SECOND DRAFT: LITP
2010 – 2015

Project Name: Preparation of Local Integrated Transport Plans and Update of District Integrated Transport Plan.

Commencement Date: January 2010

Key Deliverables: Merafong City Local Integrated Transport Plan.

Initiator: West Rand District Municipality in Association with Merafong City Local Municipality.

Approved By: West Rand District Municipality
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>i.</td>
<td>Chapter Content</td>
<td>5</td>
</tr>
<tr>
<td>ii.</td>
<td>List of Acronyms</td>
<td>6</td>
</tr>
<tr>
<td>iii.</td>
<td>List of Tables</td>
<td>7</td>
</tr>
<tr>
<td>iv.</td>
<td>List of Figures</td>
<td>8</td>
</tr>
<tr>
<td>v.</td>
<td>List of Maps</td>
<td>8</td>
</tr>
<tr>
<td>1.</td>
<td>Introduction</td>
<td>9</td>
</tr>
<tr>
<td>1.1.</td>
<td>Overview</td>
<td>9</td>
</tr>
<tr>
<td>1.2.</td>
<td>Legislative Framework</td>
<td>12</td>
</tr>
<tr>
<td>1.3.</td>
<td>Institutional Arrangements</td>
<td>16</td>
</tr>
<tr>
<td>2.</td>
<td>Transport Status Quo</td>
<td>19</td>
</tr>
<tr>
<td>2.1.</td>
<td>Road Infrastructure</td>
<td>19</td>
</tr>
<tr>
<td>2.1.1.</td>
<td>Road System</td>
<td>19</td>
</tr>
<tr>
<td>2.1.1.1</td>
<td>Road Network</td>
<td>19</td>
</tr>
<tr>
<td>2.1.1.2</td>
<td>Road Network Planned and Linkages</td>
<td>21</td>
</tr>
<tr>
<td>2.1.1.3</td>
<td>Road Network Map</td>
<td>22</td>
</tr>
<tr>
<td>2.1.1.4</td>
<td>Road Network Conditions</td>
<td>22</td>
</tr>
<tr>
<td>2.2.</td>
<td>Public Transport Facilities</td>
<td>24</td>
</tr>
<tr>
<td>2.2.1.</td>
<td>Minibus Taxi Facilities</td>
<td>24</td>
</tr>
<tr>
<td>2.2.2.</td>
<td>Bus Facilities</td>
<td>28</td>
</tr>
<tr>
<td>2.2.3.</td>
<td>Rail Facilities</td>
<td>28</td>
</tr>
<tr>
<td>2.3.</td>
<td>Non-Motorised Transport</td>
<td>31</td>
</tr>
<tr>
<td>2.3.1.</td>
<td>Pedestrian Facilities</td>
<td>31</td>
</tr>
<tr>
<td>2.3.2.</td>
<td>Bicycle Facilities</td>
<td>32</td>
</tr>
<tr>
<td>2.4.</td>
<td>Public Transport Services</td>
<td>33</td>
</tr>
<tr>
<td>2.4.1.</td>
<td>Minibus Taxi Transport Services</td>
<td>33</td>
</tr>
</tbody>
</table>
2.4.2. Bus Transport Services .................................................................39
2.4.3. Rail Transport Services .................................................................40
2.4.4. Pedestrian Transport Services .......................................................40
2.4.5. Animal Drawn Transport Services ..................................................41
2.4.6. Special Categories of Passengers Transport Services .................41
2.5. Traffic Data Surveys & GIS ..............................................................42

3. Transport Needs Assessment ..............................................................44
3.1. Process Followed ..............................................................................44
3.2. Minibus Taxi Industry .......................................................................44
3.3. Bus Industry ......................................................................................45
3.4. Rail Industry ......................................................................................45
3.5. Non-Motorised Transport .................................................................46
3.6. Animal Drawn Transport .................................................................48
3.7. Special Categories of Passengers ......................................................49
3.8. Traffic Law Enforcement .................................................................51

4. Transport Improvement Proposals .....................................................58
5. Budget and Implementation Programme ............................................59
6. Annexures
   6.1. Reference Material
   6.2. Commissions Input
i. CHAPTER CONTENT

1. Introduction
The introduction covers the background, demographics, the applicable legal framework and interrelationship of different transport plans.

2. Transport Status Quo
The Status Quo of transport stipulates the inventory of transport facilities i.e. roads etc. The Status Quo was used as a base document to analyse the transport system in the area.

3. Transport Needs Assessment
The transport needs assessment outlines the process that was followed in soliciting inputs from the people of Merafong Local Municipality and the identification of the maintenance needs of the transport infrastructure as well as the new infrastructure requirements.

4. Transport Improvement Proposals
The Transport Improvement Proposals encapsulates that projects that have been identified through the transport needs assessment process including the non-motorised transport, special category of passengers and private transport.

5. Implementation Budget and Programme
This section outlines a five year budget programme based on the prioritised projects and availability of funding.

6. Annexure
This section depicts the workshop material and information received from local municipal officials and local participants.
ii. LIST OF ACRONYMS

AADT – Average Annual Daily Traffic

CBD – Central Business District

IDP – Integrated Development Plan

LITP – Local Integrated Development Plan

MCLM – Merafong City Local Municipality

MIG – Municipal Infrastructure Grant

NLTA – National Land Transport Act 5 of 2009

NLTSF – National Land Transport Strategic Framework

NLTTA – National Land Transport Transition Act 22 of 2000

PLTF – Provincial Land Transport Framework

PMS – Paved Management System

PRASA – Passenger Rail Agency South Africa

RSDC – Rural Service District Centre

TDM – Travel Demand Management

VCI – Visual Condition Index

WRDM – West Rand District Municipality
iii. LIST OF TABLES

Table 1: City Towns and Townships.................................................................8
Table 2: City Area Population......................................................................10
Table 3: City Population Distribution.......................................................10
Table 4: Mining Town Population Distribution.........................................11
Table 5: Road Classification ......................................................................20
Table 6: Paved Road Condition ..................................................................23
Table 7: Road Network Status Quo............................................................24
Table 8: Taxi Facilities ..............................................................................32
Table 9: Delivered Bicycles .......................................................................32
Table 10: Live Vehicle Population............................................................42
Table 11: GIS Table ....................................................................................43
Table 12: Initial List of Projects .................................................................52
Table 13: Transport Needs Assessment .....................................................57
iv. LIST OF FIGURES

Figure 1: LITP Chapters..........................................................................................14
Figure 2: Co-ordinating Structures........................................................................18

v. LIST OF MAPS

Map 1: Towns and Townships.................................................................................10
Map 2: Merafong City Road Network.......................................................................22
Map 3: Existing Corridors.......................................................................................30

vi. LIST OF PICTURES

Picture 1: Oberholzer Train Station .................................................................22
Picture 2: Informal Taxi Rank ..............................................................................22
Picture 3: Road damaged in Khutsong Township ...........................................23
Picture 4: Carletonville Taxi Rank (Oberholzer) ...............................................30
Picture 5: Taxi Rank in Khutsong .................................................................31
Picture 6: Taxi Rank in Fochville .................................................................31
Picture 8: Taxi Rank at East Driefontein Mine ...........................................32
1. Introduction

1.1. Overview

Merafong City Local Municipality (MCLM) was incorporated into the Gauteng Province in terms of notice no.8 of 2009 of the Cross Boundary Municipalities Laws, Repeal and Related Matters Amendment Act, 2009. The Municipality is one of four Local Municipalities of the West Rand District Municipality. The Local Municipality is estimated to be 1631.7km$^2$ in size. The area is approximately 98.2% urbanised and 1.8% rural, and it is home to an estimated 289,992 people.

The Merafong City Local Municipality consists of the undermentioned towns and townships. Below is a Table of Towns and Townships and its individual population size.

### Table 1: City Towns and Townships

<table>
<thead>
<tr>
<th>Town/Township</th>
<th>Population Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carletonville</td>
<td>28090</td>
</tr>
<tr>
<td>Welverdiend</td>
<td>2840</td>
</tr>
<tr>
<td>Blybank</td>
<td>950</td>
</tr>
<tr>
<td>Khutsong</td>
<td>149850</td>
</tr>
<tr>
<td>Fochville (including Green Park)</td>
<td>18690</td>
</tr>
<tr>
<td>Kokosi</td>
<td>29740</td>
</tr>
<tr>
<td>Greenspark</td>
<td>3655</td>
</tr>
<tr>
<td>Wedela</td>
<td>9540</td>
</tr>
<tr>
<td>Wes Wits Village</td>
<td>9973</td>
</tr>
<tr>
<td>Driefontein</td>
<td>21514</td>
</tr>
</tbody>
</table>
Through various studies conducted by the Local Municipality and review of the Integrated Development Plan (IDP) and Spatial Development Framework (SDF), it was found that City’s population and household characteristics are as depicted in table 2 below (from 2001 to 2005):

**Table 2: City Area Population**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipal Settlement</td>
<td>144844</td>
<td>45925</td>
<td>3.2</td>
<td>161513</td>
<td>51504</td>
</tr>
<tr>
<td>Mining Settlement</td>
<td>52312</td>
<td>6279</td>
<td>8.3</td>
<td>56623</td>
<td>6792</td>
</tr>
<tr>
<td>Rural Areas</td>
<td>13328</td>
<td>4129</td>
<td>3.2</td>
<td>14427</td>
<td>4508</td>
</tr>
<tr>
<td>Total</td>
<td>210484</td>
<td>56333</td>
<td>3.7</td>
<td>232563</td>
<td>62804</td>
</tr>
</tbody>
</table>

*Source: Third Review SDF June, 2009.*
As indicated above, the population is estimated to increase to 289,992 by 2008 and this has to be taken into cognisance in the transport planning process.

The table below shows the concentration of people within Merafong City Local Municipality per town and township. Again this should serve as a guide in channelling resources.

**Table 3: City Population Distribution**

<table>
<thead>
<tr>
<th>Town/Township</th>
<th>Population Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carletonville</td>
<td>28090</td>
</tr>
<tr>
<td>Welverdiend</td>
<td>2840</td>
</tr>
<tr>
<td>Blybank</td>
<td>950</td>
</tr>
<tr>
<td>Khutsong</td>
<td>139850</td>
</tr>
<tr>
<td>Fochville</td>
<td>15015</td>
</tr>
<tr>
<td>Kokosi</td>
<td>29740</td>
</tr>
<tr>
<td>Greenspark</td>
<td>3655</td>
</tr>
<tr>
<td>Wedela</td>
<td>9565</td>
</tr>
<tr>
<td>Sub-total</td>
<td>229705</td>
</tr>
</tbody>
</table>

*Source: Integrated Development Plan, 2009.*

The mining town and villages have a serious transport problem largely because in most instances public transport as well as human settlements is provided by the mining houses. The by-products of the practice is learners walking to school and other facilities. The Municipality in turn has a responsibility to ensure that the local transport system is transformed. Table 4 depicts the population distribution in the mining towns and townships.

**Table 4: City Mining Town Population Distribution**

<table>
<thead>
<tr>
<th>Mining Town</th>
<th>Population Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blyvooruitzicht</td>
<td>7060</td>
</tr>
<tr>
<td>Coronation</td>
<td>60</td>
</tr>
<tr>
<td>Deel Kraal</td>
<td>2030</td>
</tr>
<tr>
<td>Elandsrand</td>
<td>5275</td>
</tr>
<tr>
<td>Doornfontein</td>
<td>2495</td>
</tr>
<tr>
<td>Western Deep Levels</td>
<td>9853</td>
</tr>
<tr>
<td>Driefontein</td>
<td>26264</td>
</tr>
<tr>
<td>Sub-total</td>
<td>53037</td>
</tr>
</tbody>
</table>

*Source: Integrated Development Plan, 2009.*
Detailed information on the MCLMs economy is covered by the SDF and the Local Economic Development (LED). For transport planning purposes, the study found that largely the economy is characterised by mining, agriculture, a growing apatite for tourism, etc. this should ideally impact into the type of local transport system which is needed – i.e. type of vehicles, etc.

Legislative Framework
The Republic of South Africa Constitution (Act No. 18 of 1996) states under schedules 4B and 5B that public transport is the responsibility of the National, Provincial and Local governments. In the Westonaria Local Municipality, transport is under the auspices of Infrastructure Development and Planning which forms part of the Roads and Storm Water division. The municipality has not yet employed a dedicated public transport official.

The Department of Transport has prescribed that when a local municipality does its Integrated Transport Plan (ITP) the following Minimum Requirements must be considered:

**Figure 1: LITP Chapters**

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Transport Status Quo</td>
<td>2</td>
</tr>
<tr>
<td>(Inventory and condition of transport infrastructure)</td>
<td></td>
</tr>
<tr>
<td>Transport needs assessment</td>
<td>3</td>
</tr>
<tr>
<td>Transport Improvement Proposals</td>
<td>4</td>
</tr>
</tbody>
</table>
The National Land Transport Transition Act 22 of 2000, National Land Transport Transition Amendment Act 26 of 2006 requires that three kinds of transport plans be developed by the different levels of Government. The three critical transport plans designed to transform the South African Transport system are:

National Land Transport Strategic Framework (NLTSF)
Provincial Land Transport Frameworks (PLTF)
Integrated Transport Plans (ITP)

Section 19(2) prescribes that ITPs be prepared by the lowest level of government and therefore designated transport authorities and all municipalities are to prepare Integrated Transport Plans.

The National Land Transport Act, 2009 under section 31 to 39 prescribes clearly the type of transport plans and the responsible authority for the preparation of those plans. The New Minimum Requirements for the preparation of transport plans makes it mandatory for the development of the following:

Comprehensive Integrated Transport Plans (CITP)
District Integrated Transport Plans (DITP)
Local Integrated Transport Plans (LITP)
Current Public Transport Records (CPTR)
Operating License Strategies (OLS)
Rationalisation Transport Plans (Ratplan)
Public Transport Plans (PTP)

The NLTA also clarifies the different types of plans and responsible authorities for the preparation of such plans. It is envisaged, once regulations have been promulgated, that the CPTR and OLS will become a normal administrative function carried out by relevant departments or directorates.

In the case of Merafong City Local Municipality therefore, it is clear that the responsibility for the preparation of LITP lies with the Municipality. This function will have an impact on the Directorate or Department that is currently responsible for the transport function.

**Institutional Arrangements**

The institutional arrangements will cover the transport planning and organisational structures relevant to the effective execution of the transport planning function as required by law. The legal framework governing the institutional structures area:

- South African Constitution
- Local Government: Municipal Structures Act

Merafong City Local Municipality – Second Draft LITP
Local Government: Municipal Systems Act  
National Land Transport Transition Act  
National Land Transport Act  
Inter-Governmental Relations Act

The NLTTA prescribes for the establishment of Transport Authorities and Transport Consultative Forums. The Transport Authorities where never established except in Kwa-Zulu Natal and Province and Municipalities made attempts to establish Consultative Transport Planning Forums. The key objective of the Transport Planning Structures and Transport was to coordinate transport planning and oversee the efficient running public transport services.

The following transport related institutional structures were established in the District:
IDP Coordinators Forum
IDP Representative Forum
District Law Enforcement Coordinating Committee
West Rand Metropolitan Forum

The latter Forum (West Rand Metropolitan Forum) was established in terms of the Gauteng Public Passenger Road Transport Act 107 of 2001. The objective of the Forum was to address and to deal with transport related matters from a transport planning perspective.

It has been established that, inspite of these Forums, there has been a lack of intra-transport coordination and inter-departmental coordination. The evaluation of the forums or coordination has been of a general nature with no clear functional responsibilities. Critical to transport planning, land use planning and the provision of public transport services, freight, etc. is an effective link between Province – District/Metro and – Local Municipalities.

It is incumbent of Merafong City Municipality (MCLM) to consider establishing a transport structure that will ensure that transport planning talks to the provision of transportation services. Below is the kind of Coordinating Structures that can be established.
A comprehensive study must be considered to determine the final institutional structure and implementation strategy.

A further concern is the departmental structure that should be responsible for Transport. The category assessment of the NLTA is that the Merafong City Local Municipality will, in the near future, take responsibility for not less than 28 transport functions. This will require a radical relook at where transport lies within the wider Merafong City Local Municipality management structure.

Transport planning and provision is dealt with under the Infrastructure Development Department. It is also assumed that the execution of the transport function is handled under Roads and Storm Water Division as well as under the Town Planning function. This, given the NLTA requirements will have to be revisited. A comprehensive undertaking of transport and its impact on the economy, poverty alleviation, job creation and enhancement, creates a major challenge.
2. TRANSPORT STATUS QUO
2.1. Road Infrastructure
2.1.1 Road System

The road network forms an integral part of the greater transportation network. It is the public right of way system by means of which most of the Municipality’s transportation needs are met. These needs include the movement of people and goods. Hence, transportation is also referred to as the ‘lifeblood of cities’.

This movement is facilitated within a system of various transportation forms (private vehicles, buses, rail, trucks, etc), operating along a network of transportation infrastructure (rail, road, etc). The transport network of Merafong City Local Municipality (MCLM) comprises two main elements, the road and rail networks. People movement includes trips between home and work, educational trips, business trips, as well as recreational trips for social activities. An urban area that is lacking in a good road network will suffer economically and socially. Coupled with land use planning in an intricate dynamic relationship, the road network influences and is influenced by the structure of any major urban area.

2.1.1.1 Road Network

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

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

This approach groups streets and roads according to the character of the service they are intended to provide. The classification recognizes that individual roads and streets do not serve travel independently. Rather, most travel involves movement through networks of roads and can be categorized relative to such networks in a logical and efficient manner. Thus, functional classification of roads and streets is also consistent with categorization of travel and is one step in the delivery process.

The Paved roads link the communities in the densely populated areas (hubs). Gravel roads predominate in the less-populated, particularly in the small holdings.
Table 5 below gives the road classification.

**Table 5: Road Classification**

<table>
<thead>
<tr>
<th>Road Classification</th>
<th>Class Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class A</td>
<td>National primary roads managed by the SANRAL on behalf of the National Department of Transport</td>
</tr>
<tr>
<td>Class B</td>
<td>Provincial primary roads, which promote intra-provincial, inter-city and interregional mobility</td>
</tr>
<tr>
<td>Class C</td>
<td>Provincial secondary roads, which promote intra regional and inter-district mobility</td>
</tr>
<tr>
<td>Class D</td>
<td>Provincial tertiary roads with an intra-district mobility function</td>
</tr>
<tr>
<td>Class E</td>
<td>Local access roads to promote access to the higher-class road network for isolated communities and centres of economic activity</td>
</tr>
</tbody>
</table>

There are two National and four Provincial roads providing mobility and access function to the local municipalities. These are as follows:
- N12 - The north-south route linking Gauteng and North West
- N14 - Links Merafong City Local Municipality with North West Province, Mogale City LM and Tshwane
- R501 - Links Carletonville – Fochville – Parys (Free State)
- R500 - Access from N12 and N14 to Carletonville
- R559 - Links Local Municipality with Randfontein
- R41 - Links Local Municipality with Randfontein

The main freight route, within the local municipality, includes the N12, N14, R500, and R501 which carries significant traffic of heavy vehicles per day in and out of Merafong City LM.

2.1.1.2 Road Network Planned & Linkages

The following roads have been planned for the Merafong City LM by the provincial Gauteng Department of Public Transport Roads and Works (GDPTR&W) for the near future:
- K211 – Links Carletonville with N14
- K213 – Links Carletonville with Fochville
- K140 – Links MCLM with to the East Merafong LM
- PWV18 – Links Merafong City LM with North West and the City of Johannesburg Metropolitan Municipality (CoJMM)
2.1.1.3. Road Network Map

See road network map below

Map 2: Merafong City Road Network

Source: Google Maps

2.1.1.4. Road Network Condition

The usage of Pavement Management System (PMS) is common among Municipalities for determining the maintenance and upgrading needs/programmes for pavements in a network of roads. Implemented in sequential phases, it firstly identifies maintenance projects from an assessment of the condition of the road network. It then determines the most economic design of the maintenance treatment required.

PMS implementation is done in phases. The first is the network assessment in which the condition of the network is monitored. The analysis gives a general assessment of the network, identifies maintenance projects that should receive attention and provides a permanent database from which assessment in the future can be compared.

This assessment gives only the urgency of the projects and a suggestion of the most suitable type of treatment. The most economically suitable treatment must be designed individually in a second phase analysis. In this phase, additional information by way of special field tests will usually be required. For each designed project the specification and corresponding control parameters to ensure satisfactory construction are derived in the third phase analysis.
During our visits to this municipality, the team noticed that Local Municipality had January 2007 PMS. It is recommended that municipalities should do a pavement assessment of their network annually to determine the success of their maintenance policy and to prepare future maintenance programmes. Local Municipality is currently updating the January 2007 PMS.

**Road Conditions in MERAFONG CITY LM**

Table 6 reflects the Paved Road Condition as per Visual Condition Index (VCI) for all roads within the Merafong city lm and also indicates the road lengths within various ranges of the VCI.

**Table 6: Paved Road Condition**

<table>
<thead>
<tr>
<th>Pavement Condition</th>
<th>Very Good</th>
<th>Good</th>
<th>Fair</th>
<th>Poor</th>
<th>Very Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipality</td>
<td>14%</td>
<td>8%</td>
<td>38%</td>
<td>39%</td>
<td>0%</td>
</tr>
</tbody>
</table>

*Source: WRDM 2002/3 PMS*

Based on the above table and from the inspections we carried out, the following can be reported.

- It is urgent that the PMS be updated to reflect the current status as this helps in planning for projects and budgets.

- The road network is in a fairly good condition despite lack of continuous maintenance program due to inadequate funding.

- There are more poor roads in Kokosi Township compared to the neighbour Fochville due to the past apartheid government administration.

- Has a higher percent of fair and poor roads.

- There are pockets of pot holes but these are being dealt with as funds become available.
Table 7: Road Network Status Quo for Merafong City Local Municipality

<table>
<thead>
<tr>
<th>TOWNSHIP</th>
<th>ROADS</th>
<th>LENGTH OF ROADS (m)</th>
<th>CONDITION OF ROADS</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PAVED</td>
<td>UNPAVED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carletonville</td>
<td>141,765</td>
<td>0</td>
<td>141,765</td>
<td>Fair to Good Keep up maintenance</td>
</tr>
<tr>
<td>Khutsong</td>
<td>42,000</td>
<td>57,000</td>
<td>99,000</td>
<td>Fair to Poor Pave unpaved roads and maintenance of SW and existing roads.</td>
</tr>
<tr>
<td>Fochville</td>
<td>65,649</td>
<td>0</td>
<td>65,649</td>
<td>Good Keep up maintenance</td>
</tr>
<tr>
<td>Kokosi</td>
<td>13,293</td>
<td>42,986</td>
<td>56,279</td>
<td>Fair to Poor Main road into Kokosi turn into a river once it starts raining. It needs to be redesign and constructed. Majority of roads are Gravel.</td>
</tr>
<tr>
<td>Wedela</td>
<td>28,900</td>
<td>0</td>
<td>28,900</td>
<td>Fair Few storm water problem</td>
</tr>
<tr>
<td>Greenspark</td>
<td>3,307</td>
<td>1,523</td>
<td>4,830</td>
<td>Fair Keep up maintenance</td>
</tr>
<tr>
<td>Welverdien</td>
<td>28,904</td>
<td>0</td>
<td>28,904</td>
<td>Fair Keep up maintenance</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>323,818</td>
<td>101509</td>
<td>425,327</td>
<td></td>
</tr>
</tbody>
</table>

Source: January 2007 PMS

The general road surface condition and structure for the Merafong City Local Municipality is fair to poor as per table above.

2.2 Public Transport Facilities

2.2.1 Minibus Taxi Industry

Minibuses carry the largest number of passengers compared to all modes in Merafong City Local Municipality and generally in Gauteng due to its flexibility and perceived efficiency. However, there are certain challenges that should be addressed. These are:

- No Intermodal transport facility (for Taxi, Rail and Buses);
- Informal taxi ranks (no formal shelters, no amenities, no clearly marked loading or holding bays);
- No Adequate signage.
Table 8: Taxi Facilities in Merafong City Local Municipality

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>RANK NAME</th>
<th>RANK TYPE</th>
<th>ON STREET</th>
<th>RANK LOCATION</th>
<th>COMMENTS</th>
<th>SIZE</th>
<th>CONDITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carltonville CBD</td>
<td>Carltonville</td>
<td>Formal</td>
<td>No</td>
<td>Utilised</td>
<td>Medium</td>
<td>Poor</td>
<td>Poor</td>
</tr>
<tr>
<td>Carltonville CBD</td>
<td>Oberholzer</td>
<td>Informal</td>
<td>No</td>
<td>Utilised</td>
<td>Small</td>
<td>Fair</td>
<td>Fair</td>
</tr>
<tr>
<td>Khutsong T/S</td>
<td>Khutsong Proper Rank</td>
<td>Formal</td>
<td>No</td>
<td>Utilised</td>
<td>Medium</td>
<td>Fair</td>
<td>Fair</td>
</tr>
<tr>
<td>Khutsong T/S</td>
<td>Khutsong South Rank</td>
<td>Formal</td>
<td>No</td>
<td>Utilised</td>
<td>Medium</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td>Wedela T/S</td>
<td>Wedela Rank 1</td>
<td>Semiformal</td>
<td>No</td>
<td>Utilised</td>
<td>Small</td>
<td>Fair</td>
<td>Fair</td>
</tr>
<tr>
<td>Wedela T/S</td>
<td>Wedela Rank 2</td>
<td>Informal</td>
<td>No</td>
<td>Utilised</td>
<td>Small</td>
<td>Poor</td>
<td>Poor</td>
</tr>
<tr>
<td>Kokosi T/S</td>
<td>Kokosi Rank</td>
<td>Semiformal</td>
<td>No</td>
<td>Utilised</td>
<td>Small</td>
<td>Fair</td>
<td>Fair</td>
</tr>
<tr>
<td>Foschville</td>
<td>Foschville Rank</td>
<td>Formal</td>
<td>No</td>
<td>Utilised</td>
<td>Medium</td>
<td>Good</td>
<td>Good</td>
</tr>
<tr>
<td>Blybank</td>
<td>Blybank Rank</td>
<td>N/A</td>
<td>N/A</td>
<td>Underconstruction</td>
<td>Medium</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Welverdien</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Using Carltonville Rank</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Greenspark</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Using Carltonville Rank</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Carletonville

Carletonville Central Business District has a general good road infrastructure considering the fact that the council do not have an updated PMS. Carletonville has a formal minibus taxi rank that is unable to cater for the commuters. This is worsening by the fact that hawkers are engaged in mixed trading from selling fruits, clothing to cooking at the rank everywhere from their dedicated hawkers area to commuter loading ramps. There is no provision of wash bays and a section of the rank is used as a workshop for cars and taxis. Merafong city lm working with the taxi associations in the area has identified new site for a taxi rank which should be able
to accommodate the current taxi operations and hawkers. Bylaws need to be enforced at the new facility to avoid similar chaos.

The train station at Oberlozer needs to be attended to by PRASA. There are no shelters for passengers at the station and the pavement need refurbishment. The informal taxi rank which attempts to create an intermodal facility also is semi formal with no shelter and amenities. The picture below shows the conditions of the taxi facility.

*Picture 1: Oberholzer Train Station*

*Picture 2: Informal Taxi Rank*

*Khutsong Proper and South Township*
Khutsong is the biggest township in Merafong City Local Municipality. There are major challenges with storm water and about 15% of roads are not upgraded (paved) in Khutsong proper whilst in Khutsong south about 60% of roads still need to be upgraded (paved). The poor maintenance of roads has resulted in some of the roads deteriorate to a state where they need major rehabilitation or ripping the whole road surface and relaying the whole road layers as shown below.

*Picture 3: Road damaged in Khutsong Township*

**Wedela**

Wedela Township’s road network is in a general fair condition and there are minor storm water challenges that need to be addressed. There are two taxi ranks one is very informal and the other is informal with paved access and egress but lacks lights, toilets and other amenities. The Wedela extension is a new township and the roads generally require upgrade since all the roads are currently gravel.

**Kokosi**

Kokosi Township is in close proximity to Fochville where roads are in good condition and storm water is taken care of appropriately whilst in Kokosi the opposite is true. The ring road in Kokosi works as a road in dry condition and becomes a storm water channel during heavy rains due to either worst road design or worst road construction or both. Majority of roads in Kokosi extensions require upgrade. The taxi rank in Kokosi is informal lacking few amenities. The access is also used as an egress although there is a provision for egress.
**Fochville**
Fochville is the small town in the south of Merafong City LM next to Kokosi Township. The road infrastructure is generally in good condition. The formal taxi rank in the area is in excellent condition.

**Blybank**
Blybank Township is in development stage, so far there’s no storm water problem currently. Roads are still in good condition, need just to be maintained. The taxi rank is in construction stage.

**Welverdiend**
Welverdiend road and storm water infrastructure is in good condition, needs only minor maintenance. There is no need to build taxi rank as they are using Carletonville Taxi Rank.

**Greenspark**
Greenspark storm water and Road infrastructure are relatively new, so far no problems experienced. Since Greenspark is closer to town most people prefer to walk to town, there is no need for Taxi Rank only drop-off and pick-up point can be build.

### 2.2.2 Bus Facilities

Various buses in Merafong City Local Municipality are operated by the mining companies of the likes of Gold Fields and Anglo Gold Ashanti hence the municipalities don’t cater for buses when designing stops and ranks. The dominant mode of transport in this region is the taxi and train. However, planning for buses should be encouraged.

### 2.2.3 Rail Facilities

**PRASA (SARCC metro) rail Infrastructure**
All railways lines of note in South Africa belong either to Transnet Freight Rail (TFR) or to the Passenger Rail Agency of South Africa (PRASA). Various private companies (commonly known as private sidings) also own railway lines networks. These are used for own private internal use
ranging from for a single spur to extensive networks in the case of some mining companies and are mostly connected to the national TFR network.

**Extent and Usage**

The rail network in Merafong city LM is utilised for both commuters and freight purposes. The rail commuter routes runs through Merafong city LM as follows:

- Oberholzer – Merafong – Midway – Johannesburg

The Oberholzer to Johannesburg route starts in Merafong City Local Municipality and leave the WRDM at Goudeon from where the rest of the route runs inside the City of Jo’burg Metropolitan Municipality.

The Rail Plan classifies the Merafong City LM routes as category D. The route classified as category D means that there is uncertainty on that line. When PRASA considers the network investment of rail line, one of the key things they consider when doing their feasibility study is to categorised the line in terms of current and future demand.

Merafong city LM made a proposal for a new train station Proposal when the New Khutsong Township was proclaimed. Proposal to PRASA is in progress and once completed PRASA will need to complete Census that will inform them (PRASA) whether to construct new station or not.

The following observations can be made on the rail infrastructure in Merafong City LM

Rail infrastructure in the Merafong City LM appears to be fair although there are examples of railway stations areas that need maintenance and upgrading.

The Planning of new infrastructure in Merafong City LM will be reviewed by PRASA. Census is carried out by PRASA every two years to review the current train and train line usage in South Africa as part of PRASA strategic network development. The census informs PRASA if there is need to increase trains in the railway line or not.
Map 3: Network Approach: Existing Corridors

Source: PRASA
Figure 5: Total number of passengers per corridor – station counts

Source: PRASA
Non-Motorised Transport

Pedestrian Facilities
While station location vary in terms of origin-destination patterns to be served and from one municipality to the other, the fundamental pedestrian access to public transport remain constant.

Public transport ridership in Merafong City Local Municipality is frequently compromised by a general lack of acceptable pedestrian facilities. The challenges faced are:

- Lack of pedestrian pavements
- Poor quality of pavements often dirt or mud
- No adequate protection from harsh climatic conditions
- Lack of sufficient lighting
- Pedestrian overcrowding due to narrow or below-capacity pavements
- Obstruction of pavements due to poor design, vendors, etc
The workshop held April 16, 2010 at West Rand District Municipality alluded to the lack of pedestrian facilities within the local municipality and district in general. There is desperate need for walkways on R500 and internal routes within the townships in the municipality. The pedestrian facilities together with Bicycle facilities are and will continue to be part of the Non-Motorised transport plans within the local and district municipality.

2.3.1. Bicycle Facilities

The national department of Transport has established a Bicycle roll out programme mainly for rural scholars called Shova Kalula. WRDM has already rolled out some bicycle in the rural area to help scholars ride to school. Seven schools in Merafong City LM received the bicycles so far, as follows:

Table 9: Delivered Bicycles

<table>
<thead>
<tr>
<th>School Name</th>
<th>Delivered Bicycles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joseph Ditsele Intermediate School</td>
<td>29</td>
</tr>
<tr>
<td>Kaalplaas Combined School</td>
<td>33</td>
</tr>
<tr>
<td>Laerskool De Deer</td>
<td>34</td>
</tr>
<tr>
<td>Pabalelo Primary School</td>
<td>18</td>
</tr>
<tr>
<td>Rooipoort Primary Farm School</td>
<td>32</td>
</tr>
<tr>
<td>Sekgwa Intermediate School</td>
<td>17</td>
</tr>
<tr>
<td>Visnet Intermediate School</td>
<td>33</td>
</tr>
</tbody>
</table>

Source: WRDM 2010

During the workshop of April 16, 2010 WRDM re-iterated that support the national call for people to use bicycles as a mode of transport. Bicycle riding has among other the following benefits:

- Formal cycle ways
- No Provision for bicycle parking

2.4. Public Transport Service

2.4.1. Minibus Taxi
2.4.1.1. **Number of Routes**

A large number of routes emanating from Merafong City Local Municipality are from Carletonville. The rank in Carletonville serves public transport operations that span the West Rand District Municipality region and beyond into North West and various other long distance destinations.

2.4.1.2. **Frequency of Services**

The minibus operations from the ranks in Merafong City Local Municipality occur daily. The trips generated from Merafong City Local Municipality cover the WRDM and surrounding areas such as the City of Johannesburg Metro, North West Province, Northern Cape Province, and Free State Province etc.

Khutsong being the largest township in Merafong City Local Municipality has several ranks, with main rank being supported by the local feeder or roaming services and other small, dispersed, informal operations generating trips to various destinations. The ranks in Khutsong, from observation, operate at a high frequency in the AM Peak and also Off-Peak periods during the day. The operations also depict a feeder service whereby roaming minibus taxi pick-up and drop off commuters at the Khutsong Main taxi rank in order for them board public transport to their various destinations.

2.4.1.3. **Infrastructure**

2.4.1.3.1. **Description of Rank Status**

A formal taxi rank has the following features, in terms of the criteria set out by the NLTTA in defining a formal taxi rank:

- Shelter
- Raised Pedestrian Platform
- Lights
- Toilets (male and female)
- Public telephone
- Dust bins
- Fire hoses
- Seats
- Hand Railings
- Information Signs
- Water Taps
- Vehicle Wash Bay
- Office

The transport infrastructure or ranks at which minibus-taxis operate are located at Khutsong, Carletonville, Kokosi, Fochville and at mine properties such as Wedela, Driefontein, etc.

**Picture 4: Carletonville Taxi Rank (Oberholzer)**
Picture 5: Taxi Rank in Khutsong

Picture 6: Taxi Rank in Fochville
The formal ranks in Merafong City LM were audited by checking for various amenities and structural erections such as roofing, driving and walking surface. The informal taxi rank will lack most of the amenities found in the formal rank. The informal rank will have minimum requirements like shelter, lighting and toilets.

2.4.1.4. **Number of Taxis Registered**

The numbers of taxis registered in Merafong City Local Municipality are not yet confirmed. Having recently incorporated Merafong City Local Municipality into the Gauteng Province from the North West Province, most of the operating permits are registered in the North West Province.
2.4.1.5. Public Transport Demand

The demand for public transport in Merafong City LM is high during the AM and PM Peak periods. Public transport demand settles during the Off Peak period. This pattern resonates from the fact that the demand for transport is influenced by a need to reach a place of work or a place of study at a specific time e.g. Work starts at 8:00 am.

There is a high demand for transport from Khutsong to Carletonville during the AM Peak period and the reverse is true for the PM Peak period. There is a high demand for transport during the AM Peak for transport moving from Carletonville taxi rank to the surrounding Mines, Randfontein, Merafong, Johannesburg, Rustenburg, Klerksdorp, Fochville, etc.

2.4.1.6. Route Utilisation

The routes identified from Merafong City Local Municipality are as follows:

- Khutsong – Carletonville
- Carletonville – Rustenburg
- Carletonville - Magaliesburg
- Carletonville – Johannesburg
- Carletonville – Randfontein
- Carletonville – Merafong
- Carletonville – Krugersdorp
- Carletonville – Ventersdorp
- Carletonville – Klerksdorp
- Carletonville – Potchefstroom
- Carletonville – Fochville
- Carletonville – Wedela
- Carletonville – Vanderbijlpark
Other, long distance trips are generated from Carletonville. These are:

- Khutsong – Welverdiend
- Carletonville – Lesotho
- Carletonville – Botswana
- Carletonville – Mozambique
- Carletonville – Swaziland

These routes were not surveyed due to the low frequency of service and low demand.

### 2.4.1.7. Rank Capacity Utilisation

The Carletonville taxi rank is utilized highly during the Off Peak period. This suggests that during this period the minibus taxi operations are at their lowest frequency.

The reason that the pattern of rank capacity utilization is like this may be attributed to the fact that public transport route utilization is high during the AM and PM Peak periods and low during the Off Peak period. Public transport services a large number of commuters during the AM and Peak periods unlike during the Off Peak period.

### 2.4.2. Bus Transport Industry

Bus services play a major role in the provision of public transport. These services can take many forms, varying in distance covered; types of vehicle used, and can operate with fixed or flexible routes and schedules. Services may be operated by public or private companies, and be provided using bus fleets of various sizes.
In Merafong City Local Municipality bus services is been offered by private companies.

2.4.3. Rail Transport Services

Commuter rail, also called suburban rail, is a passenger rail transport service between a city center, and outer suburbs and commuter towns or other locations that draw large numbers of commuters—people who travel on a daily basis. Trains operate following a schedule, at speeds varying from 50 to 120 km/h. Distance charges or zone pricing is being applied by PRASA.

2.4.4. Pedestrian Transport Services

Pedestrian transport services have not yet been catered for in the planning developments of Merafong City Local Municipality. There is constant and conflict situations before the motorist and the pedestrian. Roads design has not taken into cognisance the needs of the pedestrian. The roads design has been, in terms of the National Pedestrian Guidelines. There are no pedestrian signs at crossings neither is there road markings.

Rapid urbanisation is one of the biggest challenges that Merafong City Local Municipality is facing. Informal settlements are springing up next to the major road network and communities cross the road and not being aware of the spread of motor vehicles. Alcohol consumption is also one of the contributors of accidents among the pedestrians. The “Don’t drink and Walk” campaign should be intensely try to educate the public about the consequences of drinking and walking.
2.4.5. Animal Drawn Transport Services

Animal drawn carts are still used by many people, especially in the rural areas. The Merafong City Local Municipality should provide facilities for the provision of such services to poor communities.

Carts that are used for transportation should be built according to the specifications set by the National Government. The National Government and the SPCA have set specifications for the treatment of animals. Special areas in towns where animal drawn carts are prevalent should provide stopping areas where animals could stop for relief.

Education between people who use animal drawn transport mode and motorists must be intensified to avoid accidents. The animal drawn carts and the occupant must be visible during the night on in bad weather.

2.4.6. Special Categories of Passengers Transport Services

2.4.6.1. People who are physically challenged.

There are no transport services for people who are physically challenged in Merafong City Local Municipality. This is a serious indictment on the part of the Merafong City Local Municipality. The National Department of Transport, as well as the Constitution states that this function must be performed by the Local Municipality.

The National White Paper on Transport Policy, 1996, states that “Safe, secure, affordable, and accessible transport must be provided.” A door-to-door and 24-hour service should be provided to people who are physically challenged. A dial-a-ride service should be accessible.
2.5. Traffic Data Surveys & GIS

2.5.5. Traffic Data Surveys

The total average annual daily traffic (AADT) for the entire district indicates that the majority of movement takes place around the economic hubs of the various municipalities. The majority of these are through traffic on category 3 roads.

Table 10: Live Vehicle Population as at 28 February 2010 for WRDM

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Heavy Load Vehicle (GVM&gt;35 000 kg, not to draw)</th>
<th>Heavy load vehicle (GVM&gt;3 500 kg, equip to draw)</th>
<th>Light load vehicle (GVM35 000 kg or less)</th>
<th>Heavy passenger mv(12 or more persons)</th>
<th>Light Passenger mv(less than 12 persons)</th>
<th>Minibus</th>
<th>Motorcycle Quadru cycle</th>
<th>Special Vehicle</th>
<th>Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>430</td>
<td>939</td>
<td>12334</td>
<td>161</td>
<td>21186</td>
<td>1271</td>
<td>1878</td>
<td>1530</td>
<td>74</td>
<td>39803</td>
</tr>
</tbody>
</table>

Source: Gauteng Provincial Registry

It is evident from the table above that the municipality experience high number of light passenger vehicles and light load vehicles. The traffic operations within the municipality are composed as follows:

Freight traffic from trucks highly utilizes R500 and R501. Minibus Taxi and private vehicles utilizes mostly R500, R501 and R41 from Carletonville CBD towards Randfontein and to join N12 and N14 towards City of Johannesburg and the North West Province.

Geographic Information Systems

A geographic information system (GIS), or geographical information system, is any system that captures, stores, analyzes, manages, and presents data that are linked to location. In the simplest terms, GIS is the merging of cartography and database technology. GIS systems are used in cartography, remote sensing, land surveying, photogrammetry, geography, urban planning, emergency management, navigation, and localized search engines.

As GIS is a system, it has boundaries that may be jurisdictional, purpose or application oriented for which a specific GIS is developed. Hence, a GIS developed for an application; jurisdiction or purpose may not be necessarily
interoperable or compatible with a GIS that has been developed for some other application, jurisdiction or purpose. What goes beyond GIS is spatial data infrastructure (SDI), a concept that has no such restrictive boundaries.

Therefore, in a general sense, the term describes any information system that integrates stores, edits, analyzes, shares, and displays geographic information. In a more generic sense, GIS applications are tools that allow users to create interactive queries (user-created searches), analyze spatial information, edit data, maps, and present the results of all these operations. Geographic information science is the science underlying the geographic concepts, applications and systems, taught in degree and certificate programs at many universities.

Lack of GIS system within the local municipality adds strain to the local municipality when it comes to planning for future project and maintaining the current road network. GIS system need to be acquired for the local municipality, have the transportation department personnel trained for the municipality to maximise the technology for their benefit.

Table 11: GIS Table

<table>
<thead>
<tr>
<th>Problem Area</th>
<th>Objective</th>
<th>Strategy</th>
<th>Project</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of GIS</td>
<td>Get GIS systems in place</td>
<td>Purchase GIS software's and training personnel on how to use it.</td>
<td>GIS</td>
<td>GIS will help with planning</td>
</tr>
</tbody>
</table>
3. TRANSPORT NEEDS ASSESSMENT

3.1. Process Followed

Public participation forms the cornerstone of the process of needs assessment. In assessing the needs of the Merafong City Local Municipality, a consultation process was followed. Meetings with the officials of the municipality were held where transport issues were discussed. Workshops were held where the different organizations were represented and transport issues were discussed.

Desktop research was conducted which assisted in identifying community issues. The following documents were used to source the information i.e. Integrated Development Plan, Spatial Development Framework, Gauteng Growth and Development Strategy, Merafong City Local Economic Development, etc.

The list and prioritization of projects was compiled through the consultation process described above.

3.2. Mini-bus Taxi Industry

The mini-bus taxi is the predominant mode of transport in South Africa. Although there are no definitive statistics about the dominate nature of the mini-bus taxis, it is measured by the number of passengers it transports daily. The provision of transport must be able to address the needs of the people it serves.

In terms of section 18 of the National Land Transport Act, the general principle for transportation planning is to give is to give higher priority to public transport than to private transport and to discourage private vehicle use through Travel Demand Management measures.
Infrastructure such as taxi ranks, stops, shelters, and principles such as safety, comfort and convenience are all necessary aspects that a user of the mini-bus taxi needs for an unforgettable experience. Thus, one of the issues that was identified during the public participation process was that the MERAFONG CITY LOCAL MUNICIPALITY should be able to provide transport facilities for the users of public transport.

3.3. Bus Industry

The bus industry in Merafong is operated mainly by a private operator. The mining house which is the biggest employer Merafong provides the service for its employees. There is a perception by the community that buses could be affordable than mini-bus taxis, because buses receive a transport subsidy from government. Communities therefore requested that the municipality introduce bus services in the area. The argument put forward was that the lack of completion amongst taxis makes them to be too expensive. It also argued that buses are safer than taxis.

3.4. Rail Industry

South Africa has two rail services that are rendered to the public. Metro Rail provides an inter city service whilst Shosholoza provides a long distance service. Rail is a mass mover of commuters as it caters for more passengers than busses and taxis. Rail fares are far cheaper than other modes of transport and commuters are calling upon the Public Rail Agency of South Africa (PRASA) to open more stations and rail lines to cater for those communities that currently do not have rail services.
Although rail transport services are not a local municipality competency, it is incumbent on the municipality to provide for rail transport in their Integrated Transport Plan. The local municipality must continuously interact with PRASA to ensure that their transport plans are in corroborated with each other.

3.5. Non-Motorised Transport (NMT)
Non-motorised transport is the prevalent and predominant mode of transport in large areas of Merafong City Local Municipality because of a lack of motorised transport. This mode of transport is generally ascribed to walking, cycling, rolling and animal drawn carts. The National Travel Survey (2004) shows that a large portion of people who live in the rural areas have to walk a long distances to access facilities or transport. Walking is a predominant mode of transport in Merafong City Local Municipality though we may not possess official statistics. In Gauteng, the National Travel Survey shows that 12.2% of people walk for more than thirty minutes to the next bus stop.

Apart from walking to access public transport modes, the main centers of activities such as shops, education, medical, etc. are also far away from where they live. There are also very remote areas in which minibus taxis cannot easily access and these areas served by the light delivery vehicles.

Animal drawn carts are also notably used in other areas. There are no official statistics regarding the different modes of non-motorised transport. The challenge is for the WRDM to develop a policy and strategy of addressing issues related to non-motorised transport. The National Rural Transport Strategy for South Africa (2003) proposed the following strategies:
➢ To invest in access roads;
➢ To improve other forms of rural transport infrastructure such as local connector or district roads, suspension bridges, pontoons, paths, tracks, trails and public transport interchanges;
➢ Connected actions to redress the relative neglect of non-motorised as well as intermediate motorised transport such as tractor trailers; and
➢ Strengthening as well as regulating the role of the bakkie sector as a viable demand-responsive means to address a variety of rural freight and passenger transport needs.

The role of the bakkies as a means of transport in the rural areas plays a prominent and important role to ensure that communities are provided with mobility. The bakkie is recognised by both the Provincial and National Government and thus the Local Municipalities should be able to develop policy and strategies to address this mode of transport.

Amongst others, the policy and strategy will have to address the following issues:
➢ Prioritising non-motorised travel options;
➢ Preference to pedestrians at crossroads;
➢ Compliance rate of pedestrians at crossroads or traffic lights;
➢ Proper pedestrian design locations;
➢ Development of pedestrian friendly neighbourhoods;
➢ Pedestrian proximity to community amenities;
➢ Safer environment for cyclists;
➢ Encourage planners, researchers and engineers to do more research regarding NMT;
➢ Provide sidewalks, curbs ramps cross walks, roadway lighting, road design including bicycle lanes, improve intersection for cyclists, traffic calming design and vehicle volume and pedestrian volumes; and
➢ Impact of traffic on behaviour and perceptions of safety of pedestrians e.g. pedestrian push buttons at crossings

3.6. Animal Drawn Transport

Despite the huge migration of rural communities into urban areas since 1994, a sizeable proportion of the population still live in rural South Africa. Thus, in 1996 the National Department of Transport developed a Rural Transport Strategy with aim of addressing the transport challenges that rural communities experienced. The 1996 White Paper on Transport Policy states that transport is a catalyst that drives economic and social activities.

Animal drawn transport, which is recognised by government as a mode of mobility, enables people in deep rural areas to access amenities such as hospitals, clinics, schools and shopping areas. The need to provide resting areas for animals at shopping complexes to enable animals to drink water and have resting periods is critical to the promotion of animal drawn transport. The ‘Arrive Alive’ campaign should incorporate education to both users of animal drawn transport and to motorist, taxi operators and commuters and the general public.
3.7. Special Category of Passengers

3.7.1. Learner Transport

The Merafong City Local Municipality has initiated a process of addressing learner transport because of the need that has arisen. There has been a steady movement of learners from the township to the Model C schools that are mainly in the suburban areas since the advent of democracy, South African Constitution has enshrined in the Bill of Rights, that learners have the “entitlement to education (7-18 years old children)”. In order to address this need, the Merafong City Local Municipality is assisting to formalise and regulate learner transport under its jurisdiction.

The National Land Transport Transition Act of 2000 states that learner transport must be part of the Public Transport Plan and should be incorporated into the Provincial Land Transport Framework. The Merafong City Local Municipality will in due course be preparing a database which will be able to locate all the schools in the Merafong City Local Municipality including the distances from the residential areas.

Learner transport has been a National and Provincial competency. Since the promulgation of the National Land Transport Act of 2009, this function has been dissolved to the local municipalities. The Merafong City Local Municipality will have to develop a Learner Transport Policy and strategy to address issues of learner transport.

In terms of the Learner Transport Draft Policy (2007), the Department of Transport objectives are:
➢ To provide dedicated public transport services to and from schools serving learner transport demand in cooperation in South Africa;
➢ To promote safe and secure pick-up and drop-off points at schools;
➢ To formulate and implement learner transport subsidy policy so that learners most in need can be given affordable transport;
➢ To assess the patterns of non-motorised transport by learners and providing walk and cycle ways where demand is warranted; and
➢ To facilitate subsidised bicycles to learners most in need.

The above learner transport objective will now have to be achieved by the Merafong City Local Municipality.

3.7.2. People with Special Needs

The adoption of the Constitution of South African Act 108 of 1996 had a profound impact on Transport Policy of South Africa. Thus in 1996 the White Paper on South African Transport Policy (1996) was adopted, which took cognisance of the fact that Government shall provide safe, secure and affordable transport to its citizens. Although the Constitution enshrined the right of people to move, the White Paper did not address the needs of people who are physically challenged.

In 2000, the National Land Transport Transition Act, section 18(5) stated that Transport Planning must enhance accessibility to public transport for persons with disability. This legislative requirement necessitated the Office of the Presidency to state that “The Government will design, in consultation with disabled people a comprehensive programme for the disabled which will enhance their engagement in society and remove discriminative practices against them, especially in the work place.” Government will also discuss means to reintegrate mentally and physically disabled people in their communities.
“Now that the development of the development of integrated transport plans has been devolved to the local municipalities, it is incumbent upon the local municipalities to provide facilities and services for people who are physically disabled.

Gauteng Province in particular, the Provincial Transport Policy states that, that Provincial Government shall “Promote the incorporation of methods and provide for the needs of those with disabilities in planning, design and provision of transport facilities and services.”

In response to the above statements, the Government proposes the following strategies:

- To provide amenities for people with special needs, such as ramps for wheel chairs. Firstly at the main taxi ranks and multi-modal public facilities and extending to other facilities in a phased approach; and
- To conduct a feasibility study for the provision of a demand-response service in MCLM to a door-to-door service with specially-equipped vehicles.

The Municipal Policy and Strategy will have to address the needs of people who are physically disabled because it is a policy and legislative requirement.

3.8. Traffic Law Enforcement

Law enforcement plays a major role in providing a safe and secure transport service to commuters. In terms of section 122 of the National Land Transport Act of 2000 as well as the National Road Traffic Act 93 of 1996 as amended, law
enforcement must be a joint effort among the different agencies. The NLTTA categorises law enforcement among the following sectors:

- Provincial Inspectors;
- South African Police Services
- Municipal or Provincial Traffic Police; and
- Road Transport Inspectors (member of the Cross Border Road Transport Agency).

In supporting transport services, the above mentioned agencies must coordinate and cooperate among themselves. South Africa, like many other countries in the world are in some cases faced with issues such as poor performance, personnel who are seldom properly qualified, low supply of personnel, vehicles and specialised equipment which has impacted on the performance of services rendered by the law enforcement agencies.

In developing this aspect of the LITP for the Merafong City Local Municipality, a one-on-one meeting as well as a workshop was held on the 16 April 2010. During this consultative and participatory process with members of the law enforcement, challenges as depicted in annexure 6.2 were identified:

**Projects Identified**

**Table 12: Initial list of Projects**

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Objective</th>
<th>Strategy</th>
<th>Project</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insufficient funding</td>
<td>To keep road infrastructure in good condition</td>
<td>Regular road maintenance</td>
<td>Funding of road maintenance</td>
<td></td>
</tr>
<tr>
<td>Unpaved roads in township</td>
<td>To pave roads in the township</td>
<td>Develop a maintenance programme</td>
<td>Paving of roads in townships</td>
<td></td>
</tr>
<tr>
<td>No storm water drainage</td>
<td>To install storm water drainage</td>
<td>Develop a phase approach programme</td>
<td>Installation of storm water</td>
<td></td>
</tr>
<tr>
<td>Lack of a formal taxi rank</td>
<td>To develop a formal taxi rank</td>
<td>Seek a Joint Venture (JV) partner for funding</td>
<td>Upgrading of taxi rank</td>
<td></td>
</tr>
<tr>
<td>Lack of road signs at pedestrian crossings</td>
<td>To install pedestrian crossings</td>
<td>Create awareness among the public</td>
<td>Installation of road signs at pedestrian crossings</td>
<td></td>
</tr>
<tr>
<td>No road markings</td>
<td>To create road safety awareness ***</td>
<td>Create awareness – road signs</td>
<td>Improve road markings ***</td>
<td></td>
</tr>
<tr>
<td>No taxi ranks in rural areas</td>
<td>To provide shelter for commuters</td>
<td>Install shelter at taxi ranks</td>
<td>Upgrading of taxi ranks in rural areas</td>
<td></td>
</tr>
<tr>
<td>Leratong Taxi rank is informal</td>
<td>To provide a formal taxi rank for upgrade</td>
<td>Source funding to Upgrading of Leratong taxi rank</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No linking road from N17 to Krugersdorp</td>
<td>To give residents of Toekomsrus access to Randfontein</td>
<td>Approach the province to finance Rietvallei link road to Toekomsrus in Randfontein</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop the link road</td>
<td>To give the community access to the two extensions</td>
<td>Approach the province for funding Link road from Rietvallei ext 2 &amp; 3 to Rietvallei proper</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicles are over speeding and the streets are overcrowded</td>
<td>To provide a safe environment for pedestrians and cyclists</td>
<td>Slowing down vehicles on the road Introducing speed humps on busy primary roads</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of pedestrian crossings</td>
<td>To ensure that pedestrians are safe when crossing streets</td>
<td>Provide road markings and pedestrian crossing signs</td>
<td>Improve pedestrian crossings</td>
<td></td>
</tr>
<tr>
<td>Issue</td>
<td>Objective</td>
<td>Action</td>
<td>Outcome</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Lack of road signage</td>
<td>To educate the community about road safety</td>
<td>Develop an awareness campaign</td>
<td>Improve road signage</td>
<td></td>
</tr>
<tr>
<td>No parking areas for bicycles</td>
<td>To encourage the use of bicycles to town</td>
<td>Erect safe bicycle parking areas</td>
<td>Develop NMT policy and strategy</td>
<td></td>
</tr>
<tr>
<td>No bicycle parking areas for learners</td>
<td>To provide safe bicycle areas for learners</td>
<td>Erect safe bicycle parking areas at schools</td>
<td>Develop a strategy for learner transport</td>
<td></td>
</tr>
<tr>
<td>No freight transport strategy.</td>
<td>To reduce the cost of transport</td>
<td>Eliminate the inefficiency in freight transport</td>
<td>Develop strategy for freight transport</td>
<td></td>
</tr>
<tr>
<td>No policy and strategy for the disabled ****</td>
<td>To ensure that issues of the disabled are addressed</td>
<td>Policy will provide direction of LM and strategy provides what needs to be done</td>
<td>Develop strategy and policy for physically challenged</td>
<td></td>
</tr>
<tr>
<td>Lack of overloading strategy</td>
<td>To manage the overloading of heavy vehicles</td>
<td>The building of weigh bridges at strategic areas.</td>
<td>Develop an overloading strategy</td>
<td></td>
</tr>
<tr>
<td>Corridors have been identified and need development</td>
<td>To facilitate the development of business along the corridors</td>
<td>Create incentive to attract business to relocate</td>
<td>Develop strategies for corridor development</td>
<td></td>
</tr>
<tr>
<td>No proper and safe areas to drop off and pick up learners</td>
<td>To provide safe areas for drop off and pick up of learners</td>
<td>Identify safe areas that can be used for drop off and pick up</td>
<td>Identify safe drop off and pick up areas for learners</td>
<td></td>
</tr>
<tr>
<td>No bicycle lanes and walk ways for pedestrians in townships</td>
<td>To create a safe environment for cyclists and pedestrians</td>
<td>Create awareness and educate the public</td>
<td>Develop bicycle lanes and walk ways in the townships</td>
<td></td>
</tr>
<tr>
<td>Lack of infrastructure for the physically challenged ****</td>
<td>To ensure that the physically challenged are able</td>
<td>Provide ramps, toilets, signage etc in all public buildings</td>
<td>Provide infrastructure for the physically challenged</td>
<td></td>
</tr>
<tr>
<td>Issue</td>
<td>Description</td>
<td>Action Required</td>
<td>Outcome</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td>----------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>No door to door transport for the physically challenged</td>
<td>To provide the physically challenged with transport that is secure, safe and affordable</td>
<td>Proper needs analysis and recommendations are forwarded to authorities</td>
<td>Facilitate feasibility study for door to door delivery</td>
<td></td>
</tr>
<tr>
<td>No municipal policies and strategy for transport</td>
<td>Municipality to give policy direction</td>
<td>Identify the implementation agent and how to fund the project</td>
<td>Develop a Municipal Transport Policy and Strategy</td>
<td></td>
</tr>
<tr>
<td>No rank management</td>
<td>Municipality to be responsible for the facilities</td>
<td>To maintain the facility</td>
<td>Facilitate taxi rank management</td>
<td></td>
</tr>
<tr>
<td>No subsidised bus service</td>
<td>To provide the community with an affordable transport mode</td>
<td>The LM to assist an entrepreneur to provide the service</td>
<td>Investigate the possibility of encouraging a subsidised bus service</td>
<td></td>
</tr>
<tr>
<td>No intermodal transport facility</td>
<td>To provide the community with a seamless transport transfer facility that is safe and secured.</td>
<td>Encourage the private sector to participate in a Private Public Partnership (PPP) or build, operate and transfer Bot</td>
<td>Investigate the possibility of establishing an intermodal transport facility</td>
<td></td>
</tr>
<tr>
<td>No information or data on weighbridges</td>
<td>To find a suitable place to install weighbridges</td>
<td>Encourage the participation of private sector</td>
<td>Feasibility study for the installation of weighbridges</td>
<td></td>
</tr>
<tr>
<td>Foreign licence drivers enter the country</td>
<td>To enable law enforcement officers to prosecute transgressors with foreign licences</td>
<td>Organise training sessions for law enforcers</td>
<td>Training for law enforcers to read and interpret foreign licences</td>
<td></td>
</tr>
<tr>
<td>Officers training college</td>
<td>To provide law enforcement officers</td>
<td>Employ private trainer for on the job training</td>
<td>Train law enforcement</td>
<td></td>
</tr>
</tbody>
</table>
The Major Issues / Problem Areas

The following transport-related needs of Merafong city lm have been identified during the course of the 2010 ITP process:

IDP Public Participation Processes in Local and District Municipalities

Merafong City Local Municipality (2009 - 2010)

- Public transport is inadequate and needs to be improved to improve access to services
- Feasibility to introduce school transport or extending the schools bicycle programme especially in rural areas.
- Research to be done to access the feasibility of implementing different types of public transport.
- Poor public transport facilities, they are informal and need major upgrading
- Lack of GIS system
- Outdated Pavement Management System
- Poor accessibility of disabled and elderly to collection points for grants
- Poor non motorized transport facilities
- No bicycle lane
- No pedestrian walkways
- No intermodal facilities.
- Pedestrian crossings not painted.
- Generally there are no road markings, especially in the townships.
<table>
<thead>
<tr>
<th>Problem Area</th>
<th>Objective</th>
<th>Strategy</th>
<th>Project</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor public transport facilities</td>
<td>Constructing new and upgrading the existing facilities</td>
<td>Constructing new facilities</td>
<td>?</td>
<td>New facility will improve accessibility</td>
</tr>
<tr>
<td>Lack of GIS</td>
<td>Get GIS systems in place</td>
<td>Purchase GIS software’s and training</td>
<td>?</td>
<td>GIS will help with planning</td>
</tr>
<tr>
<td>Lack of Transportation personnel</td>
<td>Get Transportation personnel</td>
<td>Get funding from DoT to address the challenges</td>
<td>?</td>
<td>For Transportation problems to be properly addressed you need dedicated transportation personnel</td>
</tr>
<tr>
<td>Un-updated PMS</td>
<td>Update the PMS</td>
<td>Update the 2007 PMS</td>
<td>?</td>
<td>PMS will help with planning</td>
</tr>
<tr>
<td>Funds</td>
<td>Get adequate funding</td>
<td>Approach WRDM GDPTR&amp;W /DoT for funds</td>
<td></td>
<td>Need for Transport fund to be established.</td>
</tr>
</tbody>
</table>
4. TRANSPORT IMPROVEMENT PROPOSALS

Table 14 below lists projects that has been identified and listed in terms of a criterion that was agreed upon by the participants. The guiding was from category 1 to 5 of which 1 is the highest and 5 is the lowest while 2, 3 and 4 were of less importance.

**Table 14: Transport Improvement Proposals**

<table>
<thead>
<tr>
<th>PROJECT NAME</th>
<th>CATEGORY</th>
<th>SOURCES OF FUNDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carletonville New Taxi Rank</td>
<td>1</td>
<td>MLM</td>
</tr>
<tr>
<td>Pavement Management System</td>
<td>1</td>
<td>MLM</td>
</tr>
<tr>
<td>Storm Water Upgrade</td>
<td>1</td>
<td>MLM</td>
</tr>
<tr>
<td>Transport Personnel</td>
<td>1</td>
<td>MLM / WRDM</td>
</tr>
<tr>
<td>D1648, P89-1,P149 Upgrade</td>
<td>1</td>
<td>MLM / WRDM / GDPTR&amp;W</td>
</tr>
<tr>
<td>Transport Fund</td>
<td>1</td>
<td>MLM / WRDM / GDPTR&amp;W</td>
</tr>
<tr>
<td>Township Roads Upgrade Policies</td>
<td>1</td>
<td>MERAFONG CITY LOCAL MUNICIPALITY / WRDM</td>
</tr>
</tbody>
</table>

Category is the importance of the project for implementation, with 5 being the list importance and 1 being the priority. This was discussed and agreed at the Workshop held on February 25th, 2010 at Merafong City Local Municipality’s Carletonville local Municipal Hall and on the April 16th, 2010 at WRDM with all relevant stake holders within the municipality and the community.
5. IMPLEMENTATION PROGRAMME AND BUDGET

In terms of the Local Government: Municipal Systems Act, the Merafong City is required to fund projects that are incorporated into the integrated transport plan (ITP). While the National Land Transport Transitional Act, did not address funding methods for local municipalities to fund transport projects, nevertheless, functions of planning for transport in their respective areas was devalued.

The enactment of the National Land Transport Act no.5 of 2009, was to assist the local municipalities with areas that could be taxed in order to fund transport in their areas. Section 27 of Chapter 3 of the NLTA proposed that Municipal Land Transport Funds could be sourced by levying the following:

- Money appropriated by the Minister;
- Money appropriated by the MEC;
- User charge principle;
- Interest on invested cash balances belonging to the fund; and
- Donations or contributions to that fund i.e. foreign and agencies.

With respect to user charges, the Act proposed that the user charge must be inline with the Municipal Fiscal Powers and Functions Act no. 12 of 2007. The Act proposed the following criteria to be used for imposing the levy:

- Specific class of motor vehicle entering specific portion of its area at specific time;
- Land, building or other developments, including land or buildings of which the state is the owner, in its area.
- The parking of motor vehicles in a building or land in a specific portion of the area.
Parking places for or the use of ranks, stops and terminals by motor vehicles in such a portion. The fund shall be subject to the principles and discipline of the Municipal Finance Management Act (MFMA).

Table 15: Action Plan + Time Line + Responsibilities

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</tbody>
</table>
ANNEXURE

6.1 REFERENCE MATERIAL
ANNEXURE

6.1. COMMISSION INPUTS