to permit the affected parties to participate.

The other all encompassing statement is the need to think through the whole experience of travel as it supports living, working and other social aspects for people with disabilities or mobility disadvantaged persons. One missing link can break down the whole process of providing equal opportunity for access and full participation in the community.

#### **Public Transport Vehicles**

Assistance is required for disabled people when they get on and off buses, taxis and trains. This includes not only people in wheelchairs but also elderly people, women with infants, people with crutches and people with sensory impediments. Such assistance is provided by Airlines and Airport personnel and should be extended to all forms of public transport including not only urban services but also long distance buses, taxis and trains.

Public transport vehicles currently operating in NMBMM are considered inaccessible by many people with disabilities. Buses are too high and taxis are too cramped. In other cities, vehicles designed to be accessible to disabled people have been introduced and they are also more accessible for other passengers.

#### **Public Transport Systems**

Public transport routes do not cover the metro area adequately leaving long distances for disabled people to get to and from the routes.

In many townships there are virtually no formal sidewalks to support people walking to a bus/taxi stop or train station, much less trying to use a wheelchair or crutches. Where the road surface is the only alternative for such travel it is often found to be uneven or broken or cut by open trenches with no attention paid to how a wheelchair bound person could safely obtain access.

There is also a lack of readily available information in the taxi system concerning services offered and fares charged. Deaf people, for example, would benefit from a schedule of services offered and fares posted at stops and/or on vehicles.

Public transport systems that are designed to give adequate access for people with disabilities will improve the accessibility of the systems to all potential passengers.

#### **Public Transport Operators**

Almost universally amongst the disabled people interviewed was the complaint that public transport drivers were simply not interested in taking time to assist them. This complaint was focussed on taxi drivers but included bus and train operations as well. There is a need not only for extensive driver training but also for a change in operations towards providing a public service as compared to providing basic transport.

#### **Private Transport**

As indicated under "Public Transport Systems" above, facilities needed to enhance the overall mobility of disabled people go far beyond the trip on the bus, taxi or train.

The following statements need special consideration.

- Government buildings and schools are inaccessible
- Some hospitals and clinics are inaccessible
- Public facilities and recreation areas are inaccessible
- Building codes to support the disabled apply to new construction only
- Insufficient signage and information systems are available to support people with sensory disabilities
- Traffic signals should have special controls or time settings for people with disabilities
- Housing provided by NMBMM for disabled people are virtual jails due to lack of accessible transport
- Enforcement of special parking areas for disabled people is often lacking
- Many areas need ramps to replace steps or stairs

#### **Potential Strategies**

Two approaches to improving transport accessibility for the disabled have been expressed.

The first is to provide dedicated services for qualified people with disabilities. This type of operation is known as Dial-a-Ride or Door-to-Door Service and was put into permanent operation in Cape Town by the Municipality in 2002/3.

The second is to make the public transport vehicles and systems more accessible to all.

The first approach is specific to a small proportion of the disabled or mobility disadvantaged population, is costly on a passenger served basis and is relatively inflexible in terms of vehicle utilisation. It is basically a private transport system operated and subsidised by the Public.

The second is more in keeping with the Legislation and Policies adopted by all levels of Government.

It is apparent that a comprehensive strategy is required that recognizes the diverse needs of all disabled and mobility disadvantaged people throughout NMBMM.

The first approach would then be one, part of the overall strategy and would be aimed at people who, as a result of their disability, are unable to make use of current forms of public transport. Cape Town's Dial-a-Ride Service is controlled through the Metropolitan Disability Desk. Priority is given to such people for transport to and from places of employment. Trips to hospitals and clinics are restricted to off peak periods.

The second approach would then be implemented to meet the needs of the balance of mobility disadvantaged community. This will require a staged program focussing on one or two mainstream public transport corridors at a time. All aspects must be considered in each corridor. Improvements to vehicles, sidewalks, street crossings, bus/taxi stops and other infrastructure as well as to information systems must be co-ordinated to actually achieve necessary full access to key origins and destinations along the corridor. A parallel program, such as that initiated by the Eastern Cape Government for government employees, will be required to ensure that all origins and destination along the corridor are accessible for disabled people when they are outside the public transport and street networks.

Regardless of the types of disabilities that exist, planning must focus on creating transport that is accessible to all people.

It is important to stress that whichever of the options is selected it should include full interaction and participation with the mobility-disadvantaged communities affected. In researching the needs of people with disabilities some 24 organisations were identified relating to physical disabilities, 5 to mental disabilities, 3 to visual disabilities, 2 to hearing and speech disabilities and 2 to multiple disabilities. Also identified were 9 special schools, 12 care centers, 6 sport and recreational centres, 14 other service providers and related organisations and at least 12 government departments at National, Provincial and Metropolitan levels. It is obvious that these organisations cannot all have individual representation on say a Transport Authority. These groups should establish a forum that collectively can represent the needs of people with disabilities. The metropolitan transport planning process must recognise this and establish funding and facilities for such a forum to operate efficiently within the process.

# 4.3 Institutional Requirements

Given the current institutional situation in NMBMM in which the Municipality has no direct control over providing public transport services and also in which the intent in terms of the NLTTA is to establish a Transport Authority, several options are available to the Municipality towards implementing the above-mentioned strategies.

#### Option 1, Continue under current institutional establishment

Under this option NMBMM can plan transport systems, interact with a forum representing people with disabilities and put forward programs for the Provincial and National Government bodies to fund and implement.

#### Option 2, Stress the need for a transport authority

Under this option NMBMM can work towards establishing a Metropolitan Transport Authority under which public transport services can be tendered out to private and public enterprise under the auspices of a local co-ordinating authority. They can also defer improvements until such time as the transport authority is established.

### Option 3, Establish NMBMM as a public transport operator

Under this option NMBMM can set up specific public transport services that they feel are essential services to the community. Johannesburg has Metrobus established as a Council Agency. Cape Town, with the assistance of the Provincial and National Governments, has established the Dial-a-Ride service for disabled people utilizing the services of a private bus operator under contract. This option is considered not being relevant for NMBMM and will not be discussed more in detail.

From the long term strategies and ideas of reforming the public transport system the institutional structure will be focused on option 2 with a Transport Authority established for NMBMM. The need of one institutional body responsible for the planning and implementation of a regulated and integrated public transport system is the favoured strategy. Meanwhile the reform process will take place in co-operation between the institutional bodies involved.

# 5. LONG TERM PUBLIC TRANSPORT SCENARIO ANALYSIS

# 5.1 Spatial Development Framework

The NMBMM Spatial Development Framework (SDF) which was prepared in 2000/01 for the first Integrated Development Plan was updated during the 2003/04 review of the IDP and is shown in Figure 5.1.

EXISTING / INFILL DEVELOPMENT BUSINESS MAJOR CENTRES FREEWAYS AREAS CUBILENTLY COMMITTED FOR RES. DEV. MAJOR ARTERNAL BACK OF PORT AREA HOSPITALS RESIDENTIAL DEVELOPMENT 2002 TO 2007 MINOR ARTERIALS FUTURE FREEWAY RESIDENTIAL DEVELOPMENT 2007 TO 2013 FUTURE MAJOR ARTERIALS & MAJOR ROAD CONNECTONS RESIDENTIAL DEVELOPMENT 2014 TO 2020 URB BOUNDARIES AGRICULTURE RESIDENTIAL DEVELOPMENT BEYOND 2020 COEGA IDZ BOUNDAHY NEW ACCESS RDS EXISTING INDUSTRIAL MADIBA BAY SAFARI BOUNDARY MAJOR IMPROVEMENTS TO ROADS GREEN STRUCTURE (incl PEMOSS) PROPOSED INDUSTRIAL URBAN FENCE EXTRACTIVE INDUSTRIAL AURPORT

Figure 5.1 Spatial Development Framework Plan for NMBMM

The SDF contains population projections to 2020 and indicates areas of land available to house the population growth in the short, medium and long term. From the size of the land areas and the proposed housing density, estimates were prepared of the number of housing units that can be accommodated in each area. This has been used to make zonal population projections up to 2020. The SDF also indicates the areas of land designated for future industrial and commercial development, with expected time frames for the land use. These figures were used for the scenario analysis presented in a draft report to the Steering Committee in May 2005.

The future travel demand used for the analysis and evaluation of the public transport scenarios has been estimated for the year 2020 by taking the 2004 travel survey results and using the 2020 population and land use information obtained from the 2004 SDF, together with employment forecasts for the Coega IDZ obtained from the Coega Development Corporation. The Coega IDZ employment forecast used in preparing the 2020 trip matrix for scenario testing was initially the low growth estimate of 30 000 jobs which was subsequently revised to 40 000 jobs for further analysis, as discussed in the next chapter. The projected increase in travel demand from 2004 to 2020 shows a growth of public transport usage from the current approximately 400 000 trips a day to approximately 700 000 trips per day by 2020.

# 5.2 Scenarios for future public transport system

There are 3 basic options for the future development of the public transport system in the NMBMM area. The first option is to do nothing and let the modes continue to operate as they want to. In reality, there will be some intervention by the authorities with regard to the Operating Licence Strategy and the Recapitilisation Programme for minibus taxi vehicles. The other two options are to develop either the bus mode or the rail mode as the backbone of the future NMBMM public transport system, with integrated services.

It was decided to analyse and compare these 3 scenarios using the VISUM transport model, with regard to economic viability, travel standards and environmental impact. The scenarios are briefly summarised as follows and then described in detail.

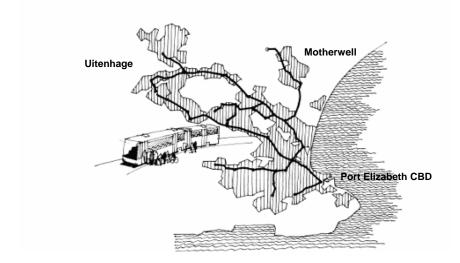
- Scanario A minimum intervention on existing system
- Scenario B an integrated and scheduled bus service with trunk bus routes and feeder/local bus services, without rail services
- Scenario C an integrated and scheduled bus service and developed commuter rail services

#### Scenario A – Minimum Intervention on Existing System

This scenario assumes that the existing public transport system continues to operate as it does currently with the only change being the conversion of taxi's radius permits to route permits in terms of the Operating Licenses Strategy which is currently being prepared for the NMBMM area. Subsidised bus services would be rationalised in terms of Department of Transport criteria for services to receive subsidy.

The routes as contained in the CPTR remain essentially the same but minor (low frequency) routes are excluded. The modelled public transport system consists of 154 bus routes and 179 minibus taxi routes, with the existing commuter train service operating between Uitenhage and Port Elizabeth. The Coega IDZ is serviced by the extension of some existing bus routes.

Scenario B – Trunk Bus Routes with Feeder System



This scenario assumes major improvements to the bus operation with priority lanes for trunk bus services being introduced on arterial roads in the main corridors, supported by local bus routes and feeder services to appropriately located transfer nodes. An express bus service

also proposed from Motherwell to the Port Elizabeth CBD via the N2 Freeway and Settlers Freeway. This scenario was tested with and without the existing commuter service between Port Elizabeth and Uitenhage. In the latter case (B2) the rail service is replaced with an express bus service which uses Uitenhage Main Road (TR 15) via a stop in Despatch. The trunk bus routes and express bus services are shown in Figure 5.2. network is supported by local bus and minibus services on other routes, which interconnect with the trunk bus routes at transfer nodes.

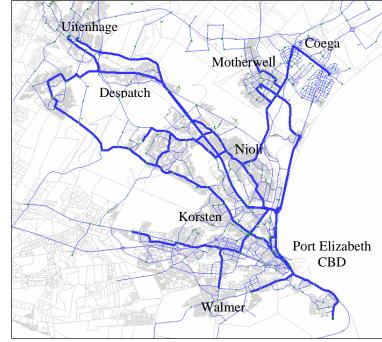
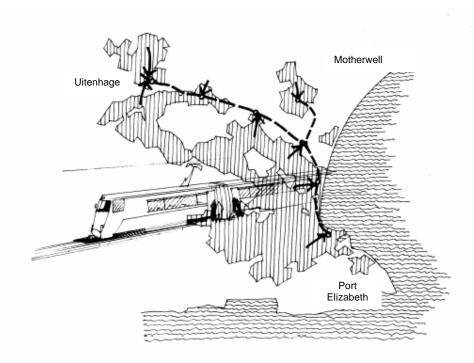


Figure 5.2 Trunk Bus Routes and Express Bus Services

The results from the travel demand modelling for 2020 showed that the Khulani Corridor between Motherwell, Njoli, Korsten and Port Elizabeth CBD was by far the busiest corridor, attracting about 90 000 passengers per day.





This scenario tests various options for expanding the rail service by constructing new lines as follows:

- C1 A new line from Aloes station into Motherwell, while continuing the existing service between Port Elizabeth and Uitenhage
- C2 The new line into Motherwell and a realignment of the existing line between New Brighton and Despatch.
- C3 A loop through Motherwell and the Coega IDZ with a trunk bus replacing the existing rail service between Port Elizabeth and Uitenhage.
- C4 The above scenario (C3) plus a new line along Standford Road to Uitenhage replacing the existing rail service between Port Elizabeth and Uitenhage.

These scenarios include trunk bus routes in corridors which are not dense enough for a rail service and the whole system is supported by local bus routes and feeder minibus services to stations. The trunk bus routes are those shown in Figure 5.2, but excluding the express bus service between Motherwell and Port Elizabeth via the N2 and the express bus service in the Standford Road corridor, as these will duplicate the expanded rail operation which is shown in Figure 5.3.

The travel demand modelling of the scenarios showed that the rail line between Motherwell, Coega and Port Elizabeth (C3) carried the highest number of passengers, about 30 000 boardings per day in 2020. In the same scenario, the Khulani Corridor trunk bus route via Njoli and Korsten carried about 70 000 passengers per day.

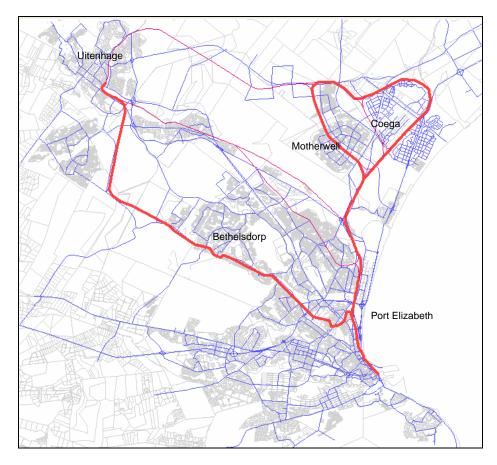


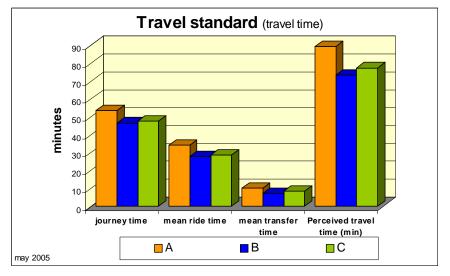
Figure 5.3 Expanded Rail Operation (Scenario C4)

# 5.3 Results from scenario analysis

The results from the scenario analysis were presented in a draft report to the Steering Committee in May 2005. The report included an analysis of the different scenarios including travel standard for passengers, an economic analysis of the operations and environmental

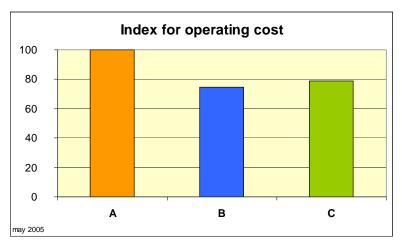
impact of the alternatives with regard to fuel consumption and emissions. The main results are summarised below.

Travel standard is measured by the perceived travel time which combines ride time with walking time, waiting time and transfer time. The adjacent graph shows that the travel time for



all passengers in Scenario B and C is significantly lower than the travel time for Scenario A, which represents the current public transport system with minimum intervention.

The analysis of operating cost shows a more efficient and thus cheaper operation for scenario B and C compared to the current structure as presented by scenario A. The difference between scenario B



without rail operations and C with rail operations shows a lower operating cost for a situation without rail in the perspective of year 2020. This result is also dependent on the assumption with regard to spatial development and travel demand forecast. With a more dense development along the rail corridors and with increased population and employment growth rate, scenario C with an improved commuter rail service could be justified in a longer term perspective.

The conclusions from the scenario analysis are as follows:

- An integrated public transport system with scheduled services including buses, minibus-taxis and commuter trains will best serve NMBMM. A non-intervention development as presented in scenario A should not be accepted.
- A system based on trunk bus route corridors and local bus and taxi services will best serve NMBMM up to 2015-2020, whereafter commuter rail services could be needed in the densified corridors.
- The Khulani Corridor should be the backbone of the future public transport system and will form an important part of a long-term strategy for land use densification and economic development of this corridor.
- An expanded railway system will not attract enough passengers to justify a large investment before about 2015 if a concentration of development does not take place along the rail corridors.

### 6. LONG TERM STRATEGY FOR PUBLIC TRANSPORT

## 6.1 Future travel demand

After presentation of the results of the initial scenario analysis to the Steering Committee in May 2005, a revised analysis was undertaken where comments made at the steering committee meeting were taken into account. Discussions were also held with the South African Rail Commuter Corporation (SARCC) with regard to their regional rail commuter planning which was in progress as part of the National Rail Master Plan.

A revised SDF has been prepared including more dense development along the public transport corridors which will have an influence on the travel demand, especially the usage of rail services. The development of Coega IDZ has also been revised with an assumed 40 000 job opportunities by 2020 (compared to the 30 000 used for the initial scenario analysis). The population forecast shows a total population of about 1,5 million inhabitants in NMBMM by 2020.

The future travel demand based on revised SDF population distribution for 2020 and new estimates of job opportunities at Coega IDZ is shown in Table 6.1.

Mode	2004	2020	Growth (% p.a.)	
Non motorised	460 000	650 000	2,2	
Public transport	400 000	700 000	3,4	
Private transport	550 000	800 000	2,0	
Total	1 410 000	2 150 000	2,6	

Table 6.1 Future Travel Demand (Person Trips per day)

The increase in total trips is approximately the same as the projected population growth rate of 2,5% per annum, but due to expected higher mobility associated with an increased employment rate as a result of economic growth, the number of motorised trips per person will increase and the non-motorised trips per person will decrease below the population growth rate.

The growth rate for public transport trips is modelled to be higher than the growth rate for private transport trips because of the expectation of a shift from non-motorised modes (walking) to use of public transport as household income increases and the public transport system is improved.

The growth in private car trips will increase at about the same rate as the population growth rate unless the strategy to improve the quality and frequency of public transport and reduce dependency on the private car is successful, which could result in private car use increasing at a lesser rate of 2,0% per annum, as shown in Table 6.1. This future travel demand is dependent on the introduction of a modern and attractive public transport system to meet the needs of commuters. The trend will otherwise be an increase in private transport with a shift away from public transport.

## 6.2 Alternatives for long term development

Based on the new population and employment figures the revised prediction of future travel demand has been used to analyse the different options found to be most favourable from the initial scenario analysis. These alternatives are:

## Trunk bus network without rail - Alternative B2

This alternative will include a trunk bus network and express bus routes together with feeder and local bus routes (operated by buses and minibus taxis) which will form an integrated public transport system.

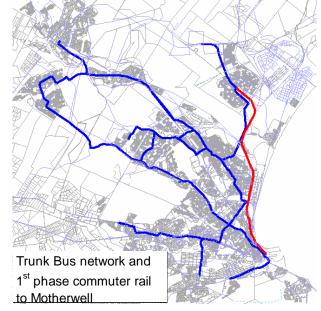
The trunk bus routes will form the backbone of the public transport system and serve the main public transport corridors. Express bus services will be introduced connecting Uitenhage, Motherwell and Coega with the city center. This network will be operated by normal and articulated buses.

A local and feeder system operated by buses and minibus taxis will serve the areas which are not close to the trunk Trunk Bus network and express bus routes

bus network and together an integrated public transport system will be created.

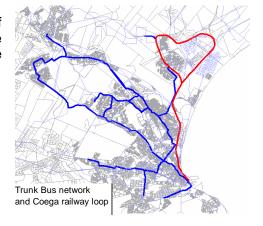
## Trunk bus network + Motherwell rail spur - Alternative C1

The alternative with a commuter railway service between the CBD and Motherwell will include the trunk bus network as in alternative B2 but the express bus service will be replaced by a rail service. A feeder system will serve the Coega area from transfers at Motherwell station and at a new station at Wells Estate.



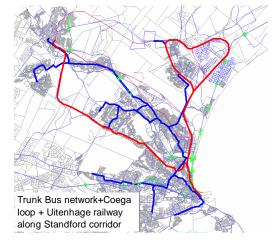
## Trunk bus network + Coega rail loop- Alternative C3

This alternative will be a further development of the railway service to Motherwell as in alternative C1 and extended to a railway loop through the Coega area.



## Trunk bus network + Coega loop + Standford rail corridor - Alternative C4

In this alternative commuter rail services will also be introduced along the side of Standford Road connecting to Uitenhage, replacing the trunk bus routes along the corridor as well as replacing the express bus route between Uitenhage and Port Elizabeth CBD.



The above alternatives were analysed for 2020 travel demand and a summary of the results in respect of travel standard (time) and operating cost are shown graphically below.

### Travel standard

The travel time analysis shows a slightly better standard for alternative B2 based on a trunk bus system without railway operations. The differences between the alternatives are small and the conclusion is that from a travel standard perspective all alternatives are similar.



Fig 6.1 Travel standard

## **Operating cost**

The operational costs for the alternative systems shows that alternative B2 will have the lowest operational costs exclusive of infrastructure costs. The costs for infrastructure will be considerably higher for the alternatives which include new railway services because the investment in new railway infrastructure will be in addition to the infrastructure needed for the trunk bus system, which is basically the same in all the alternatives studied.



Fig 6.2 Index for operating costs

#### **Conclusions**

From the revised analysis the conclusions are that all alternatives will give an attractive public transport system for the NMBMM area. An integrated system based only on a trunk bus system operated by articulated and normal buses, with a feeder and local system operated by smaller buses and minibus taxis will give a marginally better travel standard and less operating costs. The trunk bus network should be prioritised and investments in upgraded infrastructure should be part of the development of the public transport system.

The Khulani Corridor will form a central role in an integrated public transport system in all the alternatives studied. Important interchanges are defined at Njoli square, Korsten and Kempston Road. Other important nodes in the public transport system will be at Greenacres and Cleary Park connecting the Standford Road corridor with the Khulani Corridor.

The question whether a commuter rail system should be part of a future public transport system is dependent on the patronage attracted to the rail system. The analysis shows that an extensive railway development will not be justified in a 15-year perspective except maybe for Motherwell. At what time a commuter rail service could be justified between Motherwell and PE CBD is dependent on densification along the corridor. This is especially important along the railway corridor in Motherwell where a dense development is needed to justify investment in railway services. This needs to be analysed in more detail as part of the SARCC regional railway study. The conclusions from the SARCC railway study will be incorporated in the next update of the PTP. Until that time the land reserves for a future railway system should be kept as part of the public transport plan as well as part of the spatial development framework.

## 6.3 Recommended long term strategy and structure

The proposed long-term strategy for the NMBMM public transport system is based on the following important pillars:

## Develop an integrated and regulated public transport system

The long-term development should include a modern and attractive public transport system offering seamless travelling in an integrated and scheduled service. This will include a system with contracted operators, and integrated ticketing with through ticketing. It will also need establishment of a proper monitoring system and an information system to the public. All this will be gradually developed and the first contracts should include the necessary requirements to achieve the overall integrated system within the contract period.

### • Establish public transport corridors with high density development

The need for spatial development to support a modern public transport system will also be an important factor. With high density development along the public transport corridors the areas could be served by high frequency public transport and a better service will also attract more people to use the system. The public transport corridors will be important for denser development and should be included in both SDF and IDP.

## Introduce scheduled services on a trunk bus network operated by articulated buses and normal buses

The introduction of a modern public transport system will be based on scheduled service along defined routes. The backbone of the system will be the trunk bus network in the public transport corridors and these trunk bus routes will have a high patronage that justifies articulated and normal buses.

## • Introduce feeder and local bus routes operated by buses and minibus taxis

For the low demand network and for feeder bus routes to the trunk bus network there will be an extensive network operated by normal buses, midibuses and minibus taxis. The vehicle to use is dependent on the patronage of the route. The local and feeder bus service should be operated along defined routes and with a scheduled service but for sparse areas a area-based operation could be used.

## Develop interchanges as part of the city development

A system based on trunk bus and feeder bus operations needs to develop attractive interchanges where transfers could be made safe and secure. The interchanges will also be important nodes of attraction and should be located close to and part of the centres of the city.

#### Keep reserve for future introduction of railway services

Until the long-term role of the railway service is clarified, the possibility of developing the system to include an extended railway service should be guaranteed. This will include the current rail service to Uitenhage being kept and supported until long-term development is clarified. Development of new public transport routes should not be implemented parallel to existing railway service. The results from the SARCC regional railway study should be incorporated in the next revised PTP.

These basic pillars for the development of a modern and attractive public transport system should be used as overall guidelines for the spatial and infrastructure development of the city and should be included in the IDP.

### Proposed trunk bus network

The proposed trunk bus network will form the public transport corridors and is shown in Figure 6.3. The major corridors will be the Khulani Corridor from Motherwell to CBD, Standford Road corridor and Cape Road corridor and the major interchanges are shown in Figure 6.4



Fig 6.3 Proposed trunk bus network

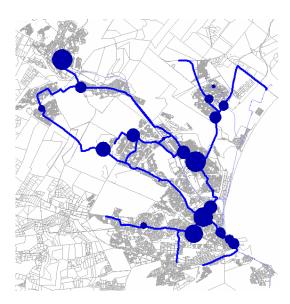
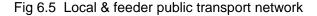


Fig 6.4 Major interchanges

## Proposed feeder and local network

The network for local and feeder public transport services operated by buses or minibus taxis will cover the whole metropolitan area as shown in Figure 6.5. The links between the feeder and local system to the trunk bus system will be concentrated at the interchanges as shown in Figure 6.4. For part of the network operation using minibus taxis will be important and the major taxi ranks are shown in Figure 6.6.





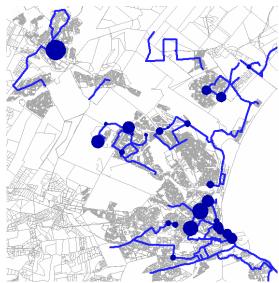


Fig 6.6 Major taxi routes and ranks

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#### Reserves for future rail service

The long-term public transport system could include an extension of the railway services with new alignments. The SARCC is responsible for railway services and analysis of the long-term development of railway services is part of the regional railway plan currently being prepared by SARCC. The alternatives studied for this PTP give some preliminary results for a 15 year horizon but for a long-term development a longer horizon analysis is needed. The modelling for the NMBMM PTP for a 15 year horizon concluded that an extended railway service will not be justified for the next 10 year period except for a possible extension to Motherwell.

The current railway service between Port Elizabeth and Uitenhage only operates during the week day peak hours. The railway is also used for freight transport and a future upgraded commuter service could be part of the long-term development. The future role of the Uitenhage railway and an alternative alignment along the Standford Road corridor will be analysed in more detail as part of the SARCC regional railway plan. Until the conclusions are made the existing railway operation should be kept and future development considered based on results of the regional railway study.

## Motherwell spur

Introducing a railway service could be done by a spur from Aloes station through Motherwell along the central corridor. The reserve for the railway alignment should be kept and could be developed into a busway until a railway service is justified by dense development along the corridor, which should take place independent of mode of transport along the corridor. The difference with or without rail to Motherwell will be the express bus route between the CBD and Motherwell that will be replaced by a rail service. The alignment through Motherwell can either be used for a rail service or a trunk bus service. The proposed trunk bus network and the commuter rail to Motherwell is shown in Figure 6.7.

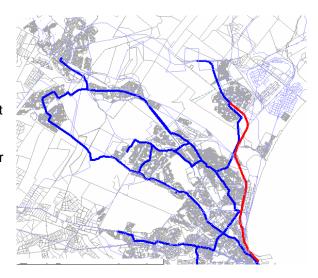


Fig 6.7 Trunk bus network and commuter rail service to Motherwell

#### Coega loop

The introduction of a railway service into the Coega IDZ needs to be supported by extensive development of the industrial area, which will only happen in a longer time perspective. The railway reserve through the IDZ should be kept until the long-term analysis by SARCC has been completed.

#### Standford Road corridor to Uitenhage

The Standford Road corridor will be developed as one of the main public transport corridors and could in the long term perspective be developed as a bus corridor or a railway corridor. The rail reserve should be kept until conclusions can be drawn based on the results of the SARCC regional railway study.

### • Uitenhage – Motherwell connection

A connection from Motherwell to Uitenhage has been discussed in a longer term perspective beyond 2030. Until conclusions are drawn based on the results of the SARCC regional railway plan, the railway reserve should be kept as part of the SDF.

## 6.4. Phased implementation

An integrated and modern public transport system will be implemented over a long period of time. The implementation will be dependent on the reform of the current system as well as funds for investment in public transport infrastructure and subsidies for the operation of the system. A phased implementation will be necessary and the major steps over the next 15 years will be first establishing a pilot route along the Khulani Corridor and then a scheduled service to Coega IDZ. Continued development with extension of the scheduled route operations along the public transport corridors could follow over a 10 year period until a fully developed public transport system would serve NMBMM.

#### 2006-2010

The phases for the first 5 years are proposed to include

- First trunk bus route in Khulani Corridor
- Scheduled service to Coega with distribution system connecting in Motherwell
- Introduction of scheduled services connecting the major tourism nodes

The trunk bus route in the Khulani Corridor will be the first example of a modern integrated public transport system in NMBMM. The route will connect Motherwell and PE CBD with a scheduled all day service. The Khulani Development Corridor runs from Motherwell to Korsten via Njoli Square. The infrastructure planned for the trunk bus spine route starts at the Motherwell Shopping Centre where facilities need to be established for modal interchange between the trunk bus service and local minibus/taxi services. The spine route extends through Njoli Square to Korsten. At Nioli Square other routes from the north and west will join the spine route which then moves towards the south via Njoli Road, Sheya Kulati Drive and Kempston Road to Korsten. In Korsten, a major public transport interchange is planned between the spine route to the Port Elizabeth CBD, and branch routes to Greenacres in Newton Park and to Cleary Park in Bethelsdorp via Standford Road. There will be minibus taxi services connecting connecting to the trunk bus route at the major interchanges at Njoli Square and Korsten.

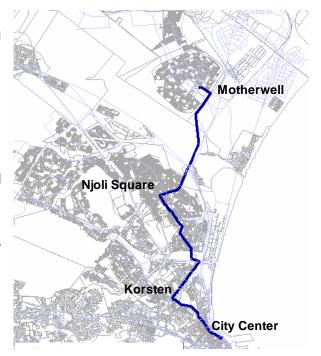
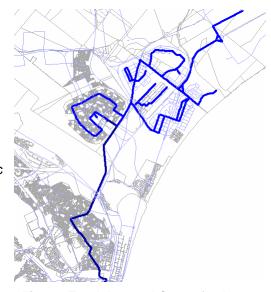


Fig 6.8 First trunk bus route in the Khulani Corridor

A preliminary analysis of the travel demand along the Khulani Corridor route shows a concentration of trips at the central spine of the corridor between Njoli Square and Korsten. A maximum peak hour load up to 1000 passengers for the first bus service introduced could be envisaged. This travel demand must be met by sufficient capacity, which justifies the use of bigger buses.

## Scheduled service to Coega IDZ

As the Coega IDZ develops, a scheduled public transport service will be gradually introduced as part of the NMBMM public transport system. The system may initially be a distribution system connecting with the trunk bus routes in Motherwell. Currently, contract services between service providers and construction companies are provided for construction workers. These services will be gradually integrated into the NMBMM public transport system. The route alignments will be detailed in the Coega Public Transport Plan and will be part of the integrated public transport system of the NMBMM. Due to the security requirements within the Coega IDZ, passengers authorised to enter secure areas in the IDZ will do so via closed/secure bus stops, thus ensuring integration with the NMBMM public transport



integration with the NMBMM public transport Fig 6.9 Trunk bus and Coega feeder network system. Secure access will be facilitated by means of doors, turnstiles and gate solutions as well as a smartcard system. The preliminary feeder network in the Coega IDZ connecting to the Motherwell and Khulani Corridor trunk bus route is shown on Figure 6.9.

#### Introduction of other scheduled bus services

After the first bus route has been established a further introduction of bus routes connecting the Khulani Corridor to major nodes at Greenacres and Walmer will be introduced. A network also connecting the major tourism nodes will follow the first implementation and will be an important part of the public transport service to serve the world sup soccer event in 2010. The scheduled service to be implemented by 2010 could comprise a network as shown in Figure 6.10.

#### 2010-2015

During the period 2010 – 2015 the public transport system will develop with the introduction of scheduled bus services and reformed minibus-taxi operations for the entire metropolitan area.

#### 2015-2020

During the period 2015-2020 the expansion of the trunk bus network throughout NMBMM will be completed. If there is dense development along the central corridor in Motherwell there could be a possibility of having a new commuter rail service introduced between Motherwell and Port Elizabeth CBD.

#### **After 2020**

For the period after 2020 the expansion of the trunk bus network will continue and/or more commuter railway services will be introduced. This has to be analysed more in detail for a 2030 land use scenario and will be part of the next revision of the public transport plan.

## 7. SHORT TERM IMPLEMENTATION STRATEGIES

## 7.1 Introduction

This section goes into greater detail to describe NMBMM's approach to commencing with the transformation process. This is dealt with through defining the strategies for transforming each of the public transport modes. These strategies are consistent with the vision, goals, objectives and policies outlined in Section 2.

The strategies are short-term in nature, as they provide direction for the implementation of this Plan over the period 2006 – 2010 in the context of the Long Term Public Transport Strategy outlined in Section 6. The strategies will be refined and redirected over time as the Plan is updated, the public transport system develops and critical issues change.

The strategies set out here will guide the Municipality and other public and private entities involved in public transport to plan, administer and manage the public transport system.

# 7.2 Strategy for transition

The 2020 Vision for NMBMM's public transport network and services provides a clear goal towards which the City can aim its implementation programme from 2006 onwards. The transition culminating in achieving the 2020 Vision will require a transition from the current situation until the ultimate system has been accomplished.

The Vision for 2020 is the best solution that can be conceived at the present time. It has been devised through a rigorous process of current public transport analysis, landuse/transport simulation and considerations of options, after which the preferred Scenario described in the Long Term Public Transport Strategy was selected. This does not mean, however, that the 2020 Vision will be implemented to the absolute letter, as the transport planning process requires that the Plan be reviewed each year into the future. This will provide ample opportunities for review and redirection of the Vision as time goes by, and will ensure that the appropriate public transport system is developed.

The key steps in the transition are as follows:

- Complete Public Transport Plan
- Obtain approval of Plan and buy-in from "governmental partners"
- Consult and negotiate with public and operators
- Complete formalisation of minibus-taxi industry
- Introduce effective enforcement
- Plan and implement the Khulani Corridor trunk bus system
- Define and implement further bus contracts
- Define and conclude area concessions
- Establish transport authority
- Extend commuter rail service to Motherwell when warranted

# 7.3 Passenger Rail System

The current rail service provides basic public transport between Uitenhage and Port Elizabeth, but serves a limited market due to an uncompetitive travel time and outdated rolling stock. In addition, the stations on the line provide access only to a small proportion of homes in the corridor within a walking distance from the stations, and feeder services are generally not provided.

Being owned by the SARCC and operated under contract to SARCC by Metrorail, the passenger rail system is planned, operated, maintained and financed independently of NMBMM or the Province, with the result that there has in the past been little co-ordination and integration of services. The perception by SARCC in the past that the rail passenger system is not a significant component of public transport in NMBMM has meant low allocations of funds for the upgrading of station infrastructure and rolling stock. This has led to the steady decline of passengers from about 10 000 daily boardings in 1996 to about 5 000 daily boarding in 2004.

The way forward for a public transport system where the railway will play an important role, needs upgrading of the railway service as part of an integrated public transport system. The future role of rail has recently been evaluated as part of the SARCC regional railway study. The preliminary outcome of the SARCC study is that a commuter rail service should be established in the Motherwell corridor, with the timeframe needing more detailed analysis of economic viability. Until a final decision is made it is proposed that SARCC continue with the current operation between Port Elizabeth and Uitenhage.

## 7.4 Scheduled Contracted Bus Services

Scheduled bus services have a vital place in the road-based public transport system, supplying demand-based services in corridors and areas of NMBMM not served adequately by passenger rail. Section 6 describes the vision for the future network in the Long Term Public Transport Strategy, which defines the hierarchy of these services, namely trunk bus, major bus and feeder/distributor bus.

It is NMBMM's intention that much of the road-based public transport system of services will be operated under formal contract, supplying services planned and regulated by NMBMM. This will have the effect of reducing the public transport market currently carried by minibustaxi on major routes from a level of approximately 75% of daily public transport trips to a significantly lower proportion.

The strategy put forward aims at delivering a framework for the conversion of existing bus and minibus-taxi type operations within a defined operating environment into either subsidized tendered, subsidized negotiated or commercial service (unsubsidized) services. The concept is not a new one, and has to date already been implemented in the South African cities to a limited extent. It has been implemented in a similar form in many countries where it has been necessary to move from an unregulated public transport system to a more planned and regulated one. Recent examples can be found in Curitiba, Brazil and Bogota, Colombia and also some of the more developed countries.

#### Strategies for scheduled bus contracts

The implementation of a scheduled public transport service needs a structure for contracts, procurement and financing. The strategies proposed as part of the PTP include:

• A phased implementation in co-operation with current operators. The provision of the services on the trunk bus, major bus and certain strategic feeder services must be planned by NMB, and decisions made on the introduction of these contracts. The main routes are defined in the PTP but must be part of the negotiations with the operators who will be responsible for the services. This process will be supported by monitoring patronage on current public transport modes so as to determine the market for new bus contracts. The decisions should be guided by an extensive consultation process with the current operators.

## Negotiated contracts for route operations

The routes to be operated under new contracts are to be decided by a negotiation process to allow minibus-taxi and bus-operators currently operating to form joint operating entities and be part of a new contract. The transformation will include both Algoa Bus Company and the minibus-taxi operators. The strategy will be to support current minibus-taxi operators and Algoa Bus Company to form new mutually owned entities that can form the basis of a contract for corridors with defined routes. These negotiations will be facilitated by NMB and ECDRT in co-operation. Only if these negotiations do not result in acceptable contracts, will an open tender process be used

The replacement of services currently provided by minibus-taxis on the various corridors by new contract bus services will require the removal of competing taxi operations. This will be necessary so that the modes do not compete for business. Competition would have the effect of reducing the passenger market from each competing mode, and causing conflict between the operators.

Certain conditions will be imposed, key ones being: (i) minibus-taxi operations and current bus-operations will cease on commencement of the contract by the new entity, (ii) the current minibus-taxi operators would either take up shares and form part of the entity, cease operations permanently or agree to operate on a corridor elsewhere by agreement with NMB, (iii) contract rates will be based on similar and acceptable market rates for bus contracts, (iv) the entity agrees that the negotiated contract will be valid for 5 - 7 years, after which the contract could be renewed either by extension of the negotiated contract or by tender, according to the decision of NMB and ECDRT.

## Recapitalisation of minibus-taxis:

The recap process will be part of the transformation of the current system and minibus-taxi operators being part of new contracts are proposed to be given priority in the use of funds for new recap vehicles.

## Formalisation of unscheduled services

The current mini-bus taxi operators will play an important role as part of a future integrated public transport system. The formalisation of the minibus-taxi industry is currently being managed and administered by ECDRT, through the Operating Licensing Board and the Registrar of public transport operators. It is essential that the formalisation process be carried out in a way that supports the implementation of the PTP.

## • Define operating areas not served by route operations:

The urban area will be subdivided into local and feeder operating areas, with unscheduled public transport services. It is the intention that operators will be provided with operating licenses, which will limit vehicles to specified routes within these areas, and prescribe the points at which passengers may be picked up and set down.

## Withdrawal of unlicensed vehicles:

A process must be undertaken whereby unlicensed vehicles are withdrawn from operation. The vehicles that will be identified as unlicensed will be withdrawn from operation by enforcement actions.

## Monitoring and adjustment of operations:

Throughout the duration of the contracts the services must be monitored both regarding the service offered and the patronage. This is necessary to ensure that the entity operates according to contract conditions and schedules. The monitoring of patronage will be used to analyse the need of adjustment of service and contract based on decreased or increased patronage on contract routes and for planning purposes.

## Enforcement of license conditions:

A process will be implemented whereby the compliance of operators with conditions of their operating licenses are checked on an ongoing basis as well as protect the contracted service from illegal competition along the route. This will be a task falling under general public transport enforcement and the responsibility for monitoring public transport services.

## Projects and programmes

In order to plan and implement bus contracts, continuous monitoring and planning is required, which will refine the strategy and detailed aspects of individual bus contracts. The following is required in the short term:

Refine the scheduled bus network plan: At this stage the proposals for the overall network are relatively well defined in the Public Transport Strategy explained in Section 6. It will be appropriate to review the network from time to time as the Public Transport Plan is updated. This will become more defined as data on patronage, consultations and a better understanding of origin-destination desire lines are revealed.

<u>Upgrade VISUM public transport simulation model</u>: The VISUM model has the potential to assist with accurate simulation of passenger demand, usage of services being considered, and scheduling of buses. The value of the model to manage public transport in NMBMM is significant, and it should therefore be continuously updated by: (i) Detailed data of public passenger movements on the current public transport and desire lines, obtained through regular detailed screenline surveys and interviews, (ii) The continuous adjustment and calibration of the model to ensure that the current movement patterns can be reliably predicted by the model, and (iii) The use of the model in consultation process with the public, users and operators.

Negotiation of first phase bus route contracts: It is of importance at this stage that the first phase contract services proposed to be commenced 2007/08 are designed and documentation prepared for the tender or negotiation, whichever is decided. For the first phase it is essential that the likely patronage of these contract services be realistically assessed, and a financial plan developed which will assist in the consultation process with the owners of the prospective entity. The current minibus-taxi operators who buy into the entity as owners and employees will require assurances that the income likely to be derived within the entity structure will equal or exceed that currently earned as an individual minibus-taxi operator.

For the negotiated contract to be successfully concluded, it will be necessary to have a properly designed contract and an acceptable financial plan (including fares to be charged and assurances of subsidy). These will be essential for the basis of the business model, and therefore the contract between NMBMM and the bus operating entity.

## 7.5 Minibus-Taxi Formalisation Process

The minibus-taxi industry continues to be subject to a formalisation process that was initiated after consultation and agreements at the National Taxi Task Team (NTTT) in 1996. These principles were fundamental to the transitional provisions later embodied in the NLTTA, which included granting of operating licenses on a route basis, size and quality of vehicles and the registration of taxi associations and operators.

The transitional processes are in 2005 still unfinished, and they must be concluded as a prerequisite of the public transport transformation process in NMBMM. This strategy sets out the manner in which this process fits into the Public Transport Plan, and more importantly the structural changes to be achieved.

#### Problems and issues

Road-based public transport services in NMBMM are largely dominated by the minibus-taxi. In NMBMM this industry is a 100% black-owned small business, employing about 6 000 people and operating a fleet of more than 2 500 vehicles. The industry is self-sustaining at an unacceptably low level from fares collected from passengers as no subsidy is paid to supplement operator costs/reduce passenger fares.

As a result of the low economic returns in the taxi industry, vehicle quality is generally below par, and vehicle design standards are unacceptable to ensure safety of passengers carried. Consequently, the national government has embarked on the taxi recapitalisation project, which over a period of 5-7 years will replace the taxi fleet with vehicles conforming to legislated safety standards.

The taxi formalisation programme in NMBMM, coupled with the implementation of scheduled bus services, will have the effect of reducing the fleet of taxi-type vehicles significantly as taxi owners become share-holders of contracted bus companies.

#### Strategies for formalising the taxi industry

The transformation of the existing taxi industry will have very significant impacts on the structure of the taxi industry, associations governing the industry and the operational areas and corridors served. This will of course involve intensive consultation with the industry, and their agreement with the principles of the Plan. The strategic interventions are as follows:

Obtain the backing and support of ECDRT: The formalisation of the minibus-taxi industry is currently being managed and administered by ECDRT, through the Operating Licensing Board and the Registrar of transport operators. Compliance with the conditions of operating licenses are further responsibilities of ECDRT, although enforcement of operating licenses may, in terms of legislation, be carried out by traffic enforcement components of NMBMM.

It is essential that the formalisation process be carried out as quickly and as efficiently as possible, as the implementation of bus contracts replacing minibus-taxi services can only follow the formalisation process. It is therefore essential that ECDRT delivers on its responsibilities, and agrees to the programmes and timescales contained in this Plan.

<u>Permit Conversion Process</u>: As a first step the Permit Conversion Process must be completed. This is a legal requirement in terms of legislation. In terms of NMBMM's OLS, the conversion process will have the effect of confining operators to a maximum of five local short-distance routes and three long-distance routes.

<u>Withdrawal of unlicensed vehicles</u>: A process must be exercised whereby unlicensed vehicles are withdrawn from operation. The vehicles that will be identified as unlicensed (i.e. not in possession of a legal permit or operating license) following the Permit Conversion Process.

Recapitalisation of minibus-taxis: Minibus-taxi operators have the expectation that their vehicles will replaced by new specification "recap" vehicles. Candidates taxi owners will be eligible for financial assistance through a scrapping allowance of R50 000 for 16-seater minibus-taxi vehicles that are withdrawn from service.

The deployment of the new specification vehicles so brought into service will be subject to an operating licence valid for 5 years. NMBMM will determine the routes and other conditions pertaining to each new vehicle. These conditions will be reflected in the operating license issued to the operator by the Operating Licensing Board. In general, recap vehicles will be confined to a single route within the urban area, or may obtain an authorisation to operate a long distance service. These services may be subject to other conditions such as the fares charged and the schedule operated.

Recap vehicles may also be used under contracts concluded between NMBMM and bus operating entities, where vehicles of the recap size can be used on certain routes and operating times. These arrangements will typically take place where an existing operator in possession of a recap vehicle agrees to participate as a shareholder of a company formed to participate in a formal bus contract.

<u>Transformation and role of associations</u>: The current system of associations established in the NLTTA formalised the taxi industry into 10 registered taxi associations in NMBMM. These associations perform a valuable role in providing structure in the industry. The associations display considerable responsibility by organising the industry in such a way that it responds to the passenger demand on movement corridors.

The transformation of the public transport network and services as envisaged in terms of this plan will have the effect of reducing the role of associations over the long term as minibustaxi type services are transformed into contracted scheduled services. This will provide the opportunity for many taxi operators to move from being a member of an association operating a taxi type service into one of being a bus operator within a formal company structure.

It is envisaged that the institution of associations will continue to be an appropriate means of coordinating and giving structure to groupings of operators given licence to operate as unscheduled feeder services in defined areas, as described below. Associations would further be a suitable structure for the long distance transport operators who operate intertown or inter-city.

The association system would be an appropriate means of ensuring that the operators who belong to these structures will comply with legislated provisions governing associations, such as the requirement to form committees, hold AGM's and comply with a standard constitution and code of conduct.

## Projects and programmes

The minibus-taxi formalisation process requires urgent actions to direct the allocation of routes under the Permit Conversion Process, and to designate the routes and conditions under which recapitalised vehicles will operate.

### Current public transport databank

This will essentially require up-to-date information of current operators, associations, routes and services. This must be accompanied by planning of supply and demand profiles on all routes currently operated. The exercise was carried out in 2004 to update the CPTR.

#### Develop minibus-taxi based OLS

The operating licensing strategy gives substance to NMBMM's plan for the future deployment of the minibus-taxi unscheduled services through the transition period from 2006 onwards. This must guide the City in its programme of the first phase bus contract implementation, the Operating Licensing Board in its allocation of operating licenses for recapitalized vehicles, and the redeployment/withdrawal of operating licenses in cases where minibus-taxi vehicles are required to cease operation on contract bus corridors.

## Enforcement for compliance with operating licenses

The system can only be regulated according to NMBMM's Public Transport Plan if all operators comply with the operating licenses issued by the Operating Licence Board. This required an effective enforcement group, with powers and resources sufficient to monitor compliance, arrest and prosecute operators that do not comply. NMBMM must, together with the ECDRT, develop a strategy and provide funding and support for this initiative.

## 7.6 Unscheduled feeder and local bus services

The changing role of public transport in NMBMM will lead to the opening up of a niche market for those operators who choose to continue delivering minibus-taxi type services. These unscheduled feeder services will be redeployed away from routes and corridors along which they would compete with formal contracted bus services. Their role will be confined to the shorter distance feeder services that provide the important role of penetrating areas distant from trunk and major bus routes, but are within walking distance of the feeder services.

The transformation of the minibus-taxi industry so redirected will involve a transitional approach, intensive consultation and careful monitoring of operations.

#### Problems and issues

The market for scheduled contracted bus services will increase over time as minibus-taxi type services are transformed into formally regulated contracts, and the minibus-taxi industry assumes the role of short distance unscheduled feeder bus services.

The role of associations, while continuing to be important in NMBMM in the future transformed public transport system, will reduce relative to their current powerbase. This will coincide with the development of companies established to take up bus contracts, and which will absorb a significant proportion of the current minibus-taxi operators and their vehicles.

### Strategies for management of unscheduled feeder services

<u>Develop the OLS for unscheduled services</u>: The Public Transport Plan places emphasis on the delivery of services through a "core" network of trunk bus, local bus and feeder/distribution bus services. This network will leave substantial areas of NMBMM without walking distance access to the core network, as low population densities will not support scheduled high-capacity bus services everywhere. The OLS must devise a plan to

identify operational areas, which may be declared, and within which areas rights will be granted to associations to provided services.

<u>Define operating areas</u>: The urban area will thus be subdivided into feeder operating areas, within which the defined fleet of vehicles will provide public transport services. It is the intention that operators will be provided with "area-based" operating licenses, which will limit vehicles to specified routes within the area, and prescribe the points at which passengers may be picked up and set down. These area based services will be "commercial services" charging fares that will sustain a service without direct subsidy payments provided through contracts. This does not preclude a sub-contracting arrangement between a contracted service and individual operators forming part of an area commercial services arrangement. This could provide for reward to area-based operators contributing towards higher patronage on the contracted service.

Regulate areas services and monitor compliance: NMBMM will implement a process whereby the compliance of operators with conditions of their operating licenses and the OLS are checked on an ongoing basis. This will be a task falling under the general responsibility for monitoring public transport services, which include bus contract monitoring.

## Projects and programmes

The implementation of the area-based commercial service agreements will require a planning and consultation process, which should be undertaken in the following sequence:

### Planning:

The first requirement will be to develop an operational plan that defines the services needed as part of the overall public transport network. This will require the analysis of travel demands, origins and destinations, so the capacity for services can be determined. The higher order contracted scheduled services network, frequency and scheduling will need to be planned in tandem, so that the route-based and area based systems are properly integrated. Of importance are the passenger volumes required to be handled at transfer points, and the scheduling of services so at to minimise waiting times.

## Consultation with industry:

The establishment of area-based services will take place only after considerable consultation and negotiation with the existing minibus-taxi industry. The operators will be prepared to take up their commercial service operations provided their business is sustained at an acceptable level. This will require the development of a business model for the operations, based on the passenger market available, income derived and costs of operations.

# 7.7 Learner Transport Services

In terms of the National Land Transport Transition Act, 2000, the transportation of learners is classified as public transport. The Eastern Cape Education Department enters into contracts with some operators to provide transport for learners who live further than 5 km from their school. These contracts include recent appointments to minibus-taxi operators, who provide transport to and from schools. Applications for operating licenses through the Operating Licensing Board must be made before minibus-taxis are used as learner transport services.

Learners are expected to make use of the mainstream public transport services and this will be borne in mind by NMBMM when designing the public transport system. Special fare subsidies for learners using public transport need to be reviewed by ECDRT and DOT, because no subsidy is currently provided for learners.

## 7.8 Provision for Special Needs Passengers

Many existing and prospective public transport users in NMBMM have physical, mental or age-related circumstances that inhibit their unrestricted use of the existing public transport system. These "special needs passengers" must be identified and provided for so that they may have reasonable access to the public transport system.

#### Problems and issues

Investigations which formed part of the Moving South Africa initiative defined three categories of special needs passengers, which clearly show that special needs of passengers go beyond the needs to accommodate wheelchairs.

The categories include "life cycle passengers", who include children below 5 years of age, the elderly older than 65 years and pregnant women. Impaired and functionally disabled passengers include the mobility disabled, sight and hearing impaired and the mentally handicapped.

## Strategy for special needs passengers

<u>Determine the status quo</u>: The first step towards providing for special needs passengers is the understanding of the size of the demand for accessible transport in NMBMM. This must be established through the appropriate investigations.

<u>Establish consultative structure</u>: Forums representing people with disabilities are well organised, and should be included and consulted in the process of devising the strategy.

<u>Incorporate the principle of "universal accessibility" design</u>: The incorporation of the necessary access to public transport services by special needs passengers often requires little additional expense when building facilities for public transport. It is essential that the "universal accessibility" principle is adopted for all aspects of operational planning, design and implementation.

## 8. OTHER TRANSPORT SERVICES

## 8.1 Metered Taxi Services

Metered taxis currently cater mainly for the tourism market and remain a largely untapped resource to complement and "fill in" the gaps in the public transport system. This section deals with the positioning of the metered taxi mode, and proposes a set of strategies to encourage its use in NMBMM.

#### Problems and issues

Metered taxis have a low profile in NMBMM, and base their operations mainly at the Port Elizabeth airport where there is some opportunity of serving the tourism market and South African-based business. More taxis operate via a radio call or cellphone system than from a fixed rank, and few are hailed while on the move. Most respond to business through clients hailing business by telephone. These operators rely on business contact passed on by advertising brochures at the airport, guesthouses and hotels. The latter are often illegal operators and have little knowledge or regard for the need to apply for operating licenses.

Neither NMBMM nor the Operating licensing Board have much understanding of the need for metered taxis, or the extent of the vehicle fleet and its operations. The metered taxi mode is in fact considered a low priority either in planning or in regulation, as the challenges in transforming other modes are more acute.

## Strategies for development of metered taxi services

The metered taxi mode must be transformed and encouraged so as to better service the tourism market and fill the public transport "gaps" in the local market.

A database of all operators, vehicles owned and their operating circumstances must be developed, and this must be used to obtain a clear and detailed understanding and record of all operators, both legal and illegal, and the markets being serviced.

Hotels and other tourism organisations must be made aware of the role of metered taxis, and services that have encroached unlawfully must be removed. This includes shuttle buses that operate metered taxi functions unlawfully and minibus-taxis.

The capacity to perform effective enforcement in relation to metered-taxis needs to be strengthened at a local government level.

# 8.2 Tourism Transport Services

This section deals with those unscheduled tourism public transport services that consist of the hire of buses by groups conveyed on a pre-defined journey and for which a group fare is charged.

#### Problems and issues

The tour bus industry is a vital one in the context of the growing tourism industry in the Eastern Cape and regulation must focus on the maintenance of an adequate number of vehicles of the highest quality.

## Strategies for tourism transport

The City must establish the status quo of tourism transport operators, the fleet based in NMBMM and the utilisation of the vehicles, so that a definitive strategy may be developed. The strategy must be devised in consultation with tourism bodies in NMBMM and in the larger Eastern Cape area.

## 8.3 Long Distance Services

Public transport conveying passengers beyond the immediate confines of NMBMM or purposes other than work forms the essence of the definition of long distance public transport. This section identifies the need to more fully understand the nature and extent of these services, and to formulate a strategy towards managing this form of transport.

#### Problems and issues

Due to the focus placed on minibus-taxi formalisation and on statutory planning, little attention has to date been given to this significant industry. Services can be categorised into:

- Long distance services between towns in neighbouring municipal areas, generally provided by minibus-taxi vehicles.
- Intra-provincial services between major centres within the Province, such as between NMBMM and East London.
- Inter-provincial services between provinces, such as between NMBMM and Johannesburg. There is a marked difference in quality and pricing between the luxurytype bus services and the budget-type bus services, with the latter mainly catering for workers in the large centres having dependent families resident in the Eastern Cape.

The fall-off in the use of long distance passenger rail services to most parts of the Province has resulted in the increase in road-based long distance public transport.

Infrastructure for boarding and alighting are used in a manner determined by the operators, with permission often not sought from NMBMM, and with little regard for the convenience of passengers. Connecting services where long distance passengers must transfer to local public transport services are often mismatched so that passengers are subject to delays and inconvenience.

#### Strategies for long distance transport

As little information is available for the management of long distance services, the following strategies are proposed:

 <u>Develop understanding of industry and operations</u>: Forthcoming surveys of public transport will be extended to collecting data on the fleets used for long distance public transport, the type of services offered, the destinations served and the ranks and infrastructure available. Vehicles based in other municipalities and other provinces must be included. This information must extend to the conditions stipulated on operating licenses.

 <u>Develop an operational plan</u>: This plan will determine the need for long distance transport for persons resident in NMBMM, and set out a framework for long distance public transport. This must include the integration of the services, their inter-connection with local services, and the locations where passengers board and alight, and an infrastructure plan to identify the needs at ranks.

## 8.4 Walk Access to Public Transport

This section deals with the important aspect of the walk and cycle modes, and the need for these to be recognised as part of the public transport system. In particular, the walk mode accounts for 33% of all daily person journeys, as indicated by the 2004 Travel Survey (public transport accounting for 26% and private transport 41%).

#### Problems and issues

Included in the 26% of public transport journeys is the requirement that the passenger of every journey undertaken by public transport must walk to the nearest public transport access point. This part of the journey should be safe, comfortable and convenient if the whole public transport journey is to be acceptable.

The mode of cycling is little used in NMBMM, but has a major potential as a form of non-motorised transport. The 2004 Travel Survey indicated that virtually no trips are made in NMBMM by bicycle. The bicycle could become a solution to the vexing problem of providing accessible affordable transport in peri-urban areas where motorised public transport may be prohibitively expensive.

### Strategies for Non-Motorised Transport

- <u>Develop walking routes to public transport:</u> Protected walkways and sidewalks are equally important in urban and peri-urban areas, and are essential to render the pedestrian safe, given the high pedestrian fatality rate in NMBMM. The City must give due attention to routes, crossings and lighting providing access to public transport access points such as bus stops, rail stations and other public transport terminals.
- <u>Establish cycle route network:</u> Cycling must be promoted by identifying opportunities for affordable transport, and a means of transport demand management. This should commence with identifying the use and potential for cycling in NMBMM, and the conception of a bicycle network linking residential areas, schools, shops and places of work. A sidewalks and cycle track masterplan has been prepared by NMBMM and the process of implementation has commenced.

## 9. MANAGING THE PUBLIC TRANSPORT SYSTEM

## 9.1 Enforcement and Monitoring of Public Transport Operations

All sectors of the public transport industry must be made to comply with the laws requiring public transport operating licenses, roadworthy vehicles and licenses drivers. The transformation of public transport services as envisaged in this Plan will need strong and concerted enforcement, the political support and the resources.

#### Problems and issues

Unfortunately, the enforcement of the relevant laws has been inadequately applied in NMBMM for many years, and this has led to a situation where many public transport operators provide illegal transport and use vehicles of poor quality. Attempts to bring about law enforcement have been ineffective and a commitment to achieving the required levels of enforcement must be made as soon as possible.

The fragmentation of traffic law enforcement, and particularly the uncertainty as to who is responsible for public transport law enforcement – the NMBMM or the Province – has resulted in the current situation of inaction.

### Strategies to establish effective public transport enforcement

- Gain acceptance for law enforcement to support the transition of the public transport system: The current taxi operations have to be transformed into a regulated operation. Law enforcement will be necessary to support legal operators thereby encouraging them to invest in new vehicles and maintain vehicles in a roadworthy condition. Introduction of effective law enforcement will be one of the more important issues in the short term. This will require the full recognition of both NMBMM's Council and the Province that substantially more resources must be provided for enforcement to take place.
- <u>Establish a unit for enforcement of public transport</u>: The enforcement of public transport operations (i.e. compliance of operating licenses) can be undertaken by transport inspectors appointed by the MEC or by traffic officers appointed by the municipality. NMBMM will liaise with the Province to determine the best means of resourcing the unit and directing its operations. NMBMM must initiate the establishment of the unit.

# 9.2 Safety and Security

Passengers using public transport have a basic right to expect that they can travel free of fear, discrimination and intimidation. At present, this is not the case on all public transport vehicles or at all places of access. This section draws attention to this basic need, and proposes a strategy for ensuring safety and security for passengers.

#### Problems and issues

Almost every facet of the public transport system is affected by crime and violence, in many cases causing passengers to reject the use of public transport. Many passengers who are captive to the use of public transport either choose an alternative mode based on fear, or are traumatized by violent actions on trains, buses and minibuses.

Public transport vehicles, stations and interchanges are often vandalized, causing the loss of assets and resources that could be better utilized. The condition of certain buses minibus taxis is a further concern, as many are unroadworthy and unsafe, leading to loss of life and injury.

## Strategies for improved safety and security

- Resolve to restore law and order: Law and order must be brought about on board public
  transport vehicles and at stations and terminals, so that passengers have a sense of
  safety at every point in their travel. This will require commitment of the NMBMM Council
  for its support, both through financial and visible means.
- <u>Co-operation of law enforcement agencies</u>: NMBMM, in co-operation with public transport operators, the Province and the SAPS must investigate and draw up a joint strategy to ensure the protection of passengers from crime and violence on trains, buses, minibuses and at interchanges.
- <u>Provide resources</u>: The appropriate human resources, surveillance equipment and other facilities needed for restoration of law and order and the continued development of a crime-free travel environment, must be identified and deployed by the Province, working in co-operation with other authorities involved in the operation or management of services.

## 9.3 Management of Public Transport Interchanges

As indicated in section 3, there are 34 taxi ranks in NMBMM of which only 14 are considered as formal ranks. The other 20 taxi ranks are classified as informal ranks. There are terminals used by buses in the NMBMM area, these being in the Port Elizabeth and Uitenhage CBDs. In addition, 11 railway stations are located on the Uitenhage – Port Elizabeth passenger line.

#### Problems and issues

Formal management of these facilities by NMBMM (or SARCC in the case of the railway stations) is essential to the proper organization, security, marshalling, trading and access to these facilities. The status quo for road-based ranks and interchanges is that the public transport operators carry out much of the management of these facilities with little interference or intervention of NMBMM.

A further problem is caused by attempts to provide ranks for different operating associations, giving rise to multiple small ranks scattered throughout the NMBMM. These ranks have been allowed to the detriment of orderly management of streets, many of which have been taken over by minibus-taxi associations. Vehicles not in service during off-peak periods park in these areas, preventing the use of scarce space for on-street short term parking.

In addition, the scattering of ranks throughout the NMBMM area does not encourage the integration of public transport services so as to allow efficient transfers for passenger from one service to another.

## Strategies for improved management of facilities

- Re-instate control of facilities by NMBMM: The first action by NMBMM must be to issue
  policy statements to the effect that NMBMM will in future be taking full responsibility for
  the upkeep, regulation and management of all public transport interchanges and ranks in
  the municipal area. This will be consistent with the intention to regulate the public
  transport system.
- <u>Develop rationalisation plan for interchange locations</u>: The multitude of scattered ranks will be rationalised by strategically located consolidated interchanges that integrate passenger rail, major and feeder bus and area-based feeder services. The new interchanges must primarily promote efficient transfers between public transport modes, and also provide access to the origins and destination of public transport journeys. These new facilities must form part of the land use planning of the City and ensure that shopping and other opportunities are provided for the convenience of passengers.
- <u>Develop interchange management plans</u>: For each major interchange required a public transport interchange management structure, orientated around regulating movements in and out of the interchange, and ensuring a positive and pleasant passenger experience.
- <u>Public private partnerships</u>: Opportunities will be sought to enter into PPP arrangements whereby certain of the functions at facilities (e.g. cleaning and security services) can be outsourced to the private sector under contract to NMBMM.

## 10. FIRST PHASE IMPLEMENTATION PROJECT

### 10.1 Introduction

The first phase implementation will start the process of reforming the public transport system. The first established operation will be an example to show the benefits to the public of a scheduled service and defined route operation. It is important that the first steps are well prepared and with strong political support as well as financial support. The first route for operation will also be an example to the public transport industry including both current minibus taxi operators as well as bus operators and must constitute the model to be used when developing the future public transport system. Emphasis has to be made that the first phase implementation will be supported by all stakeholders and a massive consultation process has to take place.

## 10.2 Bus and Taxi Contract Strategy

The public transport system will operate under contract and a clear strategy must be understood and accepted as the starting point. The PTP includes an integrated public transport system with scheduled service on fixed routes<sup>1</sup> or taxi-services within areas<sup>2</sup> with defined stops for boarding and alighting. The routes will form the overall public transport system with an extensive route network. The taxi-service based on areas will be used for internal trips within the area and for feeding to the fixed routes operated by bus or taxi.

The strategy outlined in Section 7 explains the intention to implement public transport contracts, which over time will largely replace the current operations. The strategy proposed for the first public transport contracts is a negotiated process with current operators. The transformation of the public transport system relies on the participation of the minibus-taxi industry, which will be given the opportunity of converting their current method of operation and business into one of a formal bus operator. The opportunities for future types of operations have been discussed in Section 6, which defines the trunk, local and feeder public transport operations.

#### Proposed contract strategy

There is a need for a detailed strategy to be agreed on at the local level as well as at the provincial and national level. This section sets out the proposed strategic plan for designing, negotiating and commencing operation of these bus contracts. This proposal has to be confirmed by the authorities responsible, NMB, ECDRT and NDoT, after a consultation process with stakeholders involved.

The strategy for the first round of contracts will be based on a negotiation process with current operators which will be conducted jointly by NMB and ECDRT. ECDRT will be the formal contract entity until a Transport Authority is established for the NMB area. Once the contracts are completed all public transport services within NMB should be part of an integrated public transport system. A phased implementation of scheduled services is proposed with Khulani Corridor as a first pilot. The Khulani Corridor should be in operation with full service by 2010 to serve the 2010 FIFA World Cup (with extended operations during the event period)

<sup>&</sup>lt;sup>1</sup> A fixed route is defined by the route alignment and stops to be used.

<sup>&</sup>lt;sup>2</sup> A area based operation is defined as a geographical defined area within the operations is allowed to pick up and leave passengers only at defined stops

The steps in implementing contracted services will include the following:

- New contract for Algoa Bus Company. Algoa Bus Company is currently operating on a temporary contract and this contract has to be replaced by a new contract. This contract will be a negotiated contract. The contract to be negotiated with Algoa Bus Company must be in line with the PTP definition of routes to be operated by bus. The contract should include a transition period and present a model for transformation in line with the PTP. This will also include a definition of what part of the current operations should be excluded over time and be part of new contracts. The transformation of Algoa Bus from the current situation as a "section 21" company into a BEE-company will be part of the new contract.
- Khulani Corridor contract. The Khulani Corridor contract is proposed to be operated by current operators forming a special entity formed by Algoa Bus and current taxi operators. The contract for Khulani Corridor will be the first contract in line with the PTP and should be separate from the rest of the bus contract to be negotiated with Algoa Bus and give "exclusive right" for operating the Khulani Corridor. The first contract could also include the bus service to Coega IDZ and feeder service within Motherwell but has to be decided on as part of the negotiations. The contract could be extended over time involving more taxi-operators and an increased service. The Khulani Corridor contract is proposed to be negotiated simultaneously with negotiations for the Algoa Bus contract covering the rest of the NMB area.
- Contracts for other corridors. Other corridor in the proposed bus network could form new contracts and the current bus operations in these corridors can be "taken out" of the Algoa Bus contract in stages over time. This should be confirmed in the new contract with Algoa Bus and could be defined as a % of the NMB area operation to be transformed into new contracts by defined years. These corridors are proposed to be operated under separate contracts like the Khulani Corridor, with new established companies in co-operation with current mini-bus taxi operators. A number of new companies are foreseen to be established over time by this process.
- Transformation of the taxi-operations. The current mini-bus taxi operators will play an important role as part of a future integrated public transport system. The formalisation of the minibus-taxi industry is currently being managed and administered by ECDRT, through the Operating Licensing Board and the Registrar of transport operators. It is essential that the formalisation process be carried out in a way that supports the implementation of the PTP. The taxi-operations are proposed to be gradually transformed into "scheduled services" with fixed routes and/or areas for service. This should be part of the transformation into contracted services. For fixed route services it will be done in co-operation with taxi-operators invited to form a "new company" together with Algoa Bus, like the first contract for Khulani Corridor. For non-scheduled services it could either be part of the contract or operators will be provided with operating licenses specified within these areas, which prescribe the points at which passengers may be picked up and set down. The recap process will be part of the transformation of the current system and minibus-taxi operators being part of new contracts are proposed to be given priority in the use of funds for new recap vehicles. A process must be exercised whereby unlicensed vehicles are withdrawn from operation by enforcement actions.

The issues to be discussed and agreed on by NMBMM and ECDRT are as follows:

- The actions to be taken to finalise the taxi formalisation process.
- The contract and procurement process to be used
- The manner in which prospective operators, including existing minibus-taxi operators, are to be drawn into the process of public transport contracts,
- The capacity of the three spheres of government to support the contract payments (i.e. subsidies) of public transport contracts,
- The continuing role of taxi associations once the public transport contracts have been concluded.

The details of the public transport contracting process to be used has to be developed and will be a priority planning project in 2006.

## Political support and leadership

The transformation process will require concerted efforts and strong political leadership which will need the full and visible support of the Council. The identification of a Councillor who is informed and committed to the transformation process will be essential. This "champion" will have the task of being the spokesperson for the political leadership of NMB with regard to the Public Transport Plan.

### Planning and marketing the Khulani Project

The conceptual plan for the operation of the feeder/distribution system in the Khulani Corridor will be developed in greater detail. This will be important if NMBMM is to effectively communicate the components and benefits of the new services to the public transport users, business and industry, and the general public of NMBMM.

It is also necessary to construct a business model for the proposed new feeder/distribution contracts, which can identify the infrastructure, buses, maintenance, office and other systems that a bus company needs, and also the human resources involved in the company. The investors drawn from the previous minibus-taxi industry will need assurance that it will be to their benefit both financially and in terms of the quality of their working environment that there will be an advantage in buying into the new companies that will operate the contracts.

## Consultation with stakeholders

Once there is clarity on the detailed parameters of the bus contract components for the Khulani Project, a process of consultation will commence. This will start with the targeting of interest groups, and may require a local transport forum specifically established to consider the transition from taxi operations to bus contracts and later the quality of service delivered.

The consultation process will initially be aimed at all stakeholders, and lead to the resumption of discussions with the minibus-taxi leadership. After the wider consultation with stakeholders, discussion will lead to a more informed basis for negotiation on bus contracts.

## Conclusion of contracts and gearing up for operations

The signing of the contract with the entity or entities will mark the start for a number of key preparatory activities for the company. The entity must take the necessary steps to order the fleet of buses, and enter into the necessary financial contract; the buses once supplied will require operating licenses, provided by the Operating Licensing Board; the entity must establish its structure and staff complement, and undertake training for the functions required of the entity; liaison will be essential for the operation of the through ticketing system, which will jointly involve NMBMM and the entity.

## Implementation of supporting infrastructure

Planning, design and implementation of infrastructure to support the bus contracts must be carried out in advance of the commencement of the bus contracts. The period of negotiations and preparations for the start of operations will allow sufficient time for these projects. The key projects will be the construction of interchanges, bus embayments, shelters and associated pedestrian routes, information systems, signs, roadmarking and printed timetables.

## Monitoring and management

The contract must be strictly monitored throughout the contract period, and the entity will be penalized should specified contract conditions not be complied with. NMBMM will be responsible for this function, possibly using a monitoring firm. In addition, NMBMM will manage the finances of the contract, and make payments to the entity in accordance with the conditions of the contract.

## 10.3 Khulani Corridor Development

The first phase implementation of scheduled bus route service will be along the Khulani Corridor as described in Section 6.4. A business plan will be the next step in implementing the service and will be developed in 2006 as part of the negotiations as presented in Chapter 10.2. The outline of the business plan will consist of a proposed operation with a proposed timetable in principle, buses needed for the operation, staffing and investments required.

A first draft analysis has been finalised as part of the Khulani Corridor study and the conclusions drawn are presented here.

The overall Khulani Development Corridor Project is aimed at integrating the industrial/commercial area of Korsten with residential suburbs of Kwasakhele, New Brighton and Motherwell. By improving public transport services along the corridor people will become more mobile. In addition, enhanced accessibility will support development of activity nodes, which will encourage business development in those areas, which in turn will stimulate economic upliftment of the area.

From a transportation perspective, the goals of this current project are:

- Improved access between the corridor and the metropolitan transport network
- Improved public transport facilities and services in the corridor
- Promotion of public transport in conjunction with sustainable economic development
- To promote and facilitate pedestrian movements

The first contracted trunk bus line will operate between Motherwell and the CBD serving along the Khulani Corridor passing Njoli, Kwazakhele, New Brighton and Korsten. The basis for the operation will be a full day scheduled service.

From the centre of Motherwell the bus line will follow Dibanisa Road and Daku Roads to Njoli Square, which is the central commercial and transport node of Kwazakhele area. From Njoli Square the bus line follows Njoli Street and Norongo Road to New Brighton. This section of the route is currently being upgraded to facilitate the accommodation of the new public transport system. In New Brighton the bus line shifts over to Ngesi and Mendi Roads via Ntshekisa passing Embizweni In southern New Brighton after crossing Ferguson Road the bus line moves over to Kempston Road via the new road link passing over the national freeway, N2.

Following Kempston Road the bus line reaches Korsten, which is the location of one of the most important transport modal interchanges of the metropolitan area. The interchange facilitates possible transfers in

MOTHERWELL C W.M. Mobil Rosel
Ring Rosel
Tyrisks Street

Rusinga Street

Rusinga Street

Rosel Stree

almost all directions within the city from Korsten the bus line links into the CBD via Harrower Road and Govan Mbeki Avenue and terminates at Russell Road.

A preliminary analysis of the travel demand along the proposed route shows a concentration over day at the central spine of the corridor between Njoli Square and Korsten. A maximum peak hour load up to 1 000 passengers for a first bus route introduced could be envisaged when the operations is fully developed. This travel demand must be met by sufficient capacity, which justifies the use of bigger buses.

The operations to meet the demand during peak hour give a high frequency with a bus every 5 minutes when fully developed but a phased implementation is proposed starting with a 15 minute headway as a first phase implementation. The operation needs a subsidy to ensure a full day scheduled service with modern big buses. As part of an implementation a business plan will more in detail analyse the economics as well as requirements in more detail and will give guidance to the procedure to follow and the negotiations of a contract for service.

# 10.4 Operating Licence Strategy

The operating licence strategy will be revised to support the reform of the public transport system. New and renewed operating licences will not be accepted for routes parallel to planned trunk bus routes. The recapitalisation will be part of the strategy and recap vehicles will be prioritised for planned contract services.

## 11. INSTITUTIONAL STRUCTURES

## 11.1 Institutional Role of NMBMM

NMBMM is designated in terms of the Municipal Demarcation Act (Act 27 of 1998) as a Category A municipality. In terms of the Constitution, the functional areas assigned to municipalities, relevant to public transport, are:

- Municipal planning
- Municipal public transport
- Public works in respect of its functional areas
- Municipal roads
- Traffic and parking

Whilst public transport is designated in the Constitution as a concurrent national and provincial function, the Constitution requires national and provincial government to assign functions to local government where they can be more effectively administered and if there is capacity to do so.

NMBMM is also charged with the responsibility, in terms of the National Land Transport Transition Act (Act 22 of 2000), to prepare a series of transport plans including the Public Transport Plan, and also to provide recommendations to the duly appointed Provincial body responsible for the granting of operating licenses to operate public transport services.

It is important that there be close co-operation between NMBMM and ECDRT in the preparation of negotiated contracts for the implementation of the PTP, as these contracts will require subsidy from the Province.

## 11.2 Policy Framework

The Constitution requires national and provincial government to assign functions to local government subject to certain conditions.

"156(4) The national government and provincial governments must assign to a municipality, by agreement and subject to any conditions, the administration of a matter listed in Part A of Schedule 4 or Part A of Schedule 5 which necessarily relates to local government, if:

- (a) that matter would most effectively be administered locally; and
- (b) the municipality has the capacity to administer it."

Drawing on the Constitutional principles, the White Paper on National Transport Policy supported the devolution of public transport functions.

"The principle of subsidiary and devolution of public passenger transport functions, powers and duties to the lowest appropriate level of government is confirmed."

It also advocated the concept of Transport Authorities for metropolitan area to assume responsibility for the full spectrum of transport functions. The Draft Provincial Land Transport Framework gives support to the concept of devolution of transport functions and the establishment of transport authorities. The Provincial White Paper on Transport for Sustainable Development states that:

"The Eastern Cape Provincial Department of Transport supports the concept of the devolution of functions to the lowest sphere of government which is competent to perform them".

The Provincial strategy includes the preparation of guidelines, in consultation with local government, on the criteria for the boundaries of the Transport Authority, the functions and competencies of the Transport Authority and their timing, the founding agreement, finances of a Transport Authority, and the transfer of funds for execution of provincial functions, governance in terms of the composition of the Governing Body, and the structure of the Transport Executive.

## 11.3 Transport Authority for NMBMM

The National Land Transport Transition Act gave effect to the policy in the White Paper and made provision for the establishment of a Transport Authorities if their effect is to improve transport service delivery in the local sphere of government by grouping transport functions into a single well managed and focussed institutional structure.

In order for NMBMM to establish a Transport Authority governing transport planning and public transport contracts, amongst other transport functions, a Founding Agreement must be prepared. A number of legislative and institutional changes have taken place over the past years since the initial enactment of the NLTTA. These now need to be taken into account in implementing the Transport Authority. Enactment of local government legislation in the form of the Municipal Systems Act (Act 32 of 2000) and the Municipal Finance Management Act (Act 56 of 2003) must be taken into account and certain conflicts between the various Acts satisfactorily resolved.

In establishing the Transport Authority, the NLTTA provides for:

- the municipality to enter into an agreement with the MEC in the Province to establish a transport authority which is formalized through a founding agreement.
- the transport area for the Transport Authority
- the mandatory functions of the TA, as well as a range of optional functions which can be negotiated
- the manner in which the technical and administrative functions of the Transport Authority
  are to be undertaken, either internally by the municipal department or by an external
  body as a Transport Executive. This needs to also take into account the provisions of
  local government legislation, namely the Municipal Systems Act and the Municipal
  Finance Management Act.
- the governance of the TA through the Governing Body which must consist solely of councillors of the municipality. This aspect has recently been identified to be in conflict with the Municipal Finance Management Act.
- funding arrangements

#### **Proposed functions**

The case for a transport authority for NMBMM is predicated on the assignment of the full range of mandatory and optional functions. This strengthens the case for a Transport Authority, and would be a necessary requirement for the Transport Authority to operate effectively and overcome the fragmentation of responsibility which is the very shortcoming that the Transport Authority seeks to address.

The NLTTA provides for six mandatory functions to be assigned to a transport authority, namely:

- prepare transport plans and take responsibility for implementation
- develop land transport policy including integration with spatial development frameworks
- perform financial planning with regard to land transport
- manage the movement of persons and goods by coordinating such movement
- encourage and facilitate public consultation
- call for, prepare, adjudicate and award tenders for public transport service contracts

The NLTTA also provides for a number of optional functions, and these should be assigned to the Transport Authority for NMBMM.

- make payments to public transport operators
- investigate financial circumstances and operating practices of public transport operators
- exercise control of a service delivery
- set fare structures and levels
- promote the optimum mode to reduce overall system costs
- · develop and maintain an integrated ticketing system
- establish and maintain a land transport information system
- undertake travel demand management
- implement measures to prevent damage to roads
- implement measures to minimize environmental impact
- develop and implement a passenger information system
- promote public transport
- promote security in public transport
- liaise and co-ordinate with enforcement agencies on transport law enforcement

#### Implementation Strategy

To implement the transport authority the following steps need to be taken:

- negotiate and conclude an agreement in principle with the MEC for Roads and Transport to establish a Transport Authority for NMBMM
- consult with the MEC for local government and MEC for finance
- dis-establish the metropolitan transport area, which was established under the Urban Transport Act (Act 77 of 1977).
- undertake the steps required to establish a transport authority in terms of the Municipal Systems Act when a municipal service is to be upgraded, enhanced or a new service to be provided
- consult with organized labour in terms of the requirements of the Municipal Systems Act
- confirm the functions of the Transport Authority
- develop the organizational structure for the performance of the technical functions, namely the transport executive
- determine the funding requirements and budget
- prepare the business plan for the Transport Authority
- establish the governing body
- develop a capacity building programme for the governing body
- develop branding for the transport authority
- develop a communications strategy for the transport authority

## Progress in Establishing the Transport Authority

An investigation into the establishment of a Transport Authority for the NMBMM was undertaken in 2001/02 and the recommendation for the establishment of the Nelson Mandela Bay Metropolitan Transport Authority (NMBMTA) was adopted by the Metropolitan Transport Advisory Board (MTAB) at a combined meeting with the Steering Committee for this project on 30 October 2002.

It was agreed that the NMBMTA should consist of a Governing Body of councillors nominated by the relevant portfolio committee from the NMBMM Council as follows:

- councillors and 2 alternates from the Infrastructure, Engineering and Energy Committee
- 1 councillor and 1 alternate from the Housing and Land Committee
- 1 councillor and 1 alternate from the Safety and Security Committee.

It was also agreed at the above meeting that the Transport Executive for the NMBMTA should consist of officials from the municipal staff as required to perform the functions of a Transport Authority listed in Sections 10 and 68 of the National Land Transport Transition Act.

A draft Founding Agreement has been prepared for joint signature by the Province, the Minister and NMBMM to establish the Transport Authority and a proposed annual budget has been prepared for the funding required to operate the TA. The Founding Agreement needs first to be approved by the NMBMM Mayoral Committee.

## 12. CONSULTATION, MARKETING & INFORMATION

This section briefly describes the need and extent of participation with public transport users, the general public, the operating licensing board, adjacent planning authorities and operators.

## 12.1 Consultation Process

The public transport system is ultimately an important component of the urban system, and can contribute substantially to the quality of life experienced by the majority of the population of NMBMM. Reliable access between home and work is essential for the smooth functioning of the economy.

The regulation, supply and operation of public transport concerns many stakeholders, particularly the users of transport, commerce and industry. Their interests must be canvassed in order to ensure that the services planned and regulated through the intervention of NMBMM are consistent with their needs.

## 12.2 Marketing Public Transport

A review and proposed strategy has to be prepared for public transport marketing and the provision of passenger transport information. Key aspects include:

- The role of marketing in transport provision
- Aligning marketing objectives with corporate priorities
- A marketing framework, strategy and implementation priorities
- Public transport information provision strategy and priorities
- Non motorized transport inputs in terms of marketing strategy, promotion and information provision

# 12.3 Passenger Information Strategy

Accurate, timely and adequate passenger information is a crucial component in successful passenger service delivery, as well as being the basis for the promotion and marketing of the public transport system for regular, occasional and potential users. The following information should be made available to potential users:

- Route network showing stop locations
- Timetables for each route service
- Help telephone number for service enquiries
- Website with route network and service timetables

## 13. FINANCIAL STRATEGY AND BUDGET

## 13.1 Introduction

The implementation of this Plan will require financial planning in order to execute the projects and programmes to be undertaken. The public transport system is currently a joint function, with NMBMM, ECDRT and SARCC each having roles and functions. This financial strategy and projects in this Plan reflect the consolidated set of projects and programmes of all authorities.

While the Plan is intended to guide the planning and implementation of public transport over the next 15 years to 2020, only projects programmed for the period 2006 – 2010 are listed in detail.

## 13.2 Principles of the Financial Strategy

NMBMM recognises that considerable amounts of funding will be needed if the public transport system is to be developed according to this Plan. A continuation of the status quo of funding will perpetuate the current system and, over the long term, restrict the mobility of persons living in NMBMM and limit their ability to reliably travel to work, education and shopping opportunities.

The capacity of NMBMM to fund the projects and programmes from its own municipal budget derived from rates income and the Fiscal and Finance Commission's formula are extremely limited. Because of the strategic importance of public transport to NMBMM, the Council will direct as much as can be afforded, but will be seeking partnerships with DOT/SARCC and ECDRT to ensure that capital projects obtain funding from outside NMBMM. In addition, it is expected that the operating subsidies that will be needed to support affordable fares on road-based public transport will be available from DOT.

Other sources of funding will also be applied for, where the opportunity presents itself, one of which is the 2010 Soccer World Cup, for which NMBMM will be a host city. Other sources include the Motherwell Urban Renewal Project (MURP), which qualifies for Presidential funding allocations, and the Municipal Infrastructure Grant (MIG)

# 13.3 Plans and Projects Envisaged 2006 - 2010

In order to undertake the planning and implementation of projects required to successfully transform the public transport system in NMBMM, the municipality will need to increase its staff and resources in the Engineering and Infrastructure Business Unit. There will also be a need for continued assistance from specialist transport planning consultants.

The plans and projects to be developed over the next 5 years have been identified and include the following:

#### > Statutory plan updates

The PTP and ITP must be updated annually as required by the NLTTA.

## Public transport contract models and financing of contracted services

To ensure a proper and viable introduction of contracted services a detailed explanation of the contract model to be used as well as the procurement procedures should be prepared. It is proposed that a small working group of NMBMM, ECDRT and BCM officials be established to prepare a contract model and agree on the procurement procedures to be used. The contract model should also address the financial matters and result in an agreement for route contract subsidies.

## Bus operation implementation

#### First trunk bus route business plan

A business plan for the first route to be contracted will be the basis for a proposed negotiated contract. The business plan should include proposed operational figures and economic analysis, vehicles required and other investments needed, as well as estimated ridership and revenues, a proposed ticketing system, information system to be used and infrastructure investment needed for successful implementation. The business plan for the first trunk bus route in the Khulani Corridor is to be completed during 2006 so that negotiations with potential operators can commence before the end of the year.

## Business plan for scheduled service to Coega

A business plan for the introduction of a scheduled service to Coega needs to be prepared. This could be part of the Coega Public Transport Plan and will give guidance for the implementation of contracted services and how they will be integrated with the Khulani Corridor service.

## Second phase bus routes business plans

A business plan for the continued implementation of the trunk bus route network and local and feeder bus system will be prepared to give guidance for contract procedures following from the implementation of the first trunk bus service in the Khulani Corridor.

#### Infrastructure Investments

A plan needs to be presented for the phased implementation of all public transport infrastructure investments needed. It will include the proposed development of the Khulani Corridor and investments along other public transport corridors, as well as the upgrading and modernisation of interchanges and taxi ranks in NMBMM. The infrastructure investment plan will be part of the NMBMM ITP and updated annually.

### > Transport Authority

The NMBMM Transport Authority is aimed for establishment in 2007, following the necessary application process and motivations during 2006. The business plan will go into the necessary detail of the structure, responsibilities and budget for the Transport Authority.

#### Safety, Security and Enforcement

The provision of sufficient resources for the safety and security of public transport users will be essential if the services are to be freely used. Enforcement is likewise important for the success of the future system, as it is imperative that the operators are enabled to operate according to their legal entitlements and contracts. A failure to institute sufficient enforcement resources will severely hamper the transformation.

The financing responsibility for safety and security will be divided between the authorities responsible for public transport, namely NMBMM, DOT and ECDRT. In the case of enforcement, a cost-sharing agreement between NMBMM and ECDRT will be entered into to jointly fund the public transport inspectorate.

## 13.4 Proposed Budget

The estimated quantum of funds which will need to be budgeted for activities and projects in the Public Transport Plan for the next 4 financial years (1 July 2006 to 30 June 2010) are summarised in the table below.

Table 13.4 Proposed Budget for Public Transport Plan Implementation (x R 1 000)

No.	Activity/Project	2006/07	2007/08	2008/09	2009/10
1.	Statutory plan updates	1 000	1 000	1 000	1 000
2.	Public transport contract models	500			
3.	Business plans for phased operations	500	500	500	500
4.	Public transport marketing and information	500	1 000	1 000	1 000
5.	Establish Transport Authority	500			
6.	Operation of Transport Executive	200	1 500	1 500	1 500
7.	Safety and security monitoring	500	1 000	1 500	2 000
8.	Enforcement of operators	200	1 000	1 500	2 000
9.	Motherwell Terminus shelters	100			
10.	Tyinira Street bus stops and shelters	250			
11.	Dibanisa Road bus stops and bus lanes	100		7 000	
12.	Daku Road bus stops and bus lanes	350	3 000		
13.	Njoli Street bus stops and shelters	250	4 000		
14.	Ntshekisa Road bus stops and toilets	150			
15.	Sheya Kulati Drive bus stops and shelters	200			
16.	Kempston Road reconstruction with bus lanes and bus stops	3 500	8 000	8 000	8 000
17.	Harrower Road bus stops and bus lanes	700	3 000	5 000	
18.	Korsten Interchange upgrade	500	2 000		
19.	Govan Mbeki Avenue reconstruction with bus lanes and bus stops	800	15 000	15 000	15 000
20.	Russell Road Terminus Phase 1	100			6 000
	Total	10 900	41 000	42 000	37 000

The above budget does not include the cost of purchasing new vehicles for the Khulani trunk bus service, nor does it include an operating subsidy for the scheduled service. These operational costs will be determined in the business plan which is to be prepared for the first phase implementation.

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