

BUILT ENVIRONMENT

PERFORMANCE PLAN (AND CAPITAL INVESTMENT FRAMEWORK)

Draft Report

2016/2017



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LIST OF ABBREVIATIONS

ACSA	Airports Company South Africa
BEPP	Built Environment Performance Plan
CBD	Central Business District
CIF	Capital Investment Framework
CMIP	Comprehensive Municipal Infrastructure Plan
CPM	Capital Prioritization Model
CSP	Cities Support Programme
EDC	Ekurhuleni Development Company
EMM	Ekurhuleni Metropolitan Municipality
ERWAT	East Rand Water Care Company
GDARD	Gauteng Department of Agriculture and Rural Development
GIS	Geographic Information System
GPA	Geographic Priority Areas
HSDG	Human Settlements Development Grant
ICDG	Integrated City Development Grant
IDP	Integrated Development Plan
IDZ	Industrial Development Zones
INEP	Integrated National Electrification Grant
IRPTN	Integrated Rapid Public Transport Network
MHDP	Municipal Housing Development Plan
MSDF	Metropolitan Spatial Development Framework
MTREF	Medium Term Revenue and Expenditure Framework
NDPG	Neighbourhood Development Partnership Grant
PDA	Previously Disadvantaged Areas
PRASA	Passenger Rail Authority South Africa
PTIG	Public Transport Infrastructure Grant
RSDF	Regional Spatial Development Framework
SDBIP	Service Delivery Budget Implementation Plan
SDF	Spatial Development Framework
TOD	Transit Oriented Development
USDG	Urban Settlement Development Grant
WWTW	Waste Water Treatment Works

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

The Ekurhuleni City Built Environment Performance Plan (BEPP) is a brief, strategic overview of the built environment aimed at improving the performance of metropolitan built environment. It is a city-level plan formulated and approved by the metro, and it complements existing statutory planning frameworks and complies with all legal requirements.

The core objective of the BEPP is that it provides (i) a strategic overview of the built environment; (ii) programmes and targets with an outcomes focus; (iii) basis for infrastructure grant submissions and grant alignment.

The BEPP indicates how a metro will apply its capital financing, including grant resources and all other sources of finance, fiscal and regulatory instruments and incentives and what it intends to achieve with these resources and instruments in respect of the local, provincial and national priorities of improving the performance of our built environments and transforming the spatial urban form, strongly supporting the TOD development concept.

The BEPP document can be summarized as follows: **Section A** provides the general background, reference material used and the formal adoption of the BEPP by Council.

Section B deals with the strategic review of the built environment. The current performance of the built environment is discussed with a synopsis of the city's economic infrastructure, a review of current residential demands, typology and backlogs, the status of the city's infrastructure with the associated demands and backlogs, community infrastructure, how the natural environment support and constrain urban growth and lastly a review of the trends in demand for transport services by mode and income group. Section B concludes with an overview of the impact on the spatial form of the city (i.e. the emerging trends emerging and development tensions or competing demands) and identifies possible solutions to the challenges the EMM face. Additionally possible stakeholders are identified to assist the City in addressing the challenges.

Section C focus of the Metro's Spatial Development Strategy in relation to the envisioned performance of the built environment at the city-wide level. It is a strategy for the functional integration of economic and social infrastructure supported by transport, housing, related community infrastructure and ecological infrastructure. It includes an overview of area-based management initiatives including catalytic projects of the municipality. Subsequently the EMM Capital Investment

Framework is highlighted, which is geared towards focusing capital budgeting in the metropolitan area in strategic geographic priority areas in accordance with the MSDF. Lastly, this section deals with the identification of Urban Network, Integration Zones and Hubs. The identification of catalytic projects and/or programmes by prioritised Integration Zone illustrating the intervention, sequencing, budget allocation and funding source. Each catalytic project or programme located and linked to a network element i.e. CBD, Urban Hub, Transport Link and Activity Corridor.

Section D discuss the anticipated outcomes and outputs of investment in the built environment with reference to high level development objectives and desired outcomes that is city-wide, identifying sector based development objectives and desired outcomes and concluding with the integration zones outcomes and impacts.

Section E focus on the institutional arrangements for integrated planning and EMM's arrangements for capital programme management, the function of the supply chain management system and procurement planning for the metro. The BEPP concludes with a summary of the financial allocations in the MTREF to support the spatial development strategy. The value of each catalytic project or programme identified by the EMM are provided for the MTREF period.

Annexure A is a summary list of the amended Urban Catalytic Project to be included in the BEPP document for final submission February 2016 and **Annexure B** is the matrix of built environment performance indicators.

For the purpose of the 2016/2017 Draft BEPP, the identified Catalytic Urban Development Projects of the EMM consist of the following Flagships Projects, Strategic Urban Developments and the Housing Catalytic Projects:

CATALYTIC URBAN DEVELOPMENT PROJECTS	
Eight (8) Flagship Projects	
i.	Aerotropolis - Rhodesfield, Pomona
ii.	Revitalization of Township Economies - Tembisa Civic Centre Precinct
iii.	Revitalization of Manufacturing Sector
iv.	Digital City
v.	IRPTN - IRPTN Phase 1A
vi.	Urban Regeneration – Germiston CBD / Kempton Park CBD
vii.	Strategic Land Parcels - Dries Niemandt
viii.	Beautification of Lakes and Dams - Germiston Lake, Boksburg Lake
Seven (7) Strategic Urban Developments:	
i.	Leeuwpoort Housing Development
ii.	Badenhorst Estate
iii.	Tambo Springs Inland Port
iv.	Glen Gory
v.	M&T Development Project
vi.	Riverfields Development
vii.	Prasa Gibela Project

Three (3) Mega Housing Projects Clusters:	
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- | | |
|------|---|
| i. | Northern Development Cluster – Clayville Ext 45, 71, Heartland / Esselen Park (Witfontein) / Esselen Park Ext 3 / Tembisa Ext 25 |
| ii. | Eastern Development Cluster - John Dube 2 / Brakpan Old Location / Tskane Ext 22 / Chief Luthuli 6 |
| iii. | Southern Development Cluster – Leeuwpoort / Germiston Urban Renewal housing / Zwartkoppies / Palmietfontein / Rietspruit/ Rietfontein / Palmridge 10 & 11 |

** To be updated as per Annexure A for submission February 2016.*

SECTION A

SECTION A: INTRODUCTION AND BACKGROUND

This section highlights the infrastructure related grants applicable to BEPP and the documents utilized in compiling the BEPP.

A.1 GUIDING DOCUMENTATION

The BEPP is a requirement of the Division of Revenue Act, 2014 (Act 10 of 2015) and an instrument for compliance and submission purposes for the following infrastructure grants related to the built environment of metropolitan municipalities:

Table A1.1: BEPP Infrastructure Related Grants

NAME OF GRANT	PURPOSE OF GRANT
Integrated City Development Grant (ICDG)	To provide a financial incentive for metropolitan municipalities to integrate and focus their use of available infrastructure investment and regulatory instruments to achieve a more compact urban spatial form.
Urban Settlement Development Grant (USDG)	Supplements the capital revenues of metropolitan municipalities in order to support the national human settlements development Programme focussing on poor households
Human Settlements Development Grant (HSDG)	To provide for the creation of sustainable human settlements
Public Transport Infrastructure Grant (PTIG)	To provide for accelerated planning, construction and improvement of public and non-motorised transport infrastructure
Neighbourhood Development Partnership Grant (NDPG)	To support and facilitate the planning and development of neighbourhood development programmes and projects that provide catalytic infrastructure to leverage third party public and private sector development towards improving the quality of life of residents in targeted under-served neighbourhoods (generally townships)
Integrated National Electrification Grant (INEG)	To implement the Integrated National Electrification Programme by providing capital subsidies to municipalities to address the electrification backlog of occupied residential dwellings, and the installation of bulk infrastructure and rehabilitation and refurbishment of electricity infrastructure in order to improve quality of supply.

The Ekurhuleni BEPP is compiled from a range of current Ekurhuleni planning and strategy documents. The key Ekurhuleni documents integrated into this report include:

- The Metropolitan Spatial Development Framework, 2015 (MSDF);
- The Capital Investment Framework (CIF) as a component of the MSDF;
- The Comprehensive Municipal Infrastructure Plan (CMIP), 2009 – 2025;
- The Comprehensive Integrated Transport Plan (CITP), 2013-2018;
- Long Term Financial Plan, 2010;
- Ekurhuleni Growth and Development Strategy (GDS 2005);
- Ekurhuleni Municipal Housing Development Plan (MHDP), October 2011;
- Ekurhuleni IDP 2011/12-2016/17
- Ekurhuleni Biodiversity and Open Space Strategy (2009)
- Ekurhuleni Water Service Development Plan, 2014/14
- Ekurhuleni Integrated Waste Management Plan, 2015 Draft
- Ekurhuleni Energy Masterplan
- ERWAT Strategy, 2032
- Comprehensive Municipal Infrastructure Plan,

Additionally, the Ekurhuleni BEPP acknowledges the ICDG Proposed Expenditure 2015/2016 targeted outcomes and outputs as described by the ICDG guideline document. Following is the ICDG outcomes and outputs influencing on the BEPP process and funding:

1. Improved spatial targeting and sequencing of public investments in the urban built environment to achieve a more compact urban spatial form;
2. Number of sub-metropolitan spatial integration zones identified and formalised in participating municipalities;
3. Number of spatial integration indicators, baselines and targets defined and agreed on in participating municipalities; and
4. Number of strategic/catalytic projects within sub-metropolitan spatial integration zones identified and planned by participating municipalities

While the ICDG is seen as a CAPEX grant, the City has identified a need to have more resources allocated to OPEX and planning for projects in this regard. The City has in the past utilised the majority of the grant operationally of which effective and useful spatial targeting initiatives were introduced to the cities budgeting process.

Based on the above mentioned outcomes and the cities views on effective ICDG spend to inform integration within the City, Ekurhuleni Metropolitan Municipality (EMM) has embarked on the following projects utilizing the ICDG grant in the 2015/16 financial year:

1. Capital Investment Framework (CIF):

CIF Modelling: Detailed economic modelling for the Capital Investment Framework and its related elements. The CIF enabled the City to re-prioritise the capital budget towards geographic priority areas (GPAs). These GPAs are comprised of areas of strategic importance and include various flagship projects which are located within Ekurhuleni's Integration Zones. The ICDG in this regard has in fact assisted the City to spatially target the integration zones in this regard. The ICDG spend in this regard is seen as planning.

2. Strategic Land Parcels (SLP):

SLP programme aims to package land for development to alter the metro's spatial landscape and optimize urban development by maximizing the potential of strategic developable land and property through partnership with private sector, lease or outright disposal of the land and property assets. The SLP's are catalytic in nature and have a direct relationship with the cities' Urban Network Plan. To date the ICDG grant was utilised for transaction advisory services to enable the catalytic disposal of these assets. The ICDG grant has thus assisted the City in unlocking these catalytic projects which are due to go to market upon completion of all the studies for the land parcels.

3. Metropolitan Spatial Development Framework (MSDF) Review and the drafting of the Regional Spatial Development Frameworks (RSDFs):

The MSDF review has updated the 2011 MSDF and brought it into new light the development trajectory looking towards the Aerotropolis and Gauteng City Region discourse. The newly drafted RSDFs seek to enhance and complement the MSDF through the newly formed planning regions. The MSDF review and newly formulated RSDFs are currently going through Councils approval processes. The ICDG has in this instance assisted the metro to catalyse development through the completion of these documents. The ICDG spend in this regard is thus seen as planning.

4. Human Settlements Demand Survey:

EMM has embarked on a detailed housing demand and community survey of all informal settlements, hostels and backyard rental units within the jurisdiction of Ekurhuleni Metropolitan Municipality. The data to be retrieved from this survey would adequately assist the metro to adequately plan and reconsider the densities and housing typologies that would inform Ekurhuleni's Human Settlement Mega Projects as well as the locality of such in terms of the metros Integration Zones. The ICDG spend in this regard is seen as assisting existing Human Settlement Mega projects and to more accurately quantify the needs of these projects.

5. Informal Settlements technical evaluation and classification :

Approximately 50% of EMM is constrained by underlying Dolomite with the majority of affected areas falling within the Integration Zones. The informal settlement technical evaluation and classification will determine vulnerabilities, development constraints and the socio-economic

conditions of these spaces. The ICDG spend in this regard would assist the metro in determining the best feasible proposal to eradicate informal settlements in this regard.

6. Urban Design Policy and Precinct Plans:

The City has embarked on the formulation of an urban design policy and related precinct plans to re-enhance the visual aesthetics and efficiency of nodes within the City. The precinct plans selected to be funded from the ICDG have a direct co-relation with the Integration Zones and are prominent precincts which require urgent attention. The ICDG spend in this regard would assist the city in unlocking strategic nodes through re-invention and implementing a new urbanist approach to design within the City.

7. Infrastructure Master Plan:

The City has identified a need to have a strategic, overarching, multi-sectoral, long term infrastructure plan to address the Aerotropolis development trajectory that the city has embarked on. This particular master plan would adequately inform the relative provincial and national departments of the development trends and needs of the city to meet the ever growing demand. The ICDG spend would in this instance assist the city to adequately plan for bulk infrastructure and perhaps cost the proposed infrastructure upgrades to enable the city to propose a value proposition in order to adequately source funding from various possible streams.

The key focus of the BEPP 2016/17 is the refinement and consolidation of the elements that were identified in the BEPP 2015/16. Specific areas of refinement is the Urban Network Plan and Integration Zones which also form part, about 90%, of the Geographic Priority Areas in the Capital Investment Framework (CIF). A pipeline of the catalytic urban development projects within these integration zones in the prescribed format, as per the supplementary note to the guidelines for the BEPP 2015/16- 2017/18 is required. Another area of refinement is the upgrading of informal settlements and specific poverty pockets and land developments including preparation etc.

A.2 ADOPTION OF THE BEPP

The Ekurhuleni BEPP 2015/16 was APPROVED by council on 27 August 2015. The council minutes were signed off by 31st of August 2015.

SECTION B

SECTION B: STRATEGIC REVIEW OF THE BUILT ENVIRONMENT

The following section provide a strategic overview of the Built Environment of Ekurhuleni.

B.1 CURRENT PERFORMANCE OF THE BUILT ENVIRONMENT¹

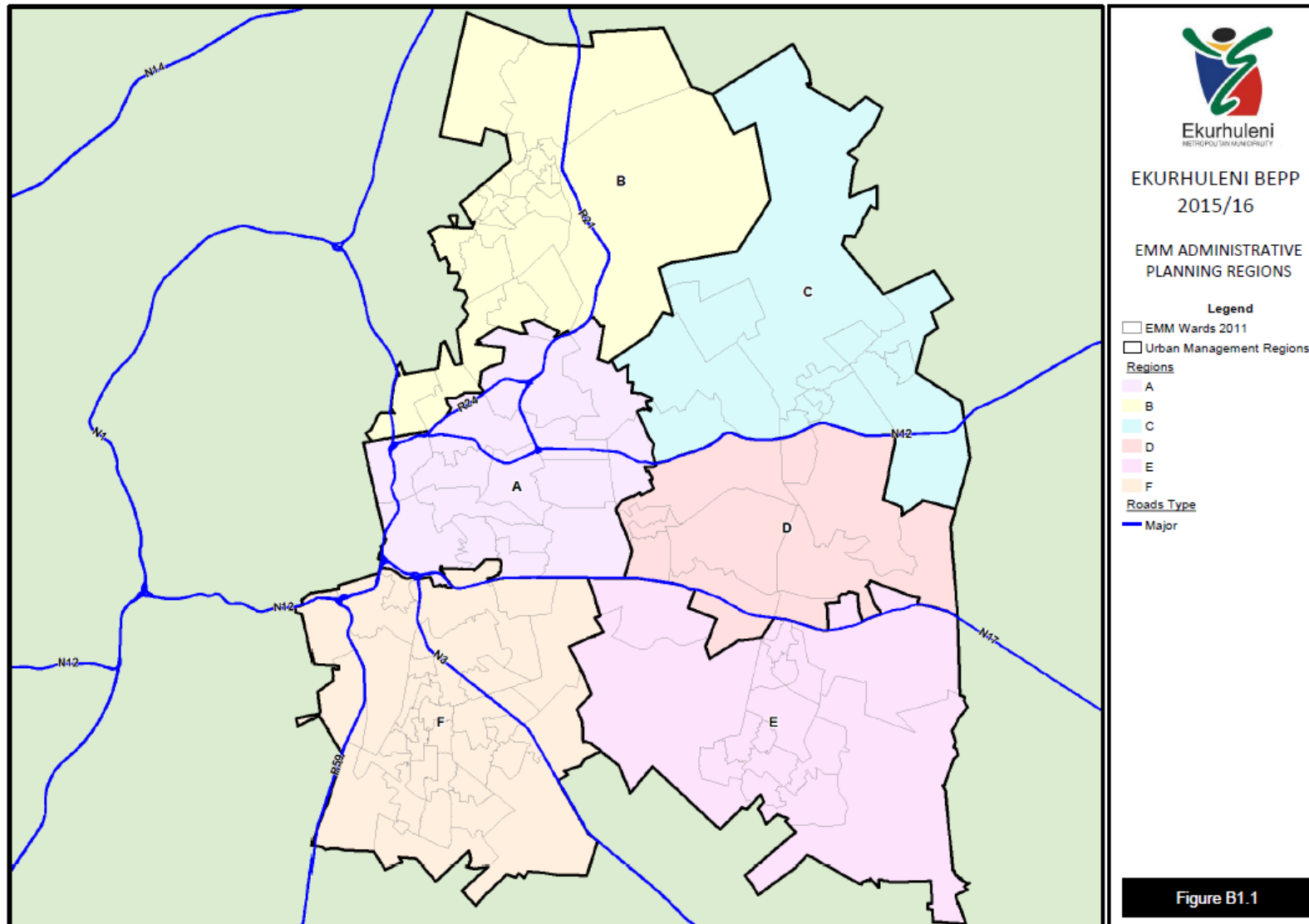
As indicated within the Ekurhuleni MSDF, the EMM has a total surface area of approximately 2000km² that accommodates a population of 3.2 million in 2012. Ekurhuleni is spread over 15.6% of Gauteng's land mass, accommodates 6.1% of the country's population (2012). Migration into the area is a key challenge. This is visible in the number of informal settlements and informal trading activity. The EMM has approximately 1.1 million households which is likely to increase when taking migration into account.

The economically active population segment of Ekurhuleni constitute 41.5% of the total population. The area contributes approximately 6.1% to the national production and over the time period 1996 to 2011, Ekurhuleni's economy grew by an estimated average of 3.2% per annum. Although the economy grew steadily, unemployment within the EMM is concerning, with a rate as high as 30% (IHS Global Insight).

The Ekurhuleni Metropolitan Municipal area is divided into six (6) planning regions, as indicated in **Figure B1.1**.

¹ Final comments from the EMM Spatial Planning Division is still outstanding.

Figure B1.1 EMM Administrative Planning Regions



GROWTH TRENDS AND PRESSURES

➤ **POPULATION GROWTH TRENDS AND PRESSURES**

Growth Trends: From the incremental population projections for 2011-2037, it is evident that approximately **2 202 million** additional people are expected within the Ekurhuleni Metropolitan Municipality by 2037. This represents about **28%** of the total incremental population of the Gauteng Province up to 2037. The future population growth is calculated at approximately 2.7% per annum between 2001 and 2025, decreasing to 1.3% per annum between 2025 and 2037. **Table B1.1** indicates the incremental population projected for 2011-2037 and **Table B1.2** indicated the anticipated growth rate per annum for 2011-2037.

Table B1.1: Incremental Population, 2011-2037

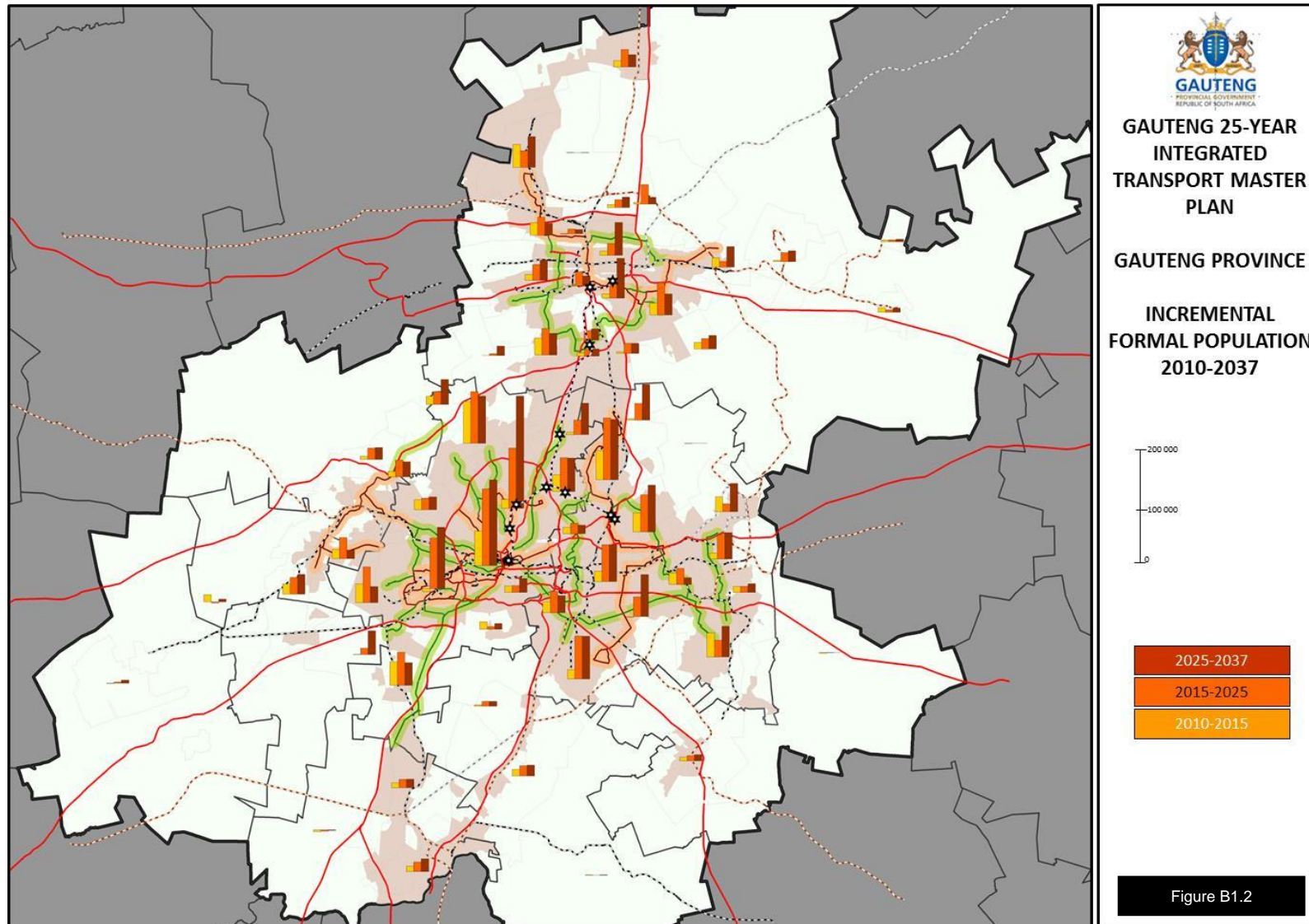
MUNICIPALITY	Census		PROJECTION		INCREMENT		
	2001	2011	2025	2037 SDF Base	2011-2025	2025-2037	Total 2011-2037
CITY OF TSHWANE MM	2,145,861	2,920,560	3,834,825	4,366,849	914,265	532,023	1,446,289
CITY OF JOBURG MM	3,225,772	4,437,917	5,954,712	6,735,681	1,516,796	780,968	2,297,764
EKURHULENI MM	2,478,132	3,175,873	4,610,716	5,378,723	1,434,843	768,007	2,202,850
SEDIBENG DM	796,756	916,383	1,182,496	1,276,630	266,113	94,134	360,247
WEST RAND DM	744,159	820,208	1,207,543	1,370,292	387,334	162,750	550,084
GAUTENG	9,390,679	12,270,941	16,790,292	19,128,174	4,519,351	2,337,882	6,857,233

Table B1.2: Growth Rate per Annum, 2011-2037

MUNICIPALITY	GROWTH PER ANNUM (%)		
	2001 - 2011	2011-2025	2025-2037
CITY OF TSHWANE MM	3.1%	2.0%	1.1%
CITY OF JOBURG MM	3.2%	2.1%	1.0%
EKURHULENI MM	2.5%	2.7%	1.3%
SEDIBENG DM	1.4%	1.8%	0.6%
WEST RAND DM	1.0%	2.8%	1.1%
GAUTENG	2.7%	2.3%	1.1%

Figure B1.2 graphically illustrates the spatial distribution and relative size of incremental population allocated to different parts of the Gauteng province according to GITMP S1 Scenario for the year 2037. It is evident that the majority part of incremental population for Ekurhuleni was placed in the western parts of the metropolitan area closest to the City of Johannesburg and the OR Tambo Aerotropolis (Alberton-Katorus-Germiston-Edenvale-Tembisa-R21). Provision was also made for population growth in the eastern parts of Ekurhuleni around Springs, Nigel, Etwatwa, Daveyton, as well as the Kwatsaduza complex, although not at the same scale as in the western parts.

Figure B1.2: Incremental Formal Population - Gauteng



➤ ECONOMIC GROWTH TRENDS AND PRESSURES

Growth Trends: From the incremental formal workers projections for 2011-2037, it is evident that approximately **1 058 million** formal workers or job opportunities are expected within Ekurhuleni. This represents about **25%** of the total incremental formal workers for the Gauteng Province up to 2037. The future job opportunities growth is calculated at approximately 3.3% per annum between 2011 and 2015, slightly decreasing to 2.1% per annum between 2015 and 2037. **Table B.4** indicates the incremental formal workers projected for 2011-2037 and **Table B.5** indicated the anticipated growth rate per annum for 2011-2037.

Table B1.3: Incremental Job Opportunities, 2011-2037

MUNICIPALITY	Census		PROJECTION		INCREMENT		
	2001	2011	2025	2037 SDF Base	2011-2025	2025-2037	Total 2011-2037
CITY OF TSHWANE MM	580,231	1,007,989	1,696,921	2,169,013	688,932	472,092	1,161,024
CITY OF JOBURG MM	909,731	1,672,265	2,694,569	3,352,269	1,022,304	657,700	1,680,004
EKURHULENI MM	602,307	1,030,555	1,618,959	2,088,910	588,404	469,952	1,058,356
SEDIBENG DM	139,969	239,246	339,865	425,068	100,619	85,203	185,822
WEST RAND DM	158,321	216,507	336,926	457,217	120,419	120,291	240,710
GAUTENG	2,390,559	4,166,562	6,687,241	8,492,478	2,520,679	1,805,237	4,325,916

Table B1.4: Growth Rate per Annum, 2011-2037

MUNICIPALITY	GROWTH PER ANNUM (%)		
	2001 - 2011	2011-2025	2025-2037
CITY OF TSHWANE MM	5.7%	3.8%	2.1%
CITY OF JOBURG MM	6.3%	3.5%	1.8%
EKURHULENI MM	5.5%	3.3%	2.1%
SEDIBENG DM	5.5%	2.5%	1.9%
WEST RAND DM	3.2%	3.2%	2.6%
GAUTENG	5.7%	3.4%	2.0%

Based on the GITMP S1 Scenario, **Figure B1.3** and **Figure B1.4** compare the spatial distribution and size of Gauteng job opportunities in 2010 to that anticipated by 2037. It is evident from **Figure B.4** that the Aerotropolis and the R21 Corridor were allocated a significant percentage of the incremental job opportunities in the Ekurhuleni metropolitan area. The existing activity nodes in the central parts of the metropolitan area (Germiston, Boksburg, Benoni, Brakpan and Springs) also grew significantly in terms of job opportunities in support to the anticipated incremental population to be established in parts of the mining belt. In line with the objectives of the National Development Plan, substantial growth was also projected/allocated for the peripheral parts around Daveyton-Etswatwa, in Katorus, as well as in the Kwatsaduza area. A notable number of job opportunities was also allocated to the Tambo Springs, and Sentra Rand freight hubs.

Figure B1.3: Gauteng Formal Workers – 2010

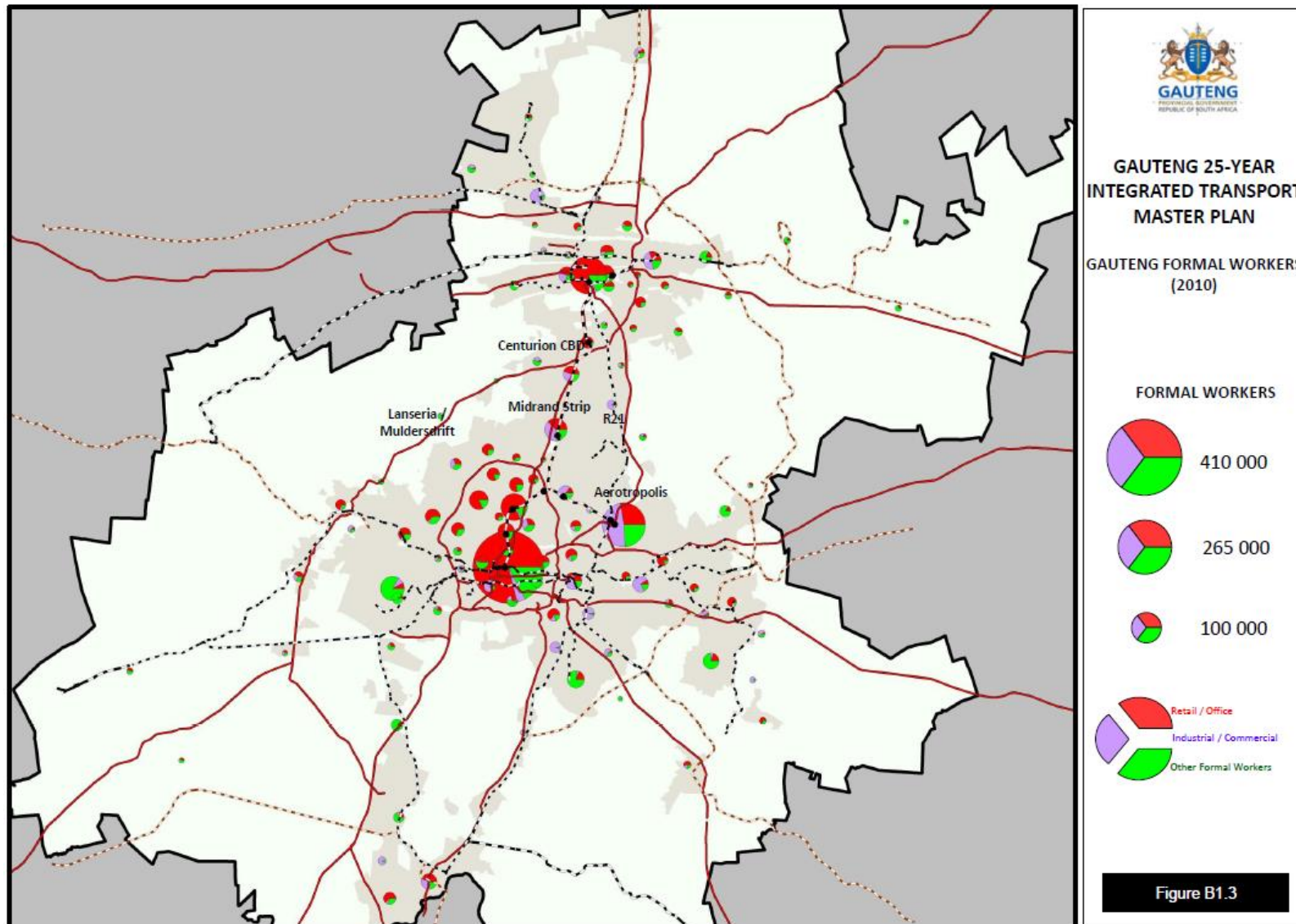
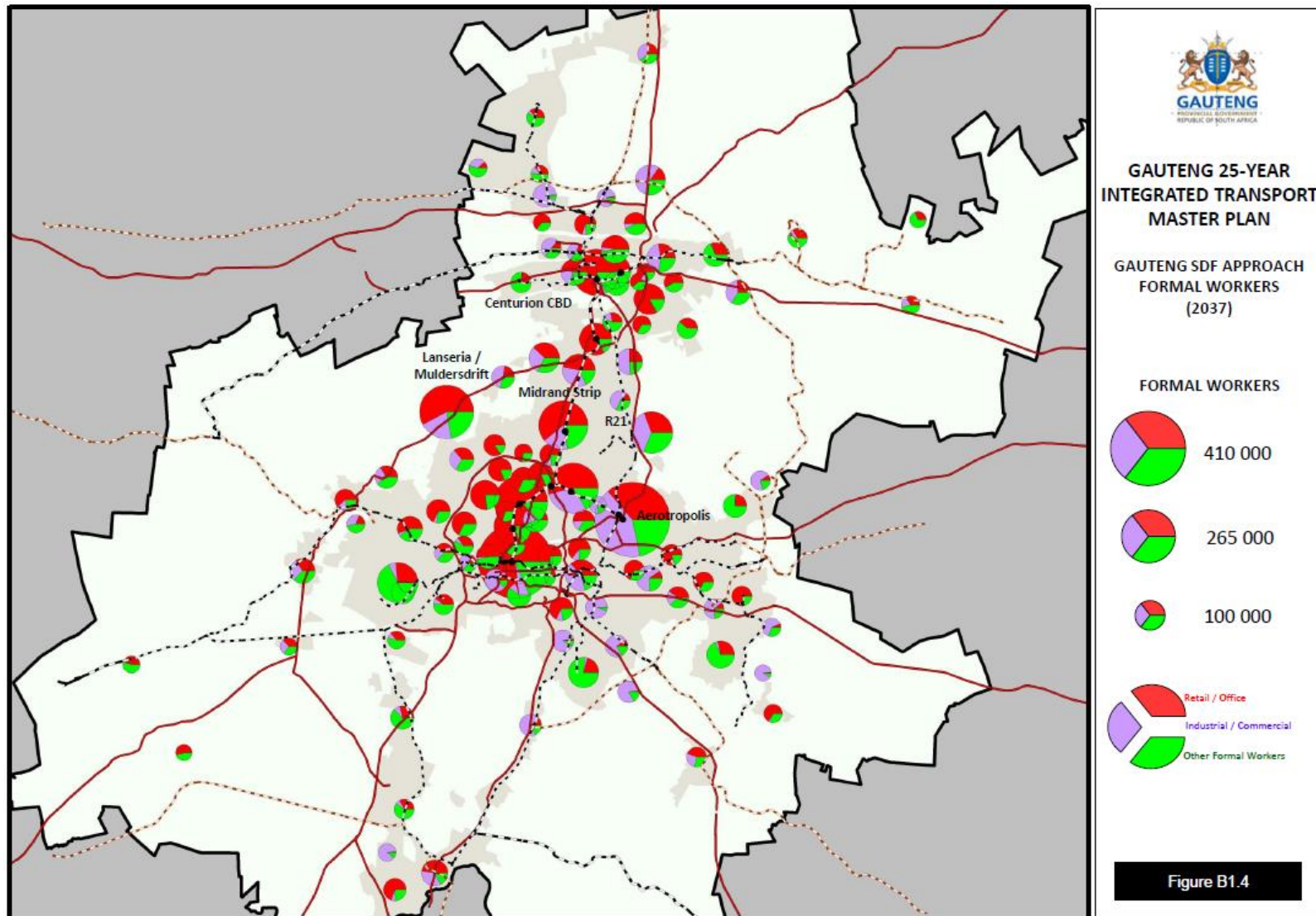


Figure B1.4: Gauteng Formal Workers – 2037



Rising Unemployment: Unemployment is a great concern, which is directly linked to the manufacturing decline within the EMM

Decline in Industrial / Manufacturing Functions: The EMM had a strong industrial base, though due to the decline in the mining industry, the industrial / manufacturing functions eroded. Large amounts of underutilised and vacant industrial land is located throughout the EMM. Well located underutilized / vacant industrial land within the urban edge should be considered for redevelopment due to urbanization pressures.

➤ SPATIAL GROWTH TRENDS AND PRESSURES

Core Development Triangle: According to the MSDF (2015), the primary focus of the EMM is to promote economic activity and future growth within the central Metropolitan Economic Activity Area. This *Core Development Triangle* holds the bulk of all job opportunities within the metro and includes the current active mines, all the major industrial areas, as well as all the major central business districts and shopping centres. The point of gravity within the Core Development Triangle is the Central Business Districts of Kempton Park, Boksburg, Germiston and Benoni. The OR Tambo International Airport and broader Aerotropolis development forms part of the *Core Development Triangle* which is a major growth point.

Main Development Corridors: There are two main development desire lines; the first being the east-west desire line between the N12 and the N17 freeways, and the second a north-south line linking the Tembisa, Kempton Park, Germiston, and Alberton areas. **Figure B1.5** schematically illustrates the *Core Development Triangle* and *Development Corridors* identified within the EMM.

EMM Blue IQ projects: There are currently two Blue IQ projects located within EMM, these include the

- (1) OR Tambo International Airport Cargo Area and the
- (2) Industrial Development Zone (IDZ) to promote primarily airport related manufacturing, warehousing and distribution industries.

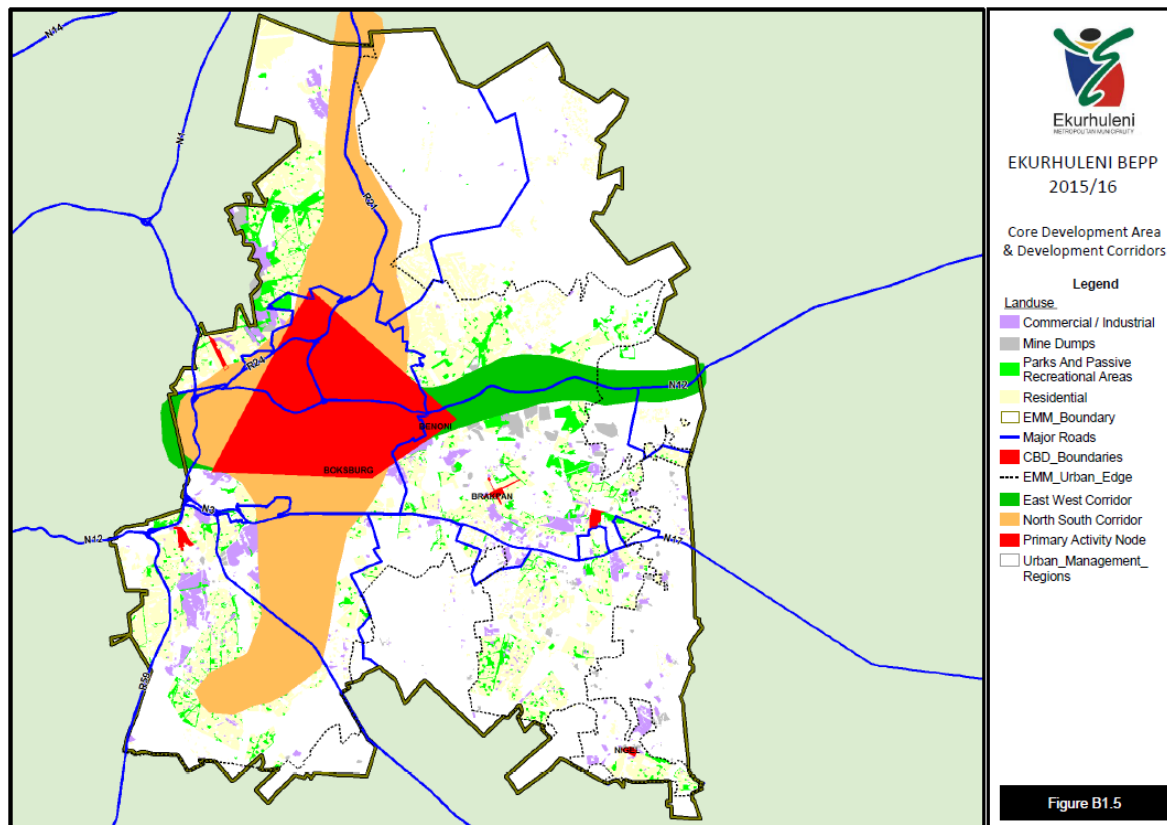
The creation of an industrial development zone adjacent to the OR Tambo International Airport will contribute to the competitiveness and growth of the manufacturing sector in Gauteng by lowering the input costs and improving the supply chain efficiencies for firms in the IDZ. Future manufacturing and related development should therefore be focused within these zones.

Aerotropolis: The Aerotropolis around ORTIA is listed as one of the major components of SIP 2. The Aerotropolis will contribute to the establishment of a new metropolitan hub which will:

- Address the issues within Ekurhuleni relating to aged urban nodes and unequal access to opportunities;
- Strengthen the identity of the EMM by claiming and promoting ORTIA as its own;

- Broaden the economic base and will strengthen and support additional industrial developments within the region.
- Provide a central point of intermodality between road, rail and air transport.

Figure B1.5: EMM Core Development Triangle and Development Corridors



Disadvantaged Communities: The MSDF acknowledges the four main disadvantaged communities of Kathorus, Tembisa, Daveyton-Etawatwa and Kwatsaduza, located outside of the *Core Development Triangle* and the importance of establishing linkages with these communities.

Enforcement of the Urban Edge: Due to the stricter enforcement of the Urban Edge and the current urbanization trend within the EMM, pressure on land available for development within the urban edge is significant, redevelopment is strongly encouraged.

Degradation of CBD's: All CBD's within the EMM are in a state of degradation and in need to be redefined and regenerated.

Limited Public Transport: Access to the CBD's and other activity nodes via a public transport system is problematic, as currently an integrated public transport system is lacking, especially in terms of providing access to the four main disadvantaged communities of Kathorus, Tembisa, Daveyton-Etawatwa and Kwatsaduza.

IMPEDIMENTS TO GROWTH AND DEVELOPMENT

Following from the identification of growth trend and pressures within the EMM, the following elements are highlighted as possible impediments to growth and development within the EMM:

- Limited availability of developable land within the urban edge
- Illegal formation of informal settlements in close proximity to existing industrial activities
- Ageing infrastructure and service interruptions;
- Decaying CBDs;
- Poor tourist promotion of assets;
- Business costs of crime and violence;
- Increased unemployment; and
- Inability to provide municipal services.

CATALYTIC URBAN DEVELOPMENT PROJECTS

The identified Catalytic Urban Development Projects are the following; Flagships, Strategic Urban Developments and the Housing Catalytic Projects as identified by the EMM in terms of the BEPP process:

Table B1.5: Catalytic Urban Development Projects Summary

CATALYTIC URBAN DEVELOPMENT PROJECTS	
Eight (8) Flagship Projects	
ix.	Aerotropolis - Rhodesfield, Pomona
x.	Revitalization of Township Economies - Tembisa Civic Centre Precinct
xi.	Revitalization of Manufacturing Sector
xii.	Digital City
xiii.	IRPTN - IRPTN Phase 1A
xiv.	Urban Regeneration – Germiston CBD / Kempton Park CBD
xv.	Strategic Land Parcels - Dries Niemandt
xvi.	Beautification of Lakes and Dams - Germiston Lake, Boksburg Lake
Seven (7) Strategic Urban Developments:	
viii.	Leeuwpoort Housing Development
ix.	Badenhorst Estate
x.	Tambo Springs Inland Port
xi.	Glen Gory
xii.	M&T Development Project
xiii.	Riverfields Development
xiv.	Prasa Gibela Project
Three (3) Mega Housing Projects Clusters:	
iv.	Northern Development Cluster – Clayville Ext 45, 71, Heartland / Esselen Park (Witfontein) / Esselen Park Ext 3 / Tembisa Ext 25
v.	Eastern Development Cluster - John Dube 2 / Brakpan Old Location / Tskane Ext 22 / Chief Luthuli 6
vi.	Southern Development Cluster – Leeuwpoort / Germiston Urban Renewal housing / Zwartkoppies / Palmietfontein / Rietspruit/ Rietfontein / Palmridge 10 & 11

NOTE: Annexure A contains an updated Catalytic Urban Developments project list which will be finalised in due course. Due to time constraint, this BEPP Draft document is based on the Catalytic Urban Developments project as indicated in TableB1.5 above. The final submission of the BEPP report, February 2016, will reflect the updated Catalytic Urban Developments project list and amendments.

B.2 TRENDS AND DEMAND FOR ECONOMIC INFRASTRUCTURE²

This section of the Built Environment Performance Plan will review the trends and demand for economic infrastructure within the Ekurhuleni Metropolitan Municipality. As such the section focusses on the **requirements for faster and more inclusive economic growth** with an emphasis on more efficient and competitive infrastructure that promotes productive growth and results in job creation (rather than consumption only). Furthermore the section also highlights impediments to development of economic infrastructure within EMM.

The expansion of a country's economic and socio-economic infrastructure is a **pre-requisite for sustainable economic growth and development**, with government and public corporations being key players in this regard.

Significantly the expansion of both the social and economic infrastructure lies at the heart of the government's **stimulatory fiscal policy** to drive growth. It is argued that infrastructure development is an enabler of socio-economic development; it provides a framework for the governance of infrastructure development, illustrates that a renewed focus is being placed on infrastructure development in South Africa, and concludes that state capacity is a pivotal determinant of successful infrastructure development.

Given the imperative of addressing basic needs, the focus of the democratic government in the first fifteen years was to roll out social infrastructure. Consequently, the focus for the next fifteen years is to also redress economic infrastructure backlogs and inadequacies which have become a constraint to economic growth. Indeed, the National Treasury argues that "South Africa's critical infrastructure needs are in part the outcome of two decades of underinvestment, public infrastructure investment tailed off from the early 1980s. From the mid-1990s, government began to increase capital spending, with a sharp rise after 2003 as prudent management of the economy created the fiscal space for long-term investment"³.

The National Treasury highlights the fact that while the South African state has demonstrated its ability to deliver large complex projects, many public entities fail to execute their planning mandates and spend their infrastructure budget. Hence government's capacity to plan and execute infrastructure projects looms large as a determinant of their successful implementation.

EMM needs **to invest in a strong network of economic infrastructure designed to support the country's medium to long-term economic and social objectives**. This economic infrastructure is a precondition for providing basic services such as electricity, water, sanitation, telecommunications

² Final comments from the EMM Economic Department is still outstanding.

³ Source: National Treasury Budget Review, 2012

and public transport, which needs to be robust and extensive enough to meet industrial, commercial and household needs.

Large investments in economic infrastructure is required within the EMM to propel economic growth and activity. These investments need to be made in a structured and considered manner to prevent inappropriate initiatives, protect the EMM's resources and ensure prioritised investments are efficiently implemented. Priority should be given to infrastructure programmes that contribute to regional integration.

Investment in economic infrastructure within the EMM is of great importance, as there is a **direct correlation between investment in urban infrastructure** (and associated growth and expansion) **and the critical components of the national agenda** (i.e. as outlined in the NDP for example. Specifically with respect to:

- Economic growth
- Job creation
- Sustainable growth and government revenue (including property rates and taxes, company tax, personal income tax, etc.)

It is important to understand those factors (economic, demographic and related) that, on the one hand exert demand and **growth pressures** and, on the other hand, have significant potential in **creating new productive (and rateable) assets** – as opposed to meeting social needs only. To this effect an understanding of the **economy in general** and the **space economy in particular** is required.

SECTOR COMPETITIVENESS ANALYSIS

This section provides a competitive analysis of the EMM's economy, in order to identify the **key growth sectors** within the metro. The competitive analysis is based on two different methods, **labour-based** (Leading-Lagging Analysis, Carvalho Analysis and the Industry Target Classification) and **production-based** (Economic Functionality – Shift-Share Analysis), which reflects on a multitude of interrelated factors and dynamics, as outlined in the following paragraphs.

Competitive Advantage Analysis (CAA) is an assessment of the structure and performance of the economy of an area, to identify local strengths ('competitive advantages') and potential for economic infrastructure development. Actually a full competitive advantage analysis would include an examination of local infrastructure, markets, labour force, amenities, access to transportation routes, etc. The approach outlined here does not go that far. Instead, it focusses on examining local industries / sectors to identify **leading and lagging sectors and their prospects for employment growth**.

Leading-Lagging Analysis

This analysis aims to examine the employment growth of the metro economy in terms of the aggregate economy. This analysis uses sector employment growth rates to produce two key values:

- Province Sector Relative Growth (PSRG) – Growth of the sector higher or lower than overall province growth
- Metro Sector Relative Growth (MSRG) – Growth of the sector higher or lower than the same sector on provincial level.

Three possible results are recorded from this analysis

- Leading – Sector exceeds growth of aggregate economy
- Lagging – Sector either declined in employment or grew at a slower rate than the aggregate economy
- Even – the sector's growth equals aggregate economy growth overall

This should be interpreted with a positive, negative or constant industry growth:

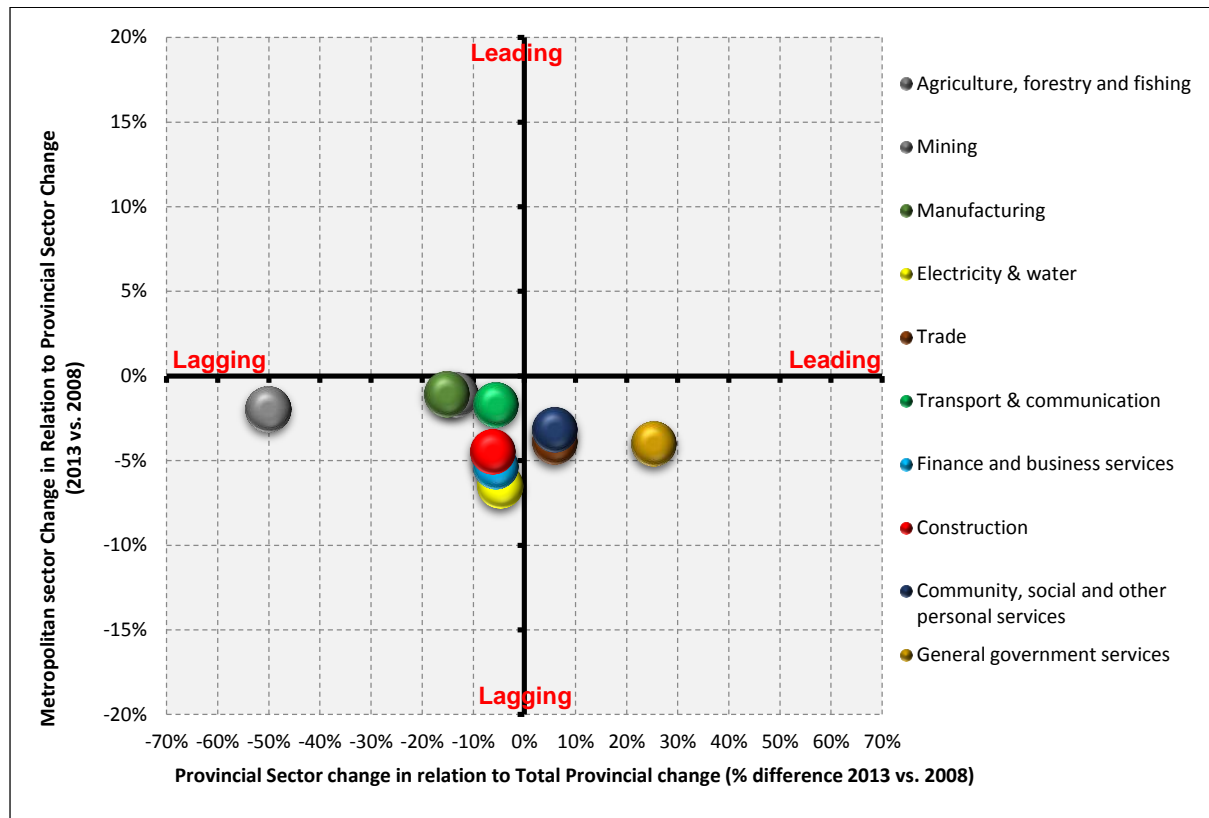
Positive Growth – Sector grew in employment

Negative Growth – Sector declined in employment

Constant Growth – Employment was constant over the time period of the analysis

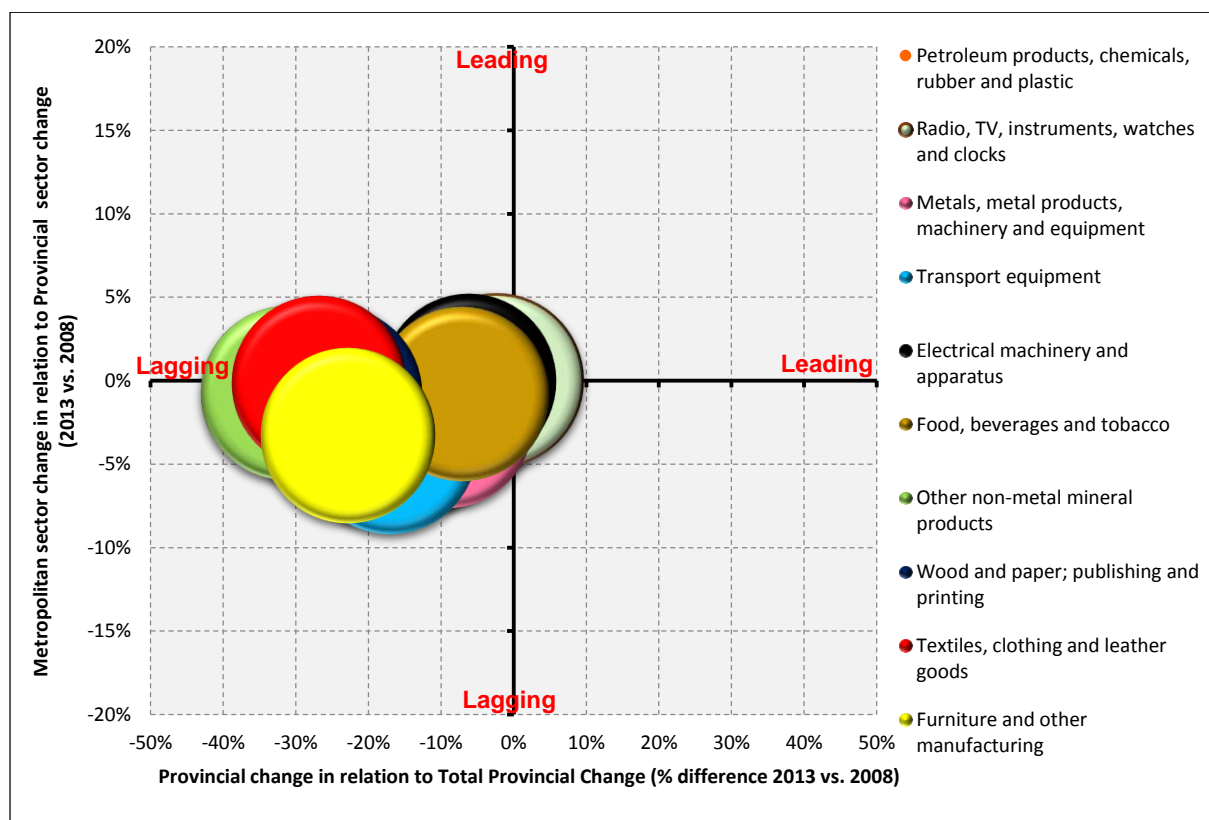
Figures B2.1 and **B2.2** illustrate the leading / lagging analysis graphically for the Metro economy's key economic sectors and the sub-sectors of the manufacturing sector.

Figure B2.1: Leading / Lagging Analysis – EMM Main Economic Sectors, 2008 to 2013



Source: Demacon, 2015

Figure B2.2: Leading / Lagging Analysis – EMM Manufacturing Sub-Sectors, 2008 to 2013



Source: Demacon, 2015

Carvalho Classification

The Carvalho Classification has been developed in 2000 by Dr Emanuel Carvalho from the University of Waterloo in collaboration with OMAFRA CED Unit staff. Three values are combined in the classification – Location Quotient, PSRG, and MSRG. It is important to note that these categories are descriptive and not prescriptive. It provides a multi-dimensional indication of the suitability of sectors, supported by tools and instruments that could be utilised in the development of these sectors.

There are 12 classifications, from ‘driving’ (for sectors that are leading in PSRG and MSRG and had high location quotients) to ‘marginal’ (for sectors that were lagging in PSRG and MSRG and had low location quotients).

Table B2.1: Classification, Interpretation and Definition

Classification	Interpretation	Definition
Driving	PSRG and MSRG leading LQ > 1.25	Community is highly specialised in this sector, which is growing in the aggregate economy and growing at an even higher rate locally
Accelerating	PSRG and MSRG leading LQ 0.75 to 1.24	Community is neither highly specialised nor under-specialised in this sector, which is growing at the aggregate economy level and growing at an even higher rate locally
Rising	PSRG and MSRG leading LQ < 0.74	Relatively low proportion of local employment, but will likely increase due to growth in this sector, which is growing on an aggregate economy level and growing at an even higher rate locally
Evolving	PSRG lagging and MSRG leading LQ > 1.25	High local specialisation in a sector which grew at an aggregate economy level at a slower rate than overall growth, local growth exceeded aggregate economic growth in this sector
Transitional	PSRG lagging and MSRG leading LQ 0.75 to 1.24	Average specialisation in a sector which grew at an aggregate economy level at a slower rate than overall growth, local growth exceeded aggregate economy growth in this sector
Moderate	PSRG lagging and MSRG leading LQ < 0.74	Relatively underrepresented in a sector which grew at an aggregate economy level at a slower rate than overall growth; local growth exceeded aggregate economy growth in this sector
Promising	PSRG leading and MSRG lagging LQ > 1.25	High local specialisation in a sector which grew at an aggregate economy level, local growth was slower than aggregate economic growth in this sector
Yielding	PSRG leading and MSRG lagging LQ 0.75 to 1.24	Average specialisation in a sector which grew at an aggregate economic level, local growth was slower than aggregate economic growth in this sector

Classification	Interpretation	Definition
Modest	PSRG leading and MSRG lagging LQ <0.74	Relatively low specialisation in a sector which grew at an aggregate economic level; local growth was slower than aggregate economic growth in this sector
Challenging	PSRG lagging and MSRG lagging LQ > 1.25	Industries have a relatively high concentration of employment in the community, which suggests that they play a prominent role in overall employment in the community and should be monitored carefully
Vulnerable	PSRG lagging and MSRG lagging LQ 0.75 to 1.24	Industries have an average concentration of employment
Marginal	PSRG lagging and MSRG lagging LQ <0.74	Industries are under-represented in the community

Source: Demacon based on www.reddi.gov.on.ca/cea_carvalho.htm

Table B2.2: Carvalho Classification, 2008 to 2013

	Main Sectors	Sub-Sectors
Driving, accelerating and rising sectors <i>Growing at local and district level</i>	✓ None	✓ None
Evolving, transitional and moderate sectors <i>Growing faster at local than district level</i>	✓ None	✓ Electrical machinery and apparatus ✓ Radio, TV, instruments, watches and clocks
Promising, yielding and modest sectors <i>Growing slower at local level than at district level</i>	✓ Wholesale and retail trade; catering and accommodation ✓ Community, social and personal service ✓ General government services	✓ Wholesale and retail trade ✓ Catering and accommodation
Challenging sectors <i>High concentration of employment – however, not growing at local or district level</i>	✓ Manufacturing	✓ Food, beverages and tobacco ✓ Petroleum products, chemicals, rubber and plastic ✓ Other non-metal mineral products ✓ Metals, metal products, machinery and equipment ✓ Transport and storage

	Main Sectors	Sub-Sectors
Vulnerable and marginal sectors <i>Relatively unrepresented in economy</i>	<ul style="list-style-type: none"> ✓ Agriculture, forestry and fishing ✓ Mining and quarrying ✓ Utilities (Electricity, gas and water) ✓ Construction ✓ Transport, storage and communication ✓ Finance, insurance, real estate and business services 	<ul style="list-style-type: none"> ✓ Textiles, clothing and leather goods ✓ Wood and paper, publishing and printing ✓ Transport equipment ✓ Furniture and other manufacturing ✓ Electricity ✓ Water ✓ Communication ✓ Finance and insurance ✓ Business services

Source: Demacon, 2015

Industry Target Classification

This classification is similar to that of the Carvalho Model in that it is based on a combination of the location quotient, Provincial Employment Sector Growth (PG) and MSRG values and it is expressed qualitative not quantitative. It is somewhat different in the way that it classifies the sectors, the categories and phrases that suggest the kind of prospects for growth that could be expected and in some cases, whether the sector should be a retention target.

Table B2.3: Industry Target Classification System – Categories

LSRG	Provincial Growth	Location Quotient	Classification	Definition
Leading	Positive	Medium or High (> 0.75)	Current Strength	Sector currently growing strong
		Low (<0.75)	Emerging Strength	Indication that a sector is experiencing growth and can be classified as having definite development potential
	Negative	Medium or High (> 0.75)	Prospects limited by external trends	External trends represent a multitude of elements that strain development and growth and include competitiveness, exchange rate, fluctuations, performance of international economies, oil prices etc.
		Low (<0.75)	Prospects limited by external trends and weak base	A weak base is an indication that the sector is structurally not particularly strong and limited in its diversification. This along with external trends strain the development prospects
Lagging	Positive	Medium or High (> 0.75)	High priority retention target	Indication of a previously dominant or economically important sector that needs to retain its positive economic position – making it a priority for growth and development.
		Low (<0.75)	Prospects limited by weak base and	A weak base indicate a need for diversification and declining

LSRG	Provincial Growth	Location Quotient	Classification	Definition
			declining competitiveness	competitiveness reflects that it might not be structural as strong as is needed for development potential
	Negative	Medium or High (> 0.75)	Prospects limited by external trends and declining competitiveness	External trends hinder development, supported by declining levels of competitiveness.
		Low (<0.75)	Prospects limited overall	Growth prospects are limited to a minimum for this sector and the economy should rather focus on other economic sectors.

Source: Sask Trends Monitor, 2007

Table B2.4: EMM Industry Targeting Classification, 2008 to 2013

	Main Sectors	Sub-Sectors
Leading Sectors		
Current and Emerging Strengths <i>MSRG leading (grow faster than district) and PG positive</i>	✓ None	<ul style="list-style-type: none"> ✓ Electrical machinery and apparatus ✓ Radio, TV, instruments, watches and clocks
Prospects limited by external trends and weak base <i>MSRG leading (grow faster than district) and PG negative</i>	✓ None	✓ None
Lagging Sectors		
High priority retention target and prospects limited by weak base and declining competitiveness <i>MSRG lagging (grow slower than district) and PG positive</i>	<ul style="list-style-type: none"> ✓ Electricity, gas and water ✓ Construction ✓ Wholesale and retail trade; catering and accommodation ✓ Transport, storage and communication ✓ Finance, insurance, real estate and business services ✓ Community, social and personal services ✓ General government services 	<ul style="list-style-type: none"> ✓ Electricity ✓ Water ✓ Wholesale and retail trade ✓ Catering and accommodation ✓ Communication ✓ Finance and insurance ✓ Business services ✓
Prospects limited by external trends and declining competitiveness and prospects limited overall	<ul style="list-style-type: none"> ✓ Agriculture, forestry and fishing ✓ Mining and quarrying ✓ Manufacturing ✓ 	<ul style="list-style-type: none"> ✓ Food, beverages and tobacco ✓ Textiles, clothing and leather goods ✓ Wood and paper, publishing and printing

	Main Sectors	Sub-Sectors
<i>MSRG lagging (grow slower than district) and PG negative</i>		<ul style="list-style-type: none"> ✓ Petroleum products, chemicals, rubber and plastic ✓ Other non-metal mineral products ✓ Metals, metal products, machinery and equipment ✓ Transport Equipment ✓ Furniture and other manufacturing ✓ Transport and storage

Source: Demacon, 2015

The industry target classification is displayed graphically in Figures B.8 and B.9. The size of the circles represents the location quotient, that is, the relative size of the sector.

Sectors located in the top and bottom left quadrants are considered having limited prospects because these industries are declining in the aggregate economy. If they are small they have additional challenges and if they are within the negative range in terms of LSRG, they also suffer from declining competitiveness.

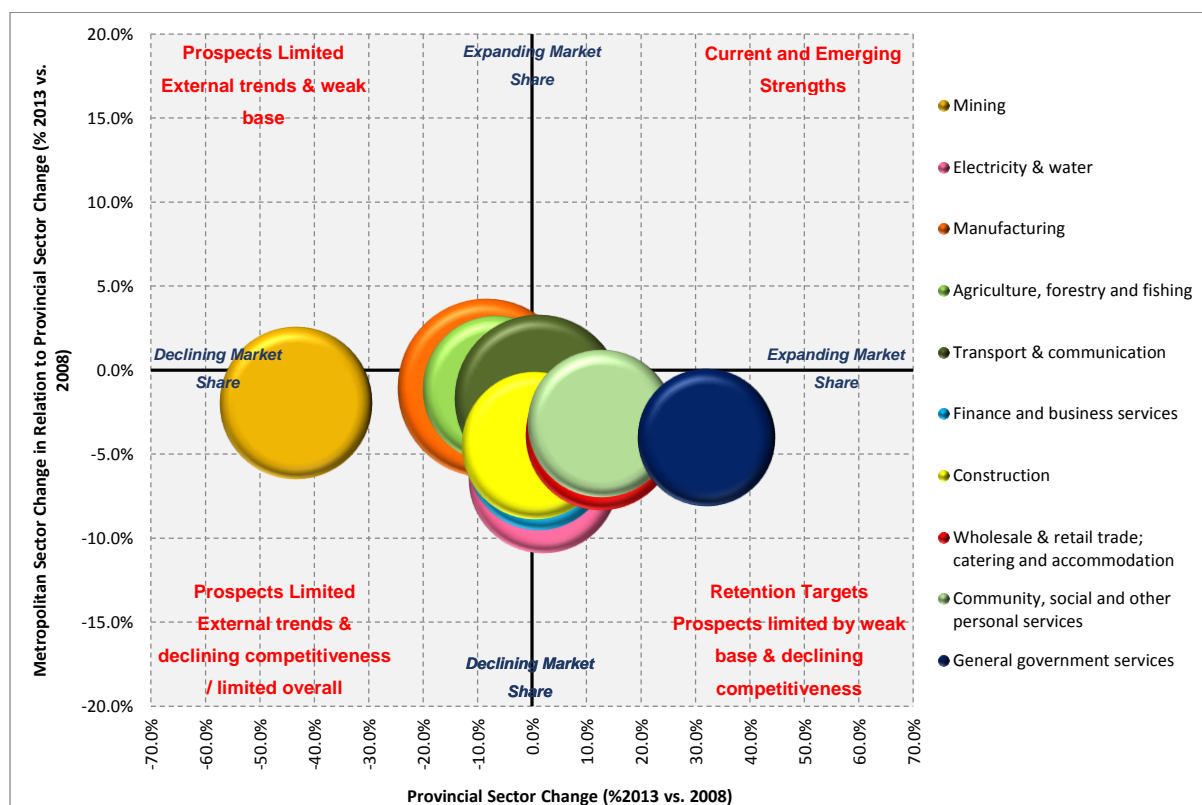
In business terminology the **upper left quadrant** reflect industry groups that are **increasing their market share** in a **declining market**, industries in the **lower left quadrant** represents industries that are **losing market share in a declining market**.

Sectors falling within the lower right quadrant are classified as retention targets (if large enough) because they are growing in the aggregate economy but more slowly locally. Smaller industry groups in this quadrant are deemed to have limited prospects.

Sectors within the upper right quadrant are growing in the aggregate economy and locally. These industries represent the strengths and emerging strengths of the local economy. If the circles are large it represents current strengths and if the circles are smaller then it reflects emerging strengths.

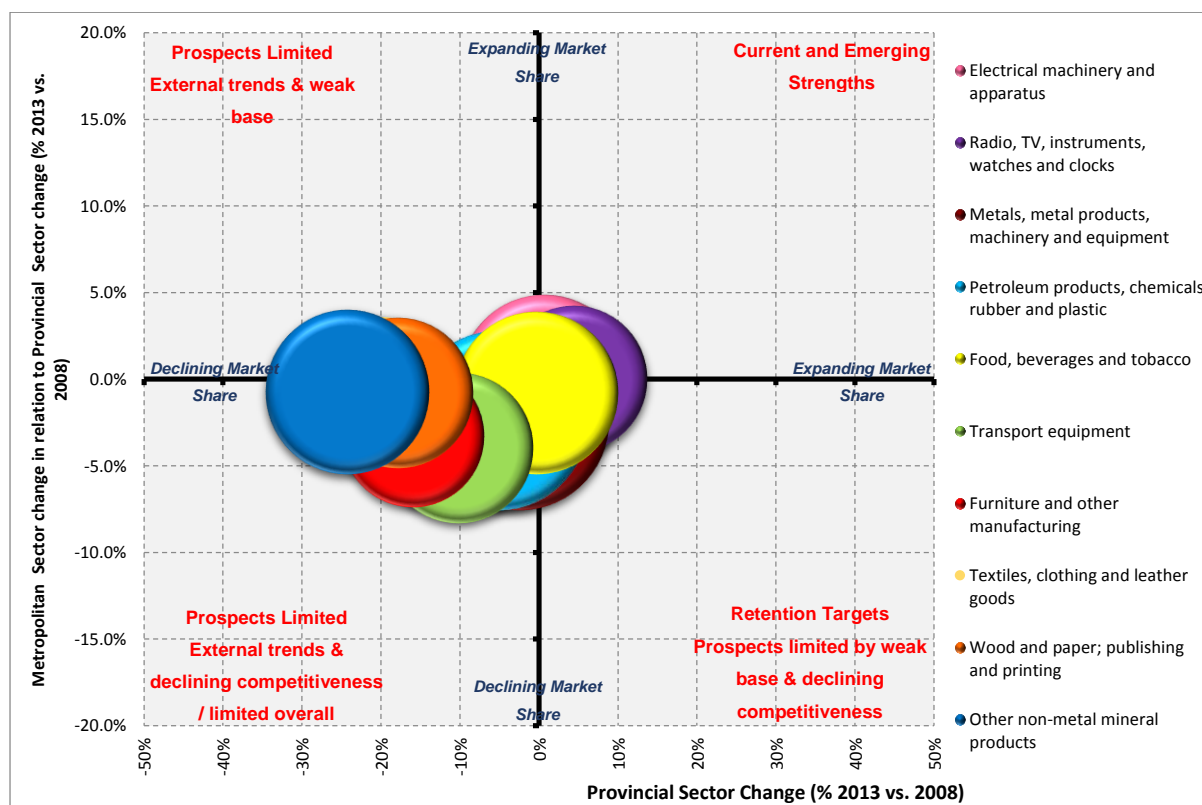
In business terminology industries in the **upper right quadrant** are **increasing their market share** in an **expanding market**, whereas the industries in the **lower right quadrant** are **losing market share** in an **expanding market**.

Figure B2.2: EMM Main Sectors Classification System, 2008 to 2013



Source: Demacon, 2015

Figure B2.3: EMM Manufacturing Sub-Sectors Classification System, 2008 to 2013



Source: Demacon, 2015

Given the Competitive Advantage Analysis (CAA) focused on examining local industries / sectors to identify leading and lagging sectors and their prospects for employment growth. The following primary target sectors have been identified.

Table B2.5: Primary Target Sectors in the EMM

Main Sectors	Sub-Sectors
<ul style="list-style-type: none"> Electricity, gas and water Construction Wholesale and retail trade; catering and accommodation Transport, storage and communication Finance, insurance, real estate and business services Community, social and personal services General government services 	<ul style="list-style-type: none"> Electrical machinery and apparatus Radio, TV, instruments, watches and clocks Electricity Water Wholesale and retail trade Catering and accommodation Communication Finance and insurance Business services

Source: Demacon, 2015

Note: In business terminology industries in the upper right quadrant are increasing their market share in an expanding market, whereas the industries in the lower right quadrant are losing market share in an expanding market. These sectors represent the primary target sectors within the metro's economy.

Table B2.6: Secondary Target Sectors in the EMM

Main Sectors	Sub-Sectors
<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None

Source: Demacon, 2015

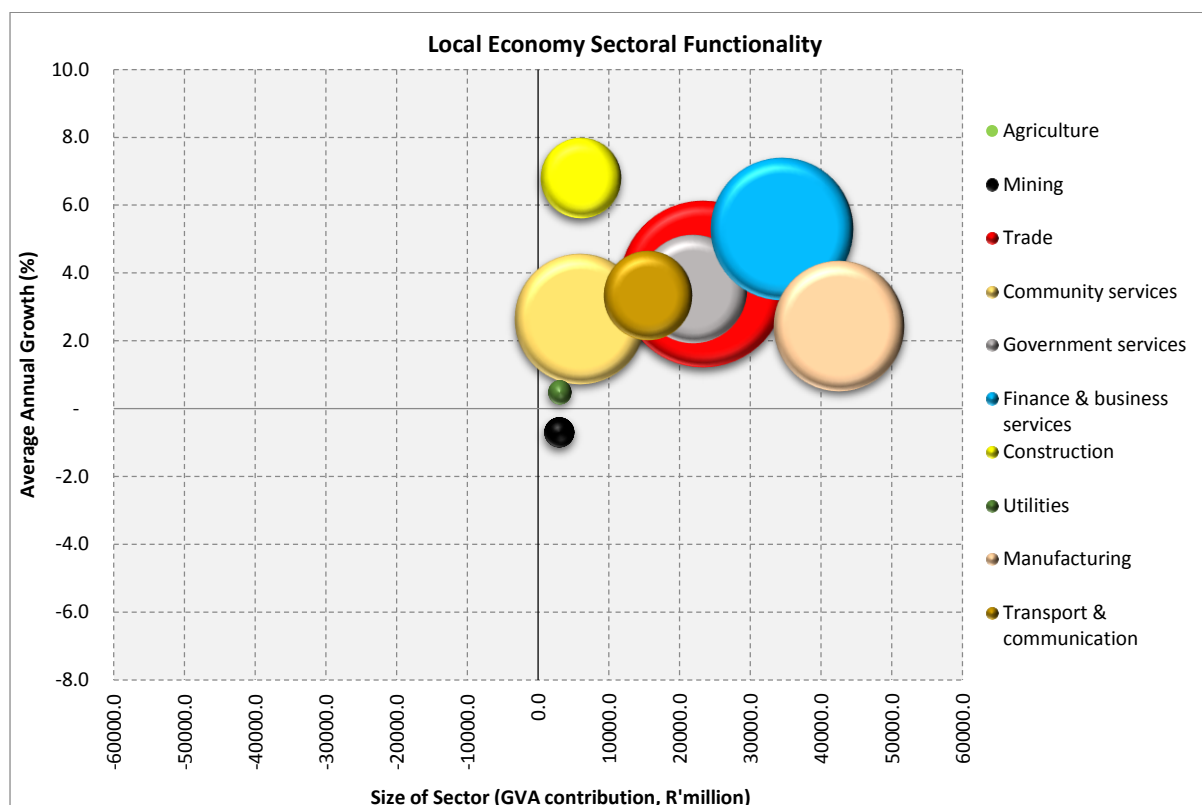
Note: The secondary target sectors should represent industries within the upper left quadrant increasing their market share in a declining market.

The findings from the labour-based analyses (Leading-Lagging Analysis, Carvalho Analysis and the Industry Target Classification) point to deeper underlying fundamental challenges. As the labour-based analyses focus on employment, it can be concluded that the economic sectors within the EMM do not perform optimally due to the fact that labour within these sectors are not competitive. Therefore initiatives should be taken to ensure increased labour competitiveness within the EMM's economy, such as increased skills development, but also raise important questions regarding over-regulation of labour legislation that renders South African labour costly and uncompetitive.

Economic Functionality – Shift Share Analysis (GVA Based)

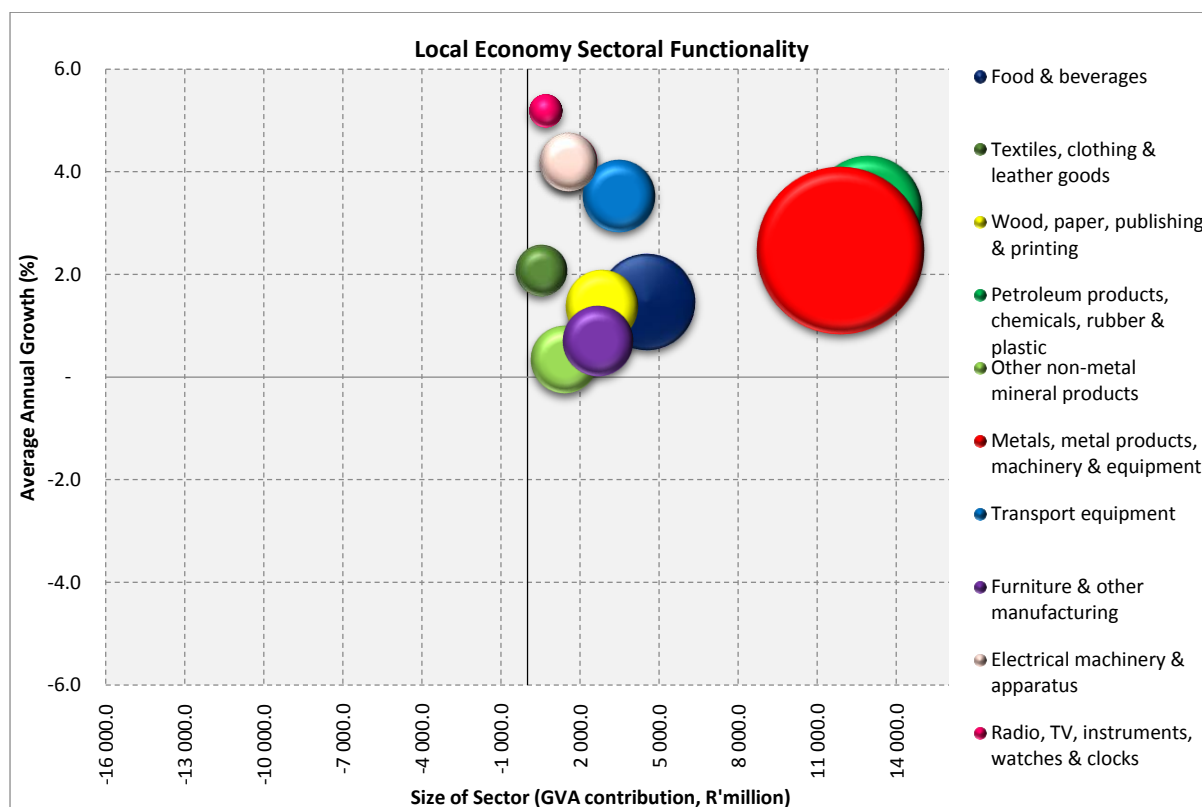
It should be noted that the analysis above is labour based – penalising some sectors due to the volatility of the labour force in our country. Therefore this analysis is supported by a shift-share analysis based on economic contribution and economic growth.

Figure B2.4: EMM Shift-Share Analysis – EMM Economy Sectoral Functionality



Source: Demacon, 2015

Figure B2.5: EMM Shift-Share Analysis – Economy Sectoral Functionality (Manufacturing Sub-Sectors)



Source: Demacon, 2015

From the production-based analysis (Shift-Share) the sectors that are both large sectors (in terms of GVA contribution) and high growth sectors for the EMM can be identified as the following sectors:

- Manufacturing
- Finance and Business Services
- Retail Trade
- Warehousing

It is clear to see from the Shift-Share analysis that the manufacturing sector still remains a large and growing sector within the EMM. This dispels the notion that manufacturing is a declining, uncompetitive sector in general, but it does point to very specific sectoral inefficiencies. Furthermore the following manufacturing clusters within the EMM's manufacturing sector experienced significant innovations in the past two decades:

- Chemicals cluster (particularly pharmaceuticals and plastics)
- Metal production and metal working cluster
- Transport and equipment cluster (particularly air transport equipment)

The following clusters within the manufacturing sector experienced significant innovation

In this content the pressure for spatial growth and expansion in these sectors reveal a direct correlation with the need for public sector infrastructure investment.

Having said this, it is clear that the EMM's largest and growing economic sectors lie within and around the major nodes and established industrial precincts – it is these areas that should receive priority in terms of National Treasury maintenance and renewal guidelines. The aforementioned areas are largely built-up and future growth will gravitate to very specific high potential locations – these will include new nodes, corridors and precincts along proportionally the largest investment opportunity in retail, commerce, warehousing and business services.

Synthesis

Two approaches were followed to identify the potential economic growth sectors within the metropolitan economy – a *labour based approach* and a *production based approach*.

Both of these approaches contribute in identifying the key growth sectors for the metropolitan economy that will ensure the expansion of the economic base and employment base of the economy, which leads to new opportunities attracting continuous domestic and foreign investment.

Table B2.7: Key Focus Sectors

Labour Based Key Focus Sectors	Production Based Key Focus Sectors
Main Sectors	
<ul style="list-style-type: none"> • Electricity, gas and water • Construction • Wholesale and retail trade; catering and accommodation • Transport, storage and communication • Finance, insurance, real estate and business services • Community, social and personal services • General government services 	<ul style="list-style-type: none"> • Wholesale and retail trade; catering and accommodation • Manufacturing • Finance, insurance, real estate and business services • Community, social and personal services • General government services • Construction
Manufacturing Sub Sectors	
<ul style="list-style-type: none"> • Electrical machinery and apparatus • Radio, TV, instruments, watches and clocks 	<ul style="list-style-type: none"> • Metals, metal products, machinery and equipment • Petroleum, chemicals, rubber and plastics • Food and beverages • Transport equipment • Electrical machinery

As these sectors expand the metropolitan economy will be strengthened, enabling it to attract a larger provincial market share (labour and production based). It will furthermore contribute a reduction in the unemployment figure of the metro. Expansion of these sectors will also manifest spatially – requiring the expansion of infrastructure.

Infrastructure investment is needed to expand economies (economically & socially):

- Transport systems (road, rail, airports, ports, waterways, etc.)
- Energy generation
- Supply and transmission
- Water collection and supply
- Communication systems (telecommunications, internet, etc.)

South Africa, and the metro itself faces a number of constraints to growth:

- Electricity challenges
- Inadequate economic infrastructure in general
- Unwieldy regulatory processes which delay investment
- Insufficient Government co-ordination, which contributes contributed to investor uncertainty

National government has developed a 9-Point Plan, at a scale large enough to constitute a 'Big Push' to ignite economic growth. The 9-Point Plan consists of the following:⁴

- 1) Resolving the energy challenge;
- 2) Revitalising the Agriculture and the agro-processing value chain;
- 3) Advancing beneficiation and adding value to our mineral wealth;
- 4) More effective implementation of a higher-impact Industrial Policy Action Plan;
- 5) Encouraging private sector investment;
- 6) Moderating workplace conflict;
- 7) Unlocking the potential of SMMEs, Co-ops, Township and Rural enterprises;
- 8) State reform, including boosting the role of state owned companies in broadband, water, sanitation and transport infrastructure; and,
- 9) Growing the Ocean Economy and Tourism.

SPACE ECONOMY

Figure B2.6 provides a visual representation of the land budget per region for the next 25 years. From a spatial economic perspective, an estimated 34 526.3 ha will be required to accommodate urban expansion over the next 25 years. It will constitute a combination of infill development and urban expansion – whereas infill development may be desirable to enhance urban efficiency and infrastructure optimisation, future growth and expansion of the urban fabric are prerequisites for high economic growth.

Figure B2.7 illustrates the current GVA / economic activity geographically with the EMM. The key areas with the highest concentration of economic activity, specifically based on manufacturing, wholesale and retail trade as well as the business and finance sector GVA contribution, include:

1. Greater Kempton Park and O.R Tambo area
2. Wadeville and Alberton area
3. Germiston and Edenvale area
4. Greater Boksburg area
5. Brakpan and Springs area

⁴ Source: Department of Communication, Press Conference, 2015

Figure B2.6: EMM Land Budget per Region, 2015 – 2040

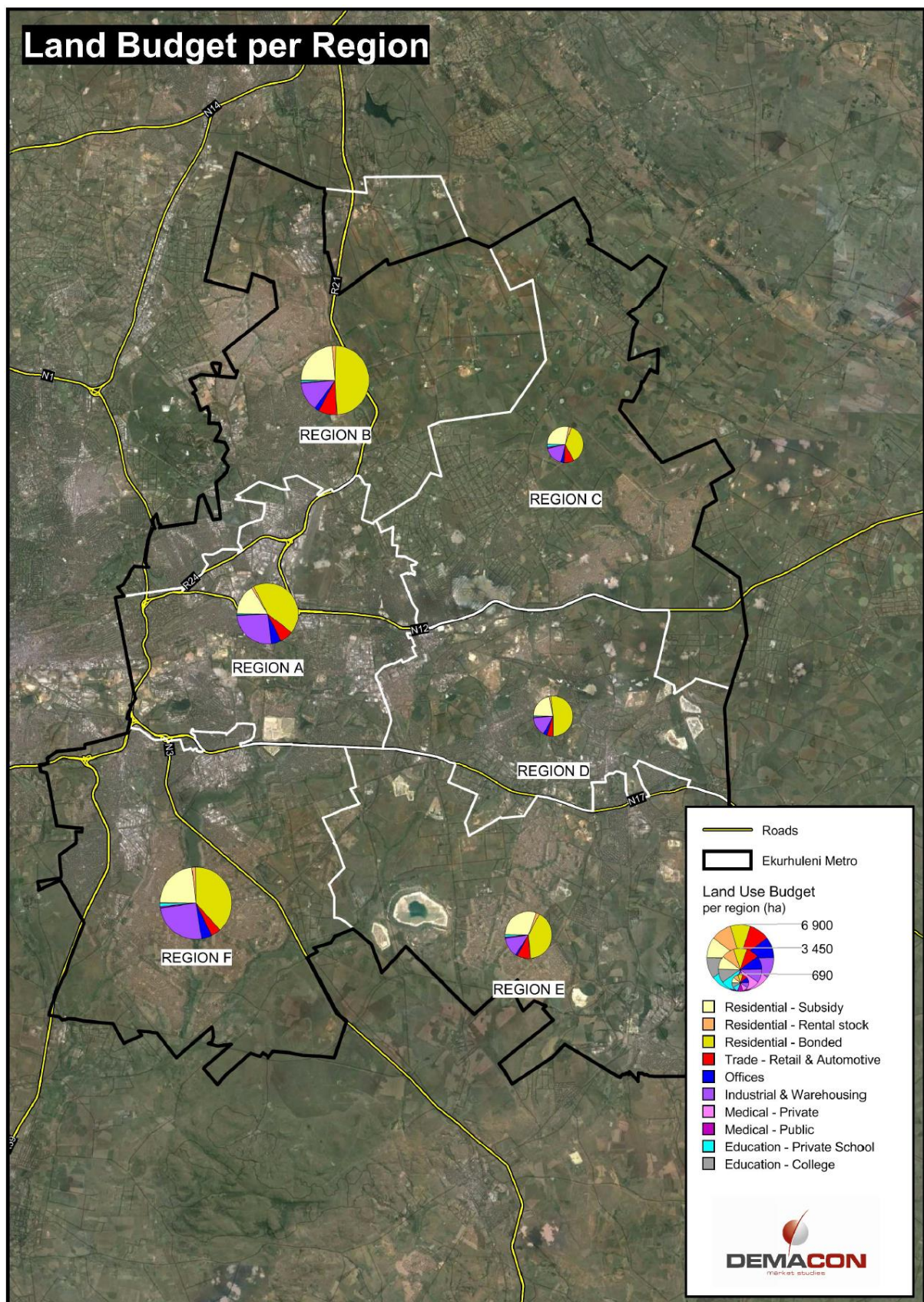


Figure B2.7: Current EMM GVA, 2013

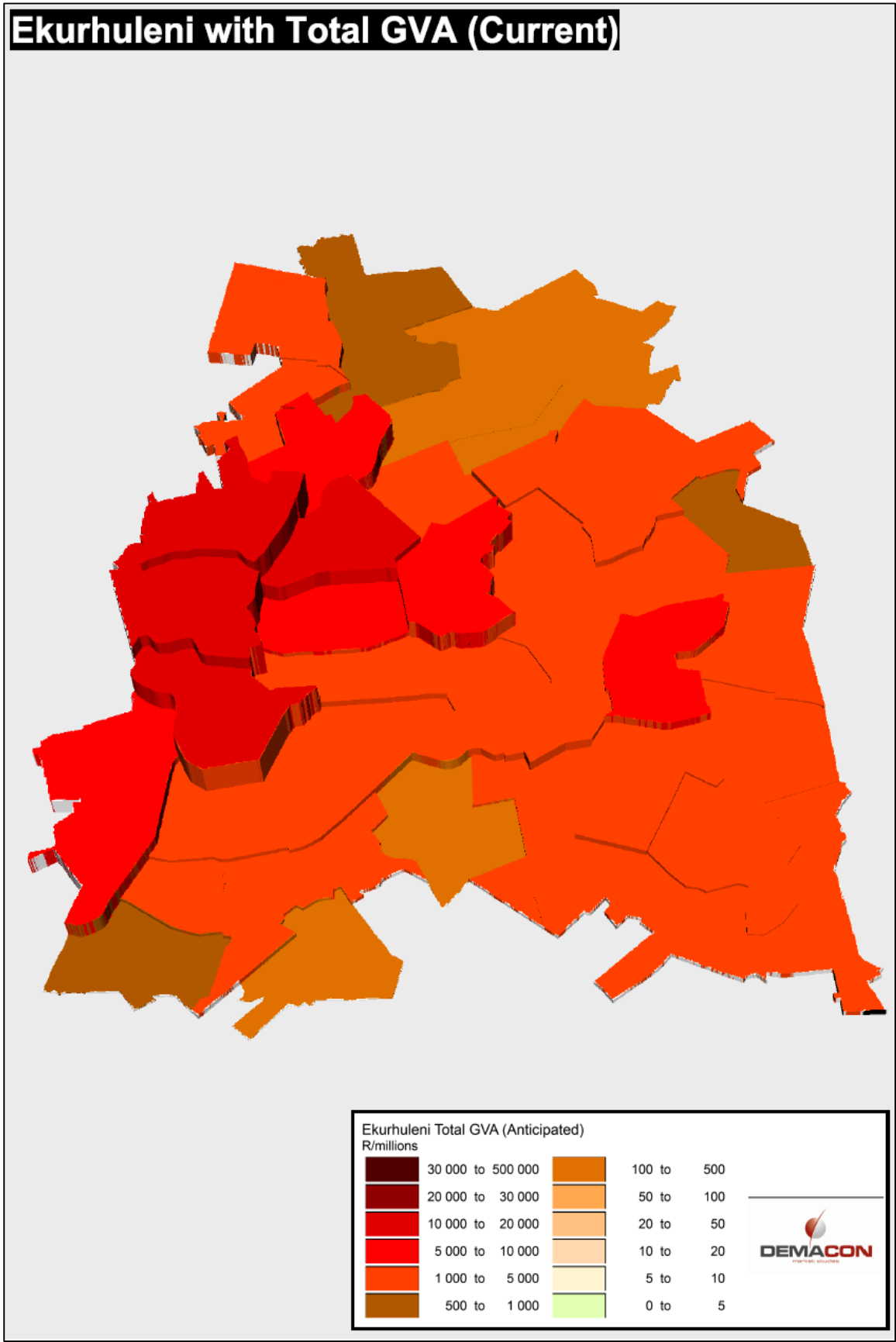
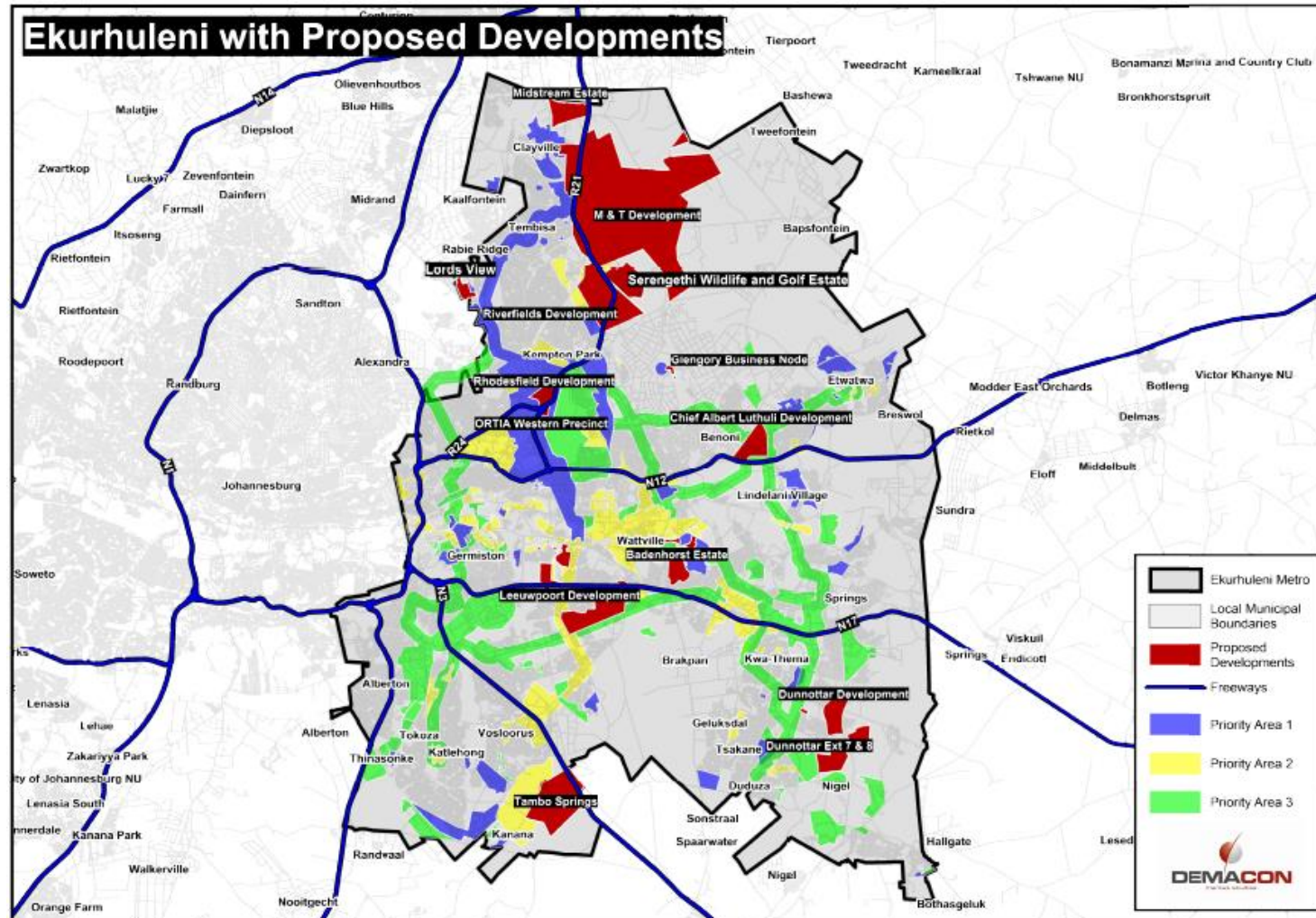


Figure B2.8 illustrates a number of the Major Developments identified for economic growth in the Metro, together with their Priority Areas.

Figure B2.8: Location of the Major Development in the Context of Ekurhuleni



The Priority Areas span on average 26.9% of the total Ekurhuleni Metropolitan Municipality. These Priority Areas are largely configured around built-up areas and along mobility corridors. As such there are space and infrastructure realities to be considered:

1. Existing infrastructure has limited capacity to sustain new development and will require future upgrades
2. Some infrastructure is situated underground, which will limit expansion possibilities
3. Not only is developable land extremely limited in these Priority Areas – existing social infrastructure will not be able to cope with excessive densification (over and above the land demand for additional residential and commercial expansion), additional land will be required to facilitate concomitant growth in social infrastructure

The Priority Areas can at best absorb (provide) 10% - 15% of future spatial growth requirements. This yields an optimum split of **80:20**: 80% of future development will take place outside these Priority Areas and will entail the development of new growth areas that will facilitate extensive private sector investment and tax base expansion.

Consistent with the economic modelling, by far the **greatest future sustained economic benefits** (including capital investment, economic growth, job creation, expansion of the tax base, etc.) will be generated by **private sector investment projects situated outside these Priority Areas**. Land readiness (including zoning rights, EIA approvals, etc.) and infrastructure availability coupled with ease of land assembly are major considerations to the investor – domestic and foreign. In this context the market has already identified the following high potential investment locations (which are in various stages of implementation):

- Badenhorst Estate Development (outside Priority Areas)
- Chief Albert Luthuli Mixed Use Development
- Dunnottar Residential and Ancillary Services Development (outside Priority Areas)
- Dunnottar Ext. 7 and 8 Development (Gibela) (outside Priority Areas)
- Glengory Mixed Use Development (outside Priority Areas)
- Leeuwpoot Mixed Use Development (outside Priority Areas)
- Lords View Industrial Estate
- M & T Mixed Use Development (outside Priority Areas)
- Midstream Estate Development (outside Priority Areas)
- Rhodesfield Urban Development Framework
- Riverfields Mixed Use Development
- Serengeti Estates Development (outside Priority Areas)
- Tambo Springs Industrial Development (outside Priority Areas)
- ORTIA Western Precinct

These projects constitute an important response to viable investment opportunities (proportional to demand) – demand pressures which cannot be absorbed within the existing built-up urban fabric through densification only, as is suggested in certain policy stances.

It is imperative to note that the Priority Areas, strategic as they may be in terms of public transport infrastructure etc., will not be able to replicate the aforementioned growth. This reality is **in line with National Treasury's focus on economic development**, over and above urban restructuring and upgrading and renewal. Major new development projects are required to grow the economy. A flexible approach will have to be taken, otherwise growth will be undermined.

SYNTHESIS

Excessive densification is promoted in the mature economies of Europe and America, where economic and population growth have tapered. South Africa has a distinctly different growth dynamic, which requires an equally unique and location appropriate approach to future growth. As opposed to singular dimensional strategies centred on densification and infill development, a vital consideration to relieve pressure on existing infrastructure (including the transportation networks) will be to **promote and actively facilitate the development of new nodes** closer to residential growth areas.

This strategy will succeed in **bringing jobs closer to the household**. South Africa is a **developing economy** that will **experience continued high rates of growth and in-migration** over the **next three to four decades**. Densification alone will not be able to cope with these growth demands.

In the context of the aforementioned geographic growth split (80:20) a **flexible development approach** will be required – in the context of South Africa's historic and all too often rigid and protectionist planning stances. As the South African population matures and population growth gradually decelerates over the next three to four decades, pressure on the urban edge will subside.

Thus, for the next **three to four decades high growth and spatial expansion** will need to take **precedence** in terms of infrastructure investment within the EMM. Therefore the geographical areas within the EMM that possess the greatest potential need to be identified in terms of realising the following objectives:

- ✓ Economic growth
- ✓ Job creation
- ✓ Sustainable growth and government revenue (including property rates and taxes, company tax, personal income tax, etc.)

Having said this, the bulk of future growth in Ekurhuleni will intensify along an extended / broader centre corridor area from the R21 in the north through Germiston and Alberton, to the R59 and the N3 in the

south. The most powerful development drivers and catalytic projects are situated in this broader corridor environment. In this broader corridor context, one can distinguish between current development drivers and future primary development drivers:

Current development drivers include:

- Albertina Sisulu Corridor (R21)
- O.R. Tambo International Airport
- R59 Corridor
- N3 Corridor

Future primary development drivers include

- Riverfields development
- M & T / R21 development
- Ekurhuleni Aerotropolis
- N3 / Tambo Springs development

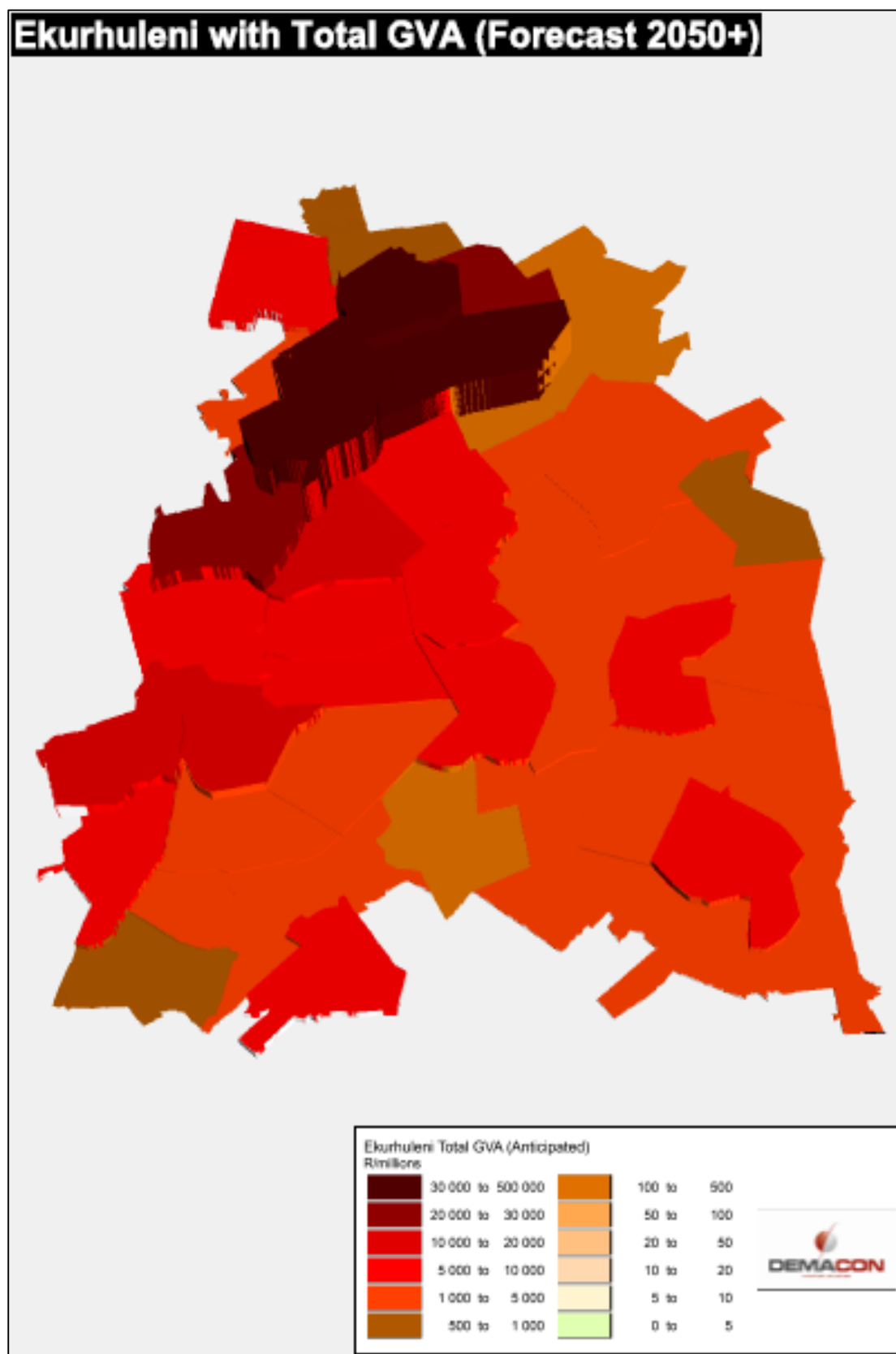
The aforementioned major private sector development projects listed earlier (and which are by and large situated outside the Priority Areas *per se*) are all in direct response to the aforementioned development drivers.

The **significance and rateability of the second economy**, (which also contribute to the objectives of economic growth, job creation as well as sustainable growth and government revenue generation), is largely unrecorded and as such its significance is not fully accounted for in economic analyses and policy documentation. The second economy is also largely untaxed, accounts for approximately 20% of the GDP, and is grossly misunderstood. In this economy lies a vast opportunity in equalising a more sustainable tax revenue base. Arguments in favour of reduced individual and company tax and increased VAT rate (which has much broader and equitable reach) have been increasingly advanced in the past few years.

The **tourism sector**, specifically in terms of business tourism, also **holds significant opportunities** for economic growth within the EMM, seeing that the **O.R. Tambo International Airport is the gateway to the province**. Infrastructure development in and around the O.R. Tambo International Airport is key to unlocking the business tourism potential of the EMM.

Figure B.15 illustrates the future EMM GVA / economic activity based on the medium to long-term impacts that could be generated as a result of the investment in economic infrastructure within the EMM, specifically looking at the major developments identified for economic growth and expansion within the metro. Consistent with corridor development, within the EMM there is a **clear gravitational pool towards the R21 Corridor**. The same principles do, however, not hold true for public transport dominated routes: high value attracts high value.

Figure B2.9: Future EMM GVA – Medium- to Long-Term Forecast



B.3 TRENDS AND DEMAND FOR BASIC INFRASTRUCTURE

This section of the Build Environment Performance Plan will review the trends and demands of the basic infrastructure provided by the Ekurhuleni Metropolitan Municipality, which include water, sanitation, roads and storm water, electricity and solid waste.

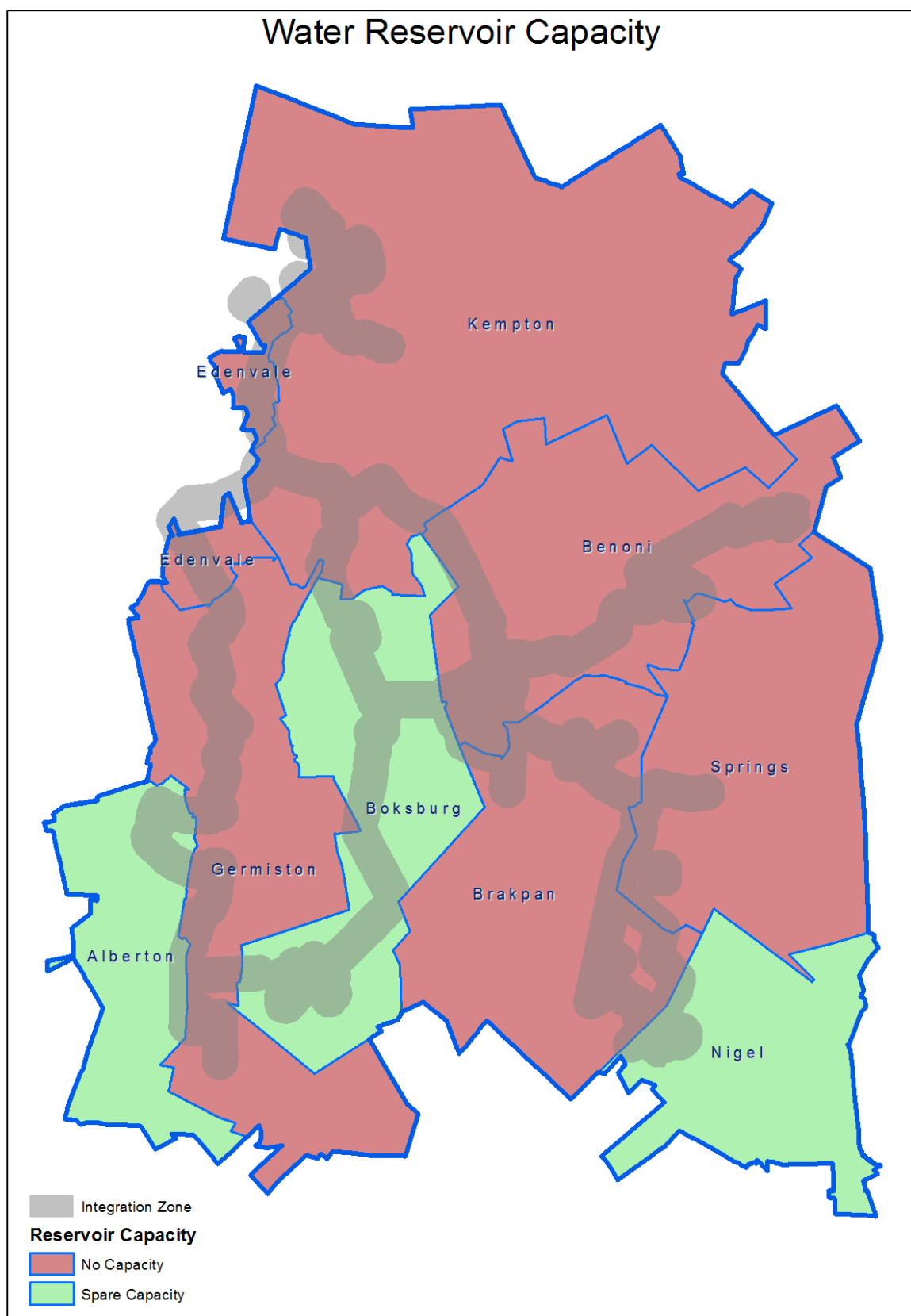
CURRENT CAPACITY OF MAJOR INFRASTRUCTURE SERVICES INDICATED SPATIALLY

Most of the municipality's infrastructure within the urban development boundary is at its full capacity and outside the urban development boundary there is no bulk infrastructure. Ekurhuleni is upgrading its infrastructure supply system in terms of Water, Sewage, Roads, Storm water and Electricity as development continuous. Very little to no spare capacity exists in the systems for any immediate expansion projects, this capacity must be increased as development progresses. Alleviation of these bulk constraints is crucial to under-pinning all strategic objectives, including servicing existing customers, facilitating new service access and stimulating economic growth. One of the flagship projects of the municipality is the Aerotropolis. This project will stimulate growth and job creation, which put a lot of pressure on the infrastructure capacities within the EMM. There is a great need to have a strategic, overarching, multi-sectoral, long term infrastructure plan to address the Aerotropolis development trajectory that the city has embarked on. This particular master plan would adequately inform the relative provincial and national departments of the development trends and needs of the city to meet the ever growing demand. The ICDG spend would in this instance assist the city to adequately plan for bulk infrastructure and perhaps cost the proposed infrastructure upgrades to enable the city to propose a value proposition in order to adequately source funding from various possible streams.

WATER:

Rand Water is the bulk supplier of all purified water to the areas within EMM. Rand Water is therefore responsible for the planning and monitoring of the water sources utilized and also caters for the municipality's demand forecast. EMM is responsible for the distribution of the water to most of the areas in the municipality, however there are few areas which are supplied directly by Rand Water. The municipality currently experiences capacity shortages within most of the water infrastructure. In terms of the major water infrastructure the EMM reservoir capacities are indicated in the table below and spatially illustrated in the figure below.

Figure B3.1: Reservoir Capacity within EMM.

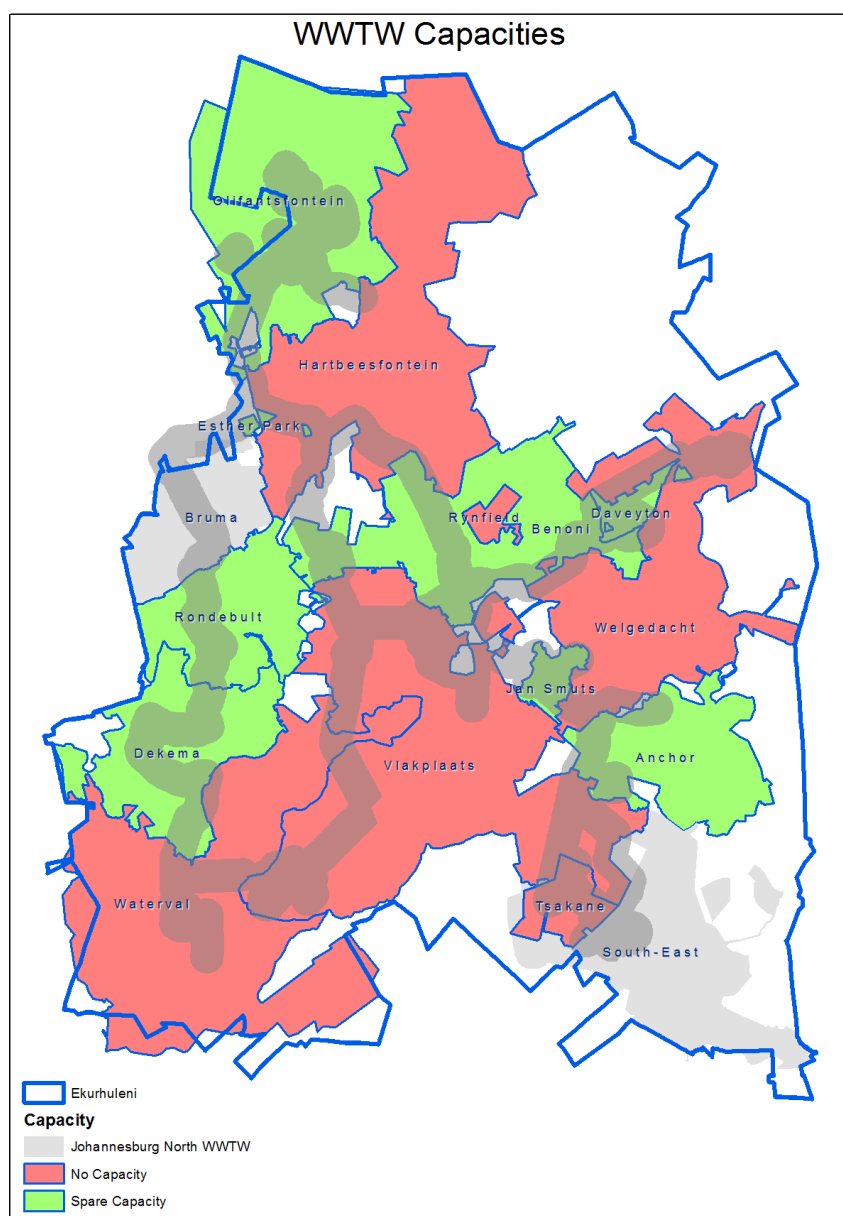


(Source: Capacity information is obtained from a presentation on water and sanitation strategy July 2016 received from water and sanitation department. Information from Rand Water and final figures from GLS is required to update the map according to supply areas and to incorporate the additional capacity supplied by Rand Water.)

SEWER:

East Rand Water Care Company (ERWAT) is a fully owned utility of EMM and is responsible for treating and monitoring the effluent discharge into the river streams. The Waste Water Treatment Works (WWTW) in the municipality are currently operating in overstressed capacities and this is one of the major constraints towards development within EMM. The total treatment capacity of Erwat within the boundaries of EMM is currently 614.5MI/d. The total flow to Erwat plants is presently 713.6MI/d which implies that the total requirement for sewage treatment now exceeds the total hydraulic treatment capacity of Erwat.¹ Storm water ingress in some areas is contributing towards the hydraulic treatment capacity of ERWAT's plants. Some of the sewer pumpstations and sewer pipelines within the municipality are also operating at full capacities. In terms of the major sewer infrastructure the WWTW capacities are indicated in the Figure below.

Figure B3.2: WWTW Capacity within EMM per Drainage Area

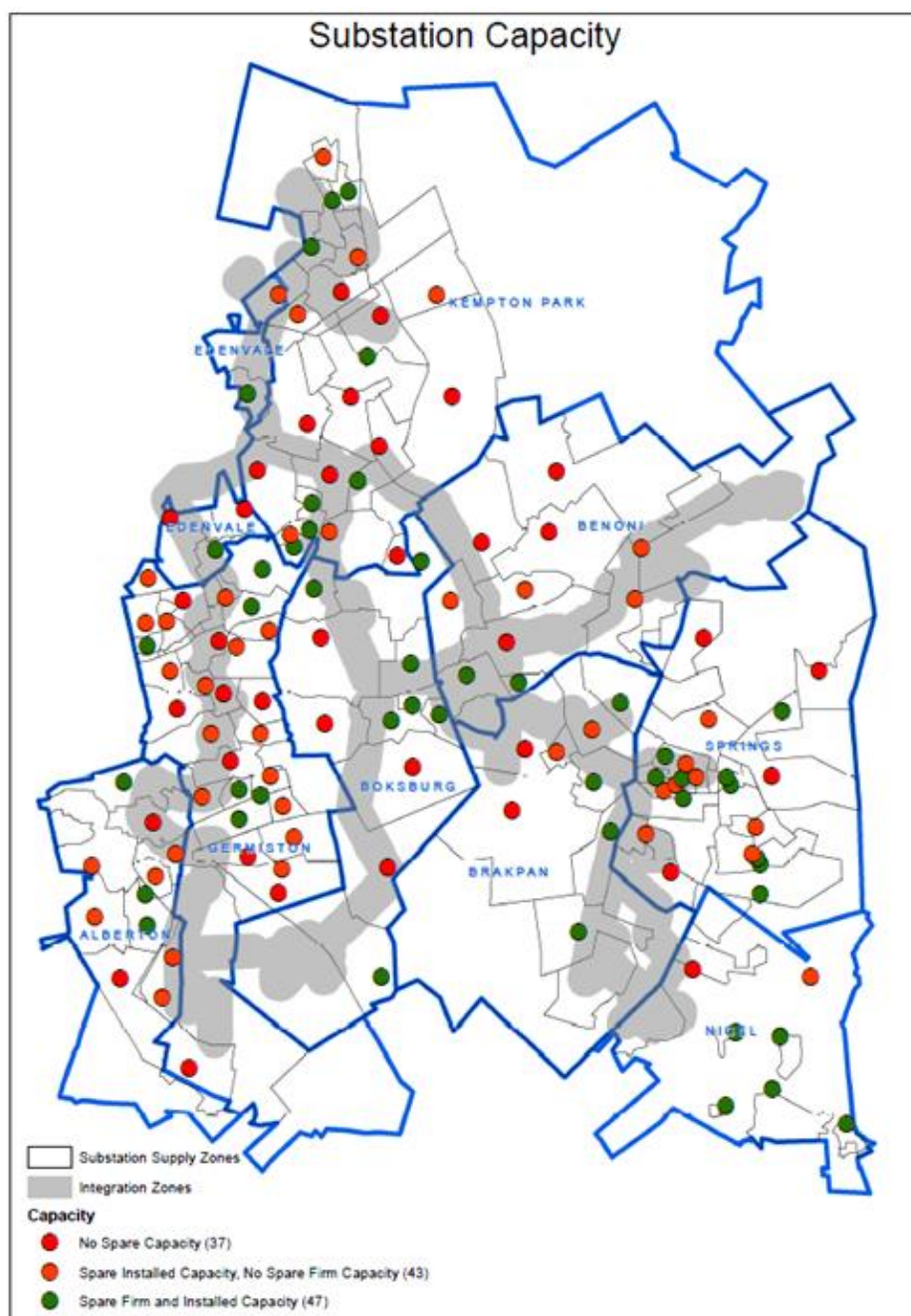


(Source: Capacity information is obtained from a presentation on water and sanitation strategy July 2016 received from water and sanitation department. The finalisation of the drainage areas together with the department is in progress and will be included in the final document.)

ELECTRICITY:

The bulk electricity within EMM is being purchased from Eskom and EMM is responsible for the distribution to most of the areas within EMM. City power provides electricity to Phomolong and a section in Bassonia area. To ensure access to electricity by household and businesses, the municipality has 127 substations which distributes 2 600 MVA to consumers. Most of the electricity infrastructure in EMM is currently at its full capacity. There are 127 substations within EMM and only ± 47 substations operates within firm capacity. The figure below indicates the average available substation capacities.

Figure B3.3: Electricity Capacity within EMM



(Source: Capacity information is obtained from EMM Energy Masterplan and Refurbishment, Network Assessment. The finalisation of the supply zones together with the department is in progress and will be included in the final document.)

The region is well served by freeways running north-south and east-west, linking the EMM to the rest of Gauteng province, as well as providing mobility within the metropolitan area. These freeways, namely the N12, N17, N3, R21 and R24, carry the most traffic and are also the most congested. Most of these freeways have been upgraded as part of SANRAL's GFIP project. The total length of road network in EMM that is owned by the municipality is 9 871 km (81%), Gauteng province owns 2 177 km (18%) and SANRAL owns 158 km (1%) of the road network in EMM. The current rapid growth that is being experienced in Ekurhuleni, which is likely to continue, has resulted in major traffic and network capacity challenges along the city's grid. Large investments in road capacity will be required to accommodate the future demand. The figure below indicates the network volumes and capacities for the current year's AM peak hour, assigned on the base year network (2012) obtained from the EMME/3 macro-demand modelling.

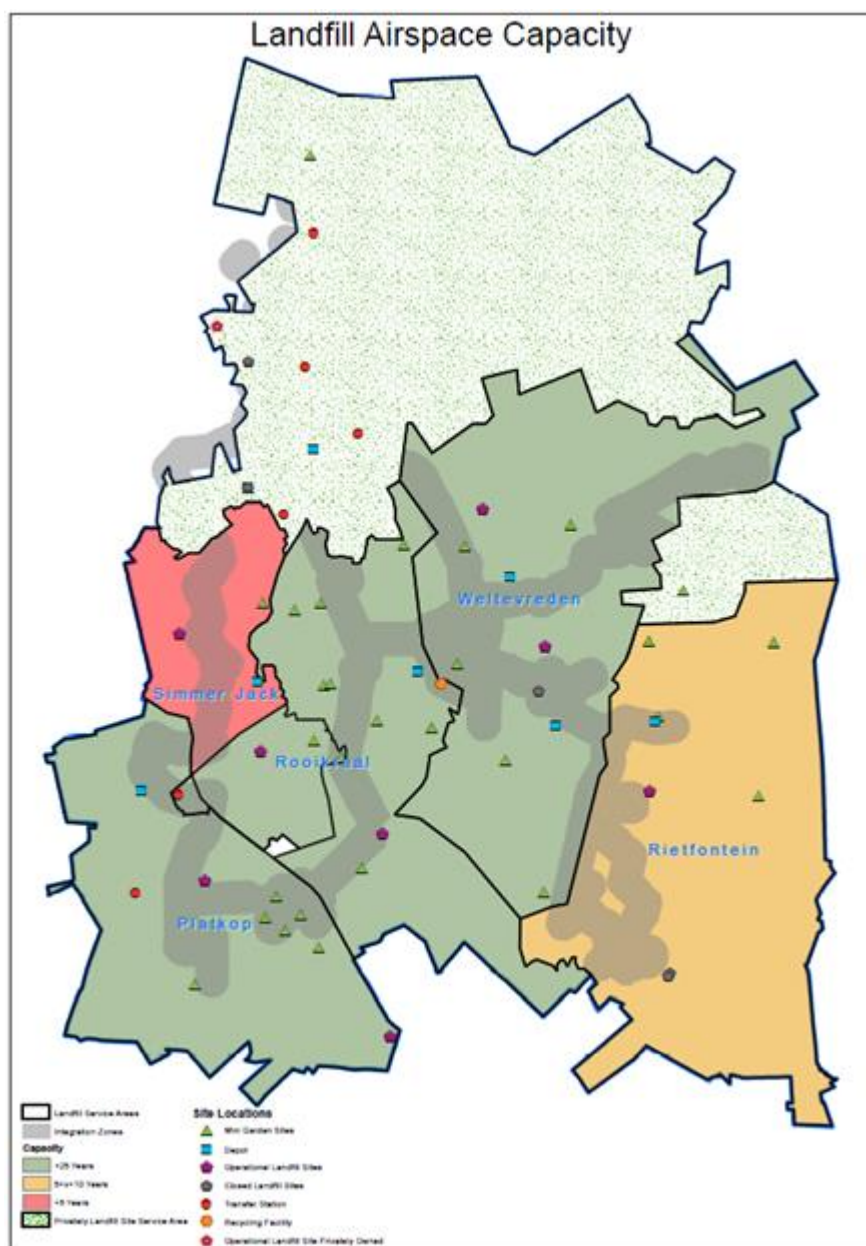
Figure B3.4: AM Peak Hour Volumes: 2015 Demand on Base Year (2012) Network



SOLID WASTE:

EMM operates and own five landfill sites though there is a responsibility to manage eleven more closed landfill sites, through external service providers. EMM services all the areas in the municipality expect for the Northern service area, which is serviced by a privately owned landfill site. The total waste that goes to the five active landfill sites is recorded at weighbridges and adds up to 92 670 tons per month. EMM has 318 specialized vehicles in fleet for solid waste service purposes. The available of adequate air space and the availability of sufficient fleet are challenges currently experienced within the municipality. The figure below indicates the capacities of the landfills based on available airspace within the different service areas. ¹

Figure B3.5: Lifespan of Landfill Sites within EMM Based on Airspace Capacity in Years



DEMAND PROJECTIONS FOR EACH MAJOR SERVICE, INCLUDING CURRENTLY UNMET DEMAND (BACKLOGS) AND FUTURE GROWTH REQUIREMENTS

The municipality by large offers comprehensive services to its customers and the existing backlogs are largely the result of new township establishment, the formation of informal settlements and the municipality having opted for higher level of services than the national minimum levels of service adopted.¹ Ekurhuleni has a CMIP which also defines the services backlogs within the municipality. According to the CMIP, EMM has the following service access backlogs:

Table B3.1: Services Access Backlog in EMM.

Service Description	Access to Services (Measured in customer units)	
	Adequate Access	Access Backlog
Water	1 030 706	148 322 (12.6%)
Sewer	965 497	213 531 (18.1%)
Electricity	950 462	228 566 (19.4%)
Roads & Storm water	973 475	205 553 (17.4%)
Solid Waste	1 081 256	97 772 (8.3%)

(Source: EMM CMIP 2014-2029)

The current water demand (AADD) in EMM is 999 MI/day with only 959.1 MI/day reservoir capacity, this result in a backlog of ±40 MI. The WSDP indicates that the projected AADD growth rate for the next 5 years is calculated to be 1.877%, which results in a water demand of 1 847,16MI/day. A Water Conservation/Water Demand Management Strategy, WDMM Business Plan and WDM Action Plan have been developed and subject to funding and human resources will be implementing 5-6 years water demand activities in order to reduce its Non-Revenue Water from 40.4% to 20% and its water losses from 31.8% to 17%. It should be noted that once these reduced targets are met, water demand management be an on-going initiative in order to maintain the achieved targets.

Over the past eight years the composite growth rate for ERWAT is estimated at 6.1 % per annum. Since the previous planning exercise (2008) the average annual increase in flow was 32.7 MI/d. Over the same period the average annual increase in capacity was 4.0 MI/d, effectively increasing the capacity deficit at a rate of 27.4 MI/d each year. For the purposes of system modelling, the growth over the twenty year planning horizon up to the year 2032, for the total ERWAT service area, is estimated at 3.2 % per annum ranging from 1.5% (low growth areas) to 4.0% (high growth areas) for individual plants. This translates into a forecast annual sewage flow increase of 28.6 MI/d while new capacity needs to be commissioned at a rate of 31.4 MI/d in order to match capacity with requirement. To accommodate the increase demand it is of utmost importance to implement projects to reduce the storm water ingress into the sewer conveyance system which will reduce the capacity constraints currently experienced within EMM.

The current electricity demand in EMM is ±3619 MVA and the total substation firm capacity is 2698 MVA, which results in a backlog of 993 MVA. The total projected demand for 2018 is 4042 MVA. With electricity being the service with the highest backlog figure, the municipality also considers the use of renewable energy. A 1000KW generator that uses methane gas collected from decaying waste has been commissioned at the Germiston landfill site. The municipality also enjoys adequate solar radiation, 860 solar modules are already producing 200 KW of solar power at the OR Tambo precinct.

EMM has a roads master plan which is used as a planning tool to guide the municipality in alleviating traffic congestion and associated environmental problems as well as, achieving a safe and orderly movement of people and goods along the city's road network. Comparison between the base year (2012) and future year networks for the 2037 demand scenario indicates a significant reduction in congested links, especially in the western and central parts. The majority of congested routes modelled on the base year (2012) network are contained within the following area: Albertyn and the N3 to the south, R23 and Benoni to the east, R25 and Kempton Park to the north, and the N3 corridor to the west. This trend is consistent with the spatial development frameworks of the EMM, which concentrates economic and residential development in the central areas where the transport demand is high. However, despite the planned Class 1 and 2 routes, there are still some links showing high congestion and the roads master plan has identified priority routes for each road class for the long-term demand (2037). It is important for the municipality to implement the plan contained in the master plan to deal with the demand.

EMM currently has 5 operating landfill sites. Weltevreden landfill site currently services 827 tons of waste per day, Rietfontein landfill site services 571 tons of waste per day, Rooikraal landfill site services 741 tons of waste per day, Simmer & Jack landfill site services 614 tons of waste per day and Platkop landfill site services 314 tons per day. The master plan for waste management in EMM considered all the necessary factors which influence the waste disposal growth rate and an annual waste disposal growth rate of 1.5% was estimated for the Landfill Facilities in EMM. Based on this growth rate the landfill sites will accommodate the waste disposal demand for >25 years, 9 years, >25 years, 2 years, 25 years respectively. The municipality has recently recapitalized the fleet for waste management services, but the availability of the fleet remains a challenge in the municipality.

In order to sustain the economic base and to sustain the current levels of economic growth, the asset base will have to grow in proportion to the expected economic growth rate. Based on these assumptions the CMIP indicates the following estimated investments which are necessary to address the growth requirements:

Table B3.2: Annual Investment Requirements to Sustain Economic Growth at Current Levels in the Municipality

Service Description	2016	2017	2018
Water	R 183 576 000	R 195 515 000	R 208 168 000
Sewer	R 157 462 000	R 167 703 000	R 178 556 000
Electricity	R 729 594 000	R 777 044 000	R 827 330 000
Roads & Storm water	R 872 299 000	R 929 030 000	R 989 152 000
Solid Waste	R 36 284 000	R 38 644 000	R 41 145 000

ASSET CONDITION AND MAINTENANCE REQUIREMENTS, INCLUDING DEMANDS FOR REFURBISHMENT/ REPLACEMENT OF ASSETS

Despite from the capacity problems experienced within EMM, the municipality also has an asset condition backlog which needs to be address to ensure continuous and sustainable service delivery. The current on-grid-infrastructure are decaying fast to an extent that continued dependence on these types of infrastructures will require extensive investment into renewals, maintenance and decommissioning. While it is projected in the CMIP that an R31billion investment into infrastructures will have to be made by 2025, off-grid solutions will have to be integrated.

The condition of the assets is measured according to the remaining asset value as stipulated in the CMIP. The table below indicates the average remaining asset value per service, which considers the asset life span and condition of the asset. From this it can be seen that for most of the assets, half of the useful life have been consumed.

Table B3.3: Remaining Asset Percentage Value per sector

Service Description	Remaining Asset Value (%)
Water	44%
Sewer	55%
Electricity	51%
Roads & Storm water	55%
Solid Waste	53%

The table below indicates the CMIP estimated asset condition backlog requirements for the current assets within EMM based on CRC (Current Replacement Costs). The electricity and roads and stormwater are the two sectors with the highest asset condition backlog.

Table B3.4: Estimated Condition Backlog per sector

Service Description	Condition Backlog (CRC in Rand)
Water	R196 854 170
Sewer	R75 031 650
Electricity	R1 962 844 089
Roads & Storm water	R1 518 649 132
Solid Waste	R39 590 733

The EMM agrees that maintenance efforts need to be intensified. It is estimated that EMM currently spends in the order of R2.1 million per year on maintenance activities on its current infrastructure and buildings portfolio, whilst the forecast maintenance budget is estimated to be in the order of R1.54 million and it is important that this budget is properly structured to extract optimum usage of the assets. Based on the nature and extent of the current infrastructure and buildings portfolio at EMM, it is estimated that 23.4% of EMM's annual maintenance expenditure should be on water and sanitation. 30.4% on roads and storm water and 34.1% on electricity infrastructure. This is approximately in line with the proportions of the asset values, but skewed towards the electricity assets given the critical nature of this equipment.¹ The EMM is aiming to increase the allocations towards repairs and maintenance on an annual basis at rates that exceed inflation levels to ensure the assets are maintained adequately.²

According to the CMIP the table below indicates the estimated asset renewal requirements. The figures include the asset renewal backlogs and the renewals as a result of new investments.

Table B3.5: Estimated Total Annual Renewal Requirements per sector (2016)

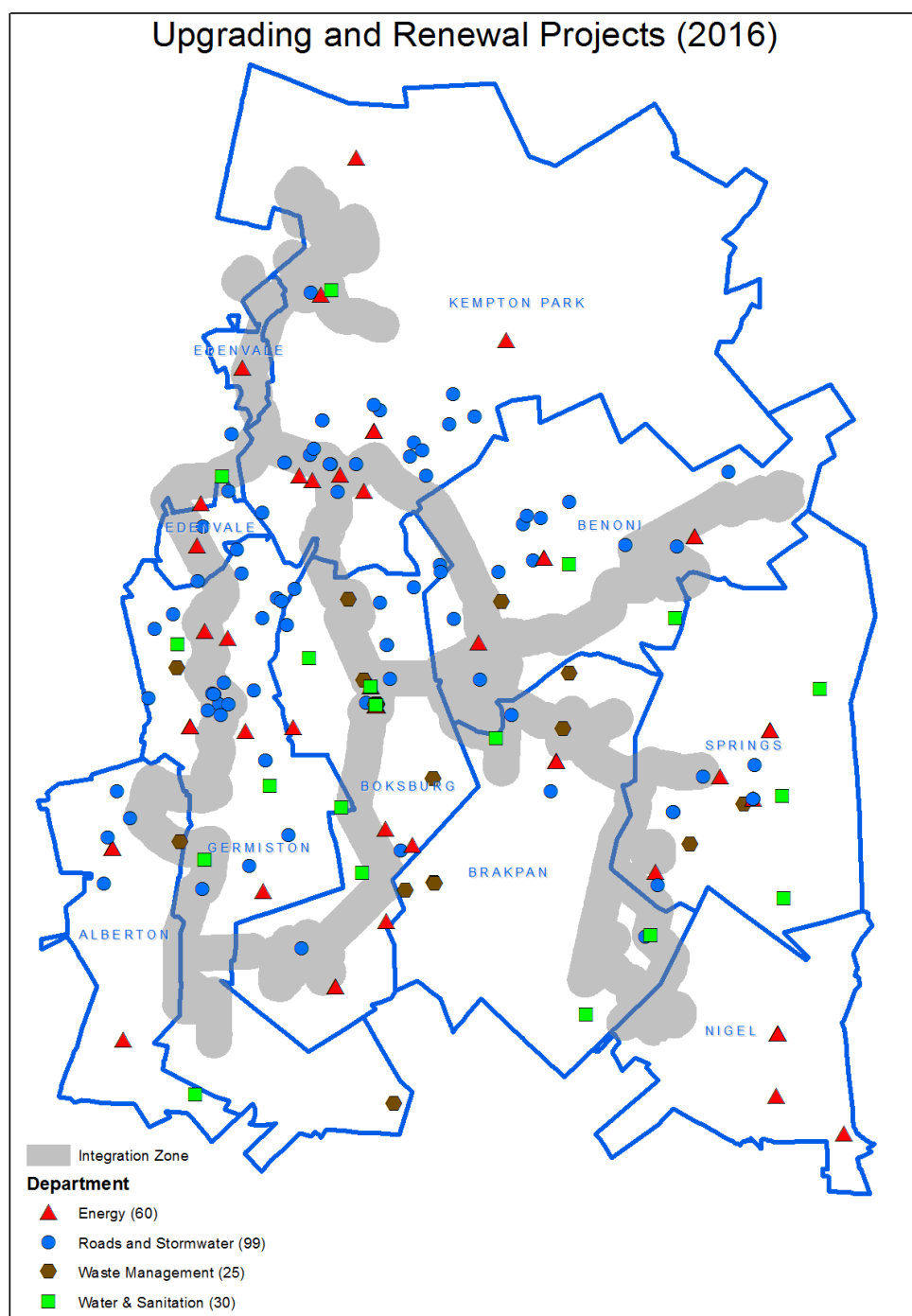
Service Description	Renewals due to backlog (2016)	Renewals due to new investment (2016)	TOTAL (2016)
Water	R82 169 000	R92 187 000	R174 356 000
Sewer	95 600 000	R126 518 000	R222 117 000
Electricity	445 011 000	R527 592 000	R972 603 000
Roads & Storm water	101 243 000	R901 124 000	R1 002 367 000
Solid Waste	2 639 000	R43 731 000	R46 370 000

The table below indicates the current financial year's budget for the upgrading and renewal projects in EMM and the figure below indicates the location of the projects. These projects are identified across the municipality with a higher concentration to the middle of the EMM area and with the highest budget allocated to Roads and Storm water.

Table B3.6: Current Budget for Upgrading and Renewal Projects

Service Description	Budget
Water & Sanitation	R 207 350 000
Electricity	R 132 260 000
Roads & Storm water	R 413 750 000
Solid Waste	R 156 800 000

Figure B3.6: Upgrading and Renewal Projects for 2016



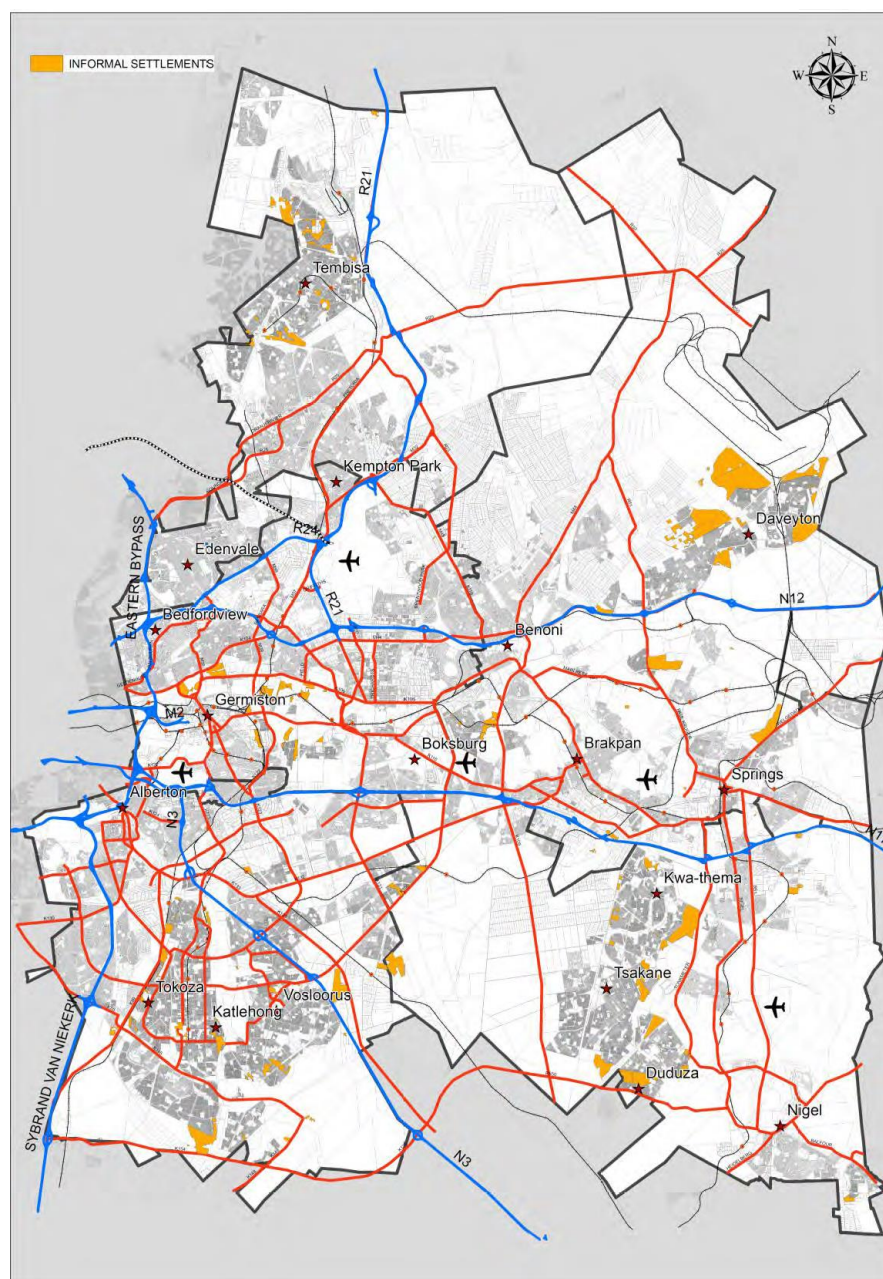
From the figures above it is clear that the current financial year's budget for upgrading and renewal projects are below the estimated renewal requirements as indicated in the CMIP for all sectors except for solid waste. It is important for the municipality to implement the necessary systems to ensure reciprocal alignment between key planning instruments. Although the municipality has made progress over the last few years towards streamlining its service delivery policies and approaches and several high profile investment initiatives are in process, funding strategies are becoming crucial to ensure sufficient funding for the required asset investments within EMM.

B.4 TRENDS AND DEMAND FOR RESIDENTIAL INFRASTRUCTURE⁵

Informal settlements are characterised by *inadequate infrastructure, poor access to basic services, unsuitable environments, uncontrolled and unhealthy population densities and lack of effective administration*. A report by the Housing Development Agency (2012), ranks Ekurhuleni as the municipality with the second largest number of households living in Informal Settlements. **Figure B.13** indicates the current locations of informal settlements within the EMM.

⁵ The Trends and Demands for Residential Infrastructure Section was compiled from information received from the EMM Department of Human Settlements, provided by Godfrey Hiliza. Additionally this section was reviewed by Mr Hiliza and comments addressed within the Draft. Comments were received 29/09/2015.

Figure B4.1: Locality of Informal Settlements in EMM



B.4.1 Current Status of Land and Housing

As indicated within the Human Settlement Plan (2016-2021) the Ekurhuleni population of 3 178 470, as recorded by Census 2011, have increased to 3 423 866 in 2014 and is expected to increase to 3 875 681 by 2019. The expected increase from 2014 to 2019 represents approximately 451 000 additional people which translates into **161 362 additional households** within Ekurhuleni by 2019.

It is noted that Germiston and Boksburg are the fastest growing towns with ***Tembisa, Katlehong, Germiston and Boksburg accommodating 64%*** of the total population of Ekurhuleni.

➤ TRENDS IN HOUSING DEMAND

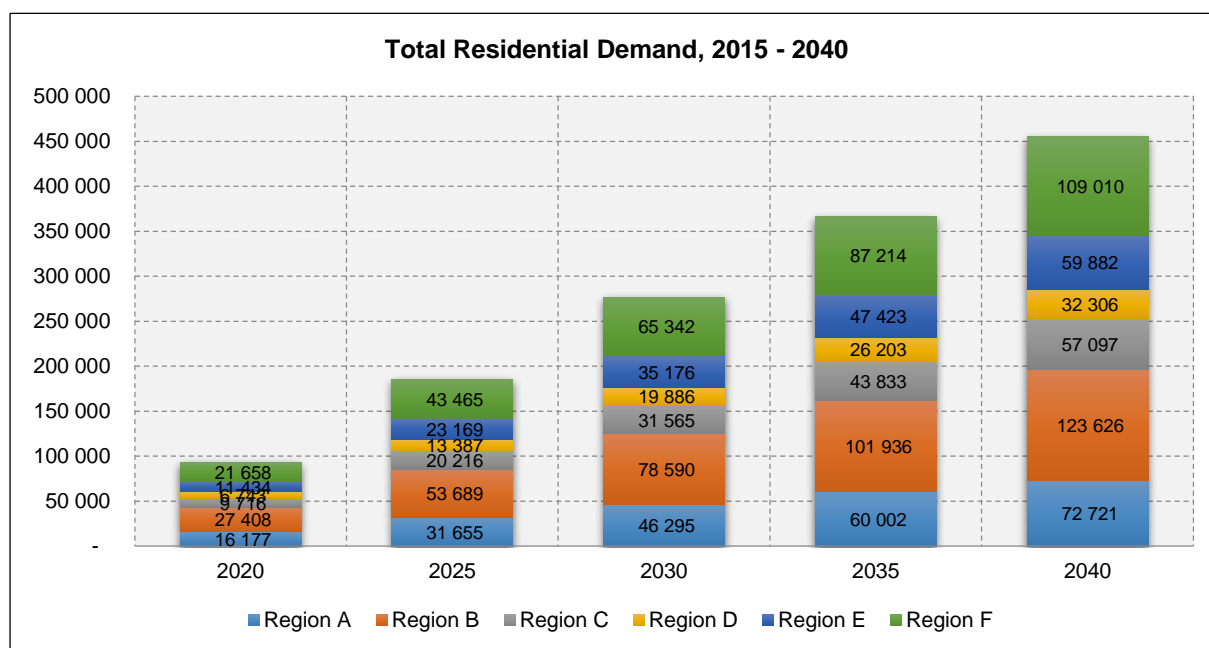
Backlogs and New Growth: Accommodating informal households in low cost housing units, it is calculated that approximately 157 720 low cost housing units are needed based on the current number of households in informal settlements. The total number of housing units, including backlogs and new growth is estimated at **319 082** housing units by 2019. It is notated, that to meet the existing housing backlog for subsidised housing, the City will have to deliver six times the current rate of housing units.

High total housing backlog including informal, backyard, hostels and waiting list units is estimated at **449 507 units**. The total number of housing units needed translate into the following number of units per housing type:

- 164 699 Informal Settlements
- 200 973 Backyard
- 44 721 Waiting list
- 39 114 hostels

Housing demand for the EMM, as reflected within the Demacon Ekurhuleni CIF Task 5 – 25 Year Land Take-Up Report, indicates a total number of **454 642 residential units** can be accommodated / taken up within the market up to 2040. **Figure B4.2** illustrates the residential demand for the next 25 years (2015 – 2040 per Region. The demand is determined for different unit typologies.

Figure B4.2: Residential Demand, 2015-2040



Source: Demacon, 2015

Table B.4.1 indicates the cumulative residential forecast per Region and 5 year time intervals.

Table B4.1: Housing Demand, 25 Year Cumulative Forecast per Region

Region	2020	2025	2030	2035	2040
Region A	16 177	31 655	46 295	60 002	72 721
Region B	27 408	53 689	78 590	101 936	123 626
Region C	9 716	20 216	31 565	43 833	57 097
Region D	6 743	13 387	19 886	26 203	32 306
Region E	11 434	23 169	35 176	47 423	59 882
Region F	21 658	43 465	65 342	87 214	109 010
Total Ekurhuleni	93 136	185 582	276 853	366 611	454 642

Source: Demacon, 2015

The following table indicates the demand per housing typology per region for a 10 year forecast period (up to 20125).

Table B4.2: Housing demand, 10 Year Cumulative Forecast per Housing Typology

Housing typology	Region A	Region B	Region C	Region D	Region E	Region F	EMM
Subsidy	13 017	25 239	11 641	5 879	13 129	22 472	91 376
CRU	1 446	2 804	1 293	653	1 459	2 497	10 153
FLISP/GAP & Social	3 982	8 747	3 094	1 898	3 486	6 661	27 867
FLISP/GAP & Affordable Bonded	3 567	5 895	1 788	1 788	2 392	4 709	20 139
Bonded	9 643	11 004	2 401	3 169	2 703	7 126	36 046
Total	31 655	53 689	20 216	13 387	23 169	43 465	185 582

Source: Demacon, 2015

➤ TRENDS IN HOUSING SUPPLY

According to the Human Settlement Plan, between 2001 and 2011, approximately **24 990** low cost subsidised units were delivered.

The Gauteng Province identified two mixed housing development projects, as stated by the premier in her State of the Province address (2011), will receive continued investment from the province. The two housing projects relevant to Ekurhuleni include:

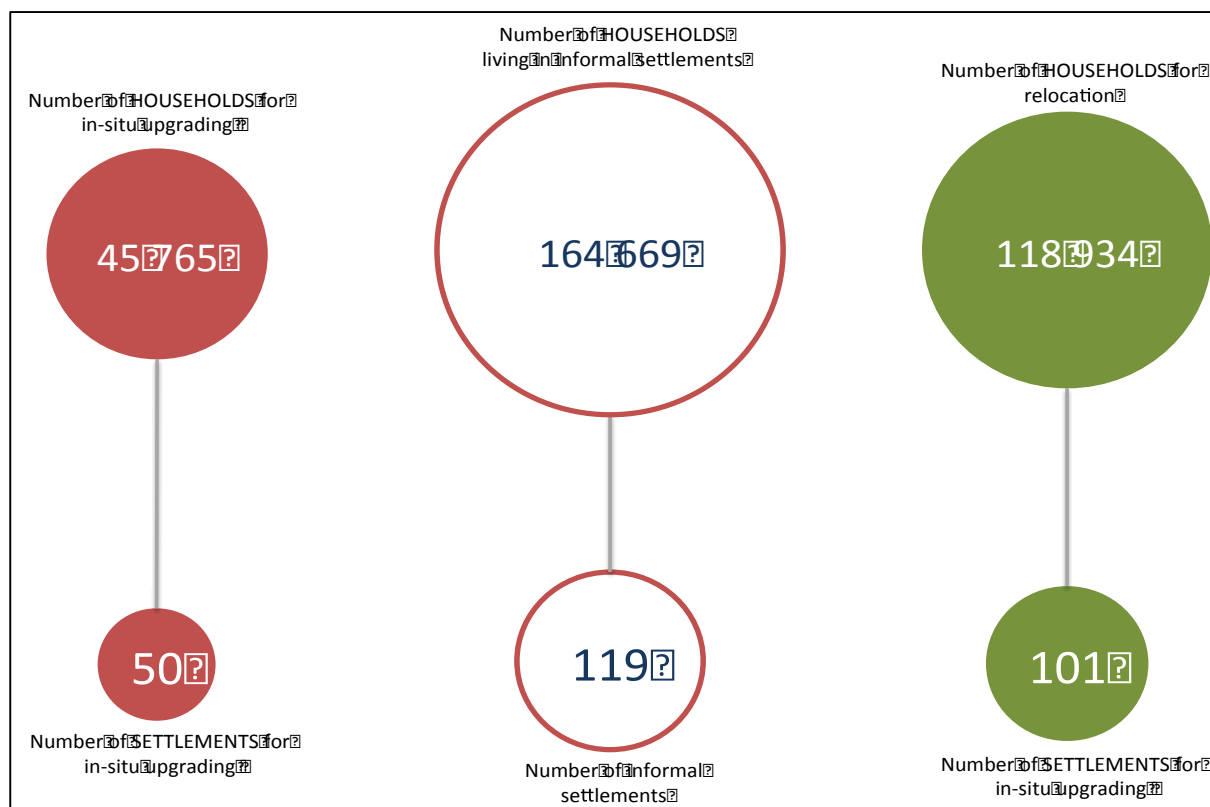
- Chief Albert Luthuli, which accommodates Daveyton and surrounding informal settlements; and
- Clayville, which accommodate Winnie Mandela Park, Tembisa and Strydom Land for Madelakufa and other parts of Tembisa.

Additional to the Provincial housing projects, the majority of land parcels currently earmarked for residential developments are located in four main concentrations at Tembisa, Daveyton, the southern parts of the Kwatsaduza complex, the southern and eastern extents of the Katorus complex, and in the central mining belt of Ekurhuleni.

MANAGEMENT AND UPGRADING OF INFORMAL SETTLEMENTS

The management and upgrading of informal settlements relates to the relocation and in-situ upgrading of informal settlements. **Figure B4.3** illustrates the number of households and settlements identified for relocation and in-situ upgrading within the EMM.

Figure B4.3: Informal Settlement vs Household Analysis



(Source: Human Settlement Plan)

Following is a list of the housing projects identified within the EMM. **Figure B4.4** illustrated the locations of current and new housing projects as identified within the Human Settlement Plan.

Upgrading of Informal Settlement Programme (UISP): The Metro is currently implementing the following six UISP projects that were handed over to the Metro through the accreditation process:

- Langaville Ext. 4 (Project 56);
- Alra Park Reiger Park Ext 5;
- Magagula Heights;
- Moleleki Ext's 1 & 2;
- Villa Liza 3; and
- Tinasonke Ext. 4.

Community Builder Programme (CBP): The Metro is implementing the CBP can be regarded as the enhance People's Housing Process Programme. The CBP projects delegated through the accreditation process includes the following:

- Mayfield Ext.1 (Project 56);
- Esselen Park (Witfontein 15 IR - R30);
- Pomona Estates;
- Esther Park;
- Terenure;
- Kwa Thema Ext. 3, 7a & Ekuthuleni;
- Tsakane Ext. 19;
- Vosloorus / KAVOSH; and
- Langaville Ext. 4 (Project 56) Informal Settlement Upgrading.

Integrated Residential Development Programme (IRDP): The programme replaced the Project Linked Subsidy Programme and provides for planning and development of integrated housing projects. The projects in the programme are planned and developed in phases and provides for a holistic development the house construction phase for qualifying housing subsidy beneficiaries and the sale of stands to non-qualifying beneficiaries and to commercial interests etc. Phase 1 includes Land, Services and Township Proclamation. Phase 2 includes Housing Construction and Individual ownership options.

The following IRDP projects have been handed over to the EMM through the Accreditation process:

- Holgatfontein 326 IR
- Rietfontein
- Kwa Thema
- Spaarwater
- Vlakfontein 130 IR Ptn 33
- Ergo Road
- Payneville Ext. 1
- Chief Luthuli Ext 4 (Consolidation & Subdivision)
- Rose Acres Palm Ridge ext. 4 & 5
- Rondebult 136 IR (Portion 10 & 17)
- Driehoek (Germiston ext. 4) Rehabilitated land
- Angelo Simmer and Jack
- Balmoral Ptn 31 & 234 (Driefontein 85 IR)
- Driefontein 85 IR Ptn 399
- ERPM Village (Ptn 402 & 403 Driefontien 85 IR)
- Vlakplaats portions 36 & 657
- Angelo Deep Klippoortjie 112 IR
- Vlakfontein Ptn 7 (Tsakane Ext 22 Emergency Area)

- Dukathole Goodhope (Germiston Ext 37)
- Eden Park West ext. 1
- Ulana Settlements
- Kutalo
- Villa Liza Ext 5

Mixed housing projects: The City has mixed housing developments planned for Chief Albert Luthuli, Leeuwpoot project. There are also a number of Mega projects, projects with land size that exceed 100hectares that are at feasibility stage. These include;

- Grootfontein in Duduza
- Palmietfontein in Katorus/Alberton
- Weltevreden
- Brakpan old location
- Witfontein

Social Housing: The City is implementing the Social Housing Programme through the Ekurhuleni Development Company (EDC), the Municipal owned Social Housing Institution responsible for the implementation of the programme. The city is currently implementing the following priority projects as part of the Social Housing Programme in the Metro:

- Delville Social Housing Development
- Germiston South Social Housing Development

Additionally, the city has identified the following priority projects as part of future Social Projects of the Metro:

- Pirrowville, Germiston station and N17 in Germiston;
- Bedfordview;
- Farrarmere;
- Benoni central and
- Kempton Park central

Furthermore, EDC and EMM DHS are in the process of identifying inner city buildings to be acquired for social housing purposes.

Hostels: The Ekurhuleni Metropolitan Municipality is the owner of 22 hostels. These 22 hostels consist of a 43 112 units.⁶ The EMM Housing Department in conjunction with Gauteng Department of Local Government and Housing is currently implementing the Community Residential Units Programme

⁶ Source: opportunities for New Rental housing units in Gauteng, Social Housing Foundation, 2009

aimed at the redevelopment and conversion of these hostels into family units. The business plans were approved for the redevelopment of the following hostels into family units:

- Buya Futhi blocks G and H;
- Kwamazibuko;
- Sethokga,
- Thokoza and
- Wattville (Ekurhuleni Metropolitan Municipality, 2011, p,56)

Serviced Stands Programme⁷: The Metro has initiated the implantation of Serviced Stands programme, through the following projects:

Table B4.3: Serviced Stands Programme EMM

Project Name	No. of Ward	No. of Stands	Budget Allocation	Budget Allocation for Human Settlements Component
Alliance Extension 9	71	634	21,397,500	Yes
Balmoral Extension 4	33	1,089	29,185,200	Yes
Holgatefontein / Mckenzieville	88	600	25,100,000	No
Langaville Extension 4	81	209	5,601,200	No
Palm Ridge Extension 9	53; 61	3,213	86,108,400	Yes
Payneville Extension 1	72	1,115	37,965,750	No
Chief Albert Luthuli Ext 4	24	326	13,105,200	No
Total		7,186	218,463,250	

Mega Projects: the Ekurhuleni Metropolitan Municipality (EMM) human settlement in consultation with the Gauteng Department of Human Settlements (GDHS) has packaged the following mega projects:

Table B4.4: Mega Projects EMM

Name of Cluster	Projects Constituting the Cluster	Total Yield
Northern Development Cluster	<ul style="list-style-type: none"> ▪ Clayville Ext 45, 71, Heartland; ▪ Esselen Park (Witfontein) ▪ Esselen Park Ext 3 ▪ Tembisa Ext 25 	19 568
Eastern Development Cluster	<ul style="list-style-type: none"> ▪ John Dube 2 ▪ Brakpan Old Location ▪ Tsakane 22 ▪ Chief Luthuli 6 	31 674

⁷ Information provided Mr. Hiliza (EMM Department of Human Settlements) 29/09/2015.

Southern Development Cluster	<ul style="list-style-type: none"> ▪ Leeuwpoort ▪ Germiston urban renewal housing programme (Including Social Housing, Balmoral 4&5 and Dukathole, Goodhope and Kutalo/ Robert Strachen ▪ Zwartkoppies ▪ Palmietfontein ▪ Rietspruit/Rietfontein, Palmridge 10 and 11 	50 169
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Table B4.10 is a summary of the goals, objectives and strategies as set out within the Housing Strategy.

Figure B4.4: Locations of Current and New Housing Projects

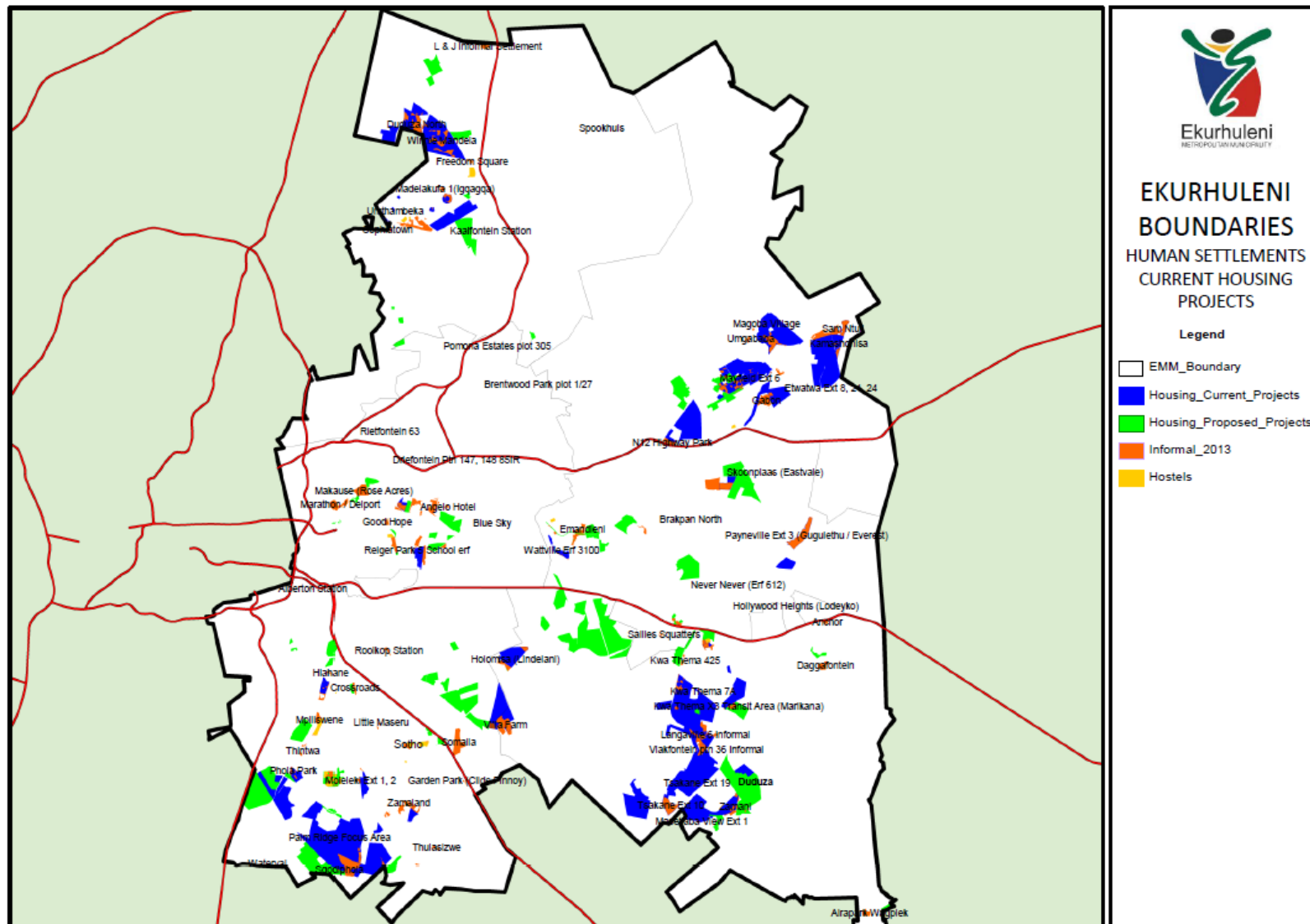


Table B4.5 Human Settlement Strategy (2016-2021)

Goal	Objective	Action
GOAL 1: INVEST IN PLACES OF DEPRIVATION	OBJECTIVE 1: Majority of projects located in poorest areas	Refine our spatial targeting model by developing an index of multiple deprivation
		Develop a monitoring and budgeting tool for most deprived areas
	OBJECTIVE 2: Deliver 76,000 housing units in the most deprived areas	Ensure all mega-projects are implemented over the next five years
	OBJECTIVE 3: Construct and launch 5 state of the art social facility complexes	Develop base design for facilities, design guidelines and terms of reference
		Design citizen programmes
		Ensure urban management models are in place
		Develop integrated project construction plans
		Integrate business planning (transport, social facilities and housing) and include in revised Integrated Development Plan (IDP) 2016/17
		Fast track planning approvals for construction of social complexes
GOAL 2: GET PEOPLE MOVING	OBJECTIVE 1: 4 000 housing opportunities within 800 meters of BRT stations (Phase 1)	Develop a land acquisition plan for land parcels within 800 meter catchment area
	OBJECTIVE 2: Bring transport close to people	Develop investment plan
		Identify all settlements located on the periphery that are outside the proposed BRT catchment area
GOAL 3: BUILD NEIGHBOURHOODS	OBJECTIVE 1: Support 10,000 landlords to upgrade small scale rental accommodation	Develop joint integration implementation plans with Department of Transport to connect peripheral settlements to BRT routes
		Develop backyard housing support programme
	OBJECTIVE 2: Ensure houses are different- all mega-projects to include diverse housing typology ratios and implementation to include diverse range of typologies	Implement revised housing project process
		Develop design codes for housing typologies
	OBJECTIVE 3: Build quality	Develop urban design prototypes for small neighbourhood blocks
		Develop cooperative urban management models for townships and newly built subsidised housing projects
GOAL 4: MAKE OUR TOWN CENTRES GREAT	OBJECTIVE 4: Design for social cohesion- implement neighbourhood design principles across all projects	Urban Design policies for all our settlement types
		Develop concise and bankable development packages for investors
		Revive urban development zone
		Establish residential improvement districts
GOAL 4: MAKE OUR TOWN CENTRES GREAT	OBJECTIVE 1: Facilitate regeneration of five city blocks in Germiston	Expropriate derelict buildings
		Develop concise and bankable development packages for investors
		Develop concise and bankable development packages for investors

MANAGEMENT / PREVENTION OF ILLEGAL OCCUPATION⁸

The Department has appointed service providers to assist with the removal of illegal occupation of land and also the patrolling of settlements to prevent further invasion and illegal occupation.

EMERGENCY HOUSING

As the needs arises, the Ekurhuleni Metro can apply for emergency housing funding, in line with the Emergency Housing Programme as presented under Part 3 of the National Housing Code, from the Gauteng Department of Human Settlements.

There are several policy response options for emergency housing set out in the Emergency Housing Programme (Part 3 of the National Housing Code, 2009). They are both proactive and reactive in nature, and can be divided into three main categories as indicated in **Table B4.6**:

Table B4.6: Emergency housing Categories

Housing Categories	Description
On-site assistance	<ul style="list-style-type: none"> No relocation required. The site can be formalised over time, possibly through the use of other housing programmes Relocation required in future. However, the site can be made temporarily suitable for habitation
Relocation / resettlement	<ul style="list-style-type: none"> Relocation to a TRA that can be provided on a temporary or permanent basis, and where households can be resettled in the future when a permanent solution becomes available Relocation to a permanent location with temporary assistance Relocation to an existing developed area with temporary assistance
Formal housing repair / rebuild	<ul style="list-style-type: none"> Formal housing can be repaired or rebuilt on the same plot or with relocation to a serviced plot

With the completion of the BEPP, only two application for emergency housing funds were listed, consisting of the **Angelo Dump Informal Settlement**, and **Moleleki Ext 4**.

B.4.2 Housing Improvements Strategies

DENSIFICATION STRATEGY

One of the tools available to the EMM to keep up with the needs of the growing population and to address the challenges of urban sprawl, congested infrastructure, etc. is densification.

⁸ Information provided Mr. Hiliza (EMM Department of Human Settlements) 29/09/2015.

Why densification as a tool for managing the rapid urbanisation of our cities?

- To achieve a more compact city thus reducing servicing costs and reducing travel times;
- To support the provision of public transport; and
- To create a more user friendly city including social and commercial services.

The suggested approach to densification is as follow:

- Relate densification to existing (rail) and future (BRT) public transport routes; and
- Relate densification to social services – with specific reference to schools – to maximise walkability.

The following general densification guidelines are proposed for the EMM:

- Public transport routes, 60-120 u/ha within a 200m radius along the corridor and within 200m of facility (including railway stations);
- Secondary and tertiary nodes, 60-120 u/ha within 500m of node;
- Primary nodes >120 u/ha up to 1km from node; and
- Low density zones (0-60 u/ha):
 - 0-15 u/ha anywhere in zone;
 - >15 u/ha to relate to social services (mainly schools) within 200m radius of facilities;
 - Properties <900m² not to be subdivided;
 - Erven developed at maximum density to be a minimum of 4 000m²; and
 - Provisions of the Town Planning Scheme to apply to height, coverage, FAR, parking and building lines.

ACCESS TO URBAN OPPORTUNITIES

By means of a well-integrated public transport system, communities will have access to urban job opportunities.

INTEGRATION WITH PUBLIC TRANSPORT

The public transport system, and especially the IRPTN, should form the backbone of future developments. Mixed use and high density developments should be focused along public transport corridors and nodes, preferable within 500m of public transport route / stop. Infill development is encouraged within strategically well located land e.g. mining land.

B.5 TRENDS AND DEMAND FOR COMMUNITY AND SOCIAL INFRASTRUCTURE

The current number social facilities located within the EMM (and per region) were recorded within the MSDF (2015 – draft) repost. The social facilities demand was calculated based on the CSIR classification of settlements to act as the basis for the provision of social facilities.

Table B5.1 is a summary of the current number of social facilities within the EMM and per region and the calculated required number of social facilities within the EMM and per region.

From the social facilities analysis with regards to **Health and Emergency Services**, it is clear that Ekurhuleni is well provided for in terms of Regional Hospitals. Although, district hospitals are needed (4) within Regions B,C,E and F. A total number of 26 additional fire stations are requiring with the EMM, of which 6 are requiring in Region B, 4 in Region C, 2 in Region D, 5 in Region E and 9 in Region F. Additional police stations (26) are required, of which 6 are requiring in Region, 4 in Region C, 2 in Region D, 5 in Region E and 9 in Region F.

Looking at the **Social Facilities**, it is clear that the EMM is in need of 44 additional *community halls* and 482.2ha for cemeteries. The additional Community halls required per region is as follows - 11 in Region B, 6 in Region C, 3 in Region D, 8 in Region E and 16 in Region F. The EMM currently has 63 *cemeteries* of which 44 are at full capacity and 19 are nearing full capacity. In terms of the estimated deaths per annum and the requirement for burial land per annum the EMM requires approximately 420ha of burial land up to 2027. The planning horizon for burial land should be 50 years, therefore approximately 1 838ha of burial land is required up to 2067. The largest land area needed for cemeteries are within Region F, requiring 167.7ha, followed by Region B, requiring 118.9Ha and Region C, requiring 69ha.

In terms of **Education Facilities**, the EMM is very under provided. A total number of 223 additional Secondary Schools are needed within the EMM, of which 55 are requiring within Region B, 32 in Region C, 18 in Region D, 40 in Region E and 78 in Region F. THE EMM is in need of 398 additional Primary Schools, of with Region B requires 98, Region C 57, Region D 33, Region E 71 and Region F 139. In terms of Crèches, a total number of 932 is required, of which Region B requires 230, Region C 133, Region D 77, Region E 167 and Region F 325.

The EMM is under provided in term of **Sport and Park Facilities** (Recreation Provision). The EMM requires 341 additional Sport stadiums and 377 additional Swimming pool complexes. In terms of Sport Stadiums, Region B requires 11, Region C 6, Region D 3, Region E 8 and Region F 16. The total number of 377 Swimming pool complexes required per Region is as follows - Region B requires 8, Region C 4, Region D 2, Region E 6 and Region F 2.

Table B5.1 Social Facilities

Facilities	Number in EMM	Number Required in EMM	Number in Region A	Number Required	Number in Region B	Number Required	Number in Region C	Number Required	Number in Region D	Number Required	Number in Region E	Number Required	Number in Region F	Number Required
Health and Emergency Services														
Regional Hospital	5		1		1				1		1		1	
District Hospital		4				1		1				1		1
Special Clinic														
Clinic	80		11		12		8		7		17		25	
Community Day Care Centre	2						1		1					
Satellite Clinic	2										1		1	
Correctional Centre														
Oral Health Services	1				1									
Frail Care	1										1			
Community Health Centre	7	16			1	4	1	2		1	2	3	3	6
National / Central Hospital														
EMS Station	25		7		3		2		3		4			
Oral Health Centres														
Mobile Services	15		4		3				4		3		1	
PHC Services		37				9		5		3		7		13
Health Post	1								1					
Specialised Hospital														
Fire Station	27	26	8		3	6	3	4	3	2	4	5	6	9
Police station	39	26	8		5	6	4	4	5	2	7	5	10	9
Social Facilities														
Community Hall	53	44	6		10	11	6	6	8	3	11	8	12	16
Cemetery	59	482.2ha	7		11	118.9ha	5	69ha	11	40.1ha	10	86.5ha	15	167.7ha
Education														
Tertiary Institution	6				1		1		1		2		1	
Secondary School	234	223	50		43	55	29	32	29	18	28	40	55	78
Primary School	368	398	44		68	98	52	57	39	33	65	71	100	139
Crèches	728	932	134		306	230	26	133	50	77	29	167	183	325
Recreation Provision (Sport and Parks)														
Sport stadium	50	341	10		7	11	5	6	5	3	9	8	14	16
Swimming Pool Complex	37	377	9		5	8	3	4	5	2	7	6	8	2

From the above brief overview, it is clear that Region F requires the most community and related facilities, whilst Region A is the best provided for in terms of community and related facilities. **Figure B5.1** and **Figure B5.2** is a graphical illustration of the social facilities within the EMM and the calculated required number per region.

Between 2006 and 2014, several community facilities were built, thereby broadening access for our residents. Some of the achievements in this regard include:

- Construction of 485 km of roads;
- Complete eradication of the bucket system;
- 368 high mast lights have been installed;
- 3445 street poles have been erected;
- Four regional parks have been developed;
- Eight multipurpose parks were upgraded;
- Four nature reserves have been upgraded; and
- A total of 60 000 trees have been planted.
- Five large stadiums re-developed and upgraded
- Three new libraries constructed

Figure B5.1: Social Facilities – Excluding Education

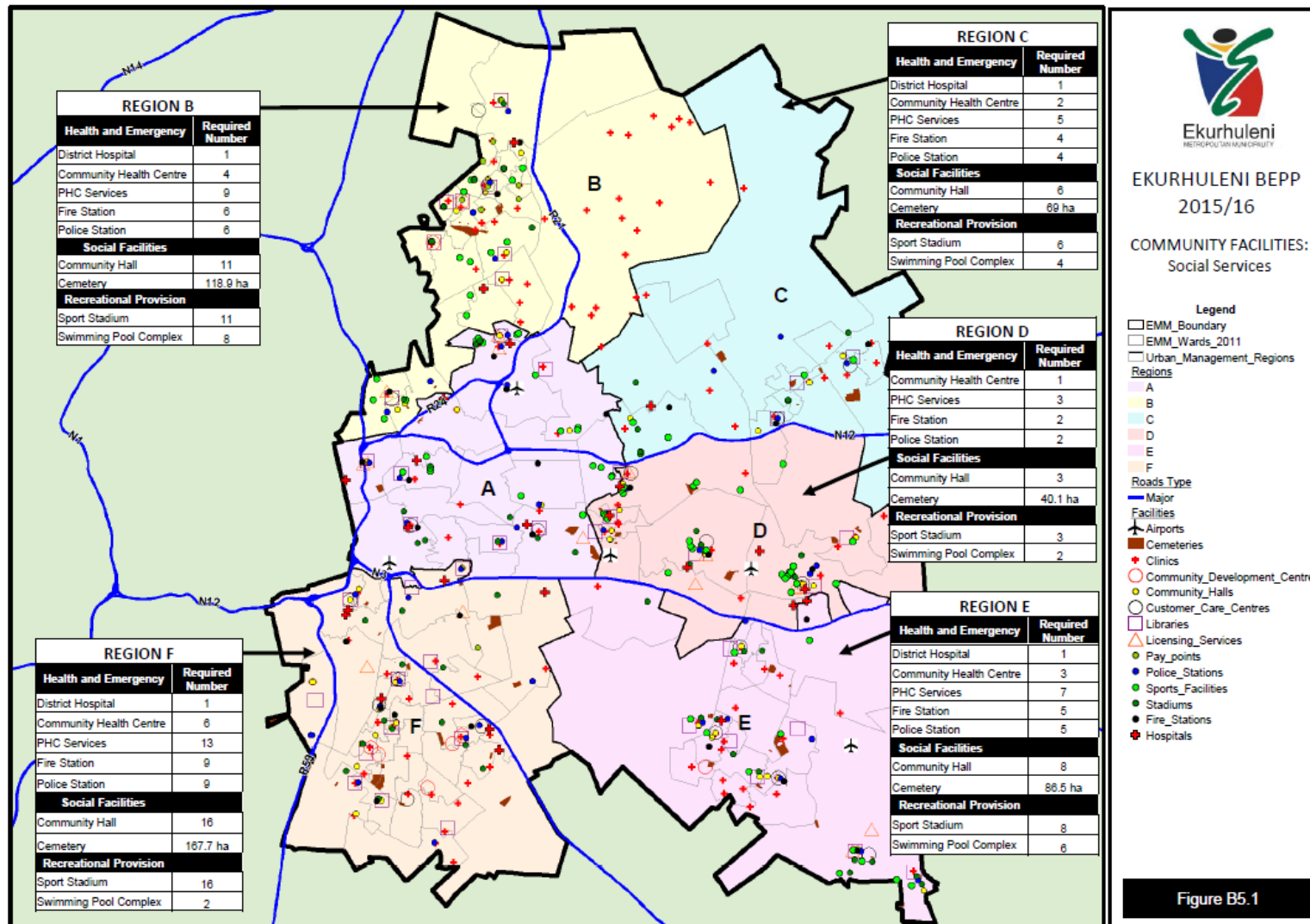
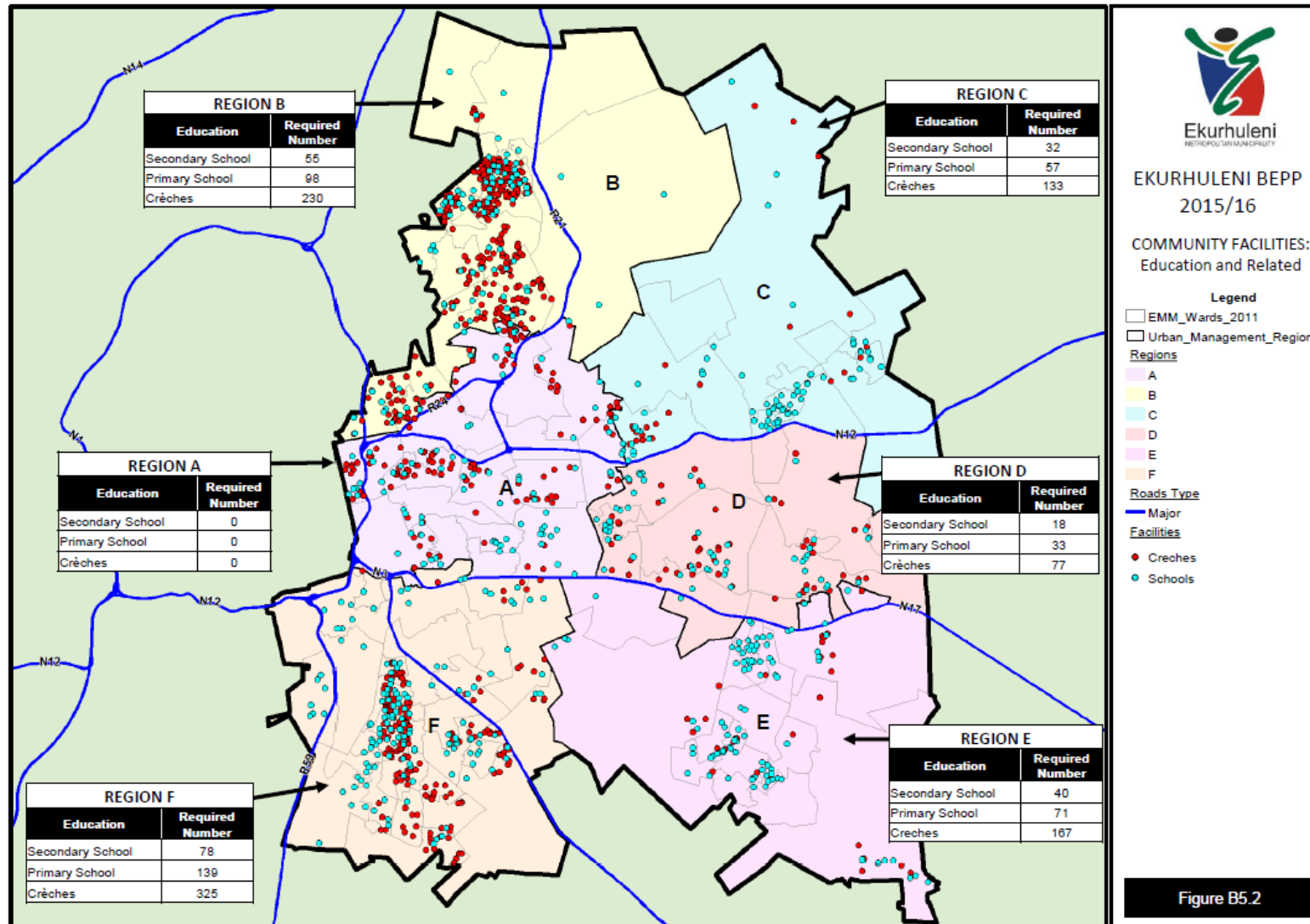


Figure B5.2: Social Facilities - Education



B.6 TRENDS AND DEMAND FOR TRANSPORTATION

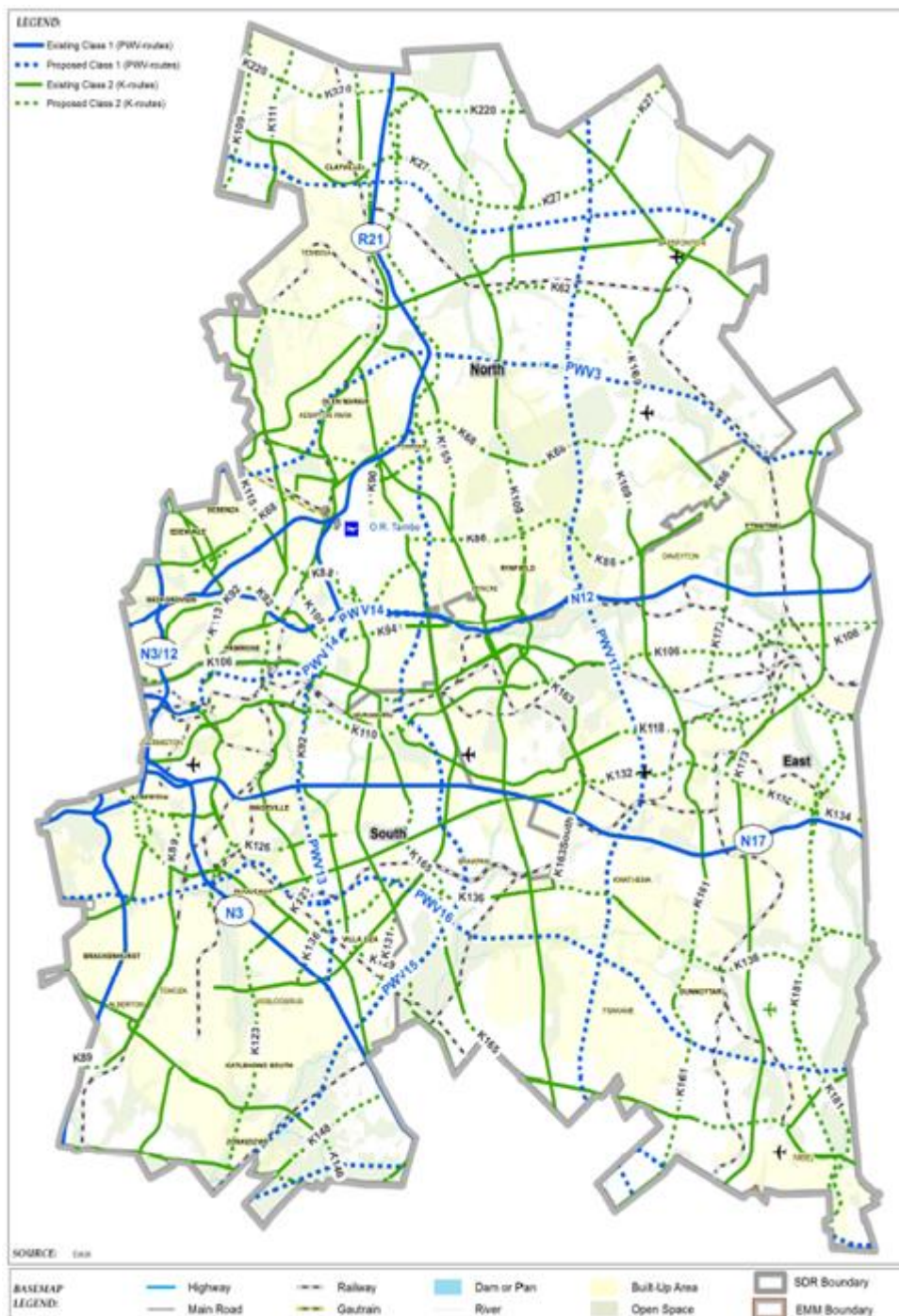
The EMM has unique transport and spatial features due to its historic development. One of the most important features of the Ekurhuleni Metropolitan Municipality (EMM) is its strategic location in Gauteng, South Africa and even Southern African context. It is located in the south-eastern quadrant of Gauteng Province and it represents the point of convergence of a number of national road and rail transport corridors which link the major urban centres and export harbours of South Africa to Gauteng Province. EMM has a Comprehensive Integrated Transport Plan which identifies transport challenges and needs, provides long-term strategies and plans and includes a five year program of priority projects. The CITP has been used to complete this section of the BEPP.

EMM's transport realities can be characterized by the following results obtained from a household travel survey conducted in 2013:

- **Vehicle ownership** - Sixty two per cent of households in EMM do not own cars, but the majority of households in the R6 000 and higher income groups own a private car. The mean car ownership per household is 0.59.
- **Public Transport access** - Some 24% of households in the EMM do not have access to any form of Public Transport, with the high-income areas with little or no access to Public Transport. Some 54% of households have access to only one mode of public transport.
- **Expenditure on public transport** - Some 13% of all households spend more than R1 000 per month on public transport.
- **Trip Purpose** - Most trips starting from home are going to work (45%), with almost the same proportion to education (43%), followed by recreation (4.6%) and shopping (4%).
- **Mode of Transport** - Walk and car shares are the highest and similar at 32%. Minibus taxis have the highest share of public transport at 22%, followed by train and bus at 5% each.
- **Travel Time** - Some 32% of all trips last between 16 and 30 minutes. Ekurhuleni East with 63 minutes has the longest travel time, followed by Katlehong (52 min); Vosloorus (51min) and Etwatwa Ekurhuleni North both on 50 minutes. Trains have the longest travel time at 80 minutes, followed by taxi at 58 minutes, bus at 55 minutes, cars at 40 minutes and walking at 31 minutes.
- **Main origins and destinations** - The most trips (88%) are made within EMM with only 12% exiting the area. A third of all trips are made within zones. The main destinations of the following origins are:
 - Alberton to Johannesburg to Tokoza to Katlehong
 - Benoni to Boksburg to Johannesburg to Katlehong
 - Germiston to Katlehong
 - Katlehong to Germiston to Alberton to Johannesburg
 - Kempton Park to Tembisa to Johannesburg
 - Springs to Kwathema to Tsakane
 - Tembisa to Kempton Park to Johannesburg to Tshwane to EMM North
 - Vosloorus to Katlehong

The EMM has an extensive road network, which consists of a hierarchy of national, provincial and municipal roads. EMM owns 81% of the road network in the municipality, Gauteng province owns 18% and SANRAL owns 1%. The region is well served by freeways running north-south and east-west, linking the EMM to the rest of Gauteng province, as well as providing mobility within the metropolitan area. These freeways, namely the N12, N17, N3, R21 and R24, carry the most traffic and are also the most congested. The figure below indicates the existing and current planned national and provincial road network of the municipality.

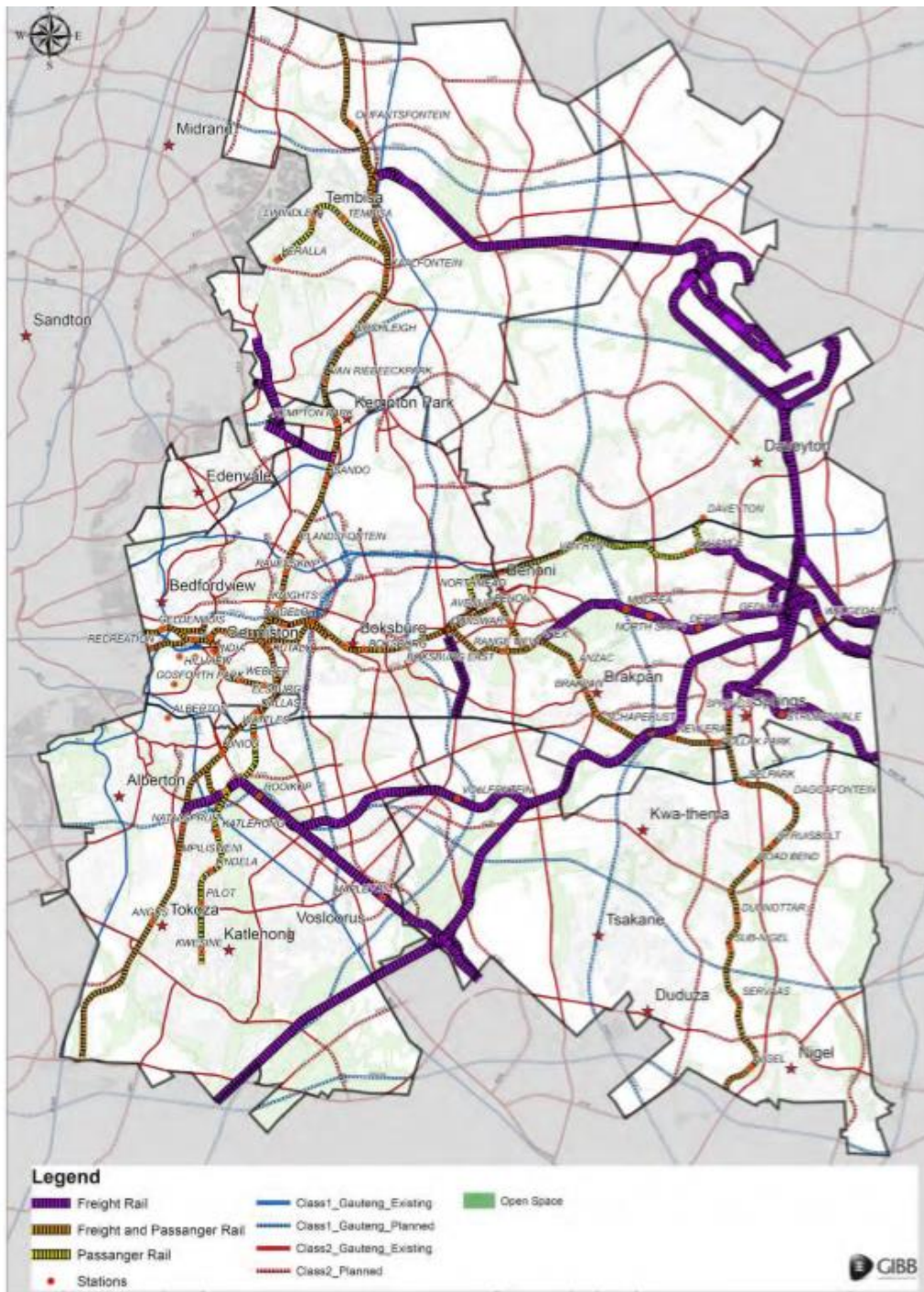
Figure B6.1: EMM Existing and Planned National and Provincial Road Network



(Source: EMM CIP 2013-2017.)

Furthermore, all the major national rail corridors in South Africa converge at the Germiston railway station in Ekurhuleni, which is also the largest railway station in South Africa. Ekurhuleni is served by a very good rail system consisting of the PRASA rail network, as well as Gautrain, linking Johannesburg and Tshwane to Kempton Park and ORTIA.

Figure B6.2: EMM Railway Network



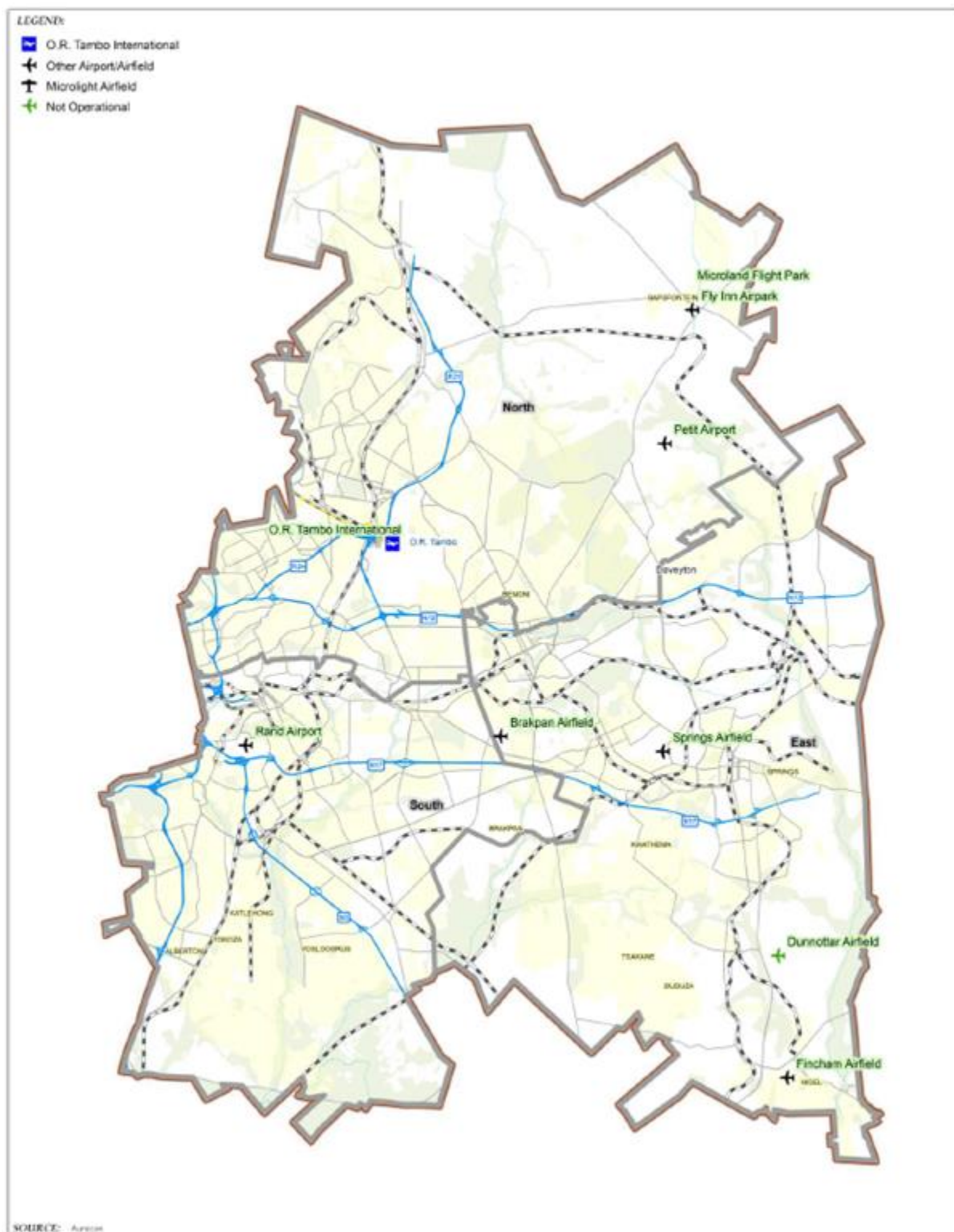
(Source: EMM CIP 2013-2017)

EMM forms part of the main economic hub in southern Africa and large numbers of freight tonnage pass through it by either rail or road. It is therefore important for EMM to become involved in facilitation improved freight operations in order to ensure the continued growth in the commercial sector of EMM and to protect the infrastructure on which the road-based freight movements and all other traffic must operate. Two major new developments incorporated into the freight strategy are the development of the Aerotropolis at the OR Tambo International Airport and the development of the freight hubs at Tambo Springs and Sentrarand.

The rail and road networks are also used to link previously disadvantaged communities in the low income residential clusters like Tembisa, the Katorus complex, the Kwatsaduza complex, and the Daveyton Etwatwa area to the main economy within EMM as they are far removed from the majority of social and economic opportunities.

EMM contains a large number of airfields in the area which range in size and function from one very large international airport hub (OR Tambo International Airport) to a number of very small private and unregistered airfields. The existing airfields and their relationship to the existing road system and the various CBD's in EMM area are shown in the figure below. The OR Tambo International Airport (ORTIA), by far the largest passenger and cargo airport in Southern Africa, is a very prominent feature in terms of the diversity and scale of secondary activities (manufacturing, warehousing etc). It attracts to the airport and its surrounding area, also known as the Aerotropolis.

Figure B6.3: Locations of Airports in EMM



(Source: EMM CIP 2013-2017)

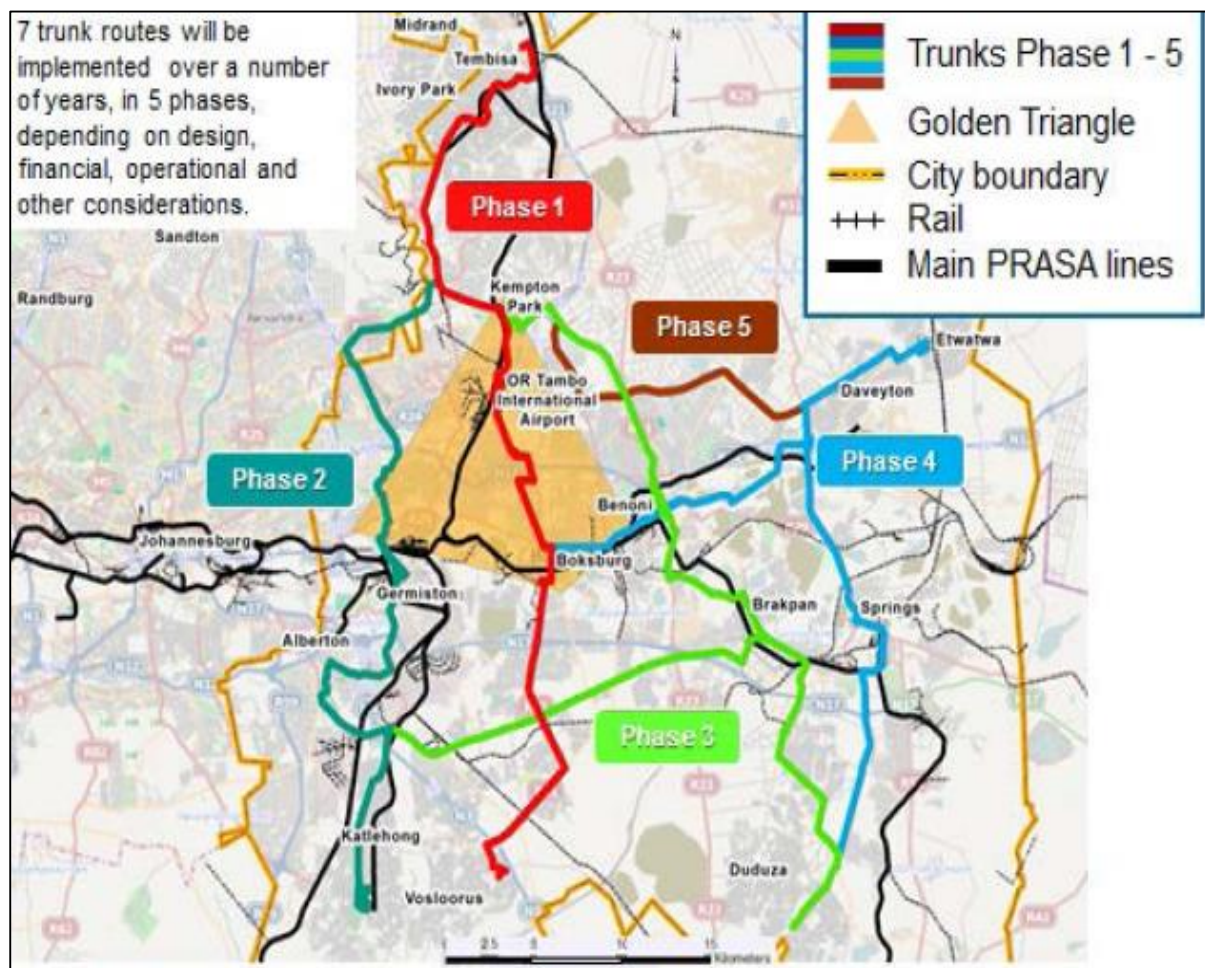
Typical problems experienced within the EMM transport system are dependency on the use of fossil fuels, continued growth in car ownership and traffic congestion resulting in air pollution impacting on global climate change, as well as increased traffic accidents. Urban productivity is highly dependent on

the efficiency of its transport system to move labour, consumers and freight between multiple origins and destinations. To address these problems a more sustainable public transport system must be developed in order to meet urban mobility needs and make Ekurhuleni a more liveable city. The focus of the public transport operational strategy is on the integration of the full public transport network, services and modes in such a fashion that passengers can move optimally from origin to destination in the area most effectively, in the shortest possible time and with the minimum of fare-paying transactions. A transformed transport system that is people oriented, sustainable and supports the economy of the EMM as well as Gauteng as a global city region, through the concept of transit orientated development is a priority for EMM. To serve this purpose, an Integrated Public Transport Network (IPTN) was developed indicating the main public transport routes and modal transfer stations, based on the following:

- Existing and proposed land uses according to the MSDF;
- The approved SPTN and other information obtained from the 2007 ITP;
- Existing taxi and bus routes;
- The IRPTN, including the BRT routes and their feeder routes, the commuter rail network and Gautrain;
- The existing major transport infrastructure; and
- Major economic nodes and future development areas, especially residential.

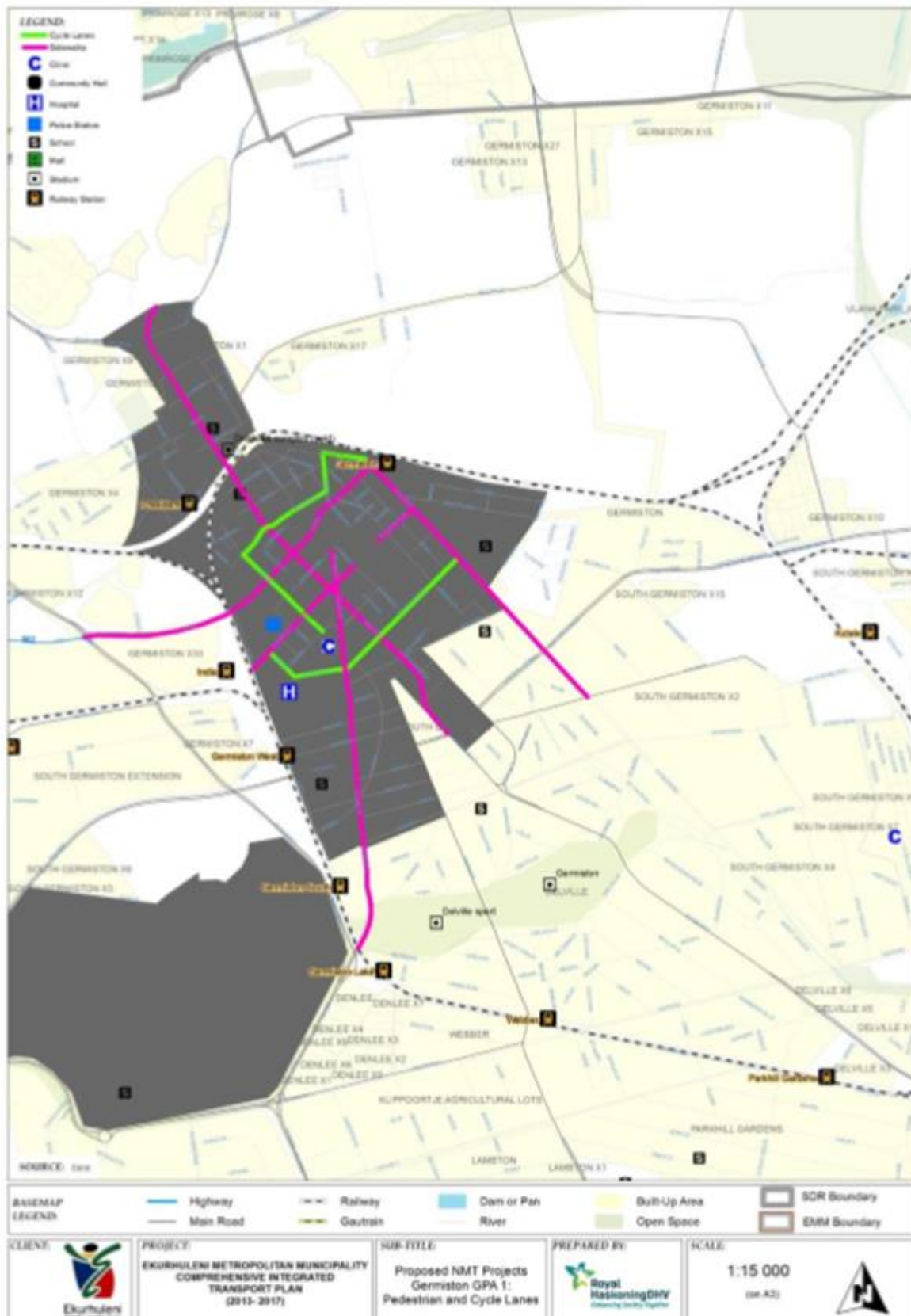
The Integrated Rapid Public Transport Network (IRPTN) Operational Plan is incorporated into the CITP and it is important that the plans stipulated in these documents are implemented. The IRPTN includes the rail network as well as the BRT network, which forms the mobility backbone of the IPTN. The IRPTN consists of seven BRT trunk routes that will be implemented in five phases. The trunk routes run along the major mobility spines in line with the MSDF, with feeder routes, ensuring significant area-wide coverage. These routes link the existing and proposed major residential and economic nodes of Ekurhuleni, providing equitable access to opportunities for all citizens. The highest priority route that will be implemented first is the Tembisa - Kempton Park - Vosloorus corridor, based on the very high public transport demand along this corridor.

Figure B6.4: IRPTN Routes



It should be noted that there is a very high need for NMT (Non-motorised Transport) facilities throughout EMM. It is therefore recommended by the CIP that EMM should develop an NMT policy and master plan to guide the implementation of NMT facilities throughout EMM. Such a policy should take into consideration the principles contained in the City of Johannesburg Complete Streets Design Guideline. Once the policy is adopted by Council, an NMT masterplan based on the policy should be drawn up that clearly shows the NMT implementation programme and budget requirements. It is also recommended that the cycle route in Germiston CBD along Hospital street, Oosthuizen street, Rose street, Queen street, F H Odendaal street, Joubert street and Station street should be used as the pilot for cycle lanes in EMM. (indicate with green line in figure below) EMM should also undertake an awareness campaign to sensitise the public of the role of NMT as a key mode of transport.

Figure B6.5: Proposed NMT Priority Project in Germiston



(Source: EMM CIP 2013-2017)

Safe and secure transportation is fundamental to a city like EMM. According to the CIP, no guidelines currently exist for the preparation of a Safety and Security strategy and it indicates that further discussions and planning by the Guidelines Review Committee is necessary. In order to address the issue of road safety in EMM, it is recommended that the municipality commissions a Traffic Safety Plan (TSP), so as to constantly aim to decrease the number of fatalities and serious injuries from road accidents, through coordinated traffic safety initiatives.

In the CIP, the IRPTN have been used to prioritise the EMM's normal public transport infrastructure funding, which is focussed in specific areas. However, the wider public transport network should not be neglected. The normal maintenance of public transport facilities is done on a rather ad hoc fashion, and funding is also too limited to adequately address the needs of the users and operators. A facilities management system is needed as well as more funding to address these needs. It is recommended that:

- The EMM develops and implements a Facilities Management System to monitor the condition of facilities and prioritise limited funding.
- Additional funding for the maintenance and upgrading of facilities be investigated from the private sector, such as ranks fees, co-funding by retail owners linked to facilities, and PPP arrangements with developers to manage facilities forming part of developments.
- Infrastructure funding be prioritised and focussed along priority corridors to upgrade public transport on a corridor by corridor basis. The IRPTN, IPTN and CIF programs are following this approach and integration of these programs need to further refined in future
- The Roads Master Plan and IRPTN Operations Plan both updated the EMM's metropolitan transport demand model for their planning purposes. However, the current EMME/3 model must be recalibrated on the 2011 Census data as well as the 2013 Household Travel Survey data. All transport and public transport planning must be conducted by means of the one master model in order to achieve consistent results.

In summary, key sector trends and impacts on the City's spatial structure and form are:

B.7 TRENDS AND DEMAND FOR SUSTAINABLE DEVELOPMENT

According to the National Environmental Management Act (1998), sustainable development can be defined as follows:

"The integration of social, economic and environmental factors into planning, implementation and decision making so as to ensure that development serves present and future generations"

The National Strategy for Sustainable Development and Action Plan (NSSD1) 2011-2014, spells out South Africa's vision for a sustainable society as follows:

“South Africa aspires to be a sustainable, economically prosperous and self-reliant nation state that safeguards its democracy by meeting the fundamental human needs of its people, by managing its limited ecological resources responsibly for current and future generations, and by advancing efficient and effective integrated planning and governance through national, regional and global collaboration.”

From the above highlighted definitions, it is clear that sustainable development does not single out the environment but includes the social and economic aspects of planning and development. Although, this section of the report will focus on the Natural / Green Infrastructure impacting on the EMM in terms of current and future development.

B.7.1 Natural / Green Infrastructures Supports and Constraints

The hydrological system in Ekurhuleni provides a strong and distinct natural spine to the open spaces located within the EMM. A key element in the vast hydrological network is the presence of the Ramsar Site in the Blesbokspruit. The hydrologic systems is vital when it comes to the biological and hydrological functioning of the area, therefore it must remain intact and disallow any further development.

As indicated within the Ekurhuleni Biodiversity and Open Space Strategy (2009). There are significant physical constraints to development in the EMM area that include elements such as shallow undermined, dolomite and wetland areas. On the other hand, the areas constraint by physicals elements for development, is advantageous for the establishment of an open space system within the EMM.

There are five environmental strategic tensions that the Growth and Development Strategy identified to be critical for the City. These relate to the mining legacy, extreme pollution, climate change, unsustainable natural resource use and degradation of eco systems. **Table B.13** is a brief summary of each element:

Table B7.1: Environmental Strategic Tensions

Elements	Description
Mining Legacy	<ul style="list-style-type: none"> The mining legacy has left the EMM with limitations in regards to developable land due to acid mine water which continues to threaten human, plant and animal life, moreover the undermined and waste lands, coupled with mine dumps that have radio-active materials are not suitable for development without creative interventions.
Extreme Pollution	<ul style="list-style-type: none"> Ekurhuleni faces challenges with regards to extreme pollution due to the vast number of industrial activities located within the municipal area. The high levels of pollution have negatively affected land, water and air

	<p>resources. Creative environmentally friendly initiatives within the industrial sector will need to be effected to ensure the continued operations.</p> <ul style="list-style-type: none"> • Significant parts of open space, especially the rivers in the area, are polluted or degraded and may require significant investment to get them back to an acceptable state
Climate Change	<ul style="list-style-type: none"> • Due to climate change, and the impact thereof, Ekurhuleni has to investment in environmental development and sustainable initiatives. The biodiversity and ecosystem of EMM has degraded due to the industrial and urban development within the municipality.
Scarcity of Natural Resources	<ul style="list-style-type: none"> • Ekurhuleni is confronted with the scarcity of natural resources in terms of water, soil, energy and waste. Without proper management, the scarcity of natural resources, will ultimately negatively impact on development within the municipality. • A total number of 1 3970 ha high potential agricultural land and 4 8170 ha moderate potential agricultural land has been identified within Ekurhuleni that should be preserved for agricultural purposes.
Degradation of eco systems	<ul style="list-style-type: none"> • The overall degradation of the eco system is concerning and need addressing.

The MSDF (2015) highlights that according to an environmental constraints assessment of the EMM, approximately **60%** of the municipality contains ecological important areas, sensitive surface and hydrological features, high potential agricultural land and/or potential pollution sources. The regions that are most affected by the presence of environmental constraints are Regions C and E. The region with the greatest opportunity for development, unhindered by environmental constraints, is Region B and in particular the areas of Kempton Park and Pomona.

The Critical Biodiversity Areas (CBA) within the bioregion are the portfolio of sites that are required to meet the region's biodiversity targets, and need to be maintained in the appropriate condition for their category. The appropriate conditions for each of the categories identified in the Ekurhuleni Metropolitan Municipality Bioregional Plan are as follows:

- **CBA 1: Areas which need to remain in a largely natural state;**
- CBA 2: Areas cultivated landscapes have importance for supporting threatened species;
- Ecological Support Areas (ESA) 1: Areas largely natural or near natural landscapes which should remain in at least (or be rehabilitated to) a functional state which are important for preventing degradation of Critical Biodiversity Areas and Protected Areas, and are particularly focussed on the maintenance of ecological processes (e.g. river buffers helping to moderate water flow during floods);
- **ESA 2: Transformed areas which nevertheless potentially retain some value for supporting ecological processes and where additional impacts on ecological processes should be avoided;**
- Protected Areas: Which include areas that are both proclaimed in terms of appropriate legislation and managed as protected areas, as well as areas that are either proclaimed or managed as protected areas;
- Other Natural Areas: Areas that still contain natural habitat but that are not required to meet biodiversity thresholds; and
- No Natural Areas Remaining: Areas which are identified in CPlan version 3.3 as having no remaining intact habitat.

A broad overview of the bioregional plan within the Ekurhuleni Metropolitan Municipality indicates that approximately 49% of the municipality contains either protected areas, natural areas or areas that are considered as being Critical Biodiversity Areas or Ecological Support Areas. The regions that contain the greatest percentage of Critical Biodiversity Area One, which are areas that need to remain in a largely natural state, are Region E and Region F (refer to **Figure B.25**).

Figure B7.1: Biodiversity Plan

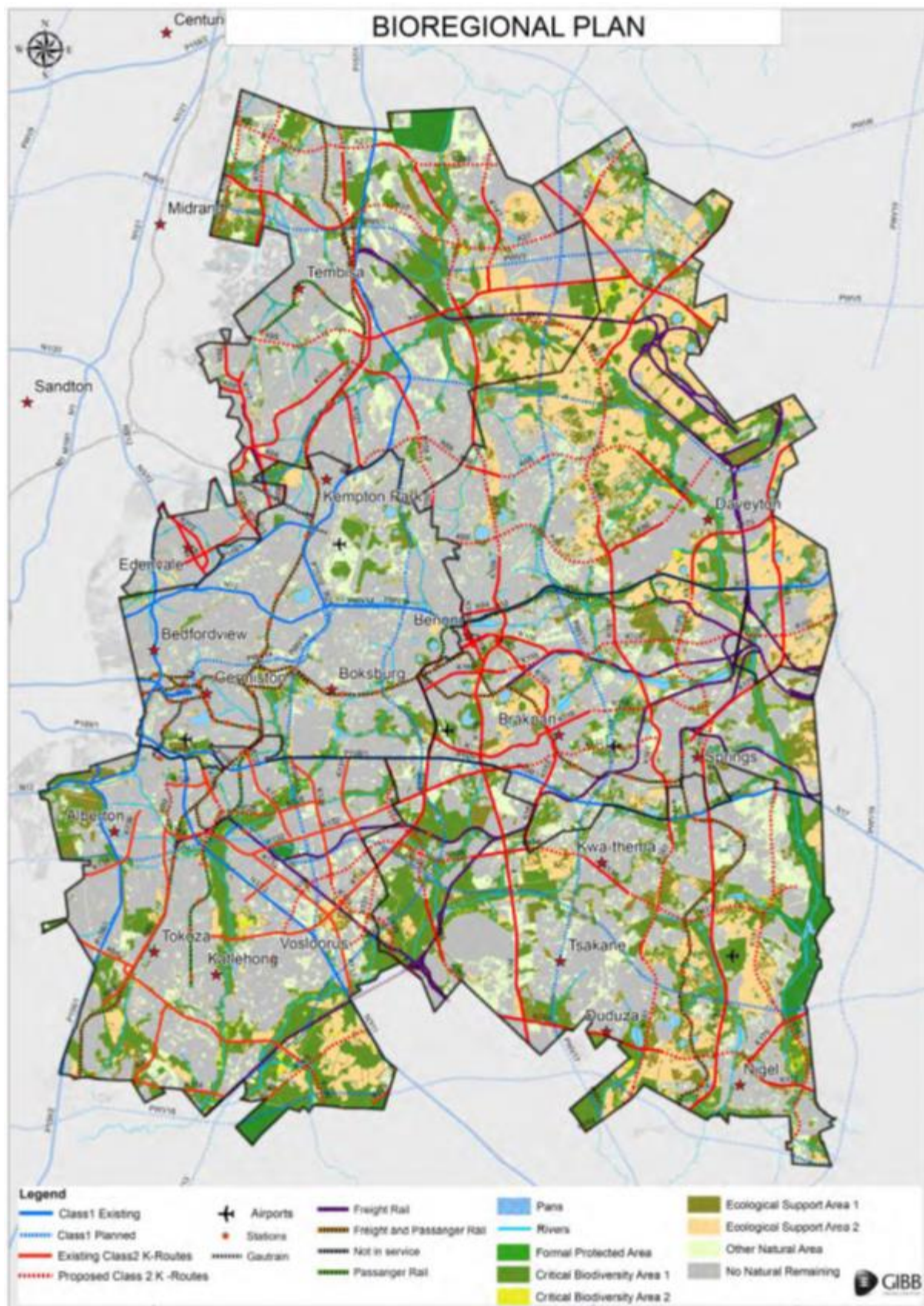
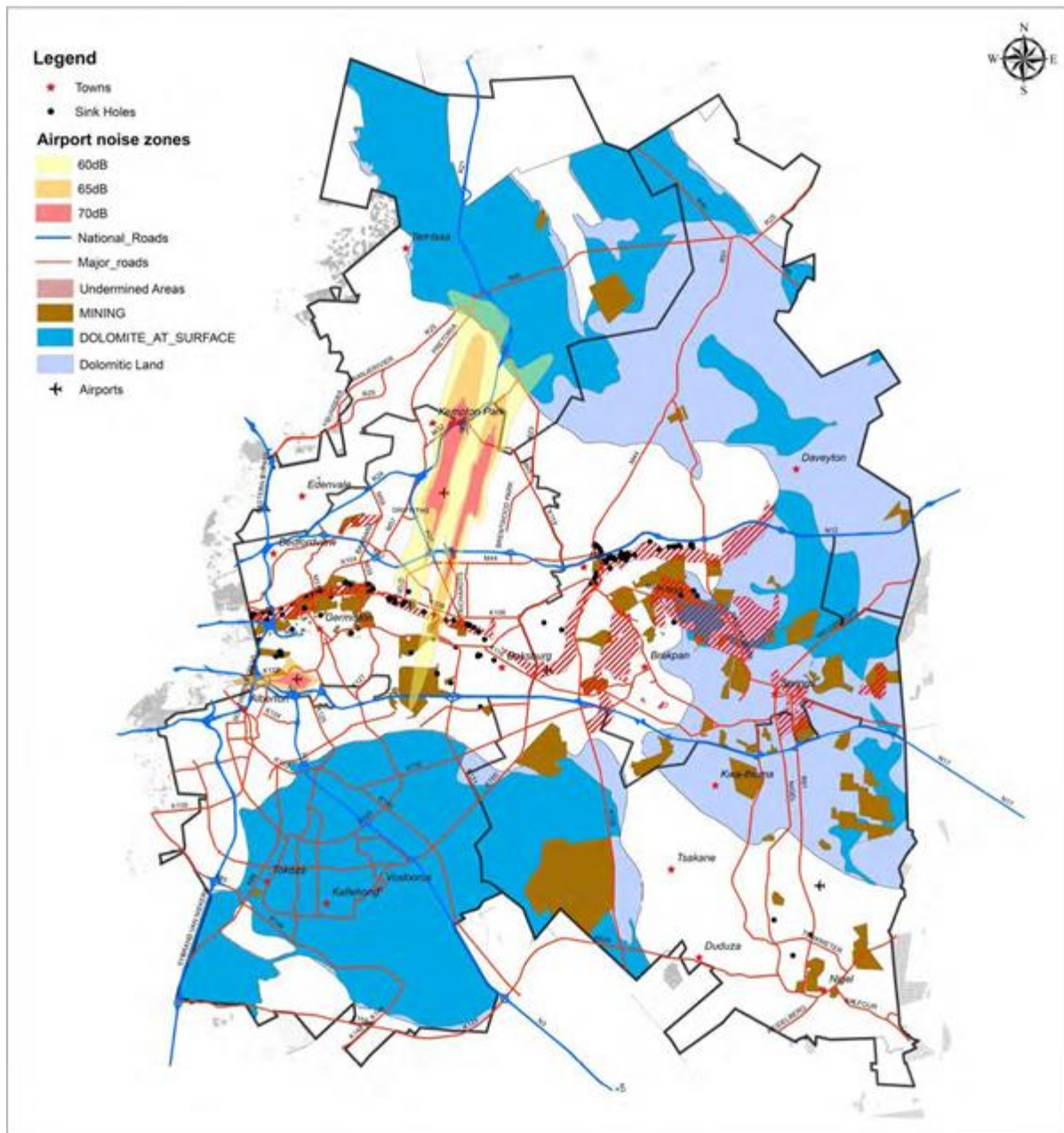


Figure B7.2: Risk Areas within the Ekurhuleni Metropolitan Municipality



Areas identified as having environmental constraints will not necessarily negate any development from occurring, however, it will identify issues that will need to be considered prior to any development. Areas identified within the bioregional plan should be taken into consideration when planning new developments, as some areas are not suitable for development (e.g. conservation areas).

Through sustainability, the EMM strives to achieve a compact city with a protected open space system and bio-diversity area which sufficiently support higher density and mixed land use development within walking distance of an effective public transport network for all communities. The public transport network should connect communities with all major job opportunities. Sufficient social and bulk infrastructure is needed to serve higher density areas on a high standard.

Job opportunity nodes need to be linked via the public transport network and the broader economic regions with the EMM by means of a hierarchy of regional roads, through routes, provincial routes, airports and a regional rail network.

B.8 IMPACT OF SECTOR TRENDS AND DEMANDS ON SPATIAL FORM

Table B8.1 is a summary of the key sector trend influencing the spatial form of EMM, and related possible solutions to the challenges identified. Additionally possible stakeholders in addressing the challenges the EMM face are identified.

Table B8.1: Summary of Sector Trends

CURRENT SITUATION	POSSIBLE RESPONSE	POSSIBLE STAKEHOLDERS
DEMOGRAPHIC		
<ul style="list-style-type: none"> The expected population growth for the EMM places pressure on existing infrastructure, availability of land and job opportunities. 	<ul style="list-style-type: none"> Through focused integrated plans the necessary infrastructure, housing and job opportunities can be provided / created within the EMM to accommodate the expected population growth within the broader Gauteng / Global City Region context. 	<ul style="list-style-type: none"> Department of Labour EMM Economic Development EMM City Planning EMM Department Roads and Storm Water EMM Department Water and Sanitation EMM Department of Human Settlements
ECONOMIC INFRASTRUCTURE		
<ul style="list-style-type: none"> The EMM's economic characterised by growing unemployment and increasing job losses, especially in the manufacturing sector In terms of employment, the economic sectors within the metro are not performing optimally due to the fact that the labour within these sectors are not competitive. The informal sector is vital for the areas with very high unemployment and very low labour participation rates. 	<ul style="list-style-type: none"> Initiatives should focused on skills development, especially aimed at technical institution within the EMM aimed at manufacturing and engineering skills, especially with upgrading production. The manufacturing sector should remain the key focus in terms of revitalising and expanding the metro's economy. According to the EMM's MSD⁹ the metro, together with the input of local commerce, needs to propagate more widely the competitive advantage it has in its manufacturing sector and its good infrastructure for distribution. In addition, areas such as the services sector, i.e. finance and business services, retail trade and warehousing, as well as downstream manufacturing sectors such as the chemicals (specifically pharmaceuticals and plastics), the metal production and metal works, and the transport and equipment (particularly air transport) sectors should be encouraged within the metro. Areas that have been identified with potential area: <ul style="list-style-type: none"> Industrial areas of Spartan, Isando, Jet Park, Olifantsfontein, Wadeville, Alrode and Dunswart, which currently contain the bulk of manufacturing and transport industries in the metro. CBDs of Kempton Park, Boksburg, Benoni and Germiston, which contain the bulk of finance and local retail sector. The retail trade sector should also be promoted within the Tembisa, Kathorus, Daveyton, Etwatwa and Kwatsaduza area. 	<ul style="list-style-type: none"> South Africa Department of Labour National Department of Education Gauteng Department of Education NALEDI (National Labour and Economic Development Institute) EMM Health and Social Development EMM City Planning EMM Economic Development Department of Trade and Industry (SMME Development) EMM Economic Development

⁹ Source: EMM Metropolitan Spatial Development Framework: Review – 1st Draft April 2015

	<ul style="list-style-type: none"> The second economy is largely untaxed, accounts for approximately 20% of the GDP and is grossly misunderstood. Within the second economy lies a vast opportunity in equalising a more sustainable tax revenue base. Therefore the benefits for the second economy needs to be enhanced and increased in terms of new developments and economic infrastructure expansion within the EMM. The following initiatives could be taken in creating increased benefits for the second economy: <ul style="list-style-type: none"> Expanding and Strengthening Educational Programmes and Opportunities (Skills development) Local Labour Promotion SMME Development Diversifying the Economic Base Creating an Enabling Environment The bulk of future growth within the EMM will need to intensify along an extended / broader centre corridor area from the R21 in the north through Germiston and Alberton, to the R59 and the N3 in the south. The most powerful development drivers are situated in this broader corridor environment. The current development driver include the Albertina Sisulu Corridor (R21), the O.R Tambo International Airport, the R59 Corridor and the N3 Corridor. The future primary development drivers include the Riverfields development, M&T / R21 development, Ekurhuleni Aerotropolis and the N3 / Tambo Springs development. 	
BASIC INFRASTRUCTURE		
<ul style="list-style-type: none"> Most of the EMM's basic infrastructure within the urban development boundary is at full capacity and in need of urgent upgrading. No bulk infrastructure is available outside of the urban development boundary. Funding short-fall. 	<ul style="list-style-type: none"> Compile a strategic, overarching, multi-sectoral, long term infrastructure plan to address the Aerotropolis development trajectory that the city has embarked on Large investments to upgrade infrastructure is necessary. Investigation of funding strategies are important and it is necessary to emphasise the alignment of key planning instruments, to develop and implement a funding prioritisation system, continue to exert more centralised control over budget allocations and to synchronise the roll-out of the capital programme. The infrastructure requirements should be prioritised according to areas with the greatest influence. Council should embark on a continuous programme of optimisation of asset portfolios to obtain best value for money. Maintenance of infrastructure must receive urgent attention. 	<ul style="list-style-type: none"> Rand Water ERWAT ESKOM EMM City Planning EMM Department Roads and Storm Water EMM Department Water and Sanitation

	<ul style="list-style-type: none"> It is important to also focus on strategies/programmes to reduce the current loading on existing infrastructure such as water conservation strategies, reduction of stormwater ingress in the sewer network, renewable energy programmes, public transport and solid waste recycling projects. 	
RESIDENTIAL INFRASTRUCTURE		
<ul style="list-style-type: none"> The total housing backlog for the EMM (including informal, backyard, hostels and waiting list units) is estimated at 449 507 units. Most of the household within EMM is located within Tembisa, Katlehong, Germiston and Boksburg. 	<ul style="list-style-type: none"> Future housing developments should ideally be at higher densities (due to limited availability of land) and at accessible localities, preferably along the public transport corridors and at activity nodes, promoting the TOD concept (limiting peripheral urban growth). A variety of housing densities and typologies should be encouraged to permit a mix of incomes and housing types along the public transport corridors and at activity nodes. Future developments should be approached holistically, promoting economic viability, environmental sustainability, social resilience and quality of life. Future housing developments should include supportive uses such as community facilities, local business, parks and open space, recreation and entertainment facilities. Housing proposal per type: <ul style="list-style-type: none"> Township - In low income areas focus should be on the provision of social and municipal infrastructure, as well as the aesthetic upgrading of the area. Residential densities should be directed to support secondary and tertiary activity nodes and corridors without over-utilising existing service infrastructure. Suburbs - In medium and high income areas, focus should be on the maintenance of infrastructure in these areas. Residential densities should be directed to support secondary and tertiary activity nodes and corridors without over-utilising existing service infrastructure. Informal Areas Upgrading - Informal areas (squatter areas) are to be upgraded, formalised, or relocated as per EMM housing plans. 	<ul style="list-style-type: none"> EMM Health and Social Development EMM City Planning EMM Department of Human Settlements Gauteng Department of Human Settlements Rand Water ERWAT ESKOM Private Sector
COMMUNITY INFRASTRUCTURE		
<ul style="list-style-type: none"> Numerous social and community facilities are needed within the EMM. Region F is most in need of social and community facilities, with an emphasis on education facilities. 	<ul style="list-style-type: none"> As per identified demand within the MSDF 2015, additional social and community facilities need to be provided within the different regions. Due to limited funding, a prioritisation model approach should be applied to determine which social / community facility to provide first per region per a communities need. 	<ul style="list-style-type: none"> EMM City Planning EMM Health and Social Development Gauteng Department of Education Gauteng Department of Health

TRANSPORTATION INFRASTRUCTURE		
<ul style="list-style-type: none"> The transportation system in EMM is far from sustainable and the public transport operational strategy is therefore of utmost importance. A very high need for NMT (Non-motorised Transport) facilities throughout EMM is identified, in line with the TOD concept. Funding short-fall. 	<ul style="list-style-type: none"> Investigate all possible funding strategies to ensure sufficient funding is available for major road upgrades, normal maintenance of public transport facilities. Develops an overload control strategy to minimise the implication on highway maintenance. Facilities Management System needs to be implemented to address the need of the public transport users. Travel Demand Management needs to be implemented to help alleviate traffic congestion, promote public transport and NMT modes. EMM needs to develop a NMT policy and master plan to ensure sustainable implementation of NMT facilities. 	<ul style="list-style-type: none"> SANRAL Gauteng DRT (five year road priorities in terms of funding and implementation).
SUSTAINABILITY INFRASTRUCTURE		
<ul style="list-style-type: none"> Approximately 49% of the municipality contains either protected areas, natural areas or areas that are considered as being Critical Biodiversity Areas or Ecological Support Areas which need to stay in a natural state. The mining legacy of the EMM impacts on future development due to the prevalence of acid mine water. 	<ul style="list-style-type: none"> Future planning should incorporate environmental protection areas into developments, thereby meeting the national biodiversity protection targets for vegetation types in the area, and ensuring that natural areas are protected, maintained and utilized. Promote the development of open spaces in a way that will ensure adequate access to a variety of types of open spaces within the EMM to all, that will fulfil the physical and psychological needs of the community Rehabilitate mining land where possible to create additional land area for future developments and / or preserve historical mining sites as possible tourist attraction. The inclusion of cultural and heritage elements within the open space network / protected areas can add to the viability of these areas, as noted within the MSDF the historical, cultural and tourism sites within Ekurhuleni include old mining sites, cemeteries, monuments and memorials, railway sites, Late Iron Age sites, museums and cultural villages, cinemas and nature reserves. There are a total of 266 heritages, cultural and tourism sites within the 5 regions. 	<ul style="list-style-type: none"> EMM City Planning EMM Environmental Resource Management and Development EMM Sport, Recreation, Arts and Culture Department of Tourism Department of Environmental Affairs

SECTION C

SECTION C: STRATEGIES AND PROGRAMMES¹⁰

C.1 LONG TERM VISION

According to the Ekurhuleni Growth and Development Strategy 2055 the vision of the EMM is to be **The Smart, Creative and Developmental City**. The mission statement developed for the EMM reads as follows:

Ekurhuleni provides sustainable and people centred development services that are affordable, appropriate and of a high quality. We are focussed on social, environmental and economic regeneration of our city and communities, as guided by the principles of Batho Pele and through the commitment of a motivated and dedicated team.

The EMM Growth and Development Strategy 2055 furthermore identified the following number of critical developmental imperatives to be pursued in the metropolitan area:

1. **Sustainable urban integration**
2. **Job creating economic growth**
3. **Social empowerment**
4. **Environmental well-being**
5. **Co-operative governance**

Different developmental stages are envisaged in order for the EMM to realise the above developmental imperatives:

- **Stage 1: The Delivering City** (2012-2020). This would lay the foundation for
- **Stage 2: The Capable City** (2020-2030), and ultimately enable
- **Stage 3: The Sustainable City** (2030-2055).

This trajectory lies at the heart of the EMM Growth and Development Strategy 2055 and represents a High Level Strategic Framework for the City to manage its transition through the following five strategic themes: “**Re-urbanise**”, “**Re-industrialise**”, “**Re-generate**”, “**Re-mobilise**” and “**Re-govern**”.

The EMM Growth and Development Strategy is aligned with the following four high level goals as extracted from the national guidelines on performance indicators (National Treasury, 2013):

^{10 10} Final comments from the EMM Spatial Planning Division is still outstanding.

- a) **Well-Governed City:** This is a precondition for reshaping the EMM urban form and sustainable built environment transformation. The EMM vision and leadership will initiate and drive spatial change, efficient and sustainable urban infrastructure transformation, and align with its policies, procedures and resources accordingly. The EMM will target priority areas for transformation, lever additional resources from external sources, and involve stakeholders in the planning and implementation processes.
- b) **Inclusive City:** All residents will be able to participate in economic and social opportunities. There will be better physical access to such facilities (through proximity and mobility), and greater social diversity at neighbourhood and city levels. Higher population densities are to be achieved across the city, particularly in well-located areas and around transport hubs and corridors. Priority will be given to redevelopment of brownfield sites, infill development and the intensification of existing inner urban areas to accommodate larger populations. This will be supported by a more efficient and integrated transport system. Social integration will be achieved through mixed-income, mixed-use, inclusionary forms of development with a diverse range of housing typologies and tenure alternatives. This will result in high quality and safe residential environments for all, with public services and recreational amenities within easy reach.
- c) **Productive City:** People will earn a decent living which generates sufficient resources to pay for improved infrastructure, services and amenities. The city will function efficiently and make effective use of its human and natural resources. Municipal policies and procedures (related to land, infrastructure, regulations and incentives) will encourage increased private and public investment throughout the city, including both established economic centres and new transformation areas. Public and private business support programmes will be established according to the needs and potential of different types of enterprise in various functional parts of the municipality.
- d) **Sustainable City:** The city will have innovative infrastructure networks which enable more efficient use of natural resources and provide affordable services. Investment will be focused towards resource efficient and sustainable urban infrastructure and tariffs will be set at levels to balance real cost (including provisions for maintenance and future capital investments) with affordability. Less municipal-provided resources will be consumed per capita and less solid waste will go to landfill. The EMM will monitor the resource efficiency (of energy and water) and solid waste flows to landfills.

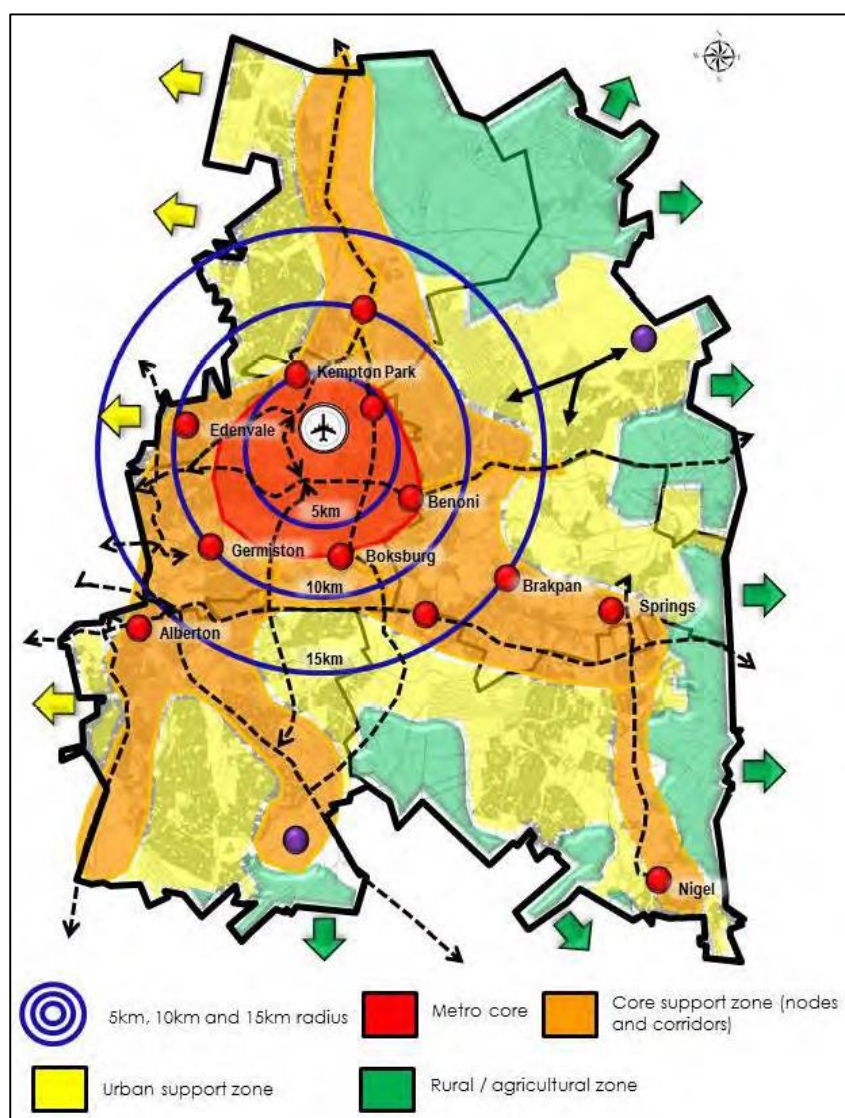
The above themes speak directly to Ekurhuleni's vision for an integrated, delivering, capable and sustainable city.

C.2 THE SPATIAL DEVELOPMENT STRATEGY OF THE MUNICIPALITY

Figure C2.1 depicts the **Ekurhuleni Spatial Development Concept** aimed to guide future development in the EMM area. The Spatial Concept is based on the following development principles:

- A strong core relating to the proposed Aerotropolis at OR Tambo International Airport;
- Anchor nodes at Sentrarand and Tambo Springs Freight Hubs, and Carnival City precinct;
- Promotion of viable east-west linkages by means of the N17 and N12 highways;
- Development of major north-south linkages/ corridors, including a separate road-based freight route;
- Upgrading and expansion of the railway system;
- Extensive agricultural development in the rural extents of the municipal area; and
- A compact urban development footprint comprising a Core Support Zone and an Urban Support Zone around the Metropolitan Core.

Figure C2.1: EMM Spatial Development Concept



The **Ekurhuleni Metropolitan Spatial Development Framework** as illustrated on **Figure C2.2** provides a clear indication of the broad land use pattern to be developed in Ekurhuleni to achieve sustainable spatial development and to thus overcome the spatial imbalances of the past. The MSDF is based on the following twelve Development Objectives as summarised in **Table C2.1** below:

Figure C2.2: Ekurhuleni Metropolitan Spatial Development Framework

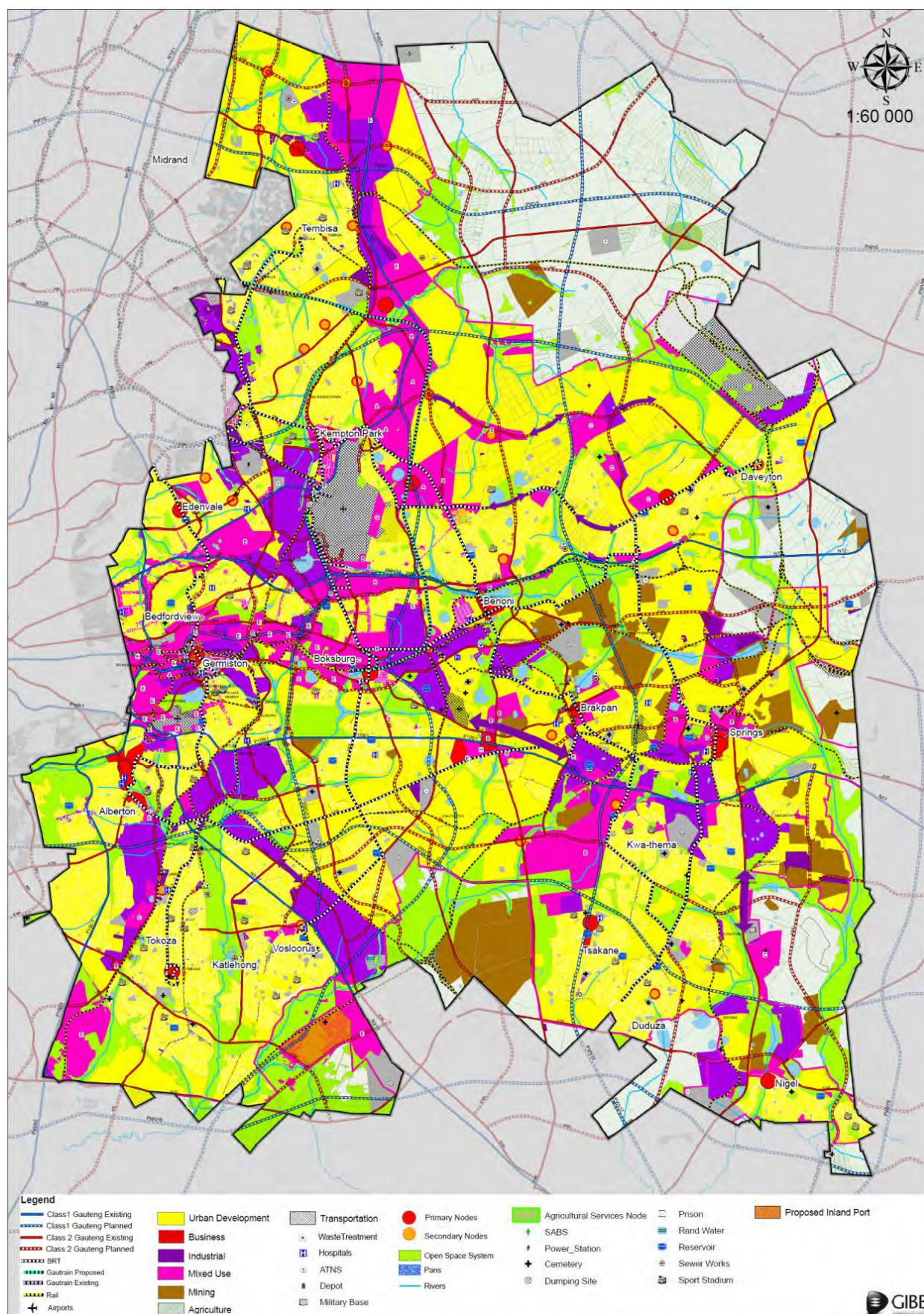


Table C2.1: Ekurhuleni MSDF Development Objectives

1.	Objective 1: Create a single Uniform Identity for Ekurhuleni Metropolitan Municipality
	<ul style="list-style-type: none"> Aerotropolis becomes new metropolitan hub (CBD).
2.	Objective 2: Create a Sustainable and Functional Open Space Network
	<ul style="list-style-type: none"> Optimise the unique characteristics of Ekurhuleni. Incorporate the open space system into the urban fabric. Optimise unutilised open space in the urban fabric.
3.	Objective 3: Promote the Development of a Sustainable Compact Urban Structure
	<ul style="list-style-type: none"> Densify activity nodes, residential areas and transport linkages. Delineate a fixed urban edge to accommodate future urban growth. Direct growth to the Ekurhuleni Core Node. Identify developable land for infill development mindful of strategic location, socio-economic value and soil conditions.
4.	Objective 4: Develop a well-defined system of Activity Nodes
	<ul style="list-style-type: none"> Identify primary and secondary activity nodes to support the Core Metropolitan Node. Protect existing industrial areas from the potential negative effects of informal settlements located in close proximity thereof. Determine an “Ekurhuleni unique” niche market for each of the Primary Nodes. Improve and further develop existing nodes in the PDAs. Link activity nodes and public transport nodes. Link the activity nodes to one another through activity spines and public transport networks.
5.	Objective 5: Actively Promote Sustainable Public Transport
	<ul style="list-style-type: none"> Provide public transport along all main corridors. Effectively manage taxi ranks. Promote mixed use, high density development along suitable corridors and at suitable nodes. Promote Transit Oriented Development along the main railway infrastructure. Promote pedestrianisation. Tighten and enforce the Urban Edge to enhance densification. Initiate a “Road to Rail Program” for passengers and cargo.
6.	Objective 6: Integrate the Disadvantaged communities into the Urban Fabric
	<ul style="list-style-type: none"> Support infill development on vacant land located close to CBDs, industrial areas, bus and taxi routes and railway stations. Promote economic development along the main linkages between these communities and the major concentrations of job opportunities. Direct growth of the PDAs to the Ekurhuleni Core Node.
7.	Objective 7: Promote Access to Social and Municipal Services through CCAs
	<ul style="list-style-type: none"> Promote economic development. Promote essential service delivery.
8.	Objective 8: Optimise Job Creation Capacity of the Formal Economy
	<ul style="list-style-type: none"> Promote specialisation in manufacturing, transport, finance, retail and institutional uses. Develop sector-specific growth strategies. Protect existing industrial areas from negative effects of informal settlements located in close proximity thereof. Regenerate industrial areas and CBDs. Provide infrastructural linkages for globally orientated growth. Promote SMME Development and Growth.
9.	Objective 9: Optimise the Comparative Advantages of EMM
	<ul style="list-style-type: none"> OR Tambo International Airport. Manufacturing. Transport infrastructure (Road, Rail and Air). Ekurhuleni’s strategic location.
10.	Objective 10: Identify the Spatial Impact of Climate Change
	<ul style="list-style-type: none"> Develop a compact, integrated and sustainable city with an efficient transport system.

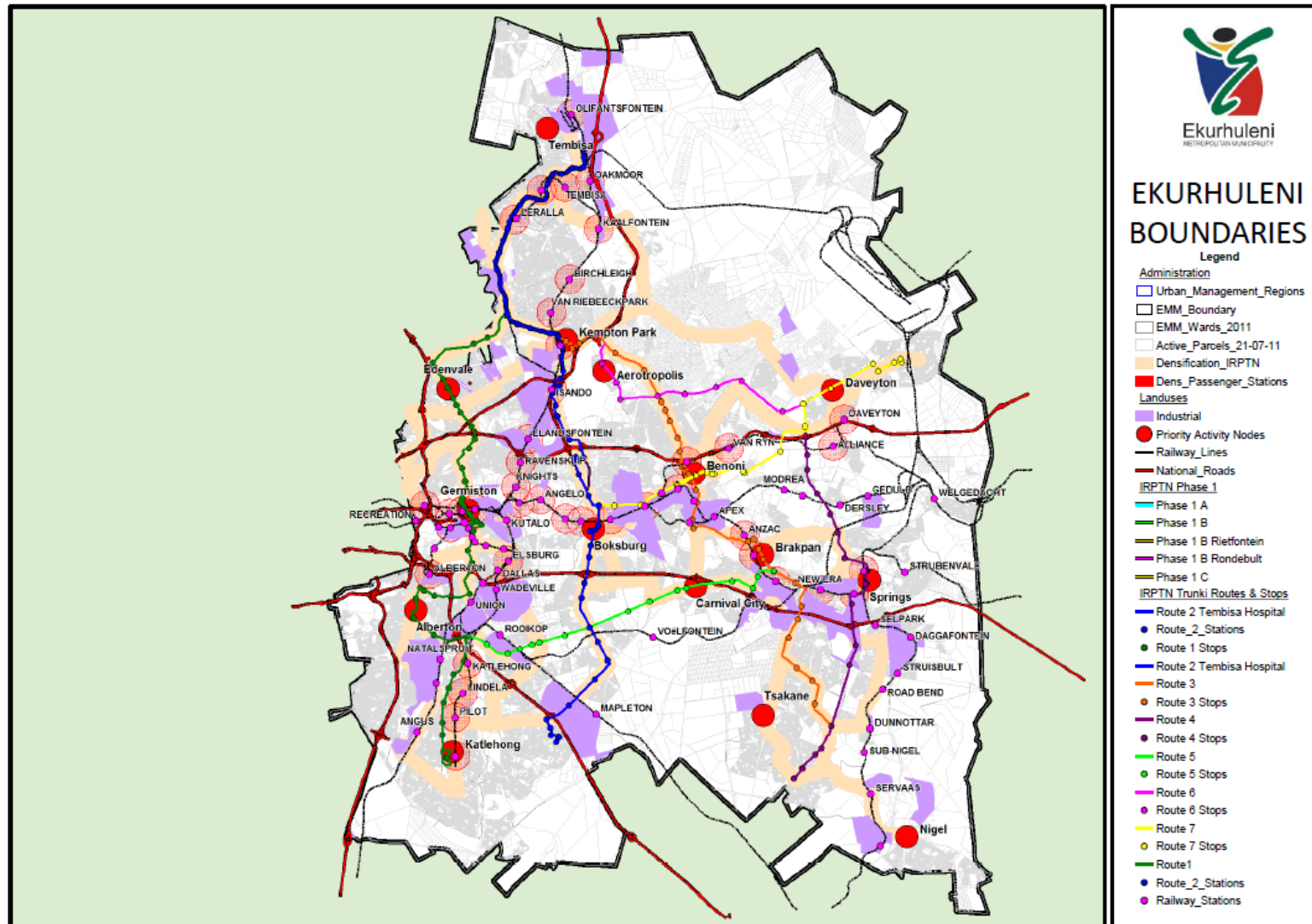
	<ul style="list-style-type: none"> • Enable the energy sector to better support the local economy of EMM. • Provide access for all people to affordable, safe, healthy and modern energy services.
11.	Objective 11: Promote Sustainable Livelihoods Development
	<ul style="list-style-type: none"> • Encourage retail development as a kick start strategy. • Develop townships into model self-sustaining neighbourhood development areas.
12.	Objective 12: Promote Sustainable Development
	<ul style="list-style-type: none"> • Focus on disaster risk reduction strategies. • Impacts of climate change (assess vulnerability, identify key risk areas, plan to mitigate these or adapt to the risks and impacts of climate change). • Dolomite. • Stormwater plans in relation to floods. • EBOSS in relation to land use applications. • Water resource management. • Food security.

Figure C2.3 conceptually captures the essence of objectives 3, 4 and 5 as listed above. It firstly shows the priority activity nodes identified in the MSDF as well as the footprint of industrial activity in the EMM. These activity nodes/ areas are linked to one another by way of an Integrated Public Transport Network comprising the PRASA commuter rail network with railway stations, as well as the proposed EMM BRT network. Densification and mixed use development is to be promoted along the BRT network and around the railway stations and within the EMM activity nodes in line with the following density guidelines:

- Public transport routes, 60-120 u/ha within a 200m radius along the corridor and within 200m of facility (including railway stations);
- Secondary and tertiary nodes, 60-120 u/ha within 500m of node;
- Primary nodes >120 u/ha up to 1km from node; and
- Low density zones (0-60 u/ha)
 - 0-15 u/ha anywhere in zone;
 - >15 u/ha to relate to social services (mainly schools) within 200m radius of facilities;
 - Properties <900m² not to be subdivided;
 - Erven developed at maximum density to be a minimum of 4 000m²; and
 - Provisions of the Town Planning Scheme to apply to height, coverage, FAR, parking and building lines.

In line with the concept of **Transport Oriented Development**, densification and mixed use should be encouraged along public transportation routes and in areas of extensive public investment in road and rail infrastructure.

Figure C2.3: MSDF Objective 3, 4 & 5



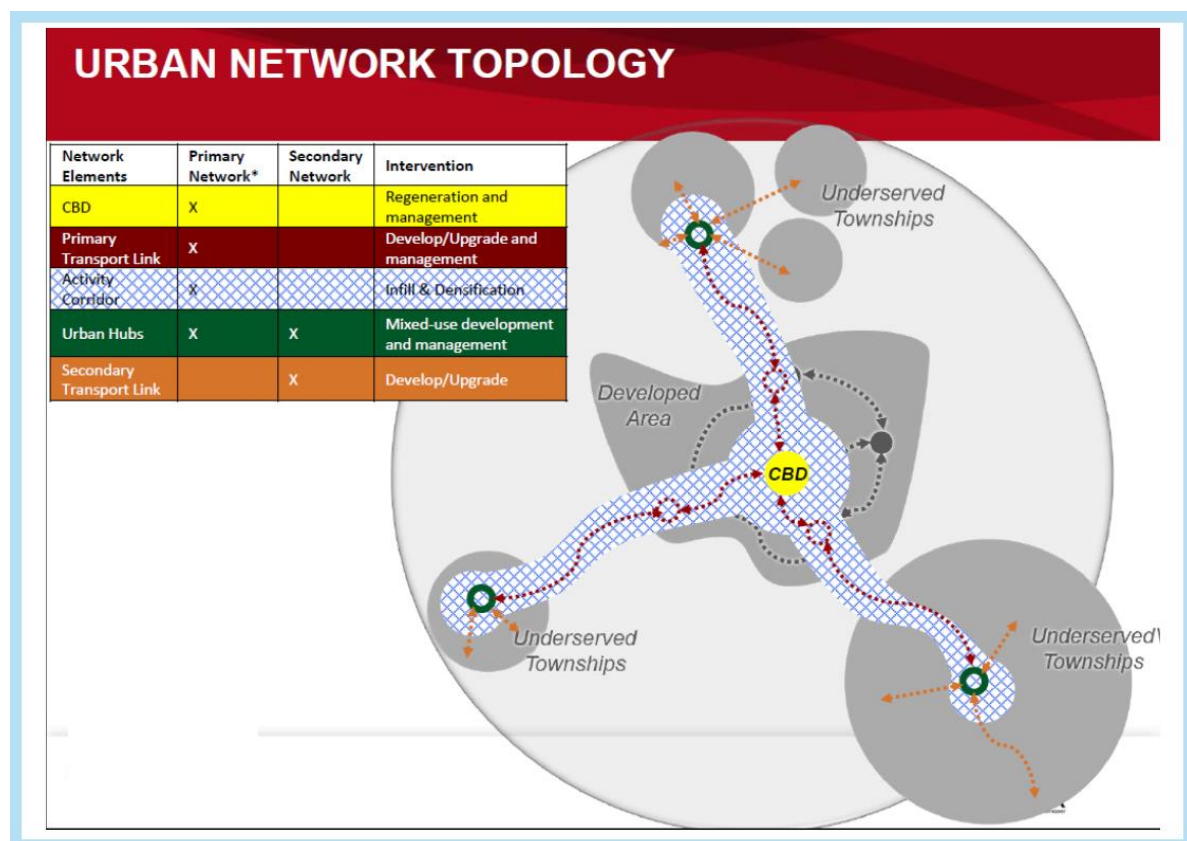
The following sections C3 and C4 highlight the functional relationship between the EMM Spatial Development Framework (C2), the EMM Capital Investment Framework (C3), and the EMM Integration Zones (C4). The MSDF provides the spatial vision, objectives and strategy towards the future development of the EMM; the Capital Investment Framework (CIF) (C3) is a component of the MSDF that fulfils the purpose to strategically and spatially guide and align municipal capital expenditure; and the Integration Zones (including the Urban Network and Hubs) (C4) represent a specific, smaller spatial component of the MSDF and CIF and which is the primary focus of the Built Environment Performance Plan.

The Integration Zones, Urban Network and Hubs are part of the EMM CIF but the geographic focus of the EMM CIF is wider than only the Integration Zones.

Figure C2.3 graphically illustrates the concept of the Integration Zone which comprise three elements:

- the consolidation of the urban fabric and promotion of economic activity around the urban hub in the marginalised areas on the urban periphery;
- the revitalisation of the main activity area in the city (the CBD); and
- effectively linking the Hubs to the CBDs by way of public transport infrastructure and services and promoting medium and higher density mixed use development along these public transport corridors.

Figure C2.3: Concept of the Integration Zone



C3 CAPITAL INVESTMENT FRAMEWORK

The Capital Investment Framework (CIF) is a requirement in terms of Section 4(e) of the Municipal Planning and Performance Management Regulations, 2001 as promulgated in terms of the Municipal Systems Act. It also fulfills the function of a Capital Expenditure Framework (CEF) as required in terms of Section 21(n) of the Spatial Planning and Land Use Management Act, 2013. In addition, the CIF also informs the Capital Expenditure Programme (CEP) as referred to by National Treasury. The CIF also strives to meet Section 153(a) of the constitution¹¹, in which the developmental duties of a municipality is outlined to “structure and manage its administration and budgeting and planning processes to give priority to the basic needs of the community, and to promote the social and economic development of the community”.

The CIF can also be defined as a financial planning and regulatory tool in terms of the National Development Plan¹², which plan makes reference to the need to achieve spatial transformation through targeting investment into strategic spatial areas through the combined use of planning, legislative and financial tools. The CIF is therefore geared towards providing a spatial rationale to the budget in order to guide investment into identified priority spatial areas as a means to achieve positive spatial transformation.

The State of the City Address delivered by the EMM Executive Mayor on 19 March 2013 resonates the objective of the NDP and function of the CIF by stating that the CIF is utilized as an instrument that will “channel CAPEX funding to critical economic infrastructure programmes, such as the Special Economic Zones (SEZ), Industrial Development Zones (IDZ), Export Processing Zones (EPZ) and Industrial Parks and Estates¹³”.

The functions of the CIF can thus be summarized as follows:

- Spatially and strategically influence and guide municipal capital prioritisation and allocation;
- Spatially and strategically coordinate and integrate capital expenditure across all sectors;
- Show where the municipality must and will be spending its capital budget; and
- Map capital projects reflected on the multi-year budget.

The Capital Investment Framework is therefore a tool utilised within the BEPP to achieve medium to long term outcomes with regard to spatial transformation through guiding and focusing investment into strategic spatial areas – some of which also comprise the BEPP Integration Zones.

It must be noted that the 2014/15 Review of the Capital Investment Framework was approved after a sitting of the Full Council Committee on 01 December 2014.

¹¹ Constitution of the Republic of South Africa, no. 108 of 1996

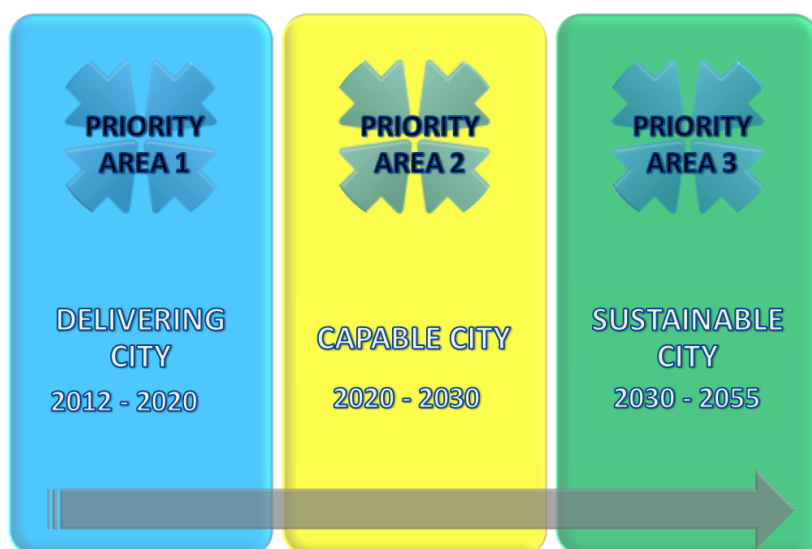
¹² South African National Government: National Development Plan, 2012

¹³ EMM State of the City Address, 2013.

CIF GEOGRAPHIC PRIORITY AREAS

The EMM Capital Investment Framework is geared towards focusing capital budgeting for the metropolitan area into three strategic geographic priority areas in accordance with the MSDF. The main objective is to achieve the spatial strategy outlined within the MSDF and to align with the development trajectory defined within the GDS in terms of promoting the Metro as a ‘Delivering City’ with a 10 year implementation horizon, a ‘Capable City’ within 20 years, and a ‘Sustainable City’ within a 20 year and beyond implementation horizon.

Figure C3.1: Geographic Priority Areas Alignment to the GDS



Spatial Structuring Elements Defining CIF Geographic Priority Areas

This section provides more detail into the various Spatial Structuring Elements (SSE's) utilised in defining the Ekurhuleni CIF Geographic Priority Areas. **Table C3.1** below provides a brief summary of each of the Spatial Structuring Elements which informed the CIF of Ekurhuleni, while **Figure C3.2** illustrates the spatial distribution of each of these Spatial Structuring Elements. The allocation of the various SSE's into the three Geographic Priority Areas is reflected on **Figure C3.3**. The prioritisation thereof was based on considerations pertaining to connectivity, access to social and economic opportunities, scope of project, locality, available funding and the implementation timeframe of the project.

The blue areas on Figure 6 depict Priority Area 1, while Priority Area 2 is shown in yellow. Priority Area 3 is illustrated in green.

Table C3.1: EMM CIF Spatial Structuring Elements

IRPTN Corridor	The phase of the IRPTN route that is to be developed should receive more funding during each CIF phase. Implementation of the corridor in the CIF is indicated as per the IRPTN phases as described by the Ekurhuleni Transport Department. The IRPTN phase 1 route, phases A and B have been demarcated as priority 1, with Phase C being demarcated as priority 2. Phase 1C has been demarcated as part of priority area 2 pending available funding being made available in the outer financial years. The remaining IRPTN trunk routes have been demarcated as priority 3 in so far as implementation of the remaining IRPTN routes is only anticipated for 2020 and beyond.
Rail Stations	The Passenger rail stations to be developed should receive more funding during each CIF phase. Highest priority is given to Rail Stations within Primary and Secondary Activity Nodes and that form part of the IRPTN phase 1 route, phases A and B; which are demarcated as priority 1 in terms of the CIF. The stations on the remaining IRPTN routes have been demarcated as priority 3, based on the 2020 and beyond proposed implementation of the phase 1C roll out. Prioritisation of the IRPTN stations therefore follows the implementation roll out timeframe proposed for the IRPTN trunk routes. It must also be noted that PRASA is presently focused on implementing the modernization plan, which refers to the maintenance and upgrading of existing rail stock. In this regard new PRASA stations are not anticipated for the short term. The stations should also be recognized as destination nodes with the potential of developing into activity nodes. Section 6 and 8 of the report provides further detail with regard to the assessment on the alignment of the PRASA modernization plan with the CIF priority areas.
Primary Nodes	It is proposed that Primary Nodes to be developed should be budgeted for as per the CIF priority areas, which have prioritized the Primary Nodes based on spatial strategy, locality in relation to the IRPTN and Urban Renewal projects that are underway and major investment developments. Primary Nodes that fall within priority area 1 are considered as the highest priority, followed by Primary Nodes that fall within priority area 2 and then priority area 3. The remaining Primary Nodes are considered as a lower priority.
Secondary Nodes	Secondary Nodes to be developed should be budgeted for as per the CIF priority areas. Secondary Nodes that fall within geographic priority area 1 and on Route 1A and B of the IRPTN are considered as the highest priority, followed by Secondary Activity Nodes on Phase 1C of the IRPTN, then Route 2 and so on. It must be noted that further refinement of the inclusion of the secondary nodes into the priority areas is required pending available information on the status of the secondary nodes. Available information on the activity nodes from the Region A RSDF has been taken into consideration.
Major Housing Projects	Major Housing projects that are well into the implementation phase by the Ekurhuleni Human Settlements Department have been demarcated as priority 1. Prioritisation of these projects was based on the development objectives of the Ekurhuleni Human Settlement Department. The CIF has included the proposed housing projects as reflected on the housing funding model and earmarked the proposed housing projects that fall along the mining belt and form part of infill development as part of priority area 2. Therefore, the CIF has placed more emphasis on prioritizing proposed housing projects that supports infill densification and expansion areas as per the MSDF.
Industrial Areas	New industrial areas need to be developed and existing industrial areas require upgrading during each CIF phase. Phasing of the industrial areas is based upon spatial strategy, income sources (based on modelling geographic income areas), Council initiatives underway, IRPTN, and major investments. It is acknowledged that the EMM industrial areas are a major source of revenue for the metro and a source of employment. Table 3 provides detail as to the prioritisation of the Industrial areas.
Major Investments and Strategic Projects	Major investment and development projects that have been included to the CIF geographic prioritisation areas include major investments and strategic projects as listed in the 2011 MSDF, and newly identified investments and strategic projects that have been identified as in a phase of initiation and/or implementation. Major

	<p>investments can be defined as private sector developments which boast significant GGP and job creation for the metro based on the eventual realization of the entire proposed development. Strategic projects must be understood as programmes and projects initiated by the EMM as with the example of the flagship projects.</p> <p>Prioritisation is therefore based on the locality of the project and readiness of the project driver to implement the project. Where possible these projects are to be linked to the implementation of the IRPTN and the priority income generating areas. Continuous re-prioritisation of these projects must however be done based on planning progress made to date, with specific relevance to input from the private sector. Section C.5 of the report provides more detail on the Strategic Projects and Major investments that have been taken into consideration on the refinement of the geographic priority areas.</p>
Poverty Eradication Areas	<p>The poverty eradication areas were derive out of the identified poverty eradication areas as listed in paragraph 15.10 of the MSDF. It is acknowledged that the provision of access to economic opportunities in close proximity to previously disadvantaged areas is a necessity as outlined in the principles of the NSDP¹⁴. Where possible the prioritisation of the poverty eradication areas should be linked to the implementation of the IRPTN. The poverty eradication areas have also been prioritized as per the role out of the Township Regeneration Plans.</p>
Expansion Areas	<p>Three priority expansion areas were identified. The highest priority Expansion Area represents the Albertina Sisulu Corridor including the Witfontein and Serengeti areas. The land is strategically located in a triangle between Tembisa to the north, the residential areas of Kempton Park to the west, and the proposed Albertina Sisulu Corridor to the east. This also forms part of the Tembisa – OR Tambo International Airport component of the Ekurhuleni North-South Corridor.</p> <p>The second highest priority Expansion Area is the OR Tambo International Airport–Daveyton Link area. This includes the area to the northeast of the OR Tambo International Airport up to and including the Mayfield area to the north of Daveyton. The development pressures evident in this area stem from both close proximity of the OR Tambo International Airport, as well as the northward residential expansion pressure from Benoni. On a metropolitan level, this area is not an expansion area in the pure sense of the word, but can also be described as an infill development area as it represents an inward direction of growth for the Daveyton-Etswatwa complex towards the OR Tambo International Airport area. Several subsidised housing projects and bonded housing projects are already underway in this area.</p> <p>The Leeuwpoort area to the south of Sunward Park is the third highest priority Expansion Area. The Ekurhuleni Leeuwpoort housing development initiative is of importance here.</p> <p>Expansion Areas are redefined in the concept so as to promote development and provision of services in nodes and corridors within the Expansion Areas. In terms of the CIF the expansion areas which have been incorporated into the priority areas includes the Aerotropolis core, housing projects, development in and around the proposed IRPTN routes.</p>
Densification areas	<p>The main focus of these areas is to support public transport and urban sustainability. The aforementioned Infill and Expansion Areas are layered onto the proposed densification areas.</p>
Geography of EMM income	<p>In defining the priority areas it is imperative that the Metro be able to identify spatially where its top investors in terms of revenue generation are located. In drawing future investment and retaining the Metros current investors to ensure future revenue security and growth, the Metro needs to provide a sustainable environment for businesses.</p>

¹⁴ *National Spatial Development Perspective, 2006.*

Figure C3.2: Refinement of the Spatial Structuring Elements 2014/15

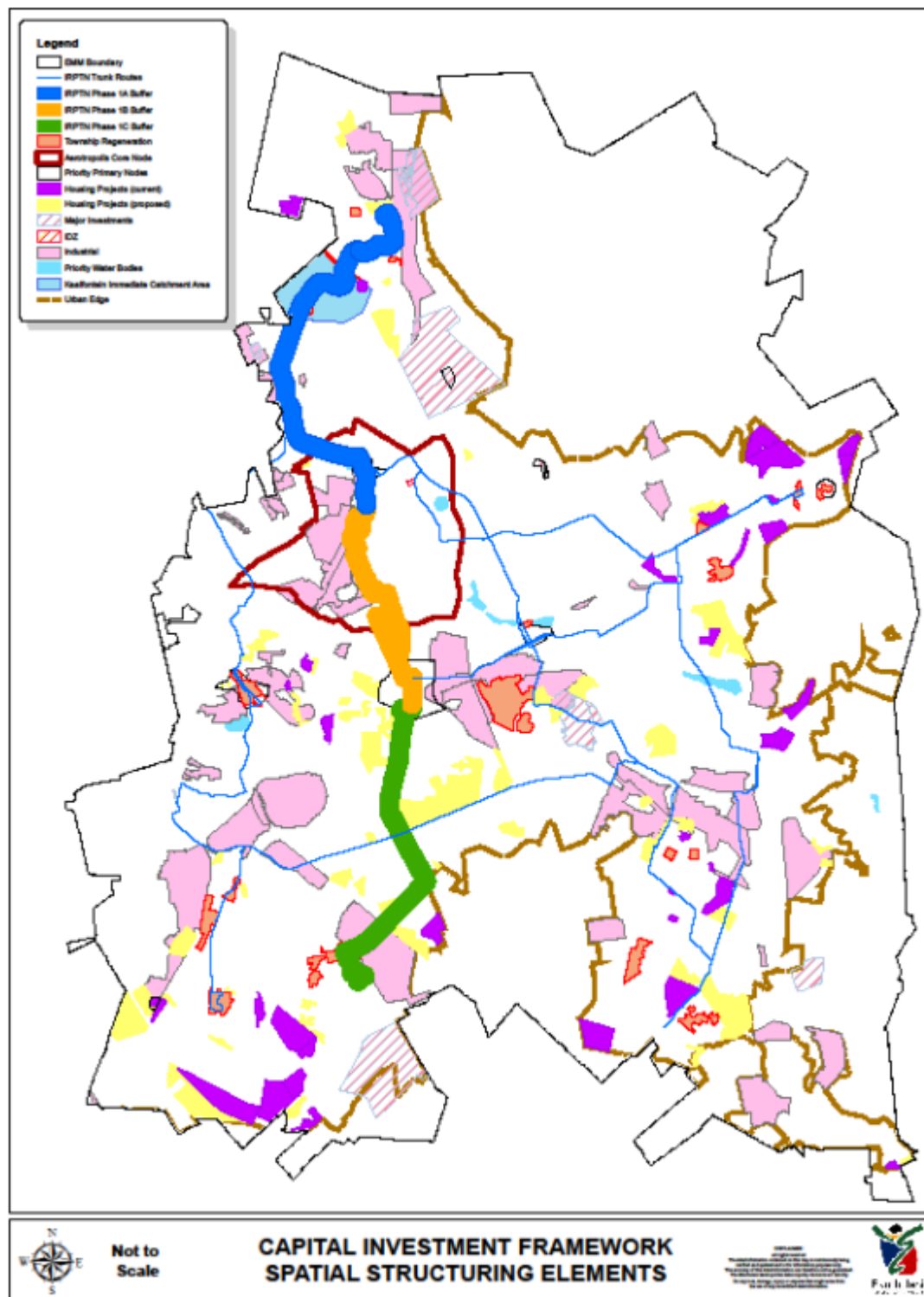


Figure C3.3: CIF Priority Areas (Basis for the Integration Zone)

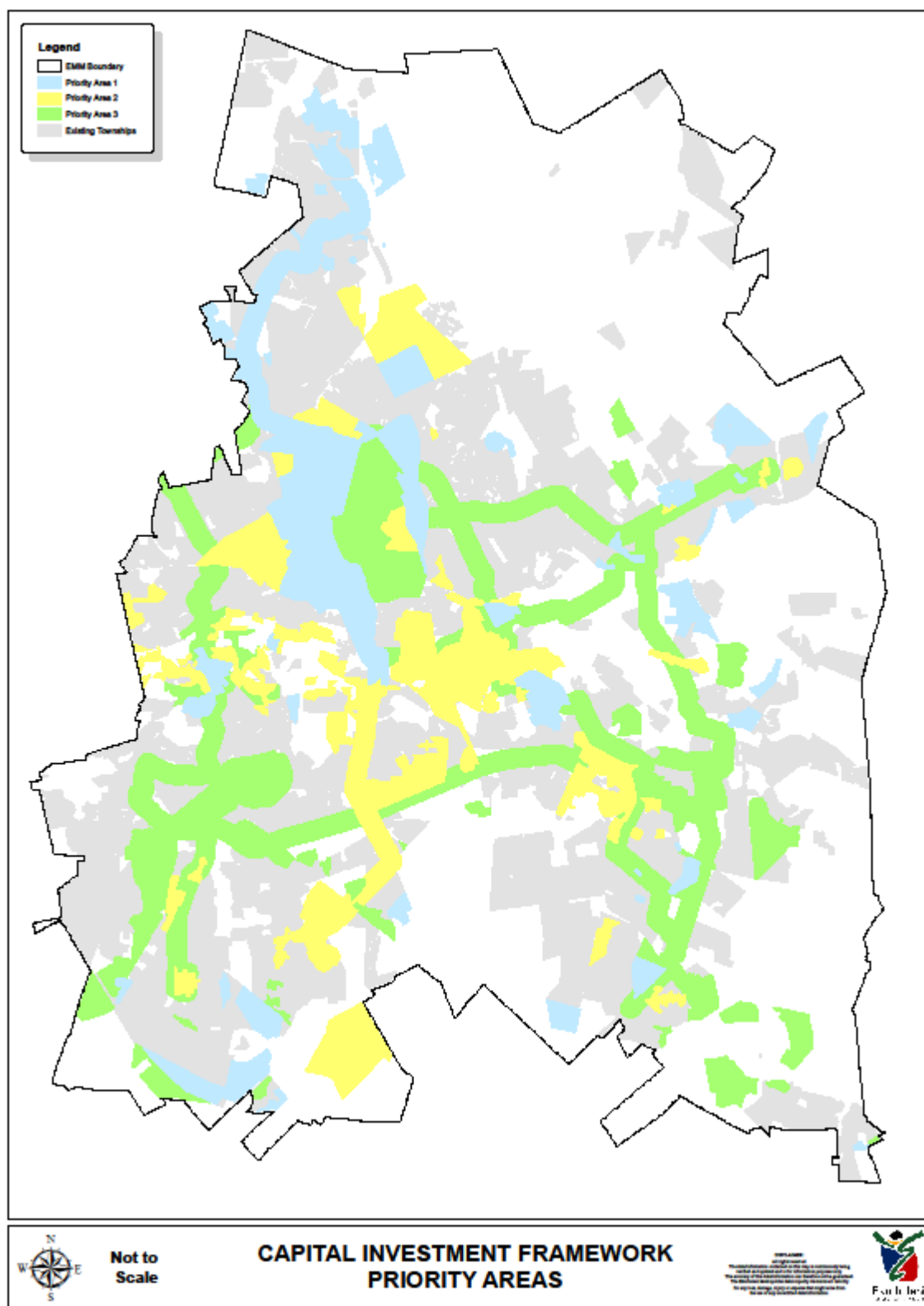


Table C3.2 below summarises the Spatial Structuring Elements included in each of the three Geographic Priority Areas as defined in the EMM Capital Investment Framework.

Table C3.2: Summary of the Geographic Priority Areas

SPATIAL STRUCTURING ELEMENT	GEOGRAPHIC PRIORITY AREA 1	GEOGRAPHIC PRIORITY AREA 2	GEOGRAPHIC PRIORITY AREA 3
IRPTN CORRIDOR	Tembisa -Kempton Park, OR Tambo, Benoni via Boksburg- Vosloorus, Daveyton , Etwatwa, Duduza, Kwa-Thema	Ivory Park and Tembisa in the North to Germiston and from Katlehong in the South to Germiston via Alberton	Kempton Park, Benoni and Brakpan, Kwatsaduza. Brakpan to current Natalspruit
RAIL STATIONS	Germiston, Germiston West, Isando, Kempton Park, Leralla, Limindlela, President, Rhodesfield	Apex, Benoni, Boksburg East, Daveyton, Dunswart, East Rand, Elandsfontein, Geldenhuis, India, Kutalo Kwesine, New Kleinfontein Range View, Refinery, Schaperust	Anzac, Avenue, Brakpan, Daggafontein, Germiston South, Germiston Lake, Katlehong, Mpilisweni, Natalspruit, Northmead, Pollak Park, Rooikop, Springs, Wadeville
PRIMARY NODES	Tembisa, Kempton Park, Riverfield, Glen Gory, Germiston CBD, Boksburg, Benoni CBD, Thinasonke	Etwatwa, Bedfordview, Vosloorus	Alberton CBD, Brakpan CBD, Edenvale CBD, Springs CBD, Nigel CBD
SECONDARY NODES	Birch Acres, Cason, Daveyton, Jansen Park, Jurgenspark, Zonkizizwe	Admin Triangle, Daveyton, Duduza, Etwatwa, Kwa-Thema, Kwenele, Tsakane, Twala, Vosloorus, Windmill Park	Bonaeropark, Edenvale, Geduld, Kwa-Thema, Langaville, Maryvlei, Sonstraal AH
HOUSING PROJECTS (CURRENT)	Alliance Ext 9, Alra Park Essential Services, Chief A Luthuli Park Ext 4, Chris Hani Proper & Ext 2, Clayville Ext 45, Eden Park West And West Ext 1, Etwatwa Ext 18, Etwatwa Ext 19 (Solomon Mahlangu), Etwatwa Ext 34 (Barcelona), Etwatwa Ext 35 (Combiza), Etwatwa Ext 36 (Kamashonisa), Etwatwa Ext 37 (Magoba Village), Kwa Thema Ext 5, Kwa Thema Ext. 3, Ekuthuleni, Langaville Ext 4, Madelakufa 2, Magagula Heights Top Structures, Mayfield Ext 1, Mayfield Ext 12, Moleleki Ext 1, 2, Payneville Ext 1 & 3, Project Palm Ridge Ext 9, Reiger Park Ext 5, Tinazonke, Tsakane Ext 19, Tsakane Ext 22, Ulana Settlements, Villa Lisa Ext 3, Vosloorus / Kavosh, Zonkizizwe Proper Ext 1 & 2, Sanitation System, Leeuwpoot	Good Hope	Kwa Thema 7a
HOUSING PROJECTS (PROPOSED)	Alliance Ext 2, Dersley, Ecaleni(Coal Yard), Esther Park, Old Mutual Land, Olifantsfontein Cullinan Land, Terenure	Angelo Deep, Apex Land, Badenhorst Land – (Leachville, Rietfontein, Weltevreden), Balmoral Block, Driefontein 85IR Reiger Park, Dukathole Land, Ergo Road, ERPM Village (Comet Village), Esselen Park, Joe Slovo, Klippoortje 112IR, Kutalo Station, Kwa-Thema, Kwesine Station, Leachville Ext 2, Mining Belt Germiston (Makause), Pomona Rehabilitated Land-Angelo, Rietfontein, Kwa Thema, Rose Acres Project, South Germiston Ext 8, Van Dyk Park, Vulcania 279, Wattville /Actonville, Wattville Erf 3130	Brakpan Old Location, Cool Breeze, Daggafontein, Duduza, 119 Klippoortje110-IR, Helderwyk Ext 3 & 7, Holgatfontein, Holomisa (Lindelani), Katlehong Roodekop, Klippoortje A H Ptn 127, Kwa-Thema, Langaville Ext 10, Magagula Heights, Palmietfontein 57 & 142, Rietspruit 152-IR & 153-IR, Rondebult 35 & 41, Spaarwater Ptn 2 171 IR, Villa Lisa Ext 5, Vlakfontein 130-IR Ptn 20, Vlakplaats Ptns 36 & 657, Vosloorus Ext 28 Med Risk Dolomite, Vulcania 279, Zwartkopjes Farm
INDUSTRIAL AREAS	Alrode South, Apex, Chloorkop, Clayville, Elandsfontein, Fulcrum, Hughes, Isando, Jet Park, N12 Freeway Park, Olifantsfontein, Spartan, Witfontein, Hughes, Isando, Jet Park, Spartan, Witfield	Anderbolt Apex Benoni South, Boksburg East, Dunswart, Elandsfontein, Fulcrum, Industries East & West, Lilianton, Mapleton, Spartan, Vulcania, Witpoort, Activia Park, Anderbolt, Beyers Park, Boksburg East, Delville, Germiston, Heriotdale, Jupiter, Krog Industria, Lilianton, Malvern East, Muswelldale, Primrose, Rustivia, Satmar, Simmerfield, South Germiston, Ulana Park, Westwood SH, Witfield, Wychwood	Alrode Alrode South Anderbolt, Apex, Benoni South, Dunswart, Eastleigh, Enstra, Fulcrum, Industries East & West, Junction Hill, Knights, Mapleton, N12 Freeway Park, New Era, Nuffield, Putfontein, Roodekop, Spartan, Vulcania, Wadeville, Witpoort, Germiston, Jupiter, Meadowbrook, South Germiston, Sunnyrock, The Stewards, Wilbart

MAJOR INVESTMENTS, STRATEGIC PROJECTS	Aerotropolis Core Node, Badenhorst Estate, Glen Gory, Riverfields, Lords View Estate, Dries Niemandt, Blaauwpan, Germiston Lake, Kaalfontein Catchment Area, Germiston Urban Renewal, Motsu Park, Zonkizwe Park, M and T.	Aerotropolis Core Node, Badenhorst Estate, Riverfields, Inland Port, Civic Lake, Middle Lake, Homestead Lake, Kleinfontein Lake, Murray Park, Leeupan, Presidentspark	Aerotropolis Core Node, Alberton Node
POVERTY ERADICATION AREAS	Tembisa & Surroundings, Germiston CBD, Kleinfontein 67-IR (Benoni)	Actonville/ Wattville, Etwatwa, Dayveyton, Admin Triangle, Natalspruit, Kwesine, Kwa-Thema, Tsakane, Duduza	

The Geographic Priority Areas as listed above and indicated on **Figure C3.3** each require specific interventions, specific focus on different service sectors and detailed service plans. The applicable sector(s) per identified area will be identified in the relevant RSDF and/ or Precinct Plan.

Future refinements to the priority areas propose to incorporate the strategic land parcels and precinct developments. Both the precinct developments and strategic land parcels are still at the planning stage and on inception will be built into the priority areas as key defining facets in guiding the priority areas in becoming more area specific, thereby reducing the current footprint of the priority areas.

C4: EKURHULENI URBAN NETWORK, INTEGRATION ZONES AND HUBS

The Ekurhuleni Metropolitan Municipality utilised its Capital Investment Framework (CIF) footprint as the basis for the identification and demarcation of its Integration Zones. The rationale behind this lies in the core principles of the CIF which relate back to the goals and objectives of National Treasury's City Support Program which seeks to promote sustainability, urban restructuring, densification as well as spatial and sectoral integration and prioritization.

Overlaying the CIF, the proposed urban network plan emerges for the EMM. It consists of five Strategic Integration Zones as depicted on **Figure C4.1**:

Zone 1: Tembisa-Kempton Park

Zone 2: Vosloorus-Boksburg-Bartlett

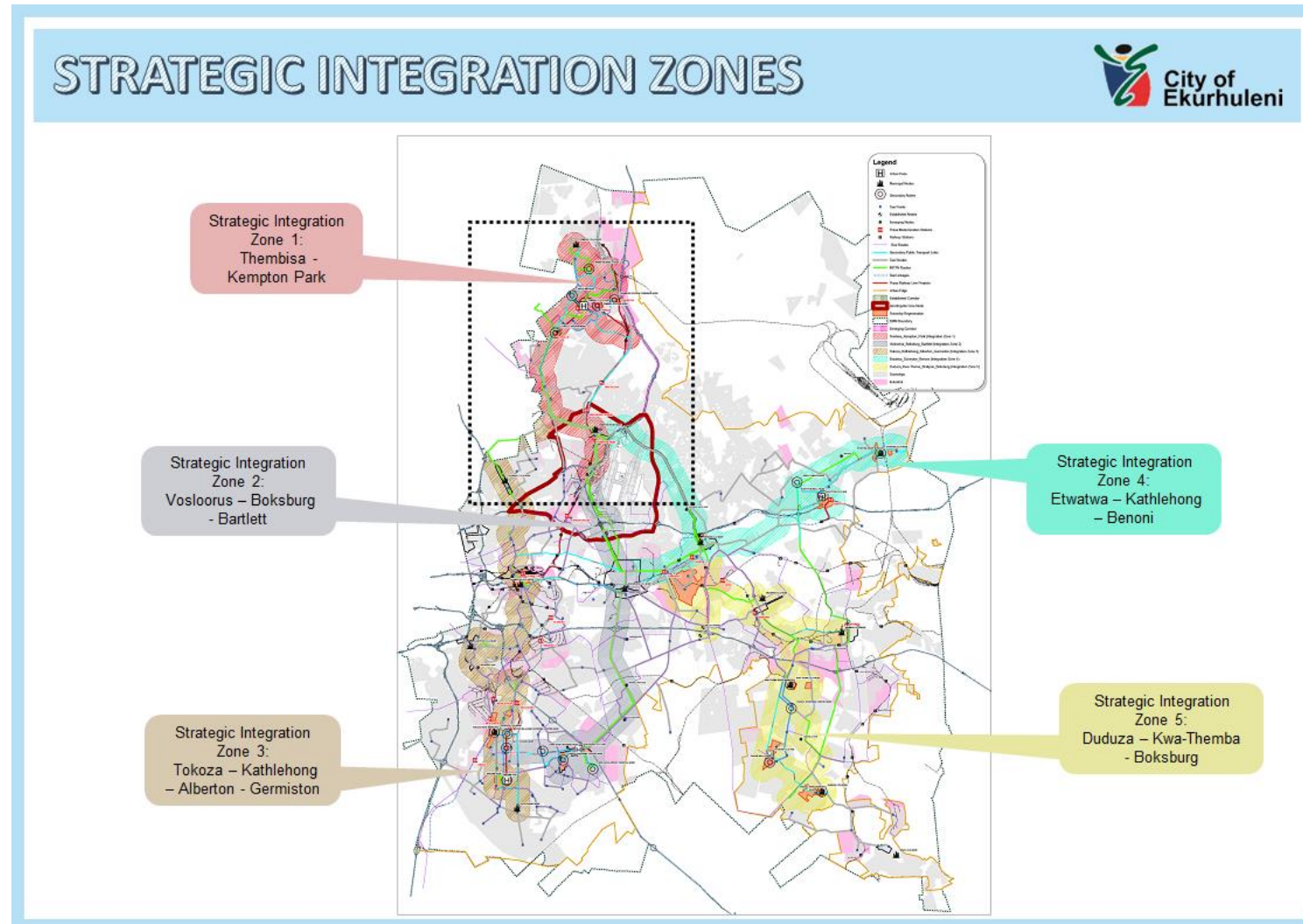
Zone 3: Katlehong-Tokoza-Alberton-Germiston

Zone 4: Etwatwa-Daveyton-Benoni

Zone 5: Duduza-Tsakane-KwaThema-Boksburg

The key structuring element with regards to this Urban Network is the proposed EMM Integrated Rapid Public Transport Network (IRPTN). Utilising the network as a footprint enabled the EMM to identify corridors that should be earmarked for densification and to accommodate movement of people to and from places of employment within EMM. The Aerotropolis Core around OR Tambo International Airport was selected as the CBD of Ekurhuleni within the urban network plan.

Figure C4.1: Strategic Integration Zones



In short the Aerotropolis Core/Ekurhuleni CBD made up of an area around the airport that is within 5 to 10 minutes travelling time from the airport via different existing and proposed transport routes and it includes the following areas:

- The activity nodes of:
 - Rhodesfield and Kempton Park CBD
- Residential Areas:
 - Cresslawn, Rhodesfield, Kempton Park Central, Caro Nome Ah, Caro Nome, Bonaero Park, Parkhaven, Impala Park, Witkoppie Ridge, Bartlett Ah, Bardene Ext, Bardene, Ravensky, Elandsfontein Rail, Klopperpark and Meadowbrook
- Industrial Areas:
 - Meadowdale, Henville, Rustivia, Tunney, Spartan, Isando, Pomona Ah, Jet Park, Atlas, Bartlett, Bartlett Ext and Hughes Ext
- Land on both sides of the R21 up to the R23 (Benoni Road off-ramp). This land is currently vacant and is fast developing as business and logistics parks. This forms part of the Aerotropolis core corridor.



The following table summarise the most salient features and functional components of each of the five Integration Zones in Ekurhuleni as depicted on **Figure C4.1**):

Township Cluster	Network Element						
	CBD	Integration Zone	Primary Public Transport Link	Urban Hub	Secondary Node	Secondary Public transport Link	Municipal Nodes
Tembisa Integration Zone 1	Aerotropolis Core	1 (Aerotropolis to Tembisa Civic Centre Node)	IRPTN route from Tembisa to OR Tambo Airport (Andrew Mapheto, Zuurfontein, CR Swart)	Tembisa CCC	Tembisa Station Node, Oakmoor Station Node, Winnie Mandela Node, Leralla Station Node, Swazi Inn Node	Andrew Mapheto, Sam Molele, DM Morakane, Pretoria Road, Brian Mazibuko, Nyarhi, George Nyanga, Maphanga, Koti, Letsiakarana, Rev RTJ Namane, Jabu Mdunge, Peter Nchabeleng, Olifantsfontein	Tembisa 1 CCC, Tembisa 2 CCC, Kenpton Park CCC
Katorus Integration Zones 2 and 3	Aerotropolis Core	2 (Vosloorus Urban Hub to Aerotropolis Core)	IRPTN route from Vosloorus to OR Tembo Airport (Barry Marais, Rondebult, Rietfontein, R21)	Vosloo-rus CCC	Chris Hani Crossing Shopping Centre, Naledi Shopping Centre, New Natalspruit Hospital	Vlakplaats, Bierman, Brickfield, Moagi, MNC Botha, Sam Sekoati, Leondale	Vosloorus CCC, Boksburg CCC
	Aerotropolis Core	3 (Katlhong CCC to Aerotropolis Core)	IRPTN route from Katlehong to Germiston via Alberton (Masakhane, Heidelberg, Ring Road, Kritzinger, Grey, Black Reef, Russel, Lake, Joubert, Meyer, Victoria, Johan Rissik, Shamrock, AG De Witt, Edenvale)	Kwesini Node	Motse wa Lejani Shopping Centre Node, Pilot Station Node, Tokoza CCA Node, Admin Triangle	Hospital, Sontonga, Thutong, Masakhana, Khumalo, Tugela, Pongola	Katlhong 1 CCC, Katlehong 2 CCC, Tokoza CCC, Alberton CCC, Germiston CCC, Edenvale CCC
Daveyton/ Etwatwa Integration Zone 4	Aerotropolis Core	4 (Aerotropolis Core to Daveyton CCA Urban Hub)	IRPTN route from Etwatwa/ Daveyton to OR Tambo via Benoni (Main Reef, Princess, New Modder, Benoni, Great North, Kingsway, Brazil, Eiselen)	Daveyton CCC	Unisa Campus, Etwatwa CCC, Daveyton Mall	Kingsway, Heald, Dungeni, Eiselen, Mveve, Makambula	Etwatwa CCC, Daveyton CCC, Benoni CCC
Kwatsaduza Integration Zone 5	Aerotropolis Core	5 (Aerotropolis Core to Tsakane CCC)	IRPTN route from Duduza to OR Tambo Airport via Brakpan (Great Noerth, Range View, Heidelberg, New Kleinfontein, Prince George, Thema, Mgebe, Vlakfontein, Spaarwater)	Tsakane CCC	Tsakane Mall, Duduza CCC, Ekhaya Shopping Centre, Kwa-Thema CCC	Twelve, Mgebe, Black, Ndabezitha, Malandela, Zulu, Xhosa, Siphumelela, Nala)	Duduza CCC, Tsakane CCC, Kwa-Thema CCC, Springs CCC, Brakpan CCC

SECTION D

SECTION D: BUILT ENVIRONMENT INDICATORS - ANTICIPATED OUTCOMES AND OUTPUTS

D.1 SUMMARY OF ANTICIPATED OUTCOMES AND OUTPUTS

The anticipated outcomes and outputs of investment in the Built Environment are provided in the Performance Matrix, attached hereto as **Annexure B**.

As the Built Environment Performance Plan places a strong focus on catalytic projects and integration zones, the following table provides a summary of the anticipated outcomes and outputs of the metro's investment in these components of its built environment. Further details of these catalytic projects and integration zones are provided in sections D4 and E6.

The table reflects a total of 19 EMM catalytic projects and 5 integration zones, as well as 3 geographic priority areas. The catalytic projects are classified into three categories: Flagship Catalytic Projects (of which there are 9), Strategic Urban Development Catalytic Projects (of which there are 7) and Catalytic Housing Project Clusters (3 of these). The table also reflects the funding source of each, the Capital Investment Framework (CIF) category and the MREF allocations.

At present the metro's largest catalytic project budgeted for is the Integrated Rapid Public Transport Network (IRPTN) at close to R2.1 billion, funded by PTNG and USDG capital grants. Some of the Strategic Urban Development projects do not show MTREF allocations as the metro will be working with the private sector, who will provide private investment funding for such projects. Not all of the catalytic projects are reliant on capital grant funding, but may be financed by the metros own funds (revenue generated from rates and tax collections, external loans such as municipal bonds, and the metros capital replacement reserve).

In total, more than R7.4 billion is expected to be spent by the metro on catalytic projects during the MTREF period, representing close to 50% of the entire capital budget during this period.

Table D1.1: Anticipated MTREF Spent on Main Built Environment Indicators

Table D1.1: Anticipated MTREF Spent on Main Built Environment Indicators

No.	Project Name	Main Funding Source	Main CIF Category	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF TOTAL	Integration Zone number	Integration Zone name / cluster	GPA
Flagship Catalytic Projects										
1	Aerotropolis: Rhodesfield, Pomona	External Loans	Economic Development	90 700 000	112 400 000	115 000 000	318 100 000	1	Tembisa	1
2	Revatiliziation of Township Economies	Revenue & External Loans	Economic Development	64 000 000	41 500 000	22 000 000	127 500 000	1,2,3,4,5	all	1,2,3
3	Revatiliziation of the Manufacturing Sector	Revenue & External Loans	Economic Development	4 000 000	7 000 000	2 000 000	13 000 000	5	Kwatsaduza	2
4	Digital City	Revenue	Upgrading & Renewal; Economic Development	239 348 000	246 252 000	282 000 000	767 600 000	1,2,3,4,5	all	1,2,3
5	IRPTN	PTNG & USDG	Economic Development	568 343 621	684 389 000	836 544 000	2 089 276 621	1,2,3,4,5	all	1,2,3
6a	Urban Regeneration - Kempton Park CBD	Revenue, External Loans & CRR	Economic Development; Urban Restructuring	66 280 000	76 200 000	70 200 000	212 680 000	1	Tembisa	1
6b	Urban Regeneration - Germiston CBD	Revenue, HSDG, External Loans & CRR	Economic Development; Urban Restructuring	323 229 000	285 200 000	756 000 000	1 364 429 000	3	Katorus	2,3
7	Revenue Enhancement	USDG & CRR	Economic Development	56 000 000	104 000 000	104 000 000	264 000 000	1,2,3,4,5	all	1,2,3
8	Beautification of Lakes and Dams - Germiston Lake, Boksburg Lake	Revenue & External Loans	Upgrading & Renewal	5 000 000	3 500 000	3 500 000	12 000 000	2,3	Katorus	2,3
9a	Urban Renewal - Tembisa	NDPG	Urban Restructuring	20 000 000	60 000 000	53 390 000	133 390 000	1	Tembisa	1
9b	Urban Renewal - Katorus	USDG	Urban Restructuring	5 500 000	17 000 000	17 000 000	39 500 000	3	Katorus	2,3
9c	Urban Renewal - Wattville-Actonville	USDG	Urban Restructuring	10 000 000	17 000 000	17 000 000	44 000 000	4	Daveyton / Etwatwa	3
				1 452 400 621	1 654 441 000	2 278 634 000	5 385 475 621			
Strategic Urban Development Catalytic Projects										
1	Leeuwpoot	USDG & Private inv.	Urban Restructuring	77 326 806	120 000 000	100 000 000	297 326 806	2	Katorus	2,3
2	Badenhorst Estate Mixed Use Development	Private investment	Urban Restructuring	-	-	-	-	2,4	Katorus; Daveyton / Etwatwa	2,3
3	Tambo Springs Inland Freight Port	Private investment	Economic Development	-	-	-	-	1,5	Tembisa; Kwatsaduza	1,2
4	Glen Gory	USDG & Private inv.	Economic Development	-	204 000 000	-	204 000 000	4	Daveyton / Etwatwa	3
5	M & T Developments Project	Private investment	Urban Restructuring	-	-	-	-	1	Tembisa	1
6	Riverfields Mixed Use Development	Private investment	Urban Restructuring	-	-	-	-	1	Tembisa	1
7	PRASA New Rolling Stock (Prasa Gibela Project)	Private investment	Economic Development	-	-	-	-	5	Kwatsaduza	2
				77 326 806	324 000 000	100 000 000	501 326 806			
Catalytic Housing Project Clusters										
1	Northern Development Cluster (Clayville Ext 45, 71, Heartland / Esselen Park (Witfontein) / Esselen Park Ext 3 / Tembisa Ext 25)	USDG; External Loans	Urban Restructuring	133 578 310	213 200 000	197 600 000	544 378 310	1	Tembisa	1
2	Eastern Development Cluster (John Dube 2 / Brakpan Old Location / Tsakane Ext 22 / Chief Luthuli 6)	USDG; External Loans	Urban Restructuring	112 055 200	76 800 000	90 900 000	279 755 200	5	Kwatsaduza	2
3	Southern Development Cluster (Leeuwpoot / Germiston Urban Renewal housing / Zwartkoppies / Palmietfontein / Rietspruit / Rietfontein / Palm Ridge 10 & 11)	USDG; External Loans	Urban Restructuring	252 796 706	258 000 000	237 000 000	747 796 706	2,3	Katorus	2,3
				498 430 216	548 000 000	525 500 000	1 571 930 216			
				2 028 157 643	2 526 441 000	2 904 134 000	7 458 732 643			

D.2 HIGH LEVEL DEVELOPMENT OBJECTIVES AND DESIRED OUTCOMES

The metro's capital budget is linked to the IDP Strategic Objectives and action plans. Each submitted budget project has to demonstrate relevance and linkage in meeting service delivery needs and related national outcomes. The following table reflects the Ekurhuleni Metro's IDP strategic objectives referenced to National Outcomes and the corresponding MTREF capital budget allocations in this regard:

Table D2.1: IDP Strategic Objectives in Line with EMM Capital Budget

IDP Strategic Objectives reconciled to Capital Budget - Ekurhuleni Metro		Medium Term Revenue & Expenditure Framework (R thousand)				
Outcome	Strategic Objective	Budget Year 2015/16	Budget Year 2016/17	Budget Year 2017/18	MTREF Total	%
National Outcome 1	Improved quality of basic education	-	-	-	-	0%
National Outcome 2	A long and healthy life for all South Africans	76 600	108 400	136 200	321 200	2%
National Outcome 3	All people in South Africa are and feel safe	99 050	129 600	99 500	328 150	2%
National Outcome 4	Decent employment through inclusive economic growth	57 500	44 500	23 000	125 000	1%
National Outcome 5	A skilled and capable workforce to support an inclusive growth path	-	-	-	-	0%
National Outcome 6	An efficient, competitive and responsive economic infrastructure network	-	-	-	-	0%
National Outcome 7	Vibrant, equitable and sustainable rural communities with food security for all	-	-	-	-	0%
National Outcome 8	Sustainable human settlements and improved quality of household life	3 031 857	3 575 980	3 187 934	9 795 771	67%
National Outcome 9	A responsive, accountable, effective and efficient local government system	1 119 056	1 007 248	1 640 011	3 766 315	26%
National Outcome 10	Environmental assets and natural resources that are well protected and continually enhanced	87 500	92 300	95 800	275 600	2%
National Outcome 11	Create a better South Africa and contribute to a better and safer Africa and World	-	-	-	-	0%
National Outcome 12	An efficient, effective and development-oriented public service and an empowered, fair and inclusive citizenship	-	-	-	-	0%
Allocations to other priorities		-	-	-	-	0%
Total Capital Budgeted Expenditure		4 471 563	4 958 028	5 182 445	14 612 036	100%

The Ekurhuleni Metro's MTREF allocations are largely based on the Growth and Development Strategy (GDS 2055), which is anchored on the following five pillars:

- Re-Urbanise – to achieve sustainable urban integration;
- Re-Industrialise – to achieve job-creating economic growth;
- Re-Generate – to achieve environmental well-being;
- Re-Mobilise – to achieve social empowerment; and
- Re-Govern – to achieve effective co-operative governance.

Working together with the Gauteng Provincial Government, the Metro's MTREF allocations are aligned to the Ten Pillar Programme, which brings into effect the Gauteng City Region. The main programme focus areas and desired outcomes of the Ekurhuleni Metro's budget are:

- Aggressive implementation of infrastructure to address spatial gaps and quality of the infrastructure;
- Creating a climate for investment in the metro through revitalising manufacturing and township economies;
- Increasing private-sector investment participation in and through urban regeneration;
- Rapid provisioning of quality basic services;
- Fighting poverty and building clean, healthy, safe and sustainable communities;
- Support for job creation and skills training, with a special emphasis on the increase local spending targeting youth, women and people living with disabilities;
- Modernising the metro and improving its communication;
- Continuing to enhance governance and compliance with applicable legislations;
- Optimising institutional transformation to ensure capacity to achieve set objectives; and
- Maintaining financial sustainability.

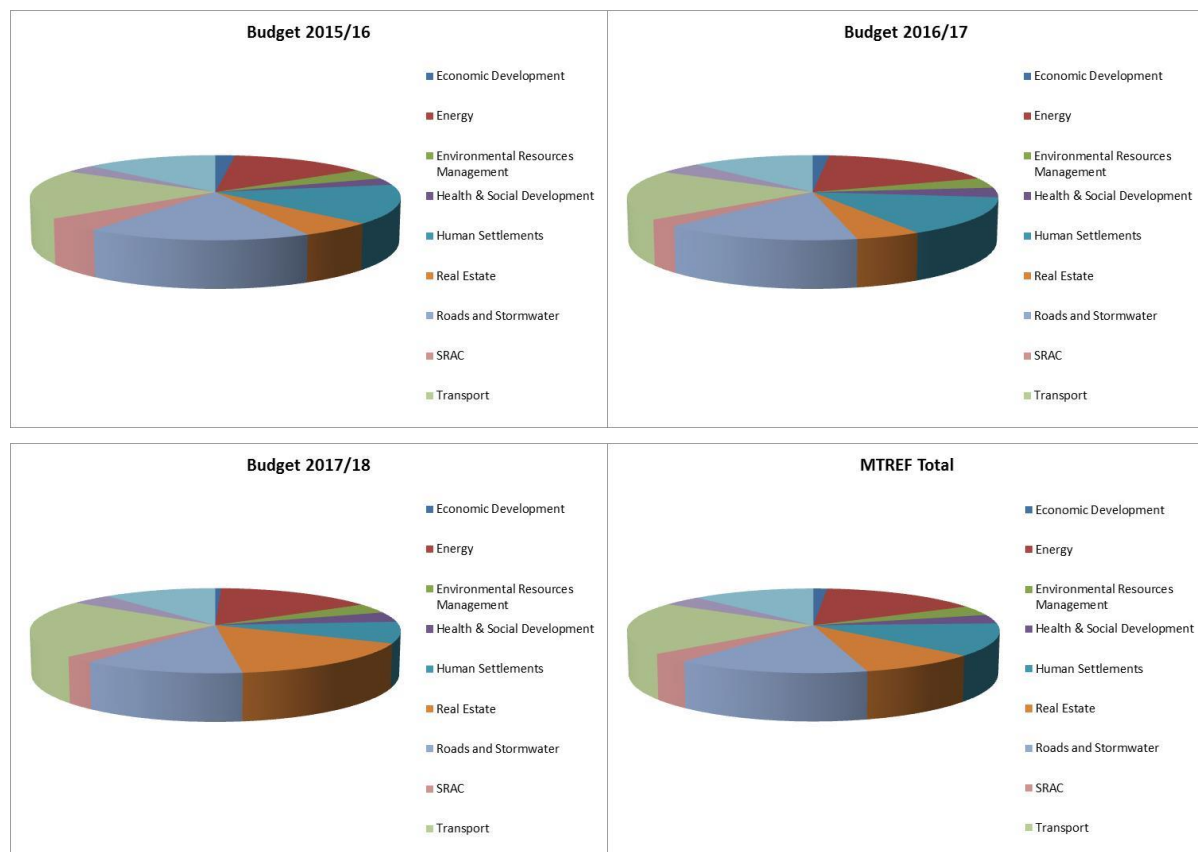
D.3 SECTOR DEVELOPMENT OUTCOMES AND OUTPUTS

The metro's anticipated spend per sector directorate for the MTREF period is indicated in the following table and graphs:

Table D3.1: Sector Development Outcomes

SECTOR	Capital Budget 2015 / 16	Capital Budget 2016 / 17	Capital Budget 2017 / 18	MTREF period TOTAL	%
Economic Development	76 000 000	68 180 000	26 940 000	171 120 000	1%
Energy	529 760 000	741 700 000	721 700 000	1 993 160 000	17%
Environmental Resources Management	149 080 000	160 225 000	168 200 000	477 505 000	4%
Health & Social Development	104 300 000	153 200 000	175 120 000	432 620 000	4%
Human Settlements	579 291 900	608 759 535	375 589 000	1 563 640 435	14%
Roads and Stormwater	674 700 000	635 400 000	576 700 000	1 886 800 000	16%
Sports, Recreation, Arts & Culture (SRAC)	193 400 000	115 911 111	114 500 000	423 811 111	4%
Transport	729 243 621	785 989 000	1 008 844 000	2 524 076 621	22%
Waste Management	117 980 000	179 500 000	185 000 000	482 480 000	4%
Water & Sanitation	512 100 000	508 000 000	515 000 000	1 535 100 000	13%
Total	3 665 855 521	3 956 864 646	3 867 593 000	11 490 313 167	100%

Figure D3.1: Sector Development Outcomes per Year Spent



The Ekurhuleni Metro anticipates investing more than R14.0 billion over the MTREF period on upgrading and renewing its infrastructure, changing the City's landscape and addressing spatial challenges, and economic development. Below are some of the major sector development outcomes and outputs expected from the Metro's investment in the built environment during 2015/16:

Transport

The Metro has allocated in excess of R800 million for transport infrastructure, including repairs and maintenance. Some of the projects being funded from this allocation are:

- The Integrated Rapid Public Transport Network (IRPTN);
- Construction of four new taxi ranks in Palm Ridge, New Vosloorus, Bluegum and Phutaditshaba;
- Metro busses to cover new routes in the east.

Roads and Stormwater

More than R1 billion has been budgeted towards roads and stormwater, intended to cover construction of roads and storm water. For road safety, pedestrian walkways are to be increased as well as bridges across the city with special emphasis on 71 priority wards. Also included is more than R500 million budgeted for rehabilitation and resurfacing of roads and storm water.

Energy

Approximately R1.4 billion has been allocated for energy expansion in order to provide sustainable energy supply and to protect the integrity of the energy network. This will be utilised for street and high mast lighting, upgrading of substations, network enhancements and electrification and alternative energy sources, focusing on informal settlement areas.

Water and Sanitation

The Metro's main water and sanitation projects include:

- The Water Loss Eradication programme;
- Bulk supply of the Albertina Sisulu Corridor in Pomona;
- Broadening access to water and sanitation services.

Human Settlements

More than R500 million has been budgeted for human settlement development and urban renewal for achievement of the following objectives and outcomes:

- Servicing 16 000 stands to improve the living conditions of people awaiting their houses;
- Refurbishment of rental houses;
- Watville-Actonville, Tembisa and Katorus urban renewal;
- Social housing in Germiston.

The Gauteng Department of Human Settlements has set aside in excess of R900 million for human settlements in the eastern corridor to cover the provision of housing units among areas such as:

- Chief Albert Luthuli;
- John Dube Extension 2;
- Tsakane Extension 22;
- Germiston South;
- Leeuwpoot;
- Rietfontein;
- Clayville Extension 45; and
- Redevelopment of hostels in Springs (Kwa-Thema) and Tembisa.

Some of the above settlements also form part of catalytic mega human settlements development projects, discussed in detail under E6.

Community Safety

Funding has been provided for the Ekurhuleni Metropolitan Police Department's infrastructure programme, in addition to funding for the rehabilitation of existing emergency infrastructure and construction of new facilities, covering the Germiston, Kwa-Thema and Thokozana fire stations.

Sports, Recreation, Arts and Culture

Approximately R190 million has been allocated to complete the Germiston Theatre and Tsakane Library, construction of the Eden Park swimming pool and the installation of several eco gyms in the metro's recreational parks.

Health and Social Development

The Metro has budgeted for the provision of quality health care, early childhood development and promotion of a healthy lifestyle. Budget funds have also been set aside for the construction of clinics in Dukathole, Khumal, Crystal Park and Tsietsi.

Environmental Resources Management and Waste Management

Funds have been allocated for keeping a clean and green environment through intensified cleaning and waste management, grass cutting, pruning of trees, illegal dumping and beautification of lakes and dams and township entrances in the metro.

Economic Development

Budget funds have been provided for investment towards Township Enterprise Hubs, including industrial parks, fabrication laboratories and business incubation centres, in order to boost local economic development, job creation and promotion and facilitation of economic growth.

Information and Communication Technology

Approximately R320 million has been budgeted for the modernisation of the city to enable seamless business processes using the appropriate technology and systems, including Enterprise Resource Planning Phase 1 and Digital City, which includes 326 hotspot sites to be activated in 2015/16 alone.

The following table shows Ekurhuleni's capital budget per source of finance. It can be seen that the major source of finance is USDG capital grant funding, comprising 35% of the metro's capital budget and related capital projects.

Table D3.2: Ekurhuleni's Capital Budget per Source of Finance

Source of Finance	Budget 2016/17	%
CRR	502 200 000	11%
EEDMS	14 000 000	0%
External Loans	1 006 655 000	23%
HSDG	29 079 000	1%
INEP	50 000 000	1%
NDPG	20 000 000	0%
Provincial Grant	3 000 000	0%
PTNG	309 296 000	7%
Revenue	987 152 906	22%
USDG	1 550 180 521	35%
Grand Total	4 471 563 427	100%

The metro's capital budget expenditure planned on National Outcomes is shown below:

Table D3.3: National Outcomes Capital Budget Expenditure

National Outcomes	Budget 2016/17	%
Outcome 1	87 500 000	2%
Outcome 2	76 600 000	2%
Outcome 3	99 050 000	2%
Outcome 4	57 500 000	1%
Outcome 8	2 995 681 521	67%
Outcome 9	1 155 231 906	26%
Grand Total	4 471 563 427	100%

Of particular relevance is the fact that 93% of the capital budget has been allocated for Outcomes 8 and 9, with the majority of this relating to Outcome 8.

For the 2016/17 capital budget, the majority of funding for National outcome 8 is again from the USDG. Capital grants in fact comprise 58% of total planned expenditure.

Table D3.4: Funding for National Outcome 8

Funding sources of National Outcome 8	Budget 2016/17	%
USDG	1 335 930 521	45%
Revenue	152 775 000	5%
External loans	803 980 000	27%
PTNG	309 296 000	10%
INEP	50 000 000	2%
NDPG	20 000 000	1%
EEDMS	14 000 000	0%
CRR	306 700 000	10%
Grand Total	2 992 681 521	100%

When considering the composition of planned USDG capital grant funding per National Outcome, it can be seen from the following table that 86% of National Outcome 8 funding is to come from USDG in 2016/17.

Table D3.5: USDG Capital Grant Funding per National Outcome

USDG per National Outcome	Budget 2016/17	%
Outcome 10	22 500 000	1%
Outcome 2	75 600 000	5%
Outcome 3	41 150 000	3%
Outcome 4	-	0%
Outcome 8	1 335 930 521	86%
Outcome 9	75 000 000	5%
Grand Total	1 550 180 521	100%

An analysis of the top 20 largest budgeted items in the capital budget also gives a snapshot of what the types and anticipated outcomes of the metro's capital expenditure is. The following table lists the top 20 expense items, their funding sources and the National Outcome to which they are linked.

Table D3.6: The Top 20 Expense Items

Department / Sector	Project Name	Funding Source	CIF Category	CCA	Ward(s)	National Outcome	2016/17 Budget	%
1. Transport	Integrated Rapid Public Transport Network(IRPTN)	PTNG	Economic Development	Multi CCA	2-18; 22; 23; 28; 29;31; 32; 43-47; 89-92; 95;99	Outcome 8	309 296 000	21%
2. Transport	Integrated Rapid Public Transport Network(IRPTN)	USDG	Economic Development	Multi CCA	2-18; 22; 23; 28; 29;31; 32; 43-47; 89-92; 95;99	Outcome 8	259 047 621	17%
3. ICT	ERP Phase 1	Revenue	Upgrading and Renewal	Corporate	All wards	Outcome 9	100 000 000	7%
4. Human Settlements	Palm Ridge Extension 9	USDG	Urban Restructuring	Katlehong 2	53; 61	Outcome 8	86 108 400	6%
5. Human Settlements	Leeupoort Development (Bulk Infrastructure)	USDG	Urban Restructuring	Boksburg	34,42,32,31,43	Outcome 8	77 326 806	5%
6. Human Settlements	Acquisition of Land for New Human Settlements	USDG	Urban Restructuring	Benoni	All wards	Outcome 8	55 000 000	4%
7. Energy	INEP Electrification of Subsidized Housing (MOU with DOE)	INEP	Urban Restructuring	Multi CCA	Multi Wards	Outcome 8	50 000 000	3%
8. ICT	DCS: Broadband Fibre	Revenue	Upgrading and Renewal	Corporate	All wards	Outcome 9	50 000 000	3%
9. Real Estate	Brownfield Property Acquisition	CRR	Urban Restructuring	Germiston	36	Outcome 9	50 000 000	3%
10. Real Estate	Germiston Civic Precinct	External Loans	Upgrading and Renewal	Germiston	36	Outcome 9	50 000 000	3%
11. SRAC	Re-mobilise - Refurbishment of 50 Community Facilities completed	CRR	Upgrading and Renewal	Corporate	All wards	Outcome 9	50 000 000	3%
12. EMPD	Vehicles (EMPD)(MORE THAN 2 SEATS)	Revenue	Upgrading and Renewal	Operational Equipment	Operational Equipment	Outcome 9	45 000 000	3%
13. Roads and Stormwater	Rehabilitate Roads in Eastern Region	USDG	Urban Restructuring	Tsakane	Multi Wards	Outcome 8	45 000 000	3%
14. Environmental Resources Management	Vehicles - Two seats and less	Revenue	Upgrading and Renewal	Operational Equipment	Operational Equipment	Outcome 9	40 500 000	3%
15. Transport	Construction of Intermodal facilities: Upgrading Germiston Station Taxi Rank	Revenue	Upgrading and Renewal	Germiston	93	Outcome 8	40 000 000	3%
16. Transport	Replace Municipal buses	Revenue	Upgrading and Renewal	Operational Equipment	Operational Equipment	Outcome 9	40 000 000	3%
17. ICT	Digital City Services / Services Intergrator (Wi-Fi)	Revenue	Upgrading and Renewal	Corporate	All wards	Outcome 9	39 348 000	3%
18. Transport	Establish MVRA/DLTC Katlehong	External Loans	Urban Restructuring	Katlehong 1	55	Outcome 8	39 000 000	3%
19. Human Settlements	Paynewille Extension 1	USDG	Urban Restructuring	Springs	72	Outcome 8	37 965 750	3%
20. Roads and Stormwater	Rehabilitation of roads: SouthAccording to PMS Currently under review	External Loans	Upgrading and Renewal	Corporate	Multi Wards	Outcome 8	37 500 000	2%
							1 501 092 577	100%
							4 471 563 427	34%

It can be seen from above that the top 20 budgeted items make up 34% (one third) of the entire capital budget. All of the items are also related either Outcome 8 or Outcome 9. 69% pertain to Outcome 8 and 31% to Outcome 9 as shown below.

Table D3.7: Percentage Funding per Source

Funding source	%(2015/16)
USDG	38%
PTNG	21%
INEP	3%
Revenue	24%
External loans	8%
CRR	6%
	100%

Further analysis shows that the transport and Human Settlements sectors comprise the majority of the budgeted expenditure of the top 20 items, as shown below.

Table D3.7: Percentage Funding per Sector

Sector	% (2015/16)
Transport	46%
Human Settlements	17%
Energy	3%
ICT	13%
Rea Estate	7%
Roads & Stormwater	5%
Environmental	3%
Other	6%
	100%

D.4 OUTCOMES AND IMPACT OF INTEGRATION ZONES

From a geographical perspective, each budget project needs to indicate the proposed ward location and serves to demonstrate public consultations and participations. The wards are then grouped as agreed to with the respective ward councillors for maximum impact. The budget may therefore be divided per area as shown in the table below, for the 2015/16 financial year capital budget:

Table D4.1: Budget According to CCA

CCA	Capital Budget 2015/16
Alberton Total	69 287 500
Benoni Total	238 531 357
Boksburg Total	210 039 306
Brakpan Total	122 355 035
Corporate Total	619 362 435
Daveyton Total	83 625 450
Duduza Total	40 925 000
Edenvale Total	101 842 500
Etwatwa Total	89 387 500
Germiston Total	475 995 051
Katlehong 1 Total	94 150 000
Katlehong 2 Total	159 236 226
Kempton Park Total	282 093 310
Kwa Thema Total	134 275 200
Multi CCA Total	652 343 621
Nigel Total	78 950 000
Operational Equipment Total	413 002 906
Springs Total	130 516 030
Tembisa 1 Total	133 597 500
Tembisa 2 Total	65 372 500
Thokoza Total	119 837 500
Tsakane Total	75 500 000
Vosloorus Total	81 337 500
Grand Total	4 471 563 427

The mapping of the projects making up the totals of each CCA during the CIF process results in each project falling within one of the CIF priority areas, as shown in the table below, which shows the 2015/16 capital budget per priority area.

Table D4.2: Budget According to CIF Priority Area

CIF Priority Areas	Sum of Adjusted Budget	Sum of Actual Expenditure Year to Date	Percentage of Budgeted Amount	Percentage Spent (Actual vs Budget)
Not Mapped	858 872 183	743 881 836	22.54%	86.61%
Outside of Priority Area	321 993 303	217 229 459	8.45%	67.46%
Outside of the Urban Edge	12 012 373	10 926 336	0.32%	90.96%
Priority Area 1	1 662 178 021	1 307 885 996	43.62%	78.69%
Priority Area 2	663 482 473	536 320 653	17.41%	80.83%
Priority Area 3	292 411 269	234 925 537	7.67%	80.34%
Grand Total	3 810 949 622	3 051 169 816	100%	80.06%

The composition of each CIF priority area above may then be further broken down to shown the anticipated outcome per each of the three CIF categories, as shown below:

Table D4.3: Anticipated Outcome per CIF Category

CIF Priority Areas	Capitalisation Investment Framework Category	Sum of Adjusted Budget	Sum of Actual Expenditure Year to Date	Percentage of Budgeted Amount	Percentage Spent (Actual vs Budget)
Not Mapped	Economic Development	40 200 000	42 250 313	4.68%	105.10%
	Upgrading and Renewal	432 363 619	357 463 997	50.34%	82.68%
	Urban Restructuring	386 308 564	344 167 525	44.98%	89.09%
Not Mapped Total		858 872 183	743 881 836	100.00%	86.61%
Outside of Priority Area	Economic Development	1 650 000	1 650 000	0.51%	100.00%
	Upgrading and Renewal	128 176 844	98 859 424	39.81%	77.13%
	Urban Restructuring	192 166 459	116 720 035	59.68%	60.74%
Outside of Priority Area Total		321 993 303	217 229 459	100.00%	67.46%
Outside of the Urban Edge	Upgrading and Renewal	12 000 000	10 913 963	99.90%	90.95%
	Urban Restructuring	12 373	12 373	0.10%	100.00%
Outside of the Urban Edge Total		12 012 373	10 926 336	100.00%	90.96%
Priority Area 1	Economic Development	636 924 992	573 414 028	38.32%	90.03%
	Upgrading and Renewal	545 269 241	434 041 742	32.80%	79.60%
	Urban Restructuring	479 983 788	300 430 226	28.88%	62.59%
Priority Area 1 Total		1 662 178 021	1 307 885 996	100.00%	78.69%
Priority Area 2	Economic Development	191 170 000	181 766 197	28.81%	95.08%
	Upgrading and Renewal	287 043 572	276 077 246	43.26%	96.18%
	Urban Restructuring	185 268 901	78 477 209	27.92%	42.36%
Priority Area 2 Total		663 482 473	536 320 653	100.00%	80.83%
Priority Area 3	Economic Development	81 650 000	78 758 715	27.92%	96.46%
	Upgrading and Renewal	118 711 269	90 493 940	40.60%	76.23%
	Urban Restructuring	92 050 000	65 672 882	31.48%	71.34%
Priority Area 3 Total		292 411 269	234 925 537	100.00%	80.34%
Grand Total		3 810 949 622	3 051 169 816	100.00%	80.06%

The procedures involved in the CIF process, including an overview of the mapping process and the importance of the Geographical Priority Areas (GPAs), are discussed in detail in section E2 below. The metro has five Integration Zones, namely:

- Integration Zone 1: Tembisa-Kempton Park
- Integration Zone 2: Vosloorus-Boksburg-Bartlett
- Integration Zone 3: Kotlehong-Tokoza-Alberton-Germiston
- Integration Zone 4: Etwatwa-Daveyton-Benoni
- Integration Zone 5: Duduza-Tsakane-KwaThema-Boksburg

The following table shows the Capital Budget broken down into the expected outcomes in terms of expenditure for each of the metro's Integration Zones over the MTREF period:

Table D4.4: Capital Budget According to Integration Zones

Integration Zone Number	Budget Year 2015 / 16	%	Budget Year 2016 / 17	%	Budget Year 2017 / 18	%	MTREF Total	%
1	474 263 310	11%	520 300 000	10%	497 190 000	10%	1 491 753 310	10%
2	299 486 806	7%	280 600 000	6%	232 400 000	4%	812 486 806	6%
3	1 028 938 777	23%	788 040 000	16%	1 209 500 000	23%	3 026 478 777	21%
4	411 544 307	9%	410 411 111	8%	307 400 000	6%	1 129 355 418	8%
5	505 371 265	11%	563 479 535	11%	311 920 000	6%	1 380 770 800	9%
-	1 751 958 962	39%	2 395 197 200	48%	2 624 035 270	51%	6 771 191 433	46%
Total	4 471 563 427	100%	4 958 027 846	100%	5 182 445 270	100%	14 612 036 545	100%

Table D1.1 in section D.1 above shows the expected spend for each of the catalytic projects together with the Integration Zones and GPAs that they fall within.

SECTION E

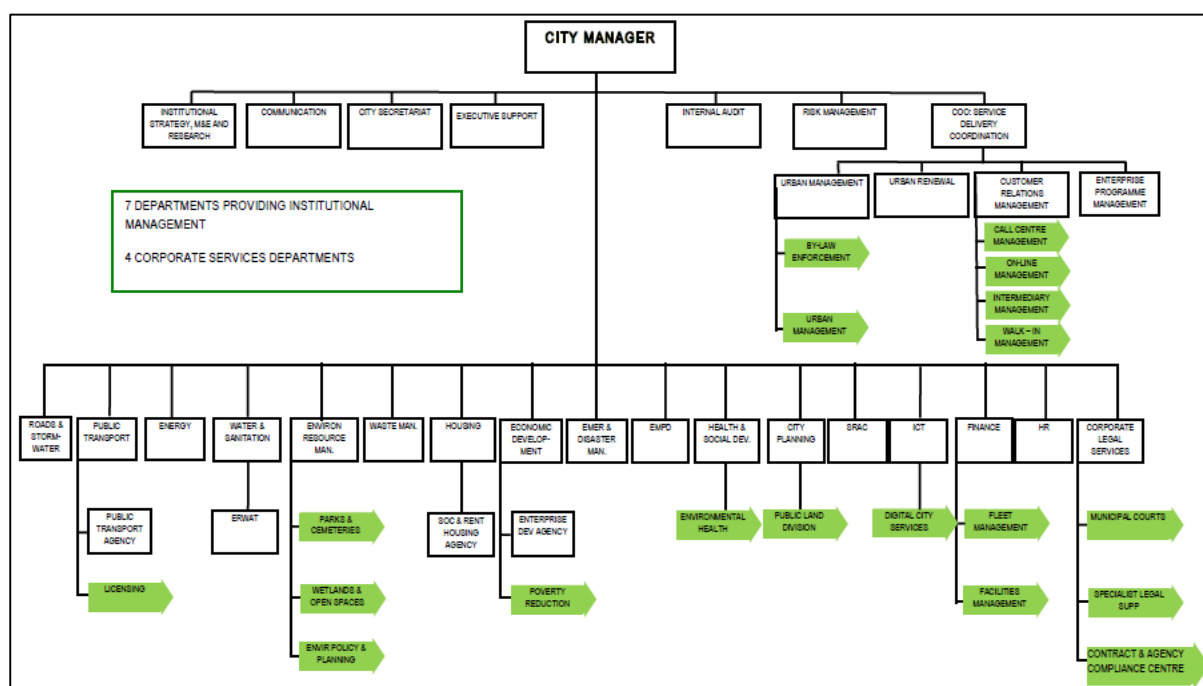
SECTION E: INSTITUTIONAL AND FINANCIAL ARRANGEMENTS

E.1 ORGANISATIONAL ARRANGEMENTS FOR SECTOR INTEGRATION

E.1.1 Overview

The Ekurhuleni Metropolitan Municipality is committed to providing effective service delivery to its communities and has therefore structured its administration into a number of key directorates, as indicated in the diagram below:

Diagram E1.1: Organisational Structure of the EMM



The Office of the City Manager provides the momentum of the administration and integrates all the separate components of the Metro. The main thrusts for sector integration are to:

- Facilitate ring-fencing of the functions associated with provision of services for proper costing and to enhance effective service delivery;
- Build capacity to ensure effective integrated planning and coordination of key projects, especially those that are grant funded; and
- Implement a service delivery performance monitoring and evaluation function, in line with National and Provincial Government initiatives.

In addition to the above directorates, the Office of the City Manager is further capacitated with two significant strategic functions, namely the Operations unit and the Organisational Planning and Performance Monitoring unit. These functions support the City Manager in the compilation of the IDP, SDBIP, and in ensuring that governance systems are in place to manage and track institutional performance.

E.1.2 Capital Investment Framework and Capital Prioritisation Model: Introduction

Sections B and C above of this BEPP document describe in detail the current trends and spatial planning requirements and initiatives within the various key sectors of the EMM, such as the Basic Infrastructure Sector, Economic Infrastructure Sector, Residential Infrastructure Sector, Community and Social Infrastructure Sector, Transportation Sector etc. The Spatial Development Strategy of the Municipality and other key documents were also discussed. There are numerous demands that emanate from the analysis of these sectors and strategies, and many different projects within these sectors therefore need to be implemented in order to meet the identified requirements.

In order to facilitate this process, a mechanism is required to determine in which order the identified projects should be implemented, when they should be implemented and how they will be funded. The EMM's Capital Investment Framework (CIF) and associated Capital Prioritisation Model (CPM) are the mechanisms used for this process. They enable integrated planning and therefore integration of the key sectors by informing and setting the basis for spatial targeting by identifying the what, when, and where. The CIF is a key contributor to the formulation and development of the Municipality's integration zones and guides prioritisation of municipal capital projects through focusing investment into identified areas in order to achieve targeted spatial transformation for the EMM.

E.1.3 Capital Investment Framework: Institutional and Legislative Arrangements

The Capital Investment Framework is of fundamental importance due to several reasons:

- The CIF is a requirement in terms of Section 4(e) of the Municipal Planning and Performance Management Regulations, 2001 as promulgated in terms of the Municipal Systems Act;
- The CIF also fulfils the function of a Capital Expenditure Framework (CEF) as required in terms of Section 21(n) of the Spatial Planning and Land Use Management Act (SPLUMA), 2013;
- The CIF also informs the Capital Expenditure Programme (CEP) as referred to by National Treasury;
- The CIF also strives to meet Section 153(a) of the constitution, in which the developmental duties of a municipality are outlined to “structure and manage its administration and budgeting and planning processes to give priority to the basic needs of the community, and to promote the social and economic development of the community”;

- The CIF is a component of the MSDF and fulfils the purpose to strategically and spatially guide, align and co-ordinate municipal capital expenditure across all sectors that will make provision for balanced spending of the municipal budget so as to promote economic growth and meet the infrastructure and services needs of the Ekurhuleni Metropolitan Municipality (EMM) residents.

The Ekurhuleni Capital Investment Framework (CIF) as an infrastructure planning policy tool has therefore been incorporated into the Built Environment Performance Plan. Although the content of a CIF is not specifically defined within legislation, the above- mentioned legislation outlines the functions of the CIF, which have been summarised as follows:

- Spatially and strategically influence and guide municipal capital prioritisation and allocation;
- Spatially and strategically coordinate and integrate capital expenditure across all sectors;
- Show where the municipality must and will be spending its capital budget; and
- Map capital projects reflected on the multi-year budget.

The CIF can also be defined as a financial planning and regulatory tool in terms of the National Development Plan (NDP), which makes reference to the need to achieve spatial transformation through targeting investment into strategic spatial areas through the combined use of planning, legislative and financial tools. The CIF is therefore geared towards providing a spatial rationale to the budget in order to start guiding investment into identified priority spatial areas as a means to achieve positive spatial transformation.

The EMM's 2013 State of the City Address resonated with the objective of the NDP and function of the CIF by stating that the CIF be utilized as an instrument that will “channel CAPEX funding to critical economic infrastructure programmes, such as the Special Economic Zones (SEZ), Industrial Development Zones (IDZ), Export Processing Zones (EPZ) and Industrial Parks and Estates.”

The CIF has also taken cognisance of the Local Government Turnaround Strategy (LGTS) in that the values underpinning the CIF embrace the objectives set out in the LGTS with regards to:

- Providing residents with infrastructure and social services;
- Creating liveable, integrated and inclusive urban and rural areas;
- Promoting Local Economic Development; and
- Promoting Community Empowerment.

The Local Government Turnaround Strategy also highlights some of the major hurdles that municipalities are faced with, which includes poor financial management, inability to sufficiently grow economically and provide basic services within the realm of continued spatial inequality. The CIF is therefore geared towards promoting improved financial management that allows for accountability and

transparency of the budget process by guiding, prioritising, aligning and co-ordinating future municipal expenditure that will yield targeted spatial transformation of the Metro.

E.1.4 Capital Investment Framework: Spatial Targeting and Transformation

The purpose of the CIF within the BEPP is premised on informing and setting the basis for spatial targeting by identifying the what, when, and where. This includes the integration of key sectors (economic development, transport, housing, finance, environment, and project management), co-ordination, fiscal alignment and governance that should result in triggering long-term spatial transformation and facilitating economic growth. The Capital Investment Framework is therefore a tool utilised within the BEPP to achieve medium to long-term outcomes with regard to spatial transformation through guiding and focusing investment into strategic spatial areas.

Geographic Priority Areas

The Capital Investment Framework is geared towards focusing capital budgeting for the Ekurhuleni Metro into strategic Geographic Priority Areas (GPAs) in accordance with the MSDF in order to achieve the spatial strategy outlined within the MSDF and take into consideration new spatial trends. The geographic priority areas are therefore based on the spatial structuring elements (SSEs) from the MSDF Spatial Concept and Land Use Proposals, namely previous MSDF priority areas, densification areas, the geography of Ekurhuleni income, major housing projects, IRPTN Corridor, rail stations, primary and secondary nodes, industrial areas, major investment and strategic projects. The purpose of the geographic priority areas is also to indicate the relative strategic spatial importance of one area against another.

Integration Zones

The Ekurhuleni Metropolitan Municipality has also utilised its Capital Investment Framework footprint as the basis for its Integration Zones. The rationale behind its utilisation lies in the core principles of the CIF which relate directly back to the vision of National Treasury's City Support Program's goals and objectives. Some of these include sustainability, urban restructuring, densification as well as spatial and sectoral integration and prioritisation. By overlaying the CIF, the proposed Urban Network Plan emerges for the EMM.

E.2 ORGANISATIONAL ARRANGEMENTS FOR CAPITAL PROGRAMME MANAGEMENT

E.2.1. Capital Budgeting Process

Projects selected for implementation are budgeted as accurately as possible for inclusion in the draft Capital Budget. The Finance Department is responsible to verify the draft Budget against the funds

available. Budget meetings subsequently follow to facilitate the necessary adjustments and to finalise the Capital Budget. This process is explained in more detail further on.

E.2.2. Tender Evaluation

Once the budget has been approved, projects are put out to tender, aligned to the timeframes required for timeous commencement of each project. Procedures and guidelines are followed as set out in the Metro's Supply Chain Management Policy and requirements of the MFMA. Bid Evaluation Committee members evaluate the tenders after members of the Supply Chain Department have verified the validity of the tender submissions received from bidders. A bid evaluation report is then prepared, including a recommendation for the preferred bidder for each tender based on points scored for quality and price (phase 1) and preference points (phase2).

The Bid Evaluation Committee strives to achieve the following key objectives:

- Evaluation of tenders in an ethical, objective manner;
- Declaring conflicts of interest that may exist;
- Quality in service delivery;
- The awarding of work in a fair, equitable, transparent and professional manner;
- The accommodation of emerging service providers.

The bid evaluation report is forwarded to the Bid Adjudication Committee. If satisfied, the recommendations are sent for executive approval in terms of the delegations of authority.

E.2.3 Implementation of Projects

During the implementation of projects the EPMO Department is responsible for project management and quality control. All applicable stakeholders are involved by means of technical meetings, project steering committee meetings and monthly site meetings (where relevant). Progress reports, including expenditure, challenges, job creation etc. are submitted on a monthly basis. Some of the key objectives during project implementation are:

- To complete the projects within the required timeframe's;
- To complete the projects not exceeding the budgeted amounts;
- To complete the projects to the standards required; and
- To apply labour intensive construction methods as far as possible.

The Capital Prioritisation Model (CPM), a major component of the Capital Investment Framework (CIF), forms the core of the EMM's Capital Programme Management process. The Capital Prioritisation Model is structured on, and incorporates, the following factors:

- Alignment to the budget process;
- Incorporation of essential strategic departmental functions related to municipal planning and project management;
- National Treasury requirements; and
- Best practices identified through engagements with neighbouring metropolitan municipalities.

E.2.4 The Capital Prioritisation Model as a key component of the Capital Investment Framework

The Capital Prioritisation Model (CPM) is an instrument utilised in the implementation of the CIF in alignment with the annual budget process set out by the EMM Finance Department in order to strategically prioritise the EMM multi-year capital budget. The CPM strives to align and incorporate project management, IDP needs analysis and the SDBIP into the prioritisation process, incorporates the geographic priority areas (GPAs) in providing for a spatial rationalisation of the budget, establishes a set process for implementation as aligned to the budget process, and guides and familiarises departments with the capital project prioritisation process and requirements.

The CPM fulfils the following important functions as part of the Capital Programme Management process:

- Facilitates and guides the prioritisation of the multi-year capital budget;
- Establishes a uniform process to be followed during the budget process in the allocation and prioritisation of the budget both strategically and spatially;
- Guides the budget allocation split;
- Requires collective action and collaboration between essential departments with an identified strategic involvement in the budget process (i.e. Finance, Strategy and Corporate Planning (IDP), EPMO, Human Settlements, Economic Development, Environment and City Planning);
- Promotes alignment of departmental functions, strategic policies and sector plans;
- Outlines actions to be pursued during the budget prioritisation process;
- Makes provision for monitoring and evaluation to assess the impact of the CIF on the multi-year capital after allocation of the budget; and
- Makes allowance for a transparent and accountable budget process.

The implementation of the CIF as per the Capital Prioritisation Model is best understood as following a process of test, guide and align with respect to gradually changing the EMM departments' approach to the budgeting process by taking cognisance of the CIF priority areas and budget process through the CPM. The phasing in of the CIF needs to ultimately promote increased alignment of departmental capital projects.

E.2.5 The Capital Prioritisation Model process

The CPM process consists of the following steps:

Table E2.1: The Capital Prioritisation Model Process

THE CAPITAL PRIORITISATION MODEL PROCESS	
Step 1	Define Project Categories
Step 2	Allocate budget percentage (%) per Project Category
Step 3	Departments are requested to submit their draft capital budgets as per the budget instruction letter issued by the EMM Finance Department
Step 4	Allocation of departments draft capital projects into the CIF project categories and Geographic Priority Areas
Step 5	Scoring of the draft capital projects
Step 6	Screening of the draft capital budget for compliance and prioritisation by the CIF Operational Task Team
Step 7	One on one departmental engagements
Step 8	Monitoring and evaluation of the expenditure report
<i>The CPM is then refined through the following additional steps:</i>	
Step 9	Testing of the scoring system on the multi-year budget
Step 10	Modelling work on the impact of the budget allocation split as an empirical substantiation of the budget allocation split for the Metro

In preparing the EMM's multi-year budget, the CPM process is applied as follows:

Table E2.2: CPM Process

Step 1: Define Project Categories
<ul style="list-style-type: none"> Category 1 – Urban Restructuring: <ul style="list-style-type: none"> The portion of the capital budget to be spent on eradicating historical backlogs of services that relates to both physical and social infrastructure. This can be termed 'The City Past' category of the budget. Projects included should focus on major housing projects and poverty eradication areas as described in the MSDF.

- **Category 2 - Upgrading & Renewal:**
 - The portion of the capital budget to be spent on upgrading and renewal of existing infrastructure and maintenance of social facilities. This can also be termed 'The City Present' category of the budget. Renewal of Existing Assets: Remaining useful life is extended due to aging of infrastructure. This does not mean the capacity is extended.
 - Upgrading of Existing Assets – to extend existing bulk capacity: To extend bulk capacity purely for existing network.
- **Category 3 - Economic Development:**
 - The portion of the capital budget to be spent on growing the economy of the city. This can also be termed 'The City Future' category of the budget. Projects included here should focus on industrial areas and major investment and development projects as described in the MSDF.
 - According to the definition from National Treasury this category refers to projects that are focussed towards extending bulk infrastructure for the purpose of the stimulating growth and are therefore purely income generating projects.
- **Category 4 – Local Interventions: Projects with a political prerogative**
 - The portion of the capital budget to be spent on specific political identified and prioritised projects not necessarily included in other categories of the capital budget.
 - This can also be termed 'The City Always' category of the budget.
 - Identification of such projects will be at the discretion of the Executive Mayor.

Categories 1 to 3 are defined as per definitions set by National Treasury.

Step 2: Allocate budget percentage (%) per Project Category

- **Category 1 – Urban Restructuring:** 30% of the capital budget
- **Category 2 - Upgrading & Renewal:** 40% of the capital budget (including furniture, vehicles and equipment) (National Treasury with reference to the MFMA circular no. 66 as read with MFMA circular no. 55 has advised Municipalities to allocate no less than 40% of the Capital Budget to upgrading and renewal)
- **Category 3 - Economic Development:** 29% of the capital budget
- **Category 4 – Local Interventions:** 1% of the capital budget

The CIF proposes a budget allocation split as a guideline for the multi-year budget process, which has been informed by National Treasury requirements and financial and projection modelling work conducted by consultants Demacon.

[Note: The above-mentioned modelling work conducted on economic growth and backlog scenarios has reinforced the need for the EMM to grow its revenue base as a means to increase the capital budget allocation towards backlog eradication and infrastructure maintenance and upgrading. This requires an

increase in the support of budget allocation towards projects with the potential and ability to generate income for the Metro. The modelling therefore supports a higher budget allocation split for economic development, as currently set at a 29 percent target for the capital budget. The budget split additionally makes provision for projects geared towards backlog eradication and projects geared towards addressing infrastructure maintenance and capacity needs of the Metro.]

Step 3: Departments are requested to submit their draft capital budgets as per the EMM Budget Instruction Letter

The Budget Instruction Letter as prepared and distributed by the Finance Department requests departments to compile and submit their multi-year draft budgets in accordance with budget and CIF requirements. In terms of the CIF requirements, departments are requested to provide the following information:

- Short description of the project
- Project Locality
- Projects level of service / area of influence
- The project category per project
- Completion of the CPM weighting system

The CIF input requirements into the multi-year budget is communicated to departments through departmental readiness workshops held in September. Departments are also requested to provide a breakdown of large general votes that comprise of sub-projects. As part of the departmental readiness workshops, departments are provided with a CPM user manual. The manual outlines data requirements pertaining to both mapping of capital projects and the trial run of the CPM prioritisation weighting system.

Step 4: Allocate Capital Budget per Geographic Priority Area and per project categories

Departments are advised of the CIF mapping requirements within the Budget Instruction Letter and are called over a three day period (late September / early October) to map their department projects with the City Planning GIS. The provision of a projects property description is a requirement in terms of National Treasury Form SA36.

Preparation workshops are held with departments to explain the CIF budget input requirements with regard to the geographic priority areas, project categories and testing of the prioritisation weighting system. Departments with the assistance of the City Planning GIS are required to generate shapefiles per project reflective of the projects exact locality and area of influence.

The projects are then assessed in terms of alignment to the priority areas and correctness of the project category allocations per capital project on the multi-year budget.

An important objective in this process is improved accuracy in the level of mapping capital projects. This requires that departments break down large general vote numbers into specific projects with an exact locality and predetermined level of service per project. Each project in turn needs to be linked to a shapefile on the ArcGIS.

The benefit achieved by improved accuracy in the mapping firstly provides the Metro with a spatial overview of the MTREF capital projects. This affords the EMM with the ability to assess alignment of departmental projects, alignment with the spatial priority areas, and ease of monitoring and evaluating expenditure spatially. This in turn promotes the concept of transparent and accountable budgeting.

Step 5: Scoring of departmental capital projects
<p>This step provides for the scoring of the individual projects based on a scoring system per project category. Furthermore the CPM Manual is developed to serve as a manual for the CPM process and scoring system. A set of prioritisation criteria and weighting systems (as discussed in the following sections) is used to prioritise the capital projects for the planning process of the EMM's multi-year budget programme.</p> <p>It is important to note that the Capital Prioritisation Model aims to prioritise projects that have already been internally evaluated during by each department based on their own prioritisation criteria / system. Therefore the aim is not to eliminate projects, but to prioritise them in a ranking order so as to assist in the EMM's budget planning process. Projects that are marked unsuccessful during this phase, in terms of budget allocation of the specific budget period, will need to be amended, in order to ensure that the project receives a higher score in the following financial year, ensuring a higher priority, and budget allocation to the project.</p> <p>The inclusion of a capital project prioritisation weighting system assists in removing subjectivity from the prioritisation process. The capital projects are scored after submission of the amalgamated draft submission budget by Finance. This is followed by an analysis of the scoring outcomes with the objective to serve as input for further refinements to the weighting system, in an effort to develop a comprehensive, objective and implementable project prioritisation process.</p>

Before looking at the mythology and scoring system of the Capital Prioritisation Model, it is important to note that a number of projects can be considered as exclusionary projects, which will not go through the CPM evaluation process. These projects include the following:

1. Committed Projects

Projects that have been approved and committed to the 2015/16 MTREF budget will not be re-evaluated through the CPM weighting system.

2. Projects in their planning phase / feasibility stage

Projects in their planning or feasibility phase will not be required to go through the CPM, as they do not at this stage of the project's lifecycle have the necessary information in order to be evaluated against the CPM criteria. Departments should note that even though feasibility study projects will not be passed through the CPM weighting criteria for scoring, the project will still be evaluated by the operational task team. *These projects will be evaluated separately which will assist in prioritising these projects for feasibility purposes*

3. Projects to Comply with an EIA

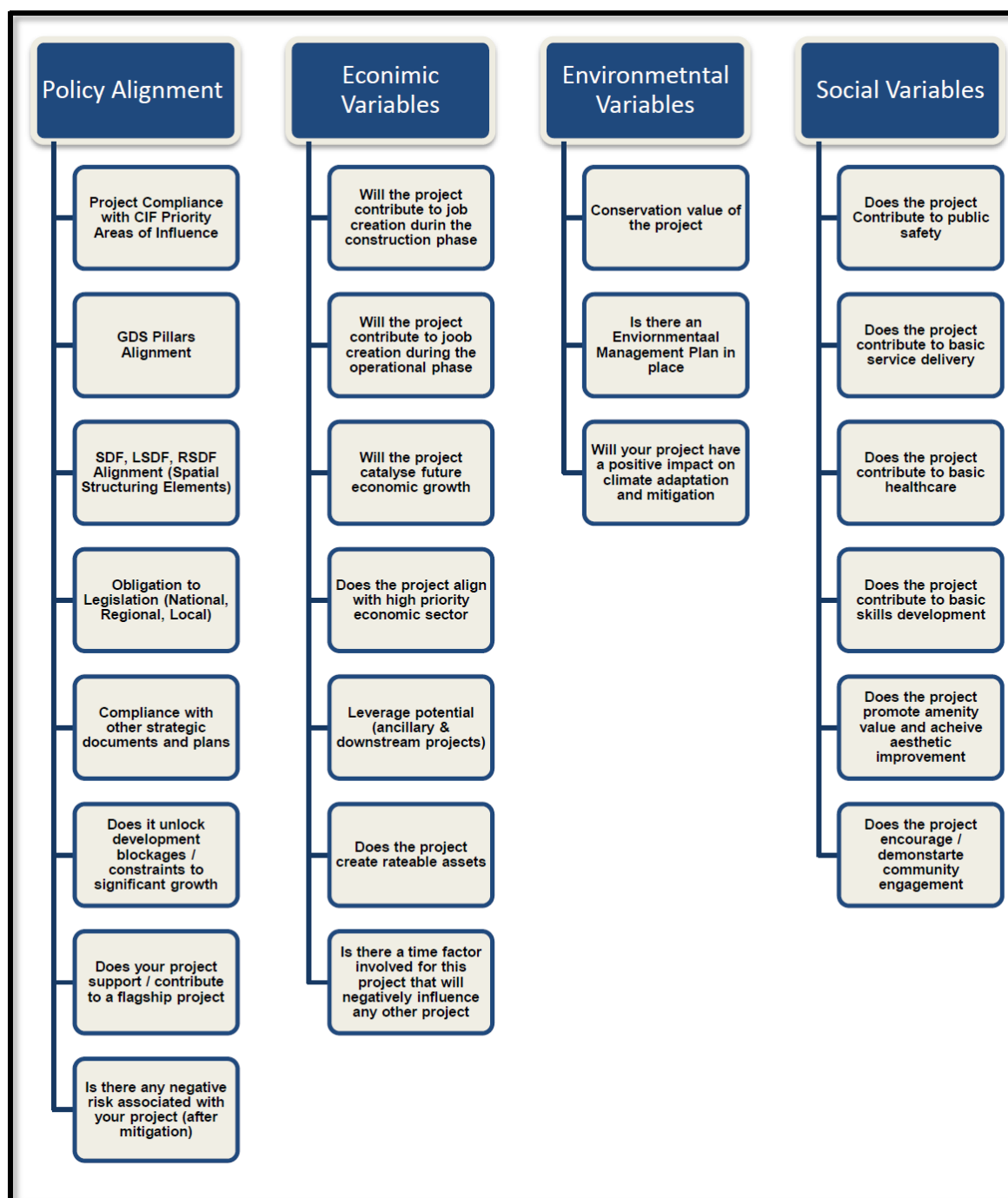
The requirement of an EIA is determined during the inception phase of a project (i.e. during the feasibility study phase). Therefore during the Departmental Appraisal phase, departments will need to consult with the Environmental Resource Department to determine whether an EIA will be required for a specific project.

4. Critical Projects

A critical project could be a project that boasts a catastrophic risk for the metro in terms of significant liability, significant loss of revenue, and significant loss of life. These projects have a very high risk associate if not implemented.

The criteria used in the weighting system are shown in the following figure:

Figure E2.1: Capital Prioritisation Model Draft Weighting System (Summary of Variables)



For each of these variables / criteria, a rating scale is used for assessing how well a particular project satisfies the criteria. Each of the key variables and their rating criteria receive a specific weighting percentage which is adapted per project category. Furthermore, a scale of impact for the rating criteria is also utilised. The scale of impact per weighting criteria is shown in the following table:

Table E2.3: Scale of Impact per Weighting Criteria

Scale of impact	Scoring
None	0
Low	25
Not Applicable	50
Moderate	75
High	100

The variable weighting per project category is shown below:

Table E2.4: Variable Weighting per Project Category

CPM Variables	Urban Restructuring	Upgrading and Renewal	Economic Development
Policy Alignment	40	40	30
Economic Variables	15	20	40
Environmental Variables	15	20	15
Social Variables	35	20	15
TOTAL WEIGHTING	100	100	100

Each of the four key variables has a weight attached to them, the sum of which must total 100, as reflected in the above table. Within the main variables, each of the rating criteria (as identified in Figure E2.1) also has a weight attached to them, also totalling 100.

It is therefore important to refine and formalise the prioritisation weighting system as part of an electronic data system for the Budget, as the prioritisation weighting system needs to guide and inform the screening process of the draft multi-year budget as a means to remove some of the subjectivity out of the budget prioritisation process and provide for an effective and efficient means of departmental project prioritisation during the budget process.

Step 6: Screen Submitted Capital Projects

The capital budget projects are screened in a joint sitting with Finance, City Planning, Human Settlements, Strategy and Corporate Planning (IDP Office), EPMO and Environmental Resource Management. These departments constitute representative members of the formalised Operational Task Team as key stakeholders in the budget evaluation process. The Task Team meets in mid to end October in order to screen the departmental projects on the multi-year CAPEX. The following evaluation (screening?) criteria are typically utilised in the assessment process:

- Legally committed projects

- EIA compliance
- Projects committed due to appointment of consultants or contractors
- Evaluation of feasibility of project plans developed on PCS:
 - Realistic project timelines
 - Realistic budget phases
 - Project Readiness
- New vs existing projects;
- Alignment with the CIF geographic priority areas

All movable assets are excluded from the categorisation.

Step 7: One on One Departmental Engagement

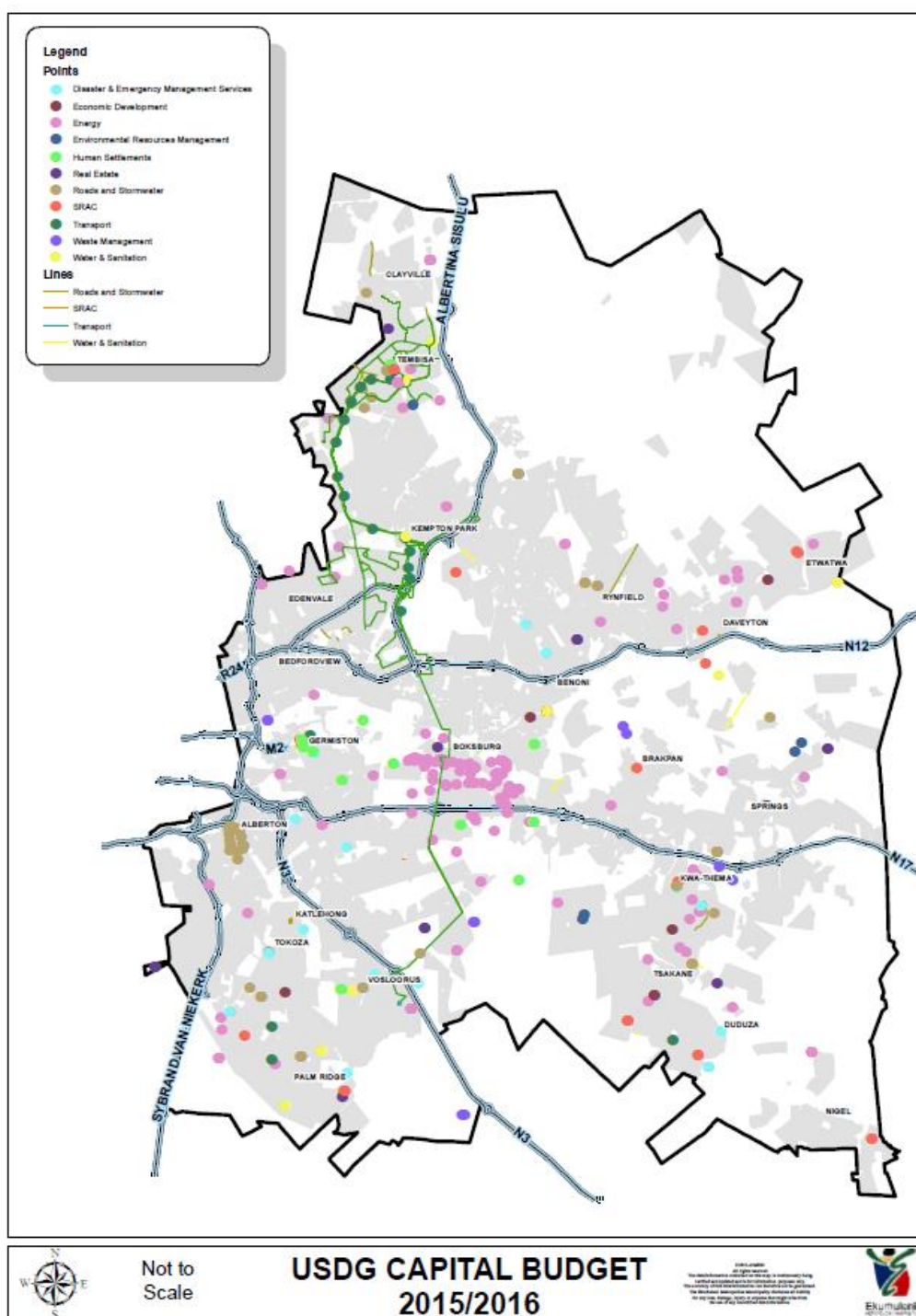
Once the evaluation / screening of the budget has been concluded as per step 6, departments are called into individual departmental engagements to discuss outcome findings from the evaluation / screening process. The one on one departmental engagement makes provision for the Operational Task Team to address identified concerns and obtain clarity regarding the department's draft budget submission. This in turn affords respective departments the opportunity to defend budget requirements or coincide with requested budget amendments. Step 7 of the process extends the CPM process as a collaborative, transparent and accountable process as part of the annual budget process. The one on one departmental engagements are held in the first week of November.

Step 8: Monitoring and Evaluation

Step 8 of the CPM makes allowance for monitoring and evaluation of project implementation through the assessment of departments' collective expenditure into the geographic priority areas (GPAs) through the expenditure report. Monitoring of departmental capital expenditure in the priority areas is currently in process for the 2015/16 financial year.

The following map gives a spatial indication of the USDG capital projects throughout the EMM flowing from the above process. The USDG projects reflected are as per EMM department, which is inclusive of Emergency and Disaster Management, Electricity and Energy, Environmental Management, Roads and Storm-water, SRAC, Transport, Waste Management, and Water and Sanitation. The concentration of the USDG capital projects within these formally disadvantaged areas is indicative of initiatives to promote an increase in the level of and provide access to services and opportunities that is aimed at improving the urban form and benefitting the disadvantaged.

Figure E2.2: USDG Funded Projects for National Outcomes 8 as Reflected Throughout EMM



E.2.6 Post Analysis and Refinement of the Budget and CIF Process

The purpose of the analysis is to assess the outcome of the CIF evaluation process in identifying achievements in the alignment of the multi-year capital budget with the CIF project categories derived from the Capital Prioritisation Model and the geographic priority areas (GPAs) that give directive to the spatial strategy of the EMM. The analysis therefore outlines the impact of the CIF on the multi-year

budget based on the outcomes results, which in turn highlights constraints, weaknesses and successes as compared to meeting determined targets set out in the CIF.

Step 9: Testing of the scoring system on the multi-year budget	
In determining to what degree targets set out in the CIF have been met for the multi-year budget the analysis is geared towards answering the following questions as related to benchmarking the impact of the CIF with respect to the multi-year capital budget:	
<ul style="list-style-type: none"> i. The budget percentage split between the CIF project categories compared to the previous year's budget; ii. The budget percentage split between the CIF geographic priority area categories for the current Budget; iii. The budget percentage split between the CIF geographic priority areas as calculated per project category; iv. Performance of the CPM prioritisation weighting system based on: <ul style="list-style-type: none"> a. Which departmental projects on the draft multi-year budget placed in the top 20 of the prioritisation as compared to the 20 lowest scoring projects (comparison made per scoring scenario); b. The number of capital projects that did not score highly within the projects allocated project category; c. The level of information provided by departments as part of the scoring criteria. 	

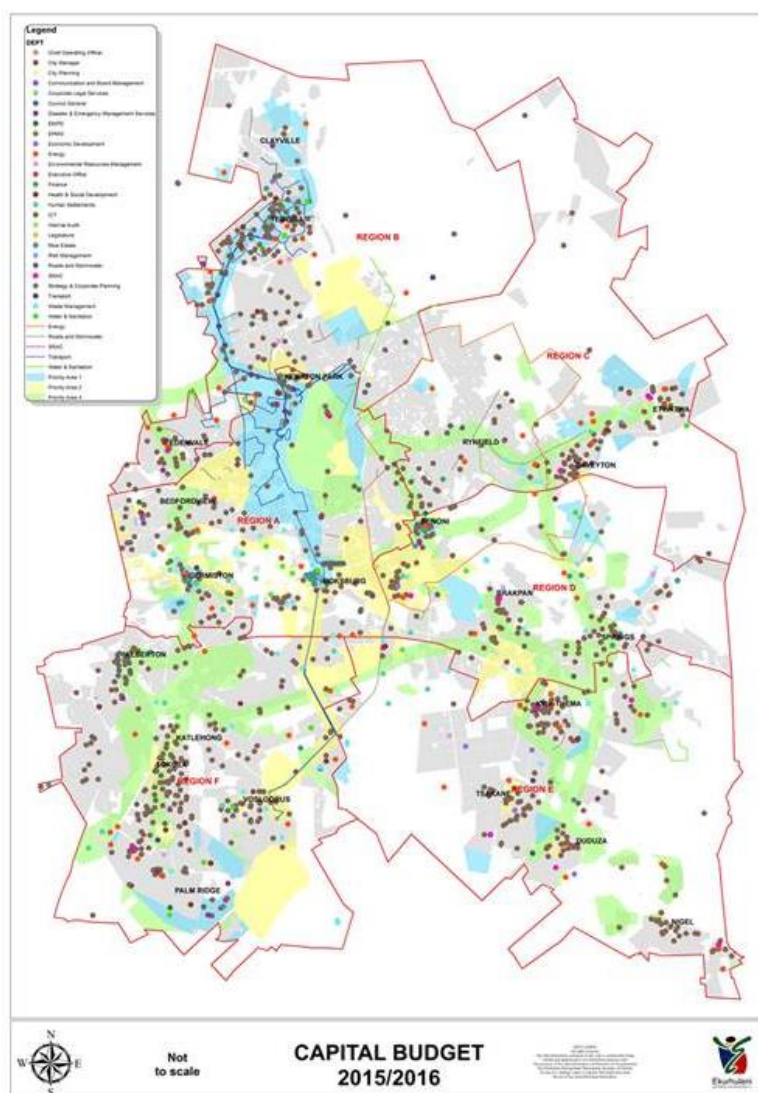
The analysis yields very important information which assists in future refinement and improvement of the Capital Budget and CIF process, as illustrated in the following practical example.

Practical Application

The 2015/16 budget analysis exercise revealed that approximately 88% of the budget allocation comes from capital projects that either fall directly within one of the three priority areas or boasts an area influence that will serve one or more of the priority areas. Further assessment of the 2015/16 budget split between the priority areas indicated a 69% budget allocation for projects that fall within and serve priority area 1 exclusively or serves priority area 1 in addition to serving another priority area(s).

The following map geographically illustrates the locality of the 2015/16 multi-year capital projects per department. The map reflects where departments are budgeting spatially in relation to the spatial priority of the EMM and in relation to one another. This gives an indication of the alignment of departmental projects and alignment with the CIF priority areas.

Figure E2.3: Locality of 2015/16 Capital Budget Projects in relation to the Priority Areas



Information revealed by the analysis process as shown in the above chart and map provide important evidence that the bulk of departments budgeting are proposed within and or directly serves one or more of the CIF priority areas.

E.2.7 Financial and Projection Modelling Work Conducted on the CIF Project Category Percentage Split

Step 10: Modelling work on the impact of the budget allocation split

Consultants Demacon Market Studies have been tasked with conducting financial and projection modelling studies against the CIF and CPM with the objective of providing economic and backlog projections to feed into strengthening the direction and determination of targets for the CIF to feed into the budget of the EMM.

The purpose of the modelling for the CIF is to illustrate the modelling scenarios with respect to Backlog Eradication and Economic Growth within the EMM, so as to identify the optimum budget split between the Capital Investment Framework categories (i.e. economic development, urban restructuring and upgrading and renewal).

Three modules were identified to serve as input in determining the ideal economic growth scenario for the EMM, namely:

- 1) Economic growth module;
- 2) Population growth module; and
- 3) Labour absorption / employment module.

The key findings of the scenario modelling based on the three growth modules are summarised below.

Key findings

- At an average economic growth rate of 3.7%, the EMM's economy creates, on average, 16 132 employment opportunities *per annum*;
- However, the economically active population increased by 35,163 *per annum*;
- This leaves a net oversupply of labour of 19,032 people *per annum* – who are not able to find work in the local, mainstream economy;
- Thus the EMM's economic growth needs to increase in order to absorb the entire economically active population within the Metro.

Based on historical growth trends, the EMM's economic growth needs to increase from 3.7% to 8.1% (therefore by 4.4% per annum) in order to create an additional 19,032 employment opportunities per annum so as to absorb the total economically active population. In order to increase economic growth an increase in infrastructure investment is required. Therefore a ratio between infrastructure investment and economic growth should be determined in order to calculate the additional infrastructure investment needed within the EMM economy to facilitate an 8.1% economic growth.

Certain international studies on developing economies suggest there is a linear / direct, positive 1:1 ratio between infrastructure spend and economic growth. Research on the SA economy suggests a more modest (and realistic) ratio of 1:0.19 between infrastructure spend and economic growth.

Based on the above ratio of 1:0.19, an increase of 23% in infrastructure spend is required in order to create the additional economic growth within the EMM of 4.4% per annum in order to reach the ideal 8.1% needed to absorb the economically active population within the EMM.

However, in order to reach the ideal 8.1% economic growth, the increase in investment infrastructure will need to be applied strategically, i.e. the majority of the infrastructure investment will need be allocated to hard-core infrastructure, specifically new roads, electricity capacity as well as water and sanitation capacity in high priority economic zones. This is because, in seeking to optimise the Sustained Economic Benefits of Government spend, two principles of budgeting and leveraging can be identified:

- *Principle 1:* The same Rand spent (on the same type of asset) has a different impact in one area *versus* another.
- *Principle 2:* The same Rand spent has a different impact in the same area, depending on the type of asset created.

An increase of 4.4% in economic growth in real terms is illustrated in the table below:

Table E2.5: Private Capital Investment Required per Annum, constant 2014 Prices

EMM Gross value Added at Basic Prices	
GVA Average Growth per annum at 3.7% (2001-2011)	R 4,391,320,170
GVA Average Growth per annum at 8.1% (2001-2011) - Ideal growth	R 9,623,682,004
Difference between current growth and Ideal growth (GVA)	R 5,232,361,834
TOTAL CAPITAL INVESTMENT NEEDED FOR IDEAL GROWTH (GDP / REAL TERMS)	R 5,403,791,789

(Source: Demacon ex Quantec, 2014)

The table illustrates the average actual GVA increase per annum (R4.4 billion) generated within the EMM based on the current 3.7% economic growth. However, in order to generate an economic growth of 8.1% per annum, the average increase in GVA per annum should amount to R5.2 billion (based on the additional 4.4% required in economic growth). The R5.2 billion additional GVA requires **a total private capital investment of R5.4 billion be unlocked annually in the EMM's economy**. Given the area's population growth it is possible from a demand side perspective for the market to absorb this type of increased investment.

Based on principles of budgeting and leveraging as discussed in the preceding paragraphs it is important that the private capital investment of R5.4 billion occur within high priority economic zones / high economic commercial nodes compared to lower impact areas. These high impact nodes can be defined as retail, office and industrial / warehousing / distribution, and low impact areas can be defined as residential, agricultural and social services / amenities.

Furthermore in the EMM, such as in the rest of the country, the labour supply far exceeds the labour demand. Therefore the increase in private consumption expenditure, increased skills levels and skills development, private capital investment, together with the increased government spend, as well as

increased exports and decreased imports will result in increased final demand, resulting in labour demand meeting labour supply (there is an accepted economic formula which substantiates this).

Therefore the EMM needs to increase its total current budget with 23% per annum in order to ensure a sustained 8.1% growth in the economy of the metro so as to ensure that labour demand meets labour supply. This increase should occur over and above the internal restructuring of the EMM's budget.

The following table illustrates the 23% increase on the current EMM's multi-year capital budget. However it should be noted that **80% of the 23% increase of total capital budget should occur within the economic development category** (so as to invest in rateable assets, which will deliver a higher revenue to the municipality). *(Note: The figures reflected were taken from the 2014/15 multi-year draft budget before final approval of the budget; therefore figures should not be construed as the actual budgeted amounts within the EMM MTREF.)*

Table E2.6: Increased Infrastructure Spend Required for a Sustained 8.1% Economic Growth

CIF Budget	2014/15	2015/16	2016/17
Total EMM Current Capital Budget	R 3,119,798,979	R 3,368,826,121	R 4,252,041,688
23% Increase on Total Capital Budget	R 717,553,765	R 774,830,008	R 977,969,588
80% of Total Increase on Capital Budget (Increase in Economic Development)	R 574,043,012	R 619,864,006	R 782,375,671

Seeing that a 23% overall increase in the total budget expenditure of the EMM is somewhat difficult to sustain, an internal restructuring coupled with a modest annual budget increase will be the most plausible option.

Therefore, based on the preceding results, the following section summarises the optimum split for the EMM's budget and CIF categories. The internal restructuring indicated in the following section will need to be implicated together with an increase in the total budget, as outlined in the preceding paragraphs.

The Optimum Budget Split per Project Category

The next table illustrates the budget split allocation between the project categories as reflected for the draft 2014/15 budget before approval. From the table it is evident that the draft budget for 2014/15 reflected a substantially low budget allocation to economic development projects for the Metro. The final approved 2014/15 budget however reflected an increase in the budget split towards the economic development category (went from 18% to 29%) and achieved alignment with the ideal budget allocation split proposed within the CIF, whilst keeping cognisant of the National Treasury requirement for a minimum budget allocation of 40% for Upgrading and Renewal projects (therefore Urban Restructuring

is the balancing amount, as Economic Development was maximised as much as could be whilst Upgrading and Renewal had to be kept at a minimum of 40% per NT requirements).

Table E2.7: Current vs. Ideal Budget Split (as at Dec 2014)

CIF Budget Categories	Current % Split (As at December 2014)	Ideal % Split (CIF)	Current Difference
Economic Development	18%	29%	+11%
Upgrading and Renewal	47%	40%	-7%
Urban Restructuring	35%	30%	- 5%
Local Interventions	-	1%	-
Grand Total	100%	100%	

It is evident that in order to reach the ideal budget split, certain internal restructuring is required for the EMM's capital budget:

- High first year increase in Economic Development; and
- Marginal first year decrease in Upgrading and Renewal.

In addition to the requirement for restructuring of the internal budget, a 23% increase is required in bulk infrastructure investment in particular for income generating projects in order to ensure a sustained increase of 4.4% in the EMM's average annual economic growth – so as to generate an 8.1% economic growth per annum. This increase is required over and above the natural budget increase from each financial year, in real terms.

Capital Projects Policy

In implementing the above, the objectives of the EMM Capital Projects Policy must be considered, namely to “ensure that capital projects are only budgeted for if feasibility has been proven”, and to “ensure the optimum allocation of resources to projects that can be implemented within the timeframes budgeted for.”

The three year capital budget provides departments the opportunity to plan their capital spending activities in advance, allowing for a more strategic approach. The typical project cycle consists of at least the following phases:

- Feasibility Study
- Basic Planning
- Environmental Impact Assessment
- Detail Planning and Design

- Implementation

It is also a requirement of the policy that all projects be evaluated in terms of a project plan (time line) as well as a cash flow linked to the project plan, to determine the practicality of implementing the project within the proposed budget and time frame (multi-year projects), and that all proposed budgets for projects be approved only if the evaluation is positive.

E.2.8 Long Term Funding Strategy

The Metro is busy compiling a Long Term Funding Strategy to ensure the balance between internal and external funding is optimal, whilst also aiming at increasing the capital budget to ensure both the stimulation of the local economy as well as the eradication of backlogs and as such creating sustainable human settlements.

The components that will impact on the final long funding strategy include:

1. EMM's revised Growth and Development Strategy (25 year horizon) – the level of services to be rendered;
2. EMM's Spatial Development Framework and Capital Investment Framework - Funding allocation model - % of budget to backlogs vs. % towards economic development projects;
3. EMM's Consolidated Municipal Infrastructure Plans (10 – 15 year horizon) - Enhanced set of data on revenue and expenditure available resulting from CMIP's that can supplement economic and financial forecasts as well as more refined maintenance requirements available;
4. EMM's Integrated Development Plan (5 year horizon); and
5. EMM's Medium Term Expenditure Framework (3 year horizon –considering increasing to a five year horizon).

The current draft of the long term funding strategy of the EMM contains the following components:

- Background;
- Legislative and accounting framework (current legislation, Accounting Framework)
- Assessment of funding requirements;
- Financial Resources;
- Appropriation of annual surplus;
- Raising of external debt for future financing of capital expenditure;
- Compliance with financial service provider requirements (Financial ratios, Credit rating); and
- Raising of external debt with financing institutions and repayment of the debt.

Funding Options

The funding options being explored at present include:

1. USDG / Large Cities Support - >R1b p.a.
2. Depreciation for all renewal projects - >R1b – R2b p.a
3. Movable assets must come from revenue generated
4. Additional borrowings for new non income generating projects (mainly bonds)
5. Structured Finance for Revenue Generating Projects – based on ROI motivation
6. PPP's – be careful of profit sharing in long run
7. New revenue sources specific to new services
8. International donor funding
9. Greater private sector involvement – other than normal PPP's, such as increased bulk contributions for private sector developments

Strategy to build up cash balances to reach appropriate cash levels with reserves

1. Funding of Capital Budget using Deprecation as Cash Generator
2. Continued use of Debt Finance for Capital Infrastructure
3. Revenue Collection
4. Revenue Enhancement/ New Sources of Revenue

Sources of funding for capital requirements

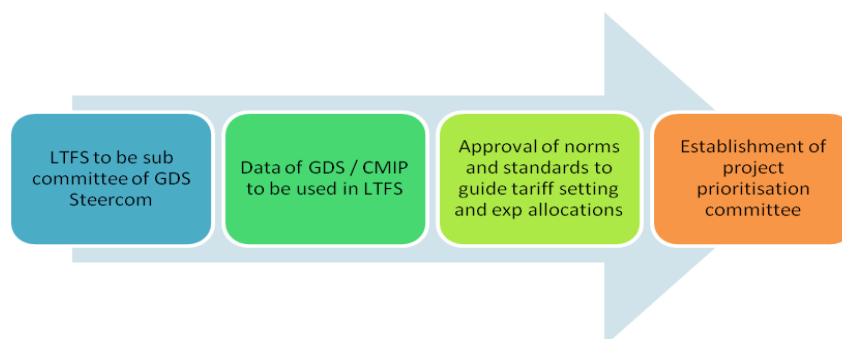
- Government Grants (R1.3b per annum, in nominal terms – potential to grow, particularly in the USDG and Large Cities Support Programme);
- Municipal Bonds (R800m per year, based on the current approved R4b Domestic Medium Term Note Programme);
- Public Private Partnerships (R2b for new HQ building + potentially R1b for Digital City);
- Surplus Cash (from operating budget) (R1b per year in nominal terms) – This will require a dedicated strategy of budgeting for a surplus to ensure the availability of cash; and
- Potential grant from the DBSA Jobs fund.

Way Forward on Long Term Funding Strategy

1. Agreement of projects to be funded from the USDG grant for the MTEF currently being compiled – this also impacts on the Built Environment Performance Plan (BEPP) to be submitted to National Treasury during November;

2. Council approval of Germiston precinct / HQ building – once approved, the process of PPP to commence with. National Treasury advised that a PPP project takes approximately 3 years to finalise;
3. Issue of EMM bond 03 to fund current year infrastructure;
4. Public Participation / Consultation process for the Local Business Tax submission;
5. Final submission of Local Business Tax submission to National Treasury;
6. Further submissions to the Jobs Fund when the next set of applications is invited;
7. Submission of business plan to DBSA re water meters projects as an income generating project with a payback period of less than 5 years. Initial discussions were held with DBSA, business plan is now the next step.

Figure E2.4: Way Forward on Long Term Funding Strategy



E.3 SUPPLY CHAIN MANAGEMENT AND PROCUREMENT PLAN

E.3.1. Compliance

The EMM has a Supply Chain Department in line with the internal Supply Chain Management Policy and requirements of the MFMA. The head of the unit is a general manager, who reports to the Chief Financial Officer.

E.3.2. Delegated Authority

Section 79 and 106 of the MFMA empower the Accounting Officer of EMM to delegate decision-making powers to officials. The following applies to the acquisition of goods and services and the disposal and letting of assets:

- All delegations must be in writing;
- No supply chain management duties or powers may be delegated or sub-delegated to a person who is not an official of the Municipality or to a committee which is not exclusively composed of officials of the Municipality.

E.3.3. SCM Procedure

The calling for tenders to secure supplies of goods and services is an integral part of supply chain management, as legislation compels public institutions to procure goods and services through this process. A thorough knowledge of the different phases of the tendering process and the accompanying procedures is therefore necessary to ensure that public officials procure goods and services timeously and according to their requirements.

In line with the MFMA, the Accounting Officer has approved the Bid Committees. The Metro ensures that the tender process is fair, transparent and equitable and cost effective to all parties. More specifically it will:

- Clearly separate its role as a purchaser from that of a provider of services;
- Produce tender documents, which clearly specify EMM's required services to allow bidders to bid for and price their work accurately;
- Package work put to tender in a manner which encourages competition and the best outcome for residents and ratepayers;
- Actively discourage improper tendering practices such as collusion, misrepresentation, and disclosure of confidential information;
- Require any conflict of interest to be disclosed immediately.

E.3.4 Procurement Plan

The following table provides a summary of the capital grant funded projects in the procurement pipeline of the metro, based on information provided by the Supply Chain Department. It should be noted that the department is busy updating its procurement planning and a more comprehensive plan will be provided with the final version of the BEPP submission.

Table E3.1: Grant Funded Projects in the Procurement Pipeline

Demand Plan Reference Number	Department	Project Name	Source of Finance 2015/2016	Approved Budget 2015/16	Source of Finance 2016/2017	Approved Budget 2016/17	Expected Completion Date
HSE2014-001	Human Settlements	Leeupoort Development (Bulk Infrastructure)	USDG	70 000 000	USDG	100 000 000	30 June 2017
HSE2014-002	Human Settlements	Acquisition of Land for New Human Settlements	USDG	45 000 000	USDG	50 000 000	30 June 2016
HSE2014-003	Human Settlements	Human Settlements, Pre Planning Fees	HSDG	55 000 000	HSDG	45 000 000	30 June 2016
HSE2014-006	Human Settlements	Refurbishment of Rental Property	USDG	25 000 000	USDG	35 013 863	30 June 2016
HSE2014-009	Human Settlements	Germiston Urban Renewal (Cultural Precinct)	USDG	43 000 000	USDG	29 200 000	30 June 2017
HSE2014-010	Human Settlements	Germiston Urban Renewal (Fire Station)	USDG	25 000 000	USDG	27 000 000	30 June 2017
HSE2014-012	Human Settlements	Germiston Urban Renewal (Civic Precinct)	USDG	50 000 000	USDG	25 000 000	30 June 2017
HSE2014-013	Human Settlements	Wattville-Actonville Urban Renewal Project	USDG	10 000 000	USDG	17 000 000	30 June 2017
HSE2014-014	Human Settlements	Katorus Urban Renewal Project	USDG	5 500 000	USDG	17 000 000	30 June 2017
ROS2014-002	Roads and Stormwater	Roads: Low Cost Housing: South	USDG	30 000 000	USDG	40 000 000	30 June 2017
ROS2014-015	Roads and Stormwater	Kaal Spruit rehabilitation	USDG	12 000 000	USDG	12 000 000	30 October 2017
ROS2014-016	Roads and Stormwater	Katlehong Implementation of Stormwater Masterplan	USDG	11 000 000	USDG	12 000 000	30 June 2017
ROS2014-017	Roads and Stormwater	Roads on Dolomite	USDG	10 000 000	USDG	10 000 000	30 June 2017
ROS2014-018	Roads and Stormwater	Tertiary Roads in Katlehong	USDG	6 000 000	USDG	10 000 000	30 June 2017
TRA2014-012	Transport	Integrated Rapid Public Transport Network (IRPTN)	USDG	259 047 621	USDG	280 000 000	30 June 2016
TRA2014-030	Transport	Construction of Intermodal facilities: Upgrading Germiston Station Taxi Rank	USDG	40 000 000	USDG	40 000 000	30 June 2016
WAS2014-016	Water & Sanitation	Human Settlements Essential Services	USDG	101 000 000	USDG	100 000 000	30 June 2016
WAS2014-051	Water & Sanitation	Upgrade Water Networks	USDG	15 000 000	USDG	30 000 000	30 June 2016
RES2014-005	Real Estate	Brownfield Property Acquisition	USDG	50 000 000	USDG	50 000 000	30/06/2017
HSD2014-013	Health & Social Development	Extension & Upgrade BARCELONA CLINIC	USDG	2 000 000	USDG	12 000 000	30 June 2018
HSD2014-025	Health & Social Development	NEW CLINIC CHIEF A LUTHULI EXTENSION WARD 24 LEVEL 2	USDG	12 000 000	USDG	12 000 000	30 June 2018
ENE2014-013	Energy	Corporate Substations	USDG	200 000 000	USDG	200 000 000	Ongoing
ENE2014-023	Energy	Corporate Electrification	USDG	120 000 000	USDG	120 000 000	Ongoing
ENE2014-026	Energy	Germiston Network enhancement	USDG	15 000 000	USDG	15 000 000	Ongoing
ENE2014-027	Energy	Thokoza Network enhancement	USDG	5 000 000	USDG	10 000 000	Ongoing
ENE2014-028	Energy	Daveyton Network enhancement	USDG	5 000 000	USDG	5 000 000	Ongoing
ENE2014-032	Energy	Kwa-Thema Network enhancement	USDG	5 000 000	USDG	5 000 000	Ongoing
ENE2014-014	Energy	Corporate Electrification INEP	INEP	50 000 000	INEP	40 000 000	Ongoing

E.4 PARTNERSHIPS

The following list reflects identified external role players who are required to provide input into the Built Environment Performance Plan with respect to external government programmes proposed for the EMM, investment value, implementation timeframes, and project locality.

- Gautrans
- SANRAL
- PRASA
- Gautrain
- GDARD
- ERWAT
- Rand Water
- Eskom

- Gauteng Department of Minerals and Energy
- Gauteng Department of Education
- Gauteng Department of Economic Development
- Gauteng Growth and Development Agency
- Gauteng Department of Human Settlements
- Gauteng Department of Health
- Telkom
- National Department of Trade and Industry
- National Department of Water Affairs and Forestry
- National Treasury
- Transnet
- ACSA
- National Department of Higher Education
- National Department of Justice

It is critical that strategic partnerships are formed by the Metro and a comprehensive stakeholder consultation programme is effected in order to sustain the progress gained so far due to the fact that the work on the Ekurhuleni Aerotropolis hinges on the development of a comprehensive value proposition for the regional economy of Ekurhuleni and the broader Gauteng Global City Region by leveraging its inherent areas of potential, sectors of competitiveness and its economic infrastructure to attract investments as well as to spatially reconfigure the city towards a sustained economic path.

The Aerotropolis Project Office in collaboration with other relevant EMM Departments are currently engaging stakeholders to discuss pivotal matters related to the impact of the Aerotropolis. These engagements also allow the City to gain an understanding of current challenges being experienced by its stakeholders and how it could possibly intervene in unblocking them. Some of the stakeholders engaged to date are as follows;

- Ekurhuleni Business Association
- Business Unity South Africa
- Bidvest
- Avis
- SANRAL
- PRASA
- DENEL

Engagements to date with the external role players yielded information indicating investments into the EMM from Airports Company South Africa (ACSA), the Gauteng Growth and Development Agency, and

Passenger Rail Agency South Africa (PRASA). Ongoing interaction with external role players is proposed and required to feed into modelling for the CIF on income geography.

An Aerotropolis Planning Committee has been established which consists of all EMM departments, relevant ACSA departments as well as other spheres of government who sit on the relevant streams of expertise within the committee. An official MOU and Terms of Reference has been signed between EMM and ACSA regarding the Aerotropolis. A pledge of support has also been signed by the then Premier of Gauteng, Nomvula Mokanyane, Executive Mayor of Ekurhuleni Councillor Mondli Gungubele and the City Manager Khaya Ngema with regards to the Aerotropolis Project.

Further engagements are taking place with Schipol Area Development Company (SADC) based in the Netherlands for assistance regarding Ekurhuleni's Aerotropolis as well as with SAA (South African Airways) and numerous Government institutions.

It is acknowledged that integral to developing a comprehensive CIF is the inclusion of external role players in the form of National and Provincial Government, Parastatals and agencies. The external role players have been identified as having a stake within the EMM in terms of financial investment, major projects and development growth (socially, economically and physically), which projects have been listed as supporting and complementary projects.

Other partnership initiatives currently in implementation and planned for implementation are discussed below.

Township Economies Development Programme (Township Nodal Regeneration)

The Township Economies Development Programme pivots on the effective implementation of the Ekurhuleni Urban Regeneration Programme which has identified and prioritised the following township complexes and nodal development areas:

- Katorus Complex: Kwesine Node, Vosloorus Node
- Kwatsaduza Complex: Tsakane Node
- Actonville / Wattville Complex: Actonville / Wattville Node
- Tembisa: Civic, Willie Mandela, Lerratta, Oakmorr, Swazi Inn, Essellen Park and hospital (includes Nodes, Corridors and Precincts)

As a result, Ekurhuleni is committed to realising the following priorities:

- Rapid development of the Aerotropolis to enhance the value proposition for trade, tourism, investment and industrial agglomeration;
- Systematic investments in economic infrastructure to unlock intrinsic economic potential;

- Deliberate investment in human development to drive innovation and competitiveness;
- Deliberate efforts to encourage entrepreneurship, new venture creation and private sector participation to stimulate economic activity and innovation;
- Strategic Economic relationships to gain access to increased tourism volumes, international capital and trade linkages through business exchanges;
- Increase urbanisation in order to enjoy economies of scale, reduce cost;
- Infrastructure investment, generate new demand and encourage domestic consumption; and
- Economic diversification that encourages movement from primary sectors to tertiary sectors of production through efficient, market and resource driven interventions.

Informal and Street Trading

Informal Street Trading has become a feature of Ekurhuleni's urban environment and it symbolizes the changing nature of the municipality in both spatial and economic terms. The Municipality has seen rapid and consistent growth of street traders which are found to be major sources of provisioning for poor households. Informal trading continues to form a vital part of Ekurhuleni emerging new spatial and economic form that accounts for a bigger space and income for the local economy.

The informal trade sector constitutes an important part of the retail sector, giving large potential to grow for future business set-up. This sector is targeted to occupy space in the form of enterprise hubs, business parks, industrial hives and shared industrial production facilities. These are facilities that the City has been developing and continues to enhance in line with the required legal pre-scripts. The current process of reviewing the City's Informal Trading Policy & By-laws will also address the challenges of the sector, thus providing guidelines on the needs of the region.

Urban Agriculture Strategy

Agricultural development in the EMM needs to be guided by the Local Economic Development (LED) Strategy and the GDS 2055 together with the IDP. To this end, the City is embarking on stringent measures of addressing this crucial sector in our economy. There will be a revision of specific policy guidelines and strategies that focus on agriculture and related activities within the EMM. The City's policies will focus on implementation, support mechanism, monitoring and evaluation and all other encompassing issues related to sustainable agro-processing. There would be a need for a programme implementation agreement (PIA) between the provincial Department of Agriculture, Conservation and Environment and Land Affairs (DACEL) and the EMM that specifies roles, responsibilities and expected contribution.

The EMM has an abundance of green and high yielding but unused portions of lands that must be utilised for agricultural development. This could bring direct benefit to the community on food security, development of emerging farmers and optimisation of land use.

To facilitate rapid progress in this regard, the City will be implementing the refurbishment of council owned farms where they will be operationalised for running incubation programmes for cooperatives and emerging farmers in the region, thus addressing the needs of the sector as well as local economic empowerment.

Strategy for Broad-Based Black Economic Empowerment

Broad-Based Black Economic Empowerment (BBBEE) is a growth strategy that has endeavoured to realise the country's full economic potential and the sustainability thereof. The objective of this BBBEE Strategy is to substantially increase the EMM's impact on bolstering black economic empowerment in the Region. The Strategy provides greater clarity on the implementation of BBBEE as provided for in Act 53 of 2003, the DTI Codes of Good Practice on BBBEE and transformation charters.

The BBBEE should give due regard to procurement guarantees and targets. Black businesses, SMME's, cooperatives and businesses of designated groups must as far as reasonably possible be given preference. The current challenge experienced with the strategy is the ever increasing test of compliance with the new BBBEE legislation by companies in the country.

OR Tambo Industrial Development Zone (IDZ)

The IDZ provides economic infrastructure necessary to attract industrial development and investment. While it provides for more job opportunities it also plays an important role in enhancing the Country's export competitiveness.

The Gauteng IDZ, commonly known as the OR Tambo Industrial Development Zone, is key to industrial development in Ekurhuleni as it promotes manufacturing of high value added products targeting the export markets. While the Department of Trade & Industry has the newly enacted SEZ Act No.16 of 2014, the current IDZ license also allows for industrial clustering away from the Airport to encourage provision of economic infrastructure and promote industrial agglomeration which is one of the City's Growth and Development Strategy 2055 (GDS 2055) to re-industrialise the City. The City has since adopted the Revitalization of the Manufacturing Sector Flagship Project which among other instruments the Gauteng IDZ is key to implement.

To date, the Gauteng IDZ is working on the development of the Jewellery Manufacturing Precinct (JMP) as phase one of the IDZ located at the OR Tambo International Airport. The project requires infrastructure development in the form of bulk and top structure.

The IDZ in collaboration with the City and the Department of Trade and Industry is working on phase two of the project, where a number of potential industrial clusters have been identified for development. These clusters include sectors such as plastics, rubber, pharmaceuticals and fuel cells.

The Inland Port Project is another form of economic infrastructure project that will enable movement of goods from one mode of transport to the other thus promoting industrial development and related activities in the Region, and neighbouring Cities and Provinces. The inland port will attract varied industries ranging from logistics, ICT, light industrial and real estate. The harbour will also link with the main highways leading to the OR Tambo International Airport thus making it minimalistic for local industries to export their products, especially the targeted light manufactured and high value added products supported by the IDZ.

The City is working jointly with Province, Transnet and the private land owners to facilitate the development of this inland port. In the current plans of development, the project also requires infrastructure development in the form of bulk, which is a municipal obligation and other forms such as the rail terminal.

Special Economic Zones (SEZ)

The Department of Trade and Industry has already shortlisted Special Economic Zones (SEZ) applications from all Nine Provinces to develop up to 10 SEZs. The transition period from the IDZ regime to the SEZ regime provides an opportunity for the current Gauteng IDZ license to have an SEZ status. The proposed Tambo Springs Inland Port project would enjoy the IDZ / SEZ status given the fact that the current Gauteng IDZ licence is not limited to activities at the Airport.

The following table provides a summary of major private investment projects where the City has partnered with the private sector in order to facilitate economic development, job creation and empowerment as discussed above.

Table E4.1: Major Private Investment Projects

MAJOR PRIVATE INVESTMENT PROJECTS		
Investment Project	Investor / Developer	Estimated Value of Investment
PRASA New Rolling Stock	Gibela Consortium / ALSTOM	R4.1 billion
Steel Mill Investment	Fortune Metaliks	R2.5 billion
Municipal solid waste to Energy	Enviroserv	R1.0 billion
Conveyor Belt Manufacturing	Oriental Rubber	R100 million
PET Bottle Recycling	Mpact	R330 million
Glass Expansion	Nampak	R400 million
Retail Mall	Investec	R300 million
Bus Depot and Head Office	Autopax (PRASA)	R350 million
Glass Manufacturing	JOEST	R200 million
Riverfields Mixed Use Development	Trans Act	R35.0 billion
O.R. Tambo International Airport (extension of western and midfield terminal)	ACSA	R3.5 billion
Badenhorst Estate Mixed Use Development	Badenhorst Family	R3.05 billion
Tambo Springs Inland Freight Port	Transnet	R52.4 billion
M&T Development Project	M& T Developments	R133.9 billion
Rhodesfield UDF	-	R11.3 billion
Glen Gory Development	-	R7.9 billion
Midstream Development	M& T Developments	R13.8 billion
Serengeti Development	African Kingdom Holdings	R10.7 billion
Reading Junction	-	-
Leeuwpoot Development	-	R9.0 billion
Lordsview Industrial Estate	-	R9.8 billion
Chief Albert Luthuli Mixed Use Development	-	R2.2 billion

E.5 PROJECT AND PROGRAMME VALUES PER SECTOR

The project and programme values per sector are reflected in the following table. Transport (17%), Energy (14%), Human Settlements (11%) and basic infrastructure such as Roads and Stormwater (13%) and Water and Sanitation (11%) comprise the highest sector values over the MTREF period. Some of the major projects constituting these values were discussed in D.2 above, and are also discussed in E.6 below.

Table E5.1: Project and Programme Values per Sector

Sector	Budget Year 2015 / 16	%	Budget Year 2016 / 17	%	Budget Year 2017 / 18	%	MTREF Total	%
Economic Development	76 000 000	2%	68 180 000	1%	26 940 000	1%	171 120 000	1%
Energy	529 760 000	12%	741 700 000	15%	721 700 000	14%	1 993 160 000	14%
Environmental Resources Management	149 080 000	3%	160 225 000	3%	168 200 000	3%	477 505 000	3%
Health & Social Development	104 300 000	2%	153 200 000	3%	175 120 000	3%	432 620 000	3%
Human Settlements	579 291 900	13%	608 759 535	12%	375 589 000	7%	1 563 640 435	11%
ICT	322 035 000	7%	308 717 700	6%	339 212 270	7%	969 964 970	7%
Real Estate	220 780 000	5%	210 120 000	4%	741 500 000	14%	1 172 400 000	8%
Roads and Stormwater	674 700 000	15%	635 400 000	13%	576 700 000	11%	1 886 800 000	13%
Sports, Recreation, Arts and Culture	193 400 000	4%	115 911 111	2%	114 500 000	2%	423 811 111	3%
Transport	729 243 621	16%	785 989 000	16%	1 008 844 000	19%	2 524 076 621	17%
Waste Management	117 980 000	3%	179 500 000	4%	185 000 000	4%	482 480 000	3%
Water & Sanitation	512 100 000	11%	508 000 000	10%	515 000 000	10%	1 535 100 000	11%
Other	262 892 906	6%	482 325 500	10%	234 140 000	5%	979 358 406	7%
Total	4 471 563 427	100%	4 958 027 846	100%	5 182 445 270	100%	14 612 036 543	100%

E.6a PROJECT AND PROGRAMME VALUES PER INTEGRATION ZONE

The breakdown of projects and programmes per Integration Zone is given in the table below. The table in section D.1 above shows the catalytic projects within each integration zone above and other related data. A detailed explanation of these catalytic projects follows next in section 6b.

Table E6.1: projects and programmes per Integration Zone

Integration Zone Number	Budget Year 2015 / 16	%	Budget Year 2016 / 17	%	Budget Year 2017 / 18	%	MTREF Total	%
1	474 263 310	11%	520 300 000	10%	497 190 000	10%	1 491 753 310	10%
2	299 486 806	7%	280 600 000	6%	232 400 000	4%	812 486 806	6%
3	1 028 938 777	23%	788 040 000	16%	1 209 500 000	23%	3 026 478 777	21%
4	411 544 307	9%	410 411 111	8%	307 400 000	6%	1 129 355 418	8%
5	505 371 265	11%	563 479 535	11%	311 920 000	6%	1 380 770 800	9%
-	1 751 958 962	39%	2 395 197 200	48%	2 624 035 270	51%	6 771 191 433	46%
Total	4 471 563 427	100%	4 958 027 846	100%	5 182 445 270	100%	14 612 036 545	100%

E.6b CATALYTIC PROJECT AND PROGRAMME VALUES PER NETWORK ELEMENT

Specific catalytic projects and programmes are being rolled out to support the growth and development of the City over the coming period. The following are the Catalytic, Strategic and Mega Housing Projects as identified by the EMM in terms of the BEPP process:

Eight Flagship Projects

1. Aerotropolis - Rhodesfield, Pomona
2. Revitalization of Township Economies - Tembisa Civic Centre Precinct
3. Revitalization of Manufacturing Sector
4. Digital City
5. IRPTN - IRPTN Phase 1A
6. Urban Regeneration – Germiston CBD / Kempton Park CBD
7. Strategic Land Parcels - Dries Niemandt
8. Beautification of Lakes and Dams - Germiston Lake, Boksburg Lake

Seven Strategic Urban Developments:

1. Leeuwpoot Housing Development
2. Badenhorst Estate
3. Tambo Springs Inland Port
4. Glen Gory
5. M&T Development Project
6. Riverfields Development
7. Prasa Gibela Project

Three Mega Housing Projects Clusters:

1. Northern Development Cluster – Clayville Ext 45, 71, Heartland / Esselen Park (Witfontein) / Esselen Park Ext 3 / Tembisa Ext 25
2. Eastern Development Cluster - John Dube 2 / Brakpan Old Location / Tskane Ext 22 / Chief Luthuli 6
3. Southern Development Cluster – Leeuwpoot / Germiston Urban Renewal housing / Zwartkoppies / Palmietfontein / Rietspruit/ Rietfontein / Palmridge 10 & 11

Each catalytic project falls within an Integration Zone, of which there are 5, together with related Network Elements. These details of each Integration Zone are summarised below.

- Integration Zone 1: Tembisa-Kempton Park
- Integration Zone 2: Vosloorus-Boksburg-Bartlett
- Integration Zone 3: Katlehong-Tokoza-Alberton-Germiston
- Integration Zone 4: Etwatwa-Daveyton-Benoni
- Integration Zone 5: Duduza-Tsakane-KwaThema-Boksburg

Table E6.2: Integration Zone 1: Tembisa-Kempton Park

Township Cluster	Network Element						
	CBD	Integration Zone	Primary Public Transport Link	Urban Hub	Secondary Node	Secondary Public Transport Link	Municipal Nodes
Tembisa Integration Zone 1	Aerotropolis Core	1 (Aerotropolis to Tembisa Civic Centre Node)	IRPTN route from Tembisa to OR Tambo Airport (Andrew Mapheto, Zuurfontein, CR Swart)	Tembisa CCC	Tembisa Station Node, Oakmoor Station Node, Winnie Mandela Node, Leralla Station Node, Swazi Inn Node	Andrew Mapheto, Sam Molele, DM Morakane, Pretoria Road, Brian Mazibuko, Nyarhi, George Nyanga, Maphanga, Koti, Letsiakarana, Rev RTJ Namane, Jabu Mdunge, Peter Nchabeleng, Olifantsfontein	Tembisa 1 CCC, Tembisa 2 CCC, Kenpton Park CCC

Table E6.3: Integration Zone 2 and 3: Vosloorus-Boksburg-Bartlett (2), and Katlehong-Tokoza-Alberton-Germiston (3)

Township Cluster	Network Element						
	CBD	Integration Zone	Primary Public Transport Link	Urban Hub	Secondary Node	Secondary Public Transport Link	Municipal Nodes
Katorus Integration Zones 2 and 3	Aerotropolis Core	2 (Vosloorus Urban Hub to Aerotropolis Core)	IRPTN route from Vosloorus to OR Tambo Airport (Barry Marais, Rondebult, Rietfontein, R21)	Vosloo-rus CCC	Chris Hani Crossing Shopping Centre, Naledi Shopping Centre, New Natalsprui8t Hospital	Vlakplaats, Bierman, Brickfield, Moagi, MNC Botha, Sam Sekoati, Leondale	Vosloorus CCC, Boksburg CCC
	Aerotropolis Core	3 (Katlehong CCC to Aerotropolis Core)	IRPTN route from Katlehong to Germiston via Alberton (Masakhane, Heidelberg, Ring Road, Kritzinger, Grey, Black Reef, Russel, Lake, Joubert, Meyer, Victoria, Johan Rissik, Shamrock,	Kwesini Node	Motse wa Lejani Shopping Centre Node, Pilot Station Node, Tokoza CCA Node, Admin Triangle	Hospital, Sontonga, Thutong, Masakhane, Khumalo, Tugela, Pongola	Katlehong 1 CCC, Katlehong 2 CCC, Tokoza CCC, Alberton CCC, Germiston CCC, Edenvale CCC

			AG De Witt, Edenvale)				
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Table E6.4: Integration Zone 4: Etwatwa-Daveyton-Benoni

Township Cluster	Network Element						
	CBD	Integration Zone	Primary Public Transport Link	Urban Hub	Secondary Node	Secondary Public Transport Link	Municipal Nodes
Daveyton/ Etwatwa Integration Zone 4	Aerotropolis Core	4 (Aerotropolis Core to Daveyton CCA Urban Hub)	IRPTN route from Etwatwa/ Daveyton to OR Tambo via Benoni (Main Reef, Princess, New Modder, Benoni, Great North, Kingsway, Brazil, Eiselen)	Daveyton CCC	Unisa Campus, Etwatwa CCC, Daveyton Mall	Kingsway, Heald, Dungeni, Eiselen, Mveve, Makambula	Etwatwa CCC, Daveyton CCC, Benoni CCC

Table E6.5: Integration Zone 5: Duduza-Tsakane-KwaThema-Boksburg

Township Cluster	Network Element						
	CBD	Integration Zone	Primary Public Transport Link	Urban Hub	Secondary Node	Secondary Public Transport Link	Municipal Nodes
Kwatsaduza Integration Zone 5	Aerotropolis Core	5 (Aerotropolis Core to Tsakane CCC)	IRPTN route from Duduza to OR Tambo Airport via Brakpan (Great Noerth, Range View, Heidelberg, New Kleinfontein, Prince George, Thema, Mgebe, Vlaktefontein, Spaarwater)	Tsakane CCC	Tsakane Mall, Duduza CCC, Ekhasa Shopping Centre, Kwa-Thema CCC	Twelve, Mgebe, Black, Ndabezitha, Mandela, Zulu, Xhosa, Siphumelela, Nala)	Duduza CCC, Tsakane CCC, Kwa-Thema CCC, Springs CCC, Brakpan CCC

The Integration Zone numbers, GPAs, funding sources and MTREF allocations are summarised in the following tables.

Table E6.6: Flagship Catalytic Projects

No.	Project Name	Main Funding Source	Main CIF Category	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF TOTAL	Integration Zone number	Integration Zone name / cluster	GPA
Flagship Catalytic Projects										
1	Aerotropolis: Rhodesfield, Pomona	External Loans	Economic Development	90 700 000	112 400 000	115 000 000	318 100 000	1	Tembisa	1
2	Revitalization of Township Economies	Revenue & External Loans	Economic Development	64 000 000	41 500 000	22 000 000	127 500 000	1,2,3,4,5	all	1,2,3
3	Revitalization of the Manufacturing Sector	Revenue & External Loans	Economic Development	4 000 000	7 000 000	2 000 000	13 000 000	5	Kwatsaduza	2
4	Digital City	Revenue	Upgrading & Renewal; Economic Development	239 348 000	246 252 000	282 000 000	767 600 000	1,2,3,4,5	all	1,2,3
5	IRPTN	PTNG & USDG	Economic Development	568 343 621	684 389 000	836 544 000	2 089 276 621	1,2,3,4,5	all	1,2,3
6a	Urban Regeneration - Kempton Park CBD	Revenue, External Loans & CRR	Economic Development; Urban Restructuring	66 280 000	76 200 000	70 200 000	212 680 000	1	Tembisa	1
6b	Urban Regeneration - Germiston CBD	Revenue, HSDG, External Loans & CRR	Economic Development; Urban Restructuring	323 229 000	285 200 000	756 000 000	1 364 429 000	3	Katorus	2,3
7	Revenue Enhancement	USDG & CRR	Economic Development	56 000 000	104 000 000	104 000 000	264 000 000	1,2,3,4,5	all	1,2,3
8	Beautification of Lakes and Dams - Germiston Lake, Boksburg Lake	Revenue & External Loans	Upgrading & Renewal	5 000 000	3 500 000	3 500 000	12 000 000	2,3	Katorus	2,3
9a	Urban Renewal - Tembisa	NDPG	Urban Restructuring	20 000 000	60 000 000	53 390 000	133 390 000	1	Tembisa	1
9b	Urban Renewal - Katorus	USDG	Urban Restructuring	5 500 000	17 000 000	17 000 000	39 500 000	3	Katorus	2,3
9c	Urban Renewal - Wattville-Actonville	USDG	Urban Restructuring	10 000 000	17 000 000	17 000 000	44 000 000	4	Daveyton / Etwatwa	3
				1 452 400 621	1 654 441 000	2 278 634 000	5 385 475 621			

Table E6.7: Strategic Urban Development Catalytic Projects

No.	Project Name	Main Funding Source	Main CIF Category	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF TOTAL	Integration Zone number	Integration Zone name / cluster	GPA
Strategic Urban Development Catalytic Projects										
1	Leeuwpoot	USDG & Private inv.	Urban Restructuring	77 326 806	120 000 000	100 000 000	297 326 806	2	Katorus	2,3
2	Badenhorst Estate Mixed Use Development	Private investment	Urban Restructuring	-	-	-	-	2,4	Katorus; Daveyton / Etwatwa	2,3
3	Tambo Springs Inland Freight Port	Private investment	Economic Development	-	-	-	-	1,5	Tembisa; Kwatsaduza	1,2
4	Glen Gory	USDG & Private inv.	Economic Development	-	204 000 000	-	204 000 000	4	Daveyton / Etwatwa	3
5	M & T Developments Project	Private investment	Urban Restructuring	-	-	-	-	1	Tembisa	1
6	Riverfields Mixed Use Development	Private investment	Urban Restructuring	-	-	-	-	1	Tembisa	1
7	PRASA New Rolling Stock (Prasa Gibela Project)	Private investment	Economic Development	-	-	-	-	5	Kwatsaduza	2
				77 326 806	324 000 000	100 000 000	501 326 806			

Table E6.8: Catalytic Housing Project Clusters

No.	Project Name	Main Funding Source	Main CIF Category	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF TOTAL	Integration Zone number	Integration Zone name / cluster	GPA
Catalytic Housing Project Clusters										
1	Northern Development Cluster (Clayville Ext 45, 71, Heartland / Esselen Park (Witfontein) / Esselen Park Ext 3 / Tembisa Ext 25)	USDG; External Loans	Urban Restructuring	133 578 310	213 200 000	197 600 000	544 378 310	1	Tembisa	1
2	Eastern Development Cluster (John Dube 2 / Brakpan Old Location / Tsakane Ext 22 / Chief Luthuli 6)	USDG; External Loans	Urban Restructuring	112 055 200	76 800 000	90 900 000	279 755 200	5	Kwatsaduza	2
3	Southern Development Cluster (Leeuwpoort / Germiston Urban Renewal housing / Zwartkoppies / Palmietfontein / Rietspruit / Rietfontein / Palm Ridge 10 & 11)	USDG; External Loans	Urban Restructuring	252 796 706	258 000 000	237 000 000	747 796 706	2,3	Katorus	2,3
				498 430 216	548 000 000	525 500 000	1 571 930 216			

Below is an explanation of what each flagship seeks to achieve in the context of Ekurhuleni's broader growth and development objectives.

Catalytic Urban Development Projects

E.6b.1 Flagship Catalytic Projects

1. Aerotropolis

Fields	Information	
1	Name and description of programme:	Flagship project- Aerotropolis
2	Name and description of project:	The Ekurhuleni Aerotropolis Project seeks to explore interventions that leverage the economic benefits of having the busiest airport on the African continent, the OR Tambo International Airport. The Aerotropolis Master Plan is currently under development to provide clear proposals to improve the City of Ekurhuleni's economic competitiveness, diversify its economy, and drive positive development throughout the province. The anchor points of the master plan are to be used as a tool that can be used as a government intervention to proactively improve the status quo, underpin the GCR concept, and lead to significant further economic development and job creation. The plan will take into account existing initiatives and studies conducted, give priority to the consideration of logistic hubs, key freight and logistics nodes and corridors, and consider a financial model to finance the various stages of development of the Aerotropolis. An operational task team has been set up to co-ordinate planning between the EMM and the GPG.
3	Location of project:	Rhodesfield, Pomona
4	Type of project:	Flagship Catalytic
5	Funding source:	See below
6	MTREF allocations 2015/16:	See below
7	MTREF allocations 2016/17:	See below
8	MTREF allocations 2017/18:	See below

11	Current status	The five-year Master Plan has been developed and is being circulated for consultation. Packaging of projects for implementation has been completed
12	Completion date	5 Year Strategic Plan 25 Year Strategic Implementation Plan

Aerotropolis: Rhodesfield, Pomona

Department / Sector	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
Roads and Stormwater	Aerotropolis: Rhodesfield road network	External Loans	Economic Development	Kempton Park	17	7 000 000	20 000 000	30 000 000	57 000 000
Water & Sanitation	Pomona: Bulk supply Albertina Sisulu Corridor	External Loans	Economic Development	Kempton Park	100	27 000 000	27 000 000	20 000 000	74 000 000
Water & Sanitation	Pomona: New Eastern OF sewer	External Loans	Economic Development	Kempton Park	100	34 000 000	30 000 000	30 000 000	94 000 000
Disaster & Emergency Management Services	Const Fire Station/House Albertina Sisulu Corridor	External Loans	Urban Restructuring	Kempton Park	15	2 000 000	12 400 000	15 000 000	29 400 000
Roads and Stormwater	Extension of Albertina Sisulu Expressway	External Loans	Upgrading and Renewal	Kempton Park	23,100	6 900 000	10 000 000	10 000 000	26 900 000
Roads and Stormwater	Pomona Roads (including Brentwood Park)	External Loans	Upgrading and Renewal	Benoni	100,23	6 000 000	6 000 000	6 000 000	18 000 000
Roads and Stormwater	Pomona Stormwater System	External Loans	Upgrading and Renewal	Boksburg	23	7 000 000	7 000 000	4 000 000	18 000 000
Roads and Stormwater	Stormwater Upgrades: NorthSW along De Havilland (ACSA): Planning	External Loans	Upgrading and Renewal	Boksburg	23	300 000	-	-	300 000
Roads and Stormwater	Rehabilitation of Roads (North) Mimosa Road (Pomona)	External Loans	Upgrading and Renewal	Kempton Park	23, 100	500 000	-	-	500 000
						90 700 000	112 400 000	115 000 000	318 100 000

2. Revitalization of Township Economies

Fields	Information	
1	Name and description of programme:	Revitalization of Township Economies
2	Name and description of project:	Tembisa Civic Centre Precinct

		<p>The township regeneration programme entails the transformation of five EMM township complexes into prosperous, compact, sustainable and better managed urban centres with vibrant economies, better transport linkages, well managed public spaces and infrastructure, with the goal of redeveloping EMM townships into great places to live, work and play.</p> <p>Economic, transport and housing have been identified as catalytic sectors to drive the regeneration of townships. Targeted investment in public spaces, public infrastructure and public buildings is prioritised to boost private investor confidence. The primary focus of the transport sector is on the provision of new and the improvement of the existing public transport network and promotion of NMT, including pedestrianisation of selected high-activity nodes and corridors. A combination of attracting external investment and supporting local entrepreneurs, particularly in the SMME and co-operatives sector, is at the centre of the economic strategy.</p>
3	Location of project:	Tembisa
4	Type of project:	Flagship Catalytic
5	Funding source:	See below
6	MTREF allocations 2015/16:	See below
7	MTREF allocations 2016/17:	See below
8	MTREF allocations 2017/18:	See below
9	Current status	<p>Phase 1 of the upgrading of the Sam Molele – George Nyanga Corridor link construction began, street furniture and street lighting added. Other projects under TURP are still in conception.</p> <p>Projects in the following areas:</p> <p>Kempton Park, Watville-Actonville, Vosloorus-Katlehong, Dukathole/Goodhope and other municipal nodes are currently in the Preplanning / Concept phase</p> <p>2 Youth Fabrication laboratories completed in Tokoza and Tembisa, a third fabrication lab is under</p>

		construction in Tsakane. Strategy for five complexes/nodes completed, which includes economic and spatial analysis. Finalizing key projects for each complex/node. The department currently developing business plans for application to Neighborhood Development Grant Program
10	Completion date	Phase 1 Sam Molele/George Nyanga - August 2015

Revitalization of Township Economies

Department / Sector	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
EMPD	Const Tembisa Precinct	External Loans	Urban Restructuring	Tembisa 1	6	8 000 000	8 000 000	-	16 000 000
Economic Development	Township Economies Development	Revenue	Economic Development	Brakpan	All wards	15 000 000	15 000 000	15 000 000	45 000 000
Economic Development	Township Enterprise Hubs	Revenue	Economic Development	Corporate	All wards	22 000 000	10 500 000	-	32 500 000
Environmental Resources Management	Re-generate - 9 Township entrances beautified and branded	Revenue	Upgrading and Renewal	Corporate	All wards	8 000 000	-	-	8 000 000
Economic Development	Trading Stalls	Revenue	Economic Development	Corporate	All wards	6 000 000	-	-	6 000 000
Roads and Stormwater	Township Develop:Ext Services ex Contributions	Revenue	Economic Development	Corporate	Multi Wards	1 500 000	1 000 000	1 000 000	3 500 000
Roads and Stormwater	Contribution Township Development	External Loans	Upgrading and Renewal	Corporate	Multi Wards	500 000	1 000 000	1 000 000	2 500 000
Roads and Stormwater	Township Develop:Ext Services (North)	External Loans	Upgrading and Renewal	Kempton Park	Multi Wards	3 000 000	6 000 000	5 000 000	14 000 000
						64 000 000	41 500 000	22 000 000	127 500 000

3. Revitalization of Manufacturing Sector

Fields	Information	
1	Name and description of programme:	Revitalization of Manufacturing Sector
2	Name and description of project:	Revitalisation of the manufacturing sector is a programme aimed at leveraging on the existing industrial capabilities to stimulate industrial activities, efficiencies and competitiveness. Thirteen pillar programmes have been identified to implement this flagship, such as Industrial Situational Analysis and Competitiveness Index (Pillar 1), Industrial Planning and Strategy (Pillar 2), Industrial Sector Clustering and Development

		(Pillar 3), Investment and Development Facilitation (Pillar 4), Technical Skills Development and Industrial Incubation (Pillar 7) etc.
3	Type of project:	Flagship Catalytic
4	Funding source:	See below
5	MTREF allocations 2015/16:	See below
6	MTREF allocations 2016/17:	See below
7	MTREF allocations 2017/18:	See below
8	Current status	<p>EMM Business Facilitation Network was launched, which is a modern business-like facility built to house core investment and economic activities by providing coordinated business support.</p> <p>Industrial Situational Analysis and Competitiveness completed.</p> <p>Industrial Planning and Strategy - Consultants were appointed and have commenced work on the strategy.</p>
9	Completion date	10 year Industrial Development and Upgrade, Productivity Improvement and Competitiveness Programme

Revitalization of the Manufacturing Sector

Department / Sector	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
Economic Development	Ekurhuleni Industrial Park	External Loans	Economic Development	Brakpan	All wards	2 000 000	5 000 000	-	7 000 000
Environmental Resources Management	Rehabilitation of the Natalspruit Catchment: Withok Estate	Revenue	Urban Restructuring	Tsakane	99	2 000 000	2 000 000	2 000 000	6 000 000
						4 000 000	7 000 000	2 000 000	13 000 000

4. Digital City

Fields	Information	
1	Name and description of programme:	Digital City

2	Name and description of project:	<p>The goal of the Digital City strategy is increased broadband coverage, which will be supported by:</p> <ul style="list-style-type: none"> • Creating a fibre and wireless network throughout Ekurhuleni to create a connected city; • Creating Internet zones for the public to encourage economic development, especially in historically disadvantaged areas; • Connecting all the EMM buildings and as such increasing efficiency; • Installing video conferencing in boardrooms and meeting rooms to increase efficiency and reduce travelling time; and • Installing application functionality to have an increased engagement with the citizens by means of easy-to-use and advanced technology. These include SMS's, smart phone, website and other electronic communication means.
3	Location of project:	Entire metro
4	Type of project:	Flagship Catalytic
5	Funding source:	See below
6	MTREF allocations 2015/16:	See below
7	MTREF allocations 2016/17:	See below
8	MTREF allocations 2017/18:	See below
9	Current status	The roll-out of Wi-Fi hotspots and video conferencing has commenced. About 250 Wi-Fi hotspots have been rolled out, and 11 boardrooms are targeted to have video conferencing at the end of this financial year.
10	Completion date	June 2017

Digital City

Department / Sector	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
ICT	ERP Phase 1	Revenue	Upgrading and Renewal	Corporate	All wards	100 000 000	100 000 000	120 000 000	320 000 000
ICT	Digital City Services / Services Intergrator (Wi-Fi)	Revenue	Upgrading and Renewal	Corporate	All wards	39 348 000	31 252 000	32 000 000	102 600 000
ICT	DCS: Broadband Fibre	Revenue	Upgrading and Renewal	Corporate	All wards	50 000 000	50 000 000	60 000 000	160 000 000
ICT	Enterprise Architecture/ Business process management including Document and Records Management	Revenue	Upgrading and Renewal	Corporate	All wards	30 000 000	40 000 000	45 000 000	115 000 000
ICT	Security for ICT Infrastructure	Revenue	Upgrading and Renewal	Corporate	All wards	20 000 000	25 000 000	25 000 000	70 000 000
						239 348 000	246 252 000	282 000 000	767 600 000

5. IRPTN

Fields	Information	
1	Name and description of programme:	IRPTN
2	Name and description of project:	<p>IRPTN Phase 1A</p> <p>The main objective of the IRPTN is to provide a new and attractive integrated public transport network that includes public road and rail transport services that serve the people of Ekurhuleni as a whole. From a public transport point of view, the IRPTN is the most significant intervention to improve and promote the use of public transport in Ekurhuleni and responds to EMM's transport vision of providing accessible, affordable and integrated transport services that are competitively priced while adhering to global standards. The IRPTN has three main strategic objectives:</p> <ul style="list-style-type: none"> • The provision of an affordable and accessible public transport system; • The integration of both motorised public transport and non-motorised transport (NMT), including rail, bus and taxi;

		<ul style="list-style-type: none"> The transformation/enabling of existing bus and taxi operators in Ekurhuleni to participate in the development of and operation of the new vehicle operating company/ies (VOCs). <p>The IRPTN will be implemented incrementally along priority corridors, according to strategic priorities, available budget and operational viability of the system. The first phase is to implement the BRT along the corridor from Tembisa to Vosloorus. This has been broken down into three sub-phases, viz. Phase 1A, Phase 1B and Phase 1C. It is intended that the 18 km trunk route along Phase 1A is to be operationalised in 2016, together with express (limited stop) complementary routes that run from the airport through Boksburg to Vosloorus.</p>
3	Location of project:	See above
4	Type of project:	Flagship Catalytic
5	Funding source:	See below
6	MTREF allocations 2015/16:	See below
7	MTREF allocations 2016/17:	See below
8	MTREF allocations 2017/18:	See below
9	Current status	Trunk route contractors have issued with the second works order. The tenders for the Automatic Fare Collection as well as the PT Managements system have been advertised
10	Completion date	June 2016 – Project operational date , Phase 1A

IRPTN

Department / Sector	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
Transport	Integrated Rapid Public Transport Network(IRPTN)	USDG	Economic Development	Multi CCA	2--18; 22; 23; 28; 29;31; 32; 43-47; 89-92; 95;99	259 047 621	280 000 000	300 000 000	839 047 621
Transport	Integrated Rapid Public Transport Network(IRPTN)	PTNG	Economic Development	Multi CCA	2--18; 22; 23; 28; 29;31; 32; 43-47; 89-92; 95;99	309 296 000	404 389 000	536 544 000	1 250 229 000
						568 343 621	684 389 000	836 544 000	2 089 276 621

6. Urban Regeneration

Fields	Information	
1	Name and description of programme:	Urban Regeneration
2	Name and description of project:	<p>Germiston CBD</p> <p>The inner city renewal programme entails transformation of nine existing EMM towns into prosperous, compact, sustainable and better managed urban centres with better transport links that are great places to live, work and play. In the short- to medium-term EMM will be focusing its interventions on Kempton Park and Germiston Central Activity / Living Areas. These primary urban renewal areas give EMM its identity and urban structure as a city with dual city centres that complement each other - Kempton Park's role is seen as a cultural and economic hub of the metro anchored by the Aerotropolis, and Germiston as the administrative headquarters of EMM. The long-term vision of the programme is to redevelop all EMM towns into Central Living Districts (CLDs), where there is an intensification of residential land uses to complement the economic uses that prevail currently and to ensure that all the towns are green, clean and safe.</p>
3	Location of project:	Germiston CBD
4	Type of project:	Flagship Catalytic
5	Funding source:	See below
6	MTREF allocations 2015/16:	See below

7	MTREF allocations 2016/17:	See below
8	MTREF allocations 2017/18:	See below
9	Current status	Contractors appointed and on site on the following projects: The new Germiston Fire Station and the Civic Theatre. Other projects under GURP are still in conception.
10	Completion date	Overall Urban Regeneration – 2030 GURP: <ul style="list-style-type: none">• Fire station -November 2016• Civic Theatre – July 2016

Urban Regeneration - Germiston CBD

Department / Sector	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
Real Estate	Construction of Civic Tower	External Loans	Urban Restructuring	Germiston	36	10 000 000	50 000 000	525 000 000	585 000 000
Transport	Construction of Intermodal facilities: Upgrading Germiston Station Taxi Rank	Revenue	Upgrading and Renewal	Germiston	93	40 000 000	40 000 000	30 000 000	110 000 000
Real Estate	Germiston Civic Precinct	External Loans	Upgrading and Renewal	Germiston	36	50 000 000	30 000 000	30 000 000	110 000 000
Human Settlements	Germiston Fire Station Social Housing Project- Buildings	USDG	Urban Restructuring	Germiston	36	20 000 000	30 000 000	40 000 000	90 000 000
Human Settlements	Delville Social Housing Development	USDG	Urban Restructuring	Germiston	36	10 000 000	30 000 000	40 000 000	80 000 000
Human Settlements	Germiston South Social Housing Development	USDG	Urban Restructuring	Germiston	35	25 000 000	27 000 000	27 000 000	79 000 000
Energy	Germiston North Substation	CRR	Economic Development	Germiston	93	10 000 000	25 000 000	25 000 000	60 000 000
Energy	Germiston Network enhancement	External Loans	Upgrading and Renewal	Germiston	21, 35, 36, 39, 41	10 000 000	15 000 000	15 000 000	40 000 000
SRAC	Germiston Theatre	External Loans	Upgrading and Renewal	Germiston	36	35 000 000	-	-	35 000 000
Water & Sanitation	Germiston: Upgrade and replace Dekema outfall sewer	External Loans	Upgrading and Renewal	Germiston	Multi Wards	10 000 000	10 000 000	10 000 000	30 000 000
Energy	Germiston Revenue enhancement	CRR	Economic Development	Germiston	21, 35, 36, 39, 41	6 000 000	10 000 000	10 000 000	26 000 000
Disaster & Emergency Management Services	Const Fire Station/House Germiston Central	External Loans	Urban Restructuring	Germiston	36	15 000 000	9 000 000	-	24 000 000
Human Settlements	Germiston South Social Housing Development	HSDG	Urban Restructuring	Germiston	37	16 852 000	-	-	16 852 000
Human Settlements	Delville Social Housing Development	HSDG	Urban Restructuring	Germiston	37	12 227 000	-	-	12 227 000
Water & Sanitation	Germiston: Elsburg outfall sewer (H385) (P 2&3) C/F	External Loans	Upgrading and Renewal	Germiston	Multi Wards	9 000 000	5 000 000	-	14 000 000
Waste Management	Facilities, Upgrade and construction of facilities: Germiston	CRR	Upgrading and Renewal	Germiston	36	10 000 000	-	-	10 000 000
Energy	Solar Rooftop - Germiston	External Loans	Urban Restructuring	Germiston	93	7 300 000	-	-	7 300 000
Roads and Stormwater	Provide Paving on erf 295 West Germiston for parking purposes	External Loans	Upgrading and Renewal	Germiston	36	4 200 000	-	-	4 200 000
Real Estate	Refurbishment of Lettable Facilities - Germiston lake, Ablusions	External Loans	Upgrading and Renewal	Germiston	36	4 000 000	-	-	4 000 000
Energy	Germiston Lighting	Revenue	Urban Restructuring	Germiston	21, 35, 36, 39, 41	1 000 000	1 000 000	1 000 000	3 000 000
Disaster & Emergency Management Services	Restoration of Germiston Fire Station	Revenue	Upgrading and Renewal	Germiston	36	1 000 000	2 000 000	-	3 000 000
Roads and Stormwater	Minor Extensions to Stormwater Germiston	External Loans	Upgrading and Renewal	Germiston	36,35,39,41,93	600 000	1 000 000	1 000 000	2 600 000
Transport	Drive Thru Germiston	Revenue	Urban Restructuring	Germiston	36	-	-	2 000 000	2 000 000
Water & Sanitation	BMC GERMISTON: WADEVILLE	CRR	Economic Development	Germiston	35	2 000 000	-	-	2 000 000
Water & Sanitation	BMC GERMISTON: WADEVILLE	CRR	Economic Development	Germiston	36	2 000 000	-	-	2 000 000
Water & Sanitation	BMC GERMISTON: WADEVILLE	CRR	Economic Development	Alberton	39	2 000 000	-	-	2 000 000
Water & Sanitation	BMC GERMISTON: WADEVILLE	CRR	Economic Development	Germiston	40	2 000 000	-	-	2 000 000
Water & Sanitation	GERMISTON BVD WAT NET UPG	CRR	Economic Development	Germiston	36	2 000 000	-	-	2 000 000
Water & Sanitation	GERMISTON BVD WAT NET UPG	CRR	Economic Development	Germiston	93	2 000 000	-	-	2 000 000
Water & Sanitation	Germiston Depot	External Loans	Urban Restructuring	Germiston	21,34,35,22	1 500 000	-	-	1 500 000
Water & Sanitation	Germiston Depot	External Loans	Upgrading and Renewal	Germiston	36	1 325 000	-	-	1 325 000
Waste Management	Supply of recycling bins Germiston	Revenue	Upgrading and Renewal	Germiston	17,35	1 125 000	-	-	1 125 000
Environmental Resources Management	Development of Town Entrances Germiston	Revenue	Upgrading and Renewal	Germiston	17	100 000	200 000	-	300 000
						323 229 000	285 200 000	756 000 000	1 364 429 000

Fields	Information	
1	Name and description of programme:	Urban Regeneration
2	Name and description of project:	<p>Kempton Park CBD</p> <p>The inner city renewal programme entails transformation of nine existing EMM towns into prosperous, compact, sustainable and better managed urban centres with better transport links that are great places to live, work and play. In the short- to medium-term EMM will be focusing its interventions on Kempton Park and Germiston Central Activity / Living Areas. These primary urban renewal areas give EMM its identity and urban structure as a city with dual city centres that complement each other - Kempton Park's role is seen as a cultural and economic hub of the metro anchored by the Aerotropolis, and Germiston as the administrative headquarters of EMM. The long-term vision of the programme is to redevelop all EMM towns into Central Living Districts (CLDs), where there is an intensification of residential land uses to complement the economic uses that prevail currently and to ensure that all the towns are green, clean and safe.</p>
3	Location of project:	Kempton Park CBD
4	Type of project:	Flagship Catalytic
5	Funding source:	See below
6	MTREF allocations 2015/16:	See below
7	MTREF allocations 2016/17:	See below
8	MTREF allocations 2017/18:	See below

Urban Regeneration - Kempton Park CBD

Department / Sector	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
Real Estate	Densification of Council Buildings Kempton Park	CRR	Upgrading and Renewal	Kempton Park	16	20 000 000	20 000 000	20 000 000	60 000 000
Health & Social Development	EXT & UPGRADE KEMPTON PARK CLINIC	Revenue	Upgrading and Renewal	Kempton Park	16	-	15 000 000	18 000 000	33 000 000
Energy	Kempton Park Network enhancement	External Loans	Upgrading and Renewal	Kempton Park	13, 15, 16, 17, 23, 25	9 000 000	12 000 000	12 000 000	33 000 000
EMPD	Const Kempton Park Precinct	Revenue	Urban Restructuring	Kempton Park	16	9 000 000	10 000 000	-	19 000 000
Energy	Kempton Park Revenue enhancement	CRR	Economic Development	Kempton Park	13, 15, 16, 17, 23, 25	4 000 000	7 200 000	7 200 000	18 400 000
Energy	Solar Rooftop - Kemptonpark	External Loans	Urban Restructuring	Kempton Park	16	-	8 000 000	8 000 000	16 000 000
Waste Management	Facilities, Upgrade and construction of facilities: Kempton Park	CRR	Upgrading and Renewal	Kempton Park	16	9 100 000	-	-	9 100 000
Roads and Stormwater	Swartsspruit Rehabilitation: Kempton Park	External Loans	Upgrading and Renewal	Kempton Park	16,17	2 000 000	2 000 000	2 000 000	6 000 000
Energy	Kempton Park Lighting	Revenue	Urban Restructuring	Kempton Park	13, 15, 16, 17, 23, 25	1 000 000	1 000 000	1 000 000	3 000 000
Transport	Establishment of new MVRA and Transport Offices Kempton Park	Revenue	Urban Restructuring	Kempton Park	26	-	-	2 000 000	2 000 000
Water & Sanitation	BULK MET CONS KEMPTON PARK	CRR	Economic Development	Kempton Park	13	2 000 000	-	-	2 000 000
Water & Sanitation	BULK MET CONS KEMPTON PARK	CRR	Economic Development	Kempton Park	17	2 000 000	-	-	2 000 000
Water & Sanitation	BULK MET CONS KEMPTON PARK	CRR	Economic Development	Tembisa 2	1	2 000 000	-	-	2 000 000
Water & Sanitation	BULK MET CONS KEMPTON PARK	CRR	Economic Development	Tembisa 2	2	2 000 000	-	-	2 000 000
Disaster & Emergency Management Services	Upgrading of Kemptonpark Fire Station	Revenue	Upgrading and Renewal	Kempton Park	17	800 000	1 000 000	-	1 800 000
Water & Sanitation	Kempton Park Depot	External Loans	Urban Restructuring	Kempton Park	Multi Wards	1 500 000	-	-	1 500 000
Water & Sanitation	Kempton Park Depot	External Loans	Upgrading and Renewal	Kempton Park	17	1 050 000	-	-	1 050 000
SRAC	Kempton Park indoor sport	Revenue	Upgrading and Renewal	Kempton Park	15	600 000	-	-	600 000
Environmental Resources Management	Development of Town Entrances Kempton Park	Revenue	Upgrading and Renewal	Kempton Park	16	200 000	-	-	200 000
Roads and Stormwater	Traffic Calming (North)Kempton Primary School, Kempton Park	Revenue	Upgrading and Renewal	Kempton Park	16	30 000	-	-	30 000
						66 280 000	76 200 000	70 200 000	212 680 000

7. Revenue Management and Enhancement

Fields	Information
1	Name and description of programme: Revenue Enhancement

		The programme has identified key business themes which serve as strategic objectives that are aimed at driving and supporting the revenue management and enhancement programme. These business themes include reduction of consumer debt through appropriate credit control and debt collection to improve revenue, improved, consistent and accurate / integrative property value chain, improved customer services, monitoring and evaluation of consumption processes and efficiencies, and revenue collection.
2	Name and description of project:	<p>The flagship has the following projects under it:</p> <ol style="list-style-type: none"> 1. Key accounts 2. e-Siyakhokha 3. Indigent management programme 4. Restructuring of the debtor's book 5. Siyakhokha Siyathuthuka
3	Type of project:	Flagship Catalytic
4	Funding source:	See below
5	MTREF allocations 2015/16:	See below
6	MTREF allocations 2016/17:	See below
7	MTREF allocations 2017/18:	See below
8	Current status	Siyakhokha Siyathuthuka campaigns have been successfully launched to improve or encourage the payment culture. E-Siyakhokha (an electronic payment portal) has over 200,000 registered customers who view and pay for the services on line. Created awareness of EMM Indigent Management Program throughout deserving communities.
9	Completion date	December 2015

Revenue Enhancement

Department	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s in which project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF TOTAL
Energy	Kwa-Thema Revenue enhancement	USDG	Economic Development	Kwa Thema	77, 78, 79, 80, 81	4 000 000	10 000 000	10 000 000	24 000 000
Energy	Thokoza Revenue enhancement	USDG	Upgrading and Renewal	Thokoza	52, 54, 56, 57, 58	4 000 000	7 200 000	7 200 000	18 400 000
Energy	Vosloorus Revenue enhancement	USDG	Economic Development	Vosloorus	43, 44, 45, 46, 47, 64	2 000 000	3 000 000	3 000 000	8 000 000
Energy	Tembisa 2 Revenue enhancement	USDG	Economic Development	Tembisa 2	1, 2, 3, 4, 7	4 000 000	7 200 000	7 200 000	18 400 000
Energy	Tembisa Revenue enhancement	USDG	Economic Development	Tembisa 1	5, 6, 7, 8, 9, 10, 14	4 000 000	7 200 000	7 200 000	18 400 000
Energy	Germiston Revenue enhancement	CRR	Economic Development	Germiston	21, 35, 36, 39, 41	6 000 000	10 000 000	10 000 000	26 000 000
Energy	Nigel Revenue enhancement	CRR	Economic Development	Nigel	88	4 000 000	8 100 000	8 100 000	20 200 000
Energy	Springs Revenue enhancement	CRR	Economic Development	Springs	72, 75, 76	4 000 000	8 100 000	8 100 000	20 200 000
Energy	Alberton Revenue enhancement	CRR	Economic Development	Alberton	37, 38, 53	4 000 000	7 200 000	7 200 000	18 400 000
Energy	Benoni Revenue enhancement	CRR	Economic Development	Benoni	24, 27, 28, 29, 30	4 000 000	7 200 000	7 200 000	18 400 000
Energy	Boksburg Revenue enhancement	CRR	Economic Development	Boksburg	22, 32, 33, 34, 42	4 000 000	7 200 000	7 200 000	18 400 000
Energy	Brakpan Revenue enhancement	CRR	Economic Development	Brakpan	31, 73, 74	4 000 000	7 200 000	7 200 000	18 400 000
Energy	Edenvale Revenue enhancement	CRR	Economic Development	Edenvale	11, 12, 18, 19, 20	4 000 000	7 200 000	7 200 000	18 400 000
Energy	Kempton Park Revenue enhancement	CRR	Economic Development	Kempton Park	13, 15, 16, 17, 23, 25	4 000 000	7 200 000	7 200 000	18 400 000
						56 000 000	104 000 000	104 000 000	264 000 000

8. Beautification of Lakes and Dams

Fields	Information	
1	Name and description of programme:	Beautification of Lakes and Dams
2	Name and description of project:	Germiston Lake, Boksburg Lake This project has been initiated in order to improve the image of the city and make it more aesthetically pleasing. This has the potential to increase investor interest in the city, while the beautification of the lakes and dams will contribute to an increase in tourism.
3	Location of project:	Germiston; Boksburg
4	Type of project:	Flagship Catalytic
5	Funding source:	See below
6	MTREF allocations 2015/16:	See below
7	MTREF allocations 2016/17:	See below
8	MTREF allocations 2017/18:	See below
9	Current status	Upgrading of Lakes/dams areas completed <ul style="list-style-type: none"> • Germiston Lake – Phase 1 completed & Additional ablution facilities still to be constructed. • Murray Park – Phase 1 • Boksburg Lake – Work Commenced Rehabilitation of the water bodies completed: <ul style="list-style-type: none"> • Kaalspruit wetland in Tembisa • Natalspruit in Tembelisha Master plan for the management of all water bodies in EMM under development.
10	Completion date	• Germiston Lake ablution block June 2015

		*Other projects within Flagship subject to budget allocation and commencement.
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Beautification of Lakes and Dams - Germiston Lake, Boksburg Lake

Department / Sector	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
Environmental Resources Management	Rehabilitation of the Boksburg lake	Revenue	Upgrading and Renewal	Boksburg	22	1 000 000	3 500 000	3 500 000	8 000 000
Real Estate	Refurbishment of Lettable Facilities - Germiston lake, Ablusions	External Loans	Upgrading and Renewal	Germiston	36	4 000 000	-	-	4 000 000
						5 000 000	3 500 000	3 500 000	12 000 000

Urban Renewal
Urban Renewal - Tembisa

Department / Sector	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
Human Settlements	Tembisa Urban Renewal Framework Projects	NDPG	Urban Restructuring	Tembisa 1	Multi Wards	20 000 000	60 000 000	53 390 000	133 390 000

Urban Renewal - Katorus

Department / Sector	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
Human Settlements	Katorus Urban Renewal Project	USDG	Urban Restructuring	Katlehong 1	Multi Wards	5 500 000	17 000 000	17 000 000	39 500 000

Urban Renewal - Wattville-Actonville

Department / Sector	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
Human Settlements	Wattville-Actonville Urban Renewal Project	USDG	Urban Restructuring	Benoni	Multi Wards	10 000 000	17 000 000	17 000 000	44 000 000

E.6b.2 Strategic Urban Development Catalytic Projects

1. Leeuwpoot Housing Development

Fields	Information	
1	Name and description of programme:	Leeuwpoot Housing Development
2	Name and description of project:	Residential, mixed use business area consisting of government and commercial offices, retail, residential units and commercial and warehouses as well as civic facilities.
3	Location of project:	The proposed development is located on the Remaining Extent of the farm Leeuwpoot No.113-IR, Portion 51 Leeuwpoot 113 I.R. and the Remainder of portion 4 and 13 of Klippootjie 112 IR.
4	Type of project:	Strategic Urban Development
5	Units and progress:	See below
6	Funding source:	See below
7	MTREF allocations 2015/16:	See below
8	MTREF allocations 2016/17:	See below
9	MTREF allocations 2017/18:	See below
10	Implementor / Developer/ Investor:	Ekurhuleni Metro and private investment
11	Current status	See below
12	Estimated project value	R9.0 billion

Leeuwpoot Housing Development

Department / Sector	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
Human Settlements	Servicing of Stands(Leeuwpoot Development)	USDG	Urban Restructuring	Boksburg	34,42,32,31,43	67 326 806	-	-	67 326 806
Human Settlements	Leeuwpoot Development (Bulk Infrastructure)	USDG	Urban Restructuring	Boksburg	34,42,32,31,43	10 000 000	120 000 000	100 000 000	230 000 000
						77 326 806	120 000 000	100 000 000	297 326 806

LEEUPPOORT HOUSING DEVELOPMENT

No.	Project Name	Project Description	Bene-ficiary Comm-unity	Current Project Stage	Current Imple-mentor	Total Number of Housing Units in Project	Total Project Costs Estimate	Estimat-ed comple-tion date	2016/2017					2017/2018				
									Planning			Implementation		Planning			Implementation	
									Projected Project Stage	Planning (Township)	PDR & Detail Design	Stands	Houses	Projected Project Stage	Plan-ning (Town-ship)	PDR & Detail Design	Houses	Internal Water & Sewer
1	Klippoortjie 112-IR		Joe Slovo & Reiger Park	Pre-planning: EIA in process & township establishment submission made	EMM	2 701	215 397 945	2022/2023 FY	Planning: Services Designs	789 907	2 565 950			Implementati on: Water & Sewer Services				16 712 438
2	Van Dyk Park	Ptns Rem Vogelfontein 84-IR & Ptn 73 Leeuwpoot 113-IR	Beach Front; Wattville Ext 3100; Tamboville	Pre-planning: Feasibility Study and Precinct Plans completed.	EMM	3 000	481 620 630	2023/2024 FY	Planning: Services Designs	2 470 350	2 850 000			Implementati on: Water & Sewer Services	877 350			9 281 250
3	Joe Slovo	Part of Leeuwpoot Mega Project	Joe Slovo	Part of Leeuwpoot Mega Project. Agreement with LDC in progress	EMM	400	58 636 720	2020/2021 FY	Pre-Planning	218 980				Planning: Services Designs	329 380	380 000		1 485 000

2. Badenhorst Estate

Fields	Information	
1	Name and description of programme:	Badenhorst Estate
2	Name and description of project:	<p>The Badenhorst estate is an extensive, large scale mixed use development that is anticipated to develop in phases over the development horizon of 15 to 20 years.</p> <p>The first phase of this development will be Dalpark Ext 19 that contains a number of planned commercial uses with tenants such as a Makro, Build-It and Hyundai Dealership.</p>
3	Location of project:	Larrendale Extensions 4 and 5

		<p>Dalpark Extensions 19 to 23 Apex Extensions 8 and 10</p> <p>Badenhorst Estate is located within Ward 52 and forms part of the designated Carnival City Regional Node. It is situated to the east of the K109/R23 (Rangeview Road) in the vicinity of the Apex industrial areas. It is furthermore bordering onto the residential neighbourhoods of Leachville, Dalpark, Wattville, and Larrendale. The Land Development Area is also in relative close proximity to the Benoni CBD, Brakpan CBD, Boksburg, the N12, N17 and N3 Highways</p>
4	Type of project:	Strategic Urban Development
5	Units:	
6	Funding source:	See below
7	MTREF allocations 2015/16:	See below
8	MTREF allocations 2016/17:	See below
9	MTREF allocations 2017/18:	See below
10	Implementor / Developer/ Investor:	Badenhorst Family
11	Estimated value	R3.05 billion

3. Tambo Springs Inland Port

Fields	Information	
1	Name and description of programme:	Tambo Springs Inland Port
2	Name and description of project:	The proposed Tambo Springs Inland Port was identified as the Gauteng-Durban Freight Corridor's most important inland port. The Project is part of the Strategic Infrastructure Programme (SIP 2) which is led by

		the national government and Transnet. Tambo Springs Inland Port was identified by Transnet as a solution for freight capacity expansion. The site will be developed as an Intermodal terminal and associated logistics hub. The development will comprise of roads and rail facilities, trucking and intermodal yards, warehousing, customs clearance facilities and other uses subservient to an Inland Port and Logistics Hub.
3	Location of project:	Remaining Extent of portion 37(a portion of portion 34) of the farm Tamboekiesfontein 173 IR and is vested in the name of Inframax Strategic Properties
4	Type of project:	Strategic Urban Development
5	Funding source:	See below
6	MTREF allocations 2015/16:	See below
7	MTREF allocations 2016/17:	See below
8	MTREF allocations 2017/18:	See below
9	Implementor / Developer/ Investor:	Transnet
10	Estimated project value	R52.4 billion

4. Glen Gory

Fields	Information	
1	Name and description of programme:	Glen Gory
2	Name and description of project:	The development will be referred to as the world class node in which it will be incorporating of a regional mall, a lifestyle mall, a value mart centre, big box retailers such as Builders Warehouse and Makro. The retail component will consist of a potential tenant mix that will mirror the lifestyle that we all aspire to, including retailers such as Checkers, Woolworths, Edgars, Foschini and Pick'n Pay. Up-market brands as well as other great South African brands will also be secured. The mall will also incorporate a Piazza for

		showcasing of events, concerts and other community festivities as well as an office node consisting of medical suites and offices.
3	Location of project:	Valkhoogte Extension 13 & 20 The proposed development site is located on the corner of Glen Gory Road and Elm Road. The development is situated in what is referred to as the Glen Gory Regional node towards which the areas of Rynfield, Northmead, Farrarmere, Crystal Park and Daveyton are developing.
4	Type of project:	Strategic Urban Development
5	Units:	See below
6	Funding source:	See below
7	MTREF allocations 2015/16:	See below
8	MTREF allocations 2016/17:	See below
9	MTREF allocations 2017/18:	See below
10	Implementor / Developer/ Investor:	Ekurhuleni Metro and Private Investment
11	Current status	See below
12	Estimated project value	R7.9 billion

Glen Gory

Department / Sector	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
Council General	Provision for Bulk Infrastructure(Glen Gory Development)	External Loans	Economic Development	Corporate	Benoni	-	204 000 000	-	204 000 000

5. M&T Development Project

Fields	Information
1	Name and description of programme: M&T Development Project

2	Name and description of project:	The project filling on M&T development (Twenty one Industrial Park) will be focusing only in the Townships that fall within the Urban Edge. There is more land that is still available outside the urban edge and it will only be profiled as soon as the urban edge is amended.
3	Location of project:	<p>The following townships falls within the urban Edge and are located at western part of the R21</p> <p>Sterkfontein X 2</p> <p>Sterkfontein X 4</p> <p>Sterkfontein X 5</p> <p>Sterkfontein X 6</p> <p>Sterkfontein X 7</p> <p>Sterkfontein X 8</p> <p>Sterkfontein X 9</p> <p>Sterkfontein X 10</p> <p>Sterkfontein X 11</p> <p>Sterkfontein X 12</p> <p>Clayville X 61</p> <p>Clayville X 63</p> <p>Clayville X 64</p> <p>Clayville X 65</p> <p>Clayville X 68</p> <p>Clayville X 69</p> <p>Gillimead Proper</p> <p>Strawberry Extension 1</p> <p>The following are located at the eastern part of the R21 :</p>

		<p>Glen Fountain Proper (only small portion in the urban edge)</p> <p>Fountain Glen Proper (only small portion in the urban edge)</p> <p>With regard to location all townships that falls within the urban edge are strategically located and straddle the R21 Albertina Sisulu Freeway to the east and west between Pretoria and O R Tambo Internal Airport.</p> <p>The Olifantsfontein interchange on the R21 Freeway is situated centrally within the Twenty One developments</p>
4	Type of project:	Strategic Urban Development
5	Units:	
6	Funding source:	See below
7	MTREF allocations 2015/16:	See below
8	MTREF allocations 2016/17:	See below
9	MTREF allocations 2017/18:	See below
10	Implementor / Developer/ Investor:	M&T Developments
11	Estimated project value	R133.9 billion

6. Riverfields Development

Fields	Information	
1	Name and description of programme:	Riverfields Development
2	Name and description of project:	The Riverfields development is a mixed-use development strategically located on the Portion of farm Witfontein 15-IR northeast of the existing Kempton Park CBD and the Albertina Sisulu Freeway (R21)

		situated between O.R. Tambo International Airport and Tshwane. The Riverfields Development commenced in 1998 and combines a number of current and proposed developments.
3	Location of project:	Portions of farm Witfontein 15-IR
4	Type of project:	Strategic Urban Development
5	Units and progress:	See below
6	Funding source:	See below
7	MTREF allocations 2015/16:	See below
8	MTREF allocations 2016/17:	See below
9	MTREF allocations 2017/18:	See below
10	Implementor / Developer/ Investor:	Trans Act
11	Estimated project value	R35.0 billion

RIVERFIELDS HOUSING DEVELOPMENT

No.	Project Name	Project Description	Benefi-ciary Comm-unity	Current Project Stage	Current Imple-mentor	Total Number of Housing Units in Project	Total Project Costs Estimate	Estima-ted comple-tion date	2016/2017					2017/2018			
									Planning			Implementation		Planning		Implementation	
									Projected Project Stage	Planning (Township)	PDR & Detail Design	Stands	Houses	Projected Project Stage	PDR & Detail Design	Houses	Internal Water & Sewer
1	Esselen Park	Ptn 63 & 39 Witfontein 15-IR	Vusimusi/Ehlanzeni	Planning: Precinct Plan; EIA & Township Layout	EMM	7 050	691 432 948	2022/2023 FY	Planning: Services Designs	2 061 773	6 697 500			Implementati on: Water & Sewer Services			43 621 875

7. Prasa Gibela Project

Fields	Information	
1	Name and description of programme:	Prasa Gibela Project

2	Name and description of project:	Prasa Gibela intends to establish a manufacturing plant on Portion 23 of the farm Grootfontein 165 –IR in Dunnottar north of Nigel, within the Ekurhuleni Metropolitan Municipality (EMM) in Gauteng for the development of a factory for manufacturing of new rolling stock of approximately 3500 train carriages.
3	Location of project:	Portion 23 of Farm Grootfontein -165 IR
4	Type of project:	Strategic Urban Development
5	Funding source:	See below
6	MTREF allocations 2015/16:	See below
7	MTREF allocations 2016/17:	See below
8	MTREF allocations 2017/18:	See below
9	Implementor / Developer/ Investor:	Gibela Consortium / ALSTOM
10	Estimated project value	R4.1 billion

E.6b.3 Catalytic Housing Projects Clusters

1. Northern Development Cluster

Fields	Information	
1	Name and description of programme:	Northern Development Cluster
2	Name and description of project:	A mix of Single-RDP, Multi-RDP, Rental and GAP/FLISP Housing Typologies
3	Location of project:	Clayville Ext 45, 71, Heartland Esselen Park (Witfontein) Esselen Park Ext 3 Tembisa Ext 25
4	Type of project:	Catalytic Housing Project Cluster
5	Units and progress:	See below
6	Funding source:	See below
7	MTREF allocations 2015/16:	See below
8	MTREF allocations 2016/17:	See below
9	MTREF allocations 2017/18:	See below
10	Implementor / Developer/ Investor:	Ekurhuleni Metro

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Northern Development Cluster - Clayville Ext 45, 71, Heartland / Esselen Park (Witfontein) / Esselen Park Ext 3 / Tembisa Ext 25

Department / Sector	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
Roads and Stormwater	Rehabilitation of Roads (North)	External Loans	Upgrading and Renewal	Corporate	Multi Wards	-	25 000 000	40 000 000	65 000 000
Roads and Stormwater	Tertiary Roads: North	External Loans	Urban Restructuring	Tembisa 1	1,2,4,5,6,7,12,89	20 000 000	15 000 000	10 000 000	45 000 000
Roads and Stormwater	Stormwater Upgrades: North	External Loans	Upgrading and Renewal	Corporate	Multi Wards	-	20 000 000	20 000 000	40 000 000
Roads and Stormwater	Roads: Low Cost Housing: North	USDG	Urban Restructuring	Corporate	Multi Wards	-	19 000 000	10 000 000	29 000 000
Roads and Stormwater	Pedestrian Management Impl. (North)	Revenue	Upgrading and Renewal	Edenvale	4,5,7,9,10,11,12,18,19,22,92	6 000 000	6 000 000	6 000 000	18 000 000
Roads and Stormwater	Geometric Road Improvements (North)	External Loans	Upgrading and Renewal	Corporate	Multi Wards	-	6 000 000	8 000 000	14 000 000
Roads and Stormwater	Township Develop:Ext Services (North)	External Loans	Upgrading and Renewal	Kempton Park	Multi Wards	3 000 000	6 000 000	5 000 000	14 000 000
Energy	Clayville Electrification	USDG	Urban Restructuring	Tembisa 2	1	10 000 000	20 000 000	20 000 000	50 000 000
Roads and Stormwater	Rehabilitation of Roads (North)Rehabilitation of Clayville Bridge	External Loans	Upgrading and Renewal	Tembisa 2	1	500 000	-	-	500 000
Health & Social Development	New Clinic Esselen Park Tembisa	USDG	Urban Restructuring	Tembisa 1	8	-	4 000 000	6 000 000	10 000 000
Human Settlements	Esselen Park - Witfontein (Mega - Tembisa Triangle) - Birchleigh North Ext 4	USDG	Urban Restructuring	Kempton Park	91	6 253 310	-	-	6 253 310
Finance	New paypoint at Esselen park	Revenue	Urban Restructuring	Tembisa 1	8	1 000 000	3 000 000	-	4 000 000
Roads and Stormwater	Roads: Low Cost Housing: NorthEsselen Park ext 1 Link Roads	USDG	Urban Restructuring	Tembisa 1	8	2 400 000	-	-	2 400 000
Energy	Esselen Park Electrification	USDG	Urban Restructuring	Tembisa 1	91	1 000 000	-	-	1 000 000
Roads and Stormwater	Roads: Low Cost Housing: NorthCompletion Esselen Park Roads	USDG	Urban Restructuring	Kempton Park	91	1 000 000	-	-	1 000 000
Roads and Stormwater	Geometric Road Improvements (North)Completion Sam Molele / Esselen Park ext3 Intersection.	External Loans	Upgrading and Renewal	Tembisa 1	8,91	600 000	-	-	600 000
Transport	Construction of MVRA/DLTC Tembisa	Revenue	Urban Restructuring	Tembisa 2	4	10 000 000	21 800 000	17 000 000	48 800 000
Energy	Tembisa substation	USDG	Economic Development	Tembisa 1	8	-	10 000 000	10 000 000	20 000 000
Energy	Tembisa 2 Revenue enhancement	USDG	Economic Development	Tembisa 2	1, 2, 3, 4, 7	4 000 000	7 200 000	7 200 000	18 400 000
Energy	Tembisa Revenue enhancement	USDG	Economic Development	Tembisa 1	5, 6, 7, 8, 9, 10, 14	4 000 000	7 200 000	7 200 000	18 400 000

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EMPD	Const Tembisa Precinct	External Loans	Urban Restructuring	Tembisa 1	6	8 000 000	8 000 000	-	16 000 000
Roads and Stormwater	Tembisa Depot Upgrading	External Loans	Upgrading and Renewal	Tembisa 1	14	10 000 000	5 000 000	-	15 000 000
Energy	Tembisa 2 Network enhancement	USDG	Upgrading and Renewal	Tembisa 2	1, 2, 3, 4, 7	4 000 000	5 000 000	5 000 000	14 000 000
Energy	Tembisa Network enhancement	USDG	Upgrading and Renewal	Tembisa 1	5, 6, 7, 8, 9, 10, 14	4 000 000	5 000 000	5 000 000	14 000 000
Roads and Stormwater	Tembisa Natural Watercourses upgrading	External Loans	Upgrading and Renewal	Tembisa 1	10	1 500 000	6 000 000	6 000 000	13 500 000
Water & Sanitation	Tembisa Sewer	External Loans	Urban Restructuring	Tembisa 1	Multi Wards	13 000 000	-	-	13 000 000
Health & Social Development	New Clinic Esselen Park Tembisa	USDG	Urban Restructuring	Tembisa 1	8	-	4 000 000	6 000 000	10 000 000
Roads and Stormwater	Pedestrian Bridges: Greater Tembisa streams	External Loans	Urban Restructuring	Tembisa 1	1,2,14,10,90,91,100	1 300 000	5 000 000	2 000 000	8 300 000
SRAC	Upgrade Tembisa Library	USDG	Urban Restructuring	Tembisa 1	2	8 000 000	-	-	8 000 000
Energy	Tembisa 2 Lighting	USDG	Urban Restructuring	Tembisa 2	1, 2, 3, 4, 7	2 500 000	2 500 000	2 500 000	7 500 000
Energy	Tembisa Lighting	USDG	Urban Restructuring	Tembisa 1	5, 6, 7, 8, 9, 10, 14	2 500 000	2 500 000	2 500 000	7 500 000
Customer Relations Management	Tembisa 2/ Winnie Mandela New Building	Revenue	Upgrading and Renewal	Tembisa 2	89	4 000 000	-	-	4 000 000
Environmental Resources Management	Construct Metro Parks Depots Tembisa 1	Revenue	Upgrading and Renewal	Tembisa 1	5	-	-	2 000 000	2 000 000
EMPD	Refurbishment Tembisa regional office	Revenue	Upgrading and Renewal	Tembisa 1	6	2 000 000	-	-	2 000 000
Water & Sanitation	Tembisa Depot	External Loans	Urban Restructuring	Tembisa 1	Multi Wards	1 500 000	-	-	1 500 000
Waste Management	Supply of recycling bins Tembisa 1	Revenue	Upgrading and Renewal	Tembisa 1	8	562 500	-	-	562 500
Waste Management	Supply of recycling bins Tembisa 2	Revenue	Upgrading and Renewal	Tembisa 2	89	562 500	-	-	562 500
Roads and Stormwater	Stormwater Upgrades: NorthCovering of Channel along Tembisa ext 7: Planning	External Loans	Upgrading and Renewal	Tembisa 2	4	300 000	-	-	300 000
Environmental Resources Management	Development of Town Entrances Tembisa 2	Revenue	Upgrading and Renewal	Tembisa 2	4,2,10	-	-	200 000	200 000
Roads and Stormwater	Stormwater improvements (Minor) (North) Tembisa clinic opp civic	External Loans	Upgrading and Renewal	Tembisa 1	6	100 000	-	-	100 000
						133 578 310	213 200 000	197 600 000	544 378 310

NORTHERN DEVELOPMENT CLUSTER

No.	Project Name	Project Description	Beneficiary Community	Current Project Stage	Current Implementor	Total Number of Housing Units in Project	Total Project Costs Estimate	Estimated completion date	2016/2017						2017/2018				
									Planning			Implementation			Planning		Implementation		
									Projected Project Stage	Planning (Township)	PDR & Detail Design	Units	Internal Water & Sewer	Community Park / Play-ground	Projected Project Stage	Planning (Township)	Stands	Internal Water & Sewer	Roads & Stormwater
1	Old Mutual Land	Tembisa Ext 25	Winnie Mandela	Pre-planning: Project Plan complete. Layout conceptualisation	EMM	1 628	124 354 171	2019/2020 FY	Implementation: Water & Sewer Services				9 065 925		Implementation: Roads and Stormwater	476 109	671	11 080 575	6 512 000
2	Clayville Ext 45	Clayville Ext 45: Part Tembisa Triangle Mega Project	Madelakufa 1 & 2 Freedom Square	Implementation	GLG & H/EMM	3 223	3 288 715	2016/2017 FY	Implementation: Top Structures			400		983 880					
3	Olifantsfontein 410 IR Clayville 45			Construction of houses; Water meters Installation	GLG & H?	1 700													
4	Esselen Park Ext 3			Planning: Layout plan Submission		1 556													
5	Esselen Park	Ptn 63 & 39 Witfontein 15-IR	Vusimusi/Ehlanzeni	Planning: Precinct Plan; EIA & Township Layout	EMM	7 050	691 432 948	2022/2023 FY	Planning: Services Designs	2 061 773	6 697 500				Implementation: Water & Sewer Services			43 621 875	

2. Eastern Development Cluster

Fields	Information	
1	Name and description of programme:	Eastern Development Cluster
2	Name and description of project:	A mix of Single-RDP, Multi-RDP, Rental and GAP/FLISP Housing Typologies
3	Location of project:	John Dube 2 Brakpan Old Location

		Tskane Ext 22 Chief Luthuli 6
4	Type of project:	Catalytic Housing Project Cluster
5	Units and progress:	See below
6	Funding source:	See below
7	MTREF allocations 2015/16:	See below
8	MTREF allocations 2016/17:	See below
9	MTREF allocations 2017/18:	See below
10	Implementor / Developer/ Investor:	Ekurhuleni Metro

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Eastern Development Cluster - John Dube 2 / Brakpan Old Location / Tsakane Ext 22 / Chief Luthuli 6

Department / Sector	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
Roads and Stormwater	Rehabilitate Roads in Eastern Region	External Loans	Urban Restructuring	Tsakane	Multi Wards	45 000 000	30 000 000	35 000 000	110 000 000
Energy	Brakpan Revenue enhancement	CRR	Economic Development	Brakpan	31, 73, 74	4 000 000	7 200 000	7 200 000	18 400 000
Energy	Brakpan Network enhancement	External Loans	Upgrading and Renewal	Brakpan	31, 73, 74	4 000 000	5 000 000	5 000 000	14 000 000
Energy	Brakpan Lighting	Revenue	Urban Restructuring	Brakpan	31, 73, 74	1 000 000	2 000 000	2 000 000	5 000 000
SRAC	Construction:New Library: Brakpan	External Loans	Urban Restructuring	Brakpan	97	2 200 000	-	-	2 200 000
Water & Sanitation	BMC BRAKPAN SPRINGS NIGEL	CRR	Economic Development	Brakpan	74	2 000 000	-	-	2 000 000
Water & Sanitation	BMC BRAKPAN SPRINGS NIGEL	CRR	Economic Development	Springs	75	2 000 000	-	-	2 000 000
Water & Sanitation	BMC BRAKPAN SPRINGS NIGEL	CRR	Economic Development	Springs	76	2 000 000	-	-	2 000 000
Water & Sanitation	Brakpan Depot	External Loans	Urban Restructuring	Brakpan	71,74,72,75,80,97	1 500 000	-	-	1 500 000
EMPD	Refurbishment Brakpan Pound office	Revenue	Upgrading and Renewal	Brakpan	74	1 000 000	-	-	1 000 000
Water & Sanitation	Brakpan Depot	External Loans	Upgrading and Renewal	Brakpan	74	850 000	-	-	850 000
Energy	Tsakane Network enhancement	USDG	Upgrading and Renewal	Tsakane	82, 83, 85	4 000 000	5 000 000	5 000 000	14 000 000
SRAC	Construction of New Library: Tsakane	USDG	Urban Restructuring	Tsakane	85	9 000 000	-	-	9 000 000
Energy	Tsakane Lighting	USDG	Urban Restructuring	Tsakane	82, 83, 85	2 500 000	2 500 000	2 500 000	7 500 000
Environmental Resources Management	Develop/Upgrade Regional Parks Tsakane	USDG	Upgrading and Renewal	Tsakane	82,85	1 000 000	2 000 000	2 000 000	5 000 000
Roads and Stormwater	Roads: Low Cost Housing: EastMasechaba: Mojela, JB Max Ext 9 Tsakane: Xaba Street, Bluegum: Zabalaza 9 Freedom	USDG	Urban Restructuring	Duduza	86	2 600 000	-	-	2 600 000
Water & Sanitation	METER PROCUREMENT TSAKANE	CRR	Economic Development	Kwa Thema	79	500 000	-	-	500 000
Water & Sanitation	METER PROCUREMENT TSAKANE	CRR	Economic Development	Kwa Thema	81	500 000	-	-	500 000
Water & Sanitation	METER PROCUREMENT TSAKANE	CRR	Economic Development	Tsakane	85	500 000	-	-	500 000
Water & Sanitation	METER PROCUREMENT TSAKANE	CRR	Economic Development	Duduza	86	500 000	-	-	500 000
Water & Sanitation	METER PROCUREMENT TSAKANE	CRR	Economic Development	Tsakane	99	500 000	-	-	500 000
Water & Sanitation	VALVES & FITTINGS TSAKANE	CRR	Economic Development	Tsakane	85	325 000	-	-	325 000
Environmental Resources Management	Development of Town Entrances Tsakane	Revenue	Upgrading and Renewal	Tsakane	82	-	100 000	200 000	300 000
Water & Sanitation	VALVES & FITTINGS TSAKANE	CRR	Economic Development	Kwa Thema	81	292 500	-	-	292 500
Water & Sanitation	VALVES & FITTINGS TSAKANE	CRR	Economic Development	Tsakane	99	292 500	-	-	292 500
Water & Sanitation	VALVES & FITTINGS TSAKANE	CRR	Economic Development	Duduza	86	227 500	-	-	227 500
Water & Sanitation	VALVES & FITTINGS TSAKANE	CRR	Economic Development	Kwa Thema	79	162 500	-	-	162 500
Energy	Chief Albert Luthuli Electrification	USDG	Urban Restructuring	Benoni	24	10 000 000	20 000 000	20 000 000	50 000 000
Health & Social Development	NEW CLINIC CHIEF A LUTHULI EXTENSION WARD 24 LEVEL 2	USDG	Urban Restructuring	Benoni	24	500 000	3 000 000	12 000 000	15 500 000
Human Settlements	Chief Albert Luthuli Ext 4	USDG	Urban Restructuring	Benoni	24	13 105 200	-	-	13 105 200
						112 055 200	76 800 000	90 900 000	279 755 200

EASTERN DEVELOPMENT CLUSTER

No.	Project Name	Project Description	Beneficiary Community	Current Project Stage	Current Implementor	Total Number of Housing Units in Project	Total Project Costs Estimate	Estimated completion date	2016/2017					2017/2018				
									Planning			Implementation		Planning			Implementation	
									Projected Project Stage	Planning (Township)	PDR & Detail Design	Stands	Houses	Projected Project Stage	Feasibility	Pre-Planning	Houses	Internal Water & Sewer
1	Brakpan Old Location		Brakpan North Never-Never Tsakane waiting list	Pre-planning: Feasibility & Precinct Plan Completed	EMM	5 700	258 042 495	2019/2020 FY	Planning: Services Designs	4 693 665	5 415 000			Implementation: Water & Sewer Services				49 376 250
2	Chief Luthuli Ext 6	Mega Project	Gabon	Implementation of Top structures by GLG & H	GLG & H?	7 274							500					
3	Tsakane Ext 22	Ptn 7 Vlakfontein 161-IR		Implementation: 850 units constructed	GLG & HEMM	4 117		2016/2017 FY				448	450					
4	John Dube Village	Mega Project	Zamani	Pre-planning: Feasibility & Precinct Plan Completed	EMM	12 295												

3. Southern Development Cluster

Fields	Information	
1	Name and description of programme:	Southern Development Cluster
2	Name and description of project:	A mix of Single-RDP, Multi-RDP, Rental and Bonded Housing Typologies
3	Location of project:	Leeuwpoort Germiston Urban Renewal housing Zwartkoppies Palmietfontein

		Rietspruit/ Rietfontein Palmridge 10 & 11
4	Type of project:	Catalytic Housing Project Cluster
5	Units and progress:	See below
6	Funding source:	See below
7	MTREF allocations 2015/16:	See below
8	MTREF allocations 2016/17:	See below
9	MTREF allocations 2017/18:	See below
10	Implementor / Developer/ Investor:	Ekurhuleni Metro

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Southern Development Cluster - Leeuwpoot / Germiston Urban Renewal housing / Zwartkoppies / Palmietfontein / Rietspruit / Rietfontein / Palm Ridge 10 & 11

Department / Sector	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
Roads and Stormwater	Rehabilitation of roads: SouthAccording to PMS Currently under review.	External Loans	Upgrading and Renewal	Corporate	Multi Wards	37 500 000	-	-	37 500 000
Roads and Stormwater	Tertiary Roads (South)	External Loans	Upgrading and Renewal	Corporate	Multi Wards	-	15 000 000	15 000 000	30 000 000
Roads and Stormwater	Rehabilitation of roads: South	External Loans	Upgrading and Renewal	Corporate	Multi Wards	-	30 000 000	30 000 000	60 000 000
Roads and Stormwater	Roads: Low Cost Housing: South	USDG	Urban Restructuring	Corporate	Multi Wards	-	40 000 000	35 000 000	75 000 000
Human Settlements	Leeuwpoot Development (Bulk Infrastructure)	USDG	Urban Restructuring	Boksburg	34,42,32,31,43	10 000 000	120 000 000	100 000 000	230 000 000
Human Settlements	Servicing of Stands(Leeuwpoot Development)	USDG	Urban Restructuring	Boksburg	34,42,32,31,43	67 326 806	-	-	67 326 806
Human Settlements	Rietfontein Kwa-Thema	USDG	Urban Restructuring	Kwa Thema	78; 74	13 674 000	-	-	13 674 000
Human Settlements	Palm Ridge Extension 9	USDG	Urban Restructuring	Katlehong 2	53; 61	86 108 400	-	-	86 108 400
Energy	Palm Ridge Electrification	USDG	Urban Restructuring	Katlehong 1	40, 48, 49, 50, 51, 55, 59, 60, 61, 62, 63	15 000 000	30 000 000	30 000 000	75 000 000
Water & Sanitation	Palm Ridge Phases 5 & 6 Bulk & Essential Services	USDG	Urban Restructuring	Katlehong 2	61	-	20 000 000	20 000 000	40 000 000
Water & Sanitation	RAND WATER TO PALM RIDGE	USDG	Urban Restructuring	Germiston	53, 58, 61, 101	10 000 000	-	-	10 000 000
Roads and Stormwater	Install SW in Palm Ridge	External Loans	Urban Restructuring	Katlehong 2	61,101,58	4 000 000	2 500 000	2 000 000	8 500 000
Roads and Stormwater	Roads: Low Cost Housing: South2015/16: Road 1 Palm Ridge 9, Road 2: Ugagane Outer Years: Verbena, Ntloboshiyane, Umqwaloth, Kotloano Street	USDG	Urban Restructuring	Alberton	53	8 200 000	-	-	8 200 000
Roads and Stormwater	Provision of Pedestrian Bridge between Zonkizizwe and Palmridge	USDG	Urban Restructuring	Katlehong 2	61, 101	-	500 000	5 000 000	5 500 000
Waste Management	Palmridge Mini Disposal Site	Revenue	Upgrading and Renewal	Thokoza	58	800 000	-	-	800 000
SRAC	Palmridge	Revenue	Upgrading and Renewal	Alberton	58	187 500	-	-	187 500
						252 796 706	258 000 000	237 000 000	747 796 706

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SOUTHERN DEVELOPMENT CLUSTER

No.	Project Name	Project Description	Beneficiary Community	Current Project Stage	Current Implementor	Total Number of Housing Units in Project	Total Project Costs Estimate	Estimated completion date	2016/2017						2017/2018					
									Planning				Implementation		Planning			Implementation		
									Projected Project Stage	Land Acquisition	Planning (Township)	PDR & Detail Design	Houses	Internal Water & Sewer	Projected Project Stage	Plan-ning (Township)	PDR & Detail Design	Stands	Internal Water & Sewer	Roads & Stormwater
1	Apex Land	Ptns 46, 163 Rietfontein 115-IR	Emandleni	Planning: Township Establishment Layout submission	EMM	1 000	138 559 230	2020/2021 FY	Implementation: Water & Sewer Services		292 450			3 712 500	Implementation: Roads and Stormwater			1 000	8 662 500	10 000 000
2	Van Dyk Park	Ptns Rem Vogelfontein 84-IR & Ptn 73 Leeuwpoot 113-IR	Beach Front; Wattville Ext 3100; Tamboville	Pre-planning: Feasibility Study and Precinct Plans completed.	EMM	3 000	481 620 630	2023/2024 FY	Planning: Services Designs		2 470 350	2 850 000			Implementation: Water & Sewer Services	877 350			9 281 250	
3	Joe Slovo	Part of Leeuwpoot Mega Project	Joe Slovo	Part of Leeuwpoot Mega Project. Agreement with LDC in progress	EMM	400	58 636 720	2020/2021 FY	Pre-Planning		218 980				Planning: Services Designs	329 380	380 000		1 485 000	
4	Palmietfontein in ptn 57	Ptn 57 Palmietfontein 141-IR	Mpilisweni	Pre-planning: Feasibility Study Completed. MEC Approval pending	EMM	4 000	438 403 280	2023/2024 FY	Planning: Services Designs		3 293 800	3 800 000			Implementation: Water & Sewer Services	1 169 800			12 375 000	
5	Palmietfontein in ptn142	Ptn 142 Palmietfontein 141-IR	Phola Park; Sakhile; Alberton Waiting List	Pre-planning: Feasibility Study Completed. MEC Approval pending	EMM	3 800	471 248 610	2023/2024 FY	Planning: Services Designs		3 129 110	3 610 000			Implementation: Water & Sewer Services	1 111 310			11 756 250	
6	Phola Park	Ptn 118 Palmietfontein 141-IR; Erf17 & 489 Phola Park	Phola Park	Pre-planning: EIA in process & township establishment (layout plan production in progress)	EMM	736	105 263 796	2019/2020 FY	Implementation: Water & Sewer Services		215 243			5 464 800	Implementation: Water & Sewer Services			710	3 643 200	7 100 000

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SOUTHERN DEVELOPMENT CLUSTER (cnt'd)

No.	Project Name	Project Description	Beneficiary Community	Current Project Stage	Current Implementor	Total Number of Housing Units in Project	Total Project Costs Estimate	Estimated completion date	2016/2017						2017/2018					
									Planning				Implementation		Planning			Implementation		
									Projected Project Stage	Land Acquisition	Planning (Township)	PDR & Detail Design	Houses	Internal Water & Sewer	Projected Project Stage	Plan-ning (Town-ship)	PDR & Detail Design	Stands	Internal Water & Sewer	Roads & Stormwater
7	Rietfontein Kwa Thema	Ptn 96 Rietfontein 128-IR & Rem Kwa-Thema 210-IR	Anchor; Ekuthuleni; Springs Waiting List	Pre-planningFeasibility study completed. Province Status Confirmation Required, as PRT was implementing Township Establishment	EMM	2 000	268 904 580	2021/2022 FY	Implementat ion: Water & Sewer Services		584 900			9 900 000	Implementati on: Water & Sewer Services			2 000	9 900 000	
8	Rietfontein 115 IR (Harry Gwala)	Wattville Erf 3130	Harry Gwala	Planning: Township Establishment (Layout plan approved): Community rejected layout want sinlge units	EMM	378	51 676 626	2018/2019 FY	Implementat ion: Water & Sewer Services					2 104 988	Implementati on: Roads and Stormwater	110 546		378	2 572 763	3 780 000
9	Wattville /Actonville	Ptns 1, 33, 36, 37, 38, 39, 85 Rietfontein 115-IR & Erf 1943 Actonville X6	Emlotheni; Wattville Benoni Overflow	Project possibly to be Terminated?		900	347 141 520	2019/2020 FY	Implementat ion: Water & Sewer Services		263 205			6 682 500	Implementati on: Water & Sewer Services			900	4 455 000	7 200 000
10	Zwartkopjes Farm	Ptn 21 Zwartkopjes 143-IR	Waiting List	Feasibility study completed: Planning	GLG & H?	7 000	1 033 179 080	2026/2027 FY	Planning	70 000 000	3 832 150				Planning: Services Designs	5 764 150	6 650 000			
11	Rietspruit Rietfontein		Somalia; Vosloors Ext 217; Zamaland)	Pre-planning	GLG & H?	14 000														

E.7 NON-INFRASTRUCTURE INTERVENTIONS

The following challenges with respect to Flagship catalytic projects, together with related interventions to address these challenges have been identified:

Challenges on Flagship Projects:

- Lack of dedicated capacity to implement in most Flagships
- No dedicated project manager for most Flagships
- Not prioritised and implemented as special projects
- Too departmentalised
- Poor institutional memory on Flagships (most information resides with certain individuals)
- Some projects are being implemented by multi departments making coordination an issue
- Funding shortfall for components of Flagships
- Institutional Arrangements not clear
- Poor visibility from a Branding, Marketing and Communication point of view

Interventions to prioritise and scale up implementation:

- Reposition Flagships as special (sectorial and spatial) projects of EMM
- Have dedicated capacity to upscale implementation – sourcing of required skills
- Use Strategic Land Parcels to unlock opportunities and fund commercial aspects of Flagships
- Work with Branding and Communication Dept. draw up a plan to profile, brand and increase visibility
- Each Flagship to have a business case and business plan
- Use business case and plan to retrofit Flagships to GDS and SIP.

Expenditure on non-infrastructure interventions for the MTEF period are indicated in the table below and comprise various types of equipment.

Table E7.1: Expenditure on Non-Infrastructure Interventions

Details	Funding Source	Capitalisation Investment Framework Category	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
ICT Equipment	Revenue	Upgrading and Renewal	10 025 000	10 740 000	8 980 000	29 745 000
Office furniture	Revenue	Upgrading and Renewal	4 681 000	6 581 000	6 090 000	17 352 000
Other Equipment	Revenue	Upgrading and Renewal	1 428 000	1 890 000	1 970 000	5 288 000
Re-govern - Supplier engagement centre established and	Revenue	Upgrading and Renewal	1 500 000	-	-	1 500 000
Specialised Equipment	Revenue	Upgrading and Renewal	200 000	150 000	200 000	550 000
Specialised Vehicles	Revenue	Upgrading and Renewal	600 000	600 000	600 000	1 800 000
Specialized Equipment	Revenue	Upgrading and Renewal	400 000	400 000	400 000	1 200 000
Vehicles	Revenue	Upgrading and Renewal	4 950 000	11 750 000	3 550 000	20 250 000
Workshop Equipment	Revenue	Upgrading and Renewal	1 000 000	500 000	500 000	2 000 000
Departmental ICT Equipment	Revenue	Upgrading and Renewal	1 000 000	250 000	200 000	1 450 000
Departmental Office Equipment	Revenue	Upgrading and Renewal	200 000	170 000	50 000	420 000
Furniture for new Fleet building	Revenue	Upgrading and Renewal	500 000	-	-	500 000
			47 568 000	63 992 000	43 130 000	154 690 000

E.8 GRANT ALLOCATIONS BY PROGRAMME

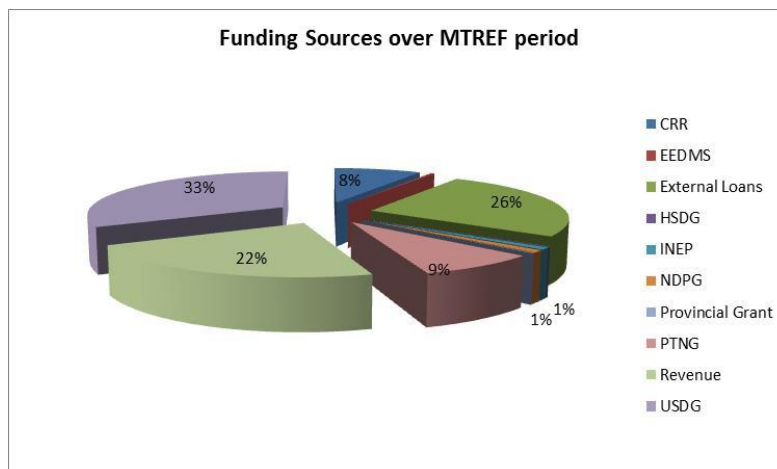
The capital expenditure budget is R 4,472 billion for the MTREF period. The Metro therefore requires R 4,052 billion to fund the proposed capital expenditure budget for the MTREF period. Capital grant funding from the Government continues to be integral to the capital budget funding at 45% (R 6,275 billion). The metro envisages approaching the funds market for an additional R 3,755 billion, for specific projects aimed at boosting economic development and other activities within the metro area. Internal generated funds for the MTREF period amounts to R 3,275 billion.

Table E8.1: Expenditure per Funding Source

Funding Source	Budget Year 2015 / 16	%	Budget Year 2016 / 17	%	Budget Year 2017 / 18	%	MTREF Total	%
USDG	1 430 830 521	32%	1 764 090 646	36%	1 547 800 000	30%	4 742 721 167	32%
HSDG	29 079 000	1%	-	0%	-	0%	29 079 000	0%
NDPG	20 000 000	0%	60 000 000	1%	53 390 000	1%	133 390 000	1%
PTNG	309 296 000	7%	404 389 000	8%	536 544 000	10%	1 250 229 000	9%
INEP	50 000 000	1%	40 000 000	1%	30 000 000	1%	120 000 000	1%
EEDMS	14 000 000	0%	20 000 000	0%	20 000 000	0%	54 000 000	0%
Revenue	1 083 777 906	24%	1 029 248 200	21%	1 162 611 270	22%	3 275 637 376	22%
External Loans	1 106 880 000	25%	1 231 900 000	25%	1 416 700 000	27%	3 755 480 000	26%
Provincial Grant	3 000 000	0%	8 000 000	0%	6 000 000	0%	17 000 000	0%
CRR	424 700 000	9%	400 400 000	8%	409 400 000	8%	1 234 500 000	8%
Total	4 471 563 427	100%	4 958 027 846	100%	5 182 445 270	100%	14 612 036 543	100%

The following chart provides a visual perspective of the above funding allocations.

Figure E8.1: Funding Source over MTREF Period



E.9 APPLICATION OF GRANT RESOURCES BY GRANT PROGRAMME AND MUNICIPAL PROJECT

Department	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s in which project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
Human Settlements	Servicing of Stands	USDG	Urban Restructuring	Tsakane	82	-	246 579 535	-	246 579 535
Human Settlements	Leeupoort Development (Bulk Infrastructure)	USDG	Urban Restructuring	Boksburg	34,42,32,31,43	10 000 000	120 000 000	100 000 000	230 000 000
Human Settlements	Acquisition of Land for New Human Settlements	USDG	Urban Restructuring	Benoni	All wards	55 000 000	60 000 000	80 000 000	195 000 000
Human Settlements	Germiston Fire Station Social Housing Project-Buildings	USDG	Urban Restructuring	Germiston	36	20 000 000	30 000 000	40 000 000	90 000 000
Human Settlements	Palm Ridge Extension 9	USDG	Urban Restructuring	Katlehong 2	53; 61	86 108 400	-	-	86 108 400
Human Settlements	Delville Social Housing Development	USDG	Urban Restructuring	Germiston	36	10 000 000	30 000 000	40 000 000	80 000 000
Human Settlements	Germiston South Social Housing Development	USDG	Urban Restructuring	Germiston	35	25 000 000	27 000 000	27 000 000	79 000 000
Human Settlements	Servicing of Stands(Leeupoort Development)	USDG	Urban Restructuring	Boksburg	34,42,32,31,43	67 326 806	-	-	67 326 806
Human Settlements	Wattville-Actonville Urban Renewal Project	USDG	Urban Restructuring	Benoni	Multi Wards	10 000 000	17 000 000	17 000 000	44 000 000
Human Settlements	Katorus Urban Renewal Project	USDG	Urban Restructuring	Katlehong 1	Multi Wards	5 500 000	17 000 000	17 000 000	39 500 000
Human Settlements	Payneville Extension 1	USDG	Urban Restructuring	Springs	72	37 965 750	-	-	37 965 750
Human Settlements	Refurbishment of Rental Property	USDG	Upgrading and Renewal	Corporate	Multi Wards	37 212 435	-	-	37 212 435
Human Settlements	Balmoral Extension 4	USDG	Urban Restructuring	Germiston	33	29 185 200	-	-	29 185 200
Human Settlements	Holgatefontein / Mckenzieville	USDG	Urban Restructuring	Nigel	88	25 100 000	-	-	25 100 000
Human Settlements	Alliance Extension 9	USDG	Urban Restructuring	Daveyton	71	21 397 500	-	-	21 397 500
Human Settlements	Helderwyk Extension 3 & 7	USDG	Urban Restructuring	Brakpan	31	14 050 035	-	-	14 050 035
Human Settlements	Rietfontein Kwa-Thema	USDG	Urban Restructuring	Kwa Thema	78; 74	13 674 000	-	-	13 674 000
Human Settlements	Alliance Extension 1	USDG	Urban Restructuring	Daveyton	71	13 376 544	-	-	13 376 544
Human Settlements	Chief Albert Luthuli Ext 4	USDG	Urban Restructuring	Benoni	24	13 105 200	-	-	13 105 200
Human Settlements	Payneville Extension 3	USDG	Urban Restructuring	Springs	72	6 137 780	-	-	6 137 780
Human Settlements	Daveyton Extension 14	USDG	Urban Restructuring	Daveyton	96	6 118 200	-	-	6 118 200
Human Settlements	Langaville Extension 4	USDG	Urban Restructuring	Kwa Thema	81	5 601 200	-	-	5 601 200
Human Settlements	Mayfield Extension 45	USDG	Urban Restructuring	Daveyton	96	5 045 706	-	-	5 045 706
Human Settlements	Apex Ext 12	USDG	Urban Restructuring	Benoni	30	2 526 157	-	-	2 526 157
Human Settlements	Balmoral Extension 5	USDG	Urban Restructuring	Germiston	33	2 208 351	-	-	2 208 351
Human Settlements	Moleleki Extension 2	USDG	Urban Restructuring	Katlehong 2	60	1 240 326	-	-	1 240 326
Human Settlements	Esselen Park - Witfontein (Mega - Tembisa Triangle) - Birchleigh North Ext 4	USDG	Urban Restructuring	Kempton Park	91	6 253 310	-	-	6 253 310
Human Settlements	Tembisa Urban Renewal Framework Projects	NDPG	Urban Restructuring	Tembisa 1	Multi Wards	20 000 000	60 000 000	53 390 000	133 390 000
Human Settlements	Germiston South Social Housing Development	HSDG	Urban Restructuring	Germiston	37	16 852 000	-	-	16 852 000
Human Settlements	Delville Social Housing Development	HSDG	Urban Restructuring	Germiston	37	12 227 000	-	-	12 227 000
						578 211 900	607 579 535	374 390 000	1 560 181 435

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Department	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s in which project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
Energy	Palm Ridge Electrification	USDG	Urban Restructuring	Katlehong 1	40, 48, 49, 50, 51, 55, 59, 60, 61, 62, 63	15 000 000	30 000 000	30 000 000	75 000 000
Energy	Langaville Electrification	USDG	Urban Restructuring	Kwa Thema	77, 78, 79, 80, 81	15 000 000	25 000 000	30 000 000	70 000 000
Energy	Phomolong substation	USDG	Economic Development	Edenvale	12	10 000 000	30 000 000	20 000 000	60 000 000
Energy	Kwa-Thema Electrification	USDG	Urban Restructuring	Kwa Thema	77, 78, 79, 80, 81	10 000 000	20 000 000	20 000 000	50 000 000
Energy	Chief Albert Luthuli Electrification	USDG	Urban Restructuring	Benoni	24	10 000 000	20 000 000	20 000 000	50 000 000
Energy	Mayfield Switching Station	USDG	Economic Development	Benoni	69 & 96	20 000 000	10 000 000	-	30 000 000
Energy	Kwa-Thema Revenue enhancement	USDG	Economic Development	Kwa Thema	77, 78, 79, 80, 81	4 000 000	10 000 000	10 000 000	24 000 000
Energy	Thokoza Network enhancement	USDG	Upgrading and Renewal	Thokoza	52, 54, 56, 57, 58	4 000 000	10 000 000	10 000 000	24 000 000
Energy	Simmer & Jack Landfill site	USDG	Urban Restructuring	Germiston	36	-	11 000 000	11 000 000	22 000 000
Energy	Crystal Park substation	USDG	Economic Development	Benoni	24	5 000 000	15 000 000	-	20 000 000
Energy	Clayville Electrification	USDG	Urban Restructuring	Tembisa 2	1	10 000 000	20 000 000	20 000 000	50 000 000
Energy	Thokoza Revenue enhancement	USDG	Upgrading and Renewal	Thokoza	52, 54, 56, 57, 58	4 000 000	7 200 000	7 200 000	18 400 000
Energy	Alra Park Electrification	USDG	Urban Restructuring	Nigel	88	18 000 000	-	-	18 000 000
Energy	Vila Lisa Ext Electrification	USDG	Urban Restructuring	Vosloorus	45	12 000 000	5 000 000	-	17 000 000
Energy	Eden Park Electrification	USDG	Urban Restructuring	Thokoza	53	15 000 000	-	-	15 000 000
Energy	Tinasonke Electrification	USDG	Urban Restructuring	Thokoza	53 & 57	14 000 000	-	-	14 000 000
Energy	Kwa-Thema Network enhancement	USDG	Upgrading and Renewal	Kwa Thema	77, 78, 79, 80, 81	4 000 000	5 000 000	5 000 000	14 000 000
Energy	Tsakane Network enhancement	USDG	Upgrading and Renewal	Tsakane	82, 83, 85	4 000 000	5 000 000	5 000 000	14 000 000
Energy	Solar lighting - Duduza North	USDG	Urban Restructuring	Duduza	86	-	-	12 819 000	12 819 000
Energy	Daveyton Network enhancement	USDG	Upgrading and Renewal	Daveyton	68, 69, 70, 71	2 000 000	5 000 000	5 000 000	12 000 000
Energy	Solar lighting - Mayfield Ex1 (Mangosotho)	USDG	Urban Restructuring	Daveyton	70	-	9 360 000	-	9 360 000
Energy	Vosloorus Revenue enhancement	USDG	Economic Development	Vosloorus	43, 44, 45, 46, 47, 64	2 000 000	3 000 000	3 000 000	8 000 000
Energy	Tembisa substation	USDG	Economic Development	Tembisa 1	8	-	10 000 000	10 000 000	20 000 000
Energy	Tembisa 2 Revenue enhancement	USDG	Economic Development	Tembisa 2	1, 2, 3, 4, 7	4 000 000	7 200 000	7 200 000	18 400 000
Energy	Thokoza Lighting	USDG	Urban Restructuring	Thokoza	52, 54, 56, 57, 58	2 500 000	2 500 000	2 500 000	7 500 000
Energy	Tsakane Lighting	USDG	Urban Restructuring	Tsakane	82, 83, 85	2 500 000	2 500 000	2 500 000	7 500 000
Energy	Vosloorus Lighting	USDG	Urban Restructuring	Vosloorus	43, 44, 45, 46, 47, 64	2 500 000	2 500 000	2 500 000	7 500 000
Energy	Solar lighting - Holomisa (Lindelani)	USDG	Urban Restructuring	Tsakane	99	-	-	5 019 000	5 019 000
Energy	Solar lighting - Molele Ext 1&2 (Siphamadla)	USDG	Urban Restructuring	Katlehong 2	60	-	4 500 000	-	4 500 000
Energy	Solar lighting - Ekurhuleni	USDG	Urban Restructuring	Kwa Thema	78	-	-	3 162 000	3 162 000
Energy	Solar lighting - Madalakufa (Igqagqa)	USDG	Urban Restructuring	Tembisa 1	6	-	3 000 000	-	3 000 000
Energy	Vosloorus Network enhancement	USDG	Upgrading and Renewal	Vosloorus	43, 44, 45, 46, 47, 64	1 000 000	1 000 000	1 000 000	3 000 000
Energy	Solar lighting - Hlahane	USDG	Urban Restructuring	Katlehong 1	51	-	1 250 000	-	1 250 000
Energy	Solar lighting - Etwatwa Ext 35 (Combiza)	USDG	Urban Restructuring	Etwatwa	67	-	1 140 000	-	1 140 000
Energy	Tembisa Revenue enhancement	USDG	Economic Development	Tembisa 1	5, 6, 7, 8, 9, 10, 14	4 000 000	7 200 000	7 200 000	18 400 000
Energy	Solar lighting - Umthambeka	USDG	Urban Restructuring	Edenvale	11	-	1 000 000	-	1 000 000
Energy	Solar lighting - Inxiweni	USDG	Urban Restructuring	Edenvale	11	-	750 000	-	750 000
Energy	Tembisa 2 Network enhancement	USDG	Upgrading and Renewal	Tembisa 2	1, 2, 3, 4, 7	4 000 000	5 000 000	5 000 000	14 000 000
Energy	Tembisa Network enhancement	USDG	Upgrading and Renewal	Tembisa 1	5, 6, 7, 8, 9, 10, 14	4 000 000	5 000 000	5 000 000	14 000 000
Energy	Tembisa 2 Lighting	USDG	Urban Restructuring	Tembisa 2	1, 2, 3, 4, 7	2 500 000	2 500 000	2 500 000	7 500 000
Energy	Tembisa Lighting	USDG	Urban Restructuring	Tembisa 1	5, 6, 7, 8, 9, 10, 14	2 500 000	2 500 000	2 500 000	7 500 000
Energy	Esselen Park Electrification	USDG	Urban Restructuring	Tembisa 1	91	1 000 000	-	-	1 000 000
Energy	INEP Electrification of Subsidized Housing (MOU with DOE)	INEP	Urban Restructuring	Multi CCA	Multi Wards	50 000 000	40 000 000	30 000 000	120 000 000
						258 500 000	340 100 000	295 100 000	893 700 000

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Department	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s in which project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
Transport	Integrated Rapid Public Transport Network(IRPTN)	USDG	Economic Development	Multi CCA	2--18; 22; 23; 28; 29;31; 32; 43-47; 89-92; 95;99	259 047 621	280 000 000	300 000 000	839 047 621
Transport	Phuthaditjaba Taxi Rank (Tokoza)	USDG	Urban Restructuring	Thokoza	58	8 000 000	-	-	8 000 000
Transport	Bluegumview Taxi Rank	USDG	Urban Restructuring	Duduza	86	7 000 000	-	-	7 000 000
Transport	Integrated Rapid Public Transport Network(IRPTN)	PTNG	Economic Development	Multi CCA	2--18; 22; 23; 28; 29;31; 32; 43-47; 89-92; 95;99	309 296 000	404 389 000	536 544 000	1 250 229 000
						583 343 621	684 389 000	836 544 000	2 104 276 621

Department	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s in which project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
Environmental Resources Management	Develop/Upgrade Regional Parks: Winnie Mandela	USDG	Upgrading and Renewal	Tembisa 2	3	300 000	8 000 000	8 000 000	16 300 000
Environmental Resources Management	Develop/Upgrade Community Parks: Phake	USDG	Upgrading and Renewal	Katlehong 1	49	1 000 000	2 000 000	2 500 000	5 500 000
Environmental Resources Management	Develop/Upgrade Regional Parks Etwatwa	USDG	Upgrading and Renewal	Etwatwa	65	1 500 000	4 000 000	-	5 500 000
Environmental Resources Management	Develop/Upgrade Regional Parks Tsakane	USDG	Upgrading and Renewal	Tsakane	82,85	1 000 000	2 000 000	2 000 000	5 000 000
Environmental Resources Management	Develop/Upgrade Regional Parks: Ukusuka Park	USDG	Upgrading and Renewal	Vosloorus	64	4 700 000	-	-	4 700 000
						8 500 000	16 000 000	12 500 000	37 000 000

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Department	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s in which project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
Health & Social Development	New TSSETS Clinic Phomolong South	USDG	Urban Restructuring	Katlehong 2	60	12 000 000	12 000 000	1 000 000	25 000 000
Health & Social Development	Early Childhood Development Centre	USDG	Urban Restructuring	Vosloorus	44/53/85/24	8 000 000	10 000 000	6 000 000	24 000 000
Health & Social Development	New Crystal Park Clinic	USDG	Urban Restructuring	Benoni	24	10 000 000	13 000 000	1 000 000	24 000 000
Health & Social Development	New Khumalo Clinic	USDG	Urban Restructuring	Katlehong 2	101	12 000 000	11 000 000	1 000 000	24 000 000
Health & Social Development	Extension & Upgrade Esangweni Clinic	USDG	Upgrading and Renewal	Tembisa 1	10	13 000 000	6 000 000	-	19 000 000
Health & Social Development	Extension & upgrade Selothe Thema Clinic	USDG	Upgrading and Renewal	Kwa Thema	77	13 000 000	4 000 000	-	17 000 000
Health & Social Development	New Dukatole Clinic	USDG	Urban Restructuring	Germiston	35	11 000 000	5 000 000	-	16 000 000
Health & Social Development	New Tswelopele Winnie Mandela Clinic	USDG	Urban Restructuring	Tembisa 2	89	-	4 000 000	12 000 000	16 000 000
Health & Social Development	NEW CLINIC CHIEF A LUTHULI EXTENSION WARD 24 LEVEL 2	USDG	Urban Restructuring	Benoni	24	500 000	3 000 000	12 000 000	15 500 000
Health & Social Development	BUHLE PARK Clinic	USDG	Urban Restructuring	Katlehong 1	40	-	2 000 000	12 000 000	14 000 000
Health & Social Development	Upgrade Erin Clinic	USDG	Upgrading and Renewal	Tembisa 2	7	100 000	2 000 000	10 000 000	12 100 000
Health & Social Development	Geluksdal Clinic	USDG	Urban Restructuring	Tsakane	86	-	2 000 000	10 000 000	12 000 000
Health & Social Development	New Clinic Lindelani X9	USDG	Urban Restructuring	Katlehong 1	55	-	2 000 000	10 000 000	12 000 000
Health & Social Development	New Duduza Clinic	USDG	Urban Restructuring	Duduza	86	-	1 000 000	5 000 000	6 000 000
Health & Social Development	VILLA LIZA Clinic	USDG	Urban Restructuring	Vosloorus	45	4 000 000	-	-	4 000 000
Health & Social Development	Extension & Upgrade BARCELONA CLINIC	USDG	Upgrading and Renewal	Etwatwa	26	-	100 000	2 000 000	2 100 000
Health & Social Development	New Bakerton Clinic	USDG	Urban Restructuring	Springs	75	-	-	100 000	100 000
Health & Social Development	New Mayfield Ext 8 Clinic	USDG	Urban Restructuring	Benoni	24	-	-	100 000	100 000
Health & Social Development	New Clinic Esselen Park Tembisa	USDG	Urban Restructuring	Tembisa 1	8	-	4 000 000	6 000 000	10 000 000
						83 600 000	81 100 000	88 200 000	252 900 000

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Department	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s in which project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
Roads and Stormwater	Roads: Low Cost Housing: North	USDG	Urban Restructuring	Corporate	Multi Wards	-	19 000 000	10 000 000	29 000 000
Roads and Stormwater	Roads: Low Cost Housing: East	USDG	Urban Restructuring	Corporate	Multi Wards	-	45 000 000	40 000 000	85 000 000
Roads and Stormwater	Roads: Low Cost Housing: South	USDG	Urban Restructuring	Corporate	Multi Wards	-	40 000 000	35 000 000	75 000 000
Roads and Stormwater	N3, Construction of pedestrian bridge between Mapleton & Vosloorus	USDG	Urban Restructuring	Vosloorus	44,95	14 600 000	-	-	14 600 000
Roads and Stormwater	Roads: Low Cost Housing: South2015/16: Road 1 Palm Ridge 9, Road 2: Ugagane Outer Years: Verbena, Ntloboshiyane, Umqwaloth, Kotloano Street	USDG	Urban Restructuring	Alberton	53	8 200 000	-	-	8 200 000
Roads and Stormwater	Provision of Pedestrian Bridge between Zonkizizwe and Palmridge	USDG	Urban Restructuring	Katlehong 2	61, 101	-	500 000	5 000 000	5 500 000
Roads and Stormwater	Etwatwa Stormwater	USDG	Urban Restructuring	Etwatwa	25,26,65,66,67	5 000 000	-	-	5 000 000
Roads and Stormwater	Roads: Low Cost Housing: EastBarbet Street, Swallow Road in 2015/16, Western road and Boundary Road in 2016/17	USDG	Urban Restructuring	Benoni	24	4 900 000	-	-	4 900 000
Roads and Stormwater	Roads: Low Cost Housing: NorthIsivana Section and Enxiweni	USDG	Urban Restructuring	Tembisa 1	14	4 600 000	-	-	4 600 000
Roads and Stormwater	Roads: Low Cost Housing: EastSebata Road and Roads in Chris Hani Ext 1 & 2	USDG	Urban Restructuring	Daveyton	68	4 000 000	-	-	4 000 000
Roads and Stormwater	Roads: Low Cost Housing: South2nd Street	USDG	Urban Restructuring	Katlehong 2	61	3 900 000	-	-	3 900 000
Roads and Stormwater	Roads: Low Cost Housing: EastTau Drive (+ 1.2 km) and Kgabo Street (+ 1.2 km)	USDG	Urban Restructuring	Daveyton	96	3 700 000	-	-	3 700 000
Roads and Stormwater	Roads: Low Cost Housing: EastMokgopo, Madiba, Ekuthuleni and Masondo street	USDG	Urban Restructuring	Etwatwa	65	3 500 000	-	-	3 500 000
Roads and Stormwater	Roads: Low Cost Housing: SouthMeazwe street,Koti street, Arapei street	USDG	Urban Restructuring	Katlehong 1	51	3 300 000	-	-	3 300 000
Roads and Stormwater	Kwa-Thema Stormwater	USDG	Upgrading and Renewal	Kwa Thema	74,76,77,78,79,80	3 000 000	-	-	3 000 000
Roads and Stormwater	Roads: Low Cost Housing: EastTarring of Vivienne drive, channeling of the bridge for between Ext 1 & 2	USDG	Urban Restructuring	Daveyton	69	2 900 000	-	-	2 900 000
Roads and Stormwater	Roads: Low Cost Housing: EastMasechaba: Mojela, JB Max Ext 9 Tsakane: Xaba Street, Bluegum: Zabalaza 9 Freedom	USDG	Urban Restructuring	Duduza	86	2 600 000	-	-	2 600 000
Roads and Stormwater	Roads: Low Cost Housing: EastWinnie Mandela, Robinson Ext 1 & 4 Cool breeze Lekope	USDG	Urban Restructuring	Duduza	87	2 600 000	-	-	2 600 000
Roads and Stormwater	Roads: Low Cost Housing: East29th Street in 2015/2016 32nd Street in 2016/2017	USDG	Urban Restructuring	Etwatwa	66	2 500 000	-	-	2 500 000
Roads and Stormwater	Roads: Low Cost Housing: EastMasango, Mphahlela, Mbhele, Holomisa, Malume, Holomisa, Malume, Sokhela, Kope, Matsimela, Rantla, Machadibana will be implemented over multi financial years	USDG	Urban Restructuring	Kwa Thema	77	2 500 000	-	-	2 500 000

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Roads and Stormwater	Roads: Low Cost Housing: NorthPatrice Lomumba	USDG	Urban Restructuring	Tembisa 2	2	2 400 000	-	-	2 400 000
Roads and Stormwater	Roads: Low Cost Housing: NorthNomzamo	USDG	Urban Restructuring	Tembisa 2	3	2 400 000	-	-	2 400 000
Roads and Stormwater	Roads: Low Cost Housing: NorthMoshoeshoe	USDG	Urban Restructuring	Tembisa 2	89	2 400 000	-	-	2 400 000
Roads and Stormwater	Roads: Low Cost Housing: South24th Street - zonkezizwe st	USDG	Urban Restructuring	Katlehong 2	62	2 300 000	-	-	2 300 000
Roads and Stormwater	Roads: Low Cost Housing: NorthLifateng, Erf 9	USDG	Urban Restructuring	Tembisa 1	9	1 800 000	-	-	1 800 000
Roads and Stormwater	Roads: Low Cost Housing: SouthZimbabwe and other	USDG	Urban Restructuring	Thokoza	58	1 800 000	-	-	1 800 000
Roads and Stormwater	Katlehong & Thokoza, Lining of Canal between Katlehong and Thokoza	USDG	Urban Restructuring	Thokoza	52,54	1 550 000	-	-	1 550 000
Roads and Stormwater	Roads: Low Cost Housing: South5th Street	USDG	Urban Restructuring	Katlehong 2	61	1 400 000	-	-	1 400 000
Roads and Stormwater	Roads: Low Cost Housing: South25th Avenue	USDG	Urban Restructuring	Katlehong 2	62	1 270 000	-	-	1 270 000
Roads and Stormwater	Roads: Low Cost Housing: South3rd Street	USDG	Urban Restructuring	Katlehong 2	61	1 100 000	-	-	1 100 000
Roads and Stormwater	Roads: Low Cost Housing: South23rd Street	USDG	Urban Restructuring	Katlehong 2	62	1 100 000	-	-	1 100 000
Roads and Stormwater	Roads: Low Cost Housing: South4th Street	USDG	Urban Restructuring	Katlehong 2	61	900 000	-	-	900 000
Roads and Stormwater	Roads: Low Cost Housing: SouthNaledi	USDG	Urban Restructuring	Katlehong 2	101	900 000	-	-	900 000
Roads and Stormwater	Roads: Low Cost Housing: SouthNcambo	USDG	Urban Restructuring	Katlehong 2	101	780 000	-	-	780 000
Roads and Stormwater	Roads: Low Cost Housing: South26th Street	USDG	Urban Restructuring	Katlehong 2	62	750 000	-	-	750 000
Roads and Stormwater	Roads: Low Cost Housing: South1st street - zonkezizwe st	USDG	Urban Restructuring	Katlehong 2	61	600 000	-	-	600 000
Roads and Stormwater	Roads: Low Cost Housing: South27th Street	USDG	Urban Restructuring	Katlehong 2	62	600 000	-	-	600 000
Roads and Stormwater	Roads: Low Cost Housing: EastSabie Street, Leachville	USDG	Urban Restructuring	Brakpan	97	500 000	-	-	500 000
Roads and Stormwater	Roads: Low Cost Housing: South28th Street	USDG	Urban Restructuring	Katlehong 2	62	500 000	-	-	500 000
Roads and Stormwater	Roads: Low Cost Housing: SouthOuter Years	USDG	Urban Restructuring	Katlehong 2	61	300 000	-	-	300 000
Roads and Stormwater	Roads: Low Cost Housing: SouthOuter Years	USDG	Urban Restructuring	Katlehong 2	62	300 000	-	-	300 000
Roads and Stormwater	Roads: Low Cost Housing: EastTsavo road at Extension 34.	USDG	Urban Restructuring	Etwatwa	26	150 000	-	-	150 000
Roads and Stormwater	Roads: Low Cost Housing: EastBridge at corner: Leopeng and Mabuya streets and canal	USDG	Urban Restructuring	Duduza	98	150 000	-	-	150 000
Roads and Stormwater	Roads: Low Cost Housing: NorthEsselen Park ext 1 Link Roads	USDG	Urban Restructuring	Tembisa 1	8	2 400 000	-	-	2 400 000
Roads and Stormwater	Roads: Low Cost Housing: NorthCompletion Esselen Park Roads	USDG	Urban Restructuring	Kempton Park	91	1 000 000	-	-	1 000 000
						101 150 000	104 500 000	90 000 000	295 650 000

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SRAC	Construction of a Zonkizizwe Multi-purpose center	USDG	Urban Restructuring	Katlehong 2	101	-	16 000 000	20 000 000	36 000 000
SRAC	Construction: New Library Etwatwa	USDG	Urban Restructuring	Etwatwa	26	-	8 911 111	11 000 000	19 911 111
SRAC	Construction of a new swimming pool in Duduza	USDG	Urban Restructuring	Duduza	86	4 000 000	15 000 000	-	19 000 000
SRAC	Construction of a new swimming pool in Eden Park	USDG	Urban Restructuring	Thokoza	58	15 000 000	-	-	15 000 000
SRAC	Construction of New Library: Tsakane	USDG	Urban Restructuring	Tsakane	85	9 000 000	-	-	9 000 000
SRAC	Rehabilitation of Thami Mnyele Cultural Park	USDG	Upgrading and Renewal	Tembisa 1	9	1 000 000	-	-	1 000 000
SRAC	Upgrade Tembisa Library	USDG	Urban Restructuring	Tembisa 1	2	8 000 000	-	-	8 000 000
						37 000 000	39 911 111	31 000 000	107 911 111

Department	Project Name	Funding Source	Capitalisation Investment Framework Category	CCA	Ward/s in which project is located	Budget Year 2015 / 16	Budget Year 2016 / 17	Budget Year 2017 / 18	MTREF period TOTAL
Water & Sanitation	Water Loss Eradication Programme	USDG	Economic Development	Corporate	All wards	-	130 000 000	320 000 000	450 000 000
Water & Sanitation	Human Settlements Essential Services	USDG	Urban Restructuring	Corporate	Multi Wards	-	100 000 000	-	100 000 000
Water & Sanitation	Etwatwa Ext19 Reservoir, Tower, access road and pipeline	USDG	Upgrading and Renewal	Etwatwa	67	19 000 000	48 000 000	-	67 000 000
Water & Sanitation	Etwatwa Sewer Upgrades	USDG	Upgrading and Renewal	Etwatwa	Multi Wards	13 000 000	20 000 000	30 000 000	63 000 000
Water & Sanitation	Palm Ridge Phases 5 & 6 Bulk & Essential Services	USDG	Urban Restructuring	Katlehong 2	61	-	20 000 000	20 000 000	40 000 000
Water & Sanitation	Upgrade Water Networks	USDG	Upgrading and Renewal	Benoni	Multi Wards	-	20 000 000	20 000 000	40 000 000
Water & Sanitation	Upgrade Sewer Networks	USDG	Upgrading and Renewal	Corporate	Multi Wards	-	-	30 000 000	30 000 000
Water & Sanitation	Zulu Xhosa resevoir	USDG	Upgrading and Renewal	Brakpan	82,83,85	19 000 000	9 000 000	-	28 000 000
Water & Sanitation	Xhosa And Zulu Pumpstation	USDG	Urban Restructuring	Brakpan	82,83,85	25 000 000	-	-	25 000 000
Water & Sanitation	Upgrade Outfall Sewers in Vosloorus C/F	USDG	Upgrading and Renewal	Vosloorus	Multi Wards	9 000 000	11 500 000	-	20 500 000
Water & Sanitation	Etwatwa Booster pumpstation	USDG	Urban Restructuring	Etwatwa	67	20 000 000	-	-	20 000 000
Water & Sanitation	Reservoir Construction	USDG	Upgrading and Renewal	Corporate	Multi Wards	-	-	20 000 000	20 000 000
Water & Sanitation	Water and Sanitation: Emergency services to informal settlements	USDG	Urban Restructuring	Corporate	Multi Wards	-	20 000 000	-	20 000 000
Water & Sanitation	Moderfontein 76 IR Ptn 7 E/tial SVC C F	USDG	Upgrading and Renewal	Daveyton	71	7 000 000	12 400 000	-	19 400 000
Water & Sanitation	Mayfield Ext 1	USDG	Urban Restructuring	Benoni	60,66	18 000 000	-	-	18 000 000
Water & Sanitation	Welgedacht/Paynville	USDG	Urban Restructuring	Springs	72,75	14 000 000	-	-	14 000 000
Water & Sanitation	RAND WATER TO PALM RIDGE	USDG	Urban Restructuring	Germiston	53, 58, 61, 101	10 000 000	-	-	10 000 000
Water & Sanitation	35ML RESERVOIR	USDG	Urban Restructuring	Thokoza	58	10 000 000	-	-	10 000 000
Water & Sanitation	NEW HOUSING ESSENTIAL	USDG	Urban Restructuring	Katlehong 2	61	10 000 000	-	-	10 000 000
Water & Sanitation	Lillianfont Outfall Sewer	USDG	Urban Restructuring	Boksburg	34,42	9 000 000	-	-	9 000 000
Water & Sanitation	Masetjaba Essential	USDG	Urban Restructuring	Nigel	88	3 000 000	-	-	3 000 000
Water & Sanitation	Etwatwa Ext 34,35&36 Essential	USDG	Urban Restructuring	Etwatwa	62,63,87	2 600 000	-	-	2 600 000
						188 600 000	390 900 000	440 000 000	1 019 500 000

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Disaster & Emergency Man. Services	Upgrading of Vosloorus Fire Station	USDG	Upgrading and Renewal	Vosloorus	44	300 000	4 000 000	-	4 300 000
						300 000	4 000 000	-	4 300 000

SECTION F: CONCLUDING REMARKS

Table F1.1 is a summary of the challenges and possible solutions identified throughout the proses of gathering information, analysing and summarising the information pertaining to the Build Environment Indicators (Section D) and the Institutional and Financial Arrangements (Section E).

Table F1.1: Section D and E Challenges and Solutions Summary

Section Reference	Details / Item	Challenges	Recommended Actions to Address Challenges
D.1	Performance Matrix	Much of the information required to populate the Performance Matrix is not available / is still being collected due to a shortage of staff in the Strategy and Corporate Department. The Matrix attached to the 2016/17 first draft BEPP submission is therefore very similar in content to the 2015/16 final submission. In the interim a table has been included in section D.1 summarising the catalytic projects of the Metro together with each project's Integration Zone, GPA, MTREF allocations etc. which summarises some of the financial information applicable to the Matrix.	The Department has indicated that it will be advertising posts shortly in order to ensure it has the required capacity to adequately provide the necessary technical support. They have also attended the recent National Treasury workshops and are aware of what is required for the BEPP Performance Matrix going forward including necessary controls and procedures to collect and report on the applicable indicators and outputs. It is therefore expected that the Matrix can be populated with accurate information for the final 2016/17 BEPP submission of Feb / March 2016.
D.2	Business Plans	Business Plans applicable to the 2016/17 USDG, HSDG and NDPG were not available as the process of compiling them only started recently.	To be incorporated into the final BEPP submission in Feb / March 2016.
D.4 & E.6	Catalytic Projects – phasing information; budget allocations	Phasing related information is not readily available, for example funding sources by project <i>phase</i> , expenditure by project <i>phase</i> , status by project <i>phase</i> etc.	MTREF allocations have been provided for each of the catalytic projects for the next 3 years instead of phase specific information. The allocations shown in the tables in E6b are estimated groupings of allocations from the capital budget applicable to catalytic housing clusters and projects and may therefore change. To be addressed for final BEPP submission in Feb / March 2016.

D.2; D.4; E.6; E.9	Funding sources shown for MTREF capital project allocations, and expenditure to date	Funding sources of the various projects in the MTREF capital budget are subject to change, for example during the mid-year review etc. Similarly, actual expenditure related information on capital grant projects will be shown in the final BEPP submission of Feb / March 2016 as 3 quarters' financial information will be available instead of only 1 at present.	The final BEPP submission in Feb / March 2016 will reflect more meaningful actual expenditure and increased accuracy of funding sources as a result of the effects of the mid-term budget review been factored in.
General	GPS co-ordinates of projects	The GPS co-ordinates of several projects are still being finalised by the Metro, making exact allocation / inclusion of projects to specific Integration Zones difficult.	Being addressed at present as part of the CIF process. Accurate project locational information and resultant more accurate allocation / inclusion in correct Integration Zones and GPAs in final 2016/17 BEPP submission.

ANNEXURE A

A.1 ANNEXURE A

Table A1.1 represents the updated Urban Catalytic Projects list, which will replace the current list contained within the main document for final Submission February 2016.

Table A1.1: Updated Urban Catalytic Projects List

1.1	Flagship Catalytic Projects
1.	Aerotropolis - Rhodesfield, Pomona
1.1.	M&T Development Project
1.2.	Riverfields Development
2.	Revitalization of Township Economies - Tembisa Civic Centre Precinct
3.	Revitalization of Manufacturing Sector
3.1.	Tambo Springs Inland Port
3.2.	Prasa Gibela Project
3.3.	Lords View
4.	Digital City
5.	IRPTN - IRPTN Phase 1A
5.1.	Strategic Land Parcels - Dries Niemandt
5.2.	New Natal Spruit Hospital SLP- Phase 1C
6.	Urban Regeneration – Germiston CBD / Kempton Park CBD
7.	Revenue Management and Enhancement
7.1.	Badenhorst Estate
7.2.	Glen Gory
8.	Beautification of Lakes and Dams - Germiston Lake, Boksburg Lake
9.	Urban Renewal
1.2	Catalytic Housing Projects Clusters:
1.	Northern Development Cluster – Clayville Ext 45, 71, Heartland / Esselen Park (Witfontein) / Esselen Park Ext 3 / Tembisa Ext 25
2.	Eastern Development Cluster - John Dube 2 / Brakpan Old Location / Tskane Ext 22 / Chief Luthuli 6
3.	Southern Development Cluster – Leeuwpoort / Germiston Urban Renewal housing / Zwartkoppies / Palmietfontein / Rietspruit/ Rietfontein / Palmridge 10 & 11

ANNEXURE B

B.1 ANNEXURE B

Note: The Performance Matrix is similar to the one included within the 2015/2016 BEPP document. The Performance Matrix will be updates as soon as the 2016/2017 information is available.

INTERMEDIATE OUTCOME (Higher Order Numbering)		OUTPUT (Lower Order Numbering)		Data Collection Frequency (Years)				TARGET[1]									
				1/4	1	2	5	Phase 1			Phase 2[2]					Department	Notes
								12/13[3]	13/14	14/15	15/16	16/17	17/18	18/19	19/20		
A1.1 Formal council approval of IDP/IDP Review with identified Urban Development Zones, Social Housing Restructuring Zones and Integration Zones (Y/N)		✓				B	N	N	Y						Strategy & Corporate Planning		
	A1.1.1 Submission of BEPP in required format by prescribed date, including: (a) Council approval of Integration Zones in compliance with Urban Network and ICDG guidelines; and (b) List of names and values of catalytic projects where procurement process is completed in each Integration Zone for each financial year of the current MTREF, including unallocated amounts (Y/N)	✓				B	N	N	Y						City Planning: Special Projects		

A1.2 Number of annual actions identified in the CSIP which have been implemented		✓				B												City Planning: Special Projects	Actions to be identified
	A1.2.1 Signed CSP Participation Agreement, including schedule of Capacity Support Implementation Plan (CSIP) (Y/N)	✓				B	N	Y	Y									City Planning: Special Projects	
A1.3 (To enter the CSP), an unqualified audit opinion by AG (with or without findings) for last financial year (Y/N). (To progress to phases following Phase 1), no material financial or supply chain management irregularities in spatial transformation projects in integration zones reported by the AG (Y/N).		✓				B	Y	Y	Y									Finance	
	A1.3.1 Financially unqualified audit opinion by AG for last financial year)	✓				B	Y	Y	Y									Finance	
	A1.3.2 % Change in Total value of irregular, fruitless and wasteful expenditure identified by AG	✓				B												Finance	Note: Data to be obtained and targets determined in conjunction with Finance
A2.1 Number of rezoning applications in integration zones approved		✓				B												City Planning: LUMS	Upon finality of Integration zones system for data collection

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A3.3 Percentage change in the value of private finance invested in catalytic project	✓				B only												Finance	Data to be sourced from private sector; Catalytic projects to be determined.
A3.4 Percentage change in the value of privately owned buildings completed in Integration Zones	✓				B												City Planning: Building Control	Data to be sourced from private sector;
A3.5 Actual municipal capital expended on catalytic projects as a percentage of the budgeted value of municipal capital for catalytic projects	✓				B only												Finance	Catalytic Projects to be determined
B 1.1 Percentage annual change in number of newly serviced land parcels			✓		B												City Planning: LUMS	Data not available in this format. The outcome should refer to the number of proclaimed erven instead
B 1.2 Number of hectares of rural land re-designated to urban land			✓		857	771	693										City Planning: LUMS	Rate of urbanisation to change upon incorporation of LESEDI into EMM

B1.3 Gross Residential Unit Density per hectare within integration zones			✓		B												City Planning: LUMS	Upon finality of Integration zones system for data collection needs to be in place
B1.4 Annual change in the number of completed subsidised rental housing units within Integration Zones			✓		B												Human Settlements	Upon finality of Integration zones system for data collection needs to be in place. Define Rental Stock; Define Integration Zone; EDC Targets; Refurbishment of units included?
B1.5 Annual increase in the number of completed privately owned rental housing units within Integration Zones			✓		B												City Planning: LUMS	No data available on privately owned rental stock

B1.6 Cumulative ratio of housing ownership types in Integration Zones			✓		B											City Planning/ Research	Integration zones to be identified. No data available on housing ownership types
B1.7 Number of units in the gap market (city-wide)			✓		B											Human Settlements	Stats SA data to be utilised. FLISP; NHFS; Province; No system in place
B1.8 Percentage change in the total number of informal settlement dwelling units within Integration Zones that have not benefitted from integrated upgrading programmes			✓		B											Human Settlements	Integration zones to be identified. Human Settlements to populate data
B2.1 Annual percentage change in proportion of households within 500 metres of access points to integrated public transport system within integration zones			✓		B			5		5			5			Transport	
B2.2 Percentage decade change in share of household income spent on transport costs for passengers city-wide			✓		B only					-2						Transport	

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C1.1 Four-yearly percentage change in total market value of all commercial properties in Integration Zones				✓	B only												Finance	Integration Zones to be identified. Market value data required
C1.2 Number of hectares of serviced space proclaimed for informal traders within Integration Zones		✓			B												Economic Development	No data available
C1.3 Annual percentage of available passenger spaces in weekday scheduled public transport trips that are occupied		✓			B												Transport	Note: To be determined
D1.1 Greendrop score for municipality		✓			74,9%												Water & Sanitation	Note: Blue drop score not within indicators??
D1.2 Kilolitres of Bulk Water entering network (self-provided or purchased)		✓			B												Water & Sanitation	To be determined
D1.3 kWhc (Kilowatt hours) purchased by the municipality		✓			61	66	71	77	83	90	97	105	113				Energy	

D1.4 Tonnage of waste produced that goes to landfill	✓				1,5 m												Waste Management	To be determined
D1.5 Litres of treated wastewater reused	✓				B												Water & Sanitation	To be determined/ Private or public?
D1.6 Annual Rand value of energy bought from renewable sources as a percentage of the Rand value of all energy bought	✓				B												Energy	To be determined/ Private or public
D1.7 Number of subsidies paid for Solar Water Heaters	✓				B												Energy	To be determined

