NELSON MANDELA BAY
METROPOLITAN MUNICIPALITY

Metropolitan
Spatial Development
Framework 2015
# TABLE OF CONTENTS

1. **EXECUTIVE SUMMARY** ........................................................................................................... 1
   1.1 Factual Overview .................................................................................................................. 1
   1.2 Proposals ............................................................................................................................... 2
   1.3 Implementation and Prioritisation ......................................................................................... 6
   1.4 Incorporating Sectoral Plans ................................................................................................. 7
   1.5 Status of the MSDF ............................................................................................................... 8

2. **INTRODUCTION** .................................................................................................................... 9
   2.1 Background and Purpose ..................................................................................................... 9
   2.2 Metropolitan Spatial Development Framework Approach ................................................ 12
   2.3 Overview of Nelson Mandela Bay ....................................................................................... 13
   2.4 Document Structure ............................................................................................................ 15

3. **LEGISLATIVE AND POLICY CONTEXT** ............................................................................... 16
   3.1 Legislative Context ................................................................................................................ 16
   3.2 National Policy Objectives .................................................................................................. 21
   3.3 Provincial Policy Objectives ................................................................................................. 24
   3.4 Local Policy Objectives ....................................................................................................... 26

4. **SPATIAL DEVELOPMENT ANALYSIS** .................................................................................. 34
   4.1 Biophysical Analysis ............................................................................................................ 34
   4.2 Challenges and Opportunities .............................................................................................. 47
   4.3 Socio Economic Analysis ..................................................................................................... 48
   4.4 Built Environment Analysis ................................................................................................ 61
   4.5 Infrastructure ........................................................................................................................ 65
   4.6 Pattern of Activities .............................................................................................................. 66

5. **SPATIAL PLANNING DIRECTIVES** ..................................................................................... 85
   5.1 Primary Structuring Elements ............................................................................................. 86
   5.2 Consolidation and Densification ......................................................................................... 87
   5.3 Growth Management ............................................................................................................ 88
   5.4 Other Supporting Strategies ................................................................................................. 89
   5.5 Incorporating Sector Plan Developments .......................................................................... 130

6. **SPATIAL PROPOSALS** .......................................................................................................... 138
   6.1 Spatial Vision ....................................................................................................................... 138
6.2 Spatial Principles informing the NMBM SDF .................................................. 138
6.3 Spatial Development Concept .............................................................................. 140

7. IMPLEMENTATION FRAMEWORK ......................................................................... 204
7.1 Capital Investment Framework ........................................................................... 204

8. BIBLIOGRAPHY ..................................................................................................... 217

LIST OF FIGURES:

Figure 1: Distance to Facilities .................................................................................. 4
Figure 2: Nelson Mandela Bay Overview .................................................................... 13
Figure 3: Horizontal alignment at local level ............................................................. 26
Figure 4: Nelson Mandela Bay Local Spatial Development Frameworks .................... 29
Figure 6: Global Significance of the biodiversity. (Source: NMBM, Bioregional Plan 2014) ......................................................................................................................... 34
Figure 10: Fresh Water Features. (Source: NMBM GIS, 2015) ................................. 43
Figure 12: Employment trends within the Nelson Mandela Bay. (Source: StatsSA 2011 Census) ...................................................................................................................... 55
Figure 15: Urban Network Strategy - Township Clusters ............................................ 90
Figure 16: Urban Network Strategy: Cluster Densities (Persons/ha) ......................... 91
Figure 17: Urban Network Strategy - Income Levels per Cluster ............................... 91
Figure 18: NMBM Urban Nodes. [(Source: NMBM Draft Urban Network Strategy 2014)] ................................................................................................................................. 142
Figure 20: Major Industrial Nodes. [(Source: NMBM Draft Urban Network Strategy 2014)] ................................................................................................................................. 149
Figure 22: Major Movement Directions. [Source: NMBM Draft Urban Network Strategy 2014)] ................................................................................................................................. 152
Figure 23: Existing Roads of Metropolitan Significance. (Source: Source: NMBM, CITP 2011/12) ................................................................................................................................. 155
Figure 24: Non-Motorised Transportation Concept (Source: NMBM, CITP 2011/12) ................................................................................................................................. 157
Figure 25: Long Term Public Transport Routes. (Source: NMBM, CITP 2011/12) 160
Figure 26: Long Term Rail Network. (Source: NMBM, CITP 2011/12) ................. 162
Figure 28: Activity & Emerging Corridors. [Source: NMBM Draft Urban Network Strategy 2014)] ................................................................................................................................. 165
Figure 32: Walmer Node. (Source: NMBM Greater Walmer LSDF, 2013) .............. 177
Figure 34: N2 Baywest Node. (Source: Western Suburbs LSDF, 2013) ................. 179
Figure 35: Densification within 10Km of CBD. (Source: NMBM, Human Settlement Plan 2011) ................................................................................................................................. 184
Figure 37: Densification within 10Km of Uitenhage. (Source: NMBM, Human Settlement Plan 2011) ............................................................. 185
Figure 38: NMBM Restructuring Zones. (Source: NMBM, Human Settlement Plan 2011) ............................................................. 186
Figure 40: NMBM Spatial Development Plan 2015 ............................................................. 193

LIST OF TABLES:

Table 1: Biodiversity Area Categories. (Source: NMBM Bioregional Plan 2014)..... 37
Table 8: Employment Status. (Source: StatsSA 2011 Census)................................. 55
Table 10: Summary of Land Requirements by Housing Programme. (Source: Shisika Development Management Services, 2012) ........................................ 59
Table 11: Social Facilities .............................................................................. 77

LIST OF ANNEXURES:

ANNEXURE A - Urban Nodes
ANNEXURE B - Major Industrial Nodes
ANNEXURE C - Critical Biodiversity Areas
ANNEXURE D- Activity Corridors
ANNEXURE E- Hubs and Integrated Zones
ANNEXURE F- Urban Edge/Urban Growth Boundary
ANNEXURE G- Flood lines and Coastal Setback Line
ANNEXURE H- Local Spatial Development Frameworks
ANNEXURE I- Mining Activities
ANNEXURE J- Spatial Development Framework 2015
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEPP</td>
<td>Built Environment Performance Plan</td>
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<tr>
<td>BPO</td>
<td>Business Process Outsourcing</td>
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<td>BRT</td>
<td>Bus Rapid Transport</td>
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<td>CBAs</td>
<td>Critical Biodiversity Areas</td>
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<td>CBD</td>
<td>Central Business District</td>
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<td>CDC</td>
<td>Coega Development Corporation</td>
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<td>CETT</td>
<td>Corporate Environmental Task Team</td>
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<td>Coega Industrial Development Zone</td>
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<td>CITP</td>
<td>Comprehensive Integrated Transport Plan</td>
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<td>DEDEAT</td>
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<td>Department of Water Affairs</td>
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<td>EDRS</td>
<td>Economic Development &amp; Recreational Services</td>
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<td>EIA</td>
<td>Environmental Impact Assessment</td>
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<td>EMF</td>
<td>Environmental Management Framework</td>
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<td>GGP</td>
<td>Gross Geographic Product</td>
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<td>Gross Value Added</td>
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<td>HIV/AIDS</td>
<td>Human Immunodeficiency Virus causing the Acquired Immunodeficiency Syndrome</td>
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<td>Housing Delivery Management System</td>
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<td>Integrated City Development Grant</td>
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<td>IPTS</td>
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<td>Abbreviation</td>
<td>Full Form</td>
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<td>ITP</td>
<td>Integrated Transport Plan</td>
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<td>Land Asset Management System</td>
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<td>Nelson Mandela Bay Municipality’s Integrated Development Plan</td>
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<td>Public Transport Infrastructure and Systems</td>
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<td>Public Transport Plan</td>
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<td>ROD</td>
<td>Record of Decision</td>
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<tr>
<td>SCU</td>
<td>Sustainable Community Unit</td>
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<td>Sustainable Community Units</td>
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<td>Acronym</td>
<td>Description</td>
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<tr>
<td>SDR</td>
<td>Strategic Development Review</td>
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1. EXECUTIVE SUMMARY

This document is the result of a review of the Metropolitan Spatial Development Framework (MSDF) which was approved in March 2009. As a core Integrated Development Plan (IDP) component, the MSDF is a plan outlining the desired spatial development of the metropolitan area as contemplated in the Spatial Planning and Land Use Management Act, 2013 (SPLUMA), which replaced disparate apartheid era laws with a coherent legislative system designed to spatially transform the country in its democratic era. This tool must therefore not be used in isolation, but must support decision-making within the context of the IDP and a City-wide Development Strategy. In addition to setting out basic guidelines for a land use management system, the MSDF also highlights priority investment and development areas and will therefore serve as a guide to decision-makers and investors.

The MSDF is aligned with and does not conflict with other development strategies, Nationally, Provincially and Regionally. The MSDF is a statutory requirement in terms of the Municipal Systems Act, No 32 of 2000 and is approved every five (5) years and refined annually. As approval of the current MSDF occurred in 2009; it is necessary that a revised MSDF be commissioned in the 2014/15 financial year. This document therefore contains the reviewed MSDF for adoption again by Council in 2015.

1.1 Factual Overview

The Nelson Mandela Bay Metropolitan Municipality (NMBMM) is the largest Metropolitan Municipality in the Eastern Cape. After the Ekurhuleni Metropolitan Municipality in Gauteng, it is the second largest Metropolitan Municipality in area in the country covering an area of 1950km² in extent.

According to the 2001 Population Census, the population in the Nelson Mandela Bay Municipality was approximately 1 million people. Demographic research undertaken as part of the refinement of the MSDF indicates the 2011 census population of about 1, 15 million revealing a very low population growth since 2001.
The Nelson Mandela Bay Municipality plays a fundamental role in the economy of the Eastern Cape Province, one of the poorest of the Provinces, contributing approximately 42% to the Gross Geographic Product (GDP) (Global Insight, 2013). Unemployment is still high at 36.6% (Census 2011). However, a more recent estimate of the GDP of 32, 34% (Global Insight, 2013) suggests that there may be some improvement in economic growth.

Housing remains a challenge with a backlog of approximately 72 411 units (BEPP 2014). The Municipality is currently verifying these figures through a study to determine the number of backyard shacks and is also engaged in an audit of informal settlements. This study commenced in April 2014.

1.2 Proposals

The Human Settlements Strategic Framework adopted by Council in December 2012 recommends spatial restructuring through the following interventions:

- **Urban Renewal Precincts**: including Inner City areas, Motherwell, Happy Valley, Lower Baakens Valley, Walmer Gqebera, Korsten, Helenvale and Greater Ibhayi-Northern Areas Hub;

- **Spatial Transformation Precincts**: such as Paronsvlei, Coega IDZ / Motherwell, Bay West and N2 Developments;

- **Implementation of an Integrated Zoning Scheme and Land Use System**;

- **Assembly of well-located public and private land for development of Integrated Human Settlements**.

The following focal points in the MSDF are regarded as key in achieving restructuring, integration and sustainability of the city and they are as follows:
1.2.1 Built Environment Performance Plan (BEPP) (Draft) 2015/16

The BEPP is a requirement of the Division of Revenue Act (DoRA) in respect of the various infrastructure grants related to the built environment of Municipalities. It is regarded as complementary to the key strategic documents of the Municipality, together with the IDP, Budget, MSDF, Integrated Public Transport Strategy (IPTS) and Human Settlements Plan. The BEPP aims to demonstrate the use of these grants for the purpose of spatial restructuring through targeting the expenditure in areas that will maximise the positive impact on citizens, leverage private sector investment and support growth and development. Amongst other proposals, the BEPP has identified various Hubs and Integrated Zones where investment is recommended to be channelled in order to facilitate development of the city.

1.2.2 Sustainability Community Planning Methodology

The existing pattern of development in the Nelson Mandela Bay Municipality is the result of segregation-based planning. The structuring not only separates different racial groupings in geographical terms, but has also resulted in great disparities in standards of living, as well as access to infrastructural services, employment and cultural and recreational facilities. As these imbalances serve as constraints for redevelopment, they should be addressed and rectified.

Sustainable Community Units (SCUs) have been introduced to achieve a more balanced structure in Nelson Mandela Bay, in order to reduce discrepancies in terms of service provision and standards; promote integration in socio-economic and functional terms; and provide for economic activities and employment opportunities.

The urban areas of the Nelson Mandela Bay Municipality have been divided into a number of planning units or entities, known as Sustainable Community Units (SCUs). These are defined by the distance that an average person can comfortably walk to access basics, i.e. a 2 km radius (See Figure 2). The planning methodology aims to provide the requirements for a minimum standard of planning and living within those areas; in other words, amenities, facilities and job opportunities must be within walking distance of all residents.
All SCUs in the Nelson Mandela Bay Municipality are to be linked by a public transport network that will make all areas accessible to all communities by means of public transport, which is also required in terms of the Integrated Transport Plan (ITP). The diagram below illustrates the strategic locations of facilities.

Moreover, the planning methodology concept identifies the need to make higher levels of sustainability and integration in the Nelson Mandela Bay Municipality the primary focus of the SCU planning. The basis for Sustainable Community Planning lies in the development principles that have been adopted at National, Provincial and Local Government levels, as supported by Legislation and Government policies. The development goals and principles of particular importance for spatial planning in SCUs are as follows:

a) Poverty alleviation and the satisfaction of basic needs;
b) Focus on special needs groups (HIV and AIDS affected persons, children, the aged and persons with disabilities);
c) Gender equality and equity;
d) The environment (physical, socio-economic);
e) Participation and democratic processes;
f) Local economic development;
g) Accessibility (public transport and pedestrian focus);
h) Mixed use development;
i) Corridor development;
j) Safety and security;
k) Variation and flexibility;
l) Densification;
m) Reducing urban sprawl;
To achieve both sustainability and integration, six functional elements have been identified as needing attention in relation to the above principles.

These six functional elements are as follows:

a) Housing;
b) Work;
c) Services;
d) Transport;
e) Community;
f) Character and Identity;

Focusing on these six elements, minimum standards are pursued to achieve an acceptable planning quality that will result in an improved quality of life for residents in these areas (for more detail on the planning methodology outlined above, refer to the Sustainable Community Planning Guide dated June 2007, which is available on the municipal website (http://www.nelsonmandelabay.gov.za).

1.2.3 Corridors and Accessibility

In restructuring the Nelson Mandela Bay Municipality, the development of corridors along major routes that have potential for integrated mixed land use development, supported by improved public transport services (e.g. the Khulani Corridor), is also envisaged. ITP has been developed as a key component of the MSDF.

The primary goal of the ITP is to improve accessibility for all residents of Nelson Mandela Bay Municipality with a strong focus on public transport provision.

1.2.4 Economic Development and Growth

This crucial component of the MSDF seeks to generate means to support and enhance urban development. Various interventions may be utilised to support economic growth and development, based on a number of considerations, such as:
a) The importance of linking the residents of the Nelson Mandela Bay Municipality to opportunities;
b) Directing investments to places where they will have the greatest effect;
c) Protecting and enhancing natural and cultural resources for sustainability and enriching the experience of Nelson Mandela Bay Municipality; and
d) Weaving the growth of Nelson Mandela Bay strongly into the economic fabric of the Eastern Cape Province.

1.2.5 Activity nodes or areas

A wide range of activity nodes or areas exist which accommodates a variety of activities. These can be divided into four main core areas, namely

- Port Elizabeth
- Uitenhage
- Despatch
- Coega IDZ and the Port of Ngqura.

1.3 Implementation and Prioritisation

The MSDF provides strategic guidance on the areas on which the Municipality should focus the allocation of its resources. In order to assist in prioritising projects and allocating resources, four main elements of the MSDF were isolated as geographic entities that could give guidance as to where the priority capital investment areas lie. These areas are:

a) Core economic areas
b) Infill priority areas
c) Strategic development areas
d) Service upgrading priority areas

National Treasury has prioritised the development of what is termed an Urban Network Strategy. This Strategy defines areas such as nodes, hubs and corridors into which government grant funding from National Treasury will be channelled. The
NMBM, in conjunction with National Treasury, is working on defining an acceptable Urban Network Strategy, which will be approved by Council and form part of this MSDF.

1.4 Incorporating Sectoral Plans

The various sectoral plans incorporated into the MSDF are identified in this section. These sectoral plans, which have major spatial implications for the MSDF, are as follows:

a) Coastal Management Plan;
b) Disaster Management Plan;
c) Environmental Policy;
d) Infrastructure Development Plan;
e) Comprehensive Integrated Transport Plan;
f) Integrated Waste Management Plan;
g) Local Economic Development Strategy;
h) Metropolitan Open Space System;
i) Tourism Master Plan;
j) Integrated HIV and AIDS Plan;
k) Water Services Master Plan;
l) Sewerage Master Plan;
m) Human Settlements Plan;
n) Land Use Management System.

In addition to these, with the preparation of more detailed Local Spatial Development Frameworks and their approval, the MSDF becomes more detailed.

Furthermore, a number of large developmental initiatives are mooted in and around Nelson Mandela Bay. If all the proposed initiatives were developed comprehensively and in support of one another, a collective momentum would be generated. Together, these projects would place Nelson Mandela Bay in a highly competitive
position to attract tourism and other investment, both nationally and internationally, and would promote domestic economic growth.

1.5 Status of the MSDF

It should be noted that in terms of the Spatial Planning and Land Use Planning Acting 2013 (SPLUMA) Chapter 4, Part F, 22(1 & 2), a Municipal Planning Tribunal or any other authority required or mandated to make a land development decision in terms of this Act or any other law relating to land development, may not make a decision which is inconsistent with a municipal spatial development framework, unless if site-specific circumstances justify a departure from such provisions.

However, it should be also noted that the MSDF is not site-specific and is therefore a broad level guide. Reference should be made to the Local Spatial Development Frameworks (LSDFs) which are deemed to be a detailed interpretation of the broader MSDF. The LSDFs are to be used together with the MSDF for the evaluation of land development applications.
2. INTRODUCTION

2.1 Background and Purpose

The quality of life for many persons living in the Nelson Mandela Bay Municipality is extremely poor. An important contributing factor to this is the structure and form of the city. The urban policies and practices of the past have resulted in a city which aggravates poverty and inequality, which is highly inconvenient for many and which uses resources inefficiently. The causes of these problems are complex and include a serious shortage of public investment to enable what needs to be done to remedy the situation. A primary contributing factor has been the lack of consistency and poor decision making about the spatial development of the city.

Therefore, this document aims to address the afore-mentioned challenges by providing spatial representation of vision of the City by providing parameters within which initiatives at a sector level and local level should translate spatial objectives into tangible and attainable development objectives, targets and projects. Furthermore, it intends to guide and manage public and investment development in order to ensure the best possible outcome for the City.

2.1.1 Terms of Reference and Scope of Work

The main objective is to provide a long term vision of the desired spatial form and structure of the Nelson Mandela Bay Municipality by creating a credible Metropolitan Spatial Development Framework through the implementation of the Comprehensive SDF Guidelines. The MSDF must give effect to the development principles contained in the Spatial Planning & Land Use Management Act, 2013 (SPLUMA) including the principles of:

- spatial Justice;
- spatial Sustainability;
- efficiency;
- spatial Resilience; and
• good Administration.

2.1.2 Purpose of the MSDF

The MSDF and associated more detailed LSDF’s seek to achieve, over time and in a controlled way, a radical restructuring of the city to make it more equitable, integrated and efficient.

Furthermore, it seeks to guide overall spatial form and identify current and future desirable land uses within the municipality, in order to give physical effect to the vision, goals and objectives of the Municipal IDP. The MSDF informs development decisions and creates a framework for investment that facilitates both public and private spending. It also provides a basis for land use management and is ‘indicative’ of broad land uses within the municipal area of jurisdiction and directions of future development. It reflects key land uses such as major transport routes, future transport links, environmentally important areas and key potentials and constraints.

The MSDF, has a strong spatial focus. Spatial planning is a public sector activity that creates a public investment and regulatory framework within which private sector decision making and investment occurs. Spatial planning is important due to the fact that most development decisions have spatial implications.

Spatial planning has two broad dimensions, namely:

(a) proactive planning, which defines desirable directions, actions and outcomes in relation to the spatial dimensions and relationships of the city, and which guides public investment;

(b) land development and management, which is concerned with regulating land use change (usually driven by private sector initiatives), and with protecting individual and group rights in land.
These two facets of spatial planning cannot be seen in isolation from each other. They need to be integrated and should inform each other. These two aspects of spatial planning and the issue of how to integrate them form the core focus of the MSDF.

2.1.3 MSDF Objectives

The following development objectives are confirmed in order to support sustainable development with the Nelson Mandela Bay Metropolitan Municipality:

- to analyse spatial opportunities, constraints, patterns and trends;
- identify the need for spatial restructuring and land reform;
- provide spatial solutions to developmental issues;
- identify national spatial development principles and their spatial application in the metropolitan area;
- provide an understanding of and allow for the spatial implications of social, economic and environmental sustainability;
- produce a document that will guide decision-making with regard to developable and non-developable areas including the sequencing of development, and;
- create a framework for public and private investment decisions to facilitate investor confidence.
2.2 Metropolitan Spatial Development Framework Approach

2.2.1. Approach

The Department of Rural Development and Land Reform (DRDLR) Guideline was used as the method to draft the Nelson Mandela Bay Spatial Development Framework.

2.2.2. Public Participation

The MSDF is concerned with public involvement at two levels. The first is with participation in relation to the MSDF itself. The second is with public involvement as an ongoing part of spatial planning and urban management systems.

Implementation of the principles and recommendations of the MSDF will affect every resident and visitor to Nelson Mandela Bay in some way or another. It is therefore important that its citizens are engaged in the formulation of the MSDF.

2.2.3 Time-Frames

The MSDF presents a long term vision of the desired spatial form of the metropolitan, and thus is critical informant to bulk infrastructure planning which normally has a 20-year planning lifespan.

After adoption of the IDP by the Council, the Spatial Development Framework is binding on the local authority for a period of 5 years (linked to the term of office of the Council). The newly elected Council may adopt the IDP of the preceding Council or develop a new IDP taking into account the existing documentation. The MSDF may be reviewed annually which could result in amendments that can only be effected by following a statutory process.
2.3 Overview of Nelson Mandela Bay

The NMBM was the first Metropolitan Municipality in the Eastern Cape Province and is one of seven metropolitan areas in South Africa. The NMBM covers an area of approximately 200 000 hectares and is bordered by the Sundays River to the north, the Van Stadens River towards the south-west and Greater Uitenhage/Despatch areas towards the west of the Metropolitan area.

2.3.1 Port Elizabeth Characteristics

The city of Port Elizabeth is nicknamed “The Friendly City”, stretched for 16km along the Algoa Bay and is one of major seaports in South Africa including the Port of Ngqura.

Port Elizabeth is one of the major industrial areas in South Africa and is the primary manufacturing hub of the Eastern Cape. Traditionally, economic growth in the Nelson Mandela Bay Municipality area has been strong, but dependent on a narrow industrial base and traditionally been driven by a few sectors only, mainly the
automotive vehicle and component manufacturing and exports, these include General Motors, Ford, Continental Tyres and other automotive related companies.

The Port Elizabeth region has a large pool of both skilled and unskilled labour. It has well developed infrastructure in terms of road and rail, and provides easy access to both the Port Elizabeth and the nearby towns of Uitenhage and Despatch. With the advent of democracy a new Industrial Development Zone (IDZ) has been established at Coega, known as the Coega Industrial Development Zone (CIDZ). The Coega IDZ under stewardship of the Coega Development Corporation has managed to attract billions of investments into economy of the Eastern Cape and thus enabling thousands of jobs to be created.

The wider area of Port Elizabeth features a number of historic attractions linked to the Donkin Reserve Park and Monument, old heritage buildings and opportunities for game viewing such as the Addo Elephant National Park.

2.3.2 Uitenhage/Dispatch Characteristics

The Greater Uitenhage/ Despatch area covers an area of approximately 237 km² (23 745 ha) and includes the towns of Uitenhage and Despatch, as well as the township areas of KwaNobuhle, Khayamnandi, Rosedale, Kabah-Langa and Joe Slovo. Uitenhage/ Despatch is characterised by significant residential component with an approximate population of 280 000 in 16 wards.

Known as the Garden Town, Uitenhage was first a farm community on the banks of the Swartkops River, now it is a thriving commercial and industrial town and has managed to keep its picturesque beauty. Uitenhage is known for its large industrial base. The largest of these industries are the Volkswagen South Africa and Good-year factories. An automotive supplier park, the NMBLP, has been developed directly next to the Volkswagen factory, thus allowing automotive component manufacturers to construct their manufacturing plants close by.
Major access corridors are the R75 between Port Elizabeth and Graaff-Reinet, the R334 Motherwell link and a well-developed internal road hierarchy and railway linkages. The Central Business Districts of Uitenhage and Despatch are well-established and fulfil a local and district wide commercial trade function.

2.4 Document Structure

The document is made up of seven sections.

Following Sections 1 and 2 of the report being the Executive Summary and Introduction to the MSDF respectively, Section 3 defines an approach to planning and also provides a short comment on National, Provincial and Local legislation and policy guidelines including the “Vision” for Nelson Mandela Bay. Section 4 presents a broad analysis of the current situation with regard to spatial planning and the existing Metropolitan structure, the desired spatial logic and relationships between different elements which make up the city’s structure (biophysical analysis, socio-economic analysis, built environment analysis, including various sector plans which have major spatial implications for the MSDF). Section 5 outlines the spatial planning directives which are designed to maintain consistent approaches in proving direction and scope for integration of all aspects of spatial planning such as land use, roads and service infrastructure, pedestrian and vehicular movement, open space systems and other development patterns. Section 6 introduces the spatial proposals and restructuring of the city highlighting major nodes and growth management scenarios defined by the urban edge. This section concludes by identifying some important projects being undertaken. Section 7 identifies urban networks, integration zones and hubs. It further sets out the various development phases and strategies for the implementation of the MSDF, drawing together specific and significant follow up studies and planning projects.
3. LEGISLATIVE AND POLICY CONTEXT

This Chapter describes the National and Provincial legislation, and policy guidelines relevant to the Metropolitan Spatial Development Framework.

3.1 Legislative Context

3.1.1 Constitution of the Republic of South African, 1996

The constitutional provisions on local government are in section 152 and 153. Section 152 is very clear on the objective of Local Government which includes:

- “To provide democratic and accountable government for local communities
- To ensure provision of services to communities in a sustainable manner,
- To promote social and economic development
- To promote a safe and healthy environment, and
- To encourage the involvement of communities and community organizations in the matters of local government.”

The developmental duties of local government are stated in Section 153 that a municipality must:

- “Structure and manage its administration, and budgeting and planning process to give priority to the basic needs of the community, and to promote the social & economic development of the municipality;
- Participate in national & provincial development programmes.”

The MSDF aims to address the social, economic and environmental developmental needs of NMBMM on a spatial level as contemplated in the Constitution of the Republic of South Africa, with respect to duties of Local Government. In doing so, it encourages spatial planning for the community which involves the community while creating safe and healthy environments.
3.1.2 Local Government: Municipal Systems Act, 2000

The MSDF, as part of the Integrated Development Plan (IDP) gives legal status in terms of the Municipal Systems Act (Act 32, 2000) and the Municipal Planning and Performance Management Regulations published on 24 August 2001.

3.1.3 Local Government: Municipal Planning and Performance Management Regulations (GN R796 of 2001)

The Regulations promulgated in terms of the Municipal System Act (2000) set out the following requirements for the development of a Spatial Development Framework:

“A spatial development framework reflected in a municipality’s integrated development plan must:

(a) set out objectives that reflect the desired spatial form of the municipality;

(b) contain strategies and policies regarding the manner in which to achieve the objectives referred to in paragraph (b), which strategies and policies must-

(i) indicate desired patterns of land use within the municipality;

(ii) address the spatial reconstruction of the municipality; and

(iii) provide strategic guidance in respect of the location and nature of development within the municipality.

(c) set out basic guidelines for a land use management system in the municipality;

(d) set out a capital investment framework for the municipality’s development programs;

(e) contain a strategic assessment of the environmental impact of the spatial development framework;

(f) identify programs and projects for the development of land within the municipality;

(g) be aligned with the spatial development frameworks reflected in the integrated development plans of neighbouring municipalities; and

(i) provide a visual representation of the desired spatial form of the municipality, which representation -
(ii) must indicate where public and private land development and infrastructure investment should take place;

(iii) must indicate desired or undesired utilisation of space in a particular area;

(iv) may delineate the urban edge;

(v) must identify areas where strategic intervention is required; and must indicate areas where priority spending is required."

3.1.4 Municipal Finance Management Act (2003) (MFMA)

The objective of the MFMA is to secure sound and sustainable management of the financial affairs of municipalities.

Section 16. (1) of the MFMA requires the municipality to approve an annual budget for the municipality and any decision must be accompanied by among others, the following documents:

- 17 (b) measurable performance objectives for revenue from each source and for each vote in the budget, taking into account the municipality's integrated development plan; and

- 17(d) any proposed amendments to the municipality's IDP following its annual review of the integrated development plan in terms of section 34 of the Municipal Systems Act.

In order to align with the objective of this act, the MSDF utilizes the Capital Investment Framework to indicate the spatial priorities and budget provisions.

3.1.5. Spatial Planning and Land Use Management Act, 2013 (SPLUMA)

The Spatial Planning and Land Use Management Act (SPLUMA), Act 16 of 2013 was promulgated on 5 August 2013. Chapter 4 of SPLUMA provides clear directives with regard to the preparation of Spatial Development Frameworks at national, Provincial, Regional and Local Municipal level. The SPLUMA will replace the Development Facilitation Act (67 of 1995), Removal of Restrictions Act (84 of 1967), the Physical Planning Act (88 of 1967) and other planning legislations. It aims to rationalise planning by ensuring the following objectives are achieved:
(a) “provide for a uniform, effective, efficient and integrated regulatory framework for spatial planning, land use and land use management in a manner that promotes the principles of co-operative government and public interest;
(b) provide for and determine development principles, compulsory norms and standards for land use management;
(c) maintain essential standards for land use management, spatial development and land use;
(d) promote-
   (i) co-operative governance;
   (ii) socio-economic benefits; and
   (iii) sustainable and efficient use of land;
(e) establish planning tribunals; and
(f) redress the imbalances of the past and ensure that there is equity in land use and land use management.”

Section 20, prescribes the processes with regard to the adoption of MSDF and furthermore emphasises the relationship between the SDF and IDP. This process is as follows:


(2) The municipal spatial development framework must be prepared as part of a municipality’s integrated development plan in accordance with the provisions of the Municipal Systems Act.

(3) Before adopting the municipal spatial development framework contemplated in subsection (1) and any proposed amendments to the municipal spatial development framework, the Municipal Council must—

(a) give notice of the proposed municipal spatial development framework in the Gazette and the media;
(b) invite the public to submit written representations in respect of the proposed municipal spatial development framework to the Municipal Council within 60 days after the publication of the notice referred to in paragraph (a); and

(c) consider all representations received in respect of the proposed municipal spatial development framework."

Section 21 states that the SDF must among other things give effect to the development principles and applicable norms and standards set out in Chapter 2. The Nelson Mandela Bay SDF has adopted these Chapter 2 development principles and applicable norms and standards in developing the spatial vision.


The National Environmental Management Act (NEMA), Act 19 of 1998, provides for “co-operative environmental governance” on matters affecting the environment. This Act inter alia regulates the preparation of Environmental Management Plans at all spheres of Government, which then influences the spatial extent of developable and un-developable land. The key principles of NEMA that inform the SDF include the following:

- environmental, social and economic sustainable development;
- the provision of access to resources and environmental management that puts people and their needs first;
- the protection of natural resource and the maintenance of natural systems.

The MSDF takes into consideration among other things, the protection of natural resource and the maintenance of natural systems. MSDF spatially represent the critical biodiversity areas that need to be protected.
3.1.7 National Heritage Act

This legislation aims to promote good management of the national estate, and to enable and encourage communities to nature and conserve their legacy so that it may be bequeathed to future generations. The National Heritage Resources Act, No. 25 of 1999, demands the establishment of a heritage resources management system involving a national heritage resources authority, a Provincial Heritage Resources Authority (PHRA) in each region or province and the local authorities which, once the system is established, will be responsible for Grade 1, 2 and 3 heritage resources respectively.

3.2 National Policy Objectives

The MSDF has used alignment as an instrument to synthesize and integrate the top-down and bottom-up planning process between different spheres of Government. The MSDF must embody the ideals for planning that have been set at a National level. This vertical alignment is thus important in ensuring that the National vision and objectives are incorporated into the spatial direction and/or focus.

Below are the most significant National strategies and/or policies relevant to the MSDF.

3.2.1 National Development Plan: Vision 2030 (NDP)

The National Planning Commission has developed a National Development Plan which focuses on enabling sustainable and inclusive development. The Plan aims to eliminate poverty and reduce inequality by 2030. The Plan has a target of developing people's capabilities to improve their lives through education and skills development, health care, better access to public transport, jobs, social protection, rising income, housing and basic services, and safety. It proposes to the following strategies to address the above goals:
• Creating jobs and improving livelihoods
• Expanding infrastructure
• Transition to a low-carbon economy
• Transforming urban and rural spaces
• Improving education and training
• Providing quality health care
• Building a capable state
• Fighting corruption and enhancing accountability
• Transforming society and uniting the nation

The National Development Plan: Vision 2030 is central to the formulation of the MSDF’s spatial vision and strategies. The MSDF proposes to bring lower income people into areas where there are major economic opportunities through social housing programmes; thereby promoting spatial, social and economic restructuring. This will enhance access to job opportunities, which is key in the alignment of the NDP: Vision 2030 and the SDF.

3.2.2. National Spatial Development Perspective (NSDP) (2006)

The NSDP is a critical tool for bringing about coordinated government action and alignment to meet social, economic and environmental goals. It is the basis for maximizing the overall social and economic impact of government development spending by interpreting the strategic direction, promoting policy coordination and fitting government actions into a coherent spatial term of reference. The purpose of the NSDP is “to fundamentally reconfigure apartheid spatial relations and to implement spatial priorities that meet the constitutional imperatives of providing basic services to all and alleviating poverty and inequality.”
The following NSDP principles will be vital in the crafting and implementation of the MSDF:

**NSDP Principles**

<table>
<thead>
<tr>
<th>Principle</th>
<th>Implication for the SDF</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Principle 1</strong>: Rapid economic growth that is sustained and inclusive as a prerequisite for the achievement of poverty alleviation.</td>
<td>The MSDF will identify areas of poverty and where economic growth can be directed.</td>
</tr>
<tr>
<td><strong>Principle 2</strong>: Government has a constitutional obligation to provide basic services to all citizens (e.g. water, energy, health and educational facilities) wherever they reside.</td>
<td>The MSDF will indicate levels of services that exist within the municipality as well as service level gaps.</td>
</tr>
<tr>
<td><strong>Principle 3</strong>: Government spending on fixed investment should be focused on localities of economic growth and / or economic potential in order to gear up private sector investment, stimulate sustainable economic activities and create long-term employment opportunities.</td>
<td>A capital investment plan will be developed as a component of the MSDF and will direct where public and private investment should occur.</td>
</tr>
<tr>
<td><strong>Principle 4</strong>: Where low economic potential exists investments should be directed at projects and programmes to address poverty and the provision of basic services in order to address past and current social inequalities.</td>
<td>The MSDF will indicate levels of services that exist within the metro.</td>
</tr>
<tr>
<td><strong>Principle 5</strong>: In order to overcome the spatial distortions of Apartheid, future settlement and economic development opportunities should be channelled into activity corridors and nodes that are adjacent to or link the main growth centres in order for them to become regional gateways to the global economy.</td>
<td>The MSDF will identify various nodes categories and corridors in order to redress spatial inefficiencies.</td>
</tr>
</tbody>
</table>
3.2.2 New Growth Path (NGP) (2010)

The policy’s principal target is to create five million new jobs by 2020. This framework reflects government’s commitment to prioritising employment creation in all economic policies. It identifies strategies that will enable South Africa to grow in a more equitable and inclusive manner while attaining South Africa’s developmental agenda.

Central to the New Growth Path is a massive investment in infrastructure as a critical driver of jobs across the economy.

- The framework identifies investments in five key areas namely: energy, transport, communication, water and housing. Sustaining high levels of public investment in these areas will create jobs in construction, operation and maintenance of infrastructure.

- The new growth path sees the infrastructure programme as a trigger to build a local supplier industry for the manufacture of the components for the build-programme.

- Specific measures, particularly changes to procurement policy and regulations, are identified to ensure that this is achieved. Risks include the still fragile global recovery; competition and collaboration with the new fast growing economies; and competing interests domestically.

3.3 Provincial Policy Objectives

The Municipal IDP is also informed by Provincial spatial planning policy directives that help provide a policy context for the formulation of the MSDF. The MSDF contributes to the attainment of the spatial development targets and objectives outlined in these policies and also deal with the spatial issues facing the municipal area. Some of the most significant strategies and/or policies are as follows:
3.3.1 The Provincial Growth and Development Plan (2004 - 2014).

Within the broad understanding of the Eastern Cape as having the highest poverty rate, the second lowest per capita income and the highest provincial unemployment; the Provincial Growth and Development Plan has prioritised the following needs which are addressed through a series of interventions, namely :-

- Agrarian Transformation and Food Security
- Poverty Eradication
- Manufacturing Diversification and Tourism
- Public Sector Transformation
- Infrastructure Development, and
- Human Resource Development

The MSDF identifies areas for focused investment as a catalyst for job creation and poverty alleviation. This will sensitise economic development while creating opportunities for social and economic inclusion.

3.3.2 The Eastern Cape Provincial Spatial Development Plan (2010 Final Draft) (ECPSDP)

One of the aims of ECPSDP is to provide a framework within which local authorities in the Province can prepare their IDP’s and Land Development Objectives (LDO’s).

Apart from aligning the Provincial priorities with National goals and objectives, the following issues are raised in relation to the Nelson Mandela Bay Municipality from a Provincial spatial perspective.

- The Coega IDZ is one of the two (2) in the Province and is seen as having significant growth potential requiring Provincial attention;
- The Nelson Mandela Bay Municipality area is recognised as having Provincial tourism potential;
• Economic activity in the Province is focussed towards Nelson Mandela Bay Metropolitan Municipality;
• The relevant strategic approach of the Province in regard to Nelson Mandela Bay is to maximise the strategic advantage of industry and commerce in order to have a positive effect on the region;
• The Province will encourage the development of the tourism industry;
• Nelson Mandela Bay is identified as one of 12 provincial nodes to be targeted for strategic investment in order to create growth and spin offs for the region.

3.4 Local Policy Objectives

In addition to the vertical alignment between MSDF and the National and Provincial policies outlined above, there is also a need for a horizontal relationship and/or alignment between the MSDF and local policies as well as neighbouring Municipalities. The following diagram reflects the MSDF’s integrated approach at local level:
3.4.1. Integrated Development Framework (IDP)

The IDP is the principal strategic planning document for the municipality. Importantly, it ensures close co-ordination and integration between projects, programmes, activities and the Budget, both internally (between directorates) and externally (with other spheres of government). The IDP ultimately enhances integrated service delivery and development and promotes sustainable, integrated communities, providing a full basket of services, as communities cannot be developed in a fragmented manner.

As the key strategic plan of the Municipality, the priorities identified in the IDP inform all financial planning and budgeting undertaken by the institution.

As a strategic document, the IDP in terms of the Municipal Systems Act Section 35 is required to contain an SDF. The SDF is thus a spatial translation of the IDP of the Municipality.

3.4.3 Local Spatial Development Frameworks (LSDFs)

MSDF is supported by a number of LSDFs which serve as a second tier/level of planning with respect to spatial planning hierarchy (Refer to Figure 4). These LSDFs are important in ensuring the realisation of the SDF’s Spatial Vision through the promotion of land uses which are in line with the spatial principles as contained in the MSDF. The LSDFs that have been approved by the Council include:

- Lorraine LSDF (almost ready to be reviewed);
- 2010 Stadium Precinct LSDF;
- Helenvale LSDF;
- Motherwell and Wells Estate LSDF;
- Western Suburbs LSDF;
- Happy Valley LSDF;
- Uitenhage and Despatch LSDF;
- Inner City LSDF;
• Greater Walmer LSDF; and
• Cape Road LSDF.

The following LSDFs are currently under development:

• Ibhayi LSDF
• Summerstrand LSDF;
• Bethelsdorp LSDF; and
• Zanemvula (Soweto-on-Sea/Veeplaas).

The following LSDFs are to be revised:

• Greater Walmer LSDF
  - Erven on the Northern portion along Circular Drive to be recommended for business development in light of the characteristics of the area that are conducive for such developments. The erven to be considered are from the corner of Circular Drive and William Moffett Expressway up to the intersection of Circular Drive and William Road/Clermont Street.
  - Villiers Road to be considered for mixed use development.

• Cape Road LSDF
  - Erven on the northern side fronting Cape Road, between Disa Avenue/William Moffett Expressway and Wykeham Avenue are recommended for mixed use development.

• Western Suburbs LSDF
  - It should be amended to include the rezoning TPA 8418 and subdivision 4222B which were approved by Council prior to the approval of the LSDF and Erf 8 Parsonsvei.
3.4.5 Sector Plans

Another horizontal alignment that exists at local level is that of Municipal sector plans to ensure that the planning process is integrated and issues are co-ordinated and addressed jointly. The MSDF will incorporate the spatial direction of these plans to ensure alignment and integration.

3.4.6 Policies

NMBMM has a number of policies which form part of the land use management tools. These policies, among other things, provide guidelines for land use management. These polices include:

- Guesthouse Policy (under review);
- Liquor Outlet Policy (under review);
- Street Naming Policy;
• Rural Management Policy;
• Outdoor Dining Policy (draft format); and
• Student Accommodation.

3.4.7 Neighbouring Planning

The NMBM sharing its borders with Kouga Municipality and Sundays River Valley Municipality which are both under the Cacadu District Municipality.

Figure 5: Municipalities sharing a border with NMBMM

(a) Sunday River Valley Municipality (SRVM)

Addo Elephant National Park is one of the key tourist attraction development at the borders of SRVM which will be critical in ensuring that there is social, spatial and
economic integration between NMBMM and Sunday River Valley Municipality. It is key in unlocking development at the border of these two Municipalities.

According to the SRVM 2013/2014 IDP report, the Greater Addo Park is of critical importance, specifically regarding future planning and development and the integration of park activities and settlement patterns within the SRVM area. Expansion plans for the Park will be focused around the establishment of a 372 000 ha terrestrial zone in addition to a 120 000 ha marine reserve which would include the Bird and St Croix Islands group in Algoa Bay. These plans would see Addo becoming the third largest conservation area in South Africa after the Kgalagadi Transfrontier Park and Kruger National Park.

It is important for the MSDF to take note of this development potential. The Implications for the MSDF will be that of ensuring that there is a tourism linkage between the Addo Elephant Park and NMBMM. Furthermore, the MSDF will ensure linkages in terms of rail and road infrastructure to the agricultural holdings in the hinterland that contribute to the economic growth and development of the region, in terms of agricultural produce and shipping services provided by the two (2) parts and the airport.

Colchester as the nearest NMBMM suburb to the park has a potential to benefit from the tourism industry through the provision of related facilities such as “Guest-house’, ‘Bed and Breakfast’, ‘Public Garage’ and even Shopping facilities. It is envisaged that there will be a growing interest of investing in the area, it is thus anticipated that investors or developers will take advantage of the development potential at the borders of these two (2) Municipalities.

(b) Kouga Municipality

The two municipalities share one the busiest transport corridor, the N2 to Cape Town. The N2 is the main transport link between these two Municipalities. The Port Elizabeth harbour and airport services have an impact in the utilization of this transport corridor, and both municipalities are benefiting economically from movement activities along this corridor. An environmental assessment process is
currently underway for establishment of a nuclear power generation facility at Thyspunt, within the Kouga Local Municipality. Should this project be implemented, there are considerable implications for the movement of goods and services along the N2 and for the development of the area.

Bay West Shopping Centre is one of the latest developments along this corridor which will enhance economic opportunities for the NMBM. It is envisaged that people travelling through this transport corridor will among other things utilise the Bay West facilities to refresh and explore before caring on with the journey.

3.5.1 Guiding Principles

The key focus areas and planning guidelines for the MSDF arising from the above - mentioned legislation and policies can be summarised as follows:

- **Integration** should be aimed for at all levels of planning. This entails physical, social and economic integration.

- Planning should aim at creating **efficient cities**. This implies reducing urban sprawl and encouraging densification to make the city more efficient, to reduce the need to travel and to contribute towards the viability of public transportation;

- Cities must be planned for **economic and environmental sustainability**;

- The principles of **democracy, equity and a people driven approach** towards planning should apply. This includes **gender** sensitivity, people with physical disabilities and awareness. Public participation is a critical element of the planning processes in order to establish ownership of planning products and processes;
- The principles of **good governance and institutional practices** must apply to all spheres of government and planning;

- An environment must be created wherein people are able to **satisfy basic needs** such as housing, land, water, health and social security;

- The conservation of **natural and built environments** including the preservation of areas of historical significance (i.e. heritage);

- Urgent and radical steps must be taken to counteract trends towards peri-urban settlement on the outskirts of towns;

- Councils need to adopt mechanisms to achieve rapid land sub division and allocation procedures so that settlement areas can be opened up in competition with peri-urban areas.
4. SPATIAL DEVELOPMENT ANALYSIS

4.1 Biophysical Analysis

The purpose of this section is to analyse biodiversity priorities and accompanying guidelines to inform land-use planning, environmental assessment and authorisations, and natural resource management by a range of sectors whose policies and decisions impact on biodiversity, as stipulated in the Nelson Mandela Bay Bioregional Plan 2014 (which is currently under review). NEMA requires that all organs of stake take biodiversity considerations into account in their decision-making. The Nelson Mandela Bay Bioregional Plan 2014 facilitates this by serving as the official reference for biodiversity priorities within the bioregion, superseding all the previous non-published spatial biodiversity plans.

4.1.1 The Biodiversity within Nelson Mandela Bay Municipality Area

The global significance of the biodiversity of the NMBM area is emphasized by the fact that the area falls within two recognised biodiversity hotspots (Myers et al., 2000: Mittermeier, 2004). Biodiversity hotspots are the earth’s richest and most threatened reservoirs of plant and animal life.

Figure 6: Global Significance of the biodiversity. (Source: NMBM, Bioregional Plan 2014)
The rich diversity of the NMBM is partly attributed to the fact that it is an area of convergence of five of South Africa’s biomes (see figure 8): the Fynbos, Subtropical Thicket, Forest, Nama Karoo and Grassland biomes (Low & Rebelo, 1998). Such a juxtaposition of biomes within a Metropolitan Municipality is unparalleled in the world (Conservation International, 2009).

![Figure 7: The biomes within Nelson Mandela Bay Municipal area. (Source: NMBM, Bioregional Plan 2014)](image-url)
4.1.2 Critical Biodiversity Areas (CBAs)

The Critical Biodiversity Areas (Refer to figure: 8) within the municipal area are the portfolio of sites that are required to meet the municipality’s biodiversity targets. Such areas should be maintained in their natural state in perpetuity. A map of CBAs was produced as part of the NMBM’s conservation Assessment and Plan, sites were assigned to CBAs categories based on their biodiversity characteristics and Ecosystem Threat Areas.

<table>
<thead>
<tr>
<th>Category</th>
<th>Code</th>
<th>Description</th>
<th>Land Management Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protected Area 1</td>
<td>PA 1</td>
<td>Protected areas managed by SAN Parks, provincial or local authorities, parastatals (e.g. NMMU), or the private sector. Includes National Parks, Provincial, Local and Private Nature Reserves.</td>
<td>To be maintained as Protected Areas.</td>
</tr>
<tr>
<td>Protected Area 2</td>
<td>PA 2</td>
<td>National Parks, Provincial, Local, Private Nature Reserves pending declaration.</td>
<td>To be declared and maintained as Protected Areas.</td>
</tr>
<tr>
<td>Critical Biodiversity Areas</td>
<td>CBAs</td>
<td>All Critically Endangered habitats, ecological process areas, ecological corridors, habitats for Species of Special Concern, and some Endangered, Vulnerable or Least Threatened habitats.</td>
<td>Such areas must be managed for biodiversity conservation purposes and incorporated into the protected area system.</td>
</tr>
<tr>
<td>Ecological Support Area 1</td>
<td>ESA 1</td>
<td>Agricultural or partly degraded land that plays an important role in ecosystem functioning and / or provides connectivity between natural areas.</td>
<td>Such areas must be maintained for extensive agricultural or similar low intensity purposes and managed to promote ecological connectivity.</td>
</tr>
<tr>
<td>Ecological Support Area 2</td>
<td>ESA 2</td>
<td>Areas severely disturbed or transformed by human activities (e.g. mining), requiring restoration or rehabilitation.</td>
<td>Such areas must be restored or rehabilitated to support ecological connectivity. Such areas must not be developed or utilised for medium to high intensity purposes (e.g. crop production, residential, industry etc.).</td>
</tr>
<tr>
<td>Other Natural Areas</td>
<td>ONA</td>
<td>Natural areas that are not required to meet biodiversity targets.</td>
<td>As per the Municipal SDF or local SDFs.</td>
</tr>
</tbody>
</table>
Areas where no natural habitat remains

<table>
<thead>
<tr>
<th>Category</th>
<th>Code</th>
<th>Description</th>
<th>Land Management Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Areas where no natural habitat remains</td>
<td>DEV</td>
<td>Areas severely disturbed or transformed by human activities with no natural habitat remaining, including airfields, cultivated lands, forestry plantations, industry, mines and quarries, severe overgrazing, and urban and rural development.</td>
<td>As per the Municipal SDF or local SDFs.</td>
</tr>
</tbody>
</table>

Table 1: Biodiversity Area Categories. (Source: NMBM Bioregional Plan 2014)

The Critical Biodiversity Area network for the Coega IDZ and Port of Ngqura was approved by the Department of Environmental Affairs in 2014 and is reflected in Figure 9, in accordance with note 8 (Page 26) of the Provincial Notice 13 of 30 March 2015 which publishes the final bioregional plan for the Nelson Mandela Bay Municipality. The CBA areas of the Coega IDZ and Port of Ngqura (CBA-IDZ) are managed as a sub category of CBA in accordance with the Open Space Management Plan as approved by the Department of Environmental Affairs (2014).
4.1.3 Agricultural Activity

Fresh produce is required on a daily basis. The Metropolitan area is favourably located in that agricultural land with potential for intensive farming is situated around the urbanised areas. Whilst farming in the Sundays and Gamtoos River Valleys meets some of the needs, there is still opportunity for large scale farming nearer the urban areas. The most suitable and fertile agricultural land for intensive farming and market gardening purposes is located west of the built-up areas. This is broadly depicted on the spatial plan as agricultural land.

Agricultural land not only fulfils a role in providing fresh produce but also acts as a green lung. Its presence should therefore contribute to an “urban edge” which limits expansion of the adjacent urban areas. Areas towards the north and northwest, although of less value for crop farming, include pockets of land suitable for irrigated farming and vast areas for livestock and wildlife farms.

Urban inhabitants and their related activities also produce a considerable amount of organic waste. The potential of turning this into compost has been investigated as part of the Integrated Waste Management Plan and a number of composting pilot projects have been identified. Market gardening areas need to be investigated as possible outlets for the use of any compost produced in this process. This will contribute further to recycling and sustainability principles.

The supply of agricultural produce and other consumer goods to urban areas from the immediate surroundings has great significance for long-term sustainable development. The MSDF map identifies areas for agricultural use within which the existing practices will be retained or more intensive farming encouraged.

Aquaculture is a form of agricultural activity to be accommodated within the spatial planning framework for the NMBM. A number of studies have been undertaken to establish marine aquaculture (mariculture) and terrestrial based aquaculture. An aquaculture development zone has been established within the Coega IDZ. The location of aquaculture development projects and mix of species to be cultivated are to be informed by specialist studies to ensure compatibility with existing land uses.
4.1.4 Protected Areas

The existing network of conservation areas within the NMBM area totals approximately 10,500 ha, or approximately 5% of the municipal area. Of this, 4,700 ha (2% of the municipal area) is recognised as protected areas in terms of the National Environmental Management: Protected Areas Act 2003 (Act No. 57 of 2003). The remaining conservation areas (approximately 5,800 ha in extent) have weak legal protection and are not necessarily managed for biodiversity conservation purposes. The Protected Area system of the NMBM is supported by the proximity of mega reserves in the Kouga (Baviaans Wilderness Area) and Sundays River Valley (Greater Addo National Park) and the NMBM Moss plays a vital role in connectivity between the systems.

The current protected area system in the Municipal area is therefore highly deficient, particularly in terms of its limited size and connectivity, and urgently requires expansion in order to achieve biodiversity targets (SRK Consulting, 2010). Due to the extent of remaining natural habitat, the NMBM is unique amongst the Metropolitan Municipalities in terms of opportunities for expanding the protected area network to the benefit of biodiversity as well as its people.

<table>
<thead>
<tr>
<th>Protected Areas</th>
<th>Area (ha)</th>
<th>Conservation Areas</th>
<th>Area (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater Addo Elephant National</td>
<td>752</td>
<td>Grassridge Private Nature Reserve</td>
<td>1,320</td>
</tr>
<tr>
<td>Groendal Wilderness Area</td>
<td>14</td>
<td>NMMU Private Nature Reserve</td>
<td>840</td>
</tr>
<tr>
<td>Island Forest Nature Reserve</td>
<td>496</td>
<td>Witteklopi Private Nature Reserve</td>
<td>29</td>
</tr>
<tr>
<td>Cape Recife Nature Reserve</td>
<td>323</td>
<td>Van Stadensberg Natural Heritage</td>
<td>579</td>
</tr>
<tr>
<td>Lady Slipper Nature Reserve</td>
<td>365</td>
<td>Seaview Game Park</td>
<td>31</td>
</tr>
<tr>
<td>Maitland Nature Reserve</td>
<td>132</td>
<td>Kragga Kamma Game Park</td>
<td>203</td>
</tr>
<tr>
<td>Sardinia Bay Nature Reserve</td>
<td>249</td>
<td>Paardekop Game Farm</td>
<td>679</td>
</tr>
<tr>
<td>Settlers Park Nature Reserve</td>
<td>75</td>
<td>Tregathelyn Game Farm</td>
<td>2,099</td>
</tr>
<tr>
<td>Swartkops Valley Nature Reserve</td>
<td>940</td>
<td>Total</td>
<td>2462</td>
</tr>
<tr>
<td>Sylvic Nature Reserve</td>
<td>91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Springs Nature Reserve</td>
<td>929</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Van Stadens Nature Reserve</td>
<td>339</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4705</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Distribution of conservation. (Source: NMBM, Bioregional Plan 2014)
4.1.5 Threatened Ecosystem

The NMBM Conservation Assessment identified a total of 58 vegetation types within the Municipal area. A high proportion of the vegetation types within the municipal area are threatened (twenty-three are Critically Endangered and a further ten are Endangered) and now face collapse unless efforts are made to ensure their persistence (Stewart et al., 2008).

The threatened status of these habitats is mirrored by the number of threatened species within the Municipal area – the Nelson Mandela Bay Municipality has the highest number of red listed species of all the Municipalities in the Eastern Cape (CSIR, 2004).

The most threatened vegetation types within the NMBM area are Lowland Fynbos, Subtropical Thicket mosaic and Forest vegetation types. The Lowland Fynbos vegetation types in the NMBM area are predominantly grassy Fynbos systems. Due to the fact that much of the urban expanse of Port Elizabeth was developed on these ecosystems, they are also some of the most threatened vegetation types within the Municipal area. The most threatened Lowland Fynbos vegetation types within the municipal area are Critically Endangered Colleen Glen Grassy Fynbos, Lorraine Transitional Grassy Fynbos, Baakens Grassy Fynbos and Walmer Grassy Fynbos. Threatened plant species in these systems include South Africa’s national flower, the king protea *Protea cynaroides* (Critically Endangered), *Cyclopia pubescens* (Critically Endangered) and *Brunsvigia litoralis* (Endangered). Pressures on the Lowland Fynbos within the NMBM area include invasion by alien vegetation, urban expansion, inappropriate fire regimes, habitat fragmentation and global climate change (Pierce-Cowling, 2009).
<table>
<thead>
<tr>
<th>No.</th>
<th>Vegetation Type</th>
<th>No.</th>
<th>Vegetation Type</th>
<th>No.</th>
<th>Vegetation Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Albany Dune Thicket</td>
<td>21</td>
<td>Groendal Fynbos</td>
<td>41</td>
<td>Sundays Doringveld Thicket</td>
</tr>
<tr>
<td>2</td>
<td>Algoa Dune Thicket</td>
<td>22</td>
<td>Humewood Dune Fynbos</td>
<td>42</td>
<td>Sundays River</td>
</tr>
<tr>
<td>3</td>
<td>Baakens Forest Thicket</td>
<td>23</td>
<td>Intermediate Beach</td>
<td>43</td>
<td>Sundays River Floodplain</td>
</tr>
<tr>
<td>4</td>
<td>Baakens Grassy Fynbos</td>
<td>24</td>
<td>Koeboeskloof Karroid Thicket</td>
<td>44</td>
<td>Sundays Spekboom Thicket</td>
</tr>
<tr>
<td>5</td>
<td>Baviaans Spekboom Thicket</td>
<td>25</td>
<td>Kragga Kamma Indian Ocean Forest</td>
<td>45</td>
<td>Sundays Thicket</td>
</tr>
<tr>
<td>6</td>
<td>Bethelsdorp Bontveld</td>
<td>26</td>
<td>Lady Slipper Mountain Fynbos</td>
<td>46</td>
<td>Sundays Valley Thicket</td>
</tr>
<tr>
<td>7</td>
<td>Bushy Park Indian Ocean Forest</td>
<td>27</td>
<td>Lorraine Transitional Grassy Fynbos</td>
<td>47</td>
<td>Swartkops Escarpment Valley Thicket</td>
</tr>
<tr>
<td>8</td>
<td>Cape Recife Bypass Dunefield</td>
<td>28</td>
<td>Maitlands Dunefield</td>
<td>48</td>
<td>Swartkops Estuarine Floodplain</td>
</tr>
<tr>
<td>9</td>
<td>Chelsea Forest Thicket Mosaic</td>
<td>29</td>
<td>Malabar Grassy Fynbos</td>
<td>49</td>
<td>Swartkops Estuary</td>
</tr>
<tr>
<td>10</td>
<td>Coastal</td>
<td>30</td>
<td>Motherwell Karroid Thicket</td>
<td>50</td>
<td>Swartkops River</td>
</tr>
<tr>
<td>11</td>
<td>Coastal Hummock Dunes</td>
<td>31</td>
<td>Pan</td>
<td>51</td>
<td>Swartkops River Floodplain</td>
</tr>
<tr>
<td>12</td>
<td>Coega Estuary</td>
<td>32</td>
<td>Rocklands Renoster Bontveld</td>
<td>52</td>
<td>Swartkops Salt Marsh</td>
</tr>
<tr>
<td>13</td>
<td>Coega Estuary Floodplain</td>
<td>33</td>
<td>Rocklands Valley Thicket</td>
<td>53</td>
<td>Thornhill Forest and Thornveld</td>
</tr>
<tr>
<td>14</td>
<td>Colchester Strandveld</td>
<td>34</td>
<td>Rocky Beach</td>
<td>54</td>
<td>Van Stadens Afro. Ind. Ocean Forest</td>
</tr>
<tr>
<td>15</td>
<td>Colleen Glen Grassy Fynbos</td>
<td>35</td>
<td>Rowallan Park Grassy fynbos</td>
<td>55</td>
<td>Van Stadens Forest Thicket</td>
</tr>
<tr>
<td>16</td>
<td>Driftsands Bypass Dunefield</td>
<td>36</td>
<td>Sandy Beach</td>
<td>56</td>
<td>Van Stadens River</td>
</tr>
<tr>
<td>17</td>
<td>Driftsands Dune fynbos</td>
<td>37</td>
<td>Sardinia Bay Forest Thicket</td>
<td>57</td>
<td>Walmer Grassy Fynbos</td>
</tr>
<tr>
<td>18</td>
<td>Goudini Grassy Fynbos</td>
<td>38</td>
<td>Schoenmakerskop Rocky Shelf Fynbos</td>
<td>58</td>
<td>Wetland</td>
</tr>
<tr>
<td>19</td>
<td>Grass Ridge Bontveld</td>
<td>39</td>
<td>Skurweberg Grassy Fynbos</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Groendal Fynbos</td>
<td>40</td>
<td>St Francis Dune Fynbos Thicket Mosaic</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3: Vegetation Types in Numbers. (Source: NMBM, Bioregional Plan 2014)

The most threatened Subtropical Thicket vegetation types occurring within the Municipal area are those that form mosaics with vegetation that have affinities to other biomes and include *Endangered* Sundays Doringveld Thicket, Bethelsdorp Bontveld and Motherwell Karroid Thicket. Coastal Fynbos Thicket mosaics within the Municipal area are confined to the southern coastline and are a mixture of fynbos and large-leaved subtropical shrubs. They include *Critically Endangered* Humewood Dune Fynbos and *Endangered* Schoenmakerskop Rocky Shelf Fynbos, Driftsands Bypass Dunefield, Driftsands Dune Fynbos and St Francis Dune Fynbos Thicket Mosaic. Threatened plant species in the
Subtropical Thicket mosaics include *Critically Endangered* Aspalathus recurvspina, Orthopterum coegana and Aloe bowiea. The Albany adder *Bitis albanica* (*Critically Endangered*) also occurs in thicket and thicket mosaic habitat types. The mosaics are threatened by the development of informal and formal housing, industrial development, plant harvesting for medicinal and cultural use, overgrazing and mining.

![Ecosystem Threat with the Nelson Mandela Bay Municipality](image)

**Figure 9:** The Ecosystem Threat with the Nelson Mandela Bay Municipality. (Source: NMBM, Bioregional Plan 2014)

### 4.1.6 Forestry

Forest in NMBM occurs in a solid form and in a mosaic with thicket. The solid forest within the NMBM is mostly confined to steep riverine gorges, which are sheltered from fire, and confined to a band along the wetter southern portion of the Municipal area. Threatened forest types within the municipal area include
**Critically Endangered** Chelsea Forest Thicket Mosaic, Bushy Park Indian Ocean Forest, Van Stadens Afromontane Indian Ocean Forest, Van Stadens Forest Thicket, Kragga Kamma Indian Ocean Forest and Thornhill Forest and Thornveld. The protected milkwood *Sideroxylon inerme*, dwarf Cape Beach *Rapanea gilliana*, and yellowwood *Afrocarpus falcatus* trees are prominent in many of the forest types. The southern population of blue duiker *Philantomba monticola*, which is confined to the Maputaland-Pondoland-Albany hotspot, occurs in the southern forested portions of NMBM. The forest within the Municipality is threatened by increased prevalence of fire, harvesting of forest products and the development of informal and formal housing.

4.1.7 Freshwater Features

**Figure 10: Fresh Water Features. (Source: NMBM GIS, 2015)**

NMBM has ten main rivers, each with a unique ecosystem (Roux *et al.*, 2002), of which four are deemed to no longer be intact (SRK Consulting, 2010). Since all of the main rivers in NMBM are unique, they all require some degree of safe-
guarding.

Of particular importance is the Swartkops River system. The Swartkops River catchment contains two main rivers systems, the Elands and the KwaZunga, and two subsidiary tributaries, the Brak and Chatty. The Groendal Wilderness Area constitutes almost a third of the catchment of this river system, and the Groendal Dam supplies almost two-thirds of Uitenhage’s domestic water. A number of threatened and rare species occur in Groendal, including the Cape redfin minnow *Pseudobarbus ater*, which is restricted to the area, and the possible presence of Hewitt’s ghost frog *Heleophrynus hewitti* (Critically Endangered) (Cunningham *et al.*, 2003; Conradie *et al.*, 2013).

Cultivation and invasive alien plants along this river system have impacted on its functioning by respectively increasing sedimentation and reducing the volume of water within the river. Alien species, such as the largemouth bass *Micropterus salmoides*, are a threat to the survival of indigenous fish species.

A number of small vleis and pans occur within the Municipal area, particularly in grassy Fynbos, Subtropical Thicket, and coastal areas. These provide distinct habitats for species, including both threatened and common amphibian species such as the African bullfrog *Pyxicephalus adspersus* and the yellow-striped reed frog *Hyperolius semidiscus*. In addition to providing habitat, these wetlands are also important for the functions that they provide, such as flood attenuation, water filtration and erosion reduction. The main pressures on wetlands are through infilling or draining (e.g. for urban development and grazing), erosion, water abstraction and diversion (e.g. through dams and weirs).

4.1.8 Coastal Features and Estuaries

The coastal zone of NMBM provides an array of recreational and sustainable resource utilisation opportunities and underpins a substantial segment of the municipality’s economy.
The Swartkops Estuary lies about 8 km north of the Port Elizabeth city centre and is an important nursery for marine fish, including several angling species. The estuary forms the basis of an informal bait collecting industry and is ranked as South Africa’s top temperate estuary in terms of subsistence value (Turpie & Clark, 2007). The bait collecting industry is also, however, responsible for destruction of the mudflats, leading to significant impacts on the functioning of the system (Baird et al., 1988). The functioning of the estuary is also threatened by pollution, enrichment, sand mining, overfishing, insufficient inflow of freshwater due to damming, and inappropriate development. Relevant sections of the Swartkops River and Estuary are currently proposed for declaration as either a Protected Environment or Nature Reserve in terms of the NEM: Protected Areas Act, 2003 (Act No. 57 of 2003). Declaration thereafter as a RAMSAR site is also being considered. Under the auspices of the Department of Water and Sanitation (DWS), a Catchment Management Forum has been formed with the objective of safeguarding the welfare of the Swartkops River and Estuary from source to sea (T Potts 2014, pers. comm., 30 Oct).

The foredune vegetation along the NMBM coastline helps to buffer against the high energy influences of the tides, wind and waves. These systems are sensitive to disturbance and are susceptible to the formation of blow-outs. The coastal area is often targeted for development, primarily due to the desirability of ocean views. The protection of the coastal foredune system is important in order to safeguard the scenic attributes of the coastal zone and to provide protection against the natural coastal agents of change, particularly in light of the implications of global sea-level rise.

The Alexandria Dunefield has its beginnings at the north-eastern extent of the municipal area. The dunefield is considered to be one of the largest and most pristine active coastal dunefields in the world. Larger and more extensive dunefields are only found in desert areas. As such, it has been incorporated into the Addo Elephant National Park and was nominated by South African National Parks as a World Heritage Site (UNESCO, 2009).
The Maitlands Dunefield, between the resort villages of Beachview and Blue Horizon Bay on the south-western part of the NMBM coastline, supports what is believed to be the highest density of black oystercatcher in the country (Bornman & Klages, 2003). The black oystercatcher is *Near Threatened* and is highly susceptible to disturbance during its breeding cycle. The Maitland area, in general, is one of the most visually spectacular areas in the Municipality and has significant value in terms of recreation and tourism.

Although the prohibition of off-road vehicles on the dunefields has substantially reduced threats to these systems, they continue to be threatened principally by encroachment of invasive alien plants and are vulnerable to insensitive recreational use.

4.1.9 Ecological Corridors

A number of ecological corridors were identified as part of the NMBM conservation assessment. These corridors were designed to promote connectivity between natural areas in order for ecological processes (such as migration and seed dispersal) to continue.

While all of the identified corridors are important, the Baakens River Valley, which forms an east-west corridor through the urban expanse of the Municipal area, deserves a special mention. It is the Municipality’s most extensive corridor through fynbos habitats and is of critical importance for the continuation of ecological processes that sustain biodiversity. The area also provides numerous ecosystem services, playing an important role in flood attenuation, storm water management, environmental education and nature-based recreation.
4.2 Challenges and Opportunities

This section provides a brief analysis of the Challenges and Opportunities related to biodiversity conservation. They are as follows:

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Public and private areas not sufficient to secure a representative proportion of all the municipality’s biodiversity;</td>
<td>Building a biodiversity economy involves promoting economic activity that uses biodiversity in a sustainable way. This includes the creation of opportunities through biodiversity for economic development in previously disadvantaged communities, the promotion of sustainable agriculture and fisheries, and the promotion of land-uses that are compatible with biodiversity such as:</td>
</tr>
<tr>
<td>• Insufficient funds exist for NMBM to acquire and manage all of the property required for conservation, protected area expansion will require the conservation of a combination of privately-owned and municipally-owned land parcels;</td>
<td>• Ecotourism</td>
</tr>
<tr>
<td>• The existing network of conservation areas within the NMBM area totals approximately 10,500 ha, or approximately 5 % of the municipal area. Of this, only 4,700 ha (2 % of the municipal area) is recognised as protected areas in terms of the NEM: Protected Areas Act. The remaining conservation areas (approximately 5,800 ha in extent) have weak legal protection and are not managed for biodiversity conservation purposes;</td>
<td>The NMBM is unique in South Africa in that it is an area of convergence for five of South Africa’s biomes. Thus, by visiting the NMBM, the eco-tourist can experience a small taste of what the country as a whole has to offer from a natural perspective.</td>
</tr>
<tr>
<td>• Legal protection of natural habitats of high conservation value outside of statutory protected areas in NMBM is not in place.</td>
<td>• Nature-based Development Models</td>
</tr>
</tbody>
</table>

During the period between approximately 2002 and 2008, marked growth occurred in the number of actual and proposed rural lifestyle residential developments within the municipal area. These developments have the potential to support biodiversity conservation objectives if they are appropriately planned and managed.

Development models that support the conservation of CBAs, in alignment with the NMBM’s land-use policies, and are underpinned by a legitimate conservation management ethic should be encouraged.

• Game Reserves and Game Farming

The northern portion of the NMBM is well suited to the development of the game reserve and game farming industry. Farming with game in the thicket biome has the potential to be more ecologically and economically sustainable than farming with livestock. The main activity for which game is utilised is hunting, including both recreational and trophy hunting. With the Eastern Cape being recognised as the most preferred destination for overseas hunters (Smith & Wilson, 2002), this industry has potential to contribute to a biodiversity based economy in the NMBM, provided that it is correctly managed and controlled (for example, preventing or limiting the introduction of non-indigenous species).

• Skills Development and Training

The development of a biodiversity economy within the municipal area will create a demand for a new set of skills within the workforce. Skills development and
training opportunities linked to biodiversity include those associated with the development of indigenous plant nurseries, ecotourism establishments and secondary industries centred on invasive alien plant biomass.

An opportunity for skills development is the creation of indigenous plant nurseries to supply plants for cultural and medicinal use. The nurseries should be linked to the establishment of a training college, potentially supported by the SANBI Green Futures Programme, in order to train previously disadvantaged individuals in horticulture. An additional benefit of the nurseries would be the reduced demand on natural systems for plants of cultural, landscaping and medicinal use.

- **Payment for Ecosystem Services**

  Payment for Ecosystem Services is the practice of offering incentives to farmers or landowners in exchange for managing their land to provide some sort of ecological service. Amongst the ecosystem services receiving the most attention worldwide is climate change mitigation and, related to this, there is an opportunity to develop the carbon sequestration industry within the NMBM.

### 4.3 Socio Economic Analysis

#### 4.3.1 Population Growth Estimates

As per the NMBM 2014 Socio Economic Profile, population increase in the general Eastern Cape Province has been nearly stagnant showing a population of 6 562 053 in 2011. This equates to an increase of 6.7% on the 1996 population and a 4.5% on the 2001 population as sited in Census 2011 results. This is attributed to out-migration as the Eastern Cape has experienced the largest case in comparison with other provinces in the country.

Recent research indicates that the situation and sequence of demographic development has for many reasons become more complex compounded by uncertainty regarding economic development and HIV/AIDS. There is insufficient data, information and knowledge to make any firm population forecast and any estimates must be seen as tentative. However, demographic experts are of the opinion that earlier forecasts may have been too high.
The impact of HIV/AIDS should be factored in by way of an increased mortality rate. However, the demographic study suggests that the impact of HIV/AIDS was overestimated by previous analysts and that the increased use of anti-retroviral treatment is likely to contribute to a stabilization of the impact of HIV/AIDS on population growth. In terms of the latest information available, HIV prevalence rates for the population of NMBM as a whole are expected to rise from 1.2% in 1995 to 10% in 2010 and to 12.6% in 2020 (2008 Demographic Study). Current HIV/AIDS prevalence rate is estimated at 30.8% (BEPP 2014).

The Table below depicts the slow rate in population experienced per year and density calculation therefore.

<table>
<thead>
<tr>
<th>Year</th>
<th>Population (y/y)</th>
<th>Population as % of EC %</th>
<th>Population Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>1 092 203</td>
<td>0.59</td>
<td>16.13</td>
</tr>
<tr>
<td>2010</td>
<td>1 098 377</td>
<td>0.57</td>
<td>16.15</td>
</tr>
<tr>
<td>2011</td>
<td>1 104 140</td>
<td>0.52</td>
<td>16.23</td>
</tr>
<tr>
<td>2012</td>
<td>1 108 089</td>
<td>0.36</td>
<td>16.29</td>
</tr>
<tr>
<td>2013</td>
<td>1 111 767</td>
<td>0.33</td>
<td>16.35</td>
</tr>
</tbody>
</table>

Table 4: Population Density. (Source: NMBM Socio Economic Profile Report 2014)

The NMBM population is estimated at 1 152 115 according to Census 2011. The said population comprises of the following races, quantified in percentages (Demographic Information for NMB based on Population Group and Gender):
<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
<th>% of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black African</td>
<td>361518</td>
<td>331220</td>
<td>692738</td>
<td>60.13%</td>
</tr>
<tr>
<td>Coloured</td>
<td>141873</td>
<td>129593</td>
<td>271466</td>
<td>23.56%</td>
</tr>
<tr>
<td>Indian or Asian</td>
<td>6335</td>
<td>6502</td>
<td>12837</td>
<td>1.11%</td>
</tr>
<tr>
<td>White</td>
<td>85608</td>
<td>79816</td>
<td>165424</td>
<td>14.36%</td>
</tr>
<tr>
<td>Other</td>
<td>3787</td>
<td>5860</td>
<td>9647</td>
<td>0.84</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>599121</strong></td>
<td><strong>552991</strong></td>
<td><strong>1152112</strong></td>
<td><strong>1152112</strong></td>
</tr>
<tr>
<td>% Total Gender</td>
<td>52.00%</td>
<td>48.00%</td>
<td>100.00%</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Table 5: Demographic Information for Nelson Mandela Bay. (Source: StatsSA 2011 Census)

According to Census 2011, 60.1% of respondents described themselves as black African, 23.6% coloured, 14.4% white and 1.1% Indian/Asian.

IsiXhosa is the most dominant language spoken by a 53.2% of the population, Afrikaans at 28.9% and English at 13.3%. Of the said population, 552 994 (48%) are male and 599 121 (52%) are female.

The age profile of the 1.15 million population of NMBM is categorized as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Age (years)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young people</td>
<td>0 - 14</td>
<td>25.50%</td>
</tr>
<tr>
<td>Youth</td>
<td>15 - 35</td>
<td>37.10%</td>
</tr>
<tr>
<td>Adult</td>
<td>36 - 64</td>
<td>31.40%</td>
</tr>
<tr>
<td>Elderly</td>
<td>65 and above</td>
<td>6%</td>
</tr>
</tbody>
</table>

Table 6: Age Profile of the Population of Nelson Mandela Bay. (Source: StatsSA 2011 Census)
The table below provides an overall summary of the age distribution, gender ratio of the NMBM population

![Sex and Age Distribution](image)

**Table 7: Sex and Age Distribution. (Source: StatsSA 2011 Census)**

It is to be noted that irrespective of the quoted stagnant population increase sited above, the NMBM is said to be densely populated with 569 people per km\(^2\) compared to that of SA said to be 42 people per km\(^2\) as sited in the NMBM Socio-Economic Profile Report 2014.

4.3.2 Trends and Demand for Economic Infrastructure

4.3.1 Economic Background

STATS SA states that: “according to ECSECC (Eastern Cape Socio Economic Consultative Council), the GDP growth rate for the Nelson Mandela Bay Municipality was 2.1% in 2010 and the GDP per capita R52 147. The largest economic sectors in the Nelson Mandela Metro are manufacturing, finance, community services and
transport. Community services, trade and manufacturing sectors are the sectors that create the most employment in the Metro”.

A breakdown of each sectors contribution to the economy is represented below:

![Figure 11: Nelson Mandela Bay’s Sector contribution to the economy. (Source: NMBMM Socio Economic Profile Report 2014)](image)

Good quality infrastructure is key to sustainable social, economic and industrial development. Poor infrastructure hampers development, growth and ability to trade in the domestic and global economy.

Economic infrastructure, which includes transport, energy, telecommunications, water and sanitation provides services which are of fundamental importance for development. In NMBM it is deficient and this is exacerbated by inadequate maintenance and thus prematurely deteriorating installations and services. Infrastructural services are often overlooked as a means to alleviate poverty and improve environmental conditions.

In order for Nelson Mandela Bay to grow and develop a sustainable economy, it is important to build new economic drivers to replace or augment the ones that have served the region in the past.
Two single sectors, “Manufacturing and Community”, and “Social and Personal Services”, make up more than half (58.1%) of the Metro’s GVA (Gross Value Added), with “Financial and Related Services”, (Transport and Trade) contributing a further 37%. The automotive sector accounts for more than 50% of the Metro’s manufacturing sector.

For background purposes, an overview of the Provincial and NMBM economy is attached as Annexure “B”. This is the latest information available.

Whilst the NMBM is undoubtedly an important node of activity within the economy of the Eastern Cape, it is characterised by several challenges in terms of economic development. These include:

- A high unemployment rate (36.6%), compounded by the low education levels of the labour force, including large numbers of illiterate adults with limited employment prospects.
- Ageing and inadequate investment in the maintenance and upgrading of infrastructure.
- The dependence on the automotive sector and insufficient diversification within the manufacturing and others sectors.
- A lack of up-to-date local economic statistics and monitoring and evaluation systems.

Growth in the automotive sector of the economy has historically provided employment and boosted exports, while masking long-term weaknesses and continuing social inequality. For NMBM, the automotive industry’s infrastructure strengths include the Coega IDZ and NMB Logistical Park which are both growing in potential. There is substantial government and institutional support - the Automotive Production & Development Programme (APDP) supports incentives to replace Motor Industry Development Programme (MIDP). The Nelson Mandela Bay economy is heavily reliant on this industry and this industry, in turn, is heavily reliant on SA incentive support – MIDP/APDP. The fragile and ever fluctuating global economy poses a serious risk to the automotive sector.

Logistically, the distance from product and supply markets is not an advantage for the Metro. This is coupled with high logistics costs and inefficient transport. The
The automotive industry faces numerous threats to its competitiveness. These include that poor fuel quality restricts entry into the fuel efficient space and markets. Poor management of South Africa’s energy supplies contributes negatively to industrial progression. In terms of the crisis of auto-mobility, there is a limit to the alternatives in South Africa. The rise of Asia (China, India, South Korea) as forces in both production and consumption proposes much competition for market share.

It has also been shown that NMBM, once the leader in the automotive industry in South Africa, now lags behind eThekwini and Tshwane which now take up the major share of the South African automotive industry.

Countering these weaknesses and inequalities will require the following:

- Serious diversification of the local economy. The NMBM must diversify its economy in order to reduce its dependency on the traditional sectors.
- Down-stream and cross-stream diversification within the manufacturing sector.
- Development of new growth industries.
- Diversification of markets for manufactured products and services.
- Investment in the intellectual capital, creativity and technical capabilities of the labour force through skills development.
- Innovation support through research and development.
- Public and private sector investment to accelerate the production of all economic sectors.
- An aggressive market development programme for regional production within the region itself, as well as within the country, in order to ensure the localised sustainability of productive activities (NMBM EDRS, 2009).
- A clear and shared economic development strategy for the NMBM.

As part of the Capacity Support Implementation Plan, the NMBM is receiving technical assistance to evaluate the Economic Development Strategy. This will consider the success of current initiatives and determine a way forward for the Municipality in respect economic development and the issues identified above.
4.3.3 Employment Trends

The unemployment rate in the NMBM is approximately 36.6% (StatsSA, 2011 Census). The composition of the above is detailed in Tables 1 – 2 below:

![Employment for those aged 15-64](image1.png)

**Figure 12: Employment trends within the Nelson Mandela Bay. (Source: StatsSA 2011 Census)**

<table>
<thead>
<tr>
<th>Employment Status</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed</td>
<td>290155</td>
</tr>
<tr>
<td>Unemployed</td>
<td>167229</td>
</tr>
<tr>
<td>Discouraged Work Seeker</td>
<td>41859</td>
</tr>
<tr>
<td>Not Economically Active</td>
<td>289969</td>
</tr>
</tbody>
</table>

**Table 8: Employment Status. (Source: StatsSA 2011 Census)**
4.3.4 The Demand for Housing Units

The existing housing stock is approximately 276 850 formal dwellings (Census 2011). While progress have been made to meet the demand for housing, the housing backlog is still a major issue with the housing backlog estimated to be 72 411 units (Informal areas of 23 411 + Backyard shacks of 49000) (BEPP 2014). Considerable effort is therefore required to address this backlog particularly when projected growth demand of some 6000 to 7000 units per annum is included.

Housing backlog and projected growth demand therefore place considerable pressure on the need for land that is recognised as a finite resource. It is imperative therefore that the utilisation of available infrastructure and existing road networks be done efficiently to achieve the objectives of the IDP. To avoid urban sprawl, the development of new housing areas must therefore recognise and implement principles that promote integration, sustainable use of resources, densification and mixed land uses. Whilst encouraged, it is recognised that densification is largely dependent on the initiatives of land owners, developers and investors in the housing market. As a result, densification will only occur over time and will consequently not have an immediate impact on meeting the demand for residential land.

The bulk of the housing need falls within the subsidised housing categories. Based on a reduced household size of 4 persons per unit, population projections suggest that the demand for new dwellings (including the backlog) is about 26 000 units to the end of 2020 (Shisaka, 2012). Assuming that subsidised households represent 85% of the total number of units, the need for subsidised housing would be approximately 22 100 units for this period.

The number of houses provided through the Municipal housing programme will not be sufficient to satisfy the total demand. It is therefore important that the private sector and NGOs become involved in low-income housing provision. Special efforts and conditions would be required to facilitate low-cost housing projects run by these stakeholders.
The estimated Housing backlog figures for NMBM are being verified through a study to determine the number of backyard shacks and an audit of informal settlements. This study commenced in April 2014 to verify the following:

- Households living in stressed areas (servitudes, floodplains and overcrowded areas);
- Land and spatial planning challenges;
- Shortage of government-owned land in inner-city and serviced areas;
- Lack of visible spatial restructuring;
- Lack of integrated sustainable human settlements.

4.3.5 Land Demand

For estimated requirements related to population increases, and in particular for the purposes of calculating land demand, the population figure to the year 2020 has been escalated to 1,5 million in order to allocate sufficient land in case population growth patterns unexpectedly increase. Furthermore, in view of the focus on housing delivery and the need to plan accordingly, predictions that household sizes will decrease from 4.5 to 4.0 persons per household in the medium and long-term perspectives are noted.

In order to create a better understanding of residential demand and supply, a joint exercise between the NMBM, the Housing Development Agency (HDA) and the MBDA was undertaken in 2012, conducted by Shisaka Development Management Services in collaboration with Bagale Consulting (Pty) Ltd. (Shisaka Development Management Services, 2012).

The following table shows the socio-economic distribution of local households from 2007 to 2020:
The data in Table 8 is based on data modelled by the Department of Economics at the University of Stellenbosch, utilising the Community Survey of 2007. This data was revised in accordance with a study undertaken in 2006 by Charles Simkins for the NMBM and verified through primary research undertaken by the firm Development Partners (Demographic Update for the NMBM – 2007). The estimate of new households was agreed in discussion with officials of the NMBM.

Of note is that 70% of the existing and projected population will depend on some form of subsidised housing in the future.

The following table indicates the proposed housing programmes to address the needs. Nine potential delivery solutions have been identified in accordance with National Government programmes. Of significance is the land that need to be identified. The table shows that there is not a great demand for land acquisition, beyond what is currently owned by the NMBM.
<table>
<thead>
<tr>
<th>Programme</th>
<th>Current location</th>
<th>Res 1H/G</th>
<th>Res 1S</th>
<th>Res 2/3</th>
<th>Res 3F</th>
<th>Total land unit required (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programme 1: <em>In Situ</em> Upgrade of Informal Settlements</td>
<td>22,040</td>
<td>15,960</td>
<td></td>
<td></td>
<td></td>
<td>38,000</td>
</tr>
<tr>
<td>Programme 2: Backyard Dwelling Consolidation</td>
<td>44,100</td>
<td>4,900</td>
<td></td>
<td></td>
<td></td>
<td>49,006</td>
</tr>
<tr>
<td>Programme 3: New Supported Site &amp; Service</td>
<td></td>
<td></td>
<td>14,300</td>
<td></td>
<td></td>
<td>14,300</td>
</tr>
<tr>
<td>Programme 4: Housing Supply (rental &amp; subdivisions)</td>
<td>5,300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5,300</td>
</tr>
<tr>
<td>Programme 5: Inner City Rental</td>
<td></td>
<td></td>
<td>900</td>
<td>2,500</td>
<td></td>
<td>3,400</td>
</tr>
<tr>
<td>Programme 8: Housing Developer Driven Support programme</td>
<td></td>
<td></td>
<td>3,000</td>
<td></td>
<td></td>
<td>3,000</td>
</tr>
<tr>
<td><strong>Total requirements (units)</strong></td>
<td>71,440</td>
<td>3,000</td>
<td>35,160</td>
<td>900</td>
<td>2,500</td>
<td><strong>41,560</strong></td>
</tr>
<tr>
<td><strong>Projected Land capacity (units) (Type A)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>26,096</td>
<td>50,597</td>
<td>5,909</td>
<td>11,526</td>
<td>94,128</td>
</tr>
<tr>
<td><strong>Excess capacity (units)</strong></td>
<td>-</td>
<td>23,096</td>
<td>15,437</td>
<td>5,009</td>
<td>9,026</td>
<td><strong>52,568</strong></td>
</tr>
</tbody>
</table>

Table 10: Summary of Land Requirements by Housing Programme. (Source: Shisika Development Management Services, 2012)

4.3.6 Other Socio-Economic Pressures

The most threatening factor to sustainable development and a balanced demographic structure is the HIV/Aids pandemic. The disease, which already has had a serious impact on society will result in reduced life expectancy, raise dependency ratios, cause fewer people to be capable of productive work and economic activity and thus a reduced labour force. The resultant loss of economically productive people, distortion of family structures as well as the
increase in number of orphans and the associated cost for health care and social services all herald fundamental implications for the future. HIV/AIDS, if left unchecked, will retard the natural population growth rate both nationally and regionally. It is also likely to impact on the local growth rate as well as on migration trends.

Statistics also indicate that the average life expectancy in South Africa for all population groups is expected to decrease between 2005 and 2020 from 63 to 56 years respectively. Although these are averages, the most affected are Blacks with an estimated average life span of 54 years in 2005 reducing to 44 years in 2020. It can be assumed that the number of orphans in the city will increase dramatically, as well as the number of terminally ill who will be unable to take care for themselves. This will have a large impact on the type of housing to be provided as well as the types, quantities and location of social services necessary – all of which will have spatial implications. The number of maternal orphans (children under 18 years of age whose mother is dead) is projected to rise from 25 930 in 2005 to 44 050 in 2020. These include children whose mothers have died from non-AIDS causes as well as AIDS causes. Current estimations are that 12.9% of all children under the age of 18 will be maternal orphans in 2020.

The number of paternal orphans (children under 18 years of age whose father is dead) is expected to rise from 38 220 in 2005 to 48 450 in 2020. These include children whose fathers have died from non-AIDS causes as well as AIDS causes. Current estimations are that 13.6% of all children under the age of 18 will be paternal orphans in 2020. The increase in AIDS deaths will thus lead to a changing demographic profile of the city. It is important therefore that spatial planning does not exacerbate the social problems caused by this disease and that improvement of the situation is facilitated where possible.

The impact of HIV/AIDS on housing, health care, social services, crime, social segregation, payment backlogs for services and employment has not been thoroughly investigated or quantified. Further research into the overall implications of HIV/AIDS is necessary in order to address these problems effectively.
Furthermore, pollutants from industry, sewerage, waste generation and air pollution sources contribute to environmental problems. Moreover, the use of vehicles, consumption of substantial amounts of water, energy and consumer products constitutes a high load per capita on the environment and on scarce natural resources. The challenge for decision makers is to achieve environmental, social and economic sustainability in the city where the requirements of all sectors are balanced to ensure the protection of scarce resources such as open space for the future.

4.4 Built Environment Analysis

The purpose of this section is to present a broader explanation of land uses within the NMBM.

4.4.1 Current Quality of Built Form

The metropolitan area is characterised by three axis of development spreading from the central city area to the west towards Hunter’s Retreat, in a north-westerly direction towards Uitenhage and towards Motherwell. Approximately 35% of the metropolitan area can be considered “built up.”

The remaining areas are largely undeveloped and comprise small agricultural land holdings, land earmarked for future urban expansion, open spaces and major conservation protected areas.
4.4.2 Heritage

The existing built environment structures urban areas and reflects the historical and cultural development of a city. Consequently, the protection and conservation of the built environment contributes to an understanding of the existing character and identity of a place. The appropriate utilisation and rehabilitation of historical buildings and environments is a principle of urban development.

The MSDF is based on the principles of conservation and sustainability and utilising the potential of historical and culturally valuable buildings, places and spaces. The value of the built environment and historical buildings and sites in tourism and the role tourism can play in the economic development of the region need to be recognised and leveraged.

4.4.3 Heritage Conservation

The following fundamental principles have been identified for heritage conservation in South Africa.
Heritage is a valuable, finite, non-renewable and irreplaceable resource that must be carefully managed to ensure its survival;

Every generation has a moral responsibility to act as a trustee of the natural and cultural heritage for succeeding generations;

South Africa has a rich heritage, both natural and man-made, which is unique and worthy of conservation;

Numerous cultures, both past and present, have contributed to that heritage and all have the right to be protected;

Every person, community and institution has an obligation to ensure that significant elements of the natural and cultural heritage are not damaged or destroyed.

4.4.4 Heritage Resources

The National Heritage Resources Act, No. 25 of 1999, demands the establishment of a heritage resources management system involving a national heritage resources authority, a Provincial Heritage Resources Authority (PHRA) in each region or province and the local authorities which, once the system is established, will be responsible for Grade 1, 2 and 3 heritage resources respectively.

Heritage resources are places or objects of cultural significance, including objects or places of aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value. Heritage resources may include buildings, structures, equipment of cultural significance, places associated with living heritage, historical settlements and townscapes, landscapes and natural features of cultural significance, graves and burial sites, archaeological and paleontological sites, geological sites and sites relating to the history of slavery.

The system requires that these graded heritage resources be formally identified as national and provincial heritage sites that must be placed on heritage registers and local heritage resources, which may be placed on a heritage register. The system also provides for the identification of protected areas and heritage areas. All these
formal identifications must follow exhaustive procedures, after which these formally identified sites, areas and resources may be described as being formally protected.

The heritage resources management obligations placed on local authorities are varied. All registered heritage practitioners are required to meet these obligations.

The Act stipulates these requirements as follows:

- Identification of places of cultural significance including objects or places of aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value.
- Grading and management of Grade 3 heritage resources.
- Management of heritage areas.
- Management of sites on the heritage register.
- Management of monuments and memorials.
- Proper management of properties of heritage value owned by the local authority.
- Preservation and promotion of places of cultural significance.

In order to fulfil its legal obligations, the Municipality needs to identify and grade heritage resources to ultimately provide a heritage resources management plan for the heritage resources in its care. One of the MSDF’s implementation strategies is the completion of a Heritage Register, in compliance with the requirements of the Heritage Resources Act.

In compliance with the Act, the preparation of a Heritage Register has been commissioned and all major sites have been evaluated. Remaining sites older than 60 years still need to be evaluated, and funding is needed for this purpose. It entails, inter alia, the identification of the resources that will fall under the jurisdiction of the NMBM to manage in the future.

Presently, development is hampered to a certain extent, as all approvals for development on sites with buildings older than 60 years need to go through the Provincial Heritage Authority, the Municipality has, through certain prescribed processes, assumed responsibility for certain heritage roles, in certain instances speeding up the heritage application approval process. An application for
competency in relation to certain built environment functions was submitted to the Provincial Heritage Resources Agency in January 2012 and stumbling blocks in relation to the Provincial Heritage Resources Authority approval were being addressed politically, with little progress having been made since December 2012.

4.4.5 Current Heritage Initiatives

The state of the built heritage in NMBM is a cause for concern. Consequently, the Municipality took a decision to prioritise the preservation of heritage and the built environment. A Problem Buildings By-law and a Heritage By-law have been developed in line with the provisions of the Heritage Resources Act.

4.5 Infrastructure

One of the main aims of the MSDF is to minimise the need to extend bulk infrastructure and to optimise existing infrastructure. The strategic planning of infrastructure, (water, stormwater, sewerage, and electricity) will need to be elaborated on in special studies that are based on the urban expansion proposed. Directorates will need to prepare development programmes for investments in the infrastructure required to support the development of and implementation of the IDP. Attention should be paid to the sustainable development of infrastructure in terms of economy, natural resources as well as environmental and health protection.

Existing bulk infrastructure systems, with minimal extensions, are expected to meet the needs of urban expansion for the near future. However, it is imperative that new technologies be explored and applied in the longer term, promoting sustainability with special emphasis on the use of resources and recycling principles.

Infrastructure expansion cannot be allowed to continue in the way it has done in the past. All over the world the challenge being faced is to limit urban sprawl in an attempt to make cities more compact and efficient and to reduce the extension of expensive bulk service infrastructure networks. Consequently, higher densities will have to become a reality despite the lack of community support for densification as the extensions to bulk services required to sustain low density sprawl, either the capital works or the on-going maintenance, are not affordable.
4.6 Pattern of Activities

4.6.2 Industry

(a) Coega Industrial Development Zone (IDZ) and the Port of Ngqura

The Coega IDZ and the Port of Ngqura warrant particular attention from an economic development perspective. The Coega Industrial Development Zone (IDZ) is located adjacent to the modern deep-water Port of Ngqura. This 11,500 ha complex aims to drive local and foreign direct investments in export-oriented industries, thereby positioning South Africa as a hub for International, African and Southern African trade. The Coega IDZ is purpose-built for manufacturing, including: the beneficiation of export goods; foreign direct investment and local socio-economic growth; skills development, and; job creation. The integrated IDZ and Port of Ngqura have established world-class infrastructure to support the industrial development objectives of the Eastern Cape.

The Port of Ngqura, positioned as a trans-shipment hub, had three container berths operational by the end of 2013, while the further expansion of both the container and bulk capacity is underway, having reached the point of being able to accommodate four container berths. In 2013, the Port of Ngqura was the fastest growing port in the world. A process is underway for the closure of the bulk fuel tanks in the Port Elizabeth Harbour. A new bulk tanking facility is to be established at the Port of Ngqura and is due to be operational by 2018. The existing Manganese export terminal in the Port of Port Elizabeth will be closed upon completion of a new manganese ore export terminal at the Port of Ngqura. Construction of the Manganese export terminal at Ngqura is scheduled for commencement in 2016 and due for completion in 2019.

The Coega IDZ, managed by the Coega Development Corporation (CDC), and the Port of Ngqura (Transnet National Port Authority), provide the necessary infrastructure for the establishment of industrial clusters intended to stimulate agglomerative economies in key sectors, in accordance with the Development Framework Plan which is approved by the NMBM. The automotive, agro-
processing, logistics and metallurgical clusters, amongst others, are dependent on competitive logistics as enablers of growth. Investments in air, road and rail are required, in order to facilitate growth within these sectors.

A key linkage is the Nelson Mandela Bay Logistics Park in Uitenhage, operated by the CDC, to enhance the logistical competitiveness of the automotive cluster. A major new automotive manufacturer (FAW) plant has been established in the Coega IDZ with further expansions planned. The development of the Coega IDZ and NMBLP automotive facilities will provide impetus to the enhancement of the logistical competitiveness of the region through investment in key enabling infrastructure.

A direct linkage between the NMBLP and Port of Ngqura will enhance the logistical competitiveness of the NMBM. As depicted in the 2009 SDF proposals, ring connectivity can be served through the enhancement of a transportation corridor from the NMBLP along the R75 and R334 to join an extension of Neptune Road at the intersection of the R334 and R335. The ring linkage would assist the development of Motherwell North (Coega Ridge) housing development, a key contributor of domestic effluent to the proposed Coega IDZ Waste Water Treatment Works, whilst mitigating congestion along the R75 (Uitenhage – PE road) and R367 (Redhouse Road). The construction of the Neptune R334 / R335 linkage would enhance the competitiveness of the Port of Ngqura by providing optimized logistics linkages to the Addo Road and Uitenhage while servicing a potential linkage to a future cargo airport at Coega through an extension of the IDZ Ring road to the Addo Road.

Provision is made on the NMBM SDF for a cargo airport within Zone 14 of the Coega IDZ. Feasibility studies for the airport are underway and master planning for an aeronautical and advanced manufacturing cluster have been completed.

The development of the metallurgical cluster will support progress towards the goal of the local beneficiation of South Africa’s natural resources. The ferrous metals cluster will provide the business case for developing a source of industrial water (from return effluent) for the IDZ. The petro-chemicals cluster will be a further user of industrial water, and further growth in the Coega IDZ is dependent upon the availability of sufficient and reliable sources of potable and industrial water. It is expected that the partnership lobby between the NMBM, the Province of the Eastern
Cape, the CDC, business chambers and civic and social partners, will develop the necessary impetus for the provision of infrastructure which will attract investments in the targeted sectors.

The training and academic cluster in Zone 4 continues to grow, having secured key investments in Business Process Outsourcing (BPO). Further growth in this sector will promote the need for the integration of the IDZ with the residential areas of Motherwell and public transportation infrastructure. The further development of commercial developments and housing units in the CDC Vulindlela (Construction) Village at Wells Estate highlight the need to integrate the commercial and transportation infrastructure of Motherwell with the key focus areas of the IDZ.

Investments in the energy sector, with the purpose of feeding into the electrical grid, will continue in the IDZ, with the focus on renewable energy, peaking power generation capacity base load and associated beneficiation opportunities.

The Dedisa Peaking Power Plant is under construction, schedule for completion in 2015. The IDZ is well positioned to establish a Liquefied Natural Gas handling facility and associated power generation facilities. Logistical service providers are continuing to show an interest in the IDZ, with a number of investors locating in Zone 1 of the IDZ.

The IDZ has secured two suppliers of industrial gas, namely Afrox and Air Products. The agri-processing sector has shown strong growth with the expansion of Dynamic Commodities and the establishment of Coega Dairy in Zone 3, which are market leaders in their field.

It is expected that the legislative process for Special Economic Zones (SEZs), being undertaken by the Department of Trade and Industry (DTI), will remove many of the constraints that have been experienced within the IDZ Programme and will provide a package of competitive incentives and further investments in the infrastructure needed to further develop the IDZ.
Other Industrial areas include the following:

- **Markman** – This industrial area caters primarily for the heavier and noxious types of industry. Although there has historically not been much demand for industrial land here due to its perceived distance from the city, this is expected to change because of its strategic proximity to the Coega IDZ. The logistical and industrial synergy linkages between Markman and the neighbouring Coega IDZ need to be optimized in order to stimulate development in both the Coega IDZ and Markman industrial areas.

- **Perseverance** – This area has the advantage of being located close to the Ibhayi residential area and thus provides conveniently located employment opportunities. Two large recent developments (SAB and Corning) have resulted in this area being almost fully developed.

- **Port Elizabeth Airport** – Developed as an area for industries dependent on air transport. While vacant space does exist, demand is increasing for industrial, commercial and residential purposes.

- **Struandale** – This is an older industrial area close to labour sources with limited expansion potential.

- **Korsten** – This is an older industrial area with older buildings and smaller industries.

- **Deal Party** – This is an old industrial area and is fully developed.

- **Uitenhage** – Capacity for expanding the Uitenhage industrial complex exists at Jagtvlakte and is integrated into the Jachtvlakte Sustainable Human Settlement Planning Process. The first phase of the NMBLP (Precinct A) is nearing completion with available land now fully let to industrial tenants. The development of Precinct B of the NMBLP will be undertaken by the CDC, operators of the NMBLP, and will further enhance the competitiveness of the Uitenhage automotive cluster with the value offering being the improvement of logistics efficiencies. **Greenbushes** – This is a relatively new industrial area which started with the rezoning of residential holdings in the area known as Ericadene. Due to demand, additional properties north of the Old Cape Road have also been rezoned in the form of upmarket industrial parks. These
industries provide much needed economic opportunities to the impoverished Kuyga settlement nearby.

Generally, the existing industrial areas are environmentally degraded with poor aesthetics and poor pollution control. An exception has been the world class safety, health, environmental and quality practices at both the Coega IDZ and NMBLP, as implemented by the CDC. The lessons and experiences from the Coega IDZ and NMBLP need to be replicated and extended to other industrial areas within the NMBM and leveraged into the redevelopment of brownfield industrial areas such as Markman Township in order to enhance environmental quality, aesthetics and operational efficiencies.

As part of the Capacity Support Implementation Plan, the NMBM is receiving technical assistance to evaluate the Economic Development Strategy. This will consider the success of current initiatives and determine a way forward for the Municipality in respect economic development and the issues identified above.

There is a portfolio of sectors discussed in the Nelson Mandela Bay Industrial Development Strategy (2012) that focuses on industrial (or secondary) sectors as opposed to primary and tertiary sectors.

**Local/Light Manufacturing:**

The majority of job seekers are excluded from obtaining work purely due to the high cost and time of commuting to commute to work areas. Places of work ideally need to be within walking distance of where people are living. Significant impact can be achieved by revisiting the traditional concepts of urban order that tend to over-emphasize heavy industry and to re-link local production to local consumer markets through light industry that is more responsive to local needs and demand.
Tourism and Hospitality:

This is a consumption industry, rather than a productive industry. Tourism numbers are stagnant or falling, and the tourism-related manufacturing industry is undeveloped. However, there are production opportunities in the manufacture of handcrafts, mementoes, local fabrics, etc. There are also agricultural spin-offs in the supply of ingredients to restaurants and hotels.

Agro-Processing:

Cacadu, adjacent to NMBM, has a relatively strong agricultural sector. The biggest employers in the Coega IDZ are agro processing plants. This sector is a crucial priority for government. Agro-processing has linkages through into the Cacadu economy. Agro-processing has strong backward and forward linkages and value chains of processing and distribution. Strengths of this sector in NMB include existing industries, natural resources and IDZs to support industry. This sector is constrained by trade policies, lack of skills, loss of productive land and zoning limitations as well as a lack of coordination between stakeholders.

Pharmaceutical:

There is a huge demand for low-cost drugs in the developing world and an ageing population in the developed world is a market for an expanding range of drugs. Nelson Mandela Bay is home to a number of world-class pharmaceutical companies and Nelson Mandela Metropolitan University has a pharmacy department. Rhodes Pharmaceutical department is another asset. Threats to this sector of industry are the lack of access to technology and intellectual property and the lack of will by “big pharma” to invest.

Sport and Leisure:

Sport and Leisure dovetails with Tourism and Hospitality and provides the opportunity to utilize the natural assets of the area. This industry promotes light
industry (sport equipment, goods and clothing). It is a means for rapid positive exposure and revenue generation - local sports events have demonstrated the capacity to attract large numbers of people to NMBM.

**Capital goods:**

South Africa is on track to become a manufacturer of locomotives for the rest of Africa. This provides the Metro with its best opportunity for growing its presence in the capital goods sector in the short to medium term, and is therefore the focus of the strategy. A large percentage of the wagons should be made in Nelson Mandela Bay. Transnet Rail Engineering has a manufacturing facility in Uitenhage, which has been identified by Transnet as its main export manufacturing facility.

**Renewable/Green Industries:**

Green industries in this context fall within the broader category of energy, which includes electricity and the various types of fuel used in combustion processes. A Government development incentive is proposed “in order to increase local demand of alternative energy and DEDEAT on the other hand, must strive to influence policy towards developing certain underdeveloped areas in South Africa including the Eastern Cape to be used as manufacturing centres for renewable energy.” (Provincial Industrial Development Strategy, 2010).

Besides the above-mentioned opportunities, the Municipality has also introduced a number of strategic initiatives and identified a number of key large-scale projects, as reflected in the Spatial Development Framework, the LED Strategy and the IDP of the Municipality, with the objectives being:

- Serving as significant catalysts for economic growth;
- Stimulating economic development;
- Enabling the Metro to become nationally and internationally competitive;
- Creating jobs;
- Alleviating poverty;
- Attracting investors and/or tourists;
- Changing the face of the Metro.
4.6.3 Residential

Repeal of the notorious “influx control” regulations during the 1990’s resulted in extremely rapid urbanization from the rural areas into the city. As people moved into the city, informal settlements established themselves in areas not suitable for residential development and the resultant poor quality of life in these areas became planning, social and economic issues. The increase in the number of informal settlements is also attributed to the backlog of housing which is estimated to be 72 411 units (BEPP 2014) for lower income groups.

In order to meet this demand, most new residential developments catering for this segment of the market are taking place north of the Swartkops River in Wells Estate and to the north-west of Motherwell, as well as towards Uitenhage along the main Uitenhage Road axis. Furthermore, in-situ upgrading is also taking place within existing township areas primarily on sites set aside for other uses like school sites which have been invaded.

A number of long standing informal settlements also exist in the peri-urban areas of the Metro. Part of the upgrading plans of the erstwhile Western District Council (now inherited by the NMBMM) was the establishment of properly planned and serviced residential townships in the following areas:

- Rocklands
- Kuyga
- Seaview
- St Albans (since found to be undevelopable due to environmental constraints)
- Witteklip

With the formalisation of these isolated settlements as part of the housing program, they need to be contained as such developments are not in line with the Provincial Spatial Development Plan. Their development will cost the Council considerable amounts of money and there are insufficient employment opportunities in those peri-urban areas to sustain large numbers of people. Servicing is difficult and very
expensive and the residents will forever be burdened by a lack of access to social, economic and cultural facilities and services which are available in the established urban areas.

The southern and western parts of Port Elizabeth as well as the northern sector of Uitenhage comprise the middle to upper income residential areas with well-established infrastructure and social and recreational facilities.

4.6.4 Open Space

The municipal area covers an area of 1950km², out of which built-up areas comprise approximately 20%, agricultural land and rural settlements 15%, Municipal Open Space System (MOSS) and areas still under assessment for inclusion in the MOSS 15%. In addition to the MOSS there is valuable open space used for agriculture, grazing, recreational purposes that are important features in the structure. Within the built-up areas local open space, food gardens, parks, non-motorized transportation and play-fields all contribute to the positive impact that green areas have on the micro-climate, aesthetics, drainage and biodiversity.

(a) Municipal Open Space System (MOSS)

At present, many open spaces exist in isolation having been provided on an ad hoc basis as part of township design and development. An opportunity therefore exists to link the various spaces together to allow residents to move on foot (or by bicycle in places) through the system. A metropolitan open space system (MOSS) has therefore been conceptualised with a view to linking together important open spaces and to gain some recognition for their importance within the urban framework.

A metropolitan open space system must not only be seen as a system of green open spaces kept for aesthetic or conservation reasons. The system has great value in terms of:-

- non-motorized transportation corridors
- recreation;
- stormwater management;
• air and water pollution control;
• aesthetics;
• urban agriculture potential;
• traditional land sites (land for the abakwetha);
• biodiversity;
• protection and promotion of flora and fauna;
• conservation of unique species;
• environmental education

Based on other studies and experiences elsewhere, it could be calculated that a metropolitan open space system can save considerable amounts of money in dealing with problems such as stormwater disposal and reducing the need for the installation of expensive infrastructure.

A refined metropolitan open space system has been formulated as part of the strategic environmental assessment (SEA) of the SDF. The metropolitan open space system includes a great variety of environments, all with specific characteristics and value. The most predominant areas in physical terms are, inter alia, the coastal and marine areas, rivers and estuaries, coastal dune systems, mountains, valleys etc.

(b) Other Open Spaces

Whilst provision of other open spaces within residential areas will continue in accordance with current standards, attention should be given to linking these open spaces to the MOSS system where possible. Furthermore, the practice of compromising open space standards in lower income housing developments should be avoided. Higher density residential developments require more access to open space as they have less private garden space and consequently a more urgent need for an improved quality of living environment.
Of importance therefore is the need to curb the slow attrition of public open spaces through ad hoc applications for development needs. If not, the very purpose for which the public open space was reserved in the first place will be lost. Furthermore, if the aim of densification is to be actively pursued, open spaces become even more necessary to maintain an acceptable quality of urban environment.

4.6.5 Social and Community Services

Social and community services include a wide range of facilities that require space and have great impact on the function of urban areas and on the standard and way of living. The SDF however is at too broad a scale to show the detailed provision of all of these facilities. Suffice to note at this point that if the population is to increase as anticipated by 2020, such an increase will obviously impact on the need for schools, health clinics, community halls, recreational facilities etc. The applied SCU-concept will incorporate all such needs at a more local level and the detailed layout planning that will follow will set aside land for such facilities.

In many cases, central or provincial government authorities determine the standard and size of social and community facilities. There is a need for close co-operation between the Municipality and the Province of the Eastern Cape to make the demand for services known and to obtain information about the resources that may become available. Based on the available standards, approximately 775ha will be required for educational purposes plus a further 163ha to meet institutional needs by 2020.

(a) Social and Community Facilities in the SCU-concept

In reality, sustainable community units (SCU) will vary in size, shape and content depending on densities, topography and other constraints. The population of a unit could for example include about 20 000 dwellings. Based on the standards indicated above, an SCU in addition to the residential, industrial and central component would contain the following number of facilities:
<table>
<thead>
<tr>
<th>FACILITY</th>
<th>NUMBER OF SITES</th>
<th>TOTAL LAND REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-primary schools</td>
<td>50</td>
<td>15 ha</td>
</tr>
<tr>
<td>Primary schools</td>
<td>33</td>
<td>83 ha</td>
</tr>
<tr>
<td>High schools</td>
<td>11</td>
<td>75 ha</td>
</tr>
<tr>
<td>Place of Worship</td>
<td>100</td>
<td>20 ha</td>
</tr>
<tr>
<td>Clinics</td>
<td>10</td>
<td>2 ha</td>
</tr>
<tr>
<td>Community Halls</td>
<td>5</td>
<td>2 ha</td>
</tr>
<tr>
<td>Old Age Homes</td>
<td>4</td>
<td>6 ha</td>
</tr>
<tr>
<td>Day Hospitals</td>
<td>4</td>
<td>4 ha</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>217</strong></td>
<td><strong>207 ha</strong></td>
</tr>
</tbody>
</table>

Table 11: Social Facilities

(b) Cemeteries Land Demand

The Spatial Development Framework Plan indicates the location of major existing and proposed cemeteries. It has been noted that at present there is a shortage of appropriately located cemeteries.

The two most important additional considerations in the location of any cemetery is the geological and hydrological suitability of the ground. Once sites have been identified they need to be subjected to detailed investigations to assess suitability in terms of these factors. Moreover, in order to ease maintenance and other costs, it is ideal to have cemeteries as large as possible. However, the size of cemeteries will ultimately depend upon land availability and land suitability. There will also be cultural and religious aspects to be taken into account. Due to these factors, it is not possible to determine need in size or numbers and investigations are required to
determine areas suitable for new cemeteries and to assess more accurately land demand for this use on a long term basis.

A cemetery audit indicates that there are 15 cemeteries totalling some 224ha. However of these, three are now full, leaving 12 cemeteries operational. Estimated available capacity at current burial rates indicates that these cemeteries will be full in less than 30 years. This estimated time span may well reduce considerably should the spread of the HIV/AIDS pandemic not be curbed.

Burials are taking place at a rate of approximately 11,000 burials per annum. Based on a 2011 population of 1,16 million, this equates to a death rate of approximately 0.95%. Assuming this remains at a constant 0.95%, an escalated 2020 population projection of 1,5 million will see this burial rate increase to approximately 15,000 burials per annum and will require an additional area of approximately 189ha to be set aside for cemetery purposes. Investigations are under way to identify and secure land that is geologically suitable for this purpose. Such investigations must consider the impact of alternate policy options and instruments in managing death and burial.

(C) Abakwetha Land Demand

The urban structure needs to accommodate the requirements of the Abakwetha custom. Such requirements include that land identified for this purpose should be reasonably vegetated so that shelters and activities are screened from view.

It is proposed that the Land Use Management Scheme be revised to accommodate a special zone for this land use as part of a detailed study into the identification of suitable sites. Such a study should be carried out in conjunction with the communities involved.
4.6.7 Trends and Demand for Sustainable Development

4.6.7.1 How the ecological (natural/green) infrastructure supports and constrains urban growth and development, procedures, standards and performance.

The National Environmental Management Biodiversity Act, Act 10 of 2004 and other environmental legislation require municipalities to develop strategic environmental planning tools (i.e. Conservation Assessment, Environmental Management Framework and Bioregional Plan) and management programmes aimed at informing and guiding land use planning and decision-making processes, thereby promoting sustainable biodiversity management.

The Municipal Systems Act, Act 32 of 2000 requires that the environmental impacts of the Municipal Spatial Development Framework (MSDF) be evaluated. In 2007, the NMBM completed a systematic biodiversity planning assessment process that spatially represented a network of its biodiversity resources and processes. This was used to inform the Strategic Environmental Assessment of the MSDF. The Municipal Systems Act 32 of 2000 also states that municipalities must deliver their services in a sustainable manner.

The biodiversity network represented within the MSDF was later used to inform the Environmental Management Framework (EMF) at a Metro-wide scale, guiding development to appropriate areas and limiting development in environmentally sensitive areas. Geographical areas were identified and mapped to facilitate a reduction in the legal requirements and streamline the Environmental Authorisation process at a strategic level, thereby ensuring that biodiversity priorities would be taken into the sector planning of the NMBM. It is anticipated that the review and refinement of the Metro’s EMF will be completed in the 2015/16 financial year.

The NMBM Bioregional Plan is aimed at conserving biodiversity at a regional level and is primarily concerned with guiding land use planning and decision making through improving the legal standing and consideration of Biodiversity/Conservation areas by all organs of state. The National Environmental Management Act, 107 of 1998, the Environmental Impact Assessment (EIA) regulations, as amended in 2010, and further amended in 2014 make specific mention of threatened ecosystems,
Critical Biodiversity Areas, Bioregional Plans and systematic biodiversity plans to act as EIA triggers. The NMBM has completed the Bioregional Plan, which has been gazetted.

A Corporate Environmental Impact Assessment Task Team (CETT) and Bilateral meetings between the Nelson Mandela Bay Municipality and the Provincial Department of Economic Development and Environmental Affairs (DEDEAT) are further instruments employed towards ensuring integration at social, economic and environmental levels.

The National Environmental Management: Integrated Coastal Management Act, Act 24 of 2008, allows for the development of a Coastal Management Programme that calls for an integrated, coordinated and uniform approach to coastal management within the Metro by all stakeholders in ensuring the sustainable use of coastal resources. The programme is currently being updated and will be subjected to a public review process. The Coastal Development Line (hazard lines) study, has been completed in association with the Eastern Cape Provincial Department of Economic Development, Environmental Affairs and Tourism (DEDEAT). The delineated development lines (hazard lines) will, once promulgated, be used to inform appropriate development along the coastline of the Metro by means of specific regulations as well as the updated Coastal Management Programme and other sector plans of the NMBM. These plans are due for completion in the 2015/16 financial period.

The natural resources planning, inventory and operational management of the NMBM's nature reserve network and green infrastructure network is concerned with conserving ecosystem values, functions and the restoration of natural systems that underpin watershed health and hydrological integrity supporting natural resources necessary for agriculture and aquaculture.

Municipal policies, such as the Integrated Environmental Policy and the Integrated Energy Plan, are specifically geared to address the response and resilience of all communities to climate change impacts.

The Integrated Environmental Policy specifically, provides guidelines for the Land Use and Planning sector of the Municipality, which (amongst others) are to:
• Undertake spatial planning that reduces urban sprawl, promotes densification, mixed use development, and corridor developments, and
• Encourage green buildings and sustainable design and development practices.

The NMBM has set out to achieve the following sustainable goals:

• Providing an affordable and secure energy supply that increases the development and use of renewable, less toxic and less carbon intensive sources.
• Providing affordable and secure energy for all, while minimising demand and consumption.
• Increasing the percentage of energy derived from renewable sources.
• Policies promoting the use of clean and efficient energy.
• Achieving greenhouse gas emissions and air pollution reduction in both municipal operations and the community at large, with attention given to the reduction and prevention of inequalities.
• Improving the response and resiliency of all communities to climate change impacts on the built, natural and social environments, with the emphasis on public health and historically underserved populations.
• Ensuring that outdoor air quality is healthy for all segments of the human population and the natural environment.

The current areas of focus for climate change in the city include:

• Greenhouse gas emissions tracking and reduction.
• Maintenance and growth of current initiatives, whilst looking at others.
• Addressing the roles and responsibilities of every directorate in climate change related issues.
• Responding to vulnerability and aligning it with adaptation.
• Education and awareness.
• Ensuring alignment with provincial and national strategies and actions, and managing in-house policies and strategies.
In 2013, a municipal Community Awareness Campaign, called the Go Green Advocacy Programme, was launched. This Programme is aimed at providing residents with the resources they need to think critically about and address environmental problems and solutions, and include the environment as an important consideration in their work and daily living. This awareness programme built on the Go Green Campaign, which was initiated in 2008 to showcase municipal-led projects and initiatives which demonstrated sustainability.

The Integrated Energy Plan aims to provide a high level perspective of the energy trends and needs of Nelson Mandela Bay over the next 10 years. The Green Procurement Implementation Strategy is aimed at moving the NMBM toward the inclusion of environmental criteria in its Supply Chain Management Policy in order to encourage the development and diffusion of goods and services which have the least impact on the environment.

An Environmental Management System (EMS) is in operation at the Nelson Mandela Bay Multi-Purpose Stadium. This Stadium was built on Green Goal principles, sourced from the 2006 FIFA World Cup held in Germany. An EMS is a management tool aimed at reducing and managing the environmental impacts of activities, and is a condition of the Stadium’s environmental authorization.

The NMBM adopted the national standard for energy efficiency or SANS 204 in municipal buildings, which greatly raised awareness of the consumption of energy resources and the type of energy resource that is being used.

The Disaster Management Sub-Directorate (Safety & Security Directorate) has identified in its’ Risk Assessment (2010) that the highest rated risks to the NMBM are Hydro-meteorological (Floods & Storms) and Hydro-meteorological (Droughts), and then Environmental Degradation (in order of importance). This has implications for city planning. Preventative and disaster-proof city planning and design must become the norm in future where the effects of climate change are not linear or always predictable.

The Waste Management sub-directorate has embarked on Metro-wide project aimed at the betterment of the waste management infrastructure, processes and existing
systems to offer better efficiency and offer operational cost savings to the NMBM. The project is entitled: “Municipal Solid Waste (MSW) Diversion and Beneficiation in the NMBM” (NMBM, 2015).

Key to this project is the implementation of waste management infrastructure which is to be constructed on strategically located sites including the possible construction of a waste-to-energy (WtE) plant. A detailed feasibility study has been carried out recently by Royal HaskoningDHV, which has identified the project to be economically, environmentally, technically and socially feasible. The project may introduce approximately 300 new sustainable jobs.

The Waste Management infrastructure for this project comprises the construction of what is described as “Waste Parks” including waste transfer stations, waste sorting and recovery facilities (also called Materials Recovery Facilities – MRF’s), and waste treatment which may include composting, anaerobic digestion (AD), aggregate crushing and sieving and waste-to-energy (WtE).

Five (5) sites where identified for Waste Management Infrastructure and the establishment of “Waste Parks” within the NMBM. These are:

- Greenbushes - Approximately size 200 x 220m
- Markman (Motherwell) - Approximately size 400 x 1000m
- Koedoeskloof - Approximately size 330 x 150 m
- PPC West - Approximately size 46ha
- Coega - CDC Zone 5

The sites earmarked for the “Waste Parks” are PPC West and Koedoeskloof, whereas Coega is earmarked for a waste-to-energy plant site only and Waste management infrastructure is earmarked to be installed and constructed at Greenbushes; Markman/Motherwell; PPC West; and Koedoeskloof.

The South African National Framework for Sustainable Development (NFSD) was approved in 2008, and is the precursor to the National Strategy for Sustainable Development and Action Plan 2011-2014 (NSSD 1), approved by Cabinet in 2011. In the NSSD 1, sustainable development is accepted as a long-term vision for the
country’s prosperity. Through 5 key priorities, it sets out to guide the implementation of all three tenets of sustainability (environmental protection, social equity and economic efficiency).

Priority 3 relates to the green economy and provides interventions to unlock the potential of this “mindshift” in developmental thinking. Infrastructure, and indeed the built environment, must become sustainable to serve both the needs of present and future communities. Another intervention is to implement a “Green Building Regulator Enforcement Programme”, and municipalities can develop Green Building by-laws, as an example. The NMBM’s IDP provides a strong focus on Local Economic Development and job-creation projects for waste minimization, beautification and education and awareness-raising for residents on climate change.

One of the biggest challenges to the sustainability of ‘green’ infrastructure (ecological services such as wetlands, biodiversity corridors, natural habitat spaces, and other biophysical systems) is a failure to address the impacts of climate change and unsustainable resource use. The National Strategy for Sustainable Development and Action Plan 2011-2014 (NSSD 1) states that ecosystem resilience must not be disturbed, and that adaptive capacity in communities must be built. These goals relate to Specific Priority 5 of the NSSD 1, which relates to “responding effectively to climate change”.

As one example of infrastructure’s ‘adaptive capacity’ (ability to respond to changes in conditions), the Water and Sanitation Sub-Directorate has embarked on an externally-funded project to increase the energy and water efficiencies of 74 pump stations throughout the Metro. These pump stations are under strain due to population increase and cyclical droughts.

The integration of municipal and provincial spatial planning instruments are encouraged as a means of integration and alignment of strategic sustainability priorities. The overlaying of municipal spatial development frameworks, the conservation status layers, and collaboration with Environmental Management and other relevant Directorates are all efforts which speak to this integration and alignment. In addition, the multi-sectoral internal municipal forums, as well as bilateral discussions (such as those between the local Department of Economic Development, Environmental Affairs and Tourism and the NMBM) with local
provincial authorities are part of efforts to create cross-communication, clarity on legislative compliance under the National Environmental Management Act and other legislation, and ultimately co-operative governance.

Overall, all the five priorities of the NSSD 1 can guide local government in making decisions on how to create sustainability in both human settlements and the built environment.

5. SPATIAL PLANNING DIRECTIVES

Apartheid planning consigned most of the South Africa cities based on the principles of segregation, separate development and unequal access to resources. Apartheid planning segregated cities resulting in places of work and economic opportunities being far from the majority of the population. Measures and strategies need to be put in place to realign the apartheid structured city into a resilient, sustainable and liveable one. Therefore, this section outlines the spatial planning directives which are designed to maintain consistent approaches in proving direction and scope for integration of all aspects of spatial planning such as land use, roads and service infrastructure, pedestrian and vehicular movement, open space systems and other development patterns.

Figure 14: Spatial Planning Concept
5.1 Primary Structuring Elements

5.1.1 Activity Nodes

Nodes are places of high accessibility which are characterised by intense concentration of mixed use activities such as retail, office, entertainment, community facilities and residential components. Such places are usually located at strategic transport interchange and should be examined in terms of their potential significance.

These nodes should be positive performing environments that are able to attract business and economic developments to these points. Well-functioning urban nodes are vibrant areas comprising shopping, work, social and cultural opportunities and public transport facilities in a high quality, safe public environment.

Furthermore, they are regarded as priority areas for densification, integration, intensification and improvement of environmental quality. There is a great need to identify a hierarchy of nodes within the metropolitan area in order to integrate the spatial structure and maximize opportunities. Nodes are mostly targeted for public and private investment as they can enhance economic opportunities and enable more efficient service delivery intensifying activities. Nodes are identified in terms of their function, economic use, intensity, density, walkability, public facilities and public transport.

5.1.2 Urban Corridors

Urban corridors consist of a combination of structuring elements which reinforce a hierarchy of nodes characterised by the mix of uses resulting in varying development intensity and width. However, activity spines are more focused on promoting intense concentration of mixed uses along a major transportation route. These structuring elements are significant in maximising the objectives of restructuring and the creation of economic opportunities by intensifying various activities. Mixed used activities should be created and promoted within such structuring elements which include different modes of transport, thus minimising travelling costs and the costs of
transport infrastructure by increasing accessibility to employment opportunities especially for previously disadvantaged communities.

5.1.3 Activity Spines

The network of activity nodes is reinforced by a system of activity spines which connect with these nodes. Activity spines can be defined as concentrated urban development along movement routes which are typically also major public transport routes. Development can either take the form of continuous linear development or a series of nodes along the activity spine. The activity spines must have a degree of demonstrated development potential.

5.1.4 Natural Open Space and Green System

The open space and green system within the metro provide a diverse range of environments which are characterised by conservation areas, recreation activities, corridor parks and servitudes, watercourses, ridges, heritages sites etc. Existing natural environmental resources are economic assets as they promote livability and viability of communities. The open space and green system should be protected and enhanced to ensure that the ecosystems within it are able to effectively deliver services. It also strengthens social bonds in places where those kinds of ties are so badly needed. Planning should allow the City to confront and manage aspects of growth and development in ways that preserve, protect, and enhance the environment. The protection of the natural visual quality of the area increases the attractiveness, livability and investment potential of the area.

5.2 Consolidation and Densification

Consolidation and Densification approach promotes more compact urban development, especially to those areas which are well serviced and centrally located. This approach contributes to the restructuring of the urban environment and discourages urban sprawl by promoting development that is adjacent to existing urban areas. Furthermore, it promotes more efficient use of the existing
infrastructure, especially along existing urban centres, urban corridors, urban nodes and other areas which represent important opportunities. There, the most important rules that should apply to densification are the following:

- Higher density development should be focused around and within walking distance from major activity areas and transport services.

- Densities should decrease as the distance away from major activity areas increases. Higher densities in the wrong locations or which are removed from major activity areas and transport routes can be harmful to urban efficiency and sustainability.

5.3 Growth Management

Most urban areas in South Africa are characterised by urban sprawl, resulting to a majority of people spending a lot of time and money travelling long distances to work, shops, schools and social facilities. It also means that local authorities must spend large amounts on providing and maintaining excessive amounts of infrastructure. In dealing with this undesirable development pattern, a key consideration of the spatial development framework must be growth management through the demarcation of an urban growth boundary (or urban edge). The “urban edge” can be briefly defined as a conceptual boundary delineating the urban area with the sole purpose of containing physical development and sprawl and redirecting growth towards a more integrated, compact and efficient urban form and guided by detailed plans.

Outside the “urban edge” the land use will be predominantly agricultural with allowances and regulations for different types of agricultural activities and for rural developments. The “urban fence” is not a physical element, but rather identified by a spatial differentiation in proposed land use intensity between what is inside the fence (urban development) and what is outside the fence (peri-urban and rural developments including small Metropolitan open space, agricultural small-holdings, intensive farming, grazing and game farms). The delineation of an urban edge is vital for achieving an efficient and sustainable municipality through -

- Containment of urban sprawl;
• Intensification of development;
• Integration of urban areas;
• Protection of valuable agricultural, natural and cultural resources;
• The optimum use of existing resources in established urban areas, such as bulk service infrastructure, roads and public facilities; and
• Reducing the need for commuting as well as commuting distances.

5.4 Other Supporting Strategies

5.4.1 Urban Network Strategy

An Urban Network Strategy (UNS) Framework was approved by the Council as part of the 2014/15 Built Environment Performance Plan (BEPP) submission. This framework was also accepted by the NDP Unit at National Treasury. The key elements of this broad Urban Network Framework are briefly highlighted as follows:

(a) Cluster Identification

This approach has divided the NMBM into six township clusters, they are as follows (as depicted on Figure 17):

• Uitenhage, Despatch, KwaNobuhle and Bloemendal Cluster. The total population for this cluster, which includes Uitenhage farms and Colchester wards, is 305 458 persons.
• Motherwell-Wells Estate Cluster, including Swartkops, Amsterdamhoek and Bluewater Bay, with a population of 165 457.
• Ibhayi-Bethelsdorp Cluster, which includes Ibhayi, KwaDwesi, KwaMagxaki, Joe Slovo, Govan Mbeki, New Brighton, Soweto-on-Sea, Veeplaas, Zwide, Helenvale and Algoa Park, with a population of 425 847.
• The CBD Cluster, which includes the inner-city areas of Central, North End, Korsten, Newton Park and Mill Park, with a population of 52 538.
• The Southern Areas Cluster, comprising Summerstrand, South End, Humerail, Walmer, Fairview, Theescombe and Schoenmakerskop, with a population of 95 172.
The N2 – Western Areas Cluster, comprising Fernglen, Sunridge, Westering, Malabar, ParsonsVlei, Kabega, Framesby, Kuyga and the Peri-Urban areas, with a population of 107 582.

(b) Density and Income

The density and income characteristics of these clusters are further illustrated in the figures below, which clearly highlight the higher densities and lower income levels of the Northern Townships (clusters) with Ibhayi having the highest density per hectare and Motherwell having the highest percentage of the population earning less than R3 183 per month.

Figure 15: Urban Network Strategy - Township Clusters
Figure 16: Urban Network Strategy: Cluster Densities (Persons/ha)

Figure 17: Urban Network Strategy - Income Levels per Cluster
5.4.2 Sustainable Community Unit (SCU)

The sustainable communities unit (SCU) concept aims to establish a structure that will assist achieving the overall planning principles set out by Government in a spatial context. The SCU in its physical form is the main planning zone of the overall metropolitan structure.

The purpose of using this urban unit as a building block is to improve accessibility to services, employment opportunities and cultural and recreational facilities by providing them closer to places of residence and along main transportation routes. It is envisaged that it will result in a more balanced and integrated physical and socio-economic structure.

The objectives of the SCU are to:

- reduce discrepancies between different sections of the society in terms of service provision and standards;
- promote integration in socio-economic and functional terms;
- provide for economic activities and employment opportunities;
- improve accessibility to services and facilities; and
- facilitate other requirements as identified in Government policy statements, goals and objectives.

Sustainable community units should include a range of housing types for different household categories including mixed densities. Areas for social facilities such as clinics, schools, crèches and libraries as well as industrial, commercial and other formal and informal economic activities should also be included. While major recreational areas are incorporated in the broader metropolitan open space structure (MOSS), units should provide for local open space and local recreational needs. Mixed land uses should be considered, particularly in centrally located sections of the unit and along transport routes and activity corridors.
It is envisaged that the vast majority of citizens will depend on public transport and walking for mobility. The approach within the SCU therefore focuses on pedestrian movement, public transport and the provision of access to services and job opportunities. Consequently the main criterion determining the size of an SCU is proposed as the maximum walking distance from the centre to the periphery. The walking distance in this context is assumed to be 2 kilometres or a 30 minute walk.

In theory, the maximum SCU size is approximately 1000ha with a population of approximately 100 000 inhabitants. In reality though, SCU's will vary in size depending upon location, densities, built-up areas, topography, physical constraints and existing land uses.

An SCU is intended to be a predominantly self-contained unit of development that is designed to minimise the need to travel while at the same time offering employment opportunities closer to places of residence. They will also be linked to one another by some form of transportation route. The core of the SCU's can comprise commercial or employment centres, service and educational centres, transport junctions or a combination of these. The efficient use of land and services will require variations in densities depending on proximity to centres or transport links.

5.4.3 NMMB Human Settlements Plan

The Human Settlement Plan / Housing Sector Plan integrate the housing chapter of the Integrated Development Plan (IDP), Spatial Development Framework (SDF), Land Use Management Strategy (LUMS) and Infrastructure Development Planning all of which are essential parts of the Spatial Policy Plans and Strategies for Sustainable Human Settlement Planning.

The Human Settlement Plan has the following objectives:

- Outline the housing / human settlement dynamics in the NMBM;
- Document housing and human settlement delivery, best practices and lessons;
- Set out proposals to fast-track human settlements and addressing shortcoming of current delivery systems in the NMBM;

The NMBM through the IDP set strategic objectives for housing delivery. The following proposals need to be implemented through the Human Settlement Plan towards meeting the strategic objectives:

<table>
<thead>
<tr>
<th>Key Objections</th>
<th>Implication for Human Settlement Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning and development of Integrated Sustainable Human Settlements.</td>
<td>• Gap/Affordable Housing</td>
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<td></td>
<td>• Social Housing, Community</td>
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<td></td>
<td>• Residential Units, Special Housing)</td>
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<td></td>
<td>• Informal Sector Upgrading</td>
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<td></td>
<td>• Formalization of Backyard Shacks</td>
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<tr>
<td></td>
<td>• Access all available financial instruments as set out in National Housing Code 2009 including</td>
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<tr>
<td></td>
<td>individual subsidies, plot and plan projects, owner built projects, social and rental housing,</td>
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<tr>
<td></td>
<td>consolidation subsidies, project linked subsidies, etc</td>
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<tr>
<td></td>
<td>• Identify, secure and assembly well located municipal, public and private land for the development of</td>
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<td></td>
<td>IRDP projects</td>
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<td></td>
<td>• Implement a range of housing options to create mixed settlements and to attract a mix of</td>
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<td></td>
<td>beneficiaries of different incomes</td>
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<td></td>
<td>• Develop guidelines for Higher Density and Integrated Residential Settlements to assist in urban</td>
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<td></td>
<td>planning and layout design</td>
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| To eradicate housing backlog | • Open up housing delivery to other agencies to reduce reliance on Municipality as the main delivery vehicle. This will free the metro to play a facilitative and supporting role  
  
  • Engage National and Provincial Government to obtain priority funding for mass housing delivery models through submitting Business Plans and Project Plans for priority projects.  
  
  • Focus on spending allocated budgets to prevent return of unspent funds  
  
  • Facilitate policy changes in order to allocate land to financial institutions, private developers, and community based partners to assist the municipality in housing delivery at scale and to address the massive and growing backlog within the horizon set out in the IDP.  
  
  • Identify partners and secure agreements through MOU's for Turnkey Projects that will deliver projects at scale, with Financial Institutions, Private Developers, Big and Small Contractors and Community Based Organizations (CBO's).  
  
  • Identify delivery bottlenecks and develop proactive and innovative plans to address these as part of the Level Two Accreditation Strategy  
  
  • Accelerate the provision of serviced |
| To eradicate informal settlement by 2016 | stands and rapid land release to enable individuals, emerging developers and medium sized developers to build houses on a "plot and plan" basis alongside the big projects by the NMBM.  
- Put out Requests for Proposals (RFP's) calling on Developers, Private Land owners, financial institutions and Informal Sector Organizations, Savings Clubs, Cooperatives to submit housing proposals according to their technical ability, capacity and financial strength from which the Metro can choose.  
- Improve project management skills, among the staff, simplify procurement methods to open up the housing delivery process beyond the metro( and “metro house” approach) etc.  
- Facilitate in -situ upgrading and minimise relocations of informal areas  
- Provide funding for the registration of beneficiaries and the planning of informal settlements in order to build a comprehensive data base. This should include the social and physical surveys of each settlement, marking and numbering of all shacks, proliferation survey, etc.  
- Support a range of housing options and typologies  
- Review Current Plan and Prepare an |
<table>
<thead>
<tr>
<th>Updated Informal Settlement Plan and Master Plan for the City</th>
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<tbody>
<tr>
<td>• Provide basic services incrementally and allow for regularization to create security of tenure over time.</td>
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<tr>
<td>• Accelerate provision of serviced sites to alleviate poverty and promote dignity while communities wait for top structures.</td>
</tr>
<tr>
<td>• Establish community partnerships and networks to curb illegal land invasions.</td>
</tr>
<tr>
<td>• Develop campaigns to informal land owners about responsibilities towards prevention of illegal land ownership.</td>
</tr>
<tr>
<td>• Develop relations with SAPS and Community Police Forums to prevent illegal land invasions.</td>
</tr>
<tr>
<td>• Identify land for housing that is well located in relation to work opportunities which in turn will act as a preventative measure against illegal land invasion. Find resources to acquire the land as set out in the land assembly strategy.</td>
</tr>
<tr>
<td>• Identify and develop land with rudimentary services for reception areas where people can settle lawfully as part of the IDP and SDF</td>
</tr>
<tr>
<td>• Procure agreements with major land owners (Government Departments) to allow Municipality to act swiftly against invasion.</td>
</tr>
</tbody>
</table>
| **To implement community and people driven housing development processes** | • Enhance stakeholder participation in the planning and development of policies.  
• Build partnerships with informal settlement communities and their representatives and agents, including savings clubs, forums for various informal settlements (e.g. Informal Sector Networks (ISN), FEDUP, NGO’s, micro finance organisations (e.g. Ubutyebi Trust), private land owners of illegally occupied land.
• Incorporate EPWP and EPHP procedures for housing construction programmes and projects
• Facilitate partnership with key stakeholders including local emerging builders, representatives of major employers, housing finance lenders, accredited social housing institutions. |
| **To develop a competent and professional housing team** | • Recruit and appoint competent staff and project managers.
• Staff training and capacity development of staff
• Develop an Implementation Plan for Level Two Accreditation and implement systems starting from 2011-2012.
• Facilitate Level Three Accreditation for period 2012-2013. |
| **To ensure fair, efficient and transparent system for the allocation of houses** | • Establish a Comprehensive Housing Waiting list.
• Obtain access to HSS System and |
| To review land use management policies to facilitate integrated housing development | • Implement Sustainable Communities Planning Guidelines.  
• Prepare innovative land use and planning guidelines to promote sustainable settlements in line with national policies.  
• Complete the Integrated Zoning Scheme Project to usher in an integrated scheme across the City.  
• Integrate the various LSDF’s prepared for the various parts of the City to ensure development that is consistent with the national policy framework. |
| --- | --- |
| To investigate alternative sources of funding for housing delivery | • Approach national and provincial housing departments for additional funding.  
• Identify Donor Agencies and External Partners that can contribute funding towards housing delivery and management. |

The SDF has identified the integration, sustainability, mobility and activity corridors, enforcement, urban fence, central city upgrading and conservation of the built
environment as the main pillars for the restructuring the City. The Human Settlement Plan proposes to respond to this framework through the following spatial interventions:

(a) Integration

<table>
<thead>
<tr>
<th>PURPOSE</th>
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<tr>
<td>• Maximise choice in all aspects of life</td>
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<tr>
<th>STRATEGIC POLICY INTERVENTIONS</th>
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<tbody>
<tr>
<td>• Increase densities.</td>
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<tr>
<td>• Promote mixed use and sustainable settlement patterns.</td>
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<table>
<thead>
<tr>
<th>BENEFITS OF INTEGRATION BASED PLANNING</th>
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<tbody>
<tr>
<td>• Improve urban mobility</td>
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<tr>
<td>• Improve access to services.</td>
</tr>
<tr>
<td>• Create opportunities close to where people live.</td>
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<tr>
<td>• Makes provision for facilities more efficiently.</td>
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<tr>
<td>• Better utilisation of land, buildings and services.</td>
</tr>
<tr>
<td>• Improve housing quality through delivery at scale.</td>
</tr>
<tr>
<td>• Better and bigger green areas to improve environmental and aesthetic quality in human settlement.</td>
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<tr>
<td>• Protect agricultural land against urban encroachment.</td>
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<table>
<thead>
<tr>
<th>RECOMMENDED SPATIAL POLICY INTERVENTIONS</th>
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<tr>
<td>• Adopt minimum residential density guidelines for new development areas, even those removed from the City Centre, which are to be planned at higher densities (at least 40 units/ ha). Future development densities to average at least 40–50 units/ Ha (not 20 units/ Ha as is the case at present in some of the current existing residential developments).</td>
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<tr>
<td>• Promote integration of various uses through mixed use development approaches.</td>
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</table>
• Infill development on vacant and derelict land and underutilized buildings not required for other purposes.

• Increase densities on and along Transport Routes and activity Corridors, through development of Nodes and Activity Streets for higher building and residential density (multi-unit and mixed use buildings) (±400-800m).

• Promote smaller residential erven for lower income developments (80-120m²) as the 200-250m² currently used/ or preferred are no longer sustainable.

• Set maximum erf sizes of say 120m² for low cost housing projects in good locations.

• Layouts to contain and make provision for corridor planning that will promote mixed development in terms of:
  • Housing typology (move away from single house per stand to row, semi and duplex units and walk-up).
  • Tenure: Promote mixed tenure within residential areas, (Freehold, Rental, Social Housing, Sectional Title) Land Use Mix: (Business, Commercial & Residential, Light/ Clean Industry, etc.).

(b) Sustainability

<table>
<thead>
<tr>
<th>PURPOSE</th>
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<tr>
<td>• Meet current needs without compromising the ability for future generations to meet own needs.</td>
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<table>
<thead>
<tr>
<th>STRATEGIC POLICY INTERVENTIONS</th>
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<tbody>
<tr>
<td>• Sustainable Community Planning Principles to be applied in planning and decision making.</td>
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<thead>
<tr>
<th>BENEFITS OF SUSTAINABILITY</th>
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<tbody>
<tr>
<td>• Self-sufficient neighbourhoods within walking distance of most community residents.</td>
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</tbody>
</table>
- Reduce travel costs, time and effort.
- Increase individual choice and accessibility.

**RECOMMENDED SPATIAL POLICY INTERVENTIONS**
- Protection of human health through provision of basic services to all.
- Preservation of biological diversity.
- Protection of natural and cultural resources.
- Poverty alleviation, through Local Economic Development.
- Public and Community involvement to harness all local resources and built pride and good citizenship.
- Create neighbourhood planning units that contain all facilities, services and job opportunities close to place of residence.
- Accommodate different housing typologies, income groups, densities, within residential neighbourhoods, etc.
- Enforce densification of residential areas within 2kms of most nodes in order to create higher population thresholds around major nodes (e.g. Greenacres, Walmer Park, Cleary Park, Motherwell, Njoli Square, etc.).

(c) Mobility and Activity Corridors

**PURPOSE**
- Use infrastructure and land efficiently.
- Prevent unnecessary extension of road networks and keep extensions (roads and rail) to the absolute minimum.
- Development of Non Motorized Transportation Networks

**STRATEGIC POLICY INTERVENTIONS**
- Densification and mixed use along public transport corridors, along railway lines and around railway stations and nodes.
- Establishing connections between disparate NMT Infrastructure such as cycling
and pedestrian paths

<table>
<thead>
<tr>
<th>BENEFITS OF CORRIDORS</th>
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<tbody>
<tr>
<td>• Promote better use of infrastructure.</td>
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<tr>
<td>• Minimise the need to extend networks unnecessarily. Make public transport to be more viable than private transport.</td>
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<tr>
<td>• Reduction in the opportunity cost of NMT</td>
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<thead>
<tr>
<th>RECOMMENDED SPATIAL POLICY INTERVENTIONS</th>
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<tr>
<td>• Review services standards (narrower road widths, shared service connections and promote use of mid-blocks services where it is efficient and cheaper).</td>
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<tr>
<td>• Development of Green Lane networks(^2) for NMT by connecting existing NMT infrastructure and developing new NMT infrastructure</td>
</tr>
<tr>
<td>• Increase residential and commercial densities along transportation corridors not merely permit low intensity businesses (±50-100 units/ha)</td>
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<tr>
<td>• Transform main routes into activity and development corridors</td>
</tr>
<tr>
<td>• Make the environments along corridors conducive to residential development to attract more people to live there</td>
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<tr>
<td>• Prepare a Transport Plan for the City that will:</td>
</tr>
<tr>
<td>- Incorporate a focus on NMT networks and the provision of Green Lanes</td>
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<tr>
<td>- Initiate the development of transport corridors looking at type, location, nature of corridors, etc.</td>
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<tr>
<td>- Study transport routes in NMBM and develop policy guidelines to make them successful public transport routes integrated with land-use.</td>
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<tr>
<td>- Focus on Khulani Corridor as a start and apply lessons learnt to other parts of the Metro.</td>
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<tr>
<td>- Develop public spaces and plazas as part of public transport corridors to attract more residential development.</td>
</tr>
<tr>
<td>- Develop strategies to enhance cycling as a form of non-motorized transportation by the providing networks of cycling infrastructure to support urban mobility.</td>
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### (d) Enforcement

**PURPOSE**
- Enforce innovative land use policies and by laws (e.g. land invasion)

**STRATEGIC POLICY INTERVENTIONS**
- More effective enforcement of land use policies in order to prevent illegal uses
- Amend outdated policies that promote illegal uses, low density urban sprawl and mono-functional land uses as appropriate.

**BENEFITS OF ENFORCEMENT**
- Protect public good and health.
- Provide certainty and prevent ad-hoc development by planning ahead install investor confidence through consistent decision making.

**RECOMMENDED SPATIAL POLICY INTERVENTIONS**
- Dealing with illegal uses, identify sites for rapid settlement to address emergency situations.
- Prevent illegal invasion through rapid land release of well-located land.
- Purchase well located land to develop low cost housing will help to discourage illegal settlement as people seek to be closer to jobs by settling on land illegally.

### (e) Urban Growth and Inner Urban Core Boundary

**PURPOSE**
- Urban Edge is a conceptual boundary that delineates the urban area from areas outside (peri-urban and rural areas) is agricultural holdings, etc.
- Urban Core is an inner focus area (+10kms of the CBD) in which priority should be focused to bring low income persons into the City in the next 5 years.
### STRATEGIC POLICY INTERVENTIONS

- Adopt urban edge to contain urban sprawl and contain development within designated areas for urban development.
- Development of a policy framework for urban edge demarcation through the establishment of a framework for urban services limits.

### BENEFITS OF URBAN EDGE POLICY

- Promote integrated sustainable and functionally efficient settlements at high urban densities (minimum ±40 units/ Ha)
- Improve accessibility to employment and services by developing human settlements on well-located land.
- Utilise land and infrastructure optimally and curtail servicing costs through innovative sharing of services and higher density planning.
- Protect agricultural land and other bio-physical natural resources to safeguard food and conserve environmental areas.
- Keep transportation distances to the minimum.

### RECOMMENDED SPATIAL POLICY INTERVENTIONS

- Define an inner city core area (say 10kms from CBD) to be the main focus of densification. Encourage the relocation of low cost housing into the inner core to reverse the trend of relocating families to the periphery.
- Offer incentives to land owners to offer land and/or develop land to accommodate low cost housing in the inner core over and above their target markets.
- Infill development and recycling land and buildings in the inner core. All state and municipal land in the core to be assembled for housing and mixed use development to create impact.
- Adopt minimum residential densities that promote the provision of efficient public transport (at least 50 units/ Ha) particularly in the inner core. This would necessitate the amendment to current minimum erf size restrictions applicable to areas in the inner core.
- Phasing and managing development to prevent sprawl and ad hoc development.
• Promote Land Use Management Policies that promote integration, efficiency and higher residential densities and amend old policies that discourage change.
• Develop policy for urban, peri-urban and rural areas as appropriate but concentrate on making the inner core more attractive to dissuade people and developers from favouring development on the periphery.
• Introduce a set of incentives and disincentives for appropriate development inside and outside the Urban edge, including the use of a urban services limit as a policy intervention.
• Discontinue the policy to relocate informal settlements on private land in Parsonsvlei, Greenbushes, Ericadene and Kragga Kamma to areas outside of the Urban Edge such as Rocklands, St Albans, etc to municipal, state land inside the urban edge. Where no State or municipal land is available the metro should engage with land owners to either allocate part of their land for in-situ upgrading of informal settlements, assemble land to be the destination point for a number of informal settlements on various private properties.

(f) Reinforce Central City

CURRENT STATUS AND/OR PROBLEM DEFINITION
• The City Centre is often the oldest node and is the heart of the City.
• It needs to be protected in order to promote social integration
• Decentralisation of business from City of Port Elizabeth to detriment of the CBD and North End, Sidwell & Korsten industrial and commercial areas has been identified as a major concern.
• Decentralization has been followed by the relocation of retail offices and industrial uses to Walmer, Newton Park and Fairview for North End.
• Although this trend is being gradually traversed in the PE CBD and Uitenhage CBD as borne out by the recent development of small offices and service business the rate is still slow.
• Despatch CBD has remained largely unchanged due to its small size
PROPOSED STRATEGIC POLICY INTERVENTIONS

- CBD Revitalisation and Urban Renewal through the recycling of land and buildings, especially upper floors, derelict Transnet land in Harbour Precinct, etc
- Create City Improvement Districts (CID’s) to focus efforts into specific areas (e.g. Baakens) Valley Precinct
- Recycling of vacated buildings and offices and underutilised/derelict land for Social Housing
- Recycling of vacated industrial premises into smaller SMME type and mixed use enterprises that can co-exist and are compatible with residential environments
- Promote CBD revitalisation through environmental upgrading to prevent decay that tends to promote or exacerbate the flight from CBD. Lend support to initiatives of the MBDA to improve the CBD and extend initiative to the Uitenhage and Despatch CBD.
- Promote intensification of residential densities and mixed use within and adjacent the decentralised nodes through the recycling of underutilised buildings and single residential erven for Social (Rental and Institutional) Housing.

BENEFITS OF CBD RENEWAL

- Prevent and discourage further decentralization of business from the CBD through incentives and policy and density penalties as appropriate.
- Maximise on location, main civic facilities and retain civic role of the CBD.
- Recycling of derelict and underutilised land and buildings.
- Infill development on land within existing and well served residential areas.

RECOMMENDED SPATIAL POLICY INTERVENTIONS FOR HUMAN SETTLEMENT PLAN

- Compliment the Mandela Bay Development Agency (MBDA) in its efforts upgrade the PE CBD. Include the Uitenhage and Despatch CBD areas as Mandate Areas for MBDA or other similar agency.
- Spatial Strategic Implementation Framework for Mandate Area for PE, Uitenhage and Despatch to be updated to reflect latest policy changes.
• Promote Social Housing and Rental Housing Initiatives in the CBD's of PE, Uitenhage and Despatch on State, municipal and private land.

• Precinct Environmental Upgrading in City Centre to improve aesthetic appeal and create sense of confidence in the area. This in turn is expected to attract more private investment into focus areas.

• Focus on land assembly to develop higher density residential development in the CBD to increase population threshold within walking distance of the CBD

• Upgrade Transport Interchange into a multi-modal interchange to bring buses, taxis and commuter and passenger trains together. This will encourage people to travel to CBG by public transport, facilitate the improvement in retail and office demand and offerings in the City

• Upgrade Harbour and Station precincts to make the CBD an attractive investment and entertainment destination.

**ACTION PLAN**

• Draw up register of buildings and land suitable for redevelopment.

• Allocate Budget to assess feasibility for conversion of buildings and to facilitate proactive planning in the 3-5 year expenditure framework.

• Build partnership with Architectural Institutions and Private – Public Sector to ensure protection of heritage buildings in the City.

• Procurement of buildings suitable for recycling for the development of Rental and Social housing.

(g) **Built Form Proposals**

i) Focus Housing along Development Axis

The Housing Settlement Plan should address built form in the following manner:

**CURRENT STATUS AND/OR PROBLEM STATEMENT**

• Development Axis spreading north-westerly from Central City towards Uitenhage

• Approximately 35% of NMBM area is considered built up except for:

  - Small agricultural holdings
- Undeveloped areas
- Land for future urban expansions
- Major conservation and protected areas.
- Development Axis which

OPPORTUNITIES PRESENTED
- Development Axis passes through well-established Commercial, Retail and Residential areas of North End, Govan Mbeki, and significant facilities and Community Nodes, e.g. NMMU Missionvale Campus, Dora Nginza Hospital
- Development Axis supported by Public Transport Infrastructure, (including existing and declared public transport routes, proposed modal Interchanges to be built in PE, Uitenhage CBD, KwaDwesi, etc)

IMPLICATIONS FOR HUMAN SETTLEMENT PLAN
- Reinforce the development axis by utilising vacant land along the Development Axis for infill development at high density and mixed use (e.g. Algoa Park, Joe Slovo, KwaMagxaki) (Refer to Figure below)
- In-situ upgrading of all informal areas along and close to the Axis instead of promoting de-densification and relocations to areas far from the Development Axis and on the urban periphery.
- Recycling of land and buildings including state land, public open space and privately owned property within 10km of the CBD and within 400-800m of the main development axis. Land along the public transport routes (±400m) and close to proposed modal interchanges and local nodes (±800 metres) to be developed more intensively.

POTENTIAL DEVELOPMENT SITES
- Missionvale Garden Lots: Private and Public Land to be secured to promote in-situ upgrading of the area.
- Missionvale NMMU Informal Settlement in-situ upgrading.
- Khanya Training Centre Redevelopment for Social/ Rental Housing and High Density Housing.
- **Algoa Park Infill**: Secure State land for social, rental and group housing within and adjacent existing flats and residential in Algoa Park.

- **Infill Development on the old Vista Site** owned by the State adjacent Dora Nginza Hospital.

- **Development of land set aside for Higher Density** in Joe Slovo West, Khayamnandi, Chatty through calling for proposals from Developers, Banks and Individuals to develop the land designated for higher density development in approved layouts. This should be done ahead of opening up new areas beyond Motherwell NU29, Jacktvlakte and amongst others.

- **Facilitate the development of new Integrated Residential** on land Development adjacent to Perseverance, Redhouse, Azalea Park Extension (to include the extension to Perseverance Industrial Area along the Swartkops – Redhouse Road). This project to follow on after the densification of Chatty, Joe Slovo West, Khayamnandi, has been implemented.

- **KwaMagxaki Infill**: Between Perseverance – Existing KwaMagxaki and undeveloped school sites within KwaMagxaki

- **Promote the subdivision** of undeveloped residential sites and other non-residential sites in existing residential areas, e.g. KwaDwesi and KwaMagxaki to increase residential opportunities

- **Identify other infill areas along the Development Axis** and facilitate rapid land release.

- **The metro to call for proposals**, once a policy for private land acquisition, and partnerships is developed to facilitate quick development.

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<th>ACTION PLAN</th>
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<tr>
<td>- <strong>State Land Assembly</strong>: NMBM to approach the State to donate and/ or reserve land in select areas along the axis for housing development in line with the Human Settlement.</td>
</tr>
<tr>
<td>- <strong>Proposal call for partners</strong> to deliver the housing jointly with the Municipality.</td>
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</tbody>
</table>
## CURRENT STATUS AND/OR PROBLEM DEFINITION

- Housing development in the metro is largely characterised by urban sprawl low residential densities, limited socio-economic integration in residential areas, inefficient provision of public transport, low population threshold in general and in particular in and along the most accessible parts of the City. Authorities choose the path of least resistance giving “communities” what they want resulting in low density settlement typologies and resulting in low density settlement typologies and relocation of beneficiaries to the periphery which results in high travel time and cost to the poor.

## OPPORTUNITIES PRESENTED AND IMPLICATIONS FOR HUMAN SETTLEMENT PLAN

- National policy settlement paradigm shift towards densification on general and in well located land, along public transport routes and in order to maximise the use of available land and services.
- Opportunity to use densification to restructure the City, increase population thresholds in well located areas (close to jobs, services, public transport and nodes.
- Promote the recycling of derelict land and buildings, respectively in restructuring zones.
- Development of a range of financial instruments that contribute to improving the quality and variety of housing provided in the various settlements.

## POTENTIAL DEVELOPMENT SITES AND/OR STRATEGIES:

- Introduce and adopt design guidelines that contribute to the creation of a varied attractive housing typologies and densities.

## TRADE OFF SPACE FOR DENSITY:

- Infrastructure costs are related to levels of density. High density settlements result in lower infrastructure costs per unit and cost savings can be re-invested in
the housing and improvement of public areas.

PROMOTE USE OF ALTERNATIVE CONSTRUCTION MATERIALS
• While conventional brick or block and mortar are the predominant materials used, the use of alternative materials needs to be considered due to potential to reduce construction costs. The high level of quality and structural integrity and the advantage of rapid creation results in limited theft and damage to materials.

ERF AND ROOF CONFIGURATIONS FOR EASE TO EXTEND HOUSING
• Designs should promote narrow frontages in order to maximise the number of sites per given length of services and to length. Housing typologies should promote linear extension towards the back or front as illustrated.

SERVICING AND ON-SITE PARKING OPTIONS
• On small and narrow sites it is best that services are positioned in the street and the house is best extended backwards. The drainage and bathroom therefore need to be placed to the front (street) side to take advantage of short pipe runs to street based connection points.
• This is not only serves to lease the back available for extension, it also helps to resolve the street elevations and prevent ad-hoc and un-coordinated extensions along the street edges.
• On-site parking should preferably be accommodated in 5m building line in front of the house otherwise side parking will result in increase side frontage. Side parking for semi-detached or free standing units requires an erf frontage of 7.5m minimum as illustrated below.

iii) Reinforce Industrial Areas and Locate Residential Close to Industry

COEGA IDZ INDUSTRIAL DEVELOPMENT

CURRENT STATUS:
• Coega: The establishment of Coega IDZ will change the epi-centre of industrial
growth towards the north of the City.

OPPORTUNITIES PRESENTED:
- Housing development adjacent and close to Coega IDZ in short, medium and long term will become a necessity as the IDZ Regulations preclude residential development inside the Coega IDZ.

IMPLICATIONS FOR THE HUMAN SETTLEMENT PLAN:
- Integrated Residential Development (Higher Density) Housing in Motherwell, Wells Estate, Motherwell North, Development Axis between Motherwell and Uitenhage and in general within 10kms of the Coega IDZ.

POTENTIAL DEVELOPMENT SITES AND STRATEGIES:
- The Human Settlement Plan to promote densification in Motherwell – Wells Estate at a density of 40 units (minimum) in general and 80-100 units/ Ha close to nodes and along public transport corridor.
- Densification of the existing Coega Vulindlela Construction Village and introduction of commercial development to support mixed use development and SCUs.

Target vacant land for development of IRDS at high density with a mix of housing typologies, tenure, income and cultural groups to compensate for poor location in respect of the CBD and other nodes of economic developers.

MARKMAN INDUSTRY

CURRENT STATUS:
- Is designated for heavy industry but has developed slowly due to perceived long distance from the CBD and poor environmental quality. It now enjoys a more strategic position in relation to the Coega IDZ.

OPPORTUNITIES PRESENTED:
- Improve environmental quality in the area and facilitate recycling of derelict and underutilised land for industrial development in cooperation with the CDC.
- Underutilised rail infrastructure and land.
- Proximity to Coega IDZ makes it marketable area.
- Feasibility study for the alignment of Markman township to the Coega IDZ with
the assistance of the CDC and Department of Trade and Industry.

**IMPLICATION FOR HUMAN SETTLEMENT PLAN:**
- Mixed use along main routes into and part of Markman (Addo Road /MR450)
- Brownfields redevelopment to promote recycling of derelict land and to promote industrial infill in Markman and Brickfields Industrial Areas).

**POTENTIAL DEVELOPMENT SITES AND/OR/ STRATEGIES:**
- Brownfield redevelopment of Markman and Brickfields Industry to attract more industrial investment
- Prepare a precinct improvement plan for Markman and Brickfields Industrial areas to make the area more attractive and marketable.
- Strategic development of the area to complement the development of the Coega IDZ.

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**PERSEVERANCE INDUSTRIAL AREA**

**CURRENT STATUS:**
- Well located close to Ibhayi, KwaDwesi and KwaMagxaki residential areas and along the PE- Uitenhage-Despatch Development Axis.
- Perseverance Industrial area is almost being fully developed.

**OPPORTUNITIES PRESENTED:**
- Possible extension of industrial area on adjacent vacant land towards Despatch to maximise on location and synergy with the developed portion of Perseverance is considered appropriate

**IMPLICATIONS FOR THE HUMAN SETTLEMENT PLAN:**
- Need to prioritise the LSDF for the area.
- Prepare a Master Plan for area adjacent the R75, Azalea Park, Swartkops Estuary/Redhouse and Perseverance to facilitate it being developed as a mixed use area Development.

**POTENTIAL DEVELOPMENT SITES AND/ OR STRATEGIES:**
- Possible extension of Perseverance Industrial area onto vacant land in the area
and towards Azalea Park/ Despatch.
- Development of the area as a mixed use development.

**AIRPORT INDUSTRIAL AREA**

**CURRENT STATUS:**

- Industry related to Air Transport but area is underdeveloped and vacant spaces are still Prevalent

**OPPORTUNITIES PRESENTED:**

- Infill development on vacant and underutilised land within and adjacent the Airport precinct.
- Recycling of underutilised buildings and land north of Alistair Miller
- Development of Modal Interchanges to promote public transport use to and from the Airport, the CBD and adjacent residential areas
- The residential area of Walmer is characterised by low density, one house on one big plot. It has great potential for subdivision, densification and conversion of land and buildings to mixed use and/ or light industrial development close to Gqebera Township which is characterised by informal dwellings, housing shortages and significant labour pool.
- Municipal land along Buffelsfontein Road and up to Villiers Road to be targeted for densification and infill development.

**IMPLICATIONS FOR HUMAN SETTLEMENT:**

- Promote densification of Walmer to provide much needed population threshold close to industrial area, airport and CBD and accommodate housing needs in the Gqebera area.
- In-situ upgrading at high densities to retain most people in, and attract more people, into the area.
- Designate vacant land south of Airport for integrated Residential Development (part of Madiba Bay Lease Area) as an extension to Gqebera Township Densification of Gqebera Township to ensure that most residents are not relocated to areas far from the City and Airport.
**POTENTIAL DEVELOPMENT SITES AND/OR STRATEGIES:**
- Extend Airport related industry from Airport into Walmer Area south of Heugh Road and West of 3rd Avenue top to 7th Avenue.
- Infill development for Airport Industry and Related Development.
- Develop vacant land along Alistair Miller Road for Airport related Industry and public transport node.
- Extension of Gqebera Township towards Driftsands to retain communities in the areas close to the Airport and the CBD.

**STRUANDALE INDUSTRIAL AREA**

**CURRENT STATUS AND/OR PROBLEM STATEMENT:**
- Established industrial area situated close to labour sources but land for expansion is limited.

**OPPORTUNITIES PRESENTED:**
- Limited opportunity to extend Struandale area which is home to significant motor related industries
- Recycling of land and buildings, infill industrial development (e.g. Mentone Factory) into SMME type facilities.
- Redevelop Gas Station Site, Incinerator Site and Vacant land in Sheya Kulati Road for industrial infill as extension to Struandale and Deal Party Industrial Areas

**IMPLICATIONS FOR HUMAN SETTLEMENT PLAN:**
- Target infill residential development in Ibhayi (former PPC dump site, Algoa Park and land along Uitenhage-PE Development (Axis) to bring people closer to CBD and in order to bridge former buffer zone and the promote recycling of land.
- Upgrade Iqhayiya College area to accommodate social/ rental housing where appropriate.
- In-situ upgrading of developable informal areas to retain most people in the immediate area.
POTENTIAL DEVELOPMENT SITES AND/OT STRATEGIES:
- Retain most settlements in Ibhayi area to minimize relocation.
- State owned land adjacent the New Brighton Tip Site, land in Algoa Park, the former PPC Lease Area which forms part of the Sheya Kulati Node to be used for Residential Development.

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<th>KORSTEN INDUSTRIAL AREA AND CBD</th>
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<tr>
<td>CURRENT STATUS:</td>
</tr>
<tr>
<td>Established industrial area close to significant buildings, small-scale industries and community facilities (Mercantile and Livingstone Hospital).</td>
</tr>
<tr>
<td>OPPORTUNITIES PRESENTED:</td>
</tr>
<tr>
<td>Derelict land and buildings suitable for recycling, rehabilitation and re-introduction of residential uses above ground floor, especially in Korsten CBD area.</td>
</tr>
<tr>
<td>Proximity to the Standford Road Corridor, Durban Road Taxi Rank and Bus Depot, designated as IPT’s Routes and Modal Interchange for the Khulani Corridor and Standford Road Corridors.</td>
</tr>
<tr>
<td>IMPLICATIONS FOR HUMAN SETTLEMENT:</td>
</tr>
<tr>
<td>Development of Social Housing (Rental, Institutional Housing via recycling of derelict buildings and land.</td>
</tr>
<tr>
<td>Development of SMME Hives to replace large industrial structures.</td>
</tr>
<tr>
<td>Develop Urban Renewal Plan for Korsten CBD Revitalisation as an extension of the Zosa Street Project and Public Transport Corridor Project in order to open up the area to the bigger market.</td>
</tr>
<tr>
<td>Promote full implementation of the Modal Interchanges Project in Korsten CBD Budget for land assembly and purchase of derelict buildings as part of the Land Assembly S strategy.</td>
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<table>
<thead>
<tr>
<th>DEAL PARTY INDUSTRIAL AREA</th>
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</thead>
<tbody>
<tr>
<td>CURRENT STATUS:</td>
</tr>
<tr>
<td>Established industrial area that is fully developed except for land belonging to</td>
</tr>
</tbody>
</table>
Transnet situated close to the existing low income areas of Ibhayi and parts of North End, Algoa Park and Sydenham.

- Traversed by N2, IPTS Routes and other major roads in the City and therefore highly accessible.

**OPPORTUNITIES PRESENTED:**

- Transnet owned land and buildings along railway lines (that are underutilised (e.g. Early Learning Centre that appears to be underutilised
- Recycling of big industries into smaller SMME type and bigger industries to be encouraged to relocate to the Coega IDZ.

**IMPLICATIONS FOR HUMAN SETTLEMENT PLAN:**

- Infill industrial development and SMME Hives on Transnet land and buildings where appropriate adjacent to the Ibhayi area (New Brighton & KwaZakhele)
- Informal settlements to be upgraded in-situ to minimise relocation away from potential job opportunities.

### UITENHAGE INDUSTRIAL AREA

**CURRENT STATUS:**

- Well established industrial area but still contains pockets of underutilised land and buildings.
- Home to the VW Motor Plant and associated NMBLP.

**OPPORTUNITIES:**

- Adequate Municipal land to extend industrial development towards Jachvlakte

**IMPLICATIONS FOR HUMAN SETTLEMENT PLAN:**

- Open up Jachvlakte for Industrial Development
- Facilitate the expansion of precinct B of the NMBLP
- Link Road to the N2 from KwaNobuhle and PE – Uitenhage via Standford Road
- Develop residential extension to KwaNobuhle towards Jachvlakte Industrial Area to promote physical integration with Khayamnandi and Chatty areas.
GREENBUSHES INDUSTRIAL AREA

CURRENT STATUS:
- New industrial area some ±10kms to the west of City Centre. Well located close to the Kuyga low income area and informal settlements in adjacent private farms and on major IPTS Route and Road of Metropolitan significance (Cape Road).
- Greenbushes is designated as western end for IPTS from the CBD through Greenacres along Cape Road

OPPORTUNITIES PRESENTED:
- Large tracts of vacant and underutilised private land.
- Situated on and along Cape Road, a designated IPTS Route

IMPLICATIONS FOR HUMAN SETTLEMENT PLAN:
- Develop more land for industry and mixed use (offices, retail and residential to take advantage of location along IPTS, (low and middle income) good market potential of the land in the area.
- Develop vacant land for residential development, at high densities to accommodate informal settlements on private, state and municipal land, evicted farm workers and labour tenants, that are converging in the area and migrate from rural areas in search of jobs

POTENTIAL DEVELOPMENT SITES AND/OR STRATEGIES
- Greenbushes
- Ericadene
- Parsonsvlei
- Kuyga Extension.

(h) Residential Proposals

CURRENT STATUS AND/OR PROBLEM STATEMENT:
- Growth in informal settlement due to:
- Increased rural-urban migration following the repeal of “influx control” regulations in the 1990’s.
- Slow housing delivery resulting in escalating backlogs.
- Relocation of beneficiaries from informal settlements being upgraded to the periphery of the City and in lower density settlements thus worsening inherited and distorted settlement disparities and urban sprawl.
- The Metro’s reluctance to purchase well located privately owned land for the in-situ upgrading of informal settlements on private property but focusing instead of relocating to municipal land, often far away from places where the beneficiary families are currently living.
- Opposition to locating informal settlements within well-established and higher income suburbs areas from property owners afraid to lose property values.
- Inadequate delivery of integrated residential settlement projects where beneficiaries of different income, tenure, economic and social status particularly in well located areas can live. The City has delivered over 42 000 low cost housing since year 2000 but none in the affordable and gap housing markets, and very few in the Rental Social Housing Market.
- Private Sector have not been able to deliver housing in the affordable market (±R115 000 – R250 000) for a variety of reasons, including lack of policy incentives to encourage them to enter this market.
- Proliferation of housing (especially low cost) to the north and north-west of the City as a natural extension to existing township areas declared as part of apartheid City planning to the virtual exclusion of settlements in other parts of the City, closer to the CBD and along public transport routes and commuter railway lines and more affluent suburbs that offer domestic employment opportunities to township residents. This often results in the relocation of beneficiaries living in informal settlements close to affluent suburbs far away from employment in domestic services and in adjacent small holdings and farms
- Proliferation of low density development and urban sprawl, which manifests in excessive de-densification of informal settlements (even those that are well located), focus on “one house per one plot” housing typologies on large residential erven (±150- 200m²), to the north and north west of the City and the over reliance on the Municipality as the main(and only) housing delivery agent in
the low income sector to the virtual exclusion of other delivery agents (e.g. private developers, co-operatives, social housing agencies, financial institutions, etc.)

**OPPORTUNITIES PRESENTED:**
- In-situ upgrading of developable and well located informal settlements
- Purchase well located public and private land that can accommodate relocated informal settlements and green field housing projects to minimise relocations.
- Land release for low income housing and integrated residential development closer to places of employment
- Opening up housing delivery to the Private Sector with the municipality playing a facilitative role rather than being the main and only developer for low cost housing which will increase the rate of delivery.

**IMPLICATION FOR HUMAN SETTLEMENT PLAN:**
- Promote gradual and incremental in-situ upgrading of informal settlements to reduce the need to relocate families to Greenfield areas where they often stay for long periods in shacks and without facilities. The relocation of informal settlements should be undertaken only as a last resort
- De-densification of well-located settlements to be discontinued in favour of retaining all residents, and where possible, even increase densities by bringing more beneficiaries into well located informal areas.
- Shack to shack relocation to be undertaken in emergency situations only. The City Policy should concentrate on building mixed housing settlements where the allocation of housing shall be done in accordance with beneficiary preferences, family size, age, etc. The City shall give preference to the provision of housing on well-located land (within 10kms of the CBD along public transport route) and in high residential densities ( > 40 units/Ha or more) and let those people that prefer low density settlements either develop their own housing solutions far away from the City or wait for their turn.

**POTENTIAL DEVELOPMENT SITES AND/ OR STRATEGIES:**
- Start development with high density residential typologies and place less emphasis on detached, low density development. The latter should receive less
priority and be built after high density settlements are built.
• Beneficiaries opting for low density units to be dealt with last and be located further from well-located areas and nodes

(i) Master Plan for Informal Settlements Upgrading

CURRENT STATUS AND/OR PROBLEM STATEMENT:
• Poor quality of life in informal settlements due to:
  - Lack of basic services
  - Lack of facilities and amenities
  - Lack of adequate shelter in respect of minimum standards
  - Located on undevelopable areas (tip sites, floodplains, etc.)
• A number of poorly located informal settlements on the peri-urban periphery (Rocklands, Kuyga, Seaview, St Albans, Witteklip) characterised by:
  - Insufficient employment opportunities close by
  - Difficult and expensive provision of bulk services
  - High travel costs for residents to and from other parts of the City thus reducing their purchasing power even further
• Lack of access to social, economic, cultural facilities and services found in other well located and established areas
• Over 42% of households in existing informal settlement, even those that are well located, are being relocated away rather than closer to the CBD thus exacerbating urban sprawl, promoting the de-densification of existing informal settlements and consequently breaking up existing social networks and income streams.

OPPORTUNITIES PRESENTED:
• Upgrading of informal settlement through in-situ upgrading as the primary policy focus.
• Retain existing income streams and socio-economic relations among the poor and marginalized.
• Ensure continued use of existing facilities in well-established areas rather than relocating beneficiaries to urban periphery where amenities are often lacking and take a long time to be provided.

IMPLICATION FOR HUMAN SETTLEMENT PLAN:
• Introduce incremental services upgrading in terms of the National Settlement Upgrading Programme (NSUP) and upgrading of Informal Settlement Programme (UISP).
• Undertake comprehensive surveys of informal settlements to determine the priorities of beneficiaries (basic services vs. top structures, etc.).
• All informal areas along and close to the public transport routes (±800m) of the route e.g. Khulani Corridor, Standford Road, TR75, etc. to be upgraded.
• Upgrade all Informal settlement on undeveloped school sites (within existing settlements and well located areas) that are no longer required for educational purposes, and other undeveloped community sites. The informal areas should be developed in situ and at higher residential densities to accommodate as many households possible.
• Well located informal settlements earmarked for de-densification where project implementation has not commenced and/ or where Council is in legal dispute with beneficiaries (who are not willing to relocate), to be replanned at higher residential densities.

ACTION PLAN
It is important to obtain view of the households in informal areas that have not yet been upgraded about how their area should be upgraded by asking the following questions amongst others:
• Beneficiary and willingness to accept alternative housing typologies
• Beneficiary willingness to relocate
• De-densification vs. retention of current densities
• Preference for gradual incremental upgrading starting with basic services and ending up with top structures over a period of few years The potential
beneficiaries need to, if given a choice, indicate if they would:

- Prefer to stay where they are or relocate and why
- Receive services only and a house later
- Stay rather than relocate due to need to be close to current jobs, social and community amenities, even if they do not receive a metro house and end up staying in denser settlements utilising alternative housing models
- Prefer rental (Rental Housing Subsidy) vs freehold tenure on dense settlements closer to the City.

PROPOSED CHANGES TO POLICY ON INFORMAL SETTLEMENTS UPGRAADING TO INCLUDE:

- Review the current informal settlement upgrading policy that promotes de-densification and relocation to prioritise in-situ upgrading on site by site basis.
- Prepare an updated Implementation Master Plan for Informal Settlement Upgrading for the City that will encourage residents to improve own living environment in current settlements, while drawing down state subsidies over a phased period. The plan will amongst others:
  - Set out guidelines for choosing settlements for in-situ upgrading versus relocation. It may be necessary to review the current NMBM priority listing and where possible recommend changes in priorities and manner in which the process of upgrading will take place.
  - Develop design parameters aimed at the retention of the maximum number of beneficiaries (erf size, densities, housing typologies, road widths, etc.). If this is not achieved in current plans, it is proposed that the plans in the seven (7) year Turn Around Strategy be amended accordingly prior to implementation to prioritise more in-situ upgrading.
  - Develop a strategy to extend tenure to all residents living in the settlements progressively over time through a gradual process of regularisation in line with lessons learnt from similar initiatives by the City of Johannesburg.
  - Stimulate small business expansion and retain existing business as it is not enough to merely focus on housing and services provision to the exclusion of business and SMME’s development.
  - Develop incremental upgrading programmes taking into account funding availability, affordability and skills, ability to work on the upgrading project
amongst the beneficiary for all informal settlements

- Develop financial mechanisms and set up appropriate structures to deal with upgrading process based on maximum participation of the beneficiary communities (e.g. skills, deployment of local use of own materials, participate in construction work, post construction management, participation in environmental improvement programmes in the settlement, to protect settlements against further invasion, etc.)

- Identify a range of sources to be approached for funding and technical assistance with implementation of upgrading programmes instead of focusing on relocation as the only solution to informal settlements upgrading.

- Build partnerships with communities and their representatives and partners in informal settlements projects, (e.g. Informal Sector Network (ISN), FEDUP, Homeless Peoples Federation, etc) and the Various Savings Clubs and Micro Finance Lending Institutions (e.g. Ubutyebi Trust).

- Relocation are being considered for a number of reasons which include the following and it is suggested that the decisions to relocate some of the settlements should be reviewed where ever possible on the following basis:
  - Land in Private Ownership: Consideration to acquire the land for housing purposes from private owners if informal settlements merits retention with respect to size, location, proximity to job opportunities, etc.
  - Land Zoned for Open Space: Consider closing the Public Open Space and rezone the erven for in-situ upgrading.
  - Development Area (undeveloped school site or land been allocated to potential development, etc.): If possible it is proposed that the development plan for the area be reviewed to enable the settlement to be upgraded in situ
  - Area prone to Flooding: Investigate flood attenuating interventions to see if this would allow part of the settled area to be developed at high density to accommodate the Assess development potential of the site and if developable NMBM to approach State for land to be made available to the metro for housing development.

- Acquire State land and plan for the development of high density housing for some of the beneficiaries from the New Brighton tip site to minimise the relocation away from the CBD.
CURRENT STATUS AND/OR PROBLEM STATEMENT

- Backyard Shacks accommodate over 49,000 households in the declared municipal housing backlog.
- Metro approach which is currently focused on the relocation of backyards fails to recognise the role they play in housing delivery.

OPPORTUNITIES PRESENTED:

- Outcome 8 Policy supports in-situ upgrading of backyard shacks creates huge opportunity to address the burden without the need to open up large greenfields projects.
- Backyard shacks provide valuable source of income for landlords and protect existing income streams.
- Ensure existing social and other economic ties to be retained.
- Families in the backyards continue to access facilities in the existing.

IMPLICATIONS FOR HUMAN SETTLEMENT PLAN:

- Recognise backyard shacks as a legitimate housing delivery model.
- Formalise backyard shacks and enable occupants to access subsidies on their current sites and formalise arrangements with current landlords. Allow separate connections to municipal services to families living in the backyard so they can also enjoy access to municipal services.
- Develop a Backyard Shack Formalisation Policy Plan.

ACTION PLAN FOR BACKYARD SHACKS FORMALISATION POLICY:

- Infill sites need to be identified to accommodate backyard shacks within the existing areas. Other innovative options for in-situ upgrading of backyard shacks should also be investigated (e.g. utilising land within the primary erf on which the backyards are located, the subdivision of properties, construction of multiple...
dwellings on main erf and/or other alternative tenure arrangements where feasible and supported by the

- landowners in line with Rental Subsidy Policy). A comprehensive policy for the formalisation of backyard shacks needs to be developed for the City to accommodate the families in the backyards that do not want to relocate to Greenfield areas but would rather access their subsidy in their current place of residence. Such a policy should be informed by a broad based questionnaire survey that will elicit views of the beneficiaries living in the backyard directly and the property owners.

- It is also proposed that the City undertakes a comprehensive survey of backyard shacks to better understand their profile, housing needs and housing preferences. The survey should include the following questions, amongst others:
  - Are they members of the family living in the main house that are now old enough to want to get their own property, or have they moved out due to overcrowding in the main house.
  - Do they prefer to rent rooms in backyard rather than obtain a their own house due to affordability or social reasons (e.g. cannot afford their own unit yet, still wish to live closer to main family and maintain socio-economic relations with members of the extended family, etc.?)
  - Are they looking for a house but either do not qualify for a subsidy and/or have not yet been allocated a subsidy house before or do not like the location of the current housing project?
  - Are they on the waiting list for a Municipal Housing Subsidy Scheme Project?
  - Are they unwilling to relocate to Greenfield areas where RDP housing is being built, and if so, why? (e.g. distance from work, social amenities, educational facilities, etc.)
  - Would they prefer an individual subsidy and build own house if such an option were available.
  - Where do they work at present, and will relocation result in either the potential of loss of a job or increased travel costs to and from current place of employment or other?
  - Do they prefer to continue living with the family at their current place of residence?
Would they be willing to access a rental or other housing subsidy instrument to formalise the rental accommodation at the backyard.

(K) Commercial & Business Areas

<table>
<thead>
<tr>
<th>CURRENT STATUS:</th>
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<tbody>
<tr>
<td>• Concentrated in the CBD of Port Elizabeth and Uitenhage and to a lesser extent Despatch.</td>
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<table>
<thead>
<tr>
<th>OPPORTUNITIES PRESENTED</th>
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<tbody>
<tr>
<td>• Significant floor space for the redevelopment is still available in the CBD Core and Outer CBD.</td>
</tr>
<tr>
<td>• Good accessibility of Central Locations from main routes into the CBD makes them ideal places for residential development.</td>
</tr>
<tr>
<td>• High Demand for rental accommodation characterised by less than 3% vacancy in flat occupancy in the PE CBD.</td>
</tr>
<tr>
<td>• Proposed development of modal interchanges in the PE and Uitenhage CBD and upgrading of routes into the City as part of the Integrated Public Transport System (IPTS).</td>
</tr>
<tr>
<td>• The PE, Uitenhage and Despatch CBD are home to the main municipal offices, Council Chambers and State Departments.</td>
</tr>
<tr>
<td>• Derelict land and buildings which include disused municipally owned playgrounds and underdeveloped open spaces and Transnet land and buildings that can be recycled for redevelopment.</td>
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<table>
<thead>
<tr>
<th>IMPLICATIONS FOR HUMAN SETTLEMENT PLAN</th>
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<tbody>
<tr>
<td>• CBD is ideal for revitalisation based on principles of integration, mixed land uses and densification.</td>
</tr>
<tr>
<td>• Port Elizabeth and Uitenhage CBD are ideal for revitalisation for leisure, entertainment, cultural activities to bring life into the City.</td>
</tr>
</tbody>
</table>
• PE Waterfront development to facilitate CBD revitalisation, promote tourism and
development of high value residential leisure and entertainment.

POTENTIAL DEVELOPMENT SITES AND/OR STRATEGIES:
• Social housing (rental and institutional housing) through the recycling of
derelict land and buildings, infill development on vacant or underdeveloped
land in inner City
• Development of PE Harbour Waterfront with significant residential
opportunities at higher densities (>100 units/ Ha)
• Recycle land in CBD in areas with high re-development potential such as
Baakens Valley, North End, South End, Mount Croix, Newton Park, etc

ACTION PLAN:
• Identify derelict land and buildings in the inner City of Port Elizabeth,
Uitenhage and Despatch that are suitable for recycling for Social Housing.
• Ensure that at least 3 sites for Social Housing are identified and approved by
Council and project funding applications are submitted to relevant authorities
and/or ±800 units are delivered per year.
• Allocate rolling budget to carry out feasibility assessments of the potential
sites; to identify planning steps to be undertaken to ready the land for
development, costs of acquisition, commence with steps to obtain preliminary
planning permission.
• Approach National Government for funding for the acquisition of land and
buildings to assemble suitable for Social Housing over the next 3-5 years.
• Advertise the municipality’s intention to acquire land and buildings in the inner
City thus attract land owners to offer their properties for redevelopment.
• Develop a Generic Land Availability Agreement and Memorandum of
Understanding that sets out payment terms and other legal incentives.
• Undertake proactive rezoning of properties for Social Housing prior to
Request for Proposals to develop the land.
• Empower MBDA to act as a Lead Agent and Project Manager for Inner City
housing projects in the CBD of Uitenhage and Despatch that fall outside the PE Mandate Area.

- Increase capacity of City Social Housing Unit to handle all Social and Rental Housing Projects in the City employing qualified project managers and or training current staff.
- Formalise the approval of other Restructuring Zones and/or amend boundaries in the Despatch and Uitenhage CBD to ensure that most appropriate areas are included.

5.5 Incorporating Sector Plan Developments

The various sector plans incorporated into the MSDF are identified in this section. These sector plans, which have major spatial implications for the MSDF, are tabled as follows:-

5.5.1 Integrated Environmental Plan

The purpose of the Integrated Environmental Plan is to assist the NMBMM in complying with environmental legislation and to promote sustainable development by improving the integration of environmental issues into social and economic development. As environmental legislation develops, more components need to be added to the Environmental Plan.

Initially, the Integrated Environmental Plan comprised a Spatial Biodiversity Plan (NMB MOSS), an Environmental Policy and an Environmental Management System. Over the last six years, legislation has necessitated the inclusion of several other plans such as alien organism control programmes, a state of the environment report, an integrated air quality management plan, and an integrated waste management plan into the MSDF planning process.
5.5.2 Coastal Management Plan

The National Environmental Management: Integrated Coastal Management Act (No. 24 of 2008) requires coastal municipalities to develop Coastal Management Plans or Programmes. A Coastal Management Programme Plan for the NMBM was finalised in 2006 and approved by Council. The CMP was updated in 2014, was released for public comment in early 2015, and is currently being finalised. Principles/values for coastal zone management which will be taken into consideration are as follows:

- Maintain coastal integrity and protect natural resources
- Promote sustainable development and natural resource utilisation
- Ensure equitable access to the coastal zone for the whole community
- Prioritise safe use of the coastal zone for all people
- Transparent and inclusive decision-making and diverse participation in coastal zone management
- Collective responsibility in coastal zone management
- Focus on education and awareness.

In Chapter 5 of Coastal Management Plan 2015, a summary table of management recommendations is given per segment for natural resource management and coastal pollution. Coastal development is assessed strategically (rather than on a segment basis) by dividing the coast into ‘management areas’ – Northern Beaches, Southern Beaches and ‘the Wildside’. A summary table of coastal development recommendations for the entire coastline is given at the end of the Chapter. It includes broad recommendations (i.e. common to all segments/general areas of the coastal zone) to achieve objectives per priority area. It is important that those involved in coastal zone management do not read these in isolation of the management recommendations given per segment in Chapter 5.

5.3 Environmental Policy

The Environmental Framework and Environmental Policy (adopted 1 October 2004) provides a statement of the environmental situation and aims to guide environmental
management and the development of an Environmental Management System with the overarching aim of ensuring the compliance of the activities of the NMBMM with environmental legislation. The Environmental Policy includes a policy statement, backed by principles supporting the policy statement. It also documents management actions (the basis of an Environmental Management System) required to implement the policy statement. The Environmental Legal Register is updated annually.

5.5.4 Disaster Management Plan

Disaster management is a continuous and integrated multi-sectoral and multi-disciplinary process of planning and implementing measures aimed at disaster prevention, mitigation, preparedness, response, recovery and rehabilitation (Disaster Management Act, 2002). It was adopted by Council in 2005 and revised in 2010. Similarly, the Policy Framework was adopted in 2005 and revised in 2010. A disaster risk assessment was conducted in 2005 and revised in 2010. The Flood Contingency Plan was drafted in 2010 and the Disaster Management By-law which was gazetted in 2009 is currently being reviewed.

Disaster management is aimed at:

(a) Preventing or reducing the risk of disasters.
(b) Mitigating the severity or consequences of disasters.
(c) Emergency preparedness.
(d) A rapid and effective response to disasters.
(e) Post-disaster recovery and rehabilitation.
5.5.5 Environmental Policy

The Environmental Framework and Environmental Policy (adopted 1 October 2004) provides a statement of the environmental situation and aims to guide environmental management and the development of an Environmental Management System with the overarching aim of ensuring the compliance of the activities of the NMBMM with environmental legislation. The Environmental Policy includes a policy statement, backed by principles supporting the policy statement, and documents management actions (the basis of an Environmental Management System) required to implement the policy statement. The Environmental Legal Register is updated annually.

5.5.6 Infrastructure Development Plan

Improving service delivery is an integral part of the Municipality’s mandate. The Municipality is acutely aware of the many service delivery challenges confronting it, and has developed a number of plans to address these challenges. Road infrastructure, which includes stormwater, is critical for the support of economic activities in Nelson Mandela Bay and has the capacity to support the current major public transport network routes.

5.5.7 Comprehensive Integrated Transport Plan (CITP)

In terms of section 36(1) of the National Land Transport Act, 2009 (Act No.5 of 2009), the Minister of Transport has published minimum requirements and guidelines of the preparation of Comprehensive Integrated Transport Plans (CITP’s). The integrated Transport Plans prepared by municipalities must comply, as a minimum, with the requirements. In terms of the above, the Nelson Mandela Municipality is required to prepare a Type 1 Comprehensive Integrated Transport Plan every five years, which must be updated annually.

The municipality’s CITP covers the five year period from July 2011 to June 2016 and provides an overview of the current transport situation, identified transport transport needs and the strategies required to address these needs.
5.5.8 Integrated Waste Management Plan (IWMP)

The first generation Integrated Waste management Plan was adopted by Council in July 2005 and set objectives for creating an appropriate, sustainable waste management system. This plan ended in 2010 and the drafting of the second generation plan (which was held in abeyance pending approval of the provincial plan) is in final draft format.

5.5.9 Water Master Plan (WMP)

Sufficient internal bulk infrastructure exists to convey water to all developments within the metropolitan boundaries. Link water mains are installed as part of developments, when required. A constraint that does exist is the completion of the Nooitgedacht Low Level Scheme, which provides water for all new developments, as well as the Coega Industrial Development Zone.

5.5.10 Sanitation Master Plan (SMP)

Sufficient internal bulk infrastructure exists to connect all developments within the metropolitan boundaries to sewers. Link sewers are installed, as and when required. Currently, sufficient hydraulic capacity exists to meet the requirements of the current developments. All waste water treatment works are being upgraded to meet future development and capacity demands, including effluent compliance.

5.5.11 Local Economic Development Plan

The situational analysis of Nelson Mandela Bay indicates high levels of poverty and unemployment. Forty four percent of the economically active population is unemployed and 38% of the total households are indigent. This indicates the need to accelerate a poverty alleviation strategy as well as the implementation of programmes and projects with huge potential for growth and development. Investment is central to this. Economic growth is a catalyst for all other government
initiatives. Amongst the focus areas in terms of the growth of Nelson Mandela Bay are SMME and co-operative development, urban agriculture, tourism, broad based economic empowerment, investment and economic diversification. Furthermore, the national government initiated programmes under Accelerated and Shared Growth Initiative South Africa (ASGIGSA) and Expanded Public Works Programme (EPWP) play an important role in poverty alleviation and job creation. The Municipality is aware that to implement various programmes needed to create jobs and reduce unemployment, skills development is key. Most of the people who are unemployed are also unskilled hence the need to develop a comprehensive skills development strategy.

5.5.12 Public Transport Plan

The first Public Transport Plan for the NMB area was completed in May 2006. It consists of a Long-term Strategic Plan and a Short-term Implementation Plan. Alternative scenarios consisting of different combinations of rail lines, bus trunk routes, local bus routes and minibus feeders were formulated and tested with the VISUM Transport Demand Model for 2020 land use and population forecasts.

The conclusions from the scenario analysis were as follows:

- An integrated public transport system with scheduled services will serve the city best. The 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 Nelson Mandela Bay for the next ten years.
- The Khulani Corridor (Motherwell – Njoli – Korsten – CBD) should be the backbone of the future public transport system.
- An expanded railway system will not attract enough passengers in the next ten years to justify large expenditure, except for possibly a short rail spur into Motherwell, which can be extended to a loop through the Coega IDZ when warranted by sufficient concentration of residential development in Motherwell and employment in the IDZ.
5.5.13 Tourism Master Plan

During 2005, a Strategic Tourism Development Plan (Tourism Master Plan) was developed for Nelson Mandela Bay. The plan was commissioned as an integral part of the implementation framework of the Economic Growth and Development Strategy which identified a number of key and strategic development initiatives and prioritised the need for a planning framework that would position Nelson Mandela Bay as a unique and competitive visitor destination within South Africa and in the African continent. A final Tourism Master Plan was produced and accepted by Council during 2007.

5.5.14 Nelson Mandela Bay Municipality Heritage Asset Register

This document describes NMBM as the first unicity in South Africa, and comprises the towns and cities of Despatch, Uitenhage and Port Elizabeth. The NMBM is a Metro that has a diverse and large amount of built environment heritage. This ranges from pre 1820 to settler to modern to struggle heritage that are evidenced in the built environment and planning of the Metro. The built and place specific heritage of the NMBM is important. It is valuable to the NMBM citizens in helping create an identity as well as providing economic opportunities such as through tourism.

Furthermore, this document mentions that there is debate about the roles of various components of a city that define its identity – some cities are well known for a particular built or national element. Some cities are well known for a greater environment and ‘feel’, and other cities are made famous by events or festivals. There is growing support in the Metro for identifying and built the unique features of the Metro. One of these features is the specific heritage of our Metro visibly shown through our built and place specific heritage.

It is in this spirit of identifying and accentuating a uniqueness of the Metro that this document is prepared so that we understand a process that can be followed to further identify our heritage.
5.5.15 Nelson Mandela Bay Municipality Environmental Management Framework, 2014 (EMF)

The Nelson Mandela Bay Municipal Environmental Management Framework is the main tool the municipality has at its disposal to manage the natural environment in its area of jurisdiction, and as such all development proposals should be evaluated against this framework. The main purpose of an EMF is to proactively identify areas of potential conflict between development proposals and critical and sensitive environment. It assists in focusing EIA’s and other decision-supporting instruments on the most important issues by pro-actively red-flagging areas of high environmental importance.
6. SPATIAL PROPOSALS

6.1 Spatial Vision

The vision of the municipality is as follows: ‘To be a globally competitive and preferred Metropole that works together with the people’.

The Spatial Development Framework being guided by the National Development Plan-Vision 2030 translate the abovementioned municipal vision, to have a spatial focus and/or direction. The municipality’s envisaged SDF spatial vision is to, by 2030, turn Nelson Mandela Bay into a Metropole that is socially and economically inclusive, an environmentally sustainable city, with integrated human settlements— a place of opportunities where people can live, study and participate in the growth of the city.

6.2 Spatial Principles informing the NMBM SDF

Chapter 8 of the National Development Plan (NDP) states that all spatial development should conform to the following normative principles: spatial justice, spatial sustainability, spatial efficiency, spatial resilience, and spatial quality. On the basis of the findings of the analysis of spatial implications identified in the previous chapters in this SDF, the aforementioned NDP spatial principles are adopted to remedy the spatial form of the Nelson Mandela Bay Municipality. The metro’s Spatial Vision is expanded upon through the respective desired outcomes of the spatial principles, as follows:

<table>
<thead>
<tr>
<th>Principles</th>
<th>Desired Outcomes</th>
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<tbody>
<tr>
<td>Spatial Justice</td>
<td>▪ Reduce travelling distances between people and places with economic activities.</td>
</tr>
<tr>
<td></td>
<td>▪ Effective public transport.</td>
</tr>
<tr>
<td></td>
<td>▪ Adequate access to affordable housing opportunities.</td>
</tr>
<tr>
<td></td>
<td>▪ Rectifying imbalances between economic and development logic.</td>
</tr>
<tr>
<td>Principles</td>
<td>Desired Outcomes</td>
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<td>-----------------------------</td>
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<tr>
<td></td>
<td>Improved urban mobility</td>
</tr>
<tr>
<td>Spatial Sustainability</td>
<td>A well-managed and balanced spatial form.</td>
</tr>
<tr>
<td></td>
<td>Protection and conservation of the metropolitan area’s natural and cultural heritage.</td>
</tr>
<tr>
<td></td>
<td>Safe and secure urban environment.</td>
</tr>
<tr>
<td></td>
<td>Enhanced positive qualities of the metropolitan area.</td>
</tr>
<tr>
<td></td>
<td>Sustainable use of the natural resources.</td>
</tr>
<tr>
<td></td>
<td>Promotion of the image of the city and economic growth.</td>
</tr>
<tr>
<td>Spatial Efficiency</td>
<td>Optimal use of land opportunities.</td>
</tr>
<tr>
<td></td>
<td>More compact development.</td>
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<tr>
<td></td>
<td>Cost effective movement system</td>
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<td></td>
<td>A well-organized urban form and structure.</td>
</tr>
<tr>
<td>Spatial Resilience</td>
<td>Sustainable livelihoods in communities within the jurisdiction of the Metro that are most likely to suffer the impacts of economic and environmental shock.</td>
</tr>
<tr>
<td>Spatial Quality</td>
<td>The improvement of the aesthetic and functional features of housing and the built environment to create liveable, vibrant and valued places.</td>
</tr>
</tbody>
</table>

In general, the SDF vision and the aforementioned Spatial Principles must promote:

- Economic growth;
- Social inclusion;
- Urban mobility through public and non-motorized transportation
- Efficient land development;
- Minimal impact on public health, the environment and natural resources;
- Urban growth;
- An integrated and sustainable city and urban areas;
- Economic development and growth;
- Densification and contain urban sprawl;
- Social development and inclusion;
- Efficient, functional and integrated land development;
- Residential and employment opportunities;
- Public partnership;
- The conservation of natural resources;
- Sustainable design and development practices;
- The natural environment;
- The quality and physical appearance of the built environment.

6.3 Spatial Development Concept

This section provides strategic guidance for the spatial restructuring of the metropolitan area. Having determined what the objectives for spatial development in NMBM are, the following phase is the formulation of those development proposals and strategies which are essential to achieve the objectives. The spatial development concept therefore indicates the desired spatial distribution of various land uses and activities across the Metro. It indicates where certain types of developments should or could take place, how these areas relate to other areas, and what development standards should apply. The spatial development concept is based on a system of interrelated and integrated spatial elements which together
make up the desired spatial development form for the municipal area. These spatial elements are made up of nodes, networks, surfaces etc.

Generally, land is a scarce resource. Consequently, the unwise allocation of land uses will result not only in the waste of the land itself, but will also lead to the inefficient use of other resources. It is essential therefore that land, as a scarce resource, should be planned in the most optimum way.

The purpose of the MSDF is to provide a guide to promote the wise demarcation and responsible allocation of land. Moreover, land use planning is a strategic and integrative process and needs to embody a wide range of considerations and interests. It is imperative therefore that once planning is done that it be reviewed continually as situations change.

Planning therefore implies a commitment. This commitment must extend to both the planning process and to the plan itself. The process must be transparent, democratic and just. It is only through a legitimate process that a legitimate plan can be produced. Once the plan has been produced the owners of the plan must ensure both its enforcement and adaptability to new circumstances, otherwise the question “Why Plan?” may justifiably be asked.

This report and accompanying plans attempt to allocate land to specific uses in a balanced way. It proposes a sequence of development and identifies priorities for further attention. Lastly, in order to achieve the vision identified and embodied within the spatial development framework, the support and commitment of politicians, officials, investors and the general public will be required.

Therefore, the general purpose of the MSDF is to co-ordinate and harmonise the development of an area to which it relates in such a way as will most effectively tend to promote the health, safety, good order, amenity, convenience and general welfare of such area as well as the efficiency and economy in the process of such development.
6.3.1 Node Hierarchy

The hierarchy of nodes will be delineated as follows (Refer to Figure 18):

(a) Metropolitan Nodes

The SDF identifies the CBD’s of Port Elizabeth, Uitenhage and Despatch as nodes of metropolitan significance in shaping the economic form and identity and interface of the NMBMM. These are seen as the geo-economic nodes which are the central-core to the economic network of the Metro and have a greater sphere of influence relative to other nodes. The Metropolitan nodes define an inner core area of approximately 10km radius where densification and restructuring initiatives are proposed to be concentrated. The Port Elizabeth CBD emerges as the primary CBD for the Nelson Mandela Bay Metropolitan Area.
Developments to address the following in these nodes are supported:

i. urban decay and the erosion of quality urban environments leading to disinvestment;

ii. encourage the relocation of low cost housing into the inner core to reverse the trend of relocating families to the periphery;

iii. decentralisation of core functions of urban core;

iv. unsustainable public transport system;

v. influx of informal and incompatible land use;

vi. serious loss of valuable heritage assets and open space;

vii. infiltration of illegal and non-conforming land uses into previously well-established developments;

viii. vehicular and pedestrian traffic congestion;

ix. encouragement of industrial expansion;

x. possibility if densification and infill development in areas in the vicinity of the CBD;

xi. consolidation of smaller erven for integrated and bigger developments.

Housing development initiatives and recommendations contained in the NMBMM Human Settlement Plan with respect to inner core development to be upheld and promoted.

(b) Regional Nodes

These are nodes located more or less central to places of residence i.e. residential suburbs and with a bigger sphere of influence and have a potential of stimulating growth which may lead to integration with the core economic areas. The nodes offer significant retail, commercial and ancillary functions that have contributed to, and resulted from, the decline of the CBD (Metropolitan Nodes).

**Njoli/Kenako Node** is identified as the Regional Node for urban/catalytic intervention with the objective of linking and integrating the previously segregated townships of Ibhayi and Bethelsdorp. The key elements in this node include: Njoli Square a National Treasury funded Civic Complex that forms an anchor
development initiative around the historic Njoli Square. Development is encouraged along routes that link Njoli Square, Kenako Mall, Eastern Cape Training Centre (ETC), Straundale Industrial Area, Vista Campus, Dora Nginza hospital, and developments at the corner of Spondo and Njoli Road in order to integrate and strengthen the linkage between these areas. Mixed-use development is recommended along strategic intersections along the Khulani Corridor, a major transport link and development corridor, designed to link the Port Elizabeth CBD with the townships of Ibhayi and Motherwell.

Housing provision be made for the Vistarus informal settlement next to the Vista Campus.

**Chatty Jachtvlakte:** The Chatty Jachtvlakte Node is identified as the second primary node in great need of catalytic interventions to unlock the development potential of this newly developed area. It is situated to the West of Njoli around the intersection of the Bloemendal Arterial and Stanford Road. This Node is at the core of the greenfields component of the Zanemvula Mega Project, developed as an initiative of the National Department of Human Settlements; Provincial Department of Human Settlements and the Municipality.

Key elements in this node include:

- The convergence of Standford Road, Bloemendal Arterials and the MR448 (Old Uitenhage Road). Standford Road is one of the primary links between the Port Elizabeth CBD and Uitenhage. The Bloemendal Arterial on the other hand is not yet fully developed, but serves as an important North/South linkage between the R75 and Standford Road. MR 368 still serves as an important secondary link between Port Elizabeth and Uitenhage and has the potential to link the Njoli and Chatty Jachtvlakte nodes.
- An estimated 54 000 residential development opportunities in Joe Slovo West; Bethelsdorp North; Khayamnandi; the Chatty developments and the Jachtvlakte/Kwanobuhle is envisaged to provide densities adequate enough to sustain socio-economic activities in the area.
It is recommended that large tracts of vacant and serviced land in the greenfield development areas be utilized for catalytic high density infill and mixed-use development.

**N2 Development/Bay West Node:** The Baywest node is recognised as a regional node due to the magnitude of the projects taking place. The N2 Development/Bay West project includes a super-regional shopping centre, a mixed-use residential development (8000 residential opportunities), a 400 000m² high-tech warehouse, offices, a motor city, and light industrial area. The development of the Baywest Mall and the ancillary developments/services is seen as an anchor that will stimulate developments in the immediate vicinity i.e. opportunity to promote intensification of residential densities, light industries etc. within ±2 kms of the node.

**Greenacres Node:** Greenacres is an existing and well established node and pressure for expansion which stretches over to Ferndelan and Cotswold is recognised. Notwithstanding recommendations of the Newton Park Local Spatial Development Framework, with regard to Ferndelan and Cotswold Park, it is recommended that the policy plan be reviewed to address the development pressure around these two (2) areas. Title Deed Restrictions that relate to, and contradict Municipal land use management issues, which do not invoke mandates of other legislative instruments, must be removed.

**Boardwalk/Casino Complex Node:** The boardwalk node is centred in the Boardwalk extending to Pick ‘n Pay in 8th Avenue, Sasol Garage at the Corner Strandfontein Road and 2nd Avenue,. The following are recommended for this node:

- Support, sustain and maintain existing and new hotel accommodation facilities between Second Avenue and Happy Valley;
- Promote tourism activities and related recreation land uses in support of existing and proposed tourist accommodation;
- Ensure linkages between accommodation facilities, existing Boardwalk and beachfront developments and proposed SANDF precinct development.
- Mixed uses development with a strong component of recreational facilities to strengthen the beach front.
(c) **Secondary and Primary Nodes**

The following nodes are recognised as potential nodes to stimulate development.

- Motherwell Interchange Node (Vulindlela Village)
- Red Location Cultural Precinct
- Kwanobuhle Shopping Centre
- Levyvale Centre
- Motherwell Shopping Centre
- Ziyabuya Centre
- Cleary Park Centre
- Mercantile Centre
- Sixth Avenue Shopping Centre
- Summerstrand Village
- Retief Plein / Radisson Complex
- Kings Court/ Builders Warehouse Complex
- Western Complex
- Walmer Park/ Fig Tree/ Moffat on Main
- William Moffat Retail Park
- Pick ‘n Pay Gardens / Circular Dr Complex
- Sunridge Shopping Centre
- Walker Drive Centre
- Linton Grange / Makro Complex
- Rowallan Park Complex

The MSDF proposes detailed studies to determine the categories and the potential of the emerging nodes in the Municipality. Intensification of mixed use developments around the node and major transportation routes in the immediate vicinity is encouraged.

The municipal spatial vision in the form of Precinct plans need to be formulated with respect to the following areas:
- **Humerail** – Waterfront Development – Upgrade the PE Harbour and Station Precinct to make the CBD an attractive investment and entertainment destination.

- **North End** – Waterfront Development – A detailed precinct plan and investment profile to be developed to determine the feasibility and costs of reclaiming the Northern Beaches Node, as shown below.

![Figure 19: North-End Beaches Water Front Concept](image)

**Industrial Nodes:** The SDF recognises the following as the major industrial Zones (Refer to Figure: 20)

- **Coega IDZ (CDC):** The development of the Coega IDZ presents a great potential for job creation and economic growth nearby suburbs, especially Wells Estate, Bluewater Bay, Amsterdamhoek and Motherwell, and the whole Municipality. It is proposed that gap-housing opportunities be created in these residential suburbs in order to accommodate the workforce anticipated from the development of the IDZ. Such residential developments, to meet the growth needs, should be located closer to the Coega IDZ.
• **Deal Party (DP):** The area comprises small, medium and large industrial enterprises. There is a need to recycle big industries into smaller SMME type and larger industries to be encouraged to relocate to the Coega IDZ. Need for the upgrade of Burman Road, Baxter Street and Old Grahamstown Road.

• **Struandale (SD):** The industrial zone forms part of the Njoli/Kenako Node. Infill development and recycling of land buildings for light industries and SMME type facilities must be promoted. State owned land in the area to be used for housing developments in line with the Human Settlement Plan proposals. An upgrade of Straunway and a portion of Mavuso Road linking Straunway and Njoli Road is proposed.

• **North End (NE):** The area comprises small, medium and large industrial enterprises. It boasts of major industries such as Coca Cola, Cadbury, Firestone and Aspen Pharmaceutical and General Motors (South Africa). There is a need to resuscitation of the Northend industrial area. Road linkages and street upgrades needed.

• **Greenbushes (GB):** Industrial land uses in these areas are recommended to be developed as light industries which are envisaged to be compatible with residential developments in the area. Noxious uses may be permitted on merit taking into consideration the impacts it may have on living conditions.

• **Markman (MM):** The sites set aside for industry have not yet been taken up and there is a need to promote developments in the vicinity that will resuscitate the Markman precinct, whilst complementing the development of the Coega IDZ. There is a need to improve aesthetic appeal at Markman Industrial by introducing attractive gateways along MR450, relocating noxious industries, improving safety and security and generally improving the quality of the environment in the area. Approximately 28% (60Ha) of this 220Ha industrial estate remains unsold and is owned by the Local Authority and a further 30Ha is vacant but in private ownership (CDC, Property Market Study 2005 quoted in Urban Econ, 2008). Potential exists for integrating the redevelopment of the area with the Coega IDZ.

• **Uitenhage Industrial (UD):** Well established industrial area but still contains pockets of underutilised land and buildings. Home to VW Motor Plant and associated NMBLP. Develop residential extensions to Kwanobuhle towards
Jachtvlakte Industrial to promote physical integration with Khayamnandi and Chatty areas. Link road to the N2 from Kwanobuhle and PE – Uitenhage via Stanford Road.

Figure 20: Major Industrial Nodes. ([Source: NMBM Draft Urban Network Strategy 2014])

6.3.2 Open Space and Green System

The development of an open space and green system is based on the Nelson Mandela Bay Municipality Draft Bioregional Plan 2015 (currently under review) (Refer to figure 21), which is a spatial plan that shows terrestrial and aquatic features that are critical for conserving biodiversity and maintaining ecosystem functioning. The NMBM Bioregional Plan is aimed at conserving biodiversity at a regional level and is primarily concerned with guiding land use planning and decision making through improving the legal standing and conservation of Biodiversity/Conservation.
areas by all organs of state. A well-defined metropolitan open space network is an important and integral part of the Spatial Development Concept of the MSDF.

The open space network will incorporate areas of high biodiversity value linked together in a viable network of open spaces. Even areas of privately owned land will be included. Open space and green system provide a unique opportunity to conserve many of Port Elizabeth’s threatened ecosystem and species. It will also assist the province and the country in meeting biodiversity conservation targets.

![Image](image_url)

**Figure 21: Urban and Natural Environment**

The Nelson Mandela Bay Municipality’s open space network will play a fundamental role in shaping the city through conservation of ecological resources which are amongst the major structuring elements guiding the development of the city. The open space and green system is mostly concerned with the spatial structure of green areas in both rural and urban landscapes with intent of contributing to the quality of
life and sustainable development. Green System also plays a very fundamental role in formulating planning and management tools since it has spatial, social and technical dimensions. The open space network will provide opportunities for all residents within the Metro to access natural resources that improve the quality of urban and rural fabric.

The Main objectives of the open space network are to:

- Conserve, protect and develop natural resources in the Metro;
- Provide interaction between the built and natural environment;
- To address the interface between the land use typology green system;
- To promote the sustainable use and management of the open space network.

The natural resources planning, inventory and operational management of the NMBM’s nature reserve network and green infrastructure network is concerned with conserving ecosystem values, functions and restoration of natural systems that underpin watershed health and hydrological integrity supporting natural resources necessary for agriculture and aquaculture. Different types of Open space and green systems which will shape the city's development and merit protection are as follows:

- Biodiversity conservation areas;
- Parks and river corridors;
- High-potential Agricultural Land;
- Coastal Areas and beaches.

The following generic principles should apply to the natural open space system:

- The natural open space system should be protected from intrusive, irresponsible and ad hoc developments that damage the ecological integrity as well as visual quality of these areas. These include urban development, mining activities and agriculture etc.
- PE MOSS must integrate and link recreational opportunities that promote ecological, economic and social objectives.
• In certain areas where natural open space network is currently affected by activities, the municipality must intervene in order to ensure that ecological corridors can be created and are able to function appropriately.

• Focus should be placed on and resources allocated to those consolidated natural open space areas where long term ecological sustainability can be achieved.

6.3.3 Public Transit and Movement Routes

Figure 22: Major Movement Directions. [Source: NMBM Draft Urban Network Strategy 2014]
As expansion takes place, an important challenge that arises is the need to minimise the extension of road infrastructure and, where it is imperative that it be extended, to ensure that maximum benefit is derived from the investment.

Based on current economic growth patterns and predictions for the future it is assumed that as much as 80% of the future population of the metropolitan area will not own cars. This means that the majority of the population will use public transport. Therefore, coupled with endeavours to reduce travel distances to and from work and facilities, there is a dire need to develop a public transportation system that will be attractive to commuters and reduce the need to continually build bigger and more expensive roads merely for single occupant motor vehicles. It is probable that such a public transportation system will not be in the form of underground rail or some other sophisticated system. Initially it is likely to be an Integrated Public Transport System (IPTS) accommodating High Occupancy Vehicle (HOV’s) in dedicated lanes where they can move rapidly from one point to another.

Expansion proposals have therefore been based on the potential to develop an integrated public transportation network that will serve the area to the best advantage. Existing road and rail routes have been analysed to determine whether they could be utilised as public transportation routes. Possible extensions to that network have been examined and SCU’s have been located in a pattern that will allow logical expansion and extension of the transportation network. Each SCU is therefore linked to others by a proposed public transport route or a route along which public transport can be accommodated.

The goals and objectives stated in the IDP with specific regard to the transportation sector include the following:

- 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.

6.3.3.2 Current transport situation

The Nelson Mandela Bay road network consists of a hierarchy of national, provincial and municipal roads. The roads that have been classified by the then NMBM Metropolitan Transport Advisory Board (MTAB) as being of metropolitan significance by virtue of the function that they perform are shown in Plan 1. The Municipality together with the South African National Roads Agency (Ltd) undertakes traffic counts annually on roads of municipal significance as well as the national roads respectively. An analysis of these counts shows that high levels of traffic congestion occurs predominantly on but no limited to the following roads during weekday peak hours: N2, Cape Road, Kragga Kamma Road, Uitenhage Road, Kempston Road Glen Hurd Drive, Main Road Walmer, Heugh Road, Buffelsfontein Road and Standford Road.
6.3.3.3 Spatial Linkages

High-density corridors that contribute to sustainable public transport services are receiving high priority in the major cities of South Africa. These corridors focus on principles such as high density, captive public transport populations, integration opportunities and mixed land use development, which maximise the use of services and reduce the need to travel by providing work opportunities in close proximity to residential trip origins. A key element is filling in new developments in existing public transport corridors, with the objective of increasing the density of development. High-density development increases the potential of viable public transport and optimises the use of resources. The objectives of the Municipality’s Spatial Plan with regard to transport optimisation are as follows:

i. The identification of transport corridors that can be developed into integrated development corridors and supported by a suitable public transport system.
ii. The identification of public transport infrastructure requirements to ensure that effective and efficient public transport operations are put in place to support the developments in each corridor.

iii. The formulation of a broad strategy, covering all public transport modes, for more detailed planning in those corridors that can be used to achieve route and mode optimisation and public transport integration.

6.3.3.4 Transport needs assessment

Future travel forecasts for 2010 and 2020 were developed from population and employment forecasts for these years. The population and employment forecasts were based on the 2001 Census statistics and were distributed according to the proposed phasing of housing and industrial land use in terms of the Spatial Development Framework. Employment forecasts for Nelson Mandela Bay include forecasts for the Coega IDZ, which were obtained from the Coega Development Corporation.

(a) Non-motorised transportation

Non-motorised transport (NMT) modes are walking and cycling, which are currently not well catered for in the metropolitan area. A Pedestrian and Cycle Path Master Plan is in place and includes several projects involving the provision of sidewalks and cycle ways throughout the metropolitan area in support of non-motorised transport which will also help to achieve the goals of travel demand management. A focus must be placed on the development of networks of NMT infrastructure which support urban mobility. The NMT concept of 2011/12 should be updated to focus on the development of connections between fragmented pedestrian and cycle paths. An investigation on the viability for a pilot bike share system should be conducted.
(b) Transport for people with disabilities

A transport needs assessment for people with disabilities has been derived from personal interviews with an extensive variety of people and organizations. The majority of the interviewees were people with disabilities. The following two approaches to improving transport accessibility for people with disabilities have been identified:

- The provision of dedicated services for qualified people with disabilities. This type of operation is known as Dial-a-Ride or Door-to-Door Service.
- Making public transport vehicles and systems more accessible to all.
The Municipality has commenced with the improvement of public transport facilities and sidewalks to make them accessible to people with disabilities. One example of such an improvement is the construction of the concrete platform for all IPTS bus stations within the city to have the same floor level as the bus level. This ensures a smooth transfer of people on wheelchairs from the platform into the bus and vice versa without any difficulties.

(c) Pedestrian bridges

Pedestrians have to cross some of the busy arterial roads in Nelson Mandela Bay; hence pedestrian bridges have become necessary. These crossing locations have been examined in the preparation of the ITP and where it is not possible to install traffic signals at these locations, pedestrian bridges have been proposed in the following locations:

- Uitenhage Road (Dora Nginza)
- Papenkuils Canal/N2
- Commercial Road/N2
- Stanford Road (Cleary Park)

(d) Tourism

The ITP has identified the need to improve the transport facilities that are critical to promoting the major tourist attractions in and around Nelson Mandela Bay.

The Addo National Elephant Park is an international tourist attraction less than one hour’s travel by road from the Port Elizabeth Airport. The section of Addo Road after the Motherwell Depot to the Elephant Park’s main gate is in poor condition. An investigation into the upgrading of this road northwards from Motherwell, which is the responsibility of the Provincial Department of Transport, is in progress.

The Narrow Gauge Apple Express railway line started as a freight line to bring fruit from the scenic Hankey/Patensie/Kareedouw area to the Port Elizabeth Harbour for
The railway has become a tourist attraction, but its future is uncertain due to
the fact that road trucks have taken over the transport of freight previously carried by
the Apple Express.

The Provincial Department of Transport is currently investigating the revitalisation of
branch railway lines that have lost their freight services to the road trucking industry.
This ITP supports the revitalisation of the Apple Express, in the interest of promoting
tourism. Shifting freight traffic from road back to rail will reduce the damage being
done to the road pavement by heavily loaded trucks.

(e) Transport authority

The National Land Transport Transition Act (Act No 22 of 2000) (NLTIA) made
provision for a Municipality to establish a Transport Authority (TA) to administer,
plan, manage and monitor the public transport system. Section 6.5.1 of the NMBM
CITP provides detailed information the proposed Transport Forum.

(f) IPTS Infrastructure Projects

Funding for the implementation of the following projects has been sourced from the
National Government (Public Transport Infrastructure and Systems Fund):

- Public transport lanes (construction commenced and on-going)
- Public transport shelters and facilities (construction commenced and on-going)
- Public transport corridors
- Modal interchanges
- Bridges
- Sidewalks and cycle tracks (construction commenced and on-going)
- Traffic control systems
Long-term road network

An investigation into the need for specific sections of the long-term road network is still to be undertaken and will be included in the update of the ITP. The road sections to be investigated include:

- An assessment of the long-term needs for the eastern section of the Baakens Parkway that was not deproclaimed and its impact on land use. Should the route not be retained, a motivation for deproclamation must be prepared.
- The evaluation of the need for an additional access road to serve KwaNobuhle.
- The review of short-term measures to improve traffic flow at all interchanges on the N2 freeway through Nelson Mandela Bay. This should comprise a separate report suitable for submission to the SANRAL.

Figure 25: Long Term Public Transport Routes. (Source: NMBM, CITP 2011/12)
6.3.3.5 Public transport strategies

The first Public Transport Plan was completed in May 2006 and contained a Long-term Strategic Plan and a Short-term Implementation Plan. Alternative scenarios consisting of different combinations of rail lines, bus trunk routes, local bus routes and minibus feeders were formulated and tested with the VISUM Transport Demand Model for 2020 land use and population forecasts.

The conclusions from the scenario analysis were as follows:

a) An integrated public transport system with scheduled services will serve NMBMM best. The non-intervention development of the existing situation should not be accepted.

b) A system based on trunk bus route corridors and local bus and minibus-taxi services will best serve NMBMM for the next ten years.

c) The Khulani Corridor (Motherwell – Njoli – Korsten – CBD) should be the backbone of the future public transport system.

d) An expanded railway system will not attract enough passengers in the next ten years to justify large expenditure, except for possibly a short rail spur into Motherwell, which can be extended to a loop through the Coega IDZ when warranted by sufficient concentration of residential development in Motherwell and employment in the IDZ.

e) In accordance with the Provincial public transportation plan, the option of utilizing the Apple Express servitude between Chelsea and Port Elizabeth railway stations for the purpose of public transportation should be investigated.

The long-term public transport development strategy will include a modern and attractive public transport system offering seamless travelling and an integrated and scheduled service. This will include contracted operators and payment through ticketing. High-density development along the public transport corridors will be served through a high-frequency public transport service, which will persuade more people to use the public transport system.
For the low-demand network and feeder bus routes, an extensive network operated by normal buses, minibuses and minibus taxis will be put in place; the vehicle used, will depend on the patronage along the route. A system based on trunk bus and feeder operations must have attractive interchanges, allowing for safe and secure transfers. As important nodes of attraction, the interchanges will be located close to suburban business activities and in the city centre.

Until the long-term role of the railway service is clarified (refer to Figure: 26), the possibility of developing the system to include an extended railway service cannot be guaranteed. The current rail service between Port Elizabeth and Uitenhage must be maintained and supported until long-term development is clarified. New public transport routes parallel to the existing railway service must not be developed.

Figure 26: Long Term Rail Network. (Source: NMBM, CITP 2011/12)
6.3.3.6 Integrated Public Transport System (IPTS)

An integrated public transport system is a broad term given to a variety of transport systems that, through improvements in infrastructure, vehicles and scheduling, use buses to provide a higher quality service than an ordinary bus line.

Taking its lead from the National Department of Transport directives, the Municipality has been led to reconsider its public transport systems proposed in the PTP to implement an Integrated Public Transport System. This forms part of the national vision of implementing quality public transport networks that could potentially reduce reliance on private vehicles.

It is held that IPTS will play a vital role in the realisation of the metro’s spatial vision 2030 through the provision of the effective and reliable public transport that links our settlements (refer to figure 27).

![Figure 27: Phase Development of IPTS Routes](image-url)
The IPTS system has been designed to include a median island and closed stations on trunk routes. These median islands were constructed in phases, with the first phase being Govan Mbeki Avenue, Fettes Road, Harrower Road and Kempston Road (see Map 3). In the short term, it is proposed that the IPTS system will reach Motherwell, Cleary Park and Newton Park. The remainder of the trunk bus routes will be serviced through a normal bus service.

a) Funding plan

The Capital Programme includes infrastructure that is to be funded from the Consolidated Metropolitan Transport Fund (CMTF), the Municipal Infrastructure Grant (MIG) and Public Transport Infrastructure and the Systems Fund (PTIS), which now includes public transport systems funding provided by Treasury through the DOT and replaces the former Public Transport Infrastructure Fund (PTIF). It excludes infrastructure that is the funding responsibility of other authorities, notably the proposed upgrading of the N2 and ramps between the Kragga Kamma Interchange and Creek Interchange, which is the responsibility of SANRAL.

6.3.3.7 Major Infrastructure Networks

One of the main aims of the MSDF is to minimise the need to extend bulk infrastructure and to optimise existing infrastructure. The strategic planning of infrastructure, (water, stormwater, sewerage, and electricity) will need to be elaborated on in special studies that are based on the urban expansion proposed. Directorates will need to prepare development programmes for investments in the infrastructure required to support the development of and implementation of the IDP. Attention should be paid to the sustainable development of infrastructure in terms of economy, natural resources as well as environmental and health protection.

6.3.4 Urban Corridors and Activity Spines

The city structure needs to be developed in a manner that uses infrastructure more efficiently and minimises the need to extend infrastructure networks unnecessarily.
Transportation infrastructure is the most expensive infrastructure in urban development and extensions to road and rail networks need to be kept to a minimum.

The transportation corridors must be developed in a manner that will be attractive to the market and promote an efficient public transport system. Residential and commercial densities along transportation routes need to be increased at strategic locations (i.e. near development nodes) in order to transform major routes into activity or development corridors and create an environment conducive for sustainable human settlements i.e. live, work and play.

![Figure 28: Activity & Emerging Corridors. Source: NMBM Draft Urban Network Strategy 2014)](image)

However, it is important when planning corridors to avoid ribbon development. A corridor must be the result of intensified development along a transport route and not merely the creation of business opportunities of a low key nature on either side of a major road as this will not promote public transport as an alternative to private transport. The character of a corridor should also be designed to change along its
length to order to break monotony and become attractive. Open spaces and squares or plazas need to form part of the urban design embodied in corridor development.

Primary Network/Transport Links

Corridor development studies need to be initiated following lessons learnt from the Khulani Corridor Study (Kempston Road to Motherwell via Njoli Square and Daku Road). The primary network in this Urban Network includes three of the five major transport arteries, being:

(a) Harrower/Stanford Road in a north-westerly direction, linking the PE CBD with the Gelvandale, Helenvale, Bethelsdorp and Bloemendal (Chatty) Townships.

(b) R75 in a north-westerly direction, linking Port Elizabeth with Despatch and Uitenhage, as well as the townships of Ibhayi, Algoa Park, Missionvale, Govan Mbeki, KwaDwesi and KwaMagxaki with Port Elizabeth, Despatch and Uitenhage.

(c) North-south linkage through Ibhayi along Sheya-Kulati, Njoli, Daku and Dibanisa Roads, linking the PE CBD and Ibhayi with Motherwell, also referred to as the Khulani Corridor.

The other significant network/transport links include:

(a) Heugh/Buffelsfontein Road (East to West) being the most southern route.

(b) Old Cape Road (R101) (east to west).

(c) The N2 runs from the West to the North through the urban area, serving as a further primary linkage between the urban areas of Nelson Mandela Bay.

These arteries/transport links form the structure of the Integrated Public Transport System in Nelson Mandela Bay and comprise road as well as rail network links. The primary network in this Urban Network includes three of the five major transport arteries, being:

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(c) North-south linkage through Ibhayi along SheyaKulati, Njoli, Daku and Dibanisa Roads, linking the PE CBD and Ibhayi with Motherwell, also referred to as the Khulani Corridor.

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(a) Heugh/Buffelsfontein Road (East to West) being the most southern route.

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(c) The N2 runs from the West to the North through the urban area, serving as a further primary linkage between the urban areas of Nelson Mandela Bay.

These arteries/transport links form the structure of the Integrated Public Transport System in Nelson Mandela Bay and comprise road as well as rail network links.

The other two major arteries, i.e. Buffelsfontein/Heugh Road and Old Cape Road are, for the purposes of this discussion, included as part of the Secondary Network Links.

Road network:

Public transport serves the metropolitan area along the following existing and planned routes:

- North-South linkage between the PE CBD and Motherwell via Ibhayi along the Khulani Corridor (Sheya-Khulati, Njoli, Daku and Dibanisa Roads).

- North-West linkage between the PE CBD and Bloemendal/Bethelsdorp along Stanford Road, currently terminating near the Cleary Park Shopping Centre, but with planned future extension to Uitenhage via the Chatty, Jachtvlakte and KwaNobuhle Estate areas.

- South-West linkage between the PE CBD and the Western Suburbs via Old Cape Road, currently terminating in the vicinity of Rowallan Park, but with planned
future extension towards the Redhouse Chelsea intersection, with a possible linkage to the Bay West Mall development.

It is specifically recorded that these activity corridors also serve as major employment areas.

**Rail network:**

![Rail network diagram](image)

*Figure 29: NMBM Rail Network. (Source: NMBM, CITP, 2011/12)*

There is an existing passenger rail link between the PE CBD and Uitenhage via New Brighton, Sydenham, Swartkops, Redhouse and Despatch. This is part of the Port Elizabeth – Graaff-Reinet Line. Furthermore, there is another one between PE CBD and Motherwell/Markman, which is part of the Port Elizabeth – JHB Line as well.
There is a planned future passenger rail link between Port Elizabeth Centre and Motherwell via the planned new Motherwell Rail Corridor parallel to Tyinira Street (Motherwell).

There is also a possible long-term linkage between Coega and Uitenhage. This is a high-priority project driven by Passenger Rail Agency of South Africa (PRASA) and about to be assessed in terms of NEMA processes for the portion between Swartkops and Motherwell.

A long-term passenger rail link route exists between Port Elizabeth and Uitenhage via Bethelsdorp, Chatty, Jachtvlakte and KwaNobuhle. This route alignment has been in existence for a long time but is compromised in places by existing developments. PRASA, however, maintains its long-term interest in this line, particularly to serve the KwaNobuhle community.

A narrow-gauge rail line exists between Humerail (Port Elizabeth) and Loerie. This line originally served as a goods line between Port Elizabeth and Loerie, but has fallen into disuse over recent years. It has the potential to carry passengers between the Port Elizabeth harbour nodal areas and the new Bay West Mall.

**Other Activity Corridors:**

The Nelson Mandela Bay Urban Network further identifies other existing mixed use activity corridors that are important. These are:

(a) **Walmer**: Starting at Marine Drive as Walmer Boulevard, increasing in activity at 1st Avenue intersection, from where the road becomes Heugh Road, continuing to the intersection of Buffelsfontein Road and 17th Avenue.

(b) **Walmer Main Road**: Commencing from Heugh Road, to Walmer Main Road, to the intersection with the William Moffat Expressway.

(c) **William Moffat Expressway**: Starting from the intersection of Buffelsfontein and 17th Avenue, along William Moffat Expressway to Cape Road.

(d) **Cape Road**: Starting at the intersection of William Moffat Drive and Cape Road, to Greenacres, terminating in the CBD.
6.3.5 Hubs and Integrated Zones

The Urban Network Approach (NDPG, 2013) makes provision for the identification of “urban hubs” that will serve as “town centres” for under serviced township clusters. It furthermore allows for a hierarchy of urban hubs, i.e. the primary and secondary hubs. In Nelson Mandela Bay, provision includes a special secondary hub, at a level between the primary and secondary hub.

Figure 30: Identified Hubs and Integrated Zones. [Source: NMBM GIS: 2015]
PRIMARY URBAN HUBS

The Primary Hubs are identified as follows:

Port Elizabeth CBD

The Port Elizabeth CBD is the administrative heart of the City and is recognised in the Urban Network Strategy as a Primary Hub.

Njoli Hub (Hub 1)

Spatial targeting and the eradication of spatial inequalities, as envisaged in the National Development Plan, is an underlying principle of the Urban Network Approach, hence the focus on catalytic development of urban hubs in under-serviced township clusters. The Njoli Hub is identified as the Primary Hub, Hub 1.

This hub is identified as the Primary Hub for urban/catalytic intervention with the objective of linking and integrating the previously segregated townships of Ibhayi and Bethelsdorp. Its identification was informed inter alia, by:

- its importance as an historical public space for meeting and informal trading;
- the convergence of major routes in Ibhayi;
- the development of the Njoli transportation nodal interchange and hub along the Khulani Corridor; and
- the underlying potential to creatively plan and implement public facilities and amenities that will act as catalyst for wider and more intensified developments that will enhance the scale of economies for the installation of public infrastructure in these areas.

The key elements in this hub include:

- Njoli Square, a multi-million rand redevelopment initiative around the historic Njoli Square;
Khulani Corridor, a major transport link and development corridor, designed to link the Port Elizabeth CBD with the townships of Ibhayi and Motherwell;

Kenako shopping Centre, a recently completed shopping centre;

The Vista Campus of the Nelson Mandela Metropolitan University (NMMU), also known as the Vista Campus;

The Eastern Cape Training Centre (ETC) opposite the Kenako Centre;

The Dora Nginza hospital which is envisaged as a future academic hospital for the NMMU Medical School Facility; and

The Vistarus informal settlement next to the Vista Campus, which is to be redeveloped as part of the Zanemvula Project, one of the first Mega/Presidential Projects initiated in 2006/07 in terms of the Breaking New Ground Strategy.

The Red Location Cultural Precinct which includes the Red Location Museum of Apartheid, an art gallery, an electronic library; a backpackers’ lodge as well as the regeneration of Singapi Street can be considered as a Secondary Hub to the Ibhayi/ Bethelsdorp Hub.

Chatty Jachtvlakte Hub (Hub 2)

The Chatty Jachtvlakte Hub is identified as the second Primary Hub. It is in great need of catalytic intervention to unlock the development potential of this newly developed area. It is situated to the West of Njoli around the intersection of the Bloemendal Arterial and Stanford Road.

This Hub is at the core of the greenfields component of the aforementioned Zanemvula Mega Project, developed as an initiative of the National Department of Human Settlements; Provincial Department of Human Settlements and the Municipality. The Housing Development Agency (HDA) is the implementing agent.

Key elements in this hub include:

- The convergence of Standford Road, Bloemendal Arterials and the MR448 (Old Uitenhage Road). Standford Road is one of the primary links between
the Port Elizabeth CBD and Uitenhage. The Bloemendal Arterial on the other hand is not yet fully developed, but serves as an important North/South linkage between the R75 and Standford Road. MR 368 still serves as an important secondary link between Port Elizabeth and Uitenhage and has the potential to link the Njoli and Chatty Jachtvlakte Hubs.

- The new greenfield residential developments of Joe Slovo West; Bethelsdorp North; Khayamndeni; the Chatty developments and the Jachtvlakte/Kwanobuhle extensions currently in the planning stage, will yield in the order of 54000 residential opportunities, once fully developed. Approximately 14000 units have already been completed and are in need of social facilities and amenities.

- There are large tracts of vacant and serviced land in the greenfield development areas that can be utilized for catalytic high density infill and mixed used development.

**SPECIAL SECONDARY HUB**

The Motherwell Township is very high on the transformation agenda of the Municipality, primarily because of its establishment history as a dormitory town for the Markman Industrial Area. It is under serviced in terms of economic as well as social facilities and amenities and even where those facilities and amenities exist, the quality is substandard. Major extensions to the township area (Motherwell Extensions 12, 29, 30 and 31) are currently under construction as part of the municipal human settlement programme. This development, which is rolled out as an integrated residential development, will yield almost 12 500 residential opportunities, home to approximately 50 000 people. A proposed private sector development to the North of Motherwell (Coega Ridge) will, if developed to full potential, yield another 25 000 to 30 000 residential opportunities (100 000 to 120 000 people).

It is against the background that a Special Secondary Hub has been identified at the centre of Motherwell around the Motherwell Shopping Centre and Clinic. Other existing facilities such as a Thusong Centre (to be redeveloped as a Traffic Centre), the Motherwell Community Centre and the higher density Sakhasongke housing project are located in this node. The node will also serve as the terminal point for the
Khulani Corridor, as well as future nodal interchange for the Integrated Public Transport System (IPTS).

This hub is currently not well defined as a strong nodal point, but it holds the potential to develop as such, particularly when the planned Motherwell Rail Corridor is implemented. The future Motherwell rail station will be in close proximity and forms a strong focal point in this node. It is therefore important that this node be identified and targeted for catalytic intervention in the near future.

Detail precinct planning will be undertaken during the 2015/16 period.

SECONDARY HUBS

The Uitenhage and Despatch CBD’s have are identified as secondary hubs as a result of their role and function as sub-regional metropolitan (sub-metropolitan) nodes.

The Urban Network Framework includes the following Secondary Hubs:

**Secondary Hub 1 (S1) (Kenako/Vista):**

This hub is situated in the Ibhayi / Bethelsdorp area around the Kenako Centre; Eastern Cape Training Centre (ETC); Dora Nginza Provincial Hospital; and the Vista Campus of the Nelson Mandela Metropolitan University (NMMU). It forms a logical link and extension to the Njoli Hub (Hub1) and holds significant potential for development interventions that will link two previously spatially (and socially) separated communities. The precinct planning for this hub will be undertaken as part of the Hub 1-precinct planning which runs concurrently with the preparation of the Ibhayi and Bethelsdorp LSDF’s.

**Secondary Hub 2 (S2) (Red Location):**

This hub is located around the Red Location Cultural Precinct which includes the Red Location Museum of Apartheid, art gallery, electronic library; a backpackers’
lodge as well as the regeneration of Singapi Street. The node will play a significant role as a cultural/ tourism node and can be directly linked with the Port Elizabeth CBD by means of the New Brighton Railway Station which is within walking distance. It will furthermore complement and strengthen not only the Njoli Hub, but also the Khulani Corridor.

**Secondary Hub 3 (S3) (Jachtvlakte/ Kwanobuhle):**

Kwanobuhle Estate is a privately owned proposed development which is about to be developed and will link the Chatty/ Jachtvlakte development with Kwanobuhle. A significant mixed-use/ retail node is provided along Standford Road extension. Provision is also made for a railway station at this juncture as part of the planned PRASA commuter rail connection between Port Elizabeth and Uitenhage via Kwanobuhle. It could alternatively serve as a passenger station for the alternative light rail system planned along Standford Road. This nodal locality is therefore included as a future Secondary Hub (S3).

**Secondary Hub 4 (S4) (Motherwell North):**

The layout for the Motherwell North extensions currently under development, made provision for a retail node which could be developed as a secondary township hub. A possible future secondary railway station in this vicinity will contribute to the significance of this node as a future hub.

**Secondary Hub 5 (S5) (Wells Estate):**

The long-term road network plans make provision for a road linkage between Weinronk Way in Blue Water Bay and Tyinira Street in Motherwell via the Wells Estate Extension 3 development. Provision has been made for a retail node at the convergence of the Phases 5 and 6 of Wells Estate Extension 3 and Blue Water Bay. This node could be developed as an effective secondary township hub for integrated mixed use development.
Other nodal areas which are recognised as part of the Urban Network Framework and urban hubs, include:

Greenacres/ Newton Park Node:

This is an existing retail and mixed use node at the convergence of the Cape Road and Langenhoven Drive/ Kempston Road transport and activity corridors. An “informal nodal interchange” is contained in the parking areas of the Greenacres Retail Park and holds the potential of formalization. An LSDF for this area was approved by Council in 2014. The potential for high density infill residential development in this node should be considered and promoted.

![Diagram of Greenacres/Newton Park Node](source: NMBM Cape Road LSDF, 2014)
**Walmer Node:**

The Walmer Node is situated at the convergence of Main Road, Walmer and William Moffat Expressway and is comprised of major retail centres. It is included in the Greater Walmer LSDF, approved by Council in 2013. The figure below is extracted from the LSDF and shows the importance of this node in its spatial context and targets it specifically for development.

![Figure 32: Walmer Node](Source: NMBM Greater Walmer LSDF, 2013)

An “informal nodal interchange”, which is developing organically at taxi drop-off and pick-up points, is noted in this nodal area and should be formalized as part of nodal development interventions.
Great Westway (Makro/ Framesby/ Westering) Node

This node is located at the convergence of Samantha Way/ Bramlin and Cape Road. It is illustrated in the extract from the Cape Road (Mill Park to Westering) LSDF, in the figure below. It is largely a retail node around the Makro, Metlife Plaza and Linton Grange shopping centres. A day care medical centre is also located in this node.

![Cape Road Spatial Development Framework](image)

Figure 33: Great Westway Node. (Source: NMBM Cape Road LSDF, 2014)

Baywest / N2 Node:

The Baywest / N2 node is anchored by the new regional Baywest Mall which will open in May 2015. This node will include further intensified mixed use and residential development, which if developed at full capacity, will render approximately 10 000 permanent job opportunities and approximately 8 200 residential opportunities aimed at the low, middle and high income markets. Housing typologies
will range from high density rental and ownership apartments to low density single residential units for a varied socio-economic sector.

Other developments such as the Kuyga extension, Westbrook and Parsonsvei will form part of the larger nodal development area and contribute to additional mixed use and residential development yielding a further estimated 6 500 residential opportunities. A direct road linkage between the Baywest/N2 Node and Chatty/Zanemvula has been identified as high priority in order to enhance the accessibility of this node to the northern townships of the Metro, not only from a convenience perspective, but more importantly from a job opportunity perspective.

![Figure 34: N2 Baywest Node. (Source: Western Suburbs LSDF, 2013)](image)

**INTEGRATION ZONES**

The following Integration Zones are identified in the Urban Network Strategy (Refer to figure 31):
Integration Zone 1 (IZ1) (Inner City):

Integration Zone 1 is comprised of the Inner City area and includes the Port Elizabeth CBD as well as Newton Park; 2010 Stadium and Inner City LSDF areas. The mandate area of the Mandela Bay Development Agency falls within this Integration Zone. This integration zone holds significant potential for inner city revitalization with projects such as the Mermaids Precinct and Lower Baakens Catalytic Projects.

Integration Zone 2 (IZ2) (Khulani/ Njoli):

This Integration Zone serves links the Inner City area (Integration Zone 1) and the Njoli Hub and incorporates a portion of the Khulani Corridor between the Standford Road and Njoli Square. It includes Secondary Hubs S1 (Kenako/ Vista) and S2 (Red Location) and holds potential for urban regeneration and intensified mixed use development along the Khulani corridor and around the Njoli Hub. Intensified mixed use around the S1 (Kenako/ Vista) Secondary Hub would be possible, but may require intense community participation particularly around the Vistarus area.

Integration Zone 3 (IZ3) (Standford Road):

This Integration Zone 3 along Standford Road serves as a spatial link between Integration Zone 1 and the Chatty Jachtvlakte Hub. Environmental and spatial constraints makes it a very narrow corridor with limited scope for catalytic and development intervention. These would mostly be limited to nodal interchanges along Standford Road such as the Cleary Park Nodal interchange. The Chatty/Jachtvlakte Mega Housing Project is partially part of this integration zone.

Integration Zone 4 (IZ4) (Fairview West):

Fairview West area is located within a 6 to 8 kilometer radius from the CBD and is adjacent to the William Moffat Expressway and Circular Drive activity corridors. It forms part of a land restitution area from where large numbers of people were relocated. A number of housing projects, comprising of mixed residential typologies
aimed at the lower income groups, contribute to the area being identified as an area of substantial spatial development and enormous potential to illustrate spatial transformation. The area is also identified as a Mega Project in the Human Settlements Programme.

**Integration Zone 5 (IZ5) (Walmer/ Summerstrand)**

This integration zone is highlighted as a new development zone for one of the large scale integrated residential development Mega Project in the Human Settlements Programme.

**Integration Zone 6 (IZ6) (Baywest / N2 Node)**

The potential, capacity and significance of the Baywest/ N2 Node as catalyst for intensified integrated and mixed use development at scale, has contributed to the inclusion of the larger development area of this node as a sixth Integration Zone (IZ6). This integration zone holds the potential to attract private sector investment in the development of the node/ zone which should be harnessed because of its potential to be a significant generator of rates income.

### 6.3.6 Consolidation and Densification

Consolidation and densification approach (Refer to figure 35, 36 & 37) is vital in creating a sustainable and efficient city. It is also a mechanism for achieving integration. As it has been mentioned above, the densities should mostly be increased or concentrated around existing primary urban centres, urban nodes, corridors and along urban activity spines. Higher densities could also result in more green space remaining in and around the city thus improving the environment. The main intent of this section will to make sure that fragmented, inequitable and inefficient urban form is restructured in order to save land and servicing infrastructural costs as well as enhancing the viability of public transport system. Furthermore, this concept will create a more equitable, efficient and environmentally sustainable urban form.
The main objective of densification is to ensure the following:

- Making more efficient use of land;
- Increase the marketability of the city;
- Minimise inequality;
- Reduce private vehicle dependency through the investment in sustainable modes of public transport;
- Create quality and sustainable urban environment, while assisting in protecting agricultural land and conservation areas;
- Improve use of service infrastructure;

The programme for consolidation and densification ensures that the urban environment encompasses essential qualities such as diversity, opportunity, sense of place, uniqueness and place of choice. To effectively increase density and thereby reduce urban sprawl, future densities should average at least 30 to 40 units per hectare (gross) in new areas. Current densities average 20 units per hectare. It is predicted that more than 80% of future residential demand will be for low-income housing. In view of the need for densification, it is this sector that will, of necessity, be most affected. The practice of creating erven of 200 - 300m² for low-income housing is unsustainable from an economic and land utilisation point of view. Increased densities on the other hand can decrease land and servicing infrastructure costs as well as enhancing the viability of public transport systems. Densification can be achieved through a number of mechanisms, these include:

- Higher density urban development;
- Mixing of compatible land uses;
- Concentration of high residential and non-residential uses along viable public and higher-order economic activities.

This approach is not only encouraged within nodes and corridors but it should be rolled out in various suburban areas within a short distance ride from the CBD. However, higher densities should be contextually appropriate with the surrounding
land uses and conditions. Factors which should be taken into consideration for consolidation densification approach are as follows:

- Location and prominence within the city;
- Opportunities for development;
- Existing infrastructure;
- Accessibility;
- Environmental considerations;
- Socio-economic characteristics;
- Market demand;
- Land availability and costs;
- Suitable development controls

In principle, nodes and corridors have been earmarked as key areas for densification. However, the Metropolitan Spatial Development Framework has identified other areas which are deemed suitable for consolidation and densification as per the above mentioned criteria.
Figure 35: Densification within 10Km of CBD. (Source: NMBM, Human Settlement Plan 2011)

Figure 36: Densification within 10Km of Coega IDZ. (Source: NMBM, Human Settlement Plan 2011)
6.3.7 Restructuring Zones

Restructuring Zones (Refer to figure 38) are Geographic Areas that are identified by Council and supported by province for targeted, focused investment. Generally, Restructuring Zones are Areas characterized by the following dysfunctions:

- **Spatial Restructuring** by bringing lower income people into areas where there are major economic opportunities and from which they would otherwise be excluded because of the dynamics of the land market on the one hand and the effects of land use planning instruments on the other hand, etc.
- **Social Restructuring** by promoting a mix of race and classes.
- **Economic Restructuring** by promoting spatial access to economic opportunity and promoting job creation.
Six (6) Restructuring Zones have been identified and approved by the NMBM Council and Provincial Authorities, namely:

- Mandate Area of the Mandela Bay Development Agency
- Walmer Allotment Area (Walmer Heights, Walmer Downs and Walmer)
- Mount Road Allotment Area (Mount Croix, Fairview
- Uitenhage CBD
- Despatch CBD

According to the Human Settlement Plan, additional Restructuring Zones have been identified and approved by Council. A broad brush analysis of the proposed Restructuring Zones is discussed below:
<table>
<thead>
<tr>
<th>NAME</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parsonsvei</td>
<td>Large tracts of privately owned land situated 10kms west of the CBD</td>
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<tr>
<td>Lorraine</td>
<td>Potential for infill development on privately owned land approximately 12-15km south west of the CBD.</td>
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<tr>
<td>Motherwell</td>
<td>Situated between 25-30km from the CBD and 5-10 km from Coega. Designated as a Presidential Urban Renewal Programme and comprises large tracts of publicly owned land with infill potential and informal housing. Although it is located far from the CBD and major employment areas although proximity to Coega IDZ and Markman Industrial Area is a major advantage.</td>
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<tr>
<td>Summerstrand</td>
<td>Located 5kms for the East of CBD, in a high income residential area and major tourist destination in the City. Publicly and privately owned vacant land is limited and the bulk of development would require redevelopment of existing properties at higher densities. Proximity to the university makes it ideal for development of student accommodation. The cost to access land, property and social resistance to change is likely to be high.</td>
</tr>
<tr>
<td>Wells Estate</td>
<td>Situated 10kms to the North-East of the CBD, with ease of access to the City via the N2, (±10 minutes) to the Coega IDZ (±5kms), close to the St Georges/ Wells Estate, Coastal Recreation belt (±10 minutes walk), has large tracts of publicly owned land, portion of which is already planned and developed for low cost (RDP) Housing. Vacant land adjacent to the Bluewater Bay and Amsterdamhoek suburbs which is ideal for the development of an Integrated Residential area.</td>
</tr>
<tr>
<td>Hunters Retreat</td>
<td>Situated approximately 15kms on the western outskirts of the City along the N2. Part of the area is earmarked for the development of the Bay West Regional Shopping Mall and Integrated Residential development. Area is characterised by large tracks of vacant public and privately owned land that can be developed around the</td>
</tr>
<tr>
<td>Proposed Regional Mall</td>
<td>for a variety of mixed uses (e.g. residential, retail, commercial, etc.)</td>
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<tr>
<td><strong>Newton Park</strong></td>
<td>Situated 5kms for the west of the CBD and contains significant</td>
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<td>residential, commercial, retail and community facilities, including</td>
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<td>the 42 000m². Greenacres Regional Shopping Centre. Opportunity</td>
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<td></td>
<td>exists to redevelop existing and developed residential properties</td>
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<td></td>
<td>some of which have been zoned for Business III or Business I in</td>
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<td></td>
<td>line with the out-dated Policy Plan for the Newton Park Area. Area</td>
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<td></td>
<td>is ideal for residential intensification served by a major public</td>
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<td></td>
<td>transport corridor (Cape Road) to the west of the City due to the</td>
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<td></td>
<td>large size of residential erven, low coverage, single storey and</td>
</tr>
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<td></td>
<td>low density nature of the existing development.</td>
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<tr>
<td><strong>2010 World Cup</strong></td>
<td>The 2010 Stadium Precinct and Environs is earmarked for</td>
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<tr>
<td><strong>Stadium and</strong></td>
<td>regeneration for leisure and entertainment, residential</td>
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<tr>
<td><strong>Environ</strong></td>
<td>intensification, SMME development and retail given the good</td>
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<td></td>
<td>location at the northern edge of the CBD and at the confluence</td>
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<td></td>
<td>major routes, public transport corridors and IPTS Routes (Harrower/</td>
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<td></td>
<td>Standford Road, Govan Mbeki, Kempston Road and Commercial Road).</td>
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<td></td>
<td>Social housing projects will play a vital role in regenerating the</td>
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<td></td>
<td>area while adding adequate numbers to support the current and future</td>
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<td></td>
<td>public infrastructure such as IPTS and retail service areas.</td>
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</tbody>
</table>

Table 12: Additional Restructuring Zones Identified by the Council.

In the interest of spatial, social and economic restructuring; It is emphasized that ‘focused investment’ be primarily directed into the 10km radius surrounding each of the three main economic hubs of the metro (i.e. PE CBD, Uitenhage/Dispatch, and Coega IDZ). Social housing projects will sensitise economic growth around these nodes while creating opportunities for social and spatial restructuring.
6.3.8 Growth Management: Urban Edge/Urban Growth Boundary

The “urban edge or urban growth boundary” is a conceptual boundary delineating the urban area from peri-urban and rural hinterland. Outside the “urban fence” the land use will be predominantly agricultural with allowances and regulations for different types of agricultural activities and for rural developments. The “urban fence” is not a physical element, but rather identified by a spatial differentiation in proposed land use intensity between what is inside the fence (urban development) and what is outside the fence (peri-urban and rural developments including small Metropolitan open space, agricultural small-holdings, intensive farming, grazing and game farms).

The urban edge is aimed at redirecting patterns of growth and encouraging development towards the greater Spatial Vision of the NMBMM. The urban edge boundary line will apply for the next 5 years and may be amended in subsequent reviews of the MSDF. The Development Principles contained in Chapter 2 and Section 42. (1) of SPLUMA and other cross-sectoral mandates must be taken into account when considering applications within and outside the urban edge boundary.

6.3.7.1 Land Uses within the Urban Edge/urban growth boundary:

Land uses within the urban edge that are consistent with the relevant NMBMM-SDF, Local Spatial Development Plans (LSDFs)/Structure Plans, the Land Use Management Plan and/or Town Planning Scheme (s), Precinct Plans and spatial development management resolutions passed by the Council will be permitted subject to the normal procedures and legislation e.g. environmental, transportation and desirability requirements, among other issues. The area inside the urban edge does not imply that development rights are guaranteed. However the intensification of development within the urban edge will be encouraged, in light of the fact that higher densities promote conglomerate economies, efficient utilization of services and infrastructure among various factors, and subsequently sustainable growth of the City.
Figure 39: Urban Edge/Growth Development Boundary. (Source: NMBM GIS, 2015)
The Baywest Shopping Mall, the biggest in the Eastern Cape, emerges as an anchor development in the Western Suburbs and a significant node. Notwithstanding the environmental sensitivity the land to the west of the Baywest Shopping Mall, mixed residential densities are encouraged on land surrounding the Baywest Node. Urban sprawl is discouraged on the northern side of the urban edge with the exception of areas close to the main urban nodes of Uitenhage and Dispatch.

The following urban edge/urban growth boundary adjustments have been made (Refer to Figure: 39):

1. Driftsands to include Mega Project 2 in terms of the Human Settlement Plan;
2. Land parcels on the Western and Southern side of the Bay West Development to include Grogro Informal Settlement and also create opportunities for diversified development in the small farm holdings in the vicinity. With no prospects of being used for viable agricultural activities.
3. Remainder Erf 8 Parsonsvei and the PPC owned land in Parsonsvei that currently falls into Van Der Kemps Kloof Reserve to permit some urban development based on conservation ethos.
4. Western section of Kwanobuhle to create opportunities for residential developments in light of the shortages of land for housing development in the Greater Uitenhage area.
5. Amanzi Estate, North of Motherwell, to create development potential for mixed use housing typologies and integration opportunities (Middle Income and, or High Income developments).
6. Inclusion of Van Der Kemp’s Kloof. The development around this area is envisaged to integrate the built urban form and the natural conservation areas in the same manner as that of Settler’s Park Nature Reserve.
7. The expansion of the urban edge to include the Van Der Kemp’s Kloof enabled a synergy with the St. Albans development which shall form part of the greater urban edge.

In addition to the main objectives of this SDF the final SDF will be submitted to the Eastern Cape MEC for Economic Development, Environmental Affairs and Tourism for adoption of the determined urban edges in terms of the 2014 National Environmental Impact Assessment [EIA] Regulations. The developments in the “new
urban edge” extension should take cognisance of bio-physical natural resources and development designs to integrate the critical environmental areas with human settlements.

6.3.7.2 Land Uses outside the Urban Edge/urban growth boundary

Local and Provincial legislation relating to the development of areas outside the urban edge must be taken into account, where applicable.

The existing residential nodes of Rocklands, Seaview and Witteklip located outside the urban edge are recognised as satellite growth-points and their expansion must be managed with the notion of convergence with the development in the City in the long-run. Land uses that are peri-urban in nature are more desirable outside the boundaries of the main urban edge and the boundaries of growth-points of Rocklands, Seaview and Witteklip. Agricultural use of the properties abutting these residential nodes must be encouraged to stimulate economic development within these nodes and the City. Low-intensity land, such as agricultural holdings, peri-urban residential uses, low-intensity service industries (typically those occurring on agricultural holdings), as well as urban agriculture are encouraged in the fringe area around the urban edge to save as a transition with the rural hinterland.

Road networks linking the rural hinterland and the city should be upgraded in order to strengthen the economic ties taking into cognisance the services provided by the Port for the shipping of farm produce.

There is also a need to provide land for cultural uses (Abakwetha) and animal rearing. Detailed studies in the form of precinct plans and the identification of land for such uses need to be commissioned and budgeted for.

6.3.8 Proposals per Focus Area

The Municipality has a number of strategic initiatives that aim to enhance economic development of the city. These are spatially illustrated in the Figure 38 (below). The Municipality is currently evaluating and prioritising these initiatives.
Figure 40: NMBM Spatial Development Plan 2015
6.3.8.1 Mega Projects

The National Minister of Human Settlements in her July 2014 Budget Speech identified the need for strategic and integrated spatial master planning and the identification and implementation of Mega Projects in priority areas. The identified Mega Projects which are in the process of being prepared for consideration by Council are as follows (Refer to Figure: 39):

- Mega Project 1: Motherwell West NU 12, 29-31
- Mega Project 2: Walmer/Summerstrand Ext./Driftsands Mixed Housing
- Mega Project 3: Fairview West
- Mega Project 4: Greater Happy Valley Project Area
- Mega Project 5: Greater Uitenhage-Despatch-Kwanobuhle Project Area

6.3.8.2 Mandela Bay Development Agency (MBDA) Projects

The strategic projects implemented by the Municipality’s developmental entity, the MBDA, have resulted in increases in property valuations and renewed economic activity, with increased rates income for the Municipality. A study conducted for the Municipality in the Central Business District has confirmed that investments by the entity have resulted in significant property value increases, increased business turnover, and increased rates, business expansion and upgrades.

The following projects are now ready for implementation or are being implemented:

- Tramways Building redevelopment (under implementation)
- Telkom Park / EPRU Stadium redevelopment
- 2010 Stadium Precinct development
- Mermaids Precinct mixed-use development
- International Convention Centre
The Coega IDZ was established to stimulate investment in the region. It is required to fund and provide the infrastructure dedicated to its operations. The NMBM and the Coega Development Corporation (CDC) have agreements in place which outlines the developmental relationship. To date, the CDC has funded all projects specifically related to internal services and major road linkages. However, shortcomings in water and sanitation have been identified as an area of concern by both the NMBM and CDC. Consequently, a plan was developed to identify the gap. Failure to address the gap will mean that the IDZ will not be able to develop further. It will cost approximately R4.3 billion to provide bulk water and sewer infrastructure.

To date, the NMBM has commenced with planning the following projects, which are critically required for the development of the Coega IDZ:

(i) Nooitgedacht Low Level Scheme (NLLS):

Contracts for the commencement of Phase 2 of the Scheme have been awarded and work is scheduled for completion by March 2017. Funding remains a constraint to commence with Phase 3 to complete the project. This is discussed in more detail later in this document.

(ii) Coega Waste Water Treatment Works and Sea Outfall:

Preliminary planning has commenced, but designs cannot proceed, because of funding constraints, given the size of the project.

(iii) Coega Return Effluent Scheme:

Due to the scale (finance) of the projects, the NMBM is unable to commence with detailed design. The NMBM has commenced with preliminary planning and as such an ROD has been issued for the system. With the cooperation of the Coega
Development Corporation (CDC), detailed design has commenced and the Return Effluent Reservoir with the outlet pipework at the Coega Kop site is being constructed with funding from the CDC.

The City Support Programme includes an exercise to evaluate infrastructure services and financing. The need and options for the provision of the above Schemes is presently being evaluated by a team from the World Bank.

(iv) Project Mthombo

Project Mthombo is an oil refinery planned to be located in the Coega Industrial Development Zone. The pre-feasibility study was undertaken by PETROSA, identifying Nelson Mandela Bay as the preferred site for the oil refinery. A number of studies to support the establishment of the refinery have been completed and have been referred to the Department of Energy for further consideration. The project is expected to create 1000 direct jobs at an operational level, 23 000 jobs during construction, and 17 000 indirect jobs. The Municipality is engaged with processes to determine whether the project will be located in Nelson Mandela Bay or not.

v) Coega IDZ – Uitenhage NMBLP Logistics Corridor

To improve logistics efficiencies between the Coega IDZ and Uitenhage, provision is made for the extension of Neptune Road to the intersection of the MR450 and MR460. The infrastructure will improve the competitiveness of the Port of Ngqura and enhance the development of the NMBLP and Coega IDZ whilst servicing the development of Motherwell North residential area.

6.3.8.4 N2 Nodal Development

Urban development in the N2 Node is driven by the private sector and comprises largely mixed-use and residential developments aimed, at the high, middle and affordable market segments. The anchor in this development node is the just completed Bay West Shopping Mall at a cost of R2 billion. The greater N2 node is
identified as a Catalytic Project of NMBM and the full development of the greater node will be actively pursued.

6.3.8.5 Red Location Cultural Precinct

Located in the historic Red Location area of Ibhayi, the precinct has been developed, consisting of the Apartheid Museum, Art Gallery, Electronic Library and Backpackers’ Lodge. The Apartheid Museum was completed in 2004.

The Art Gallery and Electronic Library buildings are complete and were handed over to Council during April 2011. The business plan for the performing arts complex has been completed and the National Department of Arts and Culture has made R500 million available for this project. The last phase of the project will consist of a school of music.

The success of the Red Location Initiative is partly depended on the Urban Renewal of the Greater Ibhayi Area as this would enable broader urban renewal beyond the localised impact of the Red Location and Njoli Square Precincts upgrades.

6.3.8.6 Van der Kemp’s Kloof

Van der Kemp’s Kloof has been identified as a priority area for biodiversity conservation in terms of the Nelson Mandela Metropolitan Open Space System (NMMOSS) and is in the process of being proclaimed as a nature reserve.

The Van Der Kemp’s Kloof project stretches from Helenvale to Chatty (beyond Booysens Park), including the Chatty Gorge east of Stanford Road, up to the Hopewell Conservation Area. It is a sizeable area with the potential to be developed holistically and in an environmentally sensitive way. The area offers opportunities for the development of hiking trails, picnic sites, recreational dams, game farming, gorge activities, tourism facilities and accommodation. The Kloof is divided into different nodes; the Kuyga Node, which was completed at the end of October 2010, and the
Grootkloof Node, which was completed earlier this year (2014). Work on the Mountain Bike and Hiking Trail, which commenced in November 2010, is now completed. The short- to medium-term plan is to find investors who will help develop and manage some of the proposed facilities and activities; however, this will required the Nelson Mandela Bay Municipality to source funding to provide basic infrastructure.

6.3.8.7 Revitalisation of Uitenhage CBD

Phases one and two of the Uitenhage CBD upgrade, which focused on the upgrading of the historic Uitenhage Market Square located in the heart of Uitenhage, are complete.

Funded by the Nelson Mandela Bay Municipality, the MBDA has spent R30 million on the upgrading of the Market Square, which included the transformation of the space from a parking area to a civic and pedestrian central space.

6.3.8.8 Njoli Square Development

This project entails the development of a major community taxi/commercial centre where the Njoli Centre presently exists. After more than five years of planning, negotiation and sourcing of funding, the project is moving towards the implementation stage.

The development is anticipated to have a positive economic impact on Nelson Mandela Bay, with initial projections indicating that the project will, directly and indirectly, contribute R189 million to the Eastern Cape GDP during the construction period. During the first five years of operation, the Project will contribute around R107 million to the Eastern Cape GDP. As many as 2000 jobs can be created during construction, with approximately 200 permanent jobs being created.
The success of the Njoli Square Upgrading Initiative is closely linked to the upgrading of the Greater Ibhayi area. Njoli is linked to Ibhayi and Bethelsdorp Hubs in the Urban Network Strategy.

Njoli Square upgrading is funded by the Neighbourhood Development Partnership Grant (NDPG) and is located in the Urban Network Strategy as a catalytic project.

6.3.8.9 Mermaid’s Precinct

The project known as the Mermaid’s Precinct is located in the heart of the CBD between Russell Road and the Donkin Row houses. The mixed use area will comprise social housing, residential development and an urban recreational node and complimentary mixed uses.

The area is currently derelict and vandalised and comprises both municipal and privately owned erven. It is ripe for redevelopment. All necessary studies and master planning are complete and implementation has commenced.

It is envisaged that the Municipality in conjunction with the MBDA, private sector and social housing institution will develop the area. Presently, funding is a constraint in taking the project forward. The project is identified as a catalytic project and conforms to the definition of a Catalytic Urban Development Projects in the BEPP Guidance note 2015/16- 2017/18.

6.3.8.10 North End Coastal Development

The North End Coastal Development project aims to reinstate the existing degraded coastal environment north of the Port Elizabeth Harbour over a 30-year period, creating an attractive urban gateway entrance to Nelson Mandela Bay. The project will help stimulate tourism and the economic development of the region. The first phase of the project will create a 500m long beachfront, with a direct link to the adjacent Nelson Mandela Bay Stadium, New Brighton and neighbouring communities. The project can be implemented only in partnership with Transnet and
the National Ports Authority. A task team comprising the Nelson Mandela Bay Municipality, Transnet and other relevant stakeholders is to be established to develop a process plan.

6.3.8.11 Waterfront Development-Port / Baakens Precinct:

There has been recent focus on plans to develop the Waterfront at King’s Beach area. Transnet have agreed to move the oil tanks in 2016 and the manganese ore facility to the Coega IDZ in 2019. In the port planning for the port post-relocation, Transnet has agreed that a portion of land will be set aside for a marina/commercial development and this portion will not fall under the strict port security controls. A Steering Committee comprising of Transnet, the MBDA, NMBM and the ECDC is currently working to ensure there is a well formulated Master Plan to determine the extent and depth of retail, residential, office, leisure/entertainment/tourism development as well as a Master Plan that can be implemented over time. The Port / Baakens precinct between the port and the Bridge Street Brewery as part of the broader Waterfront Development plan is envisaged to become a new tourism/leisure/entertainment precinct and it will be a further catalyst for the re-development of the area over time for non-industrial purposes.

The development of the Baakens Valley Precinct is identified as one of the Catalytic Projects and has been through a preliminary viability assessment by the DBSA Project Preparation Facility which has concluded that the project is viable.

6.3.8.12 Bayworld Revival:

Bayworld was one of the key tourism attractions in the region, however, the facility has had funding challenges especially after the closing of the oceanarium. Due to the importance of this facility, a special intervention needs to be made in order to ensure the revival of this facility and the plans once again include an aquarium, sea water features, dolphinarium and other tourist facilities. Bayworld is presently owned by the Department of Sports, Recreation, Arts and Culture (DSRAC) and a proposal that the operations and management of the facility be handed over to the Nelson Mandela Bay Municipality was made to the Department of Sports, Recreation, Arts and Culture (DSRAC).
It is intended that the Nelson Mandela Bay Municipality will enter into an agreement with the Department of Sports, Recreation, Arts and Culture and later hand over the facility to MBDA for project management purposes. The MBDA will therefore be responsible for the final design, sourcing the funding, which will be around R600 million, overseeing construction and the appointment of an operator as per case of the Nelson Mandela Bay Stadium. A Provincial Cabinet Memorandum has been prepared and submitted to the Department’s HOD, the Director-General of DSRAC for approval. There are on-going discussions with the Department to fast track the hand-over process.

6.3.8.13 Apple Express Rail Link

The closure of the Apple Express has negatively impacted the local tourism industry. In a process of reviving the Apple Express, it became important that a study be done to ascertain the development potential of the Apple Express line between Port Elizabeth and Avontuur in the Western Cape, or a portion of the development of this line for the purposes of real estate, freight, passenger and tourism. The study concluded that this line was not suitable for pure tourism purposes as this will not be sustainable.

Through the intervention of the MEC for Department of Economic Affairs, Environment and Tourism (DEAET), an amount of R3,8 million was made available for a feasibility study around the Apple Express. The Apple Express study will commence shortly.

The study’s objective is to make a compelling argument to Transnet to make the line available on a lease basis to a development agent.
6.3.8.14 Statue of Liberation

This project is seen to help grow the tourism products in Nelson Mandela Bay and serve as an iconic attraction that will be compel visitors to come to Nelson Mandela Bay. This will also provide an identity for the Nelson Mandela Bay region. Critical to the way forward and the implementation of the project is the identification of a suitable site.

6.3.8.15 Motherwell Node

Development in the Motherwell area will comprise municipal and private sector developments, of which the municipal component will largely entail mixed residential development opportunities in the lower income segments. The private sector component will focus on mixed land use and residential development in the low, middle and higher end housing segments.

6.3.8.16 Greater Addo National Elephant Park and Baviaanskloof Conservancy

The Greater Addo National Elephant Park and the Baviaanskloof Mega-Reserve projects seek to develop and increase the sustainability of two prime conservation areas in the Eastern Cape. Although located outside the jurisdiction of the Nelson Mandela Bay Municipality, they will, on their successful development, form vital components of the tourism and natural attractions in the region.

6.3.8.17 Private sector developments

A number of private sector developments are taking place in the city, in tandem with municipal developments. These include the N2 node, incorporating the Bay West Mall Shopping Complex, and Jachtvlakte/KwaNobuhle. The municipal capital investment in these projects is reflected in the Budget.
Figure 40, highlights the major development areas and urban growth directions in the Metro. They show areas of new development, largely residential and mixed-use development, the major industrial development areas, as well as areas in which urban renewal and infill development (regeneration development) is taking place. Growth directions are mainly in a western, north-western and northerly direction.

Urban development in the N2 Node is driven by the private sector and comprises largely mixed-use and residential developments aimed, at the high, middle and affordable market segments. The anchor in this development node is the Bay West Shopping Mall, currently under construction at a cost of R2 billion.

The development in the Chatty Jachtvlakte Node involves mixed-use and residential development by the private sector and the Municipality, with an estimated yield of 32000 new residential opportunities in the middle, affordable (rental and ownership) and subsidised housing segments.
7. IMPLEMENTATION FRAMEWORK

There are various land use policies which are aimed at addressing certain issues associated with certain land uses by setting guidelines. Some of these policies are new while others have been approved but are under review. These are summarised below:

In addition to the above mentioned policies, the municipal spatial vision and form needs to be formulated in the form of Local Spatial Development Framework and Precinct Plans. As the land use policies, these spatial guidelines are aimed at guiding development at a larger scale. The MSDF proposes detailed studies to determine the categories and the potential of the emerging nodes in the Municipality. Intensification of mixed use developments around the node and major transportation routes in the immediate vicinity is encouraged.

7.1 Capital Investment Framework

Subsequent to assessing and evaluating the municipal area in terms of its unique characteristics and development challenges as well as potential opportunities, a number of key project proposals or initiatives have been identified that would serve to drive the key development imperatives for the city. The following investment framework is a summary of strategic, long term projects identified as a result of numerous planning processes which identifies specific target areas for public investment. The concept of targeting capital spending in specific areas is to maximise service delivery to communities, leverage private sector investment and support growth of the city, the spatial transformation and efficient functioning of the city being the underpinning principles.

7.1.1 Strategic Infrastructure Projects (SIPs):

It should be noted that the usual Capital Budget provision for planned infrastructure projects has been made for the entire Metropolitan area and would be indicated in
the municipal Budget. The following projects however have been identified as being key development infrastructure investment requirements for future development.

7.1.2 Mega Projects

As mentioned earlier, the National Minister of Human Settlements emphasized the need for the municipality to embark on “Mega Projects” in order to maximise the scale and impact of housing projects through close collaboration between the various spheres of government. The following key outcomes are applicable:

- Eradication of the bucket system within 2 years
- Prioritising housing for military veterans within 12 months:
- Shelter for vulnerable children
- Employer assisted housing
- Land and Buildings for Social Housing
- Affordable and Rental housing provision at scale
- Land assembly for Spatial Restructuring starting with well-located public owned land
- Increase capacity for municipality to deliver housing

In addition to the USDG and HSDG grant allocations, the National Department of Human Settlement has also allocated approximately R77,1 million Rand for the utilisation for the planning and implementation of the megaprojects in the MTEF period as follows:

- 2014/2015 : R37,7 million
- 2015/2016 : R12.5 million
- 2016/2017 : R12.5 million
- 2017/2018 R14.4 million
This funding will only be made if the Mega Projects are included as part of the Accreditation Business Plan and approved by Council.

The Human Settlements Directorate has identified 6 Priority Mega Project Areas in which a number of “mega projects” to address the above outcomes are planned in response to the challenges set by the above outcomes. The six priority areas have been identified within which a number of small, medium and large projects are various stages of planning and implementation.

7.1.3 Economic Development Strategic Initiatives/Catalytic Projects

In terms of the requirements of the Urban Network Strategy the municipality has to develop a Built Environment Performance Plan (BEPP) which seeks to identify and integrate key development initiatives in order to improve the sustainability of the municipality from spatial, institutional and financial perspective. A major focus of the BEPP and the capital budget is the upgrading and development of informal areas in terms of the ongoing implementation of the housing programme. At the time of compiling this SDF review, the most recent draft of the BEPP (i.e. for the 2015/2016 financial years) is currently being undertaken and the process has not been concluded. The document is therefore still being refined and is to be consulted with various stakeholders prior to its approval by Council and submission to National Treasury.

From a strategic perspective, the BEPP can be seen as representing the investment strategy of the Municipality in fulfilling its objectives towards a more equitable city, transformed spatial realities and a more compact city development. (Source: BEPP.2015/2016)

7.1.4 Area Based Initiatives: Urban Renewal (ARI”s)

There are five area-based management initiatives. These are:

(a). Mandela Bay Development Agency (MBDA)

The Mandela Bay Development Agency (MBDA), established in 2003 by the Nelson Mandela Bay Municipality (NMBM) with the support of the Industrial Development Corporation (IDC), implements urban regeneration in Nelson Mandela Bay's inner city. The aim is to promote economic and tourism development against the backdrop
of urban renewal. The MBDA is a Municipal Entity. The MBDA’s mandate also extends to the Uitenhage Inner-city and other development and township areas.

The philosophy of the MBDA which applies to their projects is to create well researched, community participated, catalytic infrastructure projects and services through public sector investment to attract private sector investment. In this way, a more diverse economy including tourism and real estate is created.

A study conducted for the Municipality in the Central Business District has confirmed that investments by the entity have resulted in significant property value increases, increased business turnover, business expansion and upgrades and consequent increased rates.

(b). Uitenhage-Despatch Development Initiative (UDDI)

The UDDI was established in 2000 as an initiative between the private sector (Volkswagen), and NMBM to focus on development in the Uitenhage and Despatch area. The UDDI, as a facilitation body for the promotion of sustainable development in Nelson Mandela Bay, with the main focus on Uitenhage and Despatch, is an implementer for some of the Metro’s programmes in the Uitenhage/Despatch area. The UDDI’s goal is to stimulate special and economic sector development in the sub-region to regenerate the ailing economies of this region of Nelson Mandela Bay.

The UDDI has three strategic focus areas, aligned to the IDP of the Nelson Mandela Bay Municipality. These three areas are:

- Town improvement
- Enterprise development
- Spatial economic linkages between Uitenhage and Despatch

The initiatives under the three focus areas have been set in line with the UDDI’s three-year strategic plan, with a strong bias towards job creation, skills development, education improvement, SMME sector development and the general socio-economic improvement of the Uitenhage and Despatch communities.

(c). Motherwell Urban Renewal Programme (MURP)
Motherwell is one of eight pilot areas targeted by the Presidential programme for Urban Renewal. The main objectives of this programme are to eradicate crime, poverty and joblessness in the targeted areas.

Motherwell was established in 1982 to accommodate people from informal and illegal dwellings built on the flood plains in Soweto-on-Sea, and to cater for the influx of people into the urban area.

Motherwell was primarily developed as a residential area and the necessary infrastructure for recreational facilities, basic amenities and job creation did not keep pace with the growth of the area.

MURP facilitated a number of projects including Hawkers Trading Facilities, Car Washes, a hydroponics project, a Business Development Service Centre, Cleaning and Greening project, a peace park and the NU 2 Stadium.

(d) Helenvale Urban Renewal Programme (HURP)

Helenvale, as an area urgently in need of upgrading, led to the establishment of the Helenvale Urban Renewal Programme, based on the Motherwell Urban Renewal Programme. This Programme has also adopted a multi-faceted approach to the upgrading of amenities and services in Helenvale and to fostering employment and community participation. The MBDA is assisting with development implementation.

(e) Coega Development Corporation

The Coega Development Corporation (Pty) Ltd (“CDC”) was established in 1999 to develop and operate the Coega Industrial Development Zone (“IDZ”). The IDZ is intended to be the major employment generator of the metro and region. As such the relationship and cooperation between NMBM and the CDC is very important.

The NMBM and the CDC have an agreement in place that outlines this developmental relationship. To date, the CDC has funded all projects specifically related to internal services and major road linkages.

Water and sanitation for the CDC and NMBM have been identified as areas of concern by the NMBM. Consequently, a plan was developed to identify the gap.
Failure to address the gap will mean that the IDZ will not be able to develop further. It will cost approximately R4.3 billion to provide bulk water and sewer infrastructure.

The aforementioned projects and initiatives are tabulated and categorised according to the geographical cluster in which each project is located and the type of project as described below:

<table>
<thead>
<tr>
<th>Target Area</th>
<th>Projects</th>
<th>Description</th>
<th>Funding source</th>
<th>Estimated Capital Budget</th>
<th>Time frame</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UITENHAGE</strong></td>
<td>Amendment of the Uitenhage/Despatch LSDF to include the emended Urban Edge</td>
<td>Amendment of the Uitenhage/Despatch LSDF to include the emended Urban Edge</td>
<td>ICDG</td>
<td>R1m</td>
<td>2015 - 17</td>
</tr>
<tr>
<td><strong>UITENHAGE</strong></td>
<td>Project Area 5a: KwaNobuhle Area 11 Mixed Housing (Mega Project)</td>
<td>Mixed and integrated Housing (4515 units)</td>
<td>HSDG/USDG</td>
<td>R1.4 Billion</td>
<td>Project under implementation stage. Completion date to be determined at a later stage.</td>
</tr>
<tr>
<td><strong>UITENHAGE</strong></td>
<td>Project Area 5b: Consolidation of Urban Spaces through infill and urban upgrading (Mega Project)</td>
<td>Mixed and integrated Housing (14800 units)</td>
<td>HSDG/USDG</td>
<td>R4.1 Billion</td>
<td>Project under implementation stage. Completion date to be determined at a later stage.</td>
</tr>
<tr>
<td><strong>UITENHAGE</strong></td>
<td>UDDI Initiatives (ARI's)</td>
<td>Revitalisation of Uitenhage CBD</td>
<td>Information to be made available on completion of the recent BEPP (i.e. for the 2015-16 financial years)</td>
<td>Information to be made available on completion of the recent BEPP (i.e. for the 2015-16 financial years)</td>
<td>Information to be made available on completion of the recent BEPP (i.e. for the 2015-16 financial years)</td>
</tr>
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## UITENHAGE, DESPATCH, KWANOBULE AND BLOEMENDAL CLUSTER

<table>
<thead>
<tr>
<th>Target Area</th>
<th>Projects</th>
<th>Description</th>
<th>Funding source</th>
<th>Estimated Capital Budget</th>
<th>Time frame</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UITENHAGE</strong></td>
<td>Chatty Link Road (Catalytic Project)</td>
<td>Construction of road linking Standford Road and Bloemendal Arterials to unlock land for development</td>
<td>Information to be made available on completion of the recent BEPP (i.e. for the 2015-16 financial years)</td>
<td>Information to be made available on completion of the recent BEPP (i.e. for the 2015-16 financial years)</td>
<td>Information to be made available on completion of the recent BEPP (i.e. for the 2015-16 financial years)</td>
</tr>
<tr>
<td></td>
<td>Bloemendal Arterial (Catalytic Project)</td>
<td>Catalytic Link Road (connecting, Njoli, Chatty and Jachtvlakte Hubs)</td>
<td>ICDG</td>
<td>Phase 1: R3.2 million.</td>
<td>Phase 2: R108 million</td>
</tr>
</tbody>
</table>

## MOTHERWELL WELLS ESTATE CLUSTER

<table>
<thead>
<tr>
<th>Target Area</th>
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<th>Funding source</th>
<th>Estimated Capital Budget</th>
<th>Time frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motherwell</td>
<td>Amendment of the Greater Motherwell LSDF to include the emended Urban Edge</td>
<td>Amendment of the Greater Motherwell LSDF to include the emended Urban Edge</td>
<td>ICDG</td>
<td>R1 million</td>
<td>2015 - 17</td>
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<td>Motherwell</td>
<td>Motherwell Urban Renewal Programme (ARI’s)</td>
<td>Development of an SMME hive.</td>
<td>TBA</td>
<td>TBA</td>
<td>TBA</td>
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<tr>
<td>Motherwell</td>
<td>Project Area 1: Motherwell West IRDP Project (Mega Project)</td>
<td>Mixed and integrated Housing (3177 units)</td>
<td>HSDG/USDG</td>
<td>R3.37 Billion</td>
<td>Project under implementation stage. Completion date to be determined at a later stage</td>
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<td>COEGA IDZ</td>
<td>COEGA IDZ development (EDSI’s)</td>
<td>Extension of Neptune Road and logistics linkage to</td>
<td>Project still to be developed, budget</td>
<td>TBA</td>
<td>TBA</td>
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### MOTHERWELL WELLS ESTATE CLUSTER

<table>
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</thead>
<tbody>
<tr>
<td></td>
<td>Uitenhage via the R334.</td>
<td>not allocated.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Addo</td>
<td>Greater Addo National Park (EDSI's)</td>
<td>Upgrading of Addo Road Development of Tourism Node</td>
<td>Design for road upgrade completed by Provincial government. Budgets not allocated</td>
<td>TBA</td>
<td></td>
</tr>
</tbody>
</table>

### IBHAYI BETHELSDORP CLUSTER

<table>
<thead>
<tr>
<th>Target Area</th>
<th>Projects</th>
<th>Description</th>
<th>Funding source</th>
<th>Estimated Capital Budget</th>
<th>Time frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater Ibhayi Area</td>
<td>Red Location Njoli Square (ARI's)</td>
<td>Completion of Red Location Museum. Njoli Square Redevelopment and Upgrading</td>
<td>NDPG / NMBM</td>
<td>R500 million</td>
<td>TBA</td>
</tr>
<tr>
<td>KwaZakhele</td>
<td>Improve road access to KwaZakhele Township (SIP's)</td>
<td>Upgrade John Tallant Road, Construction of Link Road to KwaZakhele, upgrade of Grahamstown Road</td>
<td>R61 million</td>
<td>TBA</td>
<td></td>
</tr>
<tr>
<td>Helenvale</td>
<td>Project Area 6: De-densification and Urban Renewal of Helenvale Precinct (Mega Project)</td>
<td>Mixed and Integrated Housing Rectification and In-situ upgrading, (5110 Units</td>
<td>HSDG/USDG</td>
<td>R885 Million</td>
<td>Project under implementation stage. Completion date to be determined at a later stage</td>
</tr>
<tr>
<td>Helenvale</td>
<td>Helenvale Urban Renewal Area (ARI's)</td>
<td>Upgrading of Helenvale (Infrastructure development, Socio-economic development projects, Safety programmes</td>
<td>NMBM/ German Development Bank</td>
<td>R120 million</td>
<td>2015 to 2020</td>
</tr>
</tbody>
</table>
### SOUTHERN AREAS CLUSTER

<table>
<thead>
<tr>
<th>Target Area</th>
<th>Projects</th>
<th>Description</th>
<th>Funding source</th>
<th>Estimated Capital Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southern Areas</td>
<td>Amendment of the Greater Walmer LSDF.</td>
<td>Amendment of the Walmer/Fairview LSDF to include the emended along Circular Drive and Villiers Road</td>
<td>ICDG</td>
<td>R1 million</td>
</tr>
<tr>
<td>Summerstrand, Forest Hill, Driftsands, Walmer</td>
<td>Project Area 2: Forest Hill Ext, Summerstrand Ext, Driftsands Ext, Walmer Gqebere De-densification (Mega Project)</td>
<td>Mixed and Integrated Housing Project (15904 units) Bulk Infrastructure Augmentation</td>
<td>HSDG/USDG</td>
<td>R4.6 Billion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R102 Million</td>
</tr>
<tr>
<td>Fairview</td>
<td>Project Area 3: Fairview West Mixed Housing Project and Well located state land (Mega Project)</td>
<td></td>
<td>HSDG/USDG</td>
<td>R1.388 Billion</td>
</tr>
<tr>
<td>Summerstrand/ Happy Valley precinct</td>
<td>Project Area 4: Greater Happy Valley Precinct (Mega Project)</td>
<td>Project Area 4: Greater Happy Valley Precinct</td>
<td>HSDG/USDG</td>
<td>R 571 Million</td>
</tr>
<tr>
<td>Inner City/ Humewood Summerstrand</td>
<td>Telkom Park/ Rugby Stadium (EDSI’s)</td>
<td>Telkom Park/EPRU redevelopment</td>
<td>NMBM</td>
<td>Budgets not allocated</td>
</tr>
<tr>
<td>Summerstrand/Humewood</td>
<td>International Convention Centre (EDSI’s)</td>
<td>Development of an International Convention centre</td>
<td>NMBM</td>
<td>Project to be developed. No budget allocation</td>
</tr>
</tbody>
</table>

### CBD CLUSTER

<table>
<thead>
<tr>
<th>Target Area</th>
<th>Projects</th>
<th>Description</th>
<th>Funding source</th>
<th>Estimated Capital Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cape Road/ Cotswold</td>
<td>Cape Road LSD</td>
<td>Amendment of the Cape Road LSDF – recommended mixed use development on erven on the northern side fronting Cape Road (Cotswold)</td>
<td>ICDG</td>
<td>R1 million</td>
</tr>
<tr>
<td>MBDA mandate area</td>
<td>Inner city upgrading (ARI’s)</td>
<td>Upgrading Vuyisile Mini Sq, Tramways Building, Campanile Building, Mermaids Precinct</td>
<td>NMBM</td>
<td>R35 million</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Telkom Park/EPRU redevelopment</td>
<td></td>
<td>R120 million</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Budgets not allocated(</td>
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</table>
## CBD CLUSTER

<table>
<thead>
<tr>
<th>Target Area</th>
<th>Projects</th>
<th>Description</th>
<th>Funding source</th>
<th>Estimated Capital Budget</th>
<th>Time frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inner City</td>
<td>Mermaids Precinct (Catalytic Project)</td>
<td>Densification, Mixed Use Housing and Integration Project</td>
<td>Information to be made available on completion of the recent BEPP (i.e. for the 2015-16 financial years)</td>
<td></td>
<td>Projects still to be developed)</td>
</tr>
<tr>
<td>North End</td>
<td>Stadium Precinct Development (Catalytic Project)</td>
<td>Construction of road linking Stanford Road and Bloemendal Arterials to unlock land for development</td>
<td>Information to be made available on completion of the recent BEPP (i.e. for the 2015-16 financial years)</td>
<td></td>
<td>Information to be made available on completion of the recent BEPP (i.e. for the 2015-16 financial years)</td>
</tr>
<tr>
<td>North End</td>
<td>North End Coastal Development (EDSI's)</td>
<td>Beachfront Development and extension of tourism node</td>
<td>Long term project still to be developed. Budgets not allocated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integration zone 1 (CBD/Primary Node)</td>
<td>Mermaids Precinct (Catalytic Project)</td>
<td>Inner-city revitalisation, Densification, Mixed use Housing and Integration Project</td>
<td>R120 million</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integration zone 1 (CBD/Primary Node)</td>
<td>Lower Baakens Valley Precinct (Catalytic Project)</td>
<td>Inner city revitalization, Economic node, Tourism, Integration Project</td>
<td>Information to be made available on completion of the recent BEPP (i.e. for the 2015-16 financial years)</td>
<td></td>
<td>Information to be made available on completion of the recent BEPP (i.e. for the 2015-16 financial years)</td>
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</table>

## N2/WESTERN AREAS CLUSTER

<table>
<thead>
<tr>
<th>Target Area</th>
<th>Projects</th>
<th>Description</th>
<th>Funding source</th>
<th>Estimated Capital Budget</th>
<th>Time frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Areas</td>
<td>Amendment of the Western Suburbs LSDF to include the emended Urban Edge</td>
<td>Amendment of the Uitenhage/Dispatch LSDF to include the emended Urban Edge</td>
<td>ICDG</td>
<td>R1m</td>
<td>2015 - 17</td>
</tr>
<tr>
<td>Bay West / N2 North</td>
<td>N2 Nodal Development (Catalytic Project)</td>
<td>Retail, Light Industry, Mixed Use and Integrated Housing</td>
<td>Private Sector and Government</td>
<td>R12 billion</td>
<td>Shopping centre to be completed April 2015, Remainder</td>
</tr>
</tbody>
</table>
## N2/WESTERN AREAS CLUSTER

<table>
<thead>
<tr>
<th>Target Area</th>
<th>Projects</th>
<th>Description</th>
<th>Funding source</th>
<th>Estimated Capital Budget</th>
<th>Time frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corridor (Transit)</td>
<td>Western Arterial (Catalytic Project)</td>
<td>Link Road to improve connectivity to nodal areas, and mega projects</td>
<td>Public and Private</td>
<td>R400 million</td>
<td>2016 – 2018</td>
</tr>
</tbody>
</table>

## METROWIDE INITIATIVES

<table>
<thead>
<tr>
<th>Target Area</th>
<th>Projects</th>
<th>Description</th>
<th>Funding source</th>
<th>Estimated Capital Budget</th>
<th>Time frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>NMBMM (Rural)</td>
<td>Rural Management Policy</td>
<td>Alignment with the new urban edge</td>
<td>ICDG</td>
<td>R1 million</td>
<td>2016 - 2017</td>
</tr>
<tr>
<td>NMBMM</td>
<td>Land for Cultural Practices</td>
<td>Study for land development options for cultural activities (Abakwetha land)</td>
<td>ICDG</td>
<td>R800 000</td>
<td>2016 - 2017</td>
</tr>
<tr>
<td>NMBMM</td>
<td>Land for Urban Agriculture</td>
<td>Study for land development options for rearing</td>
<td>ICDG</td>
<td>R800 000</td>
<td>2016 - 2017</td>
</tr>
<tr>
<td>Informal Settlements</td>
<td>Bucket eradication and Informal settlements upgrade (SIP’s)</td>
<td>Construction of bulk services, reticulation services, relocation communities from stress areas, housing construction in destination areas</td>
<td>ICDG</td>
<td>R5.282 million</td>
<td>TBA</td>
</tr>
</tbody>
</table>
## METROWIDE INITIATIVES

<table>
<thead>
<tr>
<th>Target Area</th>
<th>Projects</th>
<th>Description</th>
<th>Funding source</th>
<th>Estimated Capital Budget</th>
<th>Time frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro wide</td>
<td>Waste water treatment (SIP’s)</td>
<td>Upgrading all WWTW to provide waterborne sanitation, Improve river water quality</td>
<td>R4.84 million</td>
<td>TBA</td>
<td></td>
</tr>
<tr>
<td>Major transport routes (Metro wide)</td>
<td>IPTS/BRT (SIP’s)</td>
<td>Provision of efficient, safe, sustainable, multi-modal public transport system</td>
<td>R2.5 billion</td>
<td>TBA</td>
<td></td>
</tr>
</tbody>
</table>

## SOCIAL HOUSING PROJECTS

<table>
<thead>
<tr>
<th>AREA</th>
<th>DELIVERY AGENT</th>
<th>FUNDING SOURCE</th>
<th>NO. OF UNITS</th>
<th>ESTIMATED BUDGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>WALMER COSMO-1</td>
<td>OWN HAVEN SOCIAL HOUSING INSTITUTION</td>
<td>SHRA RESTRUCTURING GRANT &amp; PROVINCIAL INST. GRANT</td>
<td>± 600 UNITS</td>
<td>± 150 MILLION</td>
</tr>
<tr>
<td>PARSONVLEI</td>
<td>OWN HAVEN SOCIAL HOUSING INSTITUTION</td>
<td>SHRA RESTRUCTURING GRANT &amp; PROVINCIAL INST. GRANT</td>
<td>±800 UNITS</td>
<td>±206 MILLION</td>
</tr>
<tr>
<td>WALMER COSMO-2</td>
<td>QHAMA SOCIAL HOUSING INSTITUTION</td>
<td>SHRA RESTRUCTURING GRANT &amp; PROVINCIAL INST. GRANT</td>
<td>±500 UNITS</td>
<td>±130 MILLION</td>
</tr>
<tr>
<td>SUNNYSIDE</td>
<td>QHAMA SOCIAL HOUSING INSTITUTION</td>
<td>SHRA RESTRUCTURING GRANT &amp; PROVINCIAL INST. GRANT</td>
<td>±225 UNITS</td>
<td>±58.5 MILLION</td>
</tr>
<tr>
<td>STEVE BIKO &amp; MUMFORD HOUSE</td>
<td>QHAMA SOCIAL HOUSING INSTITUTION</td>
<td>SHRA RESTRUCTURING GRANT &amp; PROVINCIAL INST. GRANT</td>
<td>±300 UNITS</td>
<td>±78 MILLION</td>
</tr>
<tr>
<td>COEGA VILLAGE</td>
<td>IMIZI</td>
<td>SHRA RESTRUCTURING</td>
<td>±500</td>
<td>±130 MILLION</td>
</tr>
<tr>
<td>Location</td>
<td>Social Housing Institution</td>
<td>Grant &amp; Provincial Inst. Grant</td>
<td>Funding Amount</td>
<td>Notes</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------------------</td>
<td>--------------------------------</td>
<td>---------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Fairview Willowdene</td>
<td>IMIZI Social Housing Institution</td>
<td>SHRA Restructuring Grant &amp; Provincial Inst. Grant</td>
<td>±400</td>
<td>±104 Million</td>
</tr>
<tr>
<td>Despatch Florida Farm</td>
<td>IMIZI Social Housing Institution</td>
<td>SHRA Restructuring Grant &amp; Provincial Inst. Grant</td>
<td>±600</td>
<td>±156 Million</td>
</tr>
</tbody>
</table>
8. BIBLIOGRAPHY


Nelson Mandela Bay Industrial Development Strategy 2012. A report by: Development


NMBM Corporate Drawing Office. (2012). *Development Areas in Nelson Mandela Bay*


