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**TITLE: Narrowing the municipal funding gap: A Metropolitan perspective in South
Africa**

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ABSTRACT

Metropolitan municipalities play a vital role in service delivery at grassroots level. South Africans suffered from a lack of basic municipal services during the Apartheid era. Accordingly, post-apartheid municipalities underwent a radical transformation to start delivering such basic services as housing, water and electricity to all. Metropolitan governments were established to cover much wider areas to remedy the fragmentation and selective forms of service delivery of the past. However, a concomitant increase in the share of tax revenues has not been forthcoming to metropolitan municipalities to help them provide these services in a financially sustainable and viable manner. Accordingly, this study seeks to find out whether there is a funding gap in metropolitan councils, if so, what the quantum of the gap is, and what can be done to address such a funding gap. This is one of the most important issues facing local government today as it has a direct impact on service delivery, as well as the long-term sustainability and viability of municipalities. The study found that there is a huge funding gap in the three metropolitan councils namely, the City of Cape Town, Ethekewini Municipality, and the City of Tshwane.

The key findings arising from the research indicate that: migration and urbanisation are having a huge impact on service delivery in metropolitan councils. The ever-increasing informal households are leading to growing service backlogs. Accordingly, whilst excellent progress has been made in rolling out service delivery, the influx of informal residents undermines the achievements made. This also impacts on the unemployment rate for the three metropolitan councils which is at an average of 24.3 % and is a major cause for concern and will continue to escalate if growth and job creation are not prioritised. Notwithstanding this, metropolitan councils are contributing significantly to the National and Provincial GDP at an average of 10% and 56% respectively. It is apparent that Metropolitan councils are the engines of growth in the economy and there needs to be due support given to them.

In addition, there is very little scope to increase the current funding sources, service charges, (electricity, water, refuse and sanitation), rates, and grants as these have been

maximised. There is also a major issue of affordability of further tariff increases. In addition the collection rates for all three metropolitan councils are above 95% Therefore, additional or new sources of revenue streams need to be explored, in particular development levies and a local business tax. As regards capital expenditure, a similar challenge of affordability and sustainability exists in meeting the service delivery backlogs and investing in new areas for growth. Whilst borrowings can be increased, this will impact on tariff increases and the affordability by consumers. A further key funding is that not all metropolitan councils are recording backlogs, rehabilitation, replacement and maintenance in a uniform way thus making comparisons difficult. Accordingly a financial model has been developed to ensure appropriate benchmarking using norms set by the World Bank. The model has also assisted in quantifying the funding gap. Accordingly, this study provides a major breakthrough in terms of an enhanced understanding of the funding of metropolitan councils and informing discussions by National Treasury and the Fiscal Finance Commission around the national fiscus, especially with regard to the funding gap and the need to review funding sources including grant funding that goes to metropolitan councils in future.

The study found that whilst there is scope for improvement in terms of economies, efficiencies, value for money and productivity and an improvement in collection rates. new sources of revenue need to be identified. However, as recommended by the Fiscal and Finance Commission (FFC) and the South African Local Government Association (SALGA), a local business tax would be the most appropriate funding mechanism to make a meaningful impact on the funding gap as it has good reach and impact. Municipalities should re-look at Public Private Partnerships (PPP's) as an alternate source of funding and reducing the cost to municipalities, development levies, additional grants, as well as alternate sources of funding as suggested by the FFC.

Improved alignment of integrated development plans (IDP's) to budgets, as well as 'Smart City' investments to stimulate growth and investment are also key issues that need to be taken cognisance of to ensure future viability and sustainability of metropolitan councils.

Acronyms

Acronyms	Meaning
CBD	Central Business District
CFO	Chief Finance Officer
COGTA	Cooperate Governance and Traditional Affairs
CSP	City Support Programme
DORA	Division of Revenue Act
FFC	Fiscal and Finance Commission
GDP	Gross Domestic Product
IDP	Integrated Development Plan
LGFF	Local Government Funding Framework
LGTAS	Local Government Turn Around Strategy
MFMA	Municipal Finance Management Act
MPRA	Municipal Property Rating Act
MDB	Municipal Demarcation Board
MFPFA	Municipal Fiscal Powers and Function Act
NDP	National Development Plan
PPP	Public Private Partnership
ROI	Return on Investment
SALGA	South African Local Government Association
SCM	Supply Chain Management

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CHAPTER 1: INTRODUCTION

1.1 Introduction

To this day, countries in Africa face huge social, environmental and economic problems. Whilst urban issues contribute directly towards these problems, they are still not regarded as priorities in local governments and globally. This is a serious concern, especially as the African continent has the highest rate of urbanisation in the world. It is anticipated that in the next 20 years there will be 300 million new people living in cities. These new city dwellers will add to the demand for capital funding on infrastructure, basic services, and social facilities. This, in conjunction with energy shortages and poor roads, adversely affect the economic productivity of countries in Africa (Paulais, 2012:7).

Apart from the objects of local government provided in the Constitution, all municipalities are also obligated to fulfil a developmental role in terms of the Constitution. It is the role of all municipalities to work independently, as well as together with their residents to ensure that their peoples' needs are met and quality of life is uplifted. Accordingly, it is of utmost importance for the entire country that the sphere of local government is capacitated and transformed to play its constitutionally-envisaged developmental role. This cannot be achieved without the help and support of the Provincial and National governments, especially from a financial perspective (Bekink, 2006:9).

One of the objectives of this dissertation is to indicate progress made in the twenty years post democracy by metropolitan councils in terms of service delivery as well as quantifying backlogs and determining the adequacy of funding for maintenance and rehabilitation of assets. The impact of urban migration on Metro services will also be determined and the ability to sustain free basic services.

The South African National Development Plan (NDP) (National Planning Commission, 2011:3) expresses the view that other government entities and spheres of government “will have a vital role to play in bringing the vision and proposals contained in the NDP to life.” In this regard, local government is at the coal-face of interacting with the community and is a key delivery agent in uplifting their quality of life. However, delivery is often constrained by a lack of resources.

The key economic indicators for metropolitan councils will be analysed in terms of their macro-economic impact and will cover, *inter alia*, *GDP contribution, unemployment, and per capita income*. Benchmarking of metropolitan councils in terms of key service delivery functions, such as per capita rates, audit outcomes, comparability of tariffs for the basket of goods and services, number of residents formal and informal will also be undertaken. Furthermore, a comparison of key ratios (current ratio, debt coverage ratio, and gearing ratio) and performance indicators such as days cash on hand and collection rates will be undertaken to determine the financial viability of metropolitan councils.

An analysis of income and expenditure trends based on five years of audited figures, as well the next five years of budgets on both, operating and capital expenditure will be undertaken. The various funding sources for capital and operating expenditure will be analysed and moreover the potential to increase same. Furthermore, the ability to gear income and borrow additional funds will be considered.

In order to address the infrastructure and service delivery challenges and ensure that metropolitan councils become sustainable, there needs to be a clear appreciation that a funding gap exists. The research will look at various funding and financing options to close such a gap and also consider alternate forms of taxes and revenue generating opportunities.

Accordingly, this chapter provides an overview of the research to be undertaken and covers the research aim, objectives and questions, an overview of the location of the

study, and the profiles of, the relevant metropolitan councils, an overview of the research methodology, the definition of key concepts, a list of relevant acronyms, as well as an outline of the rest of the chapters of this study.

1.2 Research problem

The main objective of this research is to establish the shortfall in the resource pool of Metropolitan Councils to fund their service delivery backlogs, rehabilitation and economic growth needs and identify sustainable measures that can be implemented to increase the pool to achieve these imperatives.

1.3 Research objectives and questions

The objectives of the study are linked to the main aim or problem statement of the study. In turn the eight research questions are linked to the two main objectives of the study as follows:

1.3.1 Objective 1: what is the backlog and funding gap

The research questions linked to this objective are as follows:

- To what extent are all funding sources being maximised by Metropolitan Councils?;
- What are the current service delivery backlogs?;
- What are the investment requirements to address their service delivery backlogs, rehabilitation and economic growth?;
- To what extent is there a balance between existing resources and the IDP (Integrated Development Plan) requirements?; and
- To what extent is the current level of funding sustainable?

1.3.2 Objective 2: what can be done to address the funding gap to ensure sustainable service delivery

The research questions linked to this objective are as follows:

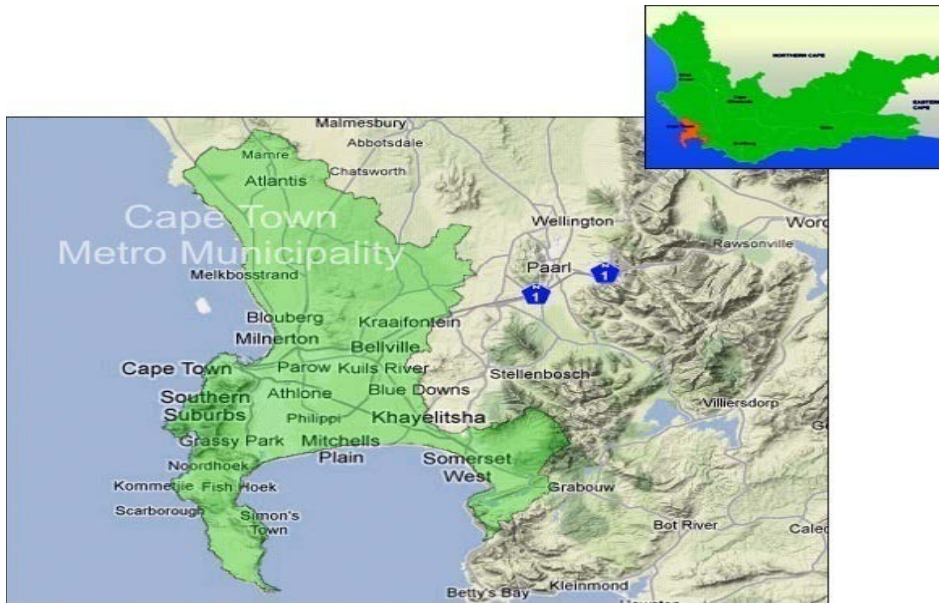
- What will the impact of new sources of revenue be on the resource pool of the Metropolitan Councils in meeting their service delivery targets?;
- How do Metropolitan Councils become smart cities and globally competitive?; and
- How do the Metropolitan Councils improve business and investor confidence and attract investments that will create sustainable jobs?

1.4 Study Area

This study is based on three metropolitan councils, namely, the City of Cape Town, the Ethekwini Municipality, and the City of Tshwane. The profiles of these cities are as follows:

1.4.1 City Of Cape Town

The City of Cape Town is highlighted in green in the map below. The City of Cape Town is the metropolitan council which governs the City of Cape Town in South Africa, and its suburbs. It is located in the Western Cape Province. The current municipality covers Cape Point in the South-West, Somerset West in the South-East, Atlantis in the North, and includes Robben Island. It has a total coastline length of 294 km (City of Cape Town, 2013:27).



Source: www.westerncape.gov accessed on 1 July 2014.

The total area is 2 461 square kilometers with a total population of 3 740 025 according to the 2011 Census. This makes up 1 068 572 households. The racial make-up of the population is 42.4% Coloured, 38.6% African, 15.7% White, and 1.4% Indian or Asian (City of Cape Town, 2013:29).

As at 2011, the unemployment rate was 23.9%. The total GDP was R250.3 billion which makes up 73.6% of the GDP of the Western Cape and 10.7% of the national GDP. From 2000 to 2010 there was a growth rate of 4.1%. However, since then there has been a growth rate of 2.6% (City of Cape Town, 2013:33).

The total 2013/2014 budget was R31.725 billion with an operating budget of R26.308 billion (83%) and a capital budget of R5.417 billion (17%) (City of Cape Town, 2013:29).

The City has the following key challenges

- Global economic conditions and recession.
- Lack of control of key economic levers, such as the harbour and airport. The City does not benefit directly from the revenue from these operations.

- Population growth, especially due to urbanisation resulting in a greater demand for infrastructure and services.
- Unemployment – need more economic development and catalytic projects to drive job creation.
- Crime levels are still high.
- HIV prevalence high at 16.8% of the population.
- Indigent households which make up 21% of the total households. Further, 35.7% of the households earn under R3 500 per month.
- Developing a strategy to mitigate against water loss.
- Mitigation and adaptation strategies to address climate change (City of Cape Town, 2013:32).

1.4.2 Ethekwini Municipality

The Ethekwini Municipality is situated on the east coast of South Africa within the province of KwaZulu-Natal. While the total of the Ethekwini Municipal Area (EMA) is only 1.4% of the total area of KwaZulu-Natal, it contains just over a third of the population of KwaZulu-Natal. The Ethekwini Municipality is surrounded by iLembe to the north, the Indian ocean to the east, Ugu to the south and Umgungundlovu to the west (Ethekwini Municipality, 2013:47).



Source: www.wikipedia.org accessed on 2 July 2014

The total area is 2 291 square kilometers with a total population of 3 442 361 according to the 2011 Census. This makes up 956 713 households. The racial composition of the population is 65.2% African, 18.7% Indian or Asian, 13.5% White, and 2.6% Coloured (Ethekewini Municipality, 2013:49).

As at 2011 the unemployment rate was 20.4%. The total GDP in 2012 was R206.9 billion which makes up about 60.5% of the GDP of the KwaZulu-Natal (KZN) and approximately 10.7% of the national GDP. Economic growth in the Municipality improved by 3.1% between 2009 and 2010, and the total GDP outperformed that of the KwaZulu-Natal and South Africa during the period 2005 to 2010. Ethekewini's economy grew at an average rate of 4.1% per annum over that period, as compared to the economy of South Africa expanding by 3.5% and the KZN and the KZN economy expanded by 3.7%. (Ethekewini Municipality, 2013:61).

The total 2013/2014 budget was R33.7 billion with an operating budget of R28.3 billion (84%) and a capital budget of R5.4 billion (16%) (Ethekewini Municipality, 2013:214).

The City has the following key challenges:

- High rate of unemployment and low economic growth;
- High levels of poverty;
- Low levels of skills development and literacy;
- Limited access to basic household and community services;
- Increased incidence of HIV/AIDS and communicable diseases;
- High levels of crime;
- Ensuring adequate energy and water supply;
- Ensuring food security;
- Unsustainable developmental practices;
- Infrastructure degradation;
- Ensuring financial sustainability; and
- Climate change (Ethekewini Municipality, 2013:84).

1.4.3 City Of Tshwane

The City of Tshwane is strategically situated as the northern-most city in South Africa in the Gauteng Province. It is the national capital of South Africa and the third largest municipality in the world in terms of its area (City of Tshwane, 2013:16)



Source: www.wikipedia.org accessed on 2 July 2014

It has a geographical area of 6 345 square kilometers. Its population is 2 921 488. The racial composition of the population is 75.4% African, 1.8% Indian or Asian, 20.1% White, and 2.0% Coloured (City of Tshwane, 2013:17).

As at 2013 the unemployment rate was 20.1% as compared to 24.8% in 2011 (City of Tshwane, 2013:23).

The total 2013/2014 budget was R27.7 billion with an operating budget of R25.2billion (91%) and a capital budget of R2.5 billion (9%) (City of Tshwane, 2013:247).

The City has the following key challenges:

- Creating a resilient and resource efficient city.
- Ensure growth that is inclusive, diversified and competitive.
- Funding quality infrastructure development that supports liveable communities.
- Developing an equitable city that supports human happiness, social cohesion, safety and healthy citizens (City of Tshwane, 2013:26).

1.5 Research Methodology

A mixed research methodology was used. Quantitative and qualitative research methodologies were employed. Quantitative research was undertaken using a questionnaire and publications from secondary sources. Qualitative research was undertaken through interviews undertaken.

Primary data was obtained using:

- (i) a questionnaire; and,
- (ii) structured interviews

Secondary data was obtained from publications by:

- (i) National Treasury;
- (ii) FFC (Financial & Fiscal Commission); and,

- (iii) SALGA (South African Local Government Association)

A random and simple probability sampling was used. The sample frame comprised the eight metropolitan councils in South Africa. From the sample frame three metropolitan councils were chosen as the sample for this study. The sample is considered representative of the population as they are in different provinces within South Africa. The sample size also ensures that the study is feasible and viable in terms of completing it. The participants are the City of Cape Town located in the Western Cape, the Ethekewini Municipality located in KwaZulu-Natal, and the City of Tshwane located in Gauteng.

1.6 Key Concepts

1.6.1 Transformation

“Transformation” is a stronger word than “change”. According to the Collins Concise Dictionary (1978: 799), “transform”, means *inter alia*, the following:

“... to change the form or appearance of ...”;

“... to change the condition, character or function of ...”.

Furthermore, according to Van Der Walldt and Knipe (1998:28), “transformation” is intended or unintended reaction to what is happening in the surrounding environment. For example, technological, economic, political, legal and labour factors may induce organisations to change.

1.6.2 Organisational Transformation

“Transformation” is a change in form, character or disposition (Swart, 1999: 223). According to Rumult (as cited in Swart 1999: 223), “organization transformation” is the process whereby an institution changes its strategy and structure, systems and processes, measurements and controls, culture and expectations, costs and capabilities, all at the same time. This clearly results in a major upheaval and change in the way the organisation does its business.

1.6.3 Restructuring

Local government restructuring includes all actions on a national level that lead to new or changed structures of local government. This leads to new arrangements and a redistribution of responsibilities of major functions, even between tiers of government. This leads to increased public participation in policy making and increased action at the local level (United Nations, 1997: vi). The term “restructuring” as used in this research study refers to change in government structure that alters the manner in which local government structures work, interacts and performs.

1.6.4 Metropolitan Councils

Metropolitan councils areas large urban settlements with high population densities, often complex and diversified economies, high levels of functional integration over a large geographic area and many economic and social activities that transcend certain municipal boundaries. According to the Constitution, a Metropolitan Council is a municipality with exclusive municipal, executive and legislative authority in a particular area.

Metropolitan council areas have more than one business district and industrial area and their economies are complex and diversified. Due to their size most metropolitan councils are important contributors to the national economy of the country. Metropolitan councils are therefore key centres in the global economy and should be governed accordingly. It is also important for metropolitan councils to accommodate the movement of people and goods in their areas, and they must function as integrated units (Bekink, 2006:17).

1.6.5 Capital and Operating Budgets

Capital expenditure is defined as expenditure which pertains to the acquisition of an asset which has a useful life of more than one year. In terms of GAAP (General Accepted Accounting Practice) accounting standards the asset cost must be spread over its economic life.

Capital expenditure is generally financed from grants from other spheres of government, own sources of revenue, depreciation, asset replacement reserves, development levies and borrowings.

Operating expenditure is expenditure that has a benefit in the year that it is incurred, for example, Salaries, Wages & Allowances, Bulk Purchases of Electricity and Water, Repairs and Maintenance and General Expenses for fuel, rental, telephone, etc. Operating expenditure is funded from property tax, service charges, grants, tariffs, fines, interest and penalties.

1.6.6 Operating expenditure

- It is an amount spent to acquire goods or services essential for daily operations and is expended immediately.
- Its effect is temporary and its benefit is realised within the accounting year.
- No asset is acquired, and neither is the value of any asset enhanced.
- It has no physical existence as it is incurred for items that are used by the organisation.
- It is recurring and regular and helps to ensure that the business survives.
- It is usually charged against revenue in the income statement in the year it is expensed.
- It is not reflected in the balance sheet.
- It decreases the revenue of the municipality (FASB, 2000:6).

1.6.7 Capital expenditure

- It refers to funds spent to purchase new assets or increase the value of existing long-term assets, such as land and buildings.
- Its effect is long term with the benefits enjoyed over several years into the future.
- Except for some intangible assets, it generally has a physical existence.
- It does not occur repeatedly; it is irregular.
- It improves the position of the business.

- A portion of the expenditure (depreciation on assets) is shown in the income statement as an expense, and the balance is shown in the balance sheet on the asset side.
- It is reflected in the balance sheet until its benefit is fully exhausted (that is, its useful life has been exhausted and it has zero book value).
- The purchase of a fixed asset does not affect revenue (FASB, 2000:4).

1.6.8 Funding of Expenditure

Municipalities' budgets must be balanced or fully funded. In terms of section 18(1) of the MFMA (Municipal Finance Management Act) an annual budget may only be funded from:

- a) Revenues that are realistically expected to be collected.
- b) Accumulated funds from the previous financial year that are cash backed and uncommitted.
- c) Borrowings or loans, but only to fund capital expenditure.

The main sources of revenue are property taxes, service charges for electricity, water, refuse and sanitation, grants from National Government and borrowings to fund capital expenditure.

1.6.9 Gearing

Gearing is one of the ratios considered in terms of a municipality's ability to borrow additional funds for capital expenditure. It is a ratio of loans outstanding or borrowings to revenue. The norm used by National Treasury for this ratio is 45%.

Some of the other factors taken into consideration when a municipality borrows are:

- i. Interest as a percentage of total expenditure. The norm is 8%.
- ii. Impact of the loan on the tariff increases and affordability to consumers.
- iii. Cash coverage ratio which is defined as cash and cash equivalents minus unspent grants to monthly operational expenditure (this excludes

depreciation, impairments, loss on disposal of assets and bad debts). The norm is 1 to 3 months.

1.6.10 Service delivery

The main function of a municipality is service delivery, as prescribed by the Constitution of the Republic of South Africa, 1996. Section 152(1) (b) of the Constitution states that one of the objects of local government is to “ensure the provision of services to communities in a sustainable manner.”

Basic municipal service is “a municipal service that is necessary to ensure an acceptable and reasonable quality of life, and if not provided, would endanger public health and safety, or the environment” (Local Government: Municipal Systems Act, 2000: 14).

1.6.11 Service delivery backlogs

These backlogs are in respect of services that the metropolitan council is mandated to provide. The key service delivery backlogs relate to basic services, such as electricity, water, refuse, sanitation, health, roads and transportation, where communities do not have access to these services. In addition, there are backlogs in social facilities like community halls and libraries, as well as recreational facilities such as sport fields and swimming pools.

1.6.12 IDP (Integrated Development Plan)

IDP's must be produced by all municipalities in South Africa. It details the development vision for the municipality and aligns this to projects to be undertaken over the life span of the IDP (5 years). IDP's are developed to a 5-year plan but are reviewed annually.

1.6.13 Management of Municipal Assets

Metropolitan councils must ensure that they meet the developmental goals with the limited resources at their disposal to deliver quality services. Accordingly there is a need to ensure that assets are managed in a judicious, frugal and prudent manner to ensure

that this is done economically, efficiently and effectively over the life cycle of the asset (including procurement, use and maintenance, and eventual disposal). Asset failure arising from poor asset management is one of the key risks facing municipalities, therefore, the maintenance, rehabilitation and replacement of assets must be carefully managed to avoid asset failure and ensure that value for money is maximised.

1.6.14 Rehabilitation, Replacement, Maintenance, Growth

Maintenance is required for the ongoing upkeep of infrastructure to ensure that these assets do not fall into a state of disrepair. This is operating expenditure.

Rehabilitation is a major overhaul of assets that extends the useful life of an asset and service potential. Accordingly the costs are capitalised. The appropriate timing of the rehabilitation will result in maximising value for money.

The replacement of assets takes place when the assets have reached the end of their economic life and it is not cost effective to maintain anymore.

Growth related expenditure refers to the cost of creating of new areas for development which leads to an increase in the rates base and services charges.

1.6.15 Asset Depreciation

According to the Asset Management Framework (South Africa, 2004:44), depreciation is the systematic reduction in value of an asset due to the economic benefits that the asset possesses being used up. Depreciation is thus the difference between the total acquisition cost and the potential residual or remaining value (Van Der Walt et al, 2014:174).

1.6.16 Viability

Stresses that affect the viability of a municipality may include significant declines in a municipality's tax base, fraud and corruption, incompetency in officials, an unexpected surge in service demands, or inadequate capacity to deliver goods and services.

Marshall and Douglas (1997) define viability as the “..... ability of a municipality to respond and anticipate or mitigate the impact of positive and negative stresses and the extent that such stresses inhibit or enhance the municipality’s ability to deliver on its constitutional mandate of governance and service delivery”. It refers to a municipality’s ability to meet its legislative mandate and deliver services effectively and efficiently in the short term. Hence, municipal viability is measured from financial, governance and community perspectives. Municipal financial viability refers to how a municipality sustains and expands its financial capacity.

1.6.17 Sustainability

Municipal sustainability and viability are often used interchangeably as they are complex concepts with many dynamic variables. Sustainability describes initiatives that are undertaken which ultimately ensure the long- term success of a municipality, while viability refers to the capacity of a municipality to deliver on its legislative requirements in the present and the future.

1.6.18 Smart Cities

The performance of metropolitan councils depends not only on their physical infrastructure, but more and more also on their communication, and intellectual and social resources. Hence, the “smart city” strategy has been introduced as a tool to include all factors to grow a successful modern city in a common framework. This framework highlights the importance of information and communication technologies, but is not limited to this. It also accentuates the need for social and environmental resources, and includes issues such as, smart metering, smart parking, energy efficiency, smart building, smart lighting, pollution control, etc. Accordingly, smart cities must not be confused with digital or intelligent cities. Social and environmental resources distinguish smart cities from their digital counterparts that are more or less only concerned with information and communication technology (McKinsey, 2013:6).

1.7 Chapter outline

A brief outline of the 6 chapters of this study is as follows:-

1.7.1 Chapter 1: Introduction

This chapter provides a brief overview of the entire study. It includes an introduction or background to the study, the research problem to be researched, the research aim, objectives and questions identified, the study area, the research methodology and tools used, the definition of some key concepts used in the study, and an outline of the chapters of this study.

1.7.2 Chapter 2: Restructuring and Transformation with Particular Reference to Metropolitan Councils

Provides an overview of the current state of local government, the legislative framework, the impact of municipal demarcation, service delivery grants, as well as development frameworks and the impact of urbanisation.

1.7.3 Chapter 3: Local Government Metropolitan Funding

Discusses funding of Metropolitan Councils, the sources of income, the adequacy thereof, an analysis of the funding of local government, unfunded mandates as well as smart cities.

1.7.4 Chapter 4: Research Methodology

Focuses on the research design and methodology procedures adopted in this study. The chapter begins with the research questions to be answered by this study. This is followed by a description of the participants and location of the study. Furthermore, the data collection strategies, research design and methods, and data analysis will be discussed in detail.

1.7.5 Chapter 5: Data Collection, Analysis, and Presentation of Findings

This chapter encompasses the presentation of descriptive and inferential statistics in the form of tables and graphs. Findings made based on the primary and secondary data collected are also discussed.

1.7.6 Chapter 6: Conclusions & Recommendations

This chapter covers the conclusions based on the findings of the research and recommendations relative to the research objectives and findings of the study.

1.8 Conclusion

This chapter provided a brief overview of the research study to be undertaken. It covers the motivation for choosing this topic, the research aim, objectives and questions, an overview of the research methodology, the definition of key concepts, the profile of the three metropolitan councils, a list of relevant acronyms, and an outline of the rest of the chapters of this study.

The next chapter, Chapter 2, will discuss the restructuring and transformation of local government from a metropolitan perspective.

CHAPTER 2: LOCAL GOVERNMENT RESTRUCTURING AND TRANSFORMATION WITH PARTICULAR REFERENCE TO METROPOLITAN COUNCILS

2.1 Introduction

Two decades post democracy, it is necessary to review the progress made by Metropolitan Councils in terms of service delivery and their continued financial viability and sustainability, especially considering the huge backlogs, high level of migration, the impact of unemployment, as well as the poor economic and rates base growth.

Part B of Schedule 4 of the Constitution of the Republic of South Africa 1996, itemises the exclusive functional competencies of local government. These include, *inter alia*, electricity and gas reticulation, storm water management systems in built up areas, water and sanitation services limited to public water supply systems and domestic waste-water and sewage disposal systems. Furthermore, Part B of Schedule 5 of the Constitution of the Republic of South Africa 1996 itemises the concurrent functional capacities of local government. These include, *inter alia*, beaches, cleansing, local sports facilities, noise pollution, street trading, traffic and parking, etc. In addition, some larger metropolitan councils also undertake the provision of housing on an agency basis on behalf of the relevant provincial government.

A point often overlooked is that in 1999 the Municipal Demarcation Board has reduced the number of municipalities nationally from 843 to 278. For example, the Ethekeini Metro is made up of 46 erstwhile municipalities, all with varying levels of services, policies, systems, procedures and human resources (COGTA, 2009:7). Whilst the amalgamation has taken a fair amount of effort and excellent progress has been made, the Metropolitan Council's sustainability needs to be critically assessed to determine their financial viability.

Furthermore, the amalgamation of previously separate smaller jurisdictions to form metropolitan municipalities has led to an increase in the geographic and population sizes of the newly established metropolitan councils but without a corresponding increase in the tax base. The traditional revenue sources for metropolitan councils are rates levied on properties within their jurisdiction and the revenue derived from the consumption of services such as electricity, water, sanitation and refuse removal. An “equitable share” of revenue raised nationally is disbursed to metropolitan councils by central government to fund the delivery of basic services. Capital grants, which are usually conditional, are also disbursed to metropolitan municipalities to provide basic services (National Treasury, 2013:16).

This chapter provides an overview of the legislative framework, the impact of municipal demarcation, service delivery grants, as well as development frameworks and the impact of urbanisation.

2.2 Legislative Framework

2.2.1 The Constitution

South Africa is a constitutional democracy that operates a fiscally decentralized system of government comprising three “distinct, interdependent and interrelated” spheres of government, namely, a national government, nine provincial governments and 278 municipalities (FFC, 2013: 7). Its aim is to, *inter alia*, optimise the political and economic benefits for communities through representation, community participation in budget and strategy processes, and access to basic services by all communities. In order to achieve these political and economic aims, each sphere of government is given powers and functions in terms of their service delivery mandates, expenditure responsibilities, revenue raising powers, and funding framework (FFC, 2013:7). In addition, the basic principles for South Africa’s decentralised system of government are provided by the Constitution of the Republic of South Africa (1996).

The Constitution of South Africa places importance on a governance system that seeks to avoid conflict. In this regard, the different components of government are urged to work together rather than against each other. The use of language in the Constitution is significant when it comes to the competence of national, provincial and local government. For example, 'spheres of government' are referred to rather than 'tiers', which would suggest a hierarchical arrangement.

The importance of cooperative government is critical. This is evidenced by an entire chapter (Chapter 3) dedicated to cooperative government. Although this chapter in the Constitution is fairly short and while it emphasises the three spheres working together, it is also very clear on what is expected from each sphere. For example section 41 (1) (e-g) of the Constitution (1996) states that each must: "respect the constitutional status, institutions, powers and functions of government in the other spheres; not assume any power or functions of government in the other spheres; not assume any power or function except those conferred on them in terms of the Constitution; exercise their powers and perform their functions in a manner that does not encroach on the geographical, functional or institutional integrity of government in another sphere" (De Villiers, 2009:46).

In terms of South Africa's decentralised system of government, municipalities are assigned a number of service delivery mandates (FFC, 2013: 8). Municipalities are required to provide a number of basic services, including water, sanitation, electricity, roads and storm water drainage and refuse removal services. To enable municipalities to fund this expenditure, local government is assigned a range of revenue raising powers which are supplemented with intergovernmental transfers, predominately from National Government. Revenue raising powers include property rates, user charges for municipal services rendered, surcharges on user charges and other local taxes, while intergovernmental transfers are in the form of unconditional and conditional grants. The Municipal Borrowing Regulations also enable municipalities to leverage private financing via borrowings (FFC, 2013: 8).

Schedules 4B and 5B of the Constitution provides a comprehensive list of service delivery responsibilities devolved to the local government sphere, as listed in Table 2.1:

Table 2.1: Local Government Service Delivery Mandates

Schedule 4B

Air pollution
 Building Regulations

 Child care Facilities
 Electricity and gas reticulation
 Fire fighting services
 Local Tourism
 Municipal airport

 Municipal planning
 Municipal health services
 Municipal Public Works

 Pontoons
 Ferries
 Jetties
 Piers
 Harbours
 Storm water management
 Trading regulations
 Potable water supply systems and sewage systems

Schedule 5B

Beaches and amusement facilities
 Billboards and the display of advertisements in public areas
 Cemeteries, funeral parlours and crematoria
 Cleansing
 Control of public nuisance
 Control of undertakings that sell liquor to the public
 Facilities for the accommodation, care and burial of animals
 Fencing and fences
 Licensing of dogs
 Licensing and control of undertakings that sell food to the public
 Local Amenities
 Local sports facilities
 Markets
 Municipal abattoirs
 Municipal parks and recreation
 Municipal roads
 Noise pollution
 Pounds
 Public places

In addition, section 155 of the Constitution establishes local government in South Africa by defining three types of municipalities:

- I. Category A: A municipality that has exclusive municipal executive and legislative authority in its area.

- II. Category B: A municipality that shares municipal executive and legislative authority in its area with a category C municipality within whose area it falls.
- III. Category C: A municipality that has municipal executive and legislative authority in an area that includes more than one municipality.

The Constitution of South Africa (1996) was a result of compromises amongst the negotiating parties that entrenched a decentralised system of government. Over and above the decentralised system were the inclusion of a justiciable Bill of Rights and the supremacy of the Constitution. A Constitutional Court was also established to be the final arbiter of constitutional disputes between the spheres of government. The overarching guiding principle for intergovernmental relations is the principle of cooperative governance (FFC, 2013: 7).

Social and economic disparities and equity in terms of services were even more apparent at the third sphere of government during the apartheid period (FFC, 2013: 9). The White local authorities primarily focused on the urban areas of the country while the Black local authorities operated in poor areas, particularly in Black townships with severely restricted economic development and lack of basic socio-economic infrastructure such as water, sanitation, electricity, refuse removal, road and stormwater infrastructure and other basic infrastructure and social amenities. Thus, the Apartheid system demonstrated different types of intergovernmental fiscal relations that failed because it was inherently inequitable and did not deal with the fundamental issues of legitimacy and race-based politics (FFC, 2013:9).

One of the fundamental factors that impacted on the design of South Africa's intergovernmental fiscal relations was the outcome of multi-party negotiations that resulted in a political compromise to ensure a smooth transition from apartheid to democracy. The major debate during the 1993 constitutional negotiations revolved around the structure of central power in relation to the regions. The National Party wanted to protect White minority interests at a local government level by advocating for

a constituency based system that would create geographic ward-based representation (Stanton, 2009:114). Ultimately, a mixture of award-based and a proportionately-based system was adopted for local government. In establishing provinces, the degree of autonomy was a major issue that attempted to accommodate regional political interests that were evident in the country at the time. This included interests of the Zulu people in Natal (now known as KwaZulu-Natal) and the various homeland governments that had to be accommodated in the new government, all of which sought a future in a federal system (Stanton, 2009:114).

To account for all these factors, South Africa proposed a system of decentralisation with a strong central authority to strike a balance between sub-national autonomy and structured control and support from the centre (FFC, 2013: 9). National government however, was vested with powers to intervene in local government whilst provinces had the power to intervene in local government if certain conditions prevailed. The new system aimed to correct the historically skewed resource distribution and to promote equal levels of service delivery and opportunities (FFC, 2013:9).

2.2.2 The Current Local Government Funding Framework (LGFF)

The main issue relating to self-government is financial independence and autonomy. Political self-government is useless if municipalities cannot raise their own revenue. In addition, the assignment of functions without the necessary funding (unfunded mandates) can have a huge effect on the financial viability and sustainability of municipalities. Globally there is no consistency with regard to the funding of municipalities. In only a few countries are municipalities mainly self-sustaining. In most countries they are mainly dependent on grants and transfers from other spheres of government. South Africa and Switzerland have the highest levels of self-financing. On the other hand, Canadian municipalities are very reliant on transfers from the relevant province. Self-financing promotes accountability at a local level in municipalities. However, it may also deepen the inequality between municipalities (Steytler, 2005:59).

Globally, the sources of revenue in municipalities are very similar. Property rates were common to all countries, with the exception of income tax. Due to growing service delivery demands and mandates, the revenue-raising powers of municipalities has become critical (Steytler, 2005:63).

The current South African local government structure and system is fairly new as the financing framework for municipalities was first established 16 years ago in 1998, as per the date stipulated in the Constitution (FFC, 2013: 8).

A funding framework, as defined formally in the Money Bills Amendment Procedure and Related Matters Act of 2009, “is a structure that provides sound fiscal policy objectives and a set of macro-economic and fiscal targets and projections” (as cited in FFC, 2013: 9). It shows how the government will be using taxes and other public funds to impact favourably on the national economy. Accordingly, the LGFF can be broadly defined as “the aggregate revenue arrangement or funding framework of local government relative to its aggregate expenditure mandates and responsibilities” (FFC, 2013:11).

In essence, the LGFF is the funding arrangement or framework required to ensure that local government and individual municipalities are sufficiently financially resourced to fulfill their constitutional mandates to render services to communities (FFC, 2013: 9). This is, however, highly questionable as the adequacy of funding for local government has not really been tested in terms of sustainability. This will be further discussed later in this study.

2.2.3 The White Paper on Local Government

The White Paper on Local Government was released in March 1998 resulting in the institutional system for municipalities being further clarified and concretised. Special attention was paid to “metropolitan governments” (Ministry of Provincial Affairs and Constitutional Development, 1998:56-68).

2.3 Restructuring of Local Government

During the pre-1994 political dispensation, the local government sector comprised of 1262 different structures, but post-1994 the Provincial Demarcation Board reduced these structures to 843. With the establishment of the Municipal Demarcation Board (MDB) in 1999, the number of municipalities were rationalised to 284 in preparation for the 2000 local government elections.

The local government transition process was given a very strong legal driving force through three pieces of legislation. The most important was probably the Local Government Transition Act (LGTA of 1993) which provided for transitional local government as well as for a clearly defined transition process. Other pieces of important legislation were the Development Facilitation Act which attempted to address the 'mindset' of local governments and to steer them in the direction of being more participative, and the Demarcation Act that allowed for the radical reconsideration of the geographical areas of jurisdiction of local governments and to ensure that every area of South Africa falls under a democratically-elected local government- the so called "wall to wall" local government. The aim of these three acts can clearly be seen to enable newly elected, fully democratic and demarcated municipalities to begin functioning in a democratic and development orientated manner after December 2000. The LGTA, 209 of 1993 explicitly mapped out three phases of transition for local government in South Africa:

- The pre-interim phase, 1993-95;
- The interim phase, 1995-99; and
- The final phase, 1999 to the election of 5 December 2000

The LGTA provided the background for the function of municipalities until the transition was completed. Within the interim measures of the LGTA, the structures of local government consisted of 843 municipal institutions, which differed according to the location of local government. In Metropolitan areas a two-tiered system of metropolitan governments were established. In non-metropolitan areas, cities and towns were governed by Transitional Local Councils (TLCs). In rural areas Transitional Rural

Councils (TRCs) and a Transitional Representative was created. Furthermore, in non-metropolitan and rural areas District Councils (DCs) were been established as higher administrative levels of different local councils.

The Development Facilitation Act, together with the LGTA, is the second piece of legislation that steered South Africa's local government transition. The DFA coined the term "development local government" to indicate the required break with the past. Developmental local government can thus be defined as local government that has a special constitutional mandate to foster development. The crucial contribution of this Act was to make it obligatory for all local governments to become "developmental local governments" through compiling Land Development Objectives (LDOs), and Integrated Development Planning (IDP). The LDO's provide a strategic framework for the area development of the community (spatially). It has to be done in a consultative manner. The IDP is to empower local authorities to prioritise and strategically focus their activities and resources according to people's needs. The Demarcation Act has led to the complete change in the size of local governments in South Africa, by reducing the number of municipalities from 843 to 293. This demarcation was largely driven by economies of scale imperatives.

The number of municipalities was further consolidated to 283 in preparation for the 2006 local elections. Ahead of the 2011 local elections the number of municipalities was further reduced to 278. The 278 municipalities comprised of 8 metropolitan municipalities, 44 district municipalities, and 226 local municipalities. The impact of the restructuring has severally impacted on metropolitan councils. For example, the Ethekewini Municipality is made up of 46 erstwhile local authorities. Apart from the disparity and inequity in service delivery the impact of the rationalisation of those local authorities in terms of systems, procedures, asset management and staffing was a major task and currently many issues are still in the process of being resolved.

At the beginning of the process of transformation of municipalities in 1996, six metropolitan councils were identified and established, namely Johannesburg, Tshwane, Cape Town, Durban, Lekoa Vaal and Khayalami (David, 1999:69). Since then another

three metropolitan councils have since been identified and confirmed by the Municipal Demarcation Board on 28 July 2008. These areas are Msunduzi (formerly Pietermaritzburg) in the Province of KwaZulu- Natal, Mangaung (formerly Bloemfontein) in the Free State Province and Buffalo City (formerly East London) in the Eastern Cape (Mlokoti, 2008: 13). In other words, the number of metropolitan councils was increased from six in 1996 to nine in 2008. An all-embracing reason for introducing metropolitan councils, is that “metropolitan areas require special consideration, given the density of population, the existence of multiple, overlapping externalities and the need to coordinate services over larger areas, while simultaneously ensuring proximity between voters and councillors” (Sutcliffe 1998,6). Currently there are eight Metropolitan cities Johannesburg, Tshwane, Ekurhuleni, Cape Town, Durban, Nelson Mandela Bay formerly (Port Elizabeth) Buffalo city formerly (East London) and Mangaung formerly (Bloemfontein). Msunduzi (Pietremaritzburg) is no longer recognised as a metropolitan council.

The White Paper on Local Government cites three further reasons for the establishment of metropolitan authorities:

- To establish a basis for equitable and socially just metropolitan governance;
- To promote strategic land use planning, and coordinated public investment in physical and social infrastructure; and
- To develop a city-wide framework for economic and social development to promote the economic competitiveness and well-being of the city (Ministry of Provincial Affairs and Constitutional Development, 1998:59-60).

This is vastly different from the previous municipal structures during Apartheid rule. For instance, around the borders of the old City of Durban there were numerous, relatively small, and medium-sized local authorities, such as the Borough of Umhlanga, Borough of Verulam, Mt. Edgecombe Town Board, the Canelands Health Committee and the Borough of Westville (David, 1999:70). All of these authorities were autonomous and did planning independently of the neighbouring municipalities with whom they shared common boundaries. Many of these local authorities could not provide all the services

they were constitutionally mandated to provide and needed larger municipalities, such as the former City of Durban to help them provide these services (David, 1999:72).

White-controlled cities and towns prospered, whilst unviable Black local authorities and settlements areas did not (David, 1999:75). There was a huge disparity in terms of services provided and quality of life. This made the need for the incorporation of these areas into the City of Durban even greater. With the incorporation of the local authorities, the former City of Durban then became a metropolitan council in its own right. The impact of the extension of the boundaries on the finances of the city will be discussed in detail hereunder.

With regard to the type of institutional arrangements for municipalities, the White Paper on Local Government goes to the heart of the issue by this powerful statement:

“The choice of institutional arrangements for the municipalities which will govern South Africa’s metropolitan areas is a key policy issue which not only impacts on the lives of millions of metropolitan residents, but is central to the economic well-being of the nation as a whole” (Ministry of Provincial Affairs and Constitutional Development, 1998:61).

In establishing municipalities and their boundaries, the key issue is how large the municipality should be to attain optimal economies of scale and can be most efficient and effective in terms of delivering on its constitutional mandate. There is no prescribed or tested formula to apply to determine such an ideal size for municipalities. It may differ from region to region and country to country. The success of a municipality is dependent on, both the state of development and economic viability of the region in question (Ministry of Provincial Affairs and Constitutional Development 1998, 61).

2.4 The Impact of Municipal Demarcation

One of the key contributory factors to the sustainability of municipalities was the demarcation process (Ncube and Vacu, 2013:13). The Municipal Demarcation Board recognised that financial viability was one the most important criteria, but was

hamstrung by the lack of available financial statistics. It was therefore not possible to ascertain who was cross-subsiding whom. Another impediment was the absence of a comprehensive needs analysis survey (Cameron, 1999:124).

The mandate of the Local Government Municipal Demarcation Board (MDB) is provided for in the Constitution, the Local Government: Municipal Demarcation Act, 1998, and the Local Government: Municipal Structures Act, (MSA) 1998. The Constitution (sections 155 and 157) mandate the MDB to determine municipal boundaries and to delimit wards. The principal Act that governs the municipal demarcation process is the Municipal Demarcation Act (1998). The Act guides the MDB in determining municipal boundaries (i.e. Section 21). The delimitation of wards for local elections and the capacity assessments of municipalities are covered by the Local Government Municipal Structures Act, 1998 (Schedule 1 and Section 85). The MDB's activities are also in accordance with other pieces of legislation such as the Public Finance Management Act (PFMA) and Municipal Finance Management Act (MFMA).

The process to demarcate the boundaries of municipalities was very acrimonious and controversial. In several instances local forums were unable to reach consensus about the relevant boundaries. Provincial MEC's also did not strictly follow the recommendations of their respective demarcation board, particularly in Cape Town, Durban, and Johannesburg. All three disputes were eventually heard before the Special Electoral Court for final binding decisions. The most famous case was in the Western Cape, where the provincial government successfully took the national government to the Constitutional Court over the Province's attempted intervention in the local boundary dispute, yet lost the subsequent Electoral Court decision (Cameron, 1999:134).

As the reconfiguration of municipalities in terms of numbers, sizes and types has been taking place in the past 20 years, concerns have been raised about the possible impact of the demarcations on municipal financial viability. The criteria used by the MDB in determining municipal boundaries has been questioned and even condemned for contributing to the establishment of financially unviable municipalities (FFC, 2013:43). For example, during the 53rd National Conference of the African National Congress

(ANC) concern was expressed about the implications of the demarcation processes on the financial viability of municipalities. The ANC resolved that..."The MDB should take into account the financial implications of its re-demarcation for municipalities; the challenge of unviable municipalities; the need for ward boundaries to break down racial barriers and a reduced frequency of re-demarcations" (ANC, 2013: Resolution 10.2.3).

The Department of Cooperative Governance and Traditional Affairs (COGTA, 2013:7) has also expressed similar concerns and consequently established a task team to review the process of municipal demarcation as part of the preparations for the 2016 local government elections. The concerns from the government are in the context of on-going challenges relating to the inner and outer boundaries and cross boundary municipalities, and the impact of demarcation decisions on the financial viability of municipalities and demarcation consequences for the establishment of a truly developmental role for local government. The issue is whether the concerns raised above on the implications of boundary changes on the viability of municipalities are valid. Is the demarcation process rendering some municipalities unviable? Although many factors have a bearing on municipal fiscal viability, (e.g. lack of a tax base due to poverty and unemployment, backlogs, poor revenue systems and collection, service and payment boycotts, poor service delivery and budget planning, unfunded mandates, corruption, skill deficits, knowledge and experience of staff, lack of timely interventions by provincial and central government) there is a need to evaluate the impact of demarcations on the financial viability and sustainability of municipalities. The consequences of boundary changes on fiscal variables such as tax bases, liabilities, revenues and expenditures, among other things, need to be evaluated. It also needs to be determined whether municipal boundary changes promote fiscally sustainable municipalities (Ncube and Vacu, 2013:2).

With regards to the foregoing, the Tshwane Metro is used as an example. The impact of the redemarcation of Tshwane with the additional incorporation of Metsweding, Kungwini and Nokeng-TSA-Taemento which are mainly rural areas has led to a major challenge for Tshwane. Tshwane inherited the backlogs of Metsweding, Kungwini and

Nokeng-TSA-Taemento of approximately R5bn as well as debt of R400M with very little income being generated due to it being a rural area. Accordingly, Tshwane has made representations to National Treasury for further grants to assist as the expenses far exceed the income. The additional expenditure for 2011/12 and 2012/13 incurred in respect of capital expenditure was R780M, whilst operating expenditure amounted to R1.6 bn.

A further illustration of the impact of the re-demarcation of boundaries is the impact on Ethekeeni which was technically debt free prior to 1994 (had sufficient investments to repay debt) and now has debt of over R10bn (and only R4bn in cash/investments). This is primarily due to the inequity of service delivery in the Apartheid era compared to the provision of service on an equitable basis to all citizens in terms of the 1996 Constitution, including free basic services for electricity, water, sanitation and refuse removal.

Literature on the effect of boundary changes on the financial performance of municipalities is vast. In some cases these boundary changes have been motivated by the desire for government consolidation, i.e. moving away from many fragmented municipal governments to a few but large municipalities. Thus, the literature looks at the fiscal impacts or consequences of consolidation/amalgamation of municipalities or the impact of amalgamation/consolidation of municipalities on their fiscal/financial performance. There are arguments for and against consolidation. On one hand, it has been argued that consolidation improves the efficiency of municipalities. In essence the argument has been that municipal amalgamation or consolidation improves the effectiveness and efficiency with which local government delivers services, or simply “bigger is better” or “bigger is cheaper” (Slack and Bird, 2013:48). The argument is that large municipalities are able to reap economies of scale in service delivery, as well as savings in administrative overheads (e.g. duplications are eliminated and the number of politicians and bureaucrats maybe reduced), thus resulting in lower per unit costs as the amount of service delivered increases. Larger municipalities are technical and financially able to provide a bigger array of services than the smaller, fragmented municipalities (Dollery et al, 2007:96; Slack and Bird, 2013:49).

On the other hand, arguments against municipal consolidation include efficiency gains as well as faster responsiveness and enhanced accountability. Small municipalities are seen as more efficient, more responsive to the needs of their citizens, and accountability channels are clear and precise (Faguet, 2004:174). Furthermore, many smaller municipalities stimulate competition, (which is sometimes an incentive to be efficient) and citizen participation is stronger in a fragmented system, while access to authority through public hearings, meetings, elections or direct contact is easier.

However, despite all the strong arguments for and against consolidation, empirical evidence on its impact is, at best, mixed. For example, after reviewing research in the United Kingdom (UK) and United States of America (USA) on economies of scale due to mergers, Brynes and Dollery (2002:38) and Dollery and Brynes (2006:26) concluded that only 8% of the studies found evidence that economies of scale resulted from mergers, 24 % found evidence of diseconomies of scale, 29 % found evidence of U-shaped cost curves and 39% found no evidence of economies of scale. Found (2012:16) found no evidence of economies of scale post boundary changes in Canada. In the USA, Boyne (1992:9) found evidence that consolidation is associated with higher spending while in Canada, Kushner and Siegel (2005:113) found that amalgamations of local governments led to efficiency in some municipalities while inefficiencies increased after some amalgamations. Table 2.2 below summarises the literature:

Table 2.2: Summary of Literature on the Impact of Municipal Boundary Changes

Country	Findings
United States of America	The question asked in this study is: “Is a country’s post consolidation (boundary change) economic development significantly better than before consolidation? The study concluded that consolidation has a significant impact on the distribution of economic burdens within a country, while impacts of economic development are not significant and limited to social development. The study also concludes that there are no efficiency gains that result from consolidation of countries (Forsyth, 2010:37).
United States	The study tests the hypothesis that city-county consolidation promotes efficiency, equity and

of America	accountability. The study found that mergers reduce efficiency, costs associated with transition and harmonising employment and wage increases, minimal cost savings, inequities continue and accountability problems worsen (Savitch & Vogel, 2004:143).
United States of America	The study looked at the benefits and costs of local boundary changes and who are the losers or winners. The findings noted gains such as new revenues sources (increase in tax base). Areas that were poor before boundary changes benefitted in the form of improved service delivery. The study noted also political and social costs/benefits. The study also found that in boundary changes the winners are largely the private actors (Fleischman, 1986:36).
Germany	The study examined whether large scale municipal amalgamations had an impact on the fiscal outcomes of the municipalities in Germany. The results suggest that it has a significant effect, indicating a positive impact of municipal amalgamation on debt per capita and expenditure per capita and a negative impact on expenditure for administrative staff (Fritz, 2011:75).
Toronto	The study examined the transactional impacts of municipal consolidation for a sample of five newly consolidated Canadian municipalities. Surveys and interviews were used to capture the data, focusing on factors such as equity, bureaucratic specialization and employee salaries, fiscal accountability, cost administration and service. The findings suggest that reorganisation of municipality boundaries does not lead to fiscal accountability. Also, considering that there are other alternatives that can be used to ensure equity at a lower cost than restructuring. The writer argues that municipal consolidation is not as highly important for equity as its advocates make it sound. Although the findings of this study do not provide an answer to whether municipal consolidation is the best option or not, they provide useful information on how best it can succeed. It can succeed if there is a consolidation agreement prior to the reform in terms of changes that should be expected in municipal salaries, service provision, and municipal governance and tax rates. Furthermore, they pointed out the lack of representation and participation on the municipal amalgamation model as contributing to failure (Vojnovic, 2002:35).
State of South Australia	The study looked at the impact of municipal amalgamation on municipal financial performance. Municipal size was used to measure municipal amalgamation. The findings reveal no correlation between the two variables. It further suggests that alternative methods to improve performance and effectiveness of local authority be pursued (Dollery, et al, 2007:39).
Israel	The study assessed the fiscal outcomes of municipal amalgamation. The results indicate that amalgamation leads to a decrease in municipal per capita expenditures but at the same time, it

	causes no decrease on the quality of services provided. Based on this, the study concludes that amalgamation may have a positive impact on municipal performance (Reingewertz, 2012:64).
Sweden	The researchers carried out a cross sectional study for a sample of 1005 Swedish municipalities. They looked at the impact of municipal amalgamation on population growth and income growth and assessed the efficiency of voluntary municipal amalgamation as compared to compulsory amalgamation. The finding reveals that municipal amalgamation positively impacts on population growth when small municipalities were amalgamated. However, no effect was found on municipal income. The authors further highlight that the positive effect on population growth may be attributed to the fact that amalgamation reduced depopulation. The result confirms high efficiency of voluntary amalgamation as compared to compulsory amalgamation (Hanes and Wikstrom, 2010:106).
Toronto	Using surveys, the paper assessed the citizen's attitude towards municipal amalgamation in three Ontario municipalities. The survey results indicated that municipal amalgamation received very little support prior to its implementation, which had negative effects on citizen participation. Furthermore, the results reveal that the respondents felt that the value of the services that they were getting was better before amalgamation. This implies that the efficiency that amalgamation was meant to achieve was not realised (Kushner, 2010:61).
Toronto	The study looked at the different ways through which the formal governance of metropolitan areas may be restructured focusing on municipal mergers in Toronto. In assessing the impact of municipal amalgamation on local spending, the study used per household spending for four services (libraries, garbage collection, parks and recreation, and fire). The results indicate that municipal amalgamation in Toronto has not resulted in the desired outcome, as it did not solve any problems that the merged municipalities were faced with prior to amalgamation. It may have had some positive effects on the financial performance of the city by improving the tax base, the economic state and equitable service delivery in the City of Toronto while it had a negative impact on citizen participation. The study could not answer the question, as to whether bigger is better, or not. However, it recommends inter-municipal cooperation as the approach that can produce better results relative to amalgamation, as it may improve responsiveness and citizen access to government decision making (Slack and Bird, 2013:47).
United Kingdom	The paper examined the challenges of obtaining efficiencies through amalgamation. The finding suggests ways through which amalgamation processes can be undertaken so as to achieve efficiency. These include: a) Avoiding the trap of uniformity, as uniformity ignores the specifics of different

	<p>municipalities amalgamated.</p> <ul style="list-style-type: none"> b) Agreeing on a clear committee design that will not change as the process goes forward. c) Sharing of information. d) Clear goals and deadlines e) Open discussion of the changing nature of democracy. The author further argues that, failure to take the factors into consideration may undermine efforts to obtain efficiency (McKay, 2004:52).
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It is apparent from the literature review that boundary changes can either impact positively or negatively on the financial viability of municipalities. Each review depends on a number of contextual issues and there are political influences that also play a key role.

However, methodologies for trying to understand the impact of demarcation on municipal property can promote better performance in the local government sector and allow the sector to play a significant role in building a capable and developmental state.

2.5 Service Delivery

Notwithstanding the fact that South Africa has taken significant strides towards realising a developmental local government, the majority of municipalities are still facing a number of challenges. In a document, entitled “The State of *Local Government in South Africa*”, compiled by the Department of Cooperative Governance and Traditional Affairs, an evaluation of every municipality in South Africa was done. The following major areas were considered: governance, financial management, service delivery and labour relations (Van Der Walt et al, 2014:87).

Service delivery backlogs are increasing to such an extent that the government may not be able to meet the 2014 Millennium Development Goals. Sufficient funds are not available to address infrastructure backlogs (Van Der Walt, et al, 2014:87).

Accordingly, whilst a lot has been achieved to increase access to basic infrastructure and services in metropolitan municipalities, it is important to note that the demand

outweighs, by far, the supply for infrastructure services in urban areas (National Treasury, et al, 2012:1).

The Apartheid era there has been a conscious and concerted drive to uplift the quality of life of all South Africans, especially the poor through access to basic services, provision of housing, improved primary health care, social grants, and boosting the economy (Commonwealth Local Government Forum 2009:87). Notwithstanding this, the 2011 Census indicates that more households do not have access to housing in urban municipalities. Given that the provision of water, electricity, sanitation, and roads are complementary services to housing, this is an indication of an implied demand for these services in urban municipalities (National Treasury, et al, 2012:1).

It is generally recognized that metropolitan municipalities need to play an integral role with regard to managing the built environment. This requires responsibilities from metropolitan municipalities in land use management, the development of human settlements and provision of public transport services. Therefore, the assignment of the housing function to metropolitan municipalities requires a separate review of appropriate sources of finances for the execution of the function to complement the abovementioned municipal services (National Treasury, et al, 2012:3).

In addition to infrastructure backlogs, the ageing of existing infrastructure coupled with the lack of proper asset management is putting pressure on municipal finances. It is argued that municipalities used to record non-cash depreciation. As such, they could not accumulate enough reserves to replace infrastructure that reached the end of their life span. To keep the ageing infrastructure networks running as they are, municipalities are required to allocate a substantial budget for remedial maintenance. As a consequence, the pace at which new infrastructure should be developed to accommodate growth and development is related (National Treasury, et al, 2012:3).

Most importantly, for urban municipalities to be competitive with the rest of the world, they need to be attractive places for business and skills. The study conducted by the

World Bank (2009:13) estimated that about R250 billion is required for the development of new infrastructure in metropolitan councils and secondary cities in South Africa to support growth and rehabilitate infrastructure. The current capital spending by metropolitan councils for 2013/14 (budgeted figures) is R29 billion per annum, which suggests that there may be a funding gap in metropolitan councils (National Treasury, etal, 2012:4).

Municipalities are not only exposed to a changing socio-environment, they are constantly affected by trends at national, regional and global levels as South Africa interacts with the rest of the world. Certain government initiatives, such as energy efficiency, renewable energy, climate change and public transport, could have an impact on local government finances. For instance, in the past two years metropolitan councils have raised concerns that the sharing of general fuel levy allocations as a revenue source was not sustainable and unpredictable due to annual fluctuations of fuel sales volume and was also in contradiction with the promotion of public transport. This is an indication that the sharing of the general fuel levy (currently limited to metropolitan councils) in its current form is probably not sustainable as a source of revenue for local government in the longer term. However, it must be noted that the fuel levy was a replacement grant for the regional services/business levies and is a much needed source of revenue.

2.6 Two Decades of Freedom: Service Delivery Progress Made 1994-2014

The changes in the composition of the South African population, as well as the impact of democracy on the poor in South Africa, needs to be analysed. The percentage of Africans in the South African population has grown (Goldman Sachs, 2013:2):

- Based on the 1996 and 2011 censuses, the African population is the fastest growing population group and now makes up 79% of the South African population. This makes the African community in a position to dictate the political and economic agenda of the country.

- Economic growth is good but unemployment has not reduced.
- GDP, on a dollarized basis, has grown 2.5 times over the period to around \$400bn today.
- Despite unemployment remaining high with about 900,000 people being added to the unemployment pool in the past two decades, 4.1 million new people were employed in this period. Accordingly, employment has increased but not at a rate good enough to reduce the aggregate % of unemployment. In other words, the number of jobs being created (supply) is being outstripped by the increase in the number of people seeking jobs (demand). (Goldman Sachs, 2013:2).

The poor have gained from cash and non-cash state transfers (Goldman Sachs,2013:3):

- Non-cash transfers: There has been improved access to services by the poor, especially in respect of education (functional illiteracy improving from 19% to 34%), electricity (improving from 58% to 85%), and water and sanitation facilities (improving by 13%) (Goldman Sachs, 2013:3).
- Cash transfers: More people are receiving monthly social grants. Over 16 million people now receive these grants at an annual cost of R10 billion. This is in line with the number of people in South Africa who live below the \$2/day poverty line.
- Both, the cash and non-cash transfers provide important financial relief and improved quality of life for the poor. (Goldman Sachs, 2013:3).

The Statistics SA General Household Survey also suggests major improvements in the quality of life for the poor in South Africa (Goldman Sachs, 2013:4):

- For example, 70% of households now make use of public clinics as compared to 57% in 2002. Moreover, about 80% of them reported being satisfied or very satisfied with the service they received.
- This is in stark contrast to the general public perception of the state of public health facilities and the quality of service. Whilst the data suggests that there are inconsistencies with the level of service provided from facility to facility, overall there has been a marked improvement in the delivery of health services (Goldman Sachs, 2013:4).

Accordingly, much has been achieved over the past two decades. However, a lot more work is required if the service delivery backlogs inherited from the Apartheid regime are to be eliminated.

2.7 Migration/Urbanisation/Spatial Development - Towards an Integrated Urban Development Framework

One of the key reasons for the huge backlog that we have is that “Apartheid has fundamentally damaged the spatial, social and economic environments in which people live, work, raise families, and seek to fulfill their aspirations. This is the basis for a democratic, integrated, prosperous and truly non-racial society” (COGTA, 2013:6).

Notwithstanding the vision outlined above by COGTA and the Reconstruction and Development Programme (in 1994) promoting the need for social and economic inclusion and integration, there has been slow improvement in terms of South African cities and towns overcoming huge spatial, economic and social differences and inequalities. This must be turned around. The vision of the National Development Plan (NDP) can achieve this. President Jacob Zuma highlighted in his State of the Nation Address in February 2013 that due cognisance should be taken of increasing urbanization that is currently occurring. The 2011 Census shows that 63% of the population of South Africa are living in urban areas. It is anticipated that this will increase to over 70% by 2030. It is apparent that municipalities on their own cannot deal

with these challenges. A national approach is needed with support from Provinces and all key sectors within National Government. Whilst it is agreed that the development of rural areas should remain a key priority at a national level, it is also critical that an integrated urban development framework is developed at a national level to help municipalities to effectively manage the ever-increasing rural-urban migration. Through implementing the National Development Plan, all three spheres of government need to review how they are going to manage rural-urban migration through supporting rural development (COGTA, 2013:21).

As indicated above, the 2011 Census shows that 63% of the population of South Africans living in urban areas and it is anticipated that this will increase to over 70% by 2030. This together with the current and future economic development of the country will place substantial pressure on municipalities to provide infrastructure to take care of existing needs and to support future growth. Current and expected future urbanisation trends of the country compel municipalities to fulfill the roles of creating an enabling environment for future economic development while in the process addressing infrastructure backlogs (including asset management backlogs) and addressing poverty (National Treasury,2013:7).

Currently the population growth rate in South Africa is greater than the economic growth rate. There are an increasing number of informal settlements and poor communities in cities. This has resulted in a huge demand for land, housing, basic services and jobs. Cities are battling to cope with this demand. , cities are increasingly becoming home to expanding poor populations, and there is an ever increasing demand for urban land and services. Cities currently contribute about 80% of the economic activity within countries. In terms of global trends, this is anticipated to continue. This means that the populations of South African cities will continue to grow, as will the poverty (National Treasury,2013b:6).

The international community perceives African urbanisation less negatively now than previously. Everyone understands that urban growth is structural: no policy can

effectively oppose it, so helping it is better than fighting it. Eventually everyone remembers that cities contribute to economic and cultural development, in accordance with what has happened on other continents. Casual relationships between urban growth and economic growth proves difficult to establish scientifically, but statistics show close correlations. The more a country grows, the greater the share of GDP is produced in cities, rising from 55 percent in the least developed countries to 75 percent in the intermediate-revenue countries and 85 percent in rich countries. In intermediate revenue countries, the per capita value add produced in megacities is several times higher than the national averages. Many studies have found a relationship between a country's level of urbanisation and its economic growth or its income per capita. This is equally true for Sub-Saharan African countries (Kessides, 2006:28). Most authors agree that economic globalisation should increase urban areas' comparative advantages with regard to economic output (Paulais, 2012:63).

The poor and vulnerable are flocking to urban areas where they live in dysfunctional and un-serviced informal settlements with no or limited basic services and/or social and economic infrastructure. Most of these informal settlement inhabitants are not able to afford municipal services charges and this has a negative impact on the fiscal sustainability of the affected municipalities (National Treasury, 2013:11).

The rate of urbanisation is the key risk as well as the inability to proactively plan for the provision of services. There are also huge expectations in terms of provision of free housing, free basic services, as well as jobs (Paulais, 2012:66).

Urbanisation has also had a huge impact on the environment. In addition, a model still needs to be developed to stimulate the economic growth of cities, address the legacy of spatial development issues, and damage caused to the environment (National Treasury,2013:12).

The National Strategy for Sustainable Development approved by the South African Cabinet on the 23 November 2011 mirrors the idea that natural systems provide the

framework for sustainable socio-economic development. The National Strategy recognises that:

- Natural resources must be used sustainably.
- Socio-economic systems are dependent on ecosystems.
- Basic human needs must be met to ensure that the resources that are necessary for long-term survival are not destroyed for short-term gain.

Accordingly, the key message is that planetary boundaries (linked to natural thresholds) must provide the overarching framework for human development in the 21st century if sustainability and a safe and secure environment in which to meet basic human needs, is the goal. This represents a prevention rather than cure strategy.

Globally, urbanisation has been calculated to be at 7.2% a year. At this rate, it is estimated that the population of cities will double within a decade. More than 3.5 billion people now live in cities and their vicinities. In mid-2012, there were 27 megacities with more than 10 million people and more than 500 metropolitan councils with over a million (Brinkoff, 2012:147).

At a global level, the birth rate is far outstripping the death rate with an estimated 6 million more people in the world every month. In practical terms this means that a new Chicago and Los Angeles combined is being created every month. From a physical point of view, it could also have profound effects on the ecology of a region. Water, soil and air pollution, waste erosion, the endangering of wildlife and plants as new development destroys natural habitats are some examples of ecological challenges associated with urbanisation. Healey et al (2002:2) also highlight the challenges brought about by urbanisation, such as rapid urban growth with subsequent adverse conditions, and call for better management and planning. Urban planning, along with the development of local environmental services, housing policy and infrastructure development programmes were promoted as an approach to “tidying up” these adverse externalities. Cities thus became a key arena of innovation in local governance, being

forced to develop what Healey et al (2002:7) refer to as “coping or survival strategies” to deal with the new worlds in which they found themselves.

The National Government recognises the important role metropolitan councils have to fulfill in the development of sustainable urban environments. Metropolitan councils need to be established as centres of good practice for planning and infrastructure development to ensure that there is effective planning, design and programming of capital investment initiatives (National Treasury,2013:13).In addition, this planning should be integrated and all the key issues must be addressed (economic, social and ecological) in the IDP which must be balanced, fair and equitable taking due cognisance of all citizens and stakeholders and creating meaningful opportunities for people to empower themselves and improving the quality of life of all citizens (Van Der Walt, 2014:61).

Legislation and policy reforms regarding the assignment of functions from national and/or provincial spheres to specified local governments in respect of human settlements and public transport, as well as the accompanying fiscal reforms, all lay emphasis on the centrality of local government to plan, manage and have full accountability for level development (National Treasury, 2013:15). Municipalities represent the vehicles through which infrastructure planning and investment can be optimised. This is required to ensure that the benefits of infrastructure development for economic development are balanced with the investments in social infrastructure creation to satisfy the social and related services needs of urban communities (National Treasury, 2013:35).

Rural-urban migration is currently not being effectively managed primarily due to the unprecedented land invasion that is being experienced. In order to more effectively manage this, support from all three spheres of government is required. This may also require constitutional changes in terms of land invasion, as well as other policy changes.

2.8 Integrated City Development

2.8.1 The urban context and expenditure pressures

South Africa's urban areas face profound development challenges. Apart from striving to achieve the core objects of local government, all municipalities are constitutionally obliged to fulfill certain developmental duties (Bekink, 2006:59).

These challenges are magnified by the process of urban growth, but are often rooted in the history of deep structural inequalities in South African society. They are evident in high unemployment, significant backlogs in access to adequate housing, poor performing public transport systems, environmental degradation and low levels of citizen satisfaction. Unsurprisingly, these inequalities severely limit the opportunities available to young, poor Black people in particular, and will be compounded by a poorly managed process of urban growth (National Treasury, 2013:7).

The most obvious manifestation of these challenges is evident in the spatial form of urban areas. Sprawling and highly segregated land use patterns impose significant costs on poor households and the environment, and divert public resources from poor to rich households (for example, through investments required to sustain existing urban infrastructure). High density peripheral settlements effectively exclude their inhabitants from full participation in urban life, while imposing significant economic and fiscal costs that are estimated at some 1.4% of annual GDP. As the National Development Plan has noted, public policy has often unwittingly reinforced these divides, and set them in concrete. Government is specifically responding to these challenges through developing an Integrated Urban Development Framework (IUDF) (National Treasury, 2013:8).

2.8.2 Urban and Fiscal Policy Responses

Capturing the benefits of urbanisation requires a public policy emphasis on both supporting the process of urban growth and reducing inequality, within the urban space economy. Facilitating urbanisation requires a focus on both the infrastructure and the institutions that manage them, with a particular focus on poor vulnerable people. Cities need to provide integrated packages of land, infrastructure and services that are vital inputs to business establishment and expansion, and they need to do these in places that capture efficiencies associated with agglomeration. Achieving these outcomes will require integration of city investments, and coordination with public investment more broadly (National Treasury, 2013:8).

Metropolitan councils are already assigned the most significant authority for these functions, including land use planning and management, land acquisition and infrastructure development, human settlements management and public transport management. Many of these functions are supported by intergovernmental transfers, whether directly or indirectly. Many Metros have begun to integrate their planning across these functions. However, policy uncertainties and conflicts remain in each of these functional areas, undermining the powers and accountability of municipalities for integrated management of the built environment. Building more inclusionary, efficient and sustainable cities requires a strengthening of the role of metropolitan councils to manage economic development. It also requires a renewed focus on securing adequate public resources to finance associated investments, and using this to leverage private finance for shared growth and development (National Treasury, 2013: 9).

The focus on physical outputs in each sector has often resulted in the cumulative effects of these investments being sub-optimal, or no more than the sum of their parts. Each of these programmes has required municipalities to respond to their specific needs and priorities, weakening their ability to pursue integrated development strategies that address desired development outcomes, such as spatial transformation and economic development. It has also resulted in gaps in the funding framework. These gaps emerge from (National Treasury, 2013:10):

- a) The relatively lower priority accorded by metropolitan councils to maintaining existing infrastructure, resulting in rising maintenance backlogs and operating costs.
- b) Medium-term spending pressures created by current investment programmes. This is particularly the case with the need for new public transport subsidies to sustain Bus Rail Transport (BRT) systems, property rates rebates and free basic services for public housing projects.
- c) Long- term spending pressures created by the poor spatial form of cities.
- d) An inability to effectively use public investment to leverage private fixed investment in urban areas.

Most grant programmes have recognised these problems, resulting in attempts to introduce higher order objectives in each grant alongside a focus on specific outputs. The Neighbourhood Development Partnership Grant (NDPG) has tried to focus on the development of township economic nodes, increasingly locating them within broader “urban networks”, and has had significant success in leveraging private fixed investment. The PTISG (Public Transport Infrastructure Support Grant) has promoted transit-orientated development planning, while the Urban Settlement Development Grant (USDG) has sought to promote improved built environment performance (National Treasury, 2013:11).

The limited leverage that individual grant programmes have are due to: (i) being comparatively small relative to the size of total public and private investments in the urban built environment; (ii) under pressure to deliver specific and measurable outputs that correlate with the resources provided in each financial year (“the numbers game”); and (iii) not able to directly address regulatory and planning weaknesses that continue to perpetuate the current spatial development trajectory (National Treasury,2013:12).

Moreover, these programmes are individually unable to shift the powerful incentives to focus in the short-term on delivery of infrastructure challenges that are faced by city leadership, national departments, developers, financiers and communities. This is despite the consensus that the outcomes of this approach are exclusionary, inefficient and ultimately unsustainable (National Treasury, 2013:12).

These grants should be integrated and focus on outcomes rather than outputs with metropolitan councils being given flexibility to prioritise based on the outcomes. It is also ironical that local government only gets 9% of nationally-generated shared revenue, yet it is the sphere of development government at the coal face with the highest backlogs, is the most accountable and is required to widely consult on its budget, including ward committees, businesses, all stakeholders and its citizens (Bekink, 2008:63).

2.8.3 Catalysing spatial integration in South African cities

The 'second generation' challenge is to build more sustainable, productive, liveable and inclusive cities. This requires metropolitan councils to more actively integrate public investment in the built environment, and is being aided by a legal process of devoting human settlement functions to metropolitan councils through housing accreditation and assignment, strengthening their role in public transport management through the implementation of the National Land Transport Act, and confirming their leading role in land use management in the Spatial Planning and Land Use Management Act 16 of 2013 (National Treasury, 2013:21).

Whilst the devolution of these functions is welcomed from an integrated built environment perspective the potential impact on a metropolitan council's sustainability is a cause for major concern.

2.8.4 Approaches to spatial transformation

The National Development Plan (NDP) emphasises the importance of transforming the spatial pattern of South African cities. This recognises that the sprawling, low density

and segregated land use patterns in South African cities are both inefficient and highly inequitable. Moreover, it responds to the critique that public investment since 1994 has largely reinforced the Apartheid spatial form and imposes significant costs on the fiscus and on poor households. It recommends a new, spatially-focused approach that encourages integrated investment, led by cities, through a far stronger emphasis on the location of infrastructure and human settlement and the resulting spatial form of cities. The NDP specifically recommends a restructuring of fiscal arrangements to support this goal (National Treasury,2013:22).

This basic approach is strongly supported by the Cities Support Programme (CSP) that was announced in the 2012/13 national budget. It has also been repeatedly emphasised by metropolitan councils themselves, during various meetings of the City Budget Forum. The CSP proposed a systematic approach to create incentives for cities to address the issues of urban spatial form, and to weaken existing incentives that perpetuated the Apartheid city, through coordinating funding programmes and linking these to national regulatory reforms in the built environment and specific capacity support measures to assist cities. This reform will require political buy in and a great deal of maturity from politicians to move away from a ward based / constituency mindset to one that would look at what is in the best interests of the city.

The Neighbourhood Development Partnership Programme (NDPG) has also emphasised the critical role of public investment in leveraging private responses within a spatial framework. The associated Urban Network Strategy promotes the established principle of land use clustering and strengthening connectivity that can be pursued through the better coordination and targeting of all public investment across primary and secondary urban networks as follows (National Treasury,2013:25):

- a) At the primary network level (or city scale) the strategy proposed is the identification of a limited number of significant urban nodes that include both traditional centres of economic activity (such as existing CBDs) and new “Urban Hubs” located within each township or cluster of townships. It also emphasises

the importance of connectivity between nodes, through the provision of rapid and cost effective public transport in the primary network.

- b) At the secondary network level, the strategy proposed relates to strengthening connectivity between smaller township centres and identified urban hubs, including investments to strengthen connectivity and accessibility within and around these centres and hubs.

Metropolitan councils themselves have begun to pay renewed attention to spatial development at various scales, and are positioning themselves to assume greater authority over built environment functions. However, municipal spatial development frameworks, human settlements programmes, public transport interventions and area-based management strategies, while often innovative, are often fragmented and lack adequate leverage over other public sector interventions, particularly those of other spheres of government (National Treasury,2013:26). It is anticipated that the NDP will address the issue of better planning amongst the spheres of government. Moreover, the creation of a cluster for Human Settlements, Energy, Water and Sanitation and Transport ministries under the Minister of COGTA could also assist with more co-ordinated and effective planning.

2.8.5 Integrated Zones

The approaches of spatial targeting (NDP), coordinated intervention (CSP) and spatial integration (NDP) are highly complementary with the basic thrust of municipal plans. Collectively they emphasise the importance of coordinated public intervention in the defined spatial forms of cities. However, to be spatially coordinated, these approaches need to coalesce at the sub-metropolitan scale, in integration zones where the full range of public interventions can be brought together to have a deeper impact on the urban form.

Integration zones are sub-metropolitan areas where opportunities exist for public intervention to promote more inclusive, efficient and sustainable forms of urban

development. These interventions are likely to include investment programmes, enhanced delivery of services, asset maintenance and regulatory changes. Integration zones are anticipated to have the following characteristics (National Treasury, 2013:18):

- a) At a spatial level these zones include identified township hubs within the urban network and corridors connecting these hubs to established urban nodes.
- b) At an economic level, these zones should reflect opportunities to leverage private investment by households or firms, including the use of available tax and investment incentives associated with the Urban Development Zones and Social Housing Restructuring Zones.
- c) At a social level, these zones should include opportunities to break down the segregated, exclusive nature of South African cities, through promoting inclusion of historical divided races and classes in South African cities.
- d) At a programme level these zones include opportunities or requirements for catalytic public investment in :
 - Core urban infrastructure services, such as bulk and connector water, sanitation, energy or solid waste infrastructure.
 - Land and human settlement development, including opportunities for land development and release, public and social housing, and upgrading of informal settlements.
 - Economic infrastructure investment, such as upgrading of business districts, the provision of improved street and pavement infrastructure, and open space systems.

The identification of these zones will serve two purposes. Firstly, it will allow significant public interventions to be focused in an identified spatial context in order to leverage a private investment response and measurable changes to the urban spatial form. Secondly, it will allow all three spheres of government to measure and manage the form

and pace of change in spatial development. In particular, the fiscal framework will increasingly seek to reward municipalities that are able to demonstrate measurable progress in transforming the spatial form of their cities in line with national development priorities (National Treasury, 2013:19). It must be appreciated that there are several frameworks and plans that impact on the land use management systems (LTDF (Long Term Development Framework) which form part of the IDP; SDP (Spatial Development Plans), and land use management scheme). Accordingly the alignment of all of these planning instruments to achieve the objectives of the integration zone needs to be tested (Bekink, 2008:68).

2.9 Conclusion

Our municipalities today have inherited several problems from the Apartheid regime, especially in respect of segregation created through the Group Areas Act. Municipalities were created and managed based on racial grounds which resulted in huge differences in the level of services provided in White and Black communities. For example, municipalities did not supply basic services, like water, electricity, health care and housing, to all South Africans. The resulting social, spatial and economic inequalities created in Black communities must now be addressed. However, the task is a daunting one. The service delivery backlogs inherited are huge.

This chapter firstly provided a brief background to the transformation and restructuring of metropolitan councils. It also provided a brief overview of the relevant legislation in terms of this study. Not all the legislation was discussed (such as the MPRA, MFMA, Systems Act and Structures Act). Greater focus was given to the Demarcation Act and its impact in terms of the funding gap of metropolitan councils. Moreover, the progress made in addressing the service delivery imbalances and backlogs inherited from the previous Apartheid regime was discussed. Finally, the issue of integrated city development in terms of the current trend of increasing urban migration was discussed which is currently shaping and transforming metropolitan councils.

However, the main question of this study is whether this has led to a funding gap in metropolitan councils, and if so, what can be done about it? Accordingly, the next chapter will look at the financing of metropolitan councils.

CHAPTER 3: METROPOLITAN COUNCIL FINANCING

3.1 Introduction

The extent of the backlogs, service delivery challenges and deteriorating infrastructure are placing increasing pressure on municipal finances. The local government framework outlined in the White Paper on Local Government (Department of Provincial Affairs & Constitutional Development, 1998) recognises that the provision of municipal services requires significant capital investment.

Notwithstanding the great strides being made in service delivery, the backlogs in Metropolitan Councils are huge which is further impacted upon by rapid urban migration. In addition, the state of repair of infrastructure and the adequacy of funding for maintenance and rehabilitation is also a cause for concern (SA Cities Network, 2013:3). This is of particular concern as metropolitan councils are the prime drivers of gross domestic product (GDP) in the economy, currently accounting for more than 80 percent of the GDP (FFC, 2013:6). Accordingly, to improve growth that is currently just above 2 percent (South Africa Reserve Bank quarterly Review March 2014 - May Monetary Policy Committee Meeting) and make reasonable progress in reducing the backlogs, there needs to be huge investment in metropolitan councils, hence, this research will focus on the status of backlogs as well as the funding required for new development and explore how this could be financed.

McKinsey & Company (2013:2) suggest that to be successful and prosper modern cities must achieve smart growth. This requires a strategic approach. Accordingly, a financing model for South African metropolitan municipalities will assist in informing a smart growth strategy by ensuring that service delivery backlogs, maintenance of assets and

economic development are all sufficiently addressed. This is in line with the vision of metropolitan municipalities to become smart cities. It must be noted that this is not only about technology (a digital city), but also about how effectively the metropolitan municipalities spend their funds to ensure value for money. There needs to be a balance between economic development and growth on the one hand and social expenditure on the other. This means metropolitan councils need to critically review the strategy that they have employed over the past 20 years and the effectiveness of same, and consequently review their vision going forward.

In view of the foregoing, this chapter discusses the funding of metropolitan councils, the sources of income, the adequacy thereof, an analysis of the funding of local government, unfunded mandates, as well as developing smart cities.

3.2 Financial Resources of Local Authorities

The following are key principles for funding of local authorities (De Villiers, 2008:29):-

- Effective decentralisation and local independence require appropriate fiscal autonomy.
- Funding of municipalities must be in line with their functions and duties they are undertaking to ensure their financial sustainability, viability, and ability to raise their own funding. All functions delegated or assigned by national or provincial government must be accompanied by the necessary funding based on full and fair costing.
- When a power is delegated by national or provincial government to a municipality, it must be accompanied with the necessary funding and other resources to exercise such power, as well as the necessary delegations to adapt the execution to the local conditions prevalent in the municipality concerned.
- Municipalities have access to a variety of funding sources to undertake their functions and duties. This should be constitutionally entrenched or legislatively guaranteed. Any grants and transfers must be sufficient and municipalities must be free to use them within their powers.

- A large percentage of funding should come from local taxes, fees and charges to cover the costs of services provided by them and for which they have the power to determine the rate or tariff.
- Taxes that municipalities have the power to levy (such as property tax), or of which they receive a guaranteed share (such as the fuel levy), should be commensurate with their responsibilities and needs, and must be flexible enough to keep in line with their responsibilities.
- Local taxes should ideally be collected by the municipality concerned, subject to them having the relevant monitoring tools in place, as well as having the necessary capacity to do so.
- Financial sustainability should be achieved via a system of financial equalisation, both vertically (between National & Provincial governments and municipalities) and horizontally (among municipalities).
- It must be legislated that municipalities power and rights to participate in developing the rules relating to the apportioning of funds to be redistributed vertically and horizontally.
- Grants and transfers from national and provincial government to municipalities must be unconditional and not aimed at any particular project only. Such grants and transfers must not impede the freedom of municipalities to exercise their own policy discretion within their own area.
- Conditional grants and transfers must be limited to the implementation of national policies relating, for example, to environmental protection, social development, health and education.
- Subject to the necessary legislation, rules and guidelines, municipalities should have access to national and international capital markets for borrowings. State monitoring may be required where the market concerned relates to a country with major socio-economic upheaval.
- Borrowings undertaken by municipalities should not threaten the fiscal policies aimed at ensuring national financial stability (De Villiers, 2008:30).

Some of these principles have not been adopted. In particular, local government is not receiving an equitable share of national revenue commensurate with the functions it is performing. In addition, a number of the grants are conditional.

Accordingly, the adequacy of funding of metropolitan councils is a concern. This is supported by the DBSA (Development Bank of South Africa, 2010:12) who have indicated that funding infrastructure is a challenge. The primary mandate of municipalities is to provide infrastructure for delivering services. The South African government has committed its municipalities to remedying the service delivery backlogs by 2014. This was regrettably not a target set with local government but was imposed and did not come with the full funding requirement. It is not surprising therefore that the target will not be met.

The estimated costs of building, upgrading, rehabilitating and expanding the required water, transport, power and town infrastructure exceeds R473 billion (COGTA,2010:23).

In addition, sources of finance for municipal delivery of services is exceeded by the demand for capital to fulfill this role and the affordability of repaying these loans is also a major cause for concern. (COGTA,2010:26). This will impact on tariffs for services and rates and will further render South Africa's cities uncompetitive in being able to attract new businesses and grow the economy. Moreover, theoretical modelling shows that borrowings in the order of R242 billion over a period of ten years, starting more than seven years ago 2007, are needed to keep pace with the dramatic challenges of the delivery of services (COGTA,2010:33). Such circumstances make it difficult to determine which dimensions and what sectors are most important for investment planning and service stability.

There is certainly a need for further investment in infrastructure and a balance needs to be maintained in terms of economic, rehabilitative and social expenditure. This requires modelling and technical preparation with affordability and sustainability being given due consideration.

Although great strides have been made in eradicating service delivery backlogs in the country, many households continue to find themselves with limited or no access to services, specifically the sanitation and refuse removal services. In addition, the economic needs of cities and the country at large continue to place a greater demand for supporting infrastructure and services from local government institutions. The demand for infrastructure placed on local government is considerable and continues to escalate (FFC, 2013:10).

In 2011, the Financial and Fiscal Commission (FFC, 2013:11) undertook a comprehensive review of the local government fiscal framework (LGFF) in an attempt to quantify the possible funding constraints in local government. One of the primary findings from the review was the existence of a potential vertical funding gap in supporting municipal capital expenditures. The research found that the current quantum of infrastructure grants that accrue to local government does not cover the difference between the current capital expenditure needs of local government and their own revenue sources. Therefore, the combination of own revenue contribution, borrowings and grants are insufficient in funding the local government infrastructure needed (FFC, 2013:11).

It is likely that this vertical fiscal gap on municipal capital budgets is progressively widening given the increasing demand for local infrastructure investments and continues to put pressure on municipal revenue instruments that support capital expenditures. The 2008 global financial crisis has had a dampening effect on the general South African economy and it has impacted negatively on municipalities own revenues sources for capital expenditure.

With the National government adopting a stimulatory fiscal policy stance to counter the effects of the economic downturn, increasing debt-financed government expenditure or the debt status of the sovereign state also impacts on the ability of sub-national governments to borrow funds. Furthermore, constant downgrading of the sovereign

state's credit rating due to recent socio-political and economic factors also impacts on the credit rating of the sub-national governments (FFC, 2013:12). Accordingly the recent downgrading of the South African government has resulted in the downgrading of several of the country's metropolitan councils. Ultimately, these factors are increasing the cost of local government to borrow, thus hampering one of its revenue instruments to fund capital expenditures.

3.3 Main Revenue Sources of Local Governments

Estimating how much money will be available to a city can be the most challenging, as well as the most important, part of preparing a city's budget. Estimates that are too high can lead to financial sustainability challenges. Accordingly, it is essential to be conservative and budget prudently for revenues. Local government revenues fall into different groups that are important for both planning and analysis purposes. Finance Officers need to be aware of the characteristics of a good local tax: predictability, buoyancy, equity, and local control. Ideally, local revenues are controlled locally and proceeds are stable, predictable, buoyant, equitable, and usable without constraints (Farvacque-Vitkovic and Kopanyi, 2014:169).

Some local government revenues are very stable and predictable (property taxes); others show wide variations (sale taxes). Some are restricted for specific uses (road charges), and others have no restrictions. Depending on the country, some local revenue sources are established by the local council, but many others may be beyond local control. For example, in the United States the constitution of the state of Wyoming (Wyoming, 2011:37) gives local officials very little decision-making authority with regard to taxes and fees. The same is true for Mexico and many developing countries.

Revenues are classified into current and capital. Within current revenues are own revenues, transfers, and other revenues. Shared taxes (collected by the central government and shared with sub national entities) sit at the border of own revenues and transfers because they often provide a large portion of local revenues (as in Argentina, Serbia, and Turkey), this category has a big influence on own-revenue capacity

projections (Council of Europe, 2006:43). Shared taxes are commonly considered transfers, even though many argue that they are own revenues if the share is returned to the local government of the jurisdiction where collected. The Council of Europe has issued a clarification statement on the matter: “Shared taxes are financial transfers; if they are not in direct relation to the amounts collected locally, they are also considered as grants” (Council of Europe, 2006:43).

Recurrent revenues should be sufficient to finance current (or operational) expenditures; that is, they should be sufficient to finance regular operations and even to generate an operational surplus, which then can be used for financing capital investments directly or by leveraging debt. Failure to generate sufficient current revenues suggests that the municipality will not be viable resulting in arrears (unpaid bills), selling of assets and use of its wealth (as some cities in the United States have done temporarily, in response to the fall in tax revenues after 2008), or be bailed out by the central government through discretionary grants (as occurred in Jordan) (Farvaque-Vitkovic and Kopanyi, 2014:171).

3.3.1. Own-Source Revenues Globally

Own-source revenues (OSR's) are funds that local government raises directly, as opposed to transfers and grants received from higher government tiers. Distinguishing and measuring them is important to assess municipal fiscal creditworthiness, autonomy, and capacity to raise revenues (Garrett and Leatherman, 2010:117).

They are also important with respect to revenue incentives: own-source revenues are the funds that local governments control, can project, and can increase through local decision, procedures, and action. Central government transfers and donations could be very significant, but the local government does not control them – there is little or nothing it can do to increase them (Devas, Munawwar and Simon, 2008:54).

Taxes are levied to finance general expenses whilst, fees are supposed to cover the direct costs of a specific service or function, such as issuing business licenses or building permits.

Hereunder follows the revenue sources that are used by local government to fund expenditure.

3.3.1.1 Property Tax

Property tax can fund those local services that cannot be charged directly to the users through user fees and are not covered by grants. The property tax can also be viewed as a form of benefit tax or land-based tax that captures part of the value accrued by a piece of land as a result of public investment in that land or in the vicinity. This assumes that adequate valuations are able to measure the impact of the new investment on land prices (Brzeski, 2012:61). In addition, property taxes can be extremely useful for land management, as they discourage land speculation and promote the productive use of urban land. Property taxes have also some drawbacks, the most important being:

- The high cost of accurate property values.
- The political difficulty of enforcement.
- The apparent inelasticity of property values with respect to GDP or national income (property values respond slower to changes in GDP than income or sales).
- As few municipalities review their property values annually it means that to maintain property tax revenues in real terms, they would have to increase the tax rate regularly and this leads to taxpayer resistance and discontent (Brzeski, 2012:63).

These shortcomings explain the relatively smaller role that property taxation plays in developing countries and the small share of revenues that property tax yields in most developing cities. In OECD member countries, the property tax represents 2 percent of GDP. In developing countries it is between 0.3 percent and 0.7 percent of GDP (Slack

2009:72). In Australia, Canada, Ireland, South Africa, and the United Kingdom, property taxes provide most of the local revenues (DEXIA, 2008:84). In a summary, property tax is not for everyone. In countries where property rights are not clear, where property boundaries are subject to litigation, where there are multiple claims on land, where land registration is not functioning well, and where the judicial system is absent, then the property tax does not work.

Property tax is a suitable funding source for municipal services for many reasons:

- Real property is immovable: it cannot move away when taxed or when taxes are increased.
- To the extent that there is a clear link between the municipal services funded in the area and property values, the accountability of local governments to local residents can be substantially improved.

It can be seen as a benefit tax, if the services taxpayers receive (roads, garbage collection, or police services) approximate the value that they pay in property tax.

Despite the theoretical arguments in favour of the property tax as the best local tax, the difficulties that most countries encounter in trying to use it well have led to some tax experts to believe that “governments in developing countries are not able to administer a well-functioning property tax” (Bahl, Martinez-Vazques, and Youngman,2008:97) because of the drawbacks listed above. More recently, however, programmes have been introduced, as in Colombia, that may indicate how property tax can be better managed. In Colombia, property tax now accounts for 40 percent of city revenue. In addition, some developing countries have started to use computer-aided, mass valuation systems (CAMA), which enable annual updating of the tax base. This is currently being applied by all metropolitan councils in South Africa (Bahl, Matinez-Vasques and Youngman, 2008:98).

3.3.1.2 General Consumption or Sales Taxes

Local sales taxes are general consumption taxes charged at the time when particular goods and services are purchased. The tax is set as a percentage of the price of the purchased product. A sales tax is a regressive tax. This means that as the taxpayer's income increases, the impact of the tax decreases. The requirements of an appropriate sales tax are that: it must be fair, simple to calculate, easy to comply with, not easy to avoid, and have a high collection rate (Farracque-Vitkovic, 2005:103).

Local sales taxes have two main benefits: (a) they provide an elastic source of revenue, that is, when the economy grows, so do retail sales, providing more revenue for the local government; and (b) they are transparent and easy to collect. They also have shortcomings: evasion problems can sometimes be serious, and a large rate differential between neighbouring local governments leads to people crossing the border to make purchases in the lower-rate city. Sometimes cities introduce an additional, "piggyback" tax or surcharge of 1 percent or 2 percent. That could be a good way to go, since it is easy both technically and politically and would avoid high compliance costs (Bird, 2001:129).

In most countries, the general sales tax (or gross receipts tax) is levied as a value added tax (VAT) at national government level. However, there have been a few cases of provincial VAT's, such as in Brazil. Many analysts believe that the local sales tax is not an appropriate tax and suggest that it should be abolished and incorporated into a comprehensive value added tax (Werneck, 2008:107). Turnover sales taxes have been gradually replaced by national VAT's in many countries, leaving local government without an important local tax. In such cases, tax revenue sharing arrangements have been devised to distribute part of the tax proceeds among local governments. Such sharing ought to be in the nature of a grant and not based on origin. However, the infrastructure needed for an effective VAT is fairly big, including proper accounting practices, which may be lacking in developing economies, where sales without receipts or electronic registers are common and so is the informal sector (World Bank, 2006:71).

Selective sales taxes on vehicles (such as fuel taxes and vehicle registration) are another type of sales tax. They have a double benefit in that they discourage road use and at the same time produce revenues that are often earmarked for road maintenance (Werneck, 2008:47).

3.3.1.3 Local Personal Income Tax

Income taxes are used at the local level but to a much lesser degree than property or retail sales taxes. Local personal income taxes can be of two types: a surtax on the central or state income tax (a piggyback tax) or a tax levied locally. The latter type of tax is uncommon, due to the high cost and difficulty in implementation and administration (Slack, 2009:73).

Local income taxes are not common in developing countries. Rather, local governments in less developed countries (e.g. in Pakistan, Serbia, Turkey) receive a substantial share of income tax revenues through tax sharing systems. However, income taxes can be justified at the local level on the basis that municipalities are more and more expected to address issues such as poverty, crime, and transport systems. To the extent that local governments are required to provide social services, a small tax on incomes is considered more appropriate than a property tax as the local income tax is more closely related to ability to pay (Slack, 2009:73).

The local income tax is a major funding source in Nordic countries, providing a revenue stream of up to 15 percent of GDP. Municipalities in Denmark, Finland, and Sweden impose local income taxes on their own, parallel to the national income tax, because they are directly responsible for social services and health. They use the tax base assessed for national income tax purposes (a similar system is used by the state governments of the United States). In these countries, the local personal income tax constitutes the main source of local revenues (85 percent in Finland and Denmark; almost 100 percent in Sweden; 16 percent in Belgium). To prevent the local government from overtaxing, the public tax ceiling has become a formal agreement in Denmark, Norway, and Sweden (Slack, 2009:73).

3.3.1.4 Local Business Tax

Local business taxes, or taxes on economic activity, take various forms. The tax can be a corporate income tax, a tax on capital or labour; a non-residential property tax; or it can be a license fee or other charge to commerce or industry. In the European Union, 10 countries use a business tax, which contributes between 15 percent and 30 percent of local governments' revenue. The local business tax is more important than any other local tax in Germany, Hungary, Italy and Luxembourg (Bird and Vaillancourt, 2006:117). In Cote d'Ivoire, the main local tax is a local business tax (patent). It is a set of fixed taxes that vary according to the type, size and location of a business. This tax produces one-third of total revenue in Abidjan. A similar tax exists in Morocco, where six tax rates are applied to several hundred categories of business classified by rental value and type of business. In Tunisia, the business tax is levied at a rate of 0.2% of gross business income (Bird and Vaillancourt, 2006:117).

Hungarian local governments collect 86 percent of their own-source revenues from local businesses, with a maximum rate of only 0.3 percent but on a base of gross sales. In addition, a small communal tax, at a fixed amount per employee, is levied based on a business's average number of employees. In Ukraine, a simplified system was introduced consisting of a fixed rate on gross sales by sole owners, plus a 10 percent sales tax on gross sales by enterprises (Bird and Vaillancourt, 2006:118).

In Latin America, local business taxes are quite common. Argentina has a local tax on gross receipts at a rate of between 1 percent and 12 percent. Colombia's business tax is on gross receipts. Sometimes a tax is levied on the firm's wealth. Chile imposes a tax of 2.5 percent to 5 percent on a firm's net wealth. Ecuador imposes a similar tax at 3 percent. In Kenya, the business tax is in the form of a license fee, a flat contribution that is not related to the income of assets of the business (Bird and Vaillancourt, 2006:119).

The local business tax is calculated on different bases, depending on the country. The two main approaches are stock base or flow base. Using stocks (e.g., payroll, the

number of employees, value of property assets, capital goods) to determine the tax base enables local governments to have relatively stable tax revenue from one year to the next. Many view it as unfair, as it ignores businesses' ability to pay and discriminates among stocks or specific assets. That is not the case when the tax assessment is based on flows (e.g., profit, added value, or net turnover). It is more equitable for businesses but is sensitive to change in the economic environment and provides less-predictable tax revenue (Bird and Vaillancourt, 2006:120).

In South Africa the local business tax was based on a payroll levy, as well as turnover. However, this was abolished by National Treasury in 2007 due to this being a self-assessed tax with very onerous requirements on business in terms of submitting returns. Local business taxes are often popular with residents and elected officials because (a) they are more responsive to economic growth than property taxes; (b) cities have more discretion over the level of business tax than any other tax rate; and (c) no one is sure about the incidence of the tax, so it is convenient to argue that it is partly exported to non-residents. One good economic argument in favour of local business taxation is that it can be seen as proxy for a benefit tax. However, public services benefiting specific business would be better paid by appropriate user charges, as well as a property tax. When these charges are not feasible, some form of broadly based business tax is justified (Bird and Vaillancourt, 2006:121).

Local business taxes have several shortcomings. First, Local business taxes are generally not equitable and may accentuate disparities among cities and they lend themselves to being exploited. Secondly, from a policy viewpoint, a high business tax can hurt employment and investment, especially in economic downturns. That is the reason that the local business tax in the European Union has been revised in many countries to exempt small firms. Thirdly, corporate income taxes are to determine how much income is attributable to the local jurisdiction imposing the tax, especially when firms have businesses in several jurisdictions. The process is technically complex. For instance, in Turkey, the large cities gain exceptionally high local taxes from corporate income because they host the headquarters of large firms that operate around the

country. For transitional economies, a local business tax is one of the easiest taxes to levy, whereas their limited administrative capacity often makes the use of other taxes, such as the property tax, more difficult (Bird and Vaillancourt, 2006:123).

Countries with long experience of using local business taxes include Brazil, Canada, Germany, Hungary, Japan, Kenya, Ukraine, the United States, and most West African countries (Bird and Vaillancourt, 2006:124).

3.3.1.5 Motor Vehicle Taxes

The motor vehicle tax is becoming more common in urban areas in both developed and developing economies. Vehicle taxes are consistent with the criteria of equity, ability to pay, and the benefit principle. Generally there is a positive correlation between the market price of vehicles and the level of income of their owners. Vehicle taxes are easier to manage in comparison to other local revenue sources. The characteristics of vehicles are well known, and so are the average market prices, based on mileage and physical condition. Tax enforcement is relatively easy and effective, considering that for this particular tax, enforcement is usually done directly by the police. For instance, not having an up-to-date vehicle registration (i.e. proof of tax compliance) may result in a fine, removal of plates or vehicle impoundment. Just as with all other local taxes, effective and efficient management of the vehicle tax requires a complete database on vehicle owners and a credible enforcement system. In many countries, this is typically a shared tax with local governments receiving 50 to 100 percent of the yield. National governments are usually reluctant to give taxing power over cars to local jurisdictions. Doing so can create tax competition between jurisdictions if the registry rules are leaky (Slack, 2009:75). In South Africa this tax is a provincial mandate.

Vehicle registration fees are also better for reducing local pollution and congestion because these negative externalities are largely localised by owners' registration and vary by engine size, vehicle age, axle, and weight.

Fuel taxes are typically national and aim at financing intercity roads and externalities. Fuel purchase is also less localised, so that fuel tax is less efficient in reducing local externalities than congestion charges or tolls, which can vary by time of day and location (Slack, 2009:76). Cities that levy a fuel tax often piggyback on state fuel taxes due to the high cost of levying their own tax. The earnings from this tax are generally used on roads, transport services, or environmental issues.

In South Africa fuel taxes are a national competency. However, municipalities do get a share of fuel taxes. This has arisen as a replacement to the RSC or business levies that were abolished by National government due to resistance from business.

Administration remains the core and main challenge for an effective vehicle taxation system. Adequate updating of a motor vehicle database should be automatic. This means that the vehicle database is updated as part of the transfer of ownership when the sale of a vehicle is completed. For instance, the plate of a sold car remains with the seller, and the new owner must obtain a new plate. This provides strong support to timely ownership records, since driving without a plate or registration is a criminal offence. Tax rates for the purpose of tax assessment need to be transparent, and tax payment obligations and deadlines need to be communicated to all owners on a yearly basis. A stamp on the plate or windshield is a simple, cheap and transparent instrument. Enforcement needs to be credible and impounding vehicles should be considered as an enforcement option (Slack, 2009:78).

Congestion taxes are a recent type of tax designed and implemented in large cities with the objective of discouraging the use of private cars and reducing congestion and pollution in city centres. The tax has been successfully implemented in London, Milan, Singapore and Stockholm. Congestion and pollution have been substantially reduced, and the proceeds of the congestion tax have been used to finance the renovation of major public transit systems, notably the subway in London. The methods to compute and levy the tax vary. For example, an average tax charged during particular hours (London, between 7 a.m. and 6 p.m.) or as a function of the congestion in the city and

the hour of the day (Singapore). The congestion tax is an example of a win-win situation in which a fiscal tool generates revenues for the local government and also leads to less carbon emission. It promotes the use of a mass transport system, contributes to improving air quality, and generates time savings in communities, hence increasing urban productivity (Slack, 2009:81).

3.3.1.6 User Charges

User charges are paid by consumers to the local government for private goods and services, such as water, electricity, waste collection, or public transport. A user charge is a charge per unit of output, for example, the water tariff per litre of consumed water, the electricity bill for a given consumption of kilowatt hours, and the fee per trash bin or per kilogram to collect solid waste. User charges or user fees have an interesting economic rationale. Well-designed user fees enable consumers to know how much they will be paying for a particular service. Proper charges allow municipalities to make informed supply decisions and the amount to be provided, and consumers can also make informed decisions in terms of how much they can afford to consume. In theory, user charges affect behaviour and promote an optimal level of consumption that is reached when the price equals the cost of providing an additional unit of the service (Devas, 2001:161).

User charges are subject to local politics and often are set below costs, particularly in developing countries, with multiple negative consequences, such as the following: (a) The service provider owned by the municipality may reduce the quality, time of availability, or coverage of services (for instance, water is provided only three or four hours per day in most Pakistani cities). (b) The provider requires subsidies from the municipal budget, so that the costs are eventually paid by the same customers or taxpayers. (c) Under-pricing a service (by not charging enough for it) can result in overconsumption. In contrast, user fees for water that are based on marginal cost encourage water conservation, discourage water consumption for low-value uses (e.g. watering the lawn or washing the car) (Devas, 2001:163).

User charges are also an important way to provide economic signals, both to consumers, concerning the scarcity of services, and to providers, about the demand for services that need to be met. They can also reduce the demand for infrastructure: “whenever possible, local public services should be charged for rather than given away” (Bird, 2001:137). Cost recovery is a basic economic principle but may be in conflict with social justice in that some low-income groups may not be able to afford cost-recovery-level tariffs. Thus, appropriate tariffs may require targeted subsidies to ensure access to public services for the poor (Bird, 2001:141).

3.3.1.7 Surcharges on Utilities

Utility surcharges are levied on house services, such as water, electricity, telephones (landlines and mobile phones), and cable television (Head and Krever, 2009:441).

They are widely used because recovery tariffs are well accepted and the surcharge is typically a small addition to the generally acceptable bills. Surcharges constitute an emerging form of taxation for developing countries. They act as increases in utility tariffs, and they may discourage the consumption of services. In general, however, people believe that they meet the criteria of a broad tax base and fairly low tax rate, making these taxes more affordable and politically acceptable (Head and Krever, 2009:445).

The Ethekewini Municipality introduced a surcharge on business electricity consumers in 2005 to fund operating expenditure relating to the Rate and General Fund. This had to be withdrawn due to an outcry from business. Johannesburg has introduced a similar surcharge on all electricity consumers with effect from 2013. In practice, these surcharges should be used for specific purposes, notably to increase the efficiency of the services being taxed. An example is the energy fund in Alameda County, in California, established in 1995 to finance energy-saving projects to make electricity cheaper for consumers in the longer run.

3.3.1.8 Fees, Permits, and Licenses

User fees include license fees, such as those for registering marriages and births, fees for providing a copy of a marriage or birth certificate, or pet registration. These fees aim to reimburse the cost the local administration incurred to provide that service or document. However, a number of license fees are in fact taxes, set high above actual costs. These typically include business or professional license fees, building permits, and others (Peter and Sevinc, 2011:63).

Charging excessive fees has become a popular practice in developing countries. These seem to be cheap and easy revenues, but they have substantial implications that policy makers need to be aware of. In some countries business licenses constitute an important revenue source. Businesses are relatively easy to identify, and enforcement is based on the need for a license to operate legally. Business licenses also serve other purposes, such as compliance with public safety ordinances and regulations on hygiene, for example, in restaurants, schools, and sport facilities. However, excessive license fees may discourage business development and costs may eventually be transferred to customers (Peter and Sevinc, 2011:59).

Construction permits or building licenses in rapidly growing cities may generate significant revenues. (Teheran in Iran offers an extreme case, in which building permits provide two-thirds of the city's revenues). They offer easy identification, ability to pay, and practically automatic enforcement – no payment, no license. Construction permits serve other purposes, such as public safety and compliance with zoning rules and regulations and minimum construction specifications. However, high building permit fees may have negative effects on willingness to pay user charges over time. Some developers argue that they have paid the fee for water, road, and waste removal by paying a high license fee in advance (Slack, 2009:95).

Land development fees and construction permits are by far the most important local government revenues in many developing countries. In some of the Balkan countries, land development fees constitute a large share of local government's revenues (50%). This has a number of implications on the level of vulnerability of the municipal revenues

structure as well as the way municipal land is dispensed of and the way cities of the region urbanise. The 2008 financial crisis has shown the need to diversify the sources of revenues. Abolishing these fees would curtail new investments, but allowing local governments to set them at any level hurts business and encourages illegal construction. One alternative is for the central government to impose rate ceilings, as in Albania. The tax base could be set per square meter, by zones, or estimated construction costs (Slack, 2009:96).

Professional licenses are sometimes used in developing countries, typically for specific high-revenue professions such as lawyers, doctors and real estate agents. In some countries, however, the cost of collection and enforcement may be greater than the revenue they generate. The use of electronic forms has reduced the cost of administering these taxes (Wyoming, 2011:116).

3.3.1.9. Fines and Penalties

The category of fines and penalties primarily includes motor vehicle traffic violations and penalties for late payment of taxes and user charges. Their use varies from one city to another. Fines and penalties can be a significant revenue source for urban traffic management in medium-size and large cities. Amman City in Jordan, has introduced a computerized system for recording and penalising traffic violations. As half of the country's population lives in another half of the country and often travels into, Amman, it has improved traffic rule compliance and generated substantial revenue for the city.

3.3.1.10 Current Revenue from Assets

Current revenue from assets is mainly rent from leases of municipal land and buildings. This category of revenue applies to municipal real estate used in retail and wholesale activities, for example, municipal food markets and municipal urban land and buildings. Asset revenues often have great potential (World Bank, 2011:6).

3.3.1.11 Other Recurrent Revenues

“Other recurrent revenues” is a residual category that indicates possible misclassification if it is too large. A figure greater than 5 percent may mean that the

revenue manager does not have an accurate account of the items included as revenue. It also signals a lack of transparency that hurts accountability. A large “other revenues” segment also could be a result of balloon budgeting, as when the local finance department puts a large sum in the category to ensure a formally balanced budget. This is a highly inappropriate budgeting practice that violates basic disciplines and distorts budget execution (World Bank, 2011:8).

3.3.1.12 Capital Revenues and Main Sources of Capital Investment Financing

In many countries revenue requires segregating current (also called “recurrent”) and “non-recurrent” or “development” revenues. The reasons behind this distinction are as follows (Peter and Sevinc 2011:66):

- (a) The basic principle that a municipality should finance its regular operations from recurrent revenue flows;
- (b) That noncurrent revenues are better accounted in, and used for, capital or development expenditures; and
- (c) That the sale or long – term lease of assets (either land or property) reduces the wealth of the municipality and thus the proceeds should be accounted for in the capital budget and reinvested to finance local public infrastructure to ensure that the wealth of the community remains the same or grows.

Many developing countries do not require the preparation of separate current and capital budgets. However, this distinction is essential for local governments to secure revenue management and to pursue development (Garrett and Leatherman, 2010: 113): The main capital revenue or sources of capital investment financing are as follows:-

- Own source capital revenues. This category includes:
 - (a) Proceeds from the sale or lease of assets (land or building);

- (b) Betterment fees or other development levies, including quasi-tax construction permits and land development fees;
 - (c) Contributions from beneficiaries of local public goods; and
 - (d) Sometimes operation surpluses from the previous fiscal year, which may be allocated to the capital budget or set aside as reserves. Municipalities should put great or major emphasis on their own capital revenues because they are under the most direct control of the municipality. Using asset sales, betterment levies, and contributions requires a clear strategy interlinked with urban planning, zoning and development plans.
- Capital transfers and grants: Transfers and grants are allocated by many central governments not only as general block grants or current grants, but also as separate transfers for general capital investments. They may also earmark grants for specific investments (referred to as conditional grants in South Africa), such as water and sanitation, roads, health, culture, or education. Earmarked or target grants may require co-payment by the municipality and perhaps also by the beneficiaries. Some of these grants may be competitive, and accessing them may require application, and local policy decisions. Some capital transfers aim to fund delegated services for which the local governments are not responsible. Proceeds from earmarked grants are best spent precisely for the set purpose and in the exact amount.
 - External revenues: Borrowing by local governments is justified, especially to finance long term investment plans provided that debt service is ensured and does not jeopardise the fiscal stability of either the local or the higher levels of government. Operational surpluses and own capital revenues can be used for co-financing or repaying debt. They play an important role in estimating and ensuring municipal borrowing capacity and creditworthiness.

- Donations or sponsorships: Donors or philanthropists may donate a capital item or monetary funds to purchase a capital item in their homeland or in a disadvantaged area. The donation or sponsorship may require some publicity or acknowledgement (such as naming the library).
- Public – Private Partnerships (PPP's): Capital expenditure can be funded through PPP' s. The private sector partner is of course concerned about making a profit whilst the municipality is concerned about providing a service and uplifting the quality of life of its people. Accordingly, risk sharing and the terms and conditions of the partnership must be clearly spelt out so that ratepayer's interests are protected (Garrett and Leatherman, 2010:113).

3.3.2. Sources of Local Government Funding in South Africa.

Whilst municipalities in South Africa do participate in the equitable share process, the DORA (Division of Revenue Act) is not an open process. It is not the same as the process municipalities follow with their budgets especially in terms of consultation and participation with all relevant stakeholders. Municipalities would welcome a similar process in terms of openness and transparency. Accordingly, there is a need to determine how democracy can be deepened by improving taxpayer participation and engagement in the national budget.

The Division of Revenue Act (DORA) is used to financially support local government through the national fiscus to enable local government to fulfil its constitutional mandate. The equitable share is an unconditional grant as opposed to other grants from national government which are conditional. The DORA and its processes give effect to Sections 214 and 227 of the Constitution. The DORA process in effect recognises the fact that municipalities have very limited taxation powers and there is a need for them to share in the national fiscus to provide services to their local communities (Khumalo, Dawood and Mahabir, 2013:14).

The table below shows the division of revenue between the three spheres of government that took place for 2013/14:

Table 3.1: Allocation of national revenues to spheres of government, 2013/14 financial year.

R Billion	Revenue allocation	Percent of Total
National Allocations	452.5	48%
Provincial	414.2	43%
<i>Equitable share</i>	337.6	35%
<i>Conditional grants</i>	76.6	8%
Local	84.7	9%
<i>Equitable share</i>	50.2	5%
<i>Conditional grants</i>	34.5	4%
Total	R951.4bn	100%

Source: Khumalo, Dawood, Mahabir. *Funding Devolved Units in South Africa's Intergovernmental Fiscal Relations Systems*. FFC: Pretoria page 7.

As can be seen from the table, National receives 48%, Provinces 43% and municipalities only 9% of the total national revenue.

The Table below reflects the sources of local government funding in South Africa:

Table 3.2: Sources of Local Government Funding

Municipal own revenue sources	Constitutional Provision	Relevant Legislation
Rates on Property	Section 229 and 227 (2)	Local Government Municipal Property Rates Act
Surcharge on fees for services provided by or on behalf of the municipality	Section 229 and 227 (2)	Local Government Municipality Fiscal Powers and Function Act
Service charges/fees	Section 229 and 227 (2)	Local Government Municipal Systems Act; Local Government Municipality Finance

		Management Act; Electricity Act and Electricity Regulations Act; National Water Act; and Provincial land use planning ordinances
Other taxes, levies or duties	Section 229 and 227(2)	Local Government Municipal Fiscal Powers and Function Act
Administrative fees		Local Government Municipal Systems Act
Fines		National Road Traffic Act.
Borrowing	Section 230A	Local Government Municipal Finance Management Act
Credit control and debt collection	Section 230A	Local Government Municipal Systems Act
Transfer from national and provincial government		
Local government equitable share of nationally collected revenues	Section 214 and 227	Intergovernmental Fiscal Relations Act; and The annual Division of Revenue Act
Fuel levy sharing with metropolitan	Section 229 (1) (b)	The Annual Taxation Laws Amendment Act
Conditional grants from national	Section 214 (c), 226(3) and 227(1) (c)	Intergovernmental Fiscal Relations Act; The Annual Division of Revenue Act; and The Annual Appropriation Act of the relevant province

Source: National Treasury. 2013. *Review of Municipality's Own Revenue Sources*. Pretoria: Government Printers.

The primary sources of metropolitan council revenue in South Africa are property tax 19.6%, services charges / fees (66.6%) and grants (12.18%) (National Treasury, 2013:61).

By contrast in Canada income is derived from property tax (54.3%), user charges (16.4%) and grants (25.7%).

In the case of Germany's property tax (24.1%) income is much lower than Canada, but however, close to South Africa. The German local authorities are allowed to levy a trade tax and this constitutes 73.7% of their revenue.

Swiss and American local authorities get a share of national income tax, are allowed to levy sales tax and also derive income from property tax service charges and entertainment tax (Steytler, 2005:27). Most of the revenue sources are used in South Africa. However the following taxes have not been devolved to local government in South Africa:

- i. Tax on motor vehicles (This is a provincial tax).
- ii. Local sales tax (This is a VAT equivalent tax that we have in South Africa and is levied by National Government).
- iii. Tax on local business and service (An application has been made by EThekweni Municipality to National Treasury for approval to levy this tax).
- iv. Tax on tourism, hotel, restaurants and entertainment, (This is a Provincial tax).

Taking due cognisance of the fact that local government is an independent sphere of government, the current funding fiscal framework should be reviewed to give local authorities additional taxing powers to levy entertainment tax as well as a value added tax. This will ensure total fiscal economy for local authorities and also improve their financial sustainability (Steytler, 2005:31).

3.4 Financing Gaps/ Constraints

The exercise of financing gaps on local capital investment and the trend of such gaps increasing is not only apparent in the context of South Africa. McKinsey Global Institute (2013:3) provides that this is in keeping with projected global GDP growth rates in

developing economies. Alam (2012:12) indicates an estimated \$250 billion capital financial gap per annum for Asian municipalities for 25 years subsequent to 2010. Mirza (2007:66) through the use of a survey estimates a \$123 billion financing gap for Canadian municipalities, which comprises of both new and existing infrastructure investment backlogs. Municipal funding constraints have not been receiving the necessary attention they deserve given the growing quantum of infrastructure gaps (both existing and new).

Alam (2012:11) qualitatively researched the municipal infrastructure financing constraints evident in four countries (Uganda, Tanzania, Bangladesh and Pakistan) while also aiming to identify proven alternative financing options through the use of a case study. Based on his findings, he argues that "...limited municipal revenue-raising autonomy; inability of municipalities to fully realize the potential of own-source revenues; inadequate government transfers; limited resources for capital expenditure as a result of large operational expenses; poor municipal financial management mostly due to lack of technical expertise within municipalities and recent development of financial markets" are the constraints hindering optimal infrastructure delivery in the sampled countries (Alam, 2012:13).

Bagchi (2001:31) also conducted a study which was implicitly aimed at analysing the constraints in financing capital expenditure for the provision of basic services by Indian local governments. He used a case study of Indian municipalities, where he qualitatively analysed the "traditional capital financing approach" (central government transfers) and the "alternative approach" (borrowing through capital markets). In his analysis, he argues that the weak financial positions of local governments (resulting from narrow tax bases, inadequate use of user charges for services rendered and occurrence of high administrative/operational costs; limited/no autonomy in terms of fiscal responsibilities and powers; lack of fiscal discipline; underdeveloped capital markets; complex and lengthy processes in accessing capital markets that tend to require expertise within local governments that are usually not available as a result of non-competitive employee salaries; and, undue political influences, are all municipal constraining factors

to accessing capital markets for infrastructure finance affecting Indian local government.

Banerji et al (2013:20) aimed at diagnosing the causes of the deteriorated performance standards of the municipal bonds markets while also identifying constraints embedded in the financing of municipal services. They also indicate in their findings that autonomy; inappropriately structured transfer systems that cause perverse incentives; fragmented coordination in service delivery due to the presence of differing bodies involved in similar service delivery functional areas; inadequate tax collection and poor financial management, as constraints hindering the full realisation of own revenue generation potential by Indian local government.

The United Cities and Local Governments (UCLG, 2010:5) in their report that was mainly commissioned to identify and analyse key constraining factors on delivering equitable and efficient local government public services, also used a case study in analysing the sampled regions (Africa, Asia Pacific, Middle East and West Asia, and North America). The study identified a wide range of expenditure and financing side constraints that were not necessarily relevant to all sampled countries concurrently, but in some, worse than others, due to uniquely differentiating factors in each of the sampled countries. The identified financing constraints from their case study are summarised in the table below:

Table 3.3: Summary of identified local government financing constraints.

Minimal Revenue Generation	Minimal revenue generation autonomy characterised by vertical fiscal imbalances (i.e. devolution of expenditure responsibilities which do not correspond with revenue sources or autonomy); unrealised revenue potential especially in the case of property taxes due to the complex and expensive nature of property tax administration which tends to be burdensome to municipalities from developing countries with minimal capacity to properly execute the function; undiversified local tax bases (inelastic and narrow); the inability of local governments to establish fees and user charges that feasibly recover incurred costs; political influences on local revenue generation; and,
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	delayed transfers centrally collected local revenues.
Inappropriately Structured Intergovernmental Transfer system	Inappropriately structured intergovernmental transfer (revenue sharing) system which unintentionally strengthens horizontal imbalances across municipalities; lack of transparency causing volatile municipal revenue which affect municipal long-term plans; extensive transfers which tend to disincentivise municipal own-revenue generation which in essence undermines autonomy and accountability; where equalisation schemes are incorporated in the transfer system, improperly balanced transfers in terms of fiscal capacity and expenditure needs, and in some cases equalisation systems embed rigid conditions; conditional grant design tending to be complex and excessive in number, lack of transparency, unstable, vulnerable to political manipulation and tend to deviate municipalities from initial priorities.
Non-Optimal Use of Borrowings	Non-optimal use of borrowings as a financing alternative by local governments due to weakly developed and implemented borrowing frameworks (that is, some frameworks are restrictive and disincentivising, e.g. Denmark and Chile, while others are too lax thus creating perverse incentives, e.g. Argentina and Brazil; underdeveloped financial markets; underperforming specialised institutions which are dependent on government; specialised institutions improperly vetting local governments in appraisals for loan qualifications (another form of bailout) which in essence disrupts the development of credit markets and disincentivises local government's gradual reliance on private capital for financing ; and, curtailed borrowing capacity as a result of uncertain, opaque central government transfer and improper financial management practices.

Source: Adapted from FFC. 2013

The studies discussed above begin to unravel what should be part of policy discussions. However, in truly stimulating a process that enables policy implementation, a thorough understanding of the actual scope of the problem (municipal capital financing constraints) that is established through both qualitative and quantitative analysis techniques is a necessity. Minimal work has been done in quantitatively working out the extent of these capital financing constraints. National Treasury (2010:16) used a number of qualitative measures to assess the borrowing capacity of the six metropolitan councils in South Africa which was a methodology adapted from the World Bank

approach. The approach assumes that there are two ways to estimating borrowing capital, namely the gearing factor and critical limits such as prudential limits on borrowing and debt service. Using this methodology, the study found that even with escalating debt servicing among these councils, they had low gearing ratios and acceptable debt-to-current revenue ratios on average. This implies that borrowing by metropolitan councils is a feasible financing instrument that can be utilised. However, what was neglected in this approach was the impact of the cost of borrowings on tariffs, an issue that will be covered in this study.

3.5 International Examples of Additional Capital Financing Instruments

One of the aims of this study is to identify additional revenue sources that could support the financing of municipal capital expenditure for metropolitan councils. The discussion above explicitly indicates that capital expenditure gaps are apparent internationally and these countries are also confronted with a similar challenge of municipal capital financing constraints, which in essence threaten long-term growth prospects. Thus in reducing this situation, sub-national government in partnership with central government need to creatively source other financing avenues that will enable full exploitation of revenue generation potential. Table 3.4 below summaries the municipal capital financing instruments that have been explored in different countries (developed, less developed and developing) in addition to traditional financing approaches, such as transfers from central government, which, with specific reference to cases of success and/or distinct financing options that could possibly apply to South Africa.

Table 3.4: Alternative approaches to financing municipal capital expenditure, international experiences.

Country	Capital Financing approach (Including brief discussion)
Indonesia & Kenya	Informal taxation schemes “Contribution made by local residents outside the formal tax system to the construction and maintenance of local public goods. Payments are coordinated by public officials but enforced largely through social customs and norms. In fact, individuals in many communities throughout the developing world, contribute substantially to local public goods such as roads and water systems,

<p>Applicability to South Africa</p>	<p>both in money and labour, with often complex arrangements in determining how much each household should pay and what penalties apply for those who free ride. These systems are called by many different names such as gotongroyong in Indonesia and Harambee in Kenya. These informal payments can be quite large, they are often regressive in their pattern and their form differs significantly across countries” as cited by Alam (2010: 14) from Olken and Signhal (2009).</p> <p>An informal arrangement of this sort will not work in South Africa as the taxation systems are highly regulated. The South African constitutional requirements of fairness, equity and transparency will also be impeded.</p>
<p>India</p> <p>Applicability to South Africa</p> <p>Municipal pooled</p>	<p>Developing banks and financial institutions</p> <p>Accordingly to Alam (2010:15), developing banks and financial institutions are primarily established to offer long-term credit and other financing services for infrastructure projects even with the existence of municipal borrowing constraining factors such as inflated interest rates which municipalities of these banks use to evaluate borrowing risks. An example is the IDFC in India which was created by the Indian government and financing institutions (foreign and domestic institution) in 1997, with the purpose of attracting private capital for Indian infrastructure project. It is currently offering a wide range of financing and advisory services pertaining to infrastructure projects such as debt financing; project loans; take out financing; guarantees for payment obligations and project performances; and, advisory and capacity building services to both government and non-government organizations (NGOs) (through its foundation, on a not-for-profit basis).</p> <p>The DBSA (Development Bank Of South Africa) plays this role in South Africa and has been very successful in providing financing for capital infrastructure at rates lower than the market. Accordingly, there have been complaints from the commercial banks. This has led to the DBSA focusing on lending to the smaller municipalities over the past 3-4 years. However, in 2013-2014 DBSA indicated that they would be lending once again to the metropolitan councils and high capacity municipalities and would also be facilitating joint funding arrangements with other development banks and development agencies (e.g. AFD – French Development Bank, European Union and the World Bank.)</p> <p>Most applicable to municipalities that are in need of capital financing from the</p>

<p>Applicability to South Africa</p>	<p>markets in the world, it was developed in the late 1820's. "The market is largely self-regulatory with market participants developing rules that govern the markets through assigning rights and responsibilities to participants as well as providing credible information to investors and the public at large. Certain bond issuances qualify for tax exemptions but discretion lies with the US Internal Revenue Service (Blaauw and Mantso,2009: 46)</p> <p>The bond market in South Africa is developing at a very slow rate primarily due to the costs and technical expertise required in setting up the framework for a bond issue.</p>
<p>Brazil</p> <p>Applicability to South Africa</p>	<p>Full-Privatisation of a function</p> <p>This relates to the complete privatisation of a function according to Fox (1994) and Guthrie (2006) as cited by Alam (2010: 13). It attempts to induce competitive market forces to lower capital service provision costs while improving on service quality. An example of successful implementation of privatisation is solid waste disposal and collection in Brazil. Alam (2010: 13) argues that key to successful privatisation of a functions competitive market forces, thus implicitly arguing for an active role by government in ensuring non-restrictive entry and exit conditions into privatised markets.</p> <p>The legislative framework exists in South Africa for full privatisation. However this needs to be carefully packaged as labour unions are very sensitive to privatisation. The Local Government Municipal Systems Act is very clear that local government must provide services in the most cost effective manner. Accordingly, if privatisation does not impact on jobs (staff are guaranteed redeployment) it should be pursued with a proper business case/plan, whilst taking due cognisance of the long-term impact of providing the service.</p>
<p>Colombia</p>	<p>Public Private Partnership (PPP)</p> <p>PPP' s can be regarded as the public sector partnering with the private sector in an attempt to mitigate the fiscal burden already borne by the government, without compromising on adequate delivery of the service. Kitchen (2006: 7) indicates that in PPP' s "both parties contribute funds or services in exchange for certain future rights". He further indicates that effective and ineffective PPP agreements are based on a mutual understanding of the risks and costs that</p>

<p>Applicability to South Africa</p>	<p>are borne by both parties. The relationship is contractual and can be once-off or on going. Alam (2010:14) uses the Colombian Bogota TransMilenio bus system concession contract as an example of a continual PPP which was implemented in an attempt to reduce traffic congestion. It was funded by the Colombian government, the World Bank and respective transport sector stakeholders jointly and has yielded great success.</p> <p>As with privatisation, the legislation for PPP's exists, however, it is very onerous. National Treasury have set up a help desk which has been very helpful, however, the number of PPP's being created is still too low. It is anticipated that the newly created Chief Procurement Office in National Treasury will look at further refinement to the regulations that will hopefully streamline the process and enable easier application.</p>
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Source: Adapted from *Alternative approaches to financing municipal capital expenditure, international experiences.*

3.6 The State of City Finances 2013

Cities are the major drivers of the South African economy, and hence their performance is a good indicator of the state of the economy and the environment in which business must operate (SACN, 2013:5). Through the services they deliver, cities influence the lives of millions of citizens and businesses and contribute significantly to the economic and social transformation of the country. Therefore, healthy municipal finances are vital to the future of South Africa. The performance of municipalities is a measure of their contribution to a sustainable environment and their own sustainability. Municipalities have to account for the resources and provision of services at appropriate levels while still fulfilling their social responsibility. Furthermore, municipalities develop long-term plans and assign resources to invest in the environment to meet future demand (SACN, 2013:5).

Various changing factors have had an impact on the environment in which cities operate and provide services. Increases in bulk purchase costs, mainly as a result of Eskom's significant tariff hikes and employee-related costs, and salary increases in excess of inflation, are not really within the control of the cities, as these costs are mostly driven

by outside factors. These cost increases are in contrast to cities needing to maintain high levels of service delivery, while keeping tariff increases within the national inflation target band. However, the cities are often forced to pass the increased costs to their consumers, which may have a significant impact on the affordability of municipal charges. This is already clearly illustrated in the poor cash flow positions of Johannesburg, Tshwane, Nelson Mandela Bay, and Mangaung. It is therefore imperative to ensure that tariffs are structured in such a way as to account for the true cost of rendering the service in order to prevent compromising on repairs and maintenance spending. This will probably have a negative effect on affordability of municipal charges going forward. The need to optimise capital expenditure also needs to take due cognisance of affordability of tariffs and impact on financial sustainability (SACN, 2013:7).

3.7 Unfunded Mandates

An additional issue that materially impacts on total government funding/financing is unfunded mandates. Chapter 3 of the Constitution establishes a system of co-operative governance with national, provincial and local government being distinctive, interdependent and interrelated. This system was designed to ensure effective and efficient service delivery as per the principles of fiscal decentralization while promoting a government of national unity.

Within this cooperative governance framework, the Constitution and supporting legislation, such as the Local Government Municipal System Act (MSA), makes provision for the assignment of national and provincial functions to local government (SALGA, 2013: 1).

This arrangement is stipulated in section 156(4) and section 126 of the Constitution and emphasises that such assignments should be undertaken: (1) with the agreement of local government, (2) if such a function is more efficiently delivered locally, and; (3) that the municipality (or municipalities) in question has sufficient capacity to undertake the

service responsibility (SALGA, 2013: 1). As per this agreement or otherwise, important provincial competencies currently carried out by some municipalities include the provision of library services, primary health care and museums.

In addition, services such as housing, transport and roads are concurrent in nature, with various aspects of these functions being undertaken by all three spheres of government. Whilst provision of these services is undertaken in the spirit of cooperative governance, with each sphere responsible for certain aspects of the service, in many instances it is beyond the control of local government due to the political demands made (SALGA, 2013: 1).

Whilst promoting the devolution of service delivery powers and functions, the Constitution also ensures that each sphere has revenue instruments (a combination of own revenue and grants) to support the delivery of such services, under the principle of funding the functions devolution. However, in cases where provinces have assigned specific provincial functions (e.g. housing) to local government as part of the legislation described above, municipalities deliver the service to communities, hence incurring the expenditure responsibility, while the revenue instrument stays with the province. The issue of the risk and additional costs associated with, for example, housing delivery is a key cause for concern in terms of the impact on the financial sustainability and viability of metropolitan councils (SALGA, 2013: 1).

In certain instances, funding for such services is not provided to municipalities or only partial funds are transferred to support the delivery of assigned provincial functions. This constitutes an unfunded or underfunded mandate. Unfunded and underfunded mandates have compromised the efficient delivery of services while putting unnecessary pressure on local government finances, as municipalities have to fund the provision of provincial functions from their own revenue (SALGA, 2013: 1).

Whilst there is a comprehensive legislative framework that governs the assignment of national and provincial functions to local government, it is not fully or properly adhered

to. This would suggest a potential challenge in the cooperative governance system envisaged in the Constitution (FFC, 2013:10).

This study mainly focuses on functional assignments undertaken in terms of Sections 99,126,156 and 238 of the Constitution, which pertain to the assignment of exclusive national and provincial functions to local government, including library services, primary health care and museums, amongst others. However, it is important to also highlight the issue of potential unfunded mandates arising through functions undertaken concurrently across the spheres. This would include the delivery of housing, public transport and roads. With greater aspects of these functions being devolved to local government through other supporting legislation, it is important that the finances to support these additional expenditure pressures are also afforded to municipalities.

3.8 An Analysis of Income and Expenditure.

It should be noted that expenditure and revenue vary considerably amongst the metropolitan councils and cannot be compared on a like-for-like basis. For example, Buffalo City income was a mere R3.7bn compared to Johannesburg with R32.2bn for the 2012/13 financial year.

Table 3.5: Major income Source 2012/13 Audited Outcome. Source: National Treasury

METROPOLITAN COUNCIL	ETHEKWINI	CAPE TOWN	JOHANNESBURG	EKURHULENI	MANGAUNG	NELSON MANDELA BAY	TSHWANE	BUFFALO	TOTAL	%
	2012/13	2012/13	2012/13	2012/13	2012/13	2012/13	2012/13	2012/13		
R thousands	UNAUDITED OUTCOME	UNAUDITED OUTCOME	UNAUDITED OUTCOME	UNAUDITED OUTCOME	UNAUDITED OUTCOME	UNAUDITED OUTCOME	UNAUDITED OUTCOME	UNAUDITED OUTCOME		
Property Tax	5,032,654	6,172,982	5,989,885	3,024,509	555,590	1,103,654	4,296,138	602,316	26,777,728	19.60%
Service charges – electricity revenue	0	8,809,204	11,327,681	9,934,115	1,694,773	2,813,453	8,235,820	1,205,758	44,020,804	32.22%
Service charges - water revenue		2,054,761	5,944,549	2,256,438	515,334	480,994	2,298,693	254,264	13,805,033	10.10%
Service charges - sanitation revenue	0	1,116,104	0	774,714	143,927	324,771	601,002	223,740	3,184,258	2.33%

Refuse	0	868,734	756,653	926,700	59,877	158,185	625,552	198,866	3,594,567	2.63%
Grants	2,255,230	1,917,467	4,767,234	2,246,117	610,134	1,525,134	2,609,745	708,522	16,639,583	12.18%
Other own revenue	15,912,548	2,686,285	3,510,485	2,478,886	872,731	932,899	1,662,297	557,559	28,613,690	20.94%
Total	23,200,432	23,625,537	32,296,487	21,641,479	4,452,366	7,339,090	20,329,247	3,751,025	136,635,663	100%

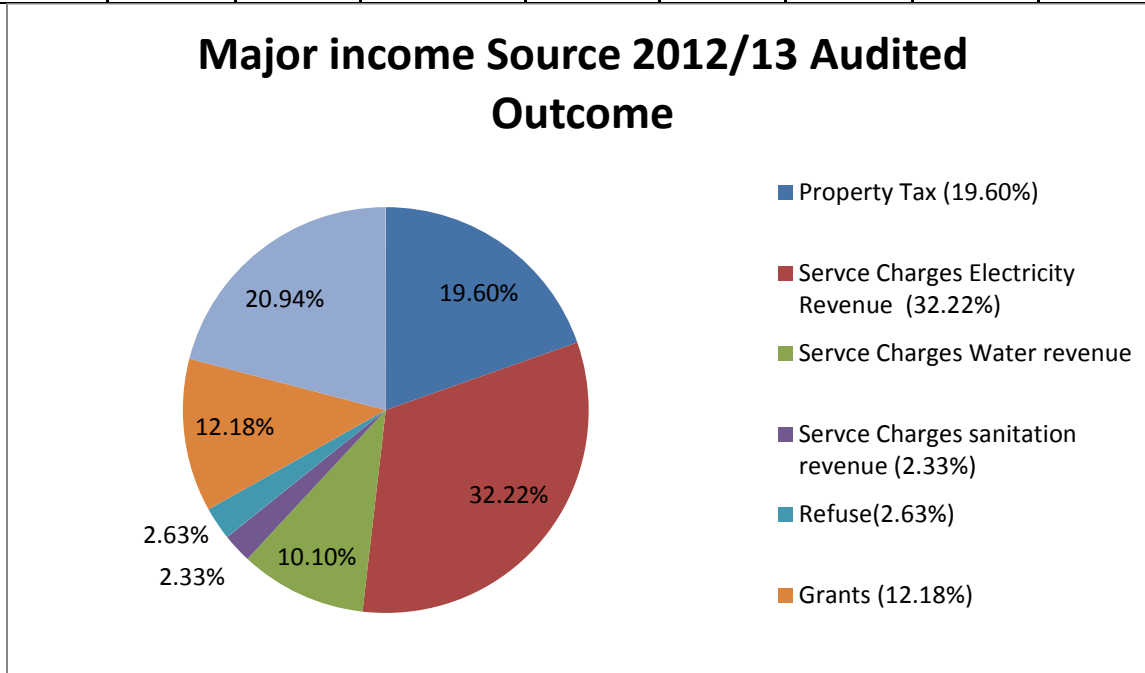


Figure 3.1: Major income Source 2012/13 Audited Outcome Source: National Treasury

Income comprises 19.60% from property taxation, 32.22% from electricity, 10.10% from water, 2.33% from sanitation and 2.63% from refuse. These key taxation and services charges income amount to 66.61% of revenue whilst grants account for a mere 12.18%. Other revenue includes income from rental charges for facilities and equipment, interest earned on external investment, interest earned on outstanding debtors, agency and service fees, fines and penalties, as well as tariffs charged by municipalities in respect of user charges for various facilities like the hire of community halls, swimming pool entrance fees, etc.

Table 3.6: Operating Expenditure 2012/13 Audited Outcome

METROPOLITAN COUNCIL	ETHEKWINI	CAPE TOWN	JOHANNESBURG	EKURHULENI	MANGAUNG	NELSON MANDELA BAY	TSHWANE	BUFFALO	TOTAL	%
	2012/13	2012/13	2012/13	2012/13	2012/13	2012/13	2012/13	2012/13		
R thousands	UNAUDITED OUTCOME	UNAUDITED OUTCOME	UNAUDITED OUTCOME	UNAUDITED OUTCOME	UNAUDITED OUTCOME	UNAUDITED OUTCOME	UNAUDITED OUTCOME	UNAUDITED OUTCOME		
Employee related costs	5,993,075	7,188,724	7,438,634	4,138,404	1,024,007	1,775,934	5,231,783	947,264	33,737,825	26.16%
Depreciation and asset impairment	1,595,413	1,610,063	1,622,101	1,241,274	293,028	788,283	1,081,766	376,528	8,608,456	6.68%
Finance charges	938,438	689,719	1,402,510	409,516	114,523	153,176	643,636	659	4,352,177	3.38%
Bulk Purchase + Material	7,557,474	5,960,444	11,037,251	10,448,171	1,451,151	2,377,134	7,352,314	1040571	47,224,510	36.62%
Transfers and grants	173,991	94,594	157,732	637,284	141,481	314,382	17,290	6,702	1,543,456	1.20%
Contracted services	2,897,594	2,602,690	2,625,323	583,817	190,664	256,345	3,501,869	7,593	12,665,895	9.82%
Other	2,717,032	4,430,697	6,642,121	2,456,546	476,482	1,291,971	1,836,567	968,032	20,819,448	16.14%
Total	21,873,017	22,576,931	30,925,672	19,915,012	3,691,336	6,957,225	19,665,225	3,347,349	128,951,767	100%

Source: National Treasury

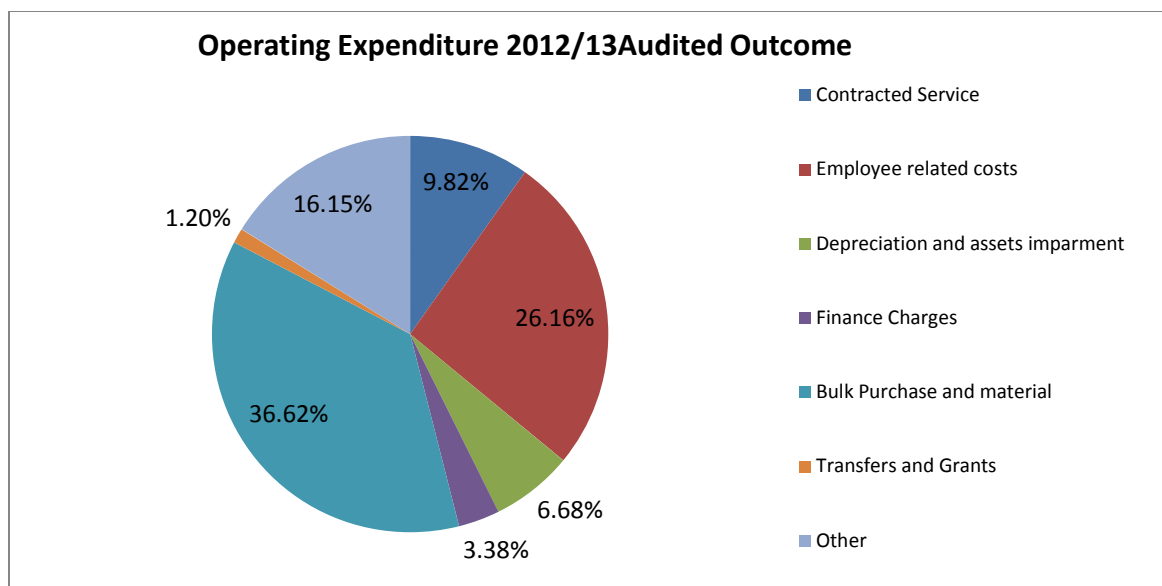


Figure 3.2: Operating Expenditure 2012/13 Audited Outcome. Source: National Treasury

As Figure 3.2 shows, the largest components of municipal operating expenditure are materials and bulk purchases in respect of water and electricity which accounts for 36.62%, labour costs 26.16%, and other expenditure 16.15%. It is interesting to note that employee costs, depreciation and asset impairment, finance charges, bulk purchase and materials, transfers and grants and contracted services amount to 83.86% of expenditure resulting in very little flexibility in budget reprioritisation.

Table 3.7: Key Areas Capital Expenditure Standard Classification 2012/13 Audited Outcome

METROPOLITAN COUNCIL	ETHEKWINI	CAPE TOWN	JOHANNESBURG	EKURHULENI	MANGAUNG	NELSON MANDELA BAY	TSHWANE	BUFFALO	TOTAL	%
	2012/13	2012/13	2012/13	2012/13	2012/13	2012/13	2012/13	2012/13		
R thousands	UNAUDITED OUTCOME	UNAUDITED OUTCOME	UNAUDITED OUTCOME	UNAUDITED OUTCOME	UNAUDITED OUTCOME	UNAUDITED OUTCOME	UNAUDITED OUTCOME	UNAUDITED OUTCOME		
Electricity	606,097	1,118,172	1,268,807	283,957	161,601	100,873	700,031	76,686	4,316,224	21.95%
Water		278,099	655,890	142,967	154,698	256,397	203,484	66,924	1,758,459	8.94%
Sanitation	669,317	272,043		77,359	109,958	152,639	662,084	98,613	2,042,013	10.38%
Refuse	139,732	199,201	22,277	40,478	13,438	1,106	41,383	15,147	472,762	2.40%
Roads	208,276	2,244,607	379,176	535,608	188,348	216,960	1,309,060	121,817	5,203,852	26.46%
Treasury & Budget Office	657,819	9,762	3,469	125,518	2,781	2,032		2,035	803,416	4.09%
Community and Public Safety	398,074	891,466	737,328	339,225	41,071	151,669	942,754	42,662	3,544,249	18.02%
Economic and Environmental Services	691,331	50,500	83,249	38,525	42,647	129,873	31,761	64,941	1,132,827	5.77%
Other	124,070	5,408	-5,594	16,633	697	7,350	242,167	1,338	392,069	1.99%
Total	3,494,716	5,069,258	3,144,602	1,600,270	715,239	1,018,899	4,132,724	490,163	19,665,871	100%

Source: National Treasury

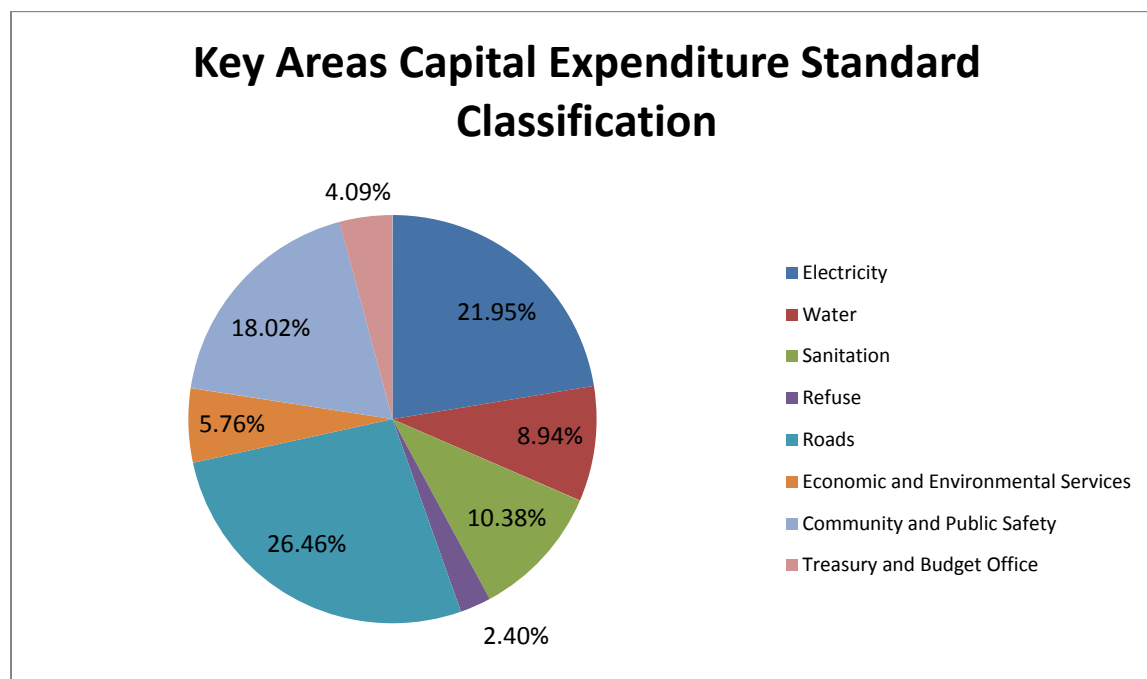


Figure 3.3: Key Areas Capital Expenditure Standard Classification 2012/13 Audited Outcome: Source: National Treasury

Figure 3.3 indicates that 70.13% of capital expenditure is spent on basic infrastructure for electricity, water, sanitation and roads and refuse removal. Expenditure on community and public safety amounts to 18.02% and comprises expenditure in respect of community and social services, sport and recreation, public safety, health and housing. It should be noted that R1.9billion was spent on housing whilst R206 million was spent on primary health care notwithstanding that these are not municipal functions and as such are unfunded mandates. The high spend on basic infrastructure is a clear indication of the commitment by metropolitan councils to eradicate the service delivery backlogs.

3.9 Smart Cities

More people are living in cities than ever before. More than 50% of the global population (3.6 billion people) live in cities. More alarmingly, this is increasing. It is estimated that

by 2030, more than 60% of the world's population (5 billion people) will be living in cities. In South Africa the projection as indicated earlier, is that it will be 70%. Accordingly, the strategy of government and cities to address this growing urbanisation is vital to all stakeholders, especially citizens (McKinsey and Company, 2013:8). This is clearly a global issue and applies equally to South Africa.

The increase from 3.6 billion to 5 billion people living in the cities will turbo charge the world's economic growth. Even cities in developed countries grapple with issues of ageing infrastructure and budgets are under pressure as their growth prospects are poor. As indicated earlier, this typically describes the challenges faced by South African metropolitan municipalities. All metropolitan municipalities are trying to be competitive and as cost effective as possible. They are also fully aware of the need to uplift the quality of life of all their citizens. Moreover, all are conscious of the environmental impact of expanding their economies in ways that are unsustainable and not resource-efficient (McKinsey and Company 2013:9).

A city's performance must be measured in terms of the triple bottom line, that is, their economic, social and environmental impact. However, cities can change. For example, Singapore changed from a colonial harbour to a world-class city in just a few decades, as well as New York's rise to a world-class city following the economic recessions of the late 1960's and 70's. Studying such success stories, three common drivers of change can be identified, namely, achieving smart growth, becoming more efficient, effective and economical, as well as change management (McKinsey and Company 2013:11).

Understandably, all cities want to grow their economies but, this does not necessarily result in a better quality of life for citizens. It also has environmental impacts. Accordingly, not all growth is good. There is a need to learn what smart growth looks like.

This is clearly evident in a number of examples amongst South African cities. When the Ethekewini municipality declared it wanted to be the eventing capital of South Africa, as

this would have major benefits from a tourism perspective and would certainly have a huge impact on growth and jobs creation, this was opposed by a number of residents who felt that it would impact on their quality of life with the inconveniences of traffic congestion, road closure, etc. Similarly the construction of the ICC (International Convention Centre) Moses Mabhida stadium and Ushaka Marine Theme Park are not viewed positively in terms of their multiplier effects on the economy, but rather the deficits that they incur. It is interesting to note that the ICC has after ten years of operation made a profit over the past two financial years.

To achieve smart growth, a city needs to develop a strategy that facilitates an integrated and co-ordinated approach to developing growth opportunities that have been identified. This requires good planning. Initially, the city competitive advantage must be identified in terms of sectors that can stimulate growth.

3.10 PPP's: Public-Private Partnerships in Urban Areas

Public-private partnerships are agreements between municipalities and businesses or other private entities to provide infrastructure, facilities and other services. This partnership involves the sharing of costs, risks, responsibilities and rewards. There are a number of reasons for establishing these relationships. According to Phago and Malan (2004:482), the White Paper on Municipal Service Partnerships (2000) acknowledges the failure of municipalities sometimes to deliver effective and efficient services to citizens, thus there is a need for partnerships between municipalities and the private sector to deliver the services concerned more efficiently, effectively, and economically.

The main benefit of such a partnership is that municipalities and the private sector have different strengths and weaknesses and hence they are able to complement one another very well. (Van Der Walt, 2014:121). For the partnership to be successful, both the municipality and the private entity must complement one another, so that the weaknesses of the one are complemented by the strengths of the other. Both the public

sector (that is metropolitan councils, in this case) and the private sector have weaknesses and strengths, and a complementary relationship can only benefit the communities that municipalities serve. When entering into partnership, specific roles and responsibilities are created, and these vary from project to project. But despite this, the basic roles and responsibilities of metropolitan councils do not change (Van Der Walt, 2014:123).

Metropolitan councils have not maximised the use of PPP's due primarily to the onerous legislative requirements. However, National Treasury has introduced technical support that will hopefully assist in improving the number of projects that could be funded by PPP's (Van Der Walt, 2014:124). A similar apathy is evident for the African continent with telecommunications (70%), energy (18%) and transportation(11%) being the key sectors, and regrettably water and sanitation only comprising 2%. In addition, there are only 40 projects to date in South Africa (Van Der Walt, 2014:124).

3.11 Conclusion

A significant portion of financial resources of metropolitan councils in South Africa are derived from property tax, service charges and other own revenue generated, whilst grants only account for a mere 12% of total income.

Whilst great strides have been made in eradicating service delivery backlogs, many households continue to find themselves with limited or no access to basic services.

Capital Financing instruments based on international experiences need to be further explored to accelerate service delivery. However, this must not impact on sustainability of local authorities as well as affordability of tariffs and taxes.

Unfunded mandates, whilst reducing, are still a cause for concern. In addition, the impact of urbanisation is causing a further drain on local government. Accordingly financial sustainability should be ensured through a system of financial equalisation,

both vertical (between state and local authorities) and horizontal (among local authorities). There is a need to target smart growth that balances economic development and the impact on the environment and communities. Public-private partnerships also must be explored in terms of an alternate service delivery mechanism that reduces the financial burden on metropolitan councils. The next chapter will discuss the research methodology employed in this study.

CHAPTER FOUR: RESEARCH METHODOLOGY

4.1 Introduction

This chapter focuses on the research design and methodology procedures adopted in this study. As Welman and Kruger (1999: 2) stated, a scientific study requires the use of many methods or approaches. The validity, reliability, authenticity and correctness of the findings of a study largely depend on the ways in which the data was obtained. In other words, it is dependent on the research methodology. Accordingly, scientific knowledge is acquired through the use of strict methods and approaches to ensure the validity and reliability of the data.

The chapter begins with the research questions to be answered by this study. This is followed by a description of the participants and location of the study. Furthermore, the data collection strategies, research design and methods, and data analysis will also be discussed in detail. The study used both qualitative and quantitative research methods. In addition, both primary and secondary data were utilised in the study.

4.2 Defining Research

Research is an investigation into a problem using a scientific, structured method to solve the problem and create additional knowledge around the issue that can be applied by others (Grinnell, 1993:4). Lundberg (1942:5) added that the scientific method comprises of observation, classification and interpretation of information and data. The outcomes of such research can be used to make business decisions. In local government currently there are various issues that can be scientifically researched to inform policies, strategies, modelling and decision-making. The subject of this study is one such issue.

4.3 Defining Research Design

The expression “research design” indicates both a process and a product aimed at formulating strong points of view (Justice, 2008:75). A research design is a “plan, structure, strategy of investigation to obtain answers to research questions”. The plan is the entire programme of the study. It is a blueprint of what the investigator will do from formulating the aims and objectives of the study to the conclusions drawn from the analysis of the information collected (Kerlinger, 1986:279). This view is supported by Thyer (1993: 94) who concurs that a traditional research design is a detailed outline of how a study is to be undertaken and completed.

4.4 Research Aim, Objectives and Questions

The aim of this study is to establish the shortfall in the resource pool of metropolitan councils to fund their service delivery backlogs, rehabilitation and economic growth needs, and identify sustainable measures that can be implemented to increase the pool to achieve these imperatives. Stemming from this, the main objectives are to determine the funding gaps of metropolitan councils, and if such a gap exists, to determine what can be done to address it. There are eight questions identified by the researcher to address the main aim and objectives of the study.

The questions posed in any research exercise specify what intrigues the researcher and generally what the study is all about (Jansen 2007:3). Moreover, these questions become the beacon that guides the research as answers to these questions are probed. Jansen (2007:3) cites two practical reasons why research questions are needed. Firstly, good research questions direct the researcher to appropriate literary resources. The questions lead to appropriate literature and narrows down the bibliographic search (Jansen 2007:3). Secondly, it provides the researcher with a focus for data collection. It is easy to drift from the original purpose of a study but with the questions at hand there is greater focus (Jansen 2007:3).

Jansen (2007:3-5) suggests that the following features can assist in improving the quality of research questions:

- **Concise** – Questions must be to the point, focusing sharply on the issues at hand and stated in a cogent and specific way;
- **Clear** – The questions must leave no doubt as to what is being proposed for the study. The questions must be framed such to be understandable by even non-specialists. In other words, they do not require further explanation;
- **Operationalisable**– The research must add value in practice. In the present study, for example, the research findings must, if implemented, improve efficiency, effectiveness and economy in metropolitan councils ;
- **Open-ended** – Questions must be asked in a manner that suggests no obvious answers. It is therefore intellectually honest and the answer is not obvious;
- **Elegant** – The questions must be posed simply yet convey rich meaning;
- **Timely** – Research must address contemporary issues especially those that have far reaching implications for society;
- **Theoretically rich** – It leads to other interesting questions. As the onion peel is coming off, you discover further layers;
- **Puzzle features** – It addresses some deep puzzle in the literature or complex problem in society. It is something to which answers are not clear. A good question evokes attention and debate. Scholars want to probe these questions further;
- **Self-explanatory** – The questions speak for themselves. A good question needs no further explanation. It is written in such a way that the topic of interest is clearly specified. While on occasions the use of specialist language is necessary, a mark of a good question is that even people beyond the subject specialists can understand the question; and
- **Grammatically correct** – Questions must be grammatically accurate. Good researchers do simple things well, have an eye for detail and are meticulous about the use of words (Jansen, 2007: 3-5).

In view of the foregoing, the following are the key questions of this research study:

Question 1:

To what extent are all funding sources being maximised by metropolitan councils?

Question 2:

What are the current service delivery backlogs?

Question 3

What are the investment requirements to address their service delivery backlogs, rehabilitation and economic growth?

Question 4

To what extent is there a balance between existing resources and IDP requirements?

Question 5:

To what extent is the current level of funding sustainable?

Question 6:

What will the impact of new sources of revenue be on the resource pool of metropolitan councils in meeting their service delivery targets?

Question 7:

How do metropolitan councils become smart cities and become globally competitive?

Question 8:

How do metropolitan councils improve business and investor confidence and attract investments that will create sustainable jobs?

The abovementioned questions form the basis of this study, and especially the research methodology to investigate the funding gaps in metropolitan councils in South Africa and what can be done to address such gaps.

4.5 Participants and Location of the Study

The participants in this study are three metropolitan councils all located in South Africa. More specifically, they are the City of Cape Town located in the Western Cape, the Ethekwini Municipality located in KwaZulu-Natal, and the City of Tshwane located in Gauteng.

4.6 Significance of the Study

Metropolitan municipalities are vital institutions in modern society as they deliver basic and other key services to local communities without which such communities will find it difficult to survive and will fail to prosper. During the previous Apartheid regime the majority of South Africans did not have access to such services. However, since the democratic era (from 1994) municipalities have undergone a huge transformation to be able to deliver basic services to all South Africans. Accordingly, huge metropolitan municipalities were established to provide services to a much wider area to redress the inequitable service delivery that existed previously. However, a corresponding increase in the share of national tax revenues has not been forthcoming to metropolitan councils to enable them to eradicate the service delivery backlogs and provide these services in a financially sustainable and viable manner. Accordingly, this study is intended to find out whether there is a funding gap in metropolitan councils, and if so, what the quantum of the gap is, and what can be done to address such a funding gap.

This is one of the most important issues facing local government today as it has a direct impact on service delivery as well as the long-term sustainability and viability of municipalities. Accordingly, this study will contribute to the existing literature on financing of service delivery in metropolitan councils. It will therefore be beneficial to metropolitan councils, to a lesser extent other municipalities, academics, researchers, National Treasury, SALGA, the FFC, and students. Citizens may also find it useful as it

will explain the reasons for the current rate of service delivery and how it can be accelerated. Thus service delivery protests can be reduced.

4.7 Data Collection Strategies

4.7.1 Primary Data: Questionnaire

A questionnaire was used to collect the data for this study. It comprised a written set of various types of questions that the respondents answered. The types of questions included open-ended and closed-ended questions. The respondents read the questions, interpreted what was required of them, and answered the questions. The reasons why a questionnaire was chosen as a data collection tool are as follows:-

- It was less expensive and more convenient, especially when compared to interviews. It saves time, and human and financial resources.
- It offered greater anonymity as there is no face-to-face interaction between the respondent and interviewer.
- It covered a greater geographical area more easily as compared to trying to interview respondents.
- The population was not illiterate, very young, very old, or handicapped and thus using the questionnaire was a feasible option.
- There was less researcher bias in terms of framing questions and interpreting of the responses.

All the questions in the questionnaire are linked to the research questions which are linked to the objectives of the study which in turn are linked to the main aim of the study or the problem statement.

As mentioned above, open-ended questions were utilised in the questionnaire. The advantages of these types of questions are as follows:

- greater freedom of expression;
- no bias due to limited response range; and
- Respondents can qualify their answers (Neuman, 2000:148).

On the other hand, the disadvantages of these types of questions are as follows:

- time consuming to code;
- researchers/ interviewers may interpret (and therefore misclassify) responses; and
- freedom of choice may be compromised because some respondents may not be able to express themselves (Neuman, 2000:148).

Closed-ended questions were also used. The advantages of these types of questions are as follows:

- speedy access to data;
- easy to code; and
- no difference in terms of articulate or inarticulate respondents (Neuman, 2000:148).

The disadvantages of closed-ended questions are as follows:

- misleading conclusions can be reached as the respondent is limited to the options available;

- Respondents cannot qualify their responses; and
- The options provided could condition the thinking of respondents, and hence the responses provided may not reflect their own views and opinions (Neuman, 2000:148).

According to Thaanyane (2008:4) “the researcher should arrange the questions in the questionnaire so that they flow smoothly”. Furthermore, researchers should group questions that are related to the same aspect or research question so as to avoid respondents switching their focus during the survey (Welman and Kruger, 2001:170). In other words, respondents must be at ease when providing data. The questionnaire for this study complies with all this advice.

In addition, Subban (2008:175) suggests that the following requirements should be considered when developing a questionnaire:

- confidentiality should be assured;
- provide choice of answers, where possible;
- the questionnaire must be well-designed where adequate space is provided for answers;
- questions should not be intrusive or offensive;
- emotive language and calculations on the part of respondents are avoided; and
- questions should be short and easy to understand.

The researcher took cognisance of these requirements when the questionnaire was designed.

4.7.2 Primary Data: Interviews

As not all the questions in the questionnaire were closed, and there could be bias on the part of the respondents, it was considered expedient to get unbiased views from the FFC and SALGA. Their responses were supported by a write-up to the questions.

These were structured interviews with an interview schedule (attached as Annexure).

Structured interviews were used as opposed to non-standardised (qualitative) interviews to increase the reliability and validity of the data obtained, and reduce interviewer bias.

4.7.3 Secondary Data

Secondary data was obtained from:

- National Treasury publications;
- FFC publications; and,
- SALGA publications
- Integrated Development Plans Of the Respondents

These are reliable sources and the publications have been peer reviewed.

4.8 The Sampling Process

According to Sekaran & Bougie (2010:37) the major steps in sampling include the following:-

- Define the population;
- Determine the sample frame;
- Determine the sampling design;
- Determine the appropriate sample size; and,
- Execute the sampling process

4.8.1 Defining the Population

The population for this study is defined as all eight metropolitan municipalities in South Africa.

4.8.2 Determining the Sample Frame

The sample frame is the list of the eight metropolitan municipalities in South Africa, namely Buffalo City, City of Cape Town, City of Johannesburg, City of Tshwane, Ekurhuleni Municipality, Ethekewini Municipality, Mangaung Municipality, and Nelson Mandela Bay Municipality.

4.8.3 Determining the Sampling Design

There are two main types of sampling, namely non-probability sampling and probability sampling. In non-probability sampling, no reference regarding the target population can be made and the sampling error cannot be determined (Jinabhai, 1998:247). Loubser (1996:253) affirms that, "in non-probability sampling there is no way of estimating the probability that any element will be included in the sample, and therefore there is no method of finding out whether the sample is representative of the population." This sampling technique is used by some researchers due to the non-existence of sampling frames. It is necessary though to use probability sampling when statistical inferences are required. A key disadvantage of the non-probability sampling procedure is the reliance on luck and judgement on the part of the researcher (Jinabhai, 1998:249).

On the other hand, in probability sampling every element has a known non-zero probability of being selected (Loubser, 1996:253). Furthermore, each unit in the target population ought to be identifiable. If not, a unit may not have a positive chance of being selected which may impact on the accuracy of the results. Probability sampling is a popular technique used in research due to its simplicity. Furthermore, it is regarded to be the most objective method of sampling a population (Jinabhai, 1998:247). This method does have some difficulties though because it relies on information on databases which may not always be updated. Should this be the case, sampling errors are likely to occur and conclusions drawn may not necessarily be true for the entire population.

The sampling design selected for this study is probability sampling, and more specifically, simple (unrestricted) random sampling. In this sampling design every element of the population has a known and equal chance of being selected as a subject. This sampling design was selected because it has the least bias and offers the most generalisability which is one of the key issues of the study as inferences will be made about the population from the results of the study.

4.8.4 The sample size

A sample size of three was chosen after consultation with the Research Proposal Committee. This sample size is considered more practicable in terms of successfully completing the study.

4.9 Research Design and Methods

Research is a blueprint for the collection of data and the interpretation thereof (Edward and Talbot, 1996:28). The methods, techniques and tools used to achieve this in this study will now be discussed.

4.9.1 Description and Purpose

A mixed research design and methodology was been chosen for this study, that is, both quantitative and qualitative research designs have been used.

Quantitative research design and methodology is founded in the positivist paradigm which mainly reflects the scientific method (Ramchander, 2004:13). This paradigm adopts a deductive approach to the research process. A quantitative methodology converts information from the participants of the study into statistical representations rather than textual pictures of the issue being studied. The complete research process is objectively developed and undertaken while the findings are generally representative of the population being studied. Accordingly, the main advantages of this methodology are accuracy and control. Control is achieved through sampling and design, and precise and reliable quantitative measurement. Accordingly, this methodology provides answers which have a much firmer basis than a lay person’s common sense, intuition or opinion. It provides more objective and unbiased answers that have a logical and scientific basis (Ramchander, 2014:15).

The alternative research design and methodology is the qualitative approach which is grounded in the interpretive paradigm. The task of the researcher is to capture what people say (Ramchander, 2014:17).

The differences between quantitative and qualitative research can be tabulated as follows:-

Table 4.1: Differences between quantitative and qualitative research

DIMENSION	QUANTITATIVE RESEARCH	QUALITATIVE RESEARCH
Underpinning philosophy	Rationalism: Human beings achieve knowledge through reasoning.	Empiricism: Human beings acquire knowledge only from sensory experiences.
Basis	Based on meanings derived from numbers.	Based on meanings expressed through words.
Approach to enquiry	Structured/rigid/predetermined methodology	Unstructured/flexible/open methodology

Main purpose of investigation	To quantify the extent of variation in a phenomenon, situation, issue, etc.	To describe variation in a phenomenon, situation, issue, etc.
Measurement of variables	Emphasis on some form of either measurement or classification of variables.	Emphasis on description of variables.
Sample size	Emphasis on greater sample size	Fewer cases
Focus of enquiry	Narrow focus in terms of extent of enquiry, but assembles required information from a greater number of respondents.	Covers multiple issues but assembles required information from fewer respondents.
Dominant research value	Reliability and objectivity (value-free)	Authenticity, but does not claim to be value free.
Dominant research topic	Explains prevalence, incidence, extent, nature of issues, opinions and attitude; discovers regularities and formulates theories.	Explores experiences, meanings, perceptions, and feelings.
Analysis of data	Subjects variables to frequency distributions, cross tabulations or other statistical procedures. Analysis through diagrams and statistics.	Subjects responses, narratives, or observational data to identification of themes and describes these. Analysis through conceptualization.
Communication of findings	Organisation more analytical in nature, drawing inferences and conclusions, and testing magnitude and strength of a relationship. Collection results in numerical and standardized data.	Organisation more descriptive and narrative in nature. Collection results in non-standardised data requiring classification into categories.
Types of questions	Non-probing	Probing
Hardware	Questionnaires, computers and printouts	Tape recorders, projection devices, videos, pictures, discussion guides
Ability to replicate	High	Low

Type of research	Descriptive or causal	Exploratory

Source: Adapted from Kumar, R. 2011. *Research Methodology: a step-by-step guide for beginners*. SAGE Publications Ltd: London.

A mixed research design was considered more suitable because:

- Merely using data from secondary sources may not be sufficient;
- The interviews will be able to explain and contextualize some of the findings from the exploratory data analysis;
- The interviews will provide an enhanced understanding of the issues and the extent of the funding gap;
- A mixed data collection approach provides strengths that offset the weaknesses of just a quantitative or qualitative approach and thus helps this study answer research questions that only one approach could not answer; and
- It provided the researcher with a wider range of data collection tools to choose from.

The quantitative and qualitative data collected related directly to the objectives of the study detailed above. Hence, the data collected was focused. This helped meet the objectives of the study and answer the research questions effectively. Conclusions and recommendations were drawn from these findings.

4.9.2 Pre-Testing and Validation

The questionnaire was pre-tested amongst five senior finance managers at the Ethekwini Municipality. Their feedback was used to amend the questions and questionnaire. In particular, questions 1, 11 and 16 were amended and questions 13 and 18 were added.

Validity of the data collection tools was ensured as follows:

- The questions used in the questionnaire were linked to the objectives of the study (face validity); and
- The findings of the study were taken back to the interviewees to determine whether or not the research findings have been able to reflect their opinions and views accurately (credibility).

4.9.3 Administration of the Questionnaire

The design of a questionnaire differs according to how it is administered, and especially how much contact the researcher has with the respondents. In this study self-administered questionnaires were completed by the respondents. The questionnaires were sent electronically to respondents using e-mail (mailed questionnaires). The benefits of this mode were that a wider geographic area could be reached, it was very inexpensive, fast delivery, easy to administer, and respondents could answer at their convenience.

4.10 Analysis of the Data

The Microsoft Excel software package was used to analyse the data obtained through the questionnaires. Descriptive and inferential statistics were used to analyse and interpret the results. The results are presented in the form of tables and graphs.

4.11 Limitations of the Study

- The study is restricted to three metro councils in South Africa. It does not involve all eight metropolitan councils or 278 municipalities in South Africa. This could be the subject of a future doctoral thesis.

- This study is undertaken by a CFO of a Metro which could lend itself to bias in terms of the interpretation of results and outcome of the study. However, the empirical test will corroborate the findings and conclusions drawn.
- Not all the data could be obtained from primary sources. Secondary sources had to be used. However, the secondary data was checked and confirmed by the primary sources to ensure the reliability and validity of the data.
- Assumptions were made in the data analysis and the development of the model.

4.12 Conclusion

A mixed research methodology was used. A questionnaire and structured interviews were used to obtain primary data. In addition, publications by National Treasury, FFC SALGA and the IDPs of the respondents were used as secondary sources. To summarise, random and simple probability sampling was used. A mixed, quantitative and qualitative research methodology was employed. A questionnaire and interviews were used to obtain the primary data. Secondary data was obtained by using publications by the National Treasury, FFC and SALGA.

The next chapter, Chapter Five, presents the results of the research and the findings based on the interpretation of the results.

CHAPTER 5: DATA PRESENTATION AND FINDINGS.

5.1 Introduction

This chapter provides the results obtained through the collection of data from the questionnaire, interviews and secondary sources on the National Treasury database, FFC, and SALGA, as well as the IDP, budgets and annual reports of the Metro's. The results are in the form of graphs and tables arising from responses to the questionnaire questions in order to satisfy the objectives of the study. A model for the funding of metropolitan councils will also be developed. Finally, the key findings of this study will be summarised.

Please note that all the data presented below was obtained from the questionnaire used in the study, unless where otherwise referenced.

5.2 Demographics

5.2.1 Population of the Metropolitan Councils

The following table indicates the number of people living in each of the three metropolitan councils with a split between informal and formal residents:

Table 5.1: Population of Metropolitan Councils

	Cape Town	Ethekwini	Tshwane	Total	%
INFORMAL RESIDENTS	617,694	726,141	715,795	2,059,630	20.07%
FORMAL RESIDENTS	3,242,895	2,754,585	2,205,693	8,203,173	79.93%
TOTAL POPULATION	3,860,589	3,480,726	2,921,488	10,262,803	100.00%

EtheKwini has the highest number of informal residents (726 141) followed closely by Tshwane (715 795) and Cape Town (617 694). The South African population grew by 15.5% from 2001, but the number of households grew by 29% (census 2011), placing additional service demands on municipalities as their services are mostly to households. (National Treasury- 2012:3). Accordingly, a further concern for the metropolitan councils is the rapid rate of urbanisation. Consequently all three metropolitan councils have shown significant increases in their population since the last census.

The bar chart below represents the percentages of informal and formal residents per Metro. Tshwane has the highest percentage of informal settlements (25%) followed by EtheKwini (21%) and Cape Town (16%).

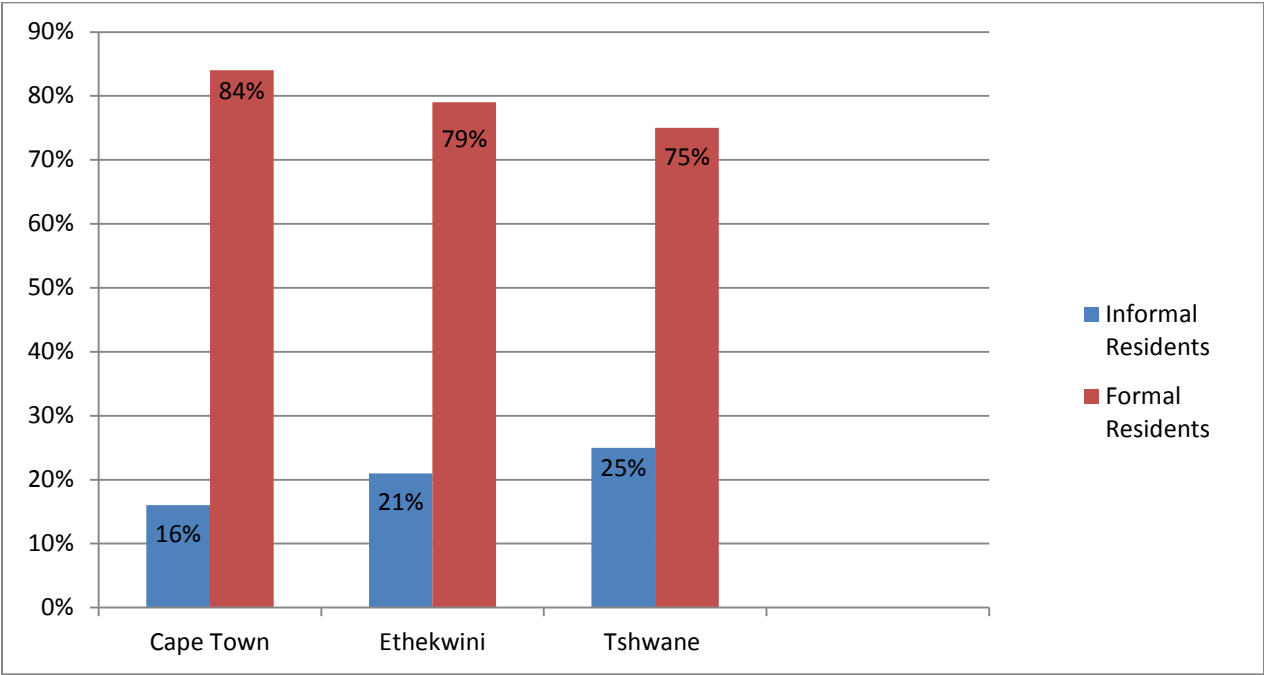


Figure 5.1: Population of Metropolitan Councils

5.2.2 Number of Households

The number of formal and informal households per metropolitan council are as follows:

Table 5.2: Number of Households

	Cape Town	Ethekwini	Tshwane	Total	%
FORMAL HOUSEHOLDS	882,420	524,582	735,231	2,142,233	72.36%
INFORMAL HOUSEHOLDS	220,605	421,328	176,305	818,238	27.64%
TOTAL HOUSEHOLD	1,103,025	945,910	911,536	2,960,471	100.00%

Cape Town has the highest number of households at 1 103 025, whilst Ethekwini has 945 910 and Tshwane has 911 536. However Ethekwini has the highest number of informal households at 421 328 (44.5% of all households).

Figure 5.2 below illustrates the percentage make up of the formal and informal households:

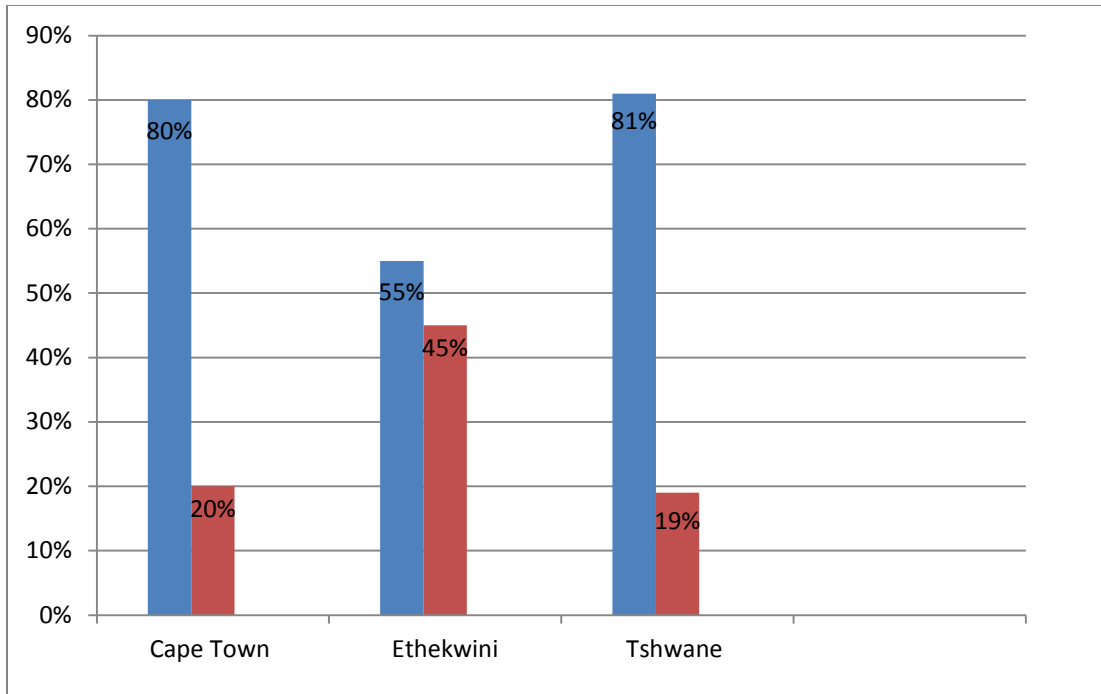


Figure 5.2: Number of Households

As indicated in Figure 5.2, Cape Town and Tshwane have 20% and 19% of their residents respectively living in informal dwelling whilst Ethekwini has 45%. However, the percentage of informal households are 16%, 21% and 25% indicating that Ethekwini has a large number of informal houses but only 21% of residents live in same. The above is not easy to follow, this will result in Ethekwini having to incur a high cost in servicing and upgrading these informal settlements. In addition, there will be an ineffective utilisation of land (low density) resulting in lower rates being generated as informal settlements do not pay for rates and services. However, there is a charge for prepaid electricity which is provided at subsidised rates as per the NERSA tariff guidelines based on an inclining block tariff.

5.2.3 Households access to basic services

Table 5.3 reflects the access to basic services by all residents in the respective metropolitan councils. The service level is the minimum standards which are as follows:

- Water –access to piped (tap) water or communal stand.
- Sewage –access to no-flush or chemical toilets.

- Electricity –access to electricity for lighting.
- Refuse –provision of communal or own refuse dump.

Table 5.3: Households access to basic services

SERVICE	Cape Town % HOUSEHOLDS	Ethekwini% HOUSEHOLDS	Tshwane % HOUSEHOLDS	Average
Water	99%	92%	87%	92%
Electricity	97%	69%	89%	85%
Sewerage	97%	77%	78%	84%
Refuse	100%	100%	85%	95%

Cape Town has not responded to this question (see note below) but, Table 5.3 indicates the average servicing of all households by the metropolitan councils. It is heartening to note that the basic services in respect of water and refuse are 92% and 95% respectively, whilst electricity and sewage are at 85% and 84%. The LGTAS (Local Government Turnaround Strategy) report (COGTA, 2013:12) also indicates a major increase in the provision of services across all metropolitan councils.

Note: Cape Town's 2013/14 IDP review indicates that 70.6% of its informal settlements are serviced and by extrapolation this amounts to 96% of the households having services. However, the figures in the table have been extracted from the LGTAS report on metropolitan councils which closely correlates to the 96% servicing level.

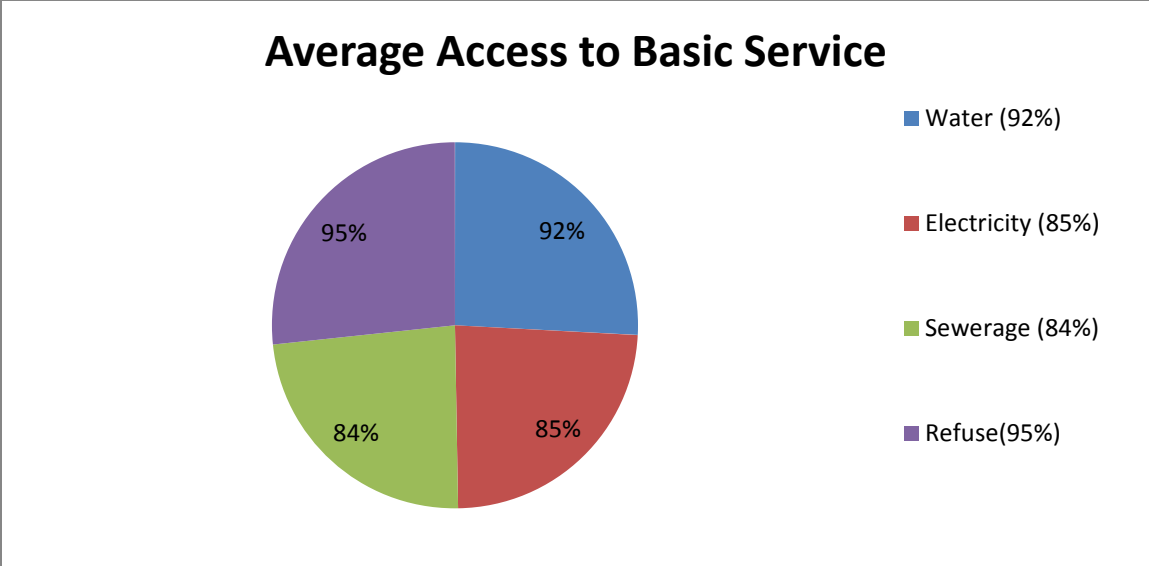


Figure 5.3: Households access to basic services

Figure 5.3 reflects the average percentage access to basic services (electricity, water, sewerage and refuse) for the three metropolitan councils. As indicated above, there has been a major increase in the provision of services across all metropolitan councils which is indeed commendable.

5.2.4 Service Delivery Protests

Table 5.4 below indicates the number of service delivery protests that took place in all three metropolitan councils over an 18 month period (from 1 January 2012 to 30 June 2013). The table further indicates the number of protests per province (DCoG Research Unit, 2013:4)

Table 5.4: Protests in the three Metropolitan Municipalities

City of Tshwane	6 (16%)	Out of a total of 42 protests in Gauteng province, 6 (16%) protests took place in the City of Tshwane.
Ethekwini	14 (54%)	Out of a total of 26 protests in KwaZulu-Natal province, 14 (54%) protests took place in the Ethekwini Municipality.
City of Cape Town	32 (67%)	Out of a total of 48 protests in the Western Cape province, 32 (67%) protests took place in the City of Cape Town.

Source: www.Municipaliq.co.za: Hotspots Monitor, June 2013 as interpreted by the DCoG Research Unit

It is indeed ironic that Cape Town residents have the highest access to basic services, yet the city had the highest number of protests. Whist Tshwane who have the worst access to services had the least number of protests.

5.2.5 Macro-economic indicators

Table 5.5: Macro-economic indicators

INDICATOR	Cape Town	Ethekwini	Tshwane	Average
Unemployment rate (Based on the narrow definition of "unemployment")	25.6%	23.0%	24.2%	24.3%
Contribution to provincial GDP (Global Insight, 2012:43)	75.7%	65.5%	26.8%	56%
Contribution to national GDP (Global Insight ,2012:44)	11.3%	10.7%	9.40%	10.5%
Per capita income (per annum) (Global Insight ,2012 :45)	R61,089	R47,221		R54,155
Average spend by residents on municipal basket of services (rates, electricity, water, sewerage & refuse charges)	R1180.480	R1179.40	R1296.70	R1218.86

The unemployment rate in each of the metropolitan councils is consistently in the range of 23-26% and the contribution to National GDP ranges from 9.4% for Tshwane to 11.3% for Cape Town and 10.7% for Ethekwini. However, the contribution to provincial GDP is relatively low for Tshwane at 26.8% whilst Cape Town is 75.7% and Ethekwini is 65.6%. This could be explained by the fact that the City of Johannesburg is also in Gauteng. It is apparent from the contribution to national and provincial GDP's that the three metropolitan councils contribute significantly to their provincial GDP, as well as the NGDP.

Cape Town has the highest per capita income and Ethekekwini the lowest. Tshwane's per capita income could not be obtained. It is interesting to note that the cost of services, the spend by consumers on a basket of goods and services, are very close with there being only 60 cents difference between Cape Town and Ethekekwini whilst Tshwane is R117.30 more.

5.3 Funding Sources

5.3.1 Funding sources as at the 30 June 2013

Table 5.6: Funding sources as at the 30 June 2013

	<u>Cape Town</u>	<u>Tshwane</u>	<u>Ethekekwini</u>	<u>Total</u>	<u>%</u>
Revenue from exchange transaction (service charge and other service)	15,117,312	12,816,436	14,063,236	41,996,984	56.9

Property tax	5,159,663	3,999,445	5,032,654	14,191,762	19.2
Grants	5,394,440	3,417,712	3,657,750	12,469,902	16.9
Fuel Levy	1,706,690	1,326,054	1,690,569	4,723,313	6.4
Other	143,452	156,645	158,742	458,839	0.6
	27,521,557	21,716,292	24,602,951	73,840,800	100.00
<u>Grants</u>					
Capital	3,414,645	2,151,545	1,834,445	7,400,635	59.4
Operating	1,979,795	1,266,167	1,817,305	5,063,267	40.6
	5,394,440	3,417,712	3,651,750	12,463,902	100.00

Table 5.6 indicates the funding sources as at 30 June 2013 for capital and operating expenditure for all three metropolitan councils. The potential to use these funding sources to generate further income is covered below in 5.3.2.

The potential to use the funding sources in Tables 5.6 to generate additional income is as follows:

5.3.2 Potential funding sources

i. Tariff Income / property taxes

Tariff income (from service charges on from electricity, water, refuse and sanitation) and property tax, which account for 56.9% and 19.2% of income respectively, have been either in line with inflation or substantially higher. Accordingly, there is little scope to increase revenue from these sources to fund further expenditure.

This is evident from the findings on Table 5.7 which indicates the tariff and rates increases over the past five years have been above CPI:

Tariffs increases above CPI past 5 years

Table 5.7: Tariffs increases above CPI past 5 years

SERVICE	Cape Town							Ethekwini							Tshwane						
	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	Cape Town Average	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	Ethekwini Average	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	Tshwane Average
Water Domestic	1	2	4.4	5.12	9.68	3.93	4.36	-0.9	4.5	3.3	1.5	6.3	3.6	3.05	-2.8	7.6	3.8	3	3.8	4.1	3.3
Electricity	5.5	25.3	19	15.94	13.6	2.26	13.6	16.45	24.6	18.8	13.8	4.8	-0.4	13.01	1.2	28.6	12.8	16	6	2.1	11.1
Rates	0	0.5	2.13	2.8	2.6	0.5	1.42	-0.9	0.2	1.7	0.5	0.3	1	0.47	-2.8	7.6	3.8	2	5.8	-5.9	1.8
Sewerage	0	-1	4.4	5.12	9.68	3.93	3.69			new	0.5	0.3	1	0.6	-2.8	7.6	4.8	2	5.8	4.1	3.6
Refuse	0	2	12.4	1.5	1.66	0.72	3.05		new	1.3	0.5	0.8	1	0.9	-2.8	11.6	2.8	11	18.8	19.1	10.1

ii. Property Tax Increases

The increase in rates above CPI as indicated in Table 5.7 above also impacts on the rates income per capita as indicated in Table 5.8 below.

In terms of the MPRA all metropolitan councils are now using market value as a basis of valuation. This has led to a major shift in the incidence of property tax income. In addition, some of the increases by metropolitan councils have been above CPI which has led to widespread resistance from residents and businesses.

Table 5.8: Rates Income past 5 years, revenue forgone, and per capita rates

R Thousand		2008/09 '000	2009/10 '000	2010/11 '000	2011/12 '000	2012/13 '000
City of Cape Town	Amount Billed	3,470,428	4,269,238	5,261,392	5,471,248	6,078,556
	Revenue forgone	-398,495	-438,118	-898,186	-959,263	-1,064,782
	Net Rates	3,071,933	3,831,120	4,363,206	4,511,985	5,013,774
	Property rates per Capita	3,947	4,923	5,607	5,798	6,442
City of Tshwane	Amount Billed	2,272,869	2,683,123	3,021,875	3,461,000	3,737,880

	Revenue forgone	0	0	0	0	0
	Net Rates	2,272,869	2,683,123	3,021,875	3,461,000	3,737,880
	Property rates per Capita	3,510	4,144	4,667	5,345	5,773
Ethekekwini	Amount Billed	4,846,534	5,080,378	5,253,414	5,634,242	6,027,238
	Revenue forgone	-1,122,916	-986,935	-1,058,614	-1,058,614	-1,245,739
	Net Rates	3,723,618	4,093,443	4,194,800	4,470,000	4,781,499
	Property rates per Capita	4,517	4,966	5,088	5,422	5,800

The percentage increases in per capita income for the three Metropolitan Council cities over the past 5 years are as follows:

Table 5.9: Increase in per Capita Income of Metropolitan Councils over past 5 years

Cape Town	EThekwini	Tshwane
63%	28.4%	64%

These increases in per capita rates are not sustainable and will certainly impact on the affordability of ratepayers. Accordingly, there seems to be very little scope to substantially generate any further revenue from this source.

iii. Grants

As indicated in chapter 2 the current Local Government Funding Framework (LGFF) is the funding arrangement to ensure that local government and individual municipalities are sufficiently resourced financially to fulfill their constitutional mandate to render services to communities (FFC, 2013:9). This is however highly questionable as the adequacy of funding for local government has not really been tested in terms of sustainability. In addition, the growth of grants is not commensurate with the backlogs that exist as well as the rate of urbanisation, demand for basic infrastructure, and free

basic services. There is certainly scope for increased grants, however, this is dependent on the rest of the fiscal demands placed on National Government by the other two spheres of government (national and provincial) and the respective sectors within same, for example, Health, Education, Defence, Safety and Security.

iv. Development Levies

This is an excellent source of funding, as it requires developers to contribute towards the cost of the provision of infrastructure for roads, water, electricity and sewage. However, the concern is that it must not inhibit the ability of developers to fund development, nor adversely affect the global competitiveness of the cities to attract new investors.

Cape Town generated R147M from development levies in the 2012/13 financial year. Ethekwini has indicated major scope for using this as a funding source, however, there has been a delay in National Treasury introducing a framework for development charges.

There are several new revenue sources available to metropolitan councils to help better fund their expenditure. This includes further tariff increases, more borrowings, new taxes and levies. The table hereunder tabulates preferences of Cape Town, Ethekwini and Tshwane with regard to new funding sources to meet service delivery targets:

Table 5.10: New Revenue Sources

	Ranking	OPTIONS	Comments
Cape Town	2	Tariff increases :	
		- Electricity	
	1	- Water	
	1	- Sewerage	
	5	- Refuse	
		- Rate	
	5	Additional borrowings	

	4	Additional / New Tax – provide details in comment box	
	3	Development Levies	
Ethekwini		Tariff increases :	
		- Electricity	
	4	- Water	
		- Sewerage	
		- Refuse	
		- Rate	
	1	Additional borrowings	
	3	Additional / New Tax – provide details in comment box	
	2	Development Levies	
Tshwane	4	Tariff increases :	Affordability for the community
		- Electricity	
		- Water	Affordability for the community
		- Sewerage	
		- Refuse	
		- Rate	
	1	Additional borrowings	
	3	Additional / New Tax – provide details in comment box	Same tax payers – affordability
	2	Development Levies	

The consolidation of the ranked preferences for sources of revenue to meet service delivery targets are as follows:

1. Additional borrowings
2. Development levies
3. Additional new tax
4. Tariff rate increases

However, the metropolitan councils have indicated that the increases must be subject to affordability.

Ethekwini has also indicated that the following taxes/revenue sources would be good potential sources of additional revenue for metropolitan councils: Local Business tax, CBD Congestion tax, Tourism Bed levy, Entertainment tax, Port Exercise tax, Airport Landing tax, Telephone tax, Landline and Cell Phone tax.

The FFC in their interview (18 February 2014) have commented as follows on funding sources:

Metropolitan councils are doing a good job with their traditional revenue sources which include rates levied on properties within their jurisdiction, revenues derived from the consumption of services such as electricity, water, sanitation, refuse removal, equitable share and capital grants. While property taxes are already assigned to metropolitan councils, increased freedom in setting their rates, as well as improved property valuation methods could also boost this source of revenue. However, outside of these traditional sources metropolitan councils have been largely ineffective. Over time, the growth of more efficient own-revenue sources for local governments would also facilitate a desirable replacement of the RSC (Regional Services Councils Levy) levy with say, a local business tax. Alternative non-traditional sources that they may consider include:

- Congestion charging
- Levy on local payroll
- Tax on tourist bed-nights
- Surcharge on water consumption
- Surcharge on electricity consumption
- Duty on property transfers
- Tax on vehicle licenses
- Tax on outdoor advertising/billboards/signage
- Levy on fuel sales
- Tax on non-residential parking bays
- Tax on municipal road use
- Local business tax
- Road-tolling

5.4 Service delivery backlogs

5.4.1 Service delivery backlogs-Capital expenditure

Table 5.11: Service delivery backlogs-Capital expenditure

SERVICE	BACKLOG (No. of households)	Cape Town	BACKLOG (No. of households)	Ethekwini	BACKLOG (No. of households)	Tshwane	Total BACKLOG (No. of households)	% BACKLOG (No. of households)	Total Capital Expenditure	%Total Capital Expenditure
Water			71496	2,811,488,000	98084	528,000,000	169580	8.79%	3,339,488,000	1.87%
Electricity			290393	2,903,000,000	104357	2,087,140,000	394750	20.46%	4,990,140,000	2.80%
Sewerage			218248	351,705,000	180012	1,363,000,000	398260	20.64%	1,714,705,000	0.96%
Refuse			0	0	158882	0	158882	8.24%	0	0.00%
Roads (km)			1118	6,708,000,000	2720	889,000,000	3838	0.20%	7,597,000,000	4.25%
Transport							0	0.00%	0	
Storm water Drainage(km)			1553	453,000,000	1395	1,140,000,000	2948	0.15%	1,593,000,000	0.89%
Housing	220 605	44,121,000,000	404213	80,000,000,000	176305	35,261,000,000	801123	41.52%	159,382,000,000	89.23%
Other							0		0	
Total	220 605	44,121,000,000	987021	93,227,193,000	545450	41,268,140,000	1929381	100.00%	178,616,333,000	100.00%

Cape Town's 2013/14 IDP review indicates that 70.6% of informal settlements are serviced resulting in 64 858 informal residents not having access to services. There are no backlogs in respect of formal housing. Accordingly, no backlogs have been logged. However, the informal residents have been indicated as the housing backlog and the cost of servicing same has been used as per the Ethekwini submission of approximately R200 000 per household.

The total service delivery backlogs amount to R178.6bn with housing being the key contributor to the backlog amounting to R159.4bn.

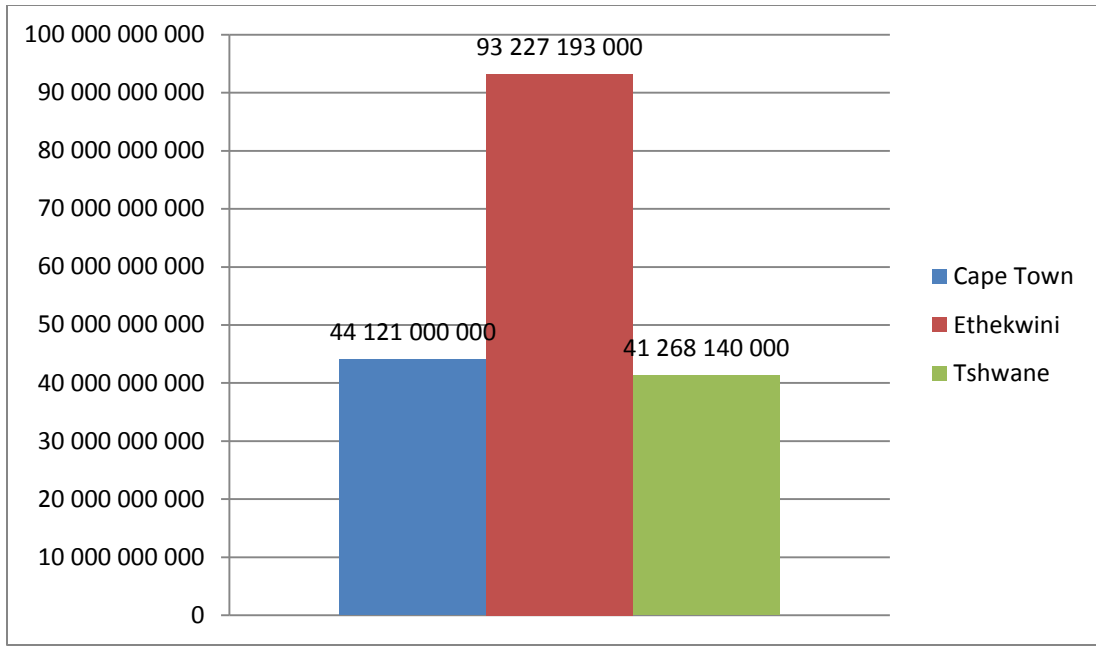


Figure 5.4: Service delivery backlogs

Sources: City of Cape Town 2013/2014 Integrated Development Plan and the questionnaires completed by the City of Tshwane and Ethekewini Municipality

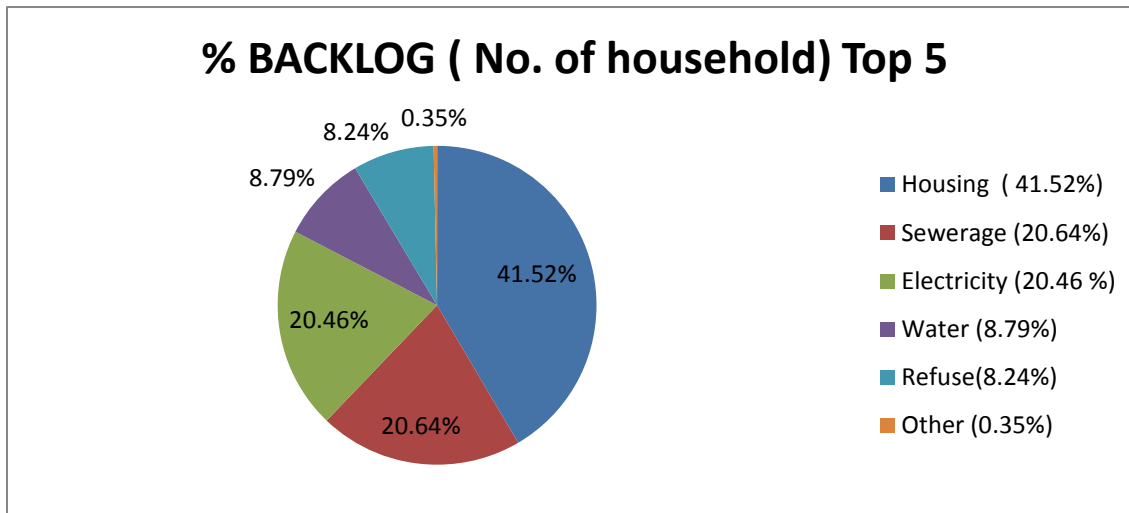


Figure 5.5: Percentage Service Delivery Backlog (No. of households)

Sources: City of Cape Town 2013/2014 Integrated Development Plan and the questionnaires completed by the City of Tshwane and Ethekewini Municipality

The highest backlogs are in respect of housing (41.52%), sewerage (20.64%), electricity (20.46%), water (8.79%), refuse (8.24%) and roads (0.20%).

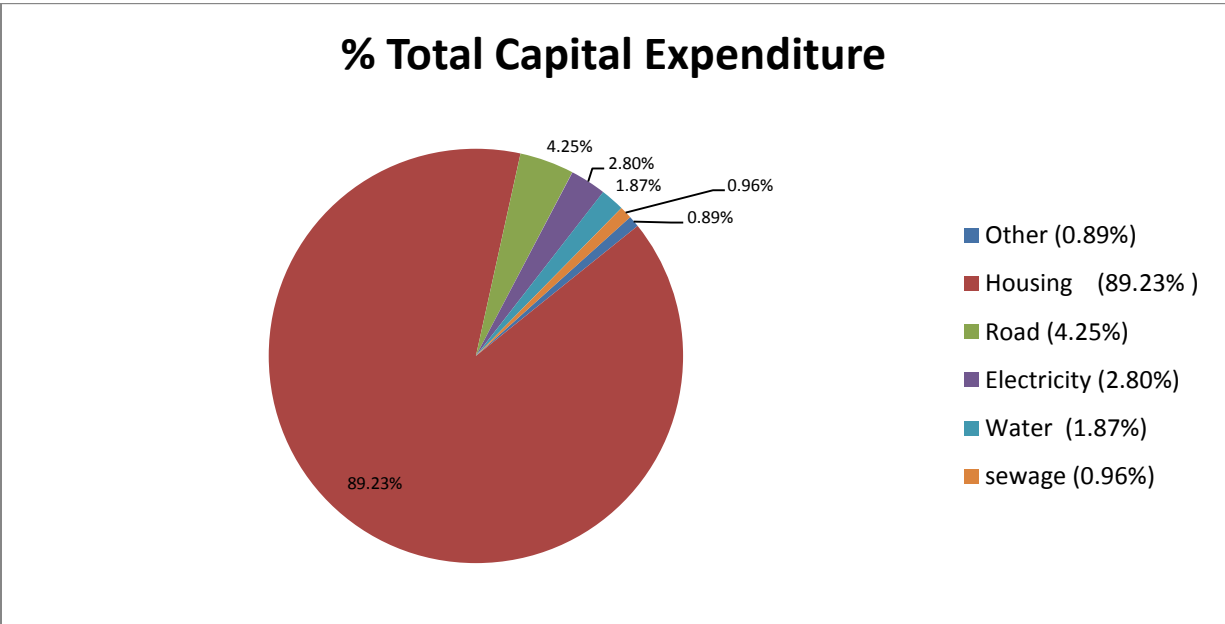


Figure 5.6: % Total Capital Expenditure

Sources: City of Cape Town 2013/2014 Integrated Development Plan and the questionnaires completed by the City of Tshwane and Ethekewini Municipality

The biggest backlog in capital expenditure is in housing (89.23%), roads (4.25%) water (1.87%) electricity (2.80%) and sewerage (0.96%). This is not fully reflective of the backlogs because, for example, chemical toilets and communal block abolition toilet facilities and water stand pipe conversions have not been included as backlogs.

5.4.2 Service delivery backlogs-Maintenance

Table 5.12: Service delivery backlogs-Maintenance

MAINTENANCE	BACKLOG	Cape Town	BACKLOG	Ethekwini	BACKLOG	Tshwane	Total BACKLOG (No. of households)	% BACKLOG (No. of households)	Total maintenance	%Total maintenance
Water				1,163,665,000	98084	500,000,000	98084	17.23%	1,663,665,000	46.53%
Electricity (households)			25833	168,536,000	104357		130190	22.87%	168,536,000	4.72%
Sewerage				724,762,000	180012	500,000,000	180012	31.60%	1,224,762,000	34.26%
Refuse					158882		158882	27.94%	0	0.00%
Roads (km)						129,000,000			129,000,000	3.61%
Transport							0	0.00%	0	0.00%
Stormwater Drainage					13 540m Plus 23 000 Catch pits	61,000,000		0.00%	61,000,000	1.71%
Housing (Units)			2000	95,000,000			2000	0.36%	95,000,000	2.66%
Other						232,637,611			232,637,611	6.51%
Total	0	0	27,833	2,151,963,000	541,335	1,422,637,611	569,579	100.00%	3,574,600,611	100.00%

Cape Town's 2013/14 IDP review indicates that 70.6% of informal settlements are serviced resulting in 64 858 informal residents not having access to services. There are no backlogs in respect of formal housing, and accordingly, no maintenance backlog has been submitted.

The total backlog in Repairs and Maintenance is R3.6bn with Ethekwini making up 64.4% of the backlog. Considering the state of repair of infrastructure these figures seems understated and will be further covered in the paragraph 5.8 on the financial model.

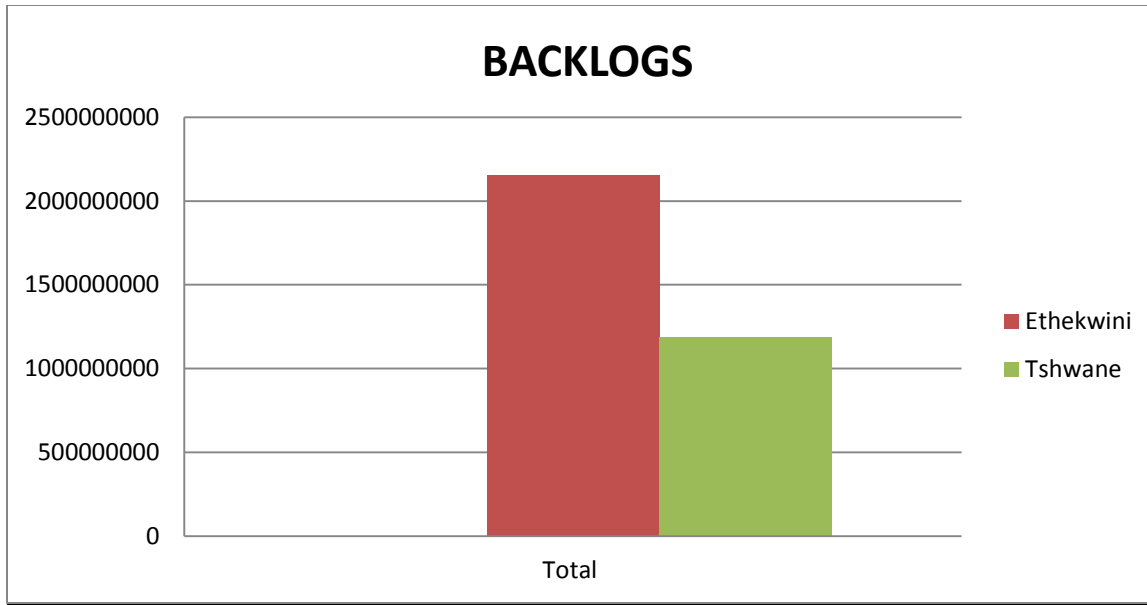


Figure 5.7: Maintenance backlogs Ethekewini and Tshwane

NB: Cape Town did not indicate any backlog in respect of informal settlements hence no maintenance backlogs.

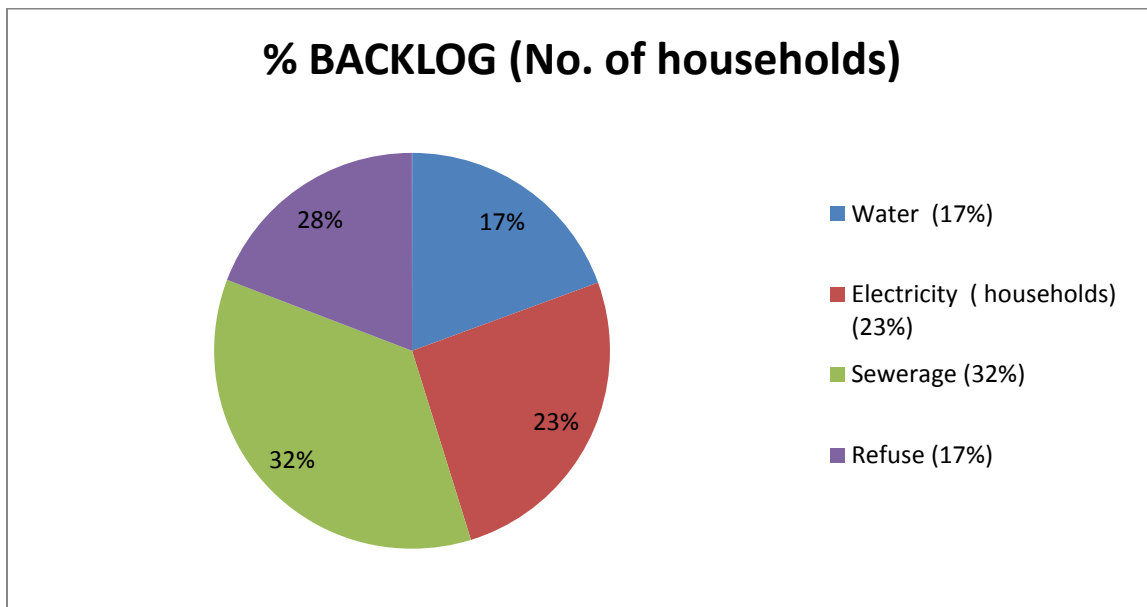


Figure 5.8: Percentage Backlogs (No. of households)

The highest backlogs are in the following areas: sewerage (32%), refuse (28%), electricity (23%), and water (17%).

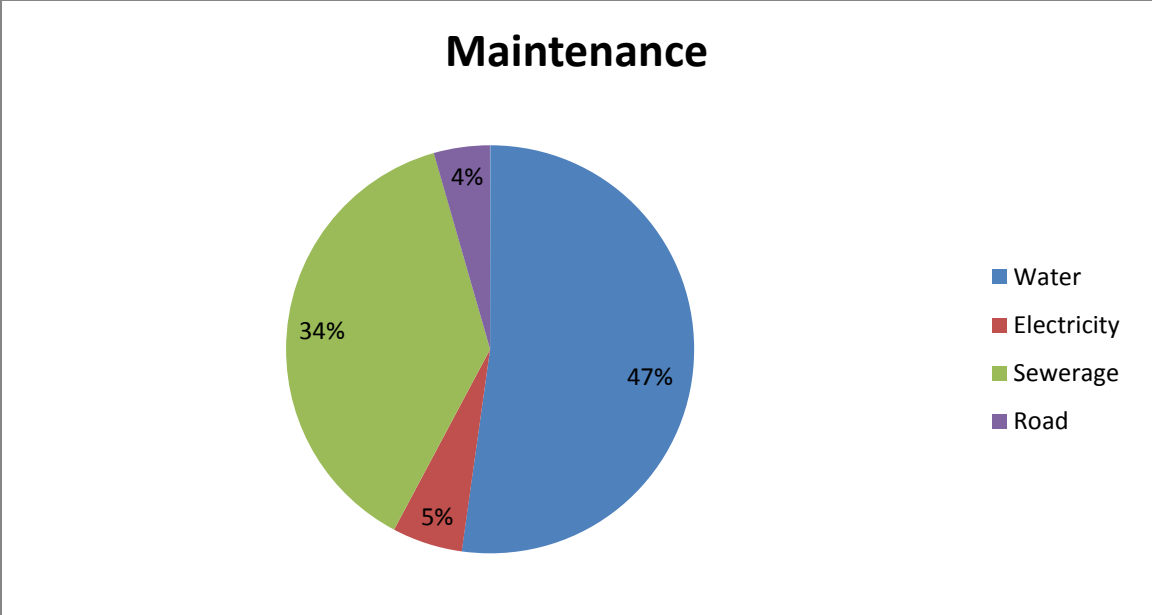


Figure 5.9: Maintenance Backlogs

The highest maintenance backlogs are as follows: water (47%), sewage (34%), electricity (5%), and roads (4%).

5.4.3 Number of years required to eradicate backlogs

Table 5.13: Number of years required to eradicate backlogs

SERVICE	Cape Town	Ethekwini	Tshwane	Average
Water		37	9	23
Electricity	26	37	11	25
Sanitation				
Sewerage		28	11	20
Refuse		nil	0	
Roads		97	19	58
Transport			0	
Storm Water Drainage		30	49	40
Housing	22	60	18	33
Other		50		

Cape Town's 2013/14 IDP review indicates that 70.6% of informal settlements are serviced resulting in 64 858 informal residents not having access to full basic services. There are no backlogs in respect of formal housing.

The backlogs for housing in respect of Cape Town and Tshwane as per their informal settlements is 220 605 and 176 305 respectively and if these residents are to be provided formal housing at a rate of 10 000 housing units per annum it would result in the backlog being eradicated in 22 years and 18 years respectively, assuming no further growth in informal settlements due to urbanisation, etc. On the other hand, it will take Ethekwini 49 years to eradicate its housing backlog at a similar rate of delivery.

The number of years required to eradicate the backlogs are indeed a cause for concern. This is clearly unacceptable to communities. Accordingly, there is a need to expedite the eradication of backlogs. However, this would require additional funding.

Figure 5.10 below shows the average years it will take to eradicate the backlog in the respective services:

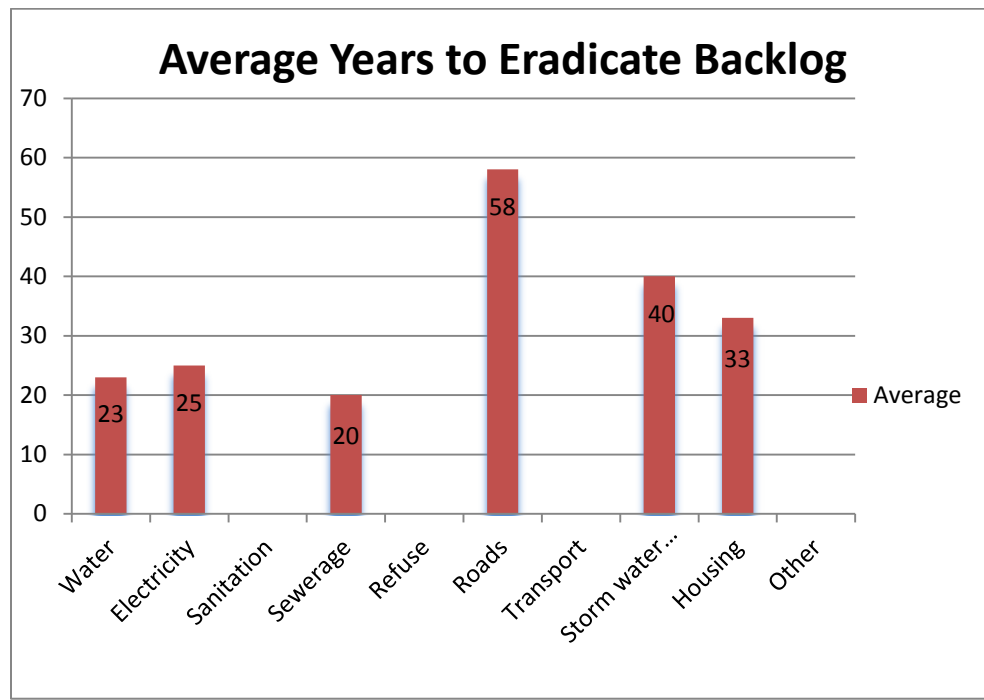


Figure 5.10: Average Number of years required to eradicate backlogs

Table 5.14 below tabulates the responses in terms of how long it will take to eradicate the service delivery backlogs if additional funding is provided:

Table 5.14: Impact of Additional Funding in eradicating backlogs

SERVICE	NO. OF YEARS	
	Ethekwini	Tshwane
Water	Approximately R1.6bn over and above what is provided in the MTREF is required to eradicate backlogs for Water, Roads, Sanitation (including ablution facilities for informal settlements). Backlogs can be eliminated in 1 year but with capacity/ resource constraints to spend full amount per annum, perhaps 2-5 years. Electricity requires R3bn and backlog can be eradicated between 2-5 years	7
Electricity		
Sanitation		
Sewerage		7
Refuse		
Roads		Additional grant funding can reduce duration by several years – order of 5 to 10 years
Transport	IRPTN network requires 13 years to complete at present rate but this could be reduced to 5 to 7 years	
Storm water Drainage	3-5 years	Additional grant funding can reduce duration by several years – order of 5 to 10 years
Housing	Can be reduced from 47 years to between 20 – 25 years by using the additional income to bridge finance housing projects, together with DOH (Department of Housing) funding	
Other		

As indicated by Tshwane and Ethekwini, additional funding will result in the cities being able to reduce the timeframe for the eradication of the backlogs.

5.5 Investments Required to address service delivery backlogs

5.5.1 Capital expenditure: past 5 years and next 5 years

Table 5.15: Capital expenditure: past 5 years and next 5 years

SERVICE	Total for Cape Town	%	Total For Ethekwini	%	Total Tshwane	%	Overall Total	%
Water	3,693,014,510	7.94%	8,084,662,000	18.09%	7,014,029,000	19.78%	18,791,705,510	14.84%
Electricity	9,435,077,352	20.28%	5,639,085,000	12.62%	5,982,789,000	16.87%	21,056,951,352	16.62%
Sanitation and Sewage	3,848,782,886	8.27%	4,914,665,000	11.00%	1,164,281,000	3.28%	9,927,728,886	7.84%
Refuse	2,165,510,184	4.65%	1,025,936,000	2.30%	0	0.00%	3,191,446,184	2.52%
Roads and Transport	13,913,541,708	29.90%	12,987,447,000	29.07%	14,934,115,000	42.12%	41,835,103,708	33.03%
Storm Water Drainage	0	0.00%	0	0.00%	155,578,000	0.44%	155,578,000	0.12%
Housing	4,371,815,620	9.40%	5,093,618,000	11.40%	6,206,710,000	17.50%	15,672,143,620	12.37%
Other	9,098,533,628	19.56%	6,934,211,000	15.52%	0	0.00%	16,032,744,628	12.66%
Total	46,526,275,888	100.00%	44,679,624,000	100.00%	35,457,502,000	100.00%	126,663,401,888	100.00%

The actual spend over the past 5 years and forecast spend over the next 5 years amounts to R126.7bn indicating an average spend by the three metropolitan council of R 12.7bn per annum (or R4.23bn per annum per metropolitan council on average). As indicated in the bar chart below (Figure 5.11) Cape Town has had the highest expenditure of R46.5bn followed by Ethekwini at R44.7bn and Tshwane R35.4bn. There has been very little growth in capital expenditure over the past 5 years due to the funding constraints.

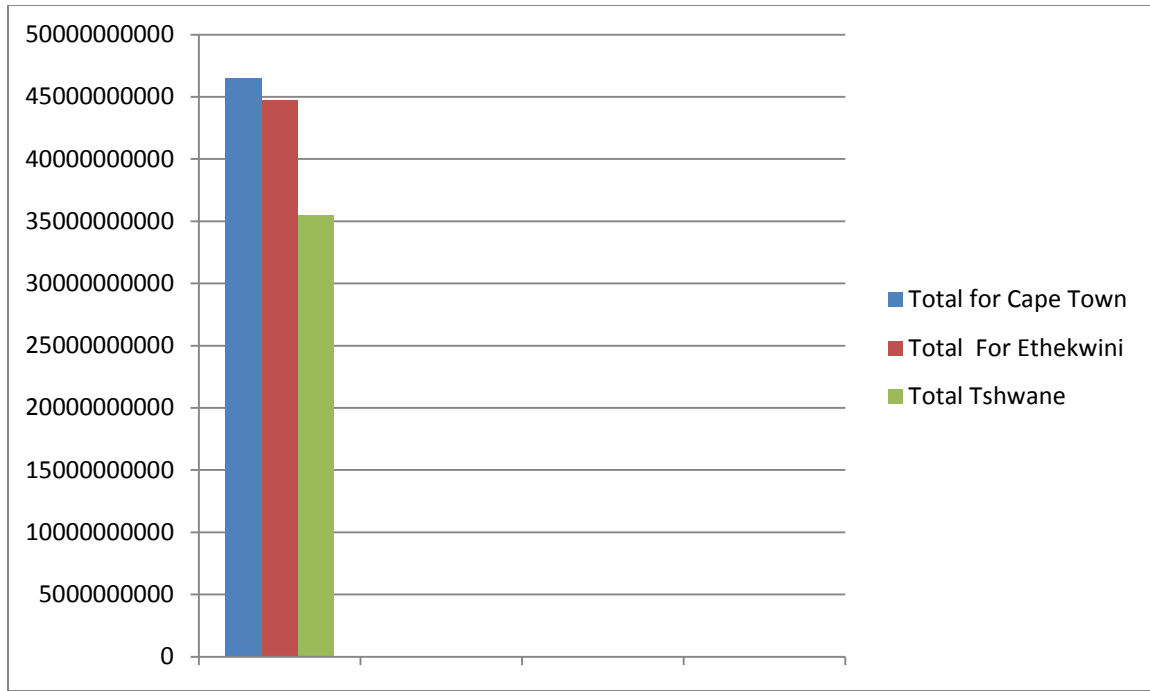


Figure 5.11: Capital expenditure past 5 years and next 5 years

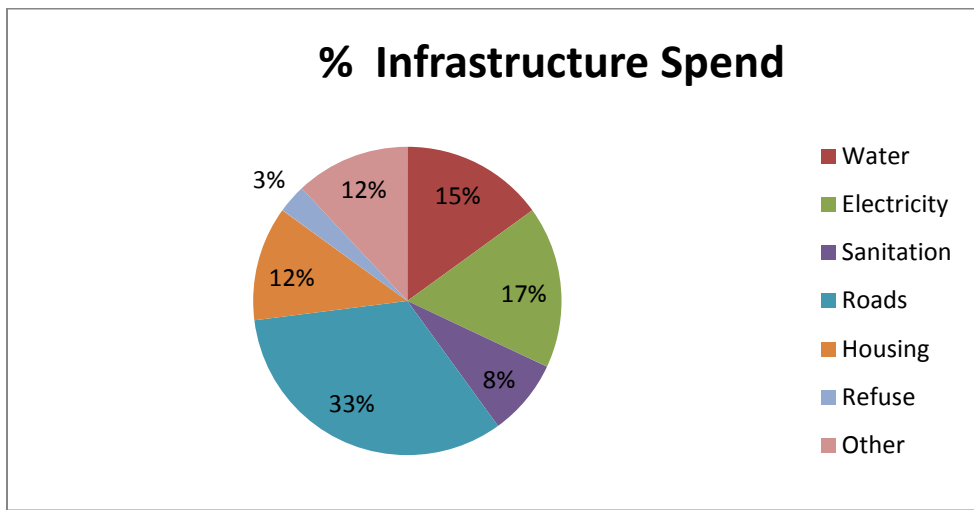


Figure 5.12: Percentage infrastructure spend per key service

The pie chart (figure 5.12) indicates that the highest spend is on roads and transportation at 33%, which includes the rollout of the integrated rail public transport network (IRPTN) followed by expenditure on electricity (17%), water (15%), housing (12%) and sanitation (8%). These five areas of spend on infrastructure and services account for 85% of the total spend on capital expenditure.

5.5.2 Capital expenditure on Economic, Social and Rehabilitative projects

Table 5.16: Capital expenditure on Economic, Social and Rehabilitative projects

CAPITAL PROJECTS	Cape Town (%)	Ethekwini (%)	Tshwane (%)	Average (%)
ECONOMIC		28	19	23
SOCIAL		28	49	39
REHABILITATIVE		42	28	35
OTHER		2	4	3
TOTAL	100.00%	100.00%	100.00%	

Table 5.16 indicates the capital expenditure on economic, social and rehabilitative projects. Cape Town has not made any submission in respect of splitting capital projects. Accordingly, the average is based on only the Ethekwini and Tshwane submissions.

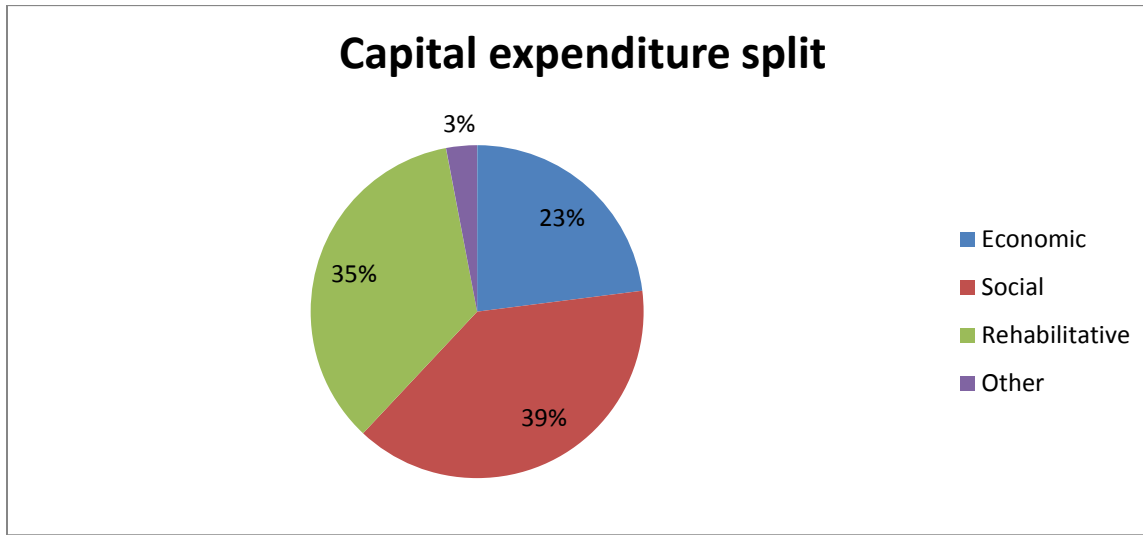


Figure 5.13: Capital Expenditure on Economic, Social and Rehabilitative Projects

The capital expenditure indicates a split between social (39%), rehabilitative (35%), and economic (23%) expenditures. This seems reasonable but, the spend on social will have to be closely managed in order that further shifts can be made to economic related

projects that can assist with growth and job creation which are critical for the sustainability of metropolitan councils.

5.5.3 Unfunded Mandates

Table 5.17: Unfunded Mandates

UNFUNDED MANDATE	Cape Town	Ethekwini	Tshwane	Total	%
Housing		247,100,000	61,933,920	309,033,920	13%
Health	898,940,000	325,400,000	106,623,356	1,330,963,356	54%
Museums	35,490,000	46,200,000	17,728,597	99,418,597	4%
Libraries	374,639,000	220,400,000	60,827,759	655,866,759	26%
Other		24,300,000	61,563,980	85,863,980	3%
Total	1,309,069,000	863,400,000	308,677,612	2,481,146,612	100%

Source: Questionnaires of the study

The total unfunded mandates for all three metropolitan councils is R 2.481bn with Cape Town having the highest at R1.309bn, followed by Ethekwini at R863M and Tshwane at R308M. The provision of health services makes up 54% of the unfunded mandates followed by libraries at 26%. Unfunded mandates as a percentage of rates income of the three metropolitan councils is 17.5%.

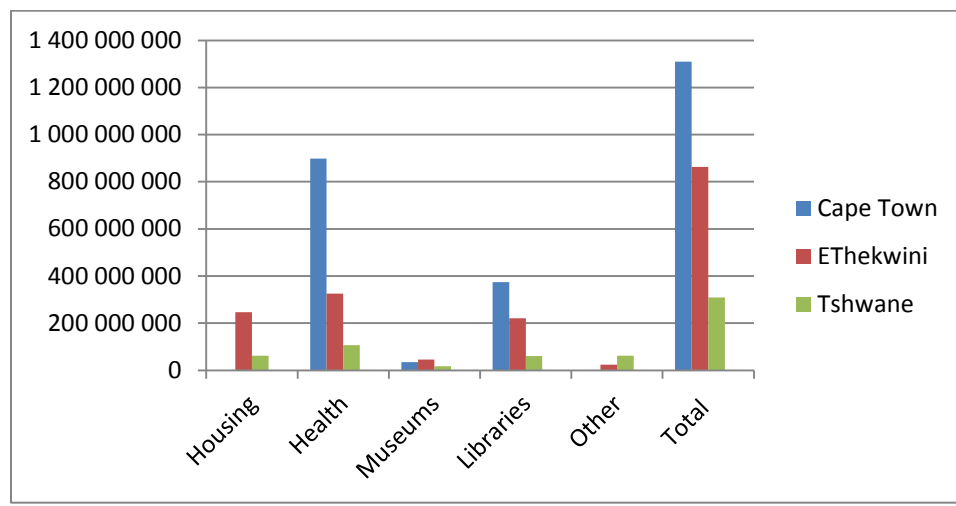


Figure 5.14: Unfunded Mandates

Cape Town has the highest unfunded mandates in respect of health and library services whilst EtheKwini has the highest in respect of museums and housing. If these unfunded mandates are reduced to zero, the metropolitan councils could fund an additional R12bn to R13bn in additional capital expenditure with same.

5.5.4 Assets at Historical and replacement costs

Table 5.18: Assets at Historical and Replacement Costs

	Cape Town	EtheKwini	Tshwane	TOTAL
TOTAL ASSETS (historical cost)	43,203,588,000	46,653,129,000	24,028,299,208	113,885,016,208
REPLACEMENT COST	289,856,722,000	313,000,000,000	161,207,000,000	764,063,722,000

Table 5.18 reflects the total value of assets at historical costs as well as replacement costs. Both Cape Town and Tshwane did not provide replacement costs, however, the historical cost to replacement cost ratio applicable to EtheKwini was applied to their historical costs to determine the replacement cost of assets for Cape Town and Tshwane. It must be noted that the replacement cost is a far better value to use in determining the maintenance costs as well as making provision for the replacement of assets. This will be further covered in the financial model in 5.8 below.

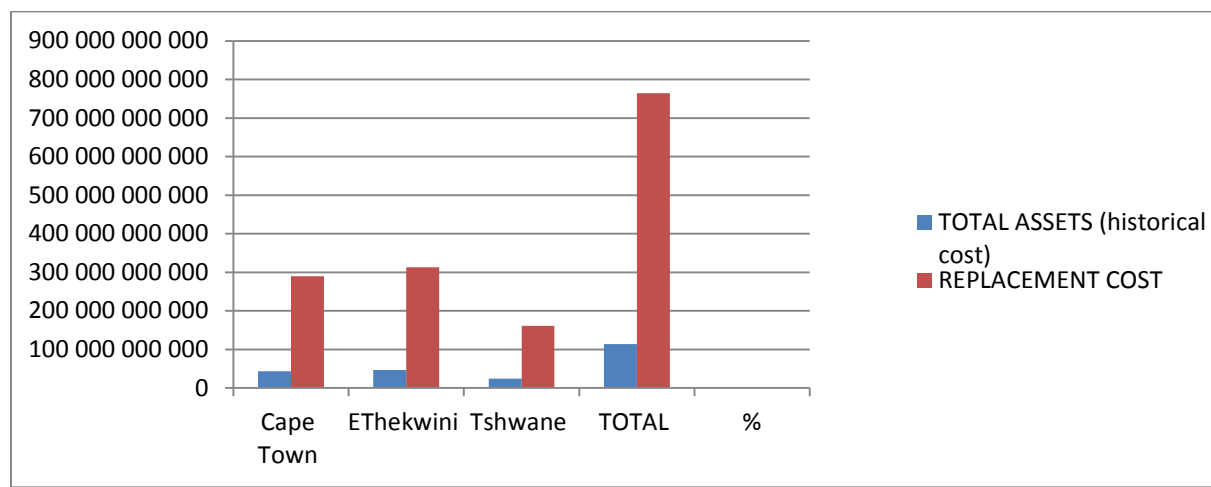


Figure 5.15: Assets at Historical and Replacement Costs

According to Figure 5.15 above, EThekwini has the highest value of assets at R313bn, followed by Cape Town R290bn and Tshwane's R161bn. The value of Tshwane's assets relative to EThekwini and Cape Town is a cause for concern. Based on the population, the number of households and geographical area that Tshwane covers it should have an asset base closer to Cape Town and EThekwini.

5.5.5 Operating expenditure: past 5 years and next 5 years

Major areas of expenditure for 2012/13 were as per the table below:

Table 5.19: Operating expenditure: past 5 years and next 5 years

	<u>Cape Town</u>	<u>Ethekwini</u>	<u>Tshwane</u>	<u>Total</u>	<u>%</u>
Employee related costs	7,492,589	6,576,031	5,304,964	19,373,584	30%
Bulk Charges	6,391,186	7,557,474	6,695,411	20,644,071	31%
Impairment costs	934,057	886,640	951,620	2,772,317	4%
Financing cost	730,788	938,438	740,274	2,409,500	4%
Depreciation	1,641,994	1,599,929	1,103,121	4,345,044	7%
Other	6,853,027	4,314,505	4,812,858	15,980,390	24%
Total expenditure	24,043,641	21,873,017	19,608,248	65,524,906	100%

Source: Audited AFS 2012/13 financial year for all three metropolitan councils from the National Treasury website.

Bulk purchases in respect of water and electricity make up 31% of the total expenditure whilst Salaries, Wages and Allowances is the second highest contributor at 30%. The top five items of expenditure, makes up 76% of the total operating expenditure whilst the average expenditure for all 8 Metropolitan Council amounts to 74% (National Treasury, 2013: 38-51). Accordingly, these items of expenditure need to be carefully monitored.

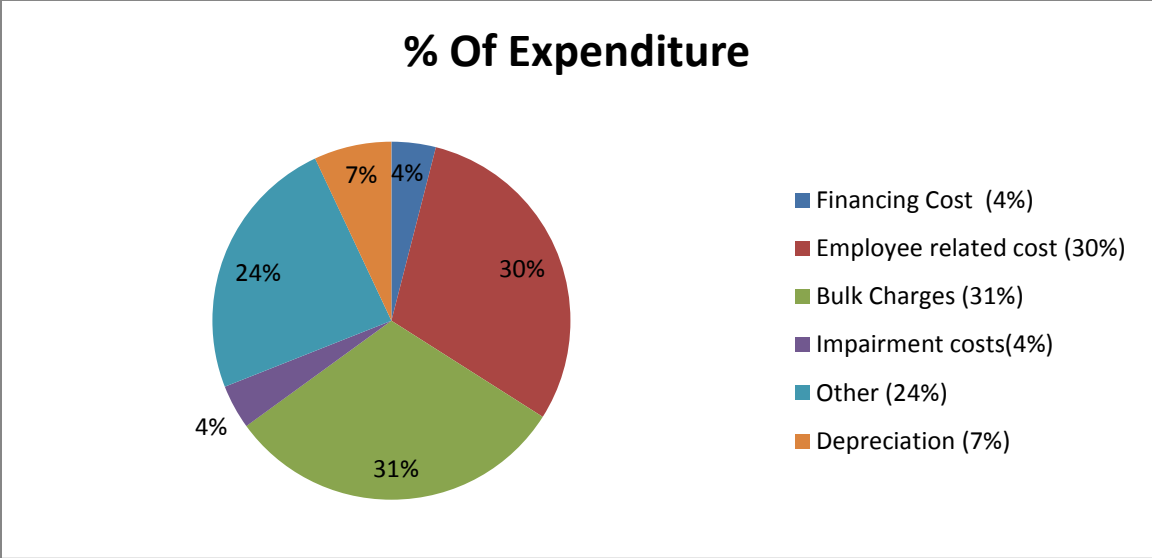


Figure 5.16: Major Operating Expenditure Costs

The employee costs for the three metropolitan councils amount to 30%, compared to 26% for all 8 metropolitan councils. This is due to Cape Town employee costs being 31%, Ethekewini 30% and Tshwane 27%, indicating that these municipalities have a higher spend on staff related expenditure compared to the other metropolitan councils. The expenditure on bulk purchases for electricity and water tracks closely with the average for all 8 metropolitan councils.

5.5.6 Number of Staff

Table 5.20: Number of Staff

	Cape Town	Ethekewini	Tshwane
Permanent staff	25 722	21 002	18 881
Number of residents per employee	15 008	16 573	15 473
Staff expenditure as % of total expenditure	31	30	27

The three metropolitan councils employ 65 605 staff in total, with Cape Town employing the highest number (25 722) and Tshwane the lowest (18 881). This also correlates with the percentage expenditure of salaries to total expenditure. In addition, on a per capita basis in terms of the number of residents per employee, Cape Town is the lowest and

Ethekwini is the highest indicating either better services are being offered in Cape Town or their productivity is poorer.

5.6 Balance between existing resources and IDP requirements

5.6.1 Key challenges

Table 5.21: Key challenges

	ISSUE	Cape Town			Ethekewini			Tshwane			Total	%
		INCLUDE D IN IDP	COSTE D	R	INCLUDE D IN IDP	COSTE D	R	INCLUDE D IN IDP	COSTE D	R		
		YES/NO	YES/N O		YES/NO	YES/N O		YES/NO	YES/N O			
1	Inequality and Poverty	YES						YES	NO		0	
2	Health	YES						YES	YES	30,000,000	30,000,000	
3	Access to basic services	YES						YES	YES	1,115,700,000	1,115,700,000	
4	Electricity	YES						YES	YES	122,100,000	122,100,000	
5	Housing	YES			Yes	No		YES	YES	533,800,000	533,800,000	
6	Transport	YES						YES	YES	1,359,900,000	1,359,900,000	
7	Unfunded Mandates	YES			Yes	Yes	863,400,000.00				8,634,000,000	
8	Climate change				Yes	No					0	
9	Urbanisation	Yes	Yes	See Budget Tables 32 & 33 MBRR SA 5 & 6 see attached								
10	Economic Growth	Yes	Yes	See Budget Tables 32 & 33 MBRR SA 5 & 6 see attached								
11	Theft of Electricity	YES			Yes	Yes	396,000,000.00				396,000,000	
12	Unaccounted for water (Loss in Distribution)				Yes	Yes	513,000,000.00				513,000,000	
13	Food Security				Yes	No	N/A					

Table 5.21 reflects the key challenges that the three metropolitan councils are facing from a service delivery perspective. It is interesting to note that a number of the challenges have not been included in their IDPs and /or costed and /or have not been costed. The key challenges that have been costed are access to basic services, unfunded mandates, theft of electricity and water loss in distribution. In addition, urbanisation, inequality, poverty and economic growth have also been identified, but have not been costed.

5.6.2 What is being done to address the IDP challenges.

Table 5.22: What is being done to address the IDP challenges

	Challenge	Action
Cape Town	Urbanisation	See IDP Objectives 3.2, 3.3 & 3.4
	Economic Growth	See SFA 1 of the IDP
Ethekewini	Climate change	Development of "Climate Change Strategy" as well as 30000 solar water heaters on rooftops before 2015.
	Theft of electricity	Anti-theft campaigns and mitigation strategies. Cable Theft Task Team established.
	Unfunded mandates- in Health Services, Libraries, Museums, Housing	Assistance from Provincial Department of Arts subject to terms and conditions as well as allocation of own resources for shortfalls.
	Reducing real water loss	Conducting leak detections, replacement of meters and aging infrastructure.
	Housing	Acquisition of appropriate land. Ablution blocks, refuse removal, storm water ditching and fire breaks etc are being provided to people residing in informal settlements.
	Food Security	Dedicated structures to drive agriculture, aqua and poultry farming, soya bean project, 20 community support farms, 423 community support gardens, one-home-one-garden project etc. Seedlings and compost together with expertise is provided to communities.

Tshwane	<p>Inequality and poverty</p>	<p>The City will map out areas of deprivation and poverty. This will be used as one of the base for investment in space by the city to reduce spatial poverty.</p> <p>The City will continue linking the EPWP programme and Operation Vat Alles to the households in its indigent register.</p> <p>The City will assist in providing economic infrastructure for development.</p> <p>The City supports SMMEs and entrepreneurship development. An integrated approach to this support will be developed and implemented through various players including institutes of higher learning found in the city and other government departments.</p> <p>Spatial Economic Targeting: the city aims to ensure that the dormitory nature of some of its townships is converted to vibrant social and economic spaces. To achieve this, investments in social and economic supporting infrastructure will be a focus for the 2013/16 financial years. This will be supported by a series of plans including the Rural Development Strategy and Tourism Strategy – sector plans which will economically facilitate in various sectors of the economy.</p>
	<p>Health</p>	<p>The City is one of the pilots for NHI and will continue to support it.</p> <p>In the 2013/14 financial year, the City is working towards having community health workers in as many regions as per the NHI requirements.</p> <p>The City seeks to ensure that it improves access to health services through the construction of new facilities where possible. In areas where this cannot be achieved, community health workers who provide services especially to the elderly and people living with HIV/AIDS will continually be utilized: Installation of generators in all LG clinics Extension of Rethabiseng Clinic, New Bronkhortspruit Clinic, Replacement of Rayton Clinic, Upgrade and extension of Zithobeni Clinic, Upgrading of ECD centres and Day Care Centre Multipurpose Development Centres, New clinic in Doornpoort.</p>

<p>Access to Basic Services</p>	<p>Service Infrastructure</p> <ul style="list-style-type: none"> • Rooiwal Power Station Refurbishment • Reservoir Extensions • New Bulk Infrastructure • Replacement and Upgrading: Redundant Bulk Pipeline Infrastructure • Refurbishment of Water Networks and Backlog Eradication • Tshwane Public Lighting Program • Replacement, Upgrade, Construct Waste Water Treatment Works Facilities • Electricity for All • Replacement of Worn Out Network Pipes
<p>Housing</p>	<ol style="list-style-type: none"> 1. Upgrading and development of informal settlements: to ensure readiness for formalization on informal settlements, needs to be articulated. 2. Diversifying the city's housing typologies: <ol style="list-style-type: none"> 2.1 Focus will be on mixed housing and social housing units development 2.2 In the 2013/14 an identified number of hostels will be converted to community residential units. 3. Programmes from the provincial Department of Housing will also assist with provision of decent housing for backyard shack dwellers.
<p>Transportation</p>	<p>Mobility optimization: In line with the National Development Plan and the Tshwane 2055 outcomes, the City started rolling out the infrastructure for the Tshwane Rapid Transit system in 2012/2013 .Working with the other spheres of government, the city will align the Tshwane Rapid Transport (TRT) infrastructure to other modes of motorised and non-motorised transportation such as the pedestrianisation of Paul Kruger precincts as a complementary project to the broader TRT development.</p>

Sources: City of Cape Town 2013/2014 Integrated Development Plan and the questionnaires completed by the City of Tshwane and Ethekwini Municipality

Table 5.22 details the responses to what is being done to address the IDP challenges. The Table is a summary of the response. However, a major comprehensive action plan is covered in the IDP of the respective cities which are all available on their respective websites.

5.7 Sustainability of Funding

5.7.1 Analysis of Key Ratios

Table 5.23: Analysis of Key Ratios

RATIO	Cape Town	Ethekwini	Tshwane	Average
Gearing	27.0%	40.6%	38.9%	35.5%
Collection Rate	95.1%	103.8%	108.6%	102.5%
Debt Coverage Ratio	4.1	12	31.9	16.00
Days cash on hand	120	100.3	112	106.15
Debtors Days	30	56.7	151	79.2333

The average gearing ratio for the three metropolitan councils is 35.5% which is within the norm set by National Treasury of 50%. Cape Town has the lowest gearing whilst Ethekwini has the highest. The average collection rate is 102% with all three cities being well above the 95% norm set by National Treasury. Tshwane has the highest collection rate and Cape Town the lowest. However, the debt outstanding for all metropolitan councils has been constantly growing due to interest being capitalised on outstanding debtors and the collection rate is less than 100% in certain instances.

5.7.2 Loans outstanding: past 5 years and 5 years and projected next 5 years (in billions)

Table 5.24: Loans outstanding: Past 5 years and Projected next 5 years (in billions)

	2008/09	2009/10	2010/11	2011/12	2012/ 13	2013/14	2014/15	2015/ 16	2016/17	2017/18	2018/19	Total	%
Cape Town	4,287	5,811	5,649	5,471	7,371	7,034	8,986	10,754	12,783	15,183	17,583	100,912	34.91%
Ethekwini	6,070	8,675	1,011	10,679	9,887	10,430	10,393	10,298	10,252	10,240	10,195	98,130	33.94%
Tshwane					9,827	10,562	11,511	12,646	13,993	15,164	16,336	90,039	31.15%
Overall Total	10,357	14,486	6,660	16,150	27,085	28,026	30,890	33,698	37,028	40,587	44,114	289,081	100.00%

The total outstanding as at 2012/13 is R27bn, with Ethekwini and Tshwane having loans outstanding at R9.8bn, and Cape Town at R7.3bn. However, the projected loans outstanding over the next six years indicates total loans outstanding of R44.1bn which is an increase of 84% with Cape Town at R17.583bn, Tshwane at R16.3bn and Ethekwini at R10.2bn.

5.7.3 Borrowings: Past 5 years and Projected

Table 5.25: Borrowings: Past 5 years and Projected

	2008/09	2009/10	2010/11	2011/12	2012/ 13	2013/14	2014/15	2015/ 16	2016/17	2017/18	2018/ 19	Total	%
Cape Town	1,200,000,00	2,000,000,00	0	0	2,384,000,00	0	2,205,000,00	2,000,000,00	2,390,000,00	2,400,000,00	2,400,000,00	16,979,000,00	41%
Ethekwini	1,050,000,00	2,900,000,00	2,000,000,00	1,000,000,00	0	1,500,000,00	1,000,000,00	1,000,000,00	1,000,000,00	1,000,000,00	1,000,000,00	13,450,000,00	33%
Tshwane	1,531,952,853	1,114,775,498	1,513,547,907	1,620,177,063	1,691,378,777	1,459,045,446	949,094,587	1,134,422,437	1,347,251,009	1,347,251,009	1,347,251,009	15,056,147,595	37%
Overall Total	3,781,952,853	6,014,775,498	3,513,547,907	2,620,177,063	4,075,378,777	2,959,045,446	4,154,094,587	4,134,422,437	4,737,251,009	4,747,251,009	4,747,251,009	45,485,147,595	100%

Borrowings from 2008/9 to 2012/13 (actual) and projections from 2013/14 to 2018/19 indicate that the Cape Town has the highest borrowings at R16.9bn, followed by Tshwane with R15 bn and Ethekwini with 13.4 bn. The total borrowed by the three metropolitan councils amounts to R45.4bn at an average of R4.1bn per annum over the 11-year period, or at an average per metro of R1.4bn per annum.

5.7.4 Cash and investments: actual for past 5 years and forecast for next 5 years

Table 5.26: Cash and investments: actual for past 5 years and forecast for next 5 years

	2008/2009	2009/2010	2010/2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019
Cape Town	3,532,670	4,462,817	5,213,129	6,160,840	8,099,360	6,603,600	6,593,510	6,687,070	7,394,150	7,756,050	8,617,883
Ethekwini	3,000,000	1,800,000	3,100,000	4,700,000	5,200,000	5,600,000	6,100,000	6,400,000	7,000,000	7,300,000	7,700,000
Tshwane	89,560	111,633	410,050	967,779	1,376,972	1,376,972	1,376,972	1,376,972	1,376,972	1,376,972	1,376,972
Overall Total	6,622,230	6,374,450	8,723,179	11,828,619	14,676,332	13,580,572	14,070,482	14,464,042	15,771,122	16,433,022	17,694,855

All three metropolitan councils are showing a steady increase in their cash forecasts. Tshwane has only provided figures up to 2012/13. Accordingly the same amounts have been provided for the next 5 years. The cash balances include grants paid in advance (not city's funds but state funds which earmarked for specific projects), as well as the General Insurance Fund Reserve (dedicated or ring fenced to meet insurance claims). These amounts need to be excluded from the cash balance to arrive at the metropolitan council's unencumbered cash. This will be further covered in the financial model in 5.8 below.

5.8 TOWARDS A MODEL FOR LOCAL GOVERNMENT FINANCING IN SOUTH AFRICA.

5.8.1 Introduction

Financial modelling is a very practical and useful tool in the analysis of business related problems (Gordon Institute of Business, 2013:13). The key challenges facing municipalities are financial sustainability, asset management and provision of infrastructure and services. Accordingly, the model developed will focus, as per the research objectives, on identifying the funding gap and alternate funding sources.

5.8.2 The Model

This model will cover:

- The investment in repairs and maintenance and the replacement of existing infrastructure, backlogs, investments required to create smart cities, impact of debtors outstanding on financial viability and the need to increase the provision for bad debts to write-off these debts.
- The loans outstanding and cash / investments will also be covered.
- In addition, alternate sources of revenue will be considered, both in respect of capital expenditure as well as operating expenditure, which will result in a

restated bottom line for the metropolitan councils which will provide a far better perspective of the challenges that the three metropolitan councils are faced with in terms of sustainability, asset management and provision of new infrastructure.

The model commences with the 2012/13 financial year income and expenditure which reflects a surplus of R8 273 205 000 for all three metropolitan councils. Adjustments are made for the various expenditure and income areas resulting in a revised deficit of R15 396 200.000.

The model is detailed in Table 5.27 below. Total income less total expenditure provides the net surplus. Additional revenue sources need to be added to this. However, the shortfall in respect of Repairs and Maintenance, the additional cost of capital, the write-off of debt and the cost of free basic services need to be deducted from this to provide the true/adjusted deficit.

Table 5.27: The Financial Model

	CAPE TOWN R' 000	EtheKwini R' 000	TSHWANE R' 000	TOTAL R' 000
OPERATING				
Income	27,363,454	24,602,951	21,716,294	73,682,699
Expenditure	23,919,728	21,873,017	19,616,749	65,409,494
NET SURPLUS	-3,443,726	-2,729,934	-2,099,545	-8,273,205
NET SHORTFALL IN REPAIRS AND MAINTENANCE AND REHABILITATION OF ASSETS (Note 1)	7,373,994	9,144,477	3,929,277	20,447,748
ADDITIONAL COST CAPITAL FINANCING(Note 2)	778,900	747,000	612,600	2,138,500
DEBTOR WRITE OFF (10% p.a.) (Note 3)	417,223	302,895	312,496	1,032,614
FREE BASIC SERVICES (Note 4)	342,231	678,490	510,360	1,531,081
Less: Additional Revenue Sources (Note 5)	566,877	486,248	427,413	1,480,538
ADJUSTED DEFICIT	4,901,745	7,656,680	2,837,775	15,396,200

Source: see below for various sources of statistical information where not mentioned, from questionnaire

The following assumptions and estimations were made in developing the model:

- (i) A rate of 4% was used to determine the Repairs and Maintenance and replacement costs of assets. This rate is recommended by the World Bank (see 5.8.3 below).
- (ii) A borrowing rate of 10% was used. This is the current borrowing rate of the Ethekewini Municipality for a loan of R1.5bn for 2013/14 financial year. The borrowing rates will differ for each municipality dependant on their credit rating, quantum of the loan, duration of the loan and market conditions at the time that the tenders for the rates are advertised. (See 5.8.4 below).
- (iii) The Bad Debt provision has been increased by 10% (see 5.8.5 below).
- (iv) The average for Cape Town's and Ethekewini's free basic services has been applied to Tshwane to determine the rates forgone (see 5.8.6 below).
- (v) A 1% increase has been provided for property tax and trading services to determine the increased revenue collection (see 5.8.7.1). This is because there is little scope to generate further revenue from these sources.
- (vi) A 1 % decrease in Salaries, Wages and Allowances is used in the model (see 5.8.7.3 below).This is the estimated gain from productivity, cost cutting measures and alternate service delivery mechanisms. Salary increases are determined nationally.
- (vii) A reduction in unfunded mandates has been provided for at a rate of 5% (see 5.8.7.4 below).This is based on a conservative reduction in unfunded mandates due to current tight economic conditions resulting in poor growth of national taxes, and accordingly, limiting National Government's ability to fund additional expenditure.

- (viii) To determine the backlog, the World Bank Backlog study was used and the figure of R320bn (after inflation) was apportioned to the metropolitan on the basis of capital expenditure. This is a very conservative approach (see 5.8.8.1 below).
- (ix) A 0.5% per annum increase in the population was applied (See 5.8.8.2 below). This is in line with the 2011 census results.
- (x) The EThekweni Cost Services Model for water, electricity, sewerage and roads was used to determine the cost of R130 000 to service a site (see 5.8.8.2 below).
- (xi) An additional investment of R1bn per annum for smart city initiatives was assumed (see 5.8.8.3 below). This is an estimated cost. A conservative figure is used as the focus of developmental local government is still on basic service delivery.
- (xii) No further provision from depreciation can be used for funding (See 5.8.8.4 below). This is because the full depreciation provision is already being utilised.
- (xiii) It is assumed that a further R53M per annum could be generated by Cape Town from development levies, in addition to the current R147m. This figure of R200m was then applied to Tshwane and EThekweni as well (See 5.8.8.4 below).
- (xiv) An additional R21.835bn needs to be borrowed by the three metropolitan councils (see Table 5.31 below). This is not sustainable and is being used only for modelling the impact. Only the interest repayable on the loan has been provided for in table 5.27 as this impacts on the Income and Expenditure Statement. The repayment of the loan is a cash flow item and is covered in Table 5.32 below.

The components of the model are discussed in detail below.

5.8.3 Replacement Cost of Assets (Note 1):

Table 5.28: Replacement Cost of Assets and Repairs and Maintenance

REPAIRS & MAINTENANCE AND 4 %				
of replacement costs	11,594,269	12,520,000	6,448,280	30,562,549
Depreciation (Actual)	-1,620,275	-1,595,412	-1,103,121	-4,318,808
Repairs & Maintenance (Actual)	-2,600,000	-1,780,111	-1,415,882	-5,795,993
	7,373,994	9,144,477	3,929,277	20,447,748

The replacement cost of assets for Ethekewini is actual, whilst a proxy-based replacement cost factor applicable to Ethekewini was used for Tshwane and Cape Town. The replacement cost of assets gives a far better reflection of the true cost for Repairs & Maintenance and the replacement cost of assets (after deducting the current expenditure on Depreciation and Repairs and Maintenance). Accordingly, these costs have been determined using replacement costs and applying a rate of 4% (as recommended by the World Bank benchmark of 2.8% to 4%) resulting in the deficit in Repairs & Maintenance and replacement cost of assets. This under-investment is clearly reflected in the poor state of infrastructure in most municipalities resulting in, *inter alia*, poor quality of roads, major potholes, electricity outages, flooding, sewage systems not being able to cope, burst water pipes, huge water and electricity loss in distribution.

5.8.4 Additional Cost of financing capital expenditure (Note 2)

The additional cost of financing capital expenditure is based on the capital financing Table 5.31, where an additional amount of R 21.385bn is assumed to be borrowed at the prevailing interest rate of 10% for capital financing and a repayment period of 15 years.

It should be noted that the additional borrowings would not be sustainable. However, the borrowings impact is illustrative for modelling purposes. Only the interest on repayment of the loan is illustrated in Table 5.27 as this impacts on the Income and Expenditure Statement. The repayment of the loan will be dealt with in Table 5.32 as it is a cash flow item.

5.8.5 Debtors write off (Note 3)

Table 5.29: Debtors

Debtors	8,217,315	5,016,587	6,866,310	20,100,212
Provision for Bad Debts	4,045,082	1,987,634	3,741,380	9,774,096
NET DEBTORS	4,172,233	3,028,953	3,124,930	10,326,116

Whilst the collection rates for all three metropolitan councils are above the 95% norm set by National Treasury, the debtors outstanding are growing due to interest being capitalised on outstanding debts as well as the increase in debtors due to 100% of debt not being collected.

It will be noted that the provision for Bad Debt covers only 48.63% of the debt outstanding. This is not sustainable. Accordingly, an additional provision of 10% per annum is required to write-off this debt. Therefore a further provision of 10% has been made on net debtors for each of the metropolitan councils.

5.8.6 Free Basic Services (FBS) (Note 4)

The FBS cost is determined by the actual cost of FBS for electricity, water, sanitation and refuse as well as the rates foregone due to the implementation of life line tariffs for the indigent.

The current shortfall in the FBS for Cape Town is R342.231M and EThekwini R678.490M. Tshwane has not indicated their income from rates foregone due to their life line tariffs on rates. Accordingly, the average for Cape Town and EThekwini has been used to determine their rates foregone.

The shortfall will be further impacted upon by the huge inward migration trends and the increased FBS that will need to be provided.

5.8.7 Additional Funding Sources (Note 5)

The additional funding sources are calculated as follows:

Table 5.30: Additional Funding Sources

	CAPE TOWN R' 000	EThekwini R' 000	TSHWANE R' 000	TOTAL R' 000
Increased Revenue Collection (Note 5.1)	182,613	174,310	156,410	513,333
Reduced Expenditure (1%) (Note 5.2)	61,737	34,527	46,109	142,373
Improved productivity (1% of SWA) (Note 5.3)	74,461	59,931	53,050	187,442
Increased tariffs 1% (Note 5.1)	182,613	174,310	156,410	513,333
Unfunded Mandates reduction (Note 5.4)	65,453	43,170	15,434	124,057
TOTAL ADDITIONAL SOURCES	566,877	486,248	427,413	1,480,538

5.8.7.1 Increased Revenue Collection (Note 5.1)

The increase in revenue is based on an improvement in revenue collection, improved billing and a reduction in theft of electricity and water, etc. A 1% increase has been provided on property tax and Trading Services (electricity, water & sanitation and refuse removal).

5.8.7.2 Reduced Expenditure (Note 5.2)

Reduction in expenditure on Repairs & Maintenance and General Expenses has been factored in arising from improved fiscal effort and more prudent expenditure management.

5.8.7.3 Improved Productivity (Note 5.3)

A 1% decrease in Salaries, Wages & Allowances due to improved productivity and consequential reduction in the number of staff employed is used in the model.

5.8.7.4 Unfunded Mandates (Note 5.4)

A reduction in unfunded mandates has been provided for at a rate of 5%.

5.8.8 Capital Expenditure

Table 5.31: Capital Expenditure 2012/2013

	CAPE TOWN R' 000	ETHEKWINI R' 000	TSHWANE R' 000	TOTAL R'000
Capital Expenditure (2012/13)	5,868,809	3,468,740	3,343,692	12,681,241
Funded by :				
Grants and subsidies	3,335,821	1,794,910	1,089,692	6,220,423
Borrowings	1,784,935		1,600,000	3,384,935
Own sources (Depreciation etc)	600,597	1,673,830	654,000	2,928,427
Development levies	147,456			147,456
Balanced Capital Budget	-	-	-	-
<u>Add :</u>				
(i) Backlogs (Note 6.1)	6,441,000	6,198,000	4,861,000	17,500,000
(ii) informal settlements (Note 6.2)	401,000	472,000	465,000	1,338,000
(iii) Smart city investment (Note 6.3)	1,000,000	1,000,000	1,000,000	3,000,000
TOTAL ADDITIONAL EXPENDITURE	7,842,000	7,670,000	6,326,000	21,838,000
DEVELOPMENT CHARGES (Note6)	-53,000	-200,000	-200,000	-453,000
Total	7,789,000	7,470,000	6,126,000	21,385,000

5.8.8.1 Backlogs (Note 6.1)

Metropolitan councils were specifically requested to quantify their backlogs in respect of the number of units, as well as the value. Regrettably, Cape Town does not quantify their backlogs but instead works with systems that inform same. The only backlogs that have been identified by Cape Town relates to informal settlements where 30% do not have the full minimum service package and this is being addressed on an annual basis.

In view of the foregoing, it was decided to use the World Bank Backlog Study Outcome in the model. This amounted to R250bn in 2009 and included metropolitan councils and secondary cities. After allowing for inflation, this figure increased from R250bn to R320bn in 2012/13. This has been apportioned to the metropolitan councils on the basis of their capital expenditure, resulting in the three metropolitan councils having an indicative backlog of R178bn.

The R320bn is very conservative in comparison with the COGTA's evaluation of backlogs in 2010 of R473bn and allowing for inflation, which amounts to R563bn in 2012/13.

It has been assumed that the backlogs will be eradicated in 10 years. Accordingly an amount of R17.5bn (10%) has been provided in the modelling for 2012/13.

5.8.8.2 Informal Settlements (Note 6.2)

The migration trends have indicated a clear trend of increases in metropolitan council populations as indicated by the increases in the 2011 Census which provides that currently 63% of the South African population is living in urban areas. In 2007, at least 52% of the South African population resided in the 27 largest municipalities. It is estimated that 70% of South Africans will live in urban areas by 2030, growing to nearly 80% by 2050 (National Treasury, 2013: 6).

Based on the foregoing, a 0.5 % increase in population per annum is deemed to be reasonable and allowing for minimum servicing of these properties amounts to approximately ± R130 000 per site (based on EThekweni's Cost Services Model for electricity, water, sewerage and road infrastructure). The cost for each metropolitan council is based on their current population sizes.

5.8.8.3 Smart City Initiatives (Note 6.3)

The current capital budgets of the Metropolitan Councils are stretched with at least 80% going towards basic infrastructure in respect of roads, transportation, electricity, water,

and sanitation, and storm water drainage. Accordingly, there is very little scope for additional funding for smart city investments that have a positive impact on growth, attracting new investment, as well as economies and efficiencies. The priority smart city investments amongst the metropolitan councils are the roll out of fibre optic networks, technology improvements, smart metering and attracting new investments. In order to make a meaningful impact on these initiatives an additional investment of R1bn per annum will be required.

5.8.8.4 Funding of Capital Expenditure (Note 6.4)

As indicated in paragraph 5.8.8 and the funding sources in Table 5.31 above, the main funding sources for capital expenditure are grants and subsidies, borrowings, depreciation and development levies. The additional expenditure from each of the sources has already been covered in paragraph 5.3 and it is apparent that grant funding cannot be relied upon as this is dependent on the national fiscal constraints. Accordingly, no additional grant funding has been provided for especially in view of the current economy and growth rate.

As regards development levies, Cape Town currently generates R147M per annum. It is assumed that a further R53M per annum could be generated without seriously impacting on investors. Based on the R200M that Cape Town could generate, a similar amount has been provided for Ethekewini and Tshwane. The full depreciation provision is already being utilised. Accordingly, no further provision from depreciation can be used for funding.

With regard to borrowings, an additional amount of R21.385bn will be required, However, this will not be sustainable and will severely impact on the gearing ratio. The interest and repayment of the loans will also impact on the operating budget and tariffs which are already well above CPI.

5.8.9 Cash on Hand /Gearing

Table 5.32: Gearing and cash projections

	CAPE TOWN R' 000	ETHEKWINI R' 000	TSHWANE R' 000	TOTAL R' 000
Cash Balance as at 2013-06-30	4,735,253	5,559,709	1,376,970	11,671,932
Less: General Insurance Fund	511,743	965,842		1,477,585
Sinking Fund	900,880	1,039,838		1,940,718
Unspent Grants	858,556		126,494	985,050
UNENCUMBERED CASH	2,464,074	3,554,029	1,250,476	7,268,579
(90 days norm)				
5-YEAR PROJECTION OF CASH (need to deduct GIF and Sinking Fund)	8,617,883	7,700,000		16,317,883
LOANS OUSTANDING as at 2013-06-30	7,371,000	9,044,012	8,136,085	24,551,097
5-YEAR PROJECTION	15,183,000	10,240,000	15,164,000	40,587,000
Gearing 5 Year projection	43.7%	32.0%	53.0%	43.0%
Gearing after R2bn additional expenditure per annum	65 %	57 %	82 %	68 %
Gearing after Full shortfall being borrowed 21 388bn	134%	130 %	143 %	135 %

The cash balance as at 30 June 2013 reflects an amount of R 11.6bn. Both Cape Town and Ethekwini balances are reasonable and in keeping with the National Treasury norm of 90 days whilst Tshwane is below the norm. However, included in the cash balances are unspent grants and funds that need to be ring-fenced for their specific purpose (General Insurance Fund and Sinking Fund for the repayment of loans). When these are excluded, the cash balance is reduced to R7.2bn (a reduction of R4.4bn or 38%). It should further be noted that the Depreciation provision is not cash backed. Accordingly, this will cause strain on borrowings when these assets are replaced. Hence, there needs to be further surpluses generated to adequately provide a reasonable cash balance of 90 days in keeping with the National Treasury norm and further provision needs to be made for Depreciation. Moreover, the R7.2bn adjusted cash (encumbered) will not be sufficient to meet the adjusted deficit of R15.396bn as per the financial model in Table 5.27.

The gearing ratio after 5 years at 43% is reasonable based on the National Treasury norm of 45% at maximum. However, if an additional R6bn is borrowed each year, the gearing goes up by 68% which is way above the norm and will impact negatively on borrowings as credit rating agencies will place a higher risk based on the borrowings and if the full R21.385bn is borrowed, the gearing goes up by 135%. This will impact negatively on the credit ratings, as well as the cost of borrowings.

From the foregoing, it is apparent that there is a further need for cash by the metropolitan councils which means that further surpluses need to be generated through additional funding sources. Moreover, borrowings are not sustainable and an additional R2bn per annum in borrowings will result in the gearing going up to 68% in 5 years and if R21.3bn is borrowed this increases by 135% which is not sustainable. In addition, provision would have to be made for the repayment of the loans raised as follows:

Table 5.33: Loans outstanding and repayments

Per Annum Loans	5 Years Amount	Repayment Over 5 Years
R 6bn	R30 bn	R3.990bn
R21.3bn	R106bn	R14.250bn

Clearly there is not sufficient cash available to meet the repayment of these loans, which will amount to R3.990bn over a period of 5 years if R6bn per annum is borrowed, whilst borrowing R21.3bn per annum will require repayment of R14.250bn

5.8.10 Outcome of the Modelling

The operating surplus based on the modelling decreases from a net surplus of R8.2bn to a net deficit of R15.4bn (refer to Table 5.27 on the “financial model”). This will require a further tariff increase of 30%, over and above the tariff increases that are already approximately 2 to 3% above CPI. Moreover, a further increase of 1% in revenue collection and a 1% increase in the tariffs have also been factored into the model. This will result in increases in tariffs of above CPI and will be unsustainable to both residents and business. It should also be noted that this increase will be merely to break even, to

ensure that the metropolitan council is able to meet unforeseen expenditure and or a drop in collection rates, a further increase of at least 5% will be required, resulting in an overall increase of 37 %.

In addition, there is also a major funding gap on the capital expenditure of R 21 385bn (refer to Table 5.31), after providing for the increase in borrowings for each metropolitan council, which is also not sustainable. The gearing ratio based on R2bn addition capital expenditure over 5 years increases from an average of 43% to 75 % which is also not sustainable. Whilst this will increase even further to 135% if the R21.385bn is borrowed over the next 5 years.

Moreover, as per Table 5.32 the cash-on-hand after deducting unspent grants, ringfenced cash for the General Insurance Fund (GIF) and Sinking Fund for repayment of loans, is well below the National Treasury norm. Furthermore, the depreciation provision is not cash backed which will put further strain on borrowings when assets need to be replaced.

From the foregoing it must be noted that the metropolitan councils have maximized all funding sources: property taxes and tariffs, as well as borrowings in respect of capital expenditure. Accordingly, should new funding sources not be identified, the metropolitan councils will be in a precarious financial position and would clearly not be sustainable and will be unable to deliver the services it is mandated to provide. Metropolitan councils would suffer the same consequences as Eskom of not providing for growth, asset maintenance and rehabilitation, and not appropriately providing funding for the replacement of assets.

5.9 Smart Cities and Globally Competitive

5.9.1 Innovation, growing tax base, Job creating and retaining existing business and attracting new business.

Table 5.34: Innovation, growing tax base, Job creating and retaining existing business and attracting new business

	ISSUE	ACTION		
		Cape Town	Ethekwini	Tshwane
1	Growing the tax base		Cornubia, Bridge City, Northern Urban Dev Corridor, N3 & N2 Corridor.	1. The Security of Revenue Project entails a full roll-out of smart electricity meters throughout the city.
			Densification and Nodal development. Continue to focus on attracting sporting and other events to the city.	2. The billing system of the City will be reviewed regularly to ensure it is effective and accurate, this will contribute towards revenue improvements.
2	Job creation		1. This is a key priority for the city together with SMME development.	1. Attracting investment that is employment absorbent.
			2. A job creation strategy has been approved by council.	2. The City is already monitoring the creation of jobs through its Extended Public Works Programme (EPWP).
				3. SMME support: An integrated approach to this support will be developed and implemented through various players including institutes of higher learning found in the city and other government departments.
3	Retaining existing businesses		Rates holidays, special rated zones / precincts, urban development zones, urban improvement precincts, access to incentives, business support programmes.	1. Rural development, rural management, agricultural villages
				2. Tourism (within Gautrain Management Agency)
				3. Nodal development, mixed uses, various housing typologies, accessibility to employment opportunities, economic development, pedestrianisation
4	Attracting new businesses		Cornubia, Bridge City, Northern Urban Dev Corridor, N3 & N2 Corridor.	1. Future urban development

		Mixed used development	2. Emerging node
		Nodal development	
			3. Tourism (within Gautrain Management Agency)
			4. Nodal development, mixed uses, various housing typologies, accessibility to employment opportunities, economic development, and pedestrianisation.
			5. A linear mixed use element of urban structure containing an intense concentration of facilities which are all focused along a major
			6. transportation route
			7. Former township areas that have been identified as target areas for focused public intervention, in order to ensure that they develop into economic nodes of greater significance

Table 5.34 indicates the innovations that metropolitan councils have looked at in terms of growing the tax base, job creation, attracting new and retaining existing business. Cape Town has not responded to this question. The priorities for Tshwane and Ethekwini are urban development, job creation and mixed used nodal development.

5.9.2 Smart City Initiatives

The table hereunder indicates the Smart City issues and initiatives that the three metropolitan councils are currently considering, as well their order of priority:

Table 5.35: Smart City Initiatives

SMART ISSUES	CONSIDERED	RANKING Cape Town	CONSIDERED	RANKING Ethekwini	CONSIDERED	RANKING Tshwane
Rollout of fibre optic networks			Yes	2	Yes	1
Smart Metering			-	6	Yes	3
Technology Improvements			Yes	5	Yes	2
Increasing Productivity			Yes	3	Yes	8
Cost Rationalisation/Value for Money			Yes	8	Yes	7
Attracting New Investments			Yes	4	Yes	5
Reducing of Distribution losses and theft in Electricity and Water			Yes	1	Yes	4
Supply Chain Management Improvements			Yes	7	Yes	6
Other – provide details in comment box			-	-	N/A	9

Table 5.35 indicates that fibre optic rollout is considered to be the most important smart city initiative. This is followed by reducing water and electricity losses in distribution (2nd), next was technology improvements (3rd), followed by smart metering (4th), and attracting new investments (5th). No response was received from Cape Town. Hence only the input from Ethekwini and Tshwane was used.

5.9.3 Improved Performance

Table 5.36: Improved Performance

	INCREASED FISCAL EFFORT	IMPROVED PERFORMANCE ETHEKWINI	%	RM
1	Revenue	<p>Bill unbilled areas for water, Revenue enhancing team to be more proactive to address illegal connections, etc. Invest in replacing old meters – long term benefits.</p> <p>Rates – address valuation roll shortcomings for example proper coding of properties, for example sewerred vs. non sewerred.</p> <p>Integrate communities and job creation to grow rates base.</p>	1	190
2	Expenditure	Zero-based budgeting; activity based costing, Austerity measures. Review , Consultant , Overtime expenses, Resource abuse		
3	Productivity	Time and motion studies, use of electronic time sheets etc. Multi-tasking,	1	240
4	SCM processes	Category Management- Economies of scale Procurement Scheduling		

Table 5.36 indicates the additional revenue and savings that could be generated by increased fiscal effort in improving collections and productivity and ensuring value for money on expenditure. This only represents Ethekwini as Cape Town and Tshwane have not responded to this question.

5.10. Improving Business and investor confidence and attracting investments that will create sustainable Jobs

5.10.1 Credit Rating

Credit ratings are required to demonstrate to lenders the ability of an entity to meet its financial obligations. In addition, investors use the rating to assess the city’s credit risk which in turn has a material impact on the pricing of any subsequent loans taken. The factors used to evaluate creditworthiness of the municipalities include the economy, debt finances, politics, management and institutional framework. Accordingly, credit ratings play a major role in the confidence that investors, businesses, residents and other stakeholders have in a municipality. The credit ratings of the three metropolitan councils are as follows:-

Table 5.37: Credit Rating

	Cape Town	Ethekwini	Tshwane
SHORT-TERM	P-1.za Rated prime -1 have a superior ability to repay short term debt obligations	A1+ Very high certainty of timely payment Liquidity factors are excellent and supported by good fundamentals. Protection factors and risk factors are minor	A1.z (maturities of less than one year): defined as the highest quality. A superior ability to repay short-term debt obligations.
LONG-TERM	Aa3.za demonstrates above average credit worthiness relative to other domestic issues	AA- a very high credit quality. Protection factors are strong adverse changes in business economic or financial conditions would increase investment risk although not significantly	A1.za (maturities of one year or greater): Defined as upper-medium grade. “A” obligations are judging to be upper-medium grade and are subject to low credit risk
SPECIFY RATING AGENCY	Moody’s Investors Service	Global Credit Rating Agency	Moody’s

5.10.2 Audit Opinion

The Accounting Officers of South African municipalities are responsible for the preparation and fair presentation of the annual financial statements for their respective municipalities in accordance with the South African Standards of Generally Recognized Accounting Practice (SA Standards of GRAP), as well as the requirements of the Municipal Financial Management Act and the Division of Revenue Act, and for such internal control as the Accounting Officer determines necessary to enable the preparation of annual financial statements (AFS) that are free from material misstatement, whether due to fraud or error.

The Audit-General's responsibility is to express an opinion on the AFS in accordance with the Public Audit Act of South Africa, 2004 (Act No. 36 of 2004) taking due cognisance of the assessment of risks of material misstatement whether due to fraud or error, accounting policies, reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the annual financial statements.

The audit opinions of the three metropolitan councils are reflected in the table below:-

Table 5.38: Audit Opinion

		Cape Town	Ethekwini	Tshwane
1	Clean The financial statements are free from material misstatements and there are no material findings on reporting on performance objectives or non-compliance with legislation.	X		
2	Unqualified The financial statements contain no material misstatements. Findings have been raised on either reporting on predetermined objectives or non-compliance with legislation, or both these aspects.		X	X
3	Qualified The financial statements contain material misstatements in			

	specific amounts, or there is insufficient evidence to conclude that specific amounts included in the financial statements are not materially misstated.			
4	Adverse opinion The financial statements contain material misstatements that are not confined to specific amounts, or the misstatements represent a substantial portion of the financial statements.			
5	Disclaimer The auditee provided insufficient evidence in the form of documentation on which to base an audit opinion. The lack of sufficient evidence is not confined to specific amounts, or represents a substantial portion of the information contained in the financial statements			

From Table 5.38 it is evident that all three metropolitan councils have achieved excellent audit opinions with Cape Town achieving a clean audit and Ethekewini and Tshwane achieving unqualified audit opinions. The matters of emphasis in each of the audit reports are listed in the Table 5.39 under item 5.10.3.

5.10.3 Matters of emphasis

Table 5.39: Matters of emphasis

	Cape Town	Ethekwini	Tshwane
1	Significant uncertainty relating to ongoing wage negotiations.	Significant uncertainty: Ratepayers objections of R217.16 million lodged against Municipal property valuations.	Significant uncertainties – As disclosed in note 55 the municipality and ME's are defendants in a number of legal claims. Ultimate outcome cannot presently be determined and no provision for any liabilities that may result has been made in the financial statements.
2	Material Impairments regarding receivables	Significant uncertainty: Financial impact on court ruling regarding labour issue on divisional arrangements of conditions of service.	Restatement of corresponding figures – Corresponding figures of 30 June 2012 have been restated as a result of various errors discovered during the year ended 30 June 2013
3	Other provisions.	Material losses and impairments: Municipality incurred losses relating to water and electricity of R513 million (119 966 557 kl) and R396 million (667 412 169 kWh) respectively.	Material losses – Note 60: Material losses amounting to R404 550 339 were incurred as a result of water distribution losses. Note 61: material losses amounting to R622 720 993 were incurred as a result of electricity distribution losses
4		Material losses and impairments: Provision for debt impairment of R1.98 billion.	Material impairment – Note 22: receivables have been significantly impaired (amount = R30 741 379 797)

5		Irregular expenditure: An amount of R325.54 million incurred during financial year.	
6		Material under spending: Municipality under spent R597.62 million on conditional grants.	
7		Material under spending: Municipality under spent R792 million on capital budget.	

As indicated in table 5.39 above the number of items under “matters of emphasis” are not a cause for concern with 3 items for Cape Town, 4 for Tshwane and 7 for Ethekewini.

5.11. Conclusion

The key findings arising from the questionnaire and interviews conducted are as follows:

1. Migration and urbanisation are having a huge impact on service delivery in metropolitan councils. The ever-increasing informal households are leading to growing backlogs. Accordingly, whilst excellent progress has been made in rolling out service delivery, the influx of informal residents undermines the achievements made.
2. The unemployment rate for the three metropolitan councils is at 24.3% which is a major cause for concern and will continue to escalate if growth and job creation are not prioritised. Metropolitan councils are contributing significantly to the National and Provincial GDPs at an average of 10% and 56% respectively. It is apparent that metropolitan councils are the engines of growth in the economy and there needs to be due support given to them.

3. There is very little scope to increase the current funding sources, service charges, (electricity, water, refuse and sanitation), rates, and grants as these have been maximised. There is also a major issue of affordability of further tariff increases. Therefore, additional or new sources of revenue streams need to be explored, in particular development levies and a local business tax.
4. As regards capital expenditure, a similar challenge of affordability and sustainability exists in meeting the service delivery backlogs and investing in new areas for growth. Whilst borrowings can be increased this will impact on tariff increases and affordability by consumers.
5. Not all metropolitan councils are recording backlogs, rehabilitation, replacement and maintenance in a uniform way thus making comparisons difficult. In addition, all metropolitan councils did not respond to these questions. Accordingly, the financial model has been developed using appropriate benchmarking and norms set by the World Bank.
6. A number of challenges have been identified by the metropolitan councils that are either included or excluded from their IDPs. However, this has not been costed. Accordingly there needs to be better alignment between IDP's and budgets.
7. Whilst the collection rates for all three metropolitan councils are above 95%, their debtors are growing and needs to be written-off by making additional provisions for bad debts. The cash on hand is reasonable, however, relative to the outstanding loans and funding of backlogs, this will be a major challenge.
8. In terms of smart city initiatives, the metropolitan councils have identified and ranked in order of priority the following initiatives:-
 - Roll out of Fibre Optic Networks
 - Reduction in distribution losses and theft in Electricity and Water

- Technology Improvement
- Attracting new Investments
- Smart Metering
- Increasing Productivity
- SCM Improvement
- Cost Rationalisation
- Value for money

9. A Financial Model was developed: The financial model clearly indicates a funding gap when more realistic expenditure for Repairs and Maintenance and replacement of assets is used, whilst also providing for growth and smart city initiatives. Moreover, additional funding sources have been considered and the impact of debtor write-offs and improved fiscal effort resulting in an adjusted deficit that is a more realistic. The model can be replicated by other metropolitan councils to determine their funding deficit or surplus.

The next chapter, Chapter Six will conclude the study by looking at the relevant conclusions and recommendations.

CHAPTER 6–GENERAL CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter will discuss the conclusions and recommendations in respect of the findings of this study relative to the research questions, objectives and main aim of the study.

The main aim of the study was to determine whether there is a funding gap in metropolitan councils, and if so, to quantify same and provide ways to address this problem. The findings clearly demonstrate that there is a huge funding gap in Metropolitan Councils. The funding gap has been quantified and a new business tax has been proposed as the most effective way of addressing this problem. A financial model has also been developed.

This study is very significant and has implications for various stakeholders especially the metropolitan councils in South Africa as they can use the model to determine their funding gaps. National Treasury and the FFC can use it to inform their discussions around the national fiscus and the spilt in the equitable share. It will also help academics, students and residents to better appreciate the financial challenges facing Metropolitan Councils and the reasons why service delivery is not expedited.

6.2 General Conclusions

6.2.1 The extent to which all funding sources are being maximised by metropolitan councils

All three metropolitan councils have maximised their primary existing funding sources in respect of tariffs for electricity, water, sanitation, refuse removal and property tax as the increases are either in line with CPI, or above. The scope to increase grants is dependent on the state of the national economy and the fact that local government would have to compete with other provincial and national fiscal priorities.

As regards capital expenditure there is scope to increase borrowings. However this is not sustainable and will also impact on the tariff increase.

There is scope to increase development levies. However, this must be looked at in terms of affordability to developers, as well as the overall impact in terms of global competitiveness to attract investors.

The FFC (interviewed on 18 February 2014) has recommended a local business tax as well as several other non- traditional sources, such as congestion charging; levy on local payroll; tax on tourist bed-nights; surcharge on water consumption; surcharge on electricity consumption; duty on property transfers; tax on vehicle licenses; tax on outdoor advertising/billboards/signage; levy on fuel sales; tax on non-residential parking bays; tax on municipal road use; and, road-tolling.

Each of these sources of revenue are worthy of further investigation and based on the impact of the tax and in keeping with good principles of taxation which would, inter alia include, ease the cost of administration, elasticity, impact and reach, they should be considered. Taking due cognisance of the huge funding gap, a local business tax is favoured as this will spread the tax burden to a wider net and the cost of administration is low as this could be managed by SARS (South Africa Revenue Services). Moreover, the elasticity is good as this tax will grow as the economy grows. A 1% turnover tax would yield the Ethekwini Municipality approximately R5bn per annum which will make a meaningful impact in addressing the funding gap. In addition, from the research conducted, there are two areas that the Constitution and Local Government: Municipal System Act provide for but have not been adequately used, namely, full privatisation of certain functions, as well as public-private partnerships.

Recommendations

In order for local government to deliver on its mandate and be financially viable and sustainable the following alternate forms of funding, amongst others, need to be considered:

Maximisation of development levies. This should be regulated in terms of a national framework to avoid developers playing off one municipality against another and to ensure consistency. National Treasury have indicated that the framework for development levies will be finalised in 2014. This framework will require an amendment to the Municipal Fiscal Power and Functions Act (MFPFA).

There is a dire need for a source of income that relates to economic development and the growth in GDP. As per the recommendation from the FFC a source of income that will meet this need would be a local government turnover tax. The Ethekewini Municipality has already made a submission in 2012 for consideration of such a tax for local government which is being considered by National Treasury. SALGA should pursue this tax through the Budget Council and Parliament. The Davies Commission on tax should include in its current study on taxation in South Africa, a local business tax for local government as one of the new tax instruments.

Notwithstanding the current state of the economy, SALGA should be actively pursuing with National Treasury, through the Budget Council and Parliament, the need for additional operating and capital grants, taking due cognizance of the precarious state of local government funding.

6.2.2 The current service delivery backlogs

It is apparent from the results of this study that all three metropolitan councils have huge service delivery backlogs.

Regrettably not all cities have appropriate systems that quantify their backlogs. However, based on the World Bank guideline of 2, 8 % to 4% required to be spent on Repairs and Maintenance and replacement of assets all three metropolitan councils have major funding gaps.

There are also huge service delivery backlogs amounting to R178 616 333 000 (R178.62 billion) for the three metropolitan councils, arising from the Apartheid era inequity of services and the major urbanisation that is currently taking place.

The key areas of service delivery backlogs are in basic infrastructure and services, i.e. water, sewerage, roads and electricity with the biggest challenge being informal settlements and the provision of houses where the backlog for all three metropolitan councils is currently 801 123 units and growing rapidly due to urbanisation.

Recommendations

All metropolitan councils need to have a uniform system of determining backlogs based on a common set of standards that need to be set by National Treasury. This must be included in the IDP and BEPP (Built Environment Performance Plan). The number of units in respect of informal settlements, as well as the service delivery gap, need to be recorded, for example, if communal block toilets are being used, we need to be able to determine the cost of upgrading same to individual toilets and water connections for each household.

6.2.3 The investment requirements to address the service delivery Backlogs, Rehabilitation and Economic Growth

The research identified the investment requirements to address the service backlogs, rehabilitation and economic growth as follows:

	R' 000
Repair and Maintenance and Rehabilitation Costs	30 562 549
Less :Current Expenditure	<u>10 114 801</u>
Short fall in Investment of Repairs and Maintenance And Rehabilitation Cost	20 447 748
Add: Backlogs (Refer paragraph 5.8.8.1 Capital Expenditure)	17 500 000
Informal Settlements	1 338 000
Free Basic Services	1 531 081
Smart City Investments	3 000 000
TOTAL INVESTMENT REQUIRED	43 816 829

The total Investment required to address the expenditure is R43.8bn per annum which will increase annually with inflationary increases and the huge urbanisation that is currently taking place. Accordingly, any delay in addressing this will result in further poor service delivery and costs growing rapidly.

As indicated in 5.8.8.1 above the total cost of backlogs are R178bn for the three metropolitan councils. However, it has been assumed that backlogs will be eradicated within 10 years. Accordingly, one tenth (1%) has been provided for this. It should also be noted that the backlogs in informal settlement and growth related expenditure are in respect of capital expenditure and if this is funded from borrowings the R43.8bn will reduce to R22bn. However, the sustainability of the increased borrowings would be a major challenge. The interest will amount to R2.1bn in the first year and the repayment of the loan requires R1.45bn per annum (Assuming a 15 year loan).

Recommendations

Metropolitan councils need to improve productivity, economies and efficiencies in order to reduce costs that could be redirected to fund this huge gap in expenditure. A zero-tolerance approach to non-payment of debt must be introduced to ensure that all those who can pay are paying.

Investment in growth related infrastructure that leads to an increase in the rates base, as well as create jobs, needs to be prioritised.

6.2.4 Extent of the balance between existing resources and IDP requirements

There are a number of critical issues that the metro have raised that are not covered in the IDP and or funded. This clearly reflects that there is a major challenge with balancing the existing resources and the IDP requirements as reflected in the huge backlogs in service delivery, replacement and maintenance of assets and lack of investment in growth to open up new developments and create jobs. In addition all Metropolitan Councils have recognised in-equality, poverty, climate change and

urbanisation as major challenges in their IDP. However, not all the challenges have been budgeted for.

Recommendations

There needs to be better alignment between the IDP and the budget. All resource challenges identified must be costed even if same is done on an estimated basis.

A greater focus in the IDP needs to be made on building more sustainable, productive, liveable and inclusive cities with greater integration of investments in the built environment with effective spatial planning that encourages mixed use and ensures effective public transport management and human settlement developments is required. In this regard, the metropolitan councils should embrace the opportunities created by the CSP (City Support Programme) to maximise the potential of these initiatives. This will go a long way to ensuring more inclusive, integrated and compact (improved densification) cities which will improve their financial viability and sustainability.

6.2.5 Sustainability of the current level of funding

The current level of funding is not sustainable as the tariff and rates increases are above CPI. These increases need to be affordable and realistic but at the same time deliver a level of service that is acceptable. Moreover, additional grant funding is dependent on the national budget and priorities of the country as a whole.

The unfunded mandates for the three metropolitan councils amount to R2.481bn and needs to be eradicated. No further unfunded mandates should be accepted and any further devolution of functions need to be done strictly in terms of the DORA, that is, they must be fully costed and the funding provision provided therefor.

The collection rates for all three metropolitan councils are above 95% and there is a risk of not sustaining these high levels of collection rates. Debtors are also growing.

A further key issue that has impacted on one of the metropolitan councils is boundary change. The re-demarcation of Tshwane has had a material impact on its viability and sustainability. The inherited backlog of R5bn and debt of R400M and very little income and no additional grants income has had a major impact on its finances with R780M being spent on capital expenditure and R1.6bn on operating expenditure in the 2011/12 and 2012/13 financial years.

Recommendations

SALGA must ensure that the grants for metropolitan councils are increased rather than decreased to ensure that there is sustainability. In addition, the issue of unfunded mandates must be given further attention to ensure that these are eradicated. The impact of the roll out of IRPTN and housing accreditation require close monitoring as they have a huge potential impact on the finances of the cities.

Boundary changes can either impact positively or negatively on the financial viability of municipalities. Whilst each review is dependent on the contextual issues and political influences that are at play, there needs to be a structured methodology that carefully analyses the financial impact independently with no political influence. Accordingly, the terms of reference of the Municipal Demarcation Board should be reviewed to ensure that its independence is strengthened.

6.2.6 The impact of new sources of revenue on the resource pool of metropolitan councils to meet their service delivery targets

The impact of additional sources of revenue from existing tariffs and improved efficiencies amounts to R1.4bn. This funding is not sufficient to meet the current funding gap of R43.8bn, or after borrowing for capital expenditure, a gap of R22bn. Moreover, not all of the additional funding sources will have a recurring benefit. The increased revenue collection, reduced expenditure, improved productivity and unfunded mandates will ultimately reach a zero return. However, tariff increases above CPI, whilst not recommended, could be sustained, but this would lead to unaffordable tariffs which

could lead to consumer resistance. The borrowings to fund capital expenditure will also not be sustainable.

Accordingly, new revenue sources need to be identified. All of the funding sources recommended by the FFC should be considered. However, a revenue source that would substantially reduce the funding gaps must be considered as a priority. A 1% local business tax will yield approximately R15bn per annum for the three metropolitan councils. This will go a long way towards closing the funding gap (based on the turnover of the business in the Ethekewini region. The turnover information is readily available in terms of VAT submissions to SARS).

Recommendations

An improvement in value for money must be sought by:

Reducing wasteful expenditure and improving efficiencies in SCM (Supply Chain Management).

Improved productivity must be sought by benchmarking the work of all sectors, as salary, wages and allowances make up approximately 30% of total expenditure. Accordingly this needs to be managed effectively.

Bulk purchases of electricity and water which makes up approximately a further 30% of expenditure need to be also managed by ensuring that NERSA (National Electricity Regulator of South Africa) and DWAF (Department of Water Affairs) allow increases that are based on inflation, and are affordable, realistic, and effective (productivity and cost efficiencies maximised).

6.2.7 Metropolitan Councils becoming Smart Cities and globally competitive

The following are the prioritised issues that the metropolitan councils in the study have identified in order to become smart cities (listed in order of priority): roll out of fibre optic networks; reduction of distribution losses and theft in electricity and water; technology

improvements; attracting new investments and smart metering; increasing productivity; SCM improvements; cost rationalisation and value-for-money; mobility optimisation; urbanisation – improve spatial planning and densification; improved economic growth; and, climate change strategy.

This ranking correlates with the study of McKinsey and Company as discussed in Chapter Three. However these smart city initiatives require huge investments.

Some of the initiatives in respect of water and electricity loss in distribution, smart metering and technology improvements may have a return on investment (ROI) of 1-2 years. These need to be pursued urgently, whilst the others maybe prioritised based on the ROI and other IDP priorities.

Alternative funding sources must be considered for certain initiatives, for example, fibre optic networks could be done on a PPP basis at no cost to the municipality.

Recommendations

That the smart city initiatives be critically examined and “creative ways” need to be identified to fund same, based on the IDP priorities and ROI.

The attraction of new investments must continually be pursued to ensure growth of the revenue base. However, these must be targeted spatially to ensure that the impact on the opening of new areas for development and investment must be carefully analysed and developers must be put on terms to commence development with a defined timeframe failing which they must pay penalties. This will improve take up and ensure a ROI that would enable metropolitan councils to be more effective

Cities need to target development in the development zone. This will ensure more effective spatial planning and maximise the take up of infrastructure in the development zone. This concentration will increase the potential of the cities to become more economically dynamic. Mixed use development must be encouraged to ensure better

integration. Improved densification for low cost housing, as well as middle income housing (private sector) and improved public transport through better integration of bus, rail and taxis, must be included in the IDP.

6.2.8 Improving business and investors' confidence to attract investments that will create sustainable jobs

All three metropolitan councils have good credit ratings, unqualified audit reports and very few matters of emphasis in their audit reports. This will certainly inspire confidence from investors, as well as financial institutions (which will impact favourably on the cost of borrowings). In addition, business and residents in the metropolitan councils will also appreciate these achievements.

However, the introduction of the campaign for clean audits by COGTA has created a great deal of confusion and adverse publicity for the Metropolitan Council and South African cities. This is not an opinion that is in accordance with the Public Audit Act of SA, 2004.

As regards credit ratings, the drop in the sovereign rating has had a knock on effect on the rating of municipalities resulting in Cape Town's, as well as several other local authority's, ratings dropping a notch.

The key issues under matter of emphasis are material losses in respect of water and electricity, irregular expenditure and material impairments in respect of debtors.

Recommendations

The metropolitan councils must continue with the good governance of unqualified reports and strive to seek further improvements in their credit ratings.

COGTA, National Treasury and the Auditor-General must drop the issue of clean audits as this is not in keeping with South African and International Auditing Standards.

6.3 Key Recommendations

The key recommendations emanating from this study are as follows:

6.3.1 Enhance Alignment of Budget to the IDP

Metropolitan councils must improve the alignment of their budgets to the IDP and must also use a financial model to determine their backlogs and identify the funding gap and explore funding sources to close this gap.

6.3.2 Ensure Improved Economy, Efficiency and Effectiveness

Metropolitan councils must improve productivity, economies and efficiencies, especially in terms of reducing expenditure, ensuring value-for-money, and improving collection rates to 100%. There needs to be reduction of wasteful expenditure, ensuring best value and improving efficiencies in SCM and improved productivity by benchmarking of the work of all sectors.

6.3.3 Increased Investment in Growth Related Infrastructure

Metropolitan councils must invest more in growth related infrastructure and ensure a balance between social, economic and rehabilitative expenditure.

The attraction of new investment must continually be pursued to ensure growth of the revenue base. This must be spatially targeted and mixed use development must be encouraged in the development zones to ensure better integration.

A balance between social, economic and rehabilitative expenditure is critical for the sustainability of municipalities.

6.3.4 Adopt Smart City Initiatives

Metropolitan councils must critically examine “smart city” initiatives, especially the attraction of new investment. The priorities that cities have identified, namely the: Rollout of fibre optic networks, reduction of distribution losses and theft in electricity and

water, technology improvements, attracting new investments and smart metering, increasing productivity, SCM improvements, cost rationalisation and value-for- money, mobility optimisation, there is also the issue of Urbanisation – improve spatial planning and densification, Improved economic growth and climate change strategy .

The Smart city initiatives need to be given due consideration and prioritised in the IDP.

6.3.5 Source Additional Grants from National Government

Introduction of additional operating and capital grants by National Treasury needs to be pursued by SALGA. Notwithstanding the current state of the economy, SALGA should actively pursue the need for additional grants for local government taking due cognisance of the precarious state of local government funding and the impact on its viability and sustainability.

6.3.6 Introduce a New Local Business Tax

Obtain approval of a turnover tax/ local business tax by National Treasury. There is a dire need for a source of income that relates to economic development and growth in the GDP. As per the recommendation from the FFC a source of income that will meet this need would be a local government turnover tax. SALGA should pursue this tax through the Budget Council and Parliament. The Davies Commission on tax should include in its current study on taxation in South Africa, a local business tax for local government.

6.3.7 Maximise the Use of Development Levies

Maximisation of the use of development levies by municipalities. This should be regulated in terms of a National Framework to avoid developers playing off one municipality against another and to ensure consistency. National Treasury must urgently finalise the framework and amendments to the Municipal Fiscal Powers and Functions Act.

6.4 Conclusion

All research questions in this study have been adequately answered.

The primary aim of the research was to establish the resource pool of Metropolitan Councils to fund their service delivery backlogs, rehabilitation and economic growth needs and identify sustainable measures that can be implemented to increase the resources pool to achieve these imperatives. In turn the two main objectives have been achieved:

- The backlogs have been quantified using a financial model that has been developed and a funding gap has been determined.
- To address the funding gap and ensure sustainable development various source of additional revenue, revenue maximisation, resource optimisation and investment in growth related infrastructure, and adoption of smart city initiatives have been recommended. However, considering the huge funding gap identified a key recommendation is the need for a local business tax to close the funding gap.

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QUESTIONNAIRE

OBJECTIVE 1: DETERMINE THE BACKLOG & FUNDING GAP

Research Question 1.1: To what extent are all funding sources being maximised by Metropolitan Council?

Please note: The Base year will be 30 June 2013

1. What are your current funding sources?

SOURCE	AMOUNT
Grants & Subsidies: <ul style="list-style-type: none">• NDP - Neighbourhood Development Programme• INEF – Integrated National Electrification Fund• USDG – Urban Settlements Development Grant• PTIS – Public Transport Infrastructure System• HSDG – Housing Subsidy Development Grant• IDCG – Integrated Cities Development Grant• ES - Equitable Share Grant<ul style="list-style-type: none">- Capital- Operating	
Borrowings	
Own Sources (Depreciation, etc)	
Development Levies	
Other	

2. What are your potential funding sources to finance capital expenditure / backlogs in excess/addition to 1 above?

SOURCE	AMOUNT
Tariff increases	
Property Tax Increases	

Development Levies	
Other	
Note: 1. Specify basis of new taxes 2. If not possible to generate further borrowings please motivate additional sources of revenue – explain?	

Research Question 1.2: What are the current service delivery backlogs?

3. What is the population of your Metro?

	NO. OF PEOPLE
INFORMAL RESIDENTS	
FORMAL RESIDENTS	
TOTAL POPULATION	

4. Number of Dwellings?

NO. OF FORMAL	
NO. OF INFORMAL	
TOTAL DWELLINGS	

5. Please provide the following macroeconomic indicators relative to your Metro:

INDICATOR	UNIT	
Unemployment rate	%	
Contribution to provincial GDP	%	
Contribution to national GDP	%	

Per capita income	R	
Average spend on municipal basket of services (rate, electricity, water, sewerage & refuse charges)	R	

6. What % of households in your Metro have access to basic services?

SERVICE	% HOUSEHOLDS
Water	
Electricity	
Sewerage	
Refuse	

7. What are your current service delivery backlogs in respect of Capital Expenditure?

SERVICE	BACKLOG (No. of households)	R
Water		
Electricity		
Sewerage		
Refuse		
Roads		
Transport		
Stormwater Drainage		
Housing		
Other		

8. What are your maintenance backlogs as at 30 June 2013?

MAINTENANCE	BACKLOG	R
Water		
Electricity		

Sewerage		
Refuse		
Roads		
Transport		
Stormwater Drainage		
Housing		
Other		

9. Specify any other operating backlogs that you may have:

SERVICE	BACKLOG IN RAN DS
Policing	
Staff Vacancies	
Health	

10. How many years will it take to eradicate the backlogs in service delivery if there is no acceleration in the spend?

SERVICE	NO. OF YEARS
Water	
Electricity	
Sanitation	
Sewerage	
Refuse	
Roads	
Transport	
Stormwater Drainage	
Housing	
Other	

Research Question 1.3: What are the investment requirements to address their service delivery backlogs, rehabilitation and economic growth?

11. What has been your capital expenditure over the past 5 years and the next 5 years on the following services?

SERVICE	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019
Water											
Electricity											
Sanitation											
Sewerage											
Refuse											
Roads											
Transport											
Stormwater Drainage											
Housing											
Other											

12. What is your % spending of capital expenditure on economic, social and rehabilitative projects?

CAPITAL PROJECTS	% SPEND
ECONOMIC	
SOCIAL	
REHABILITATIVE	
OTHER	
TOTAL	100%

13. What has been the growth in key services?

SERVICE	GROWTH %				
	2011/12	2012/13	2013/14	2014/15	2015/16
Water					
Electricity					

Sanitation					
Sewerage					
Refuse					
Rates					

14. Specify any unfunded mandates that you may have as 30 June 2013.

UNFUNDED MANDATE	AMOUNT
Housing	
Health	
Museums	
Libraries	
Other	

15. What are your Total Assets based on historical cost and the replacement cost as at 30 June 2013?

TOTAL ASSETS (historical cost)	R
REPLACEMENT COST	R

16. What was your operating expenditure over the past 5 years and anticipated operating expenditure over the next 5 years?

SERVICE	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019

17. How many staff do you employ?

PERMANENT STAFF	
-----------------	--

TEMPORARY STAFF	
TOTAL STAFF	

Research Question 1.4: To what extent is there a balance between existing resources and IDP requirements?

18. What are the key challenges facing your Metro from a service delivery perspective. Also indicate whether these issues have been included in your IDP and have been costed.

	ISSUE	INCLUDED IN IDP YES/NO	COSTED YES/NO	R
1				
2				
3				
4				
5				

19. What is being done to address these challenges?

	CHALLENGE	ACTION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Research Question 1.5: To what extent is the current level of funding sustainable?

20. Please provide the following key ratios as at 30 June 2013:

RATIO	UNIT	
Gearing	%	
Collection Rate	%	
Debt Coverage Ratio	No. of times	
Days cash on hand	Days	
Debtors Days		
Other		

21. Loans Outstanding - 5 years and projected for next 5 years

SERVICE	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019

22. Borrowing Loans/Bonds Issued to Finance Capital Expenditure – past 5 years and next 5 years.

SERVICE	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019

23. Tariff increases above CPI for the past 5 years.

	%					
SERVICE	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14
Water						
Electricity						
Rates						
Sewerage						
Refuse						

24. Cash and Investment for past 5 years and for next 5 years.

SERVICE	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019

OBJECTIVE 2: DETERMINE WHAT CAN BE DONE TO ADDRESS THE FUNDING GAP

Research Question 2.1: What will the impact of new sources of revenue be on the resource pool of Metropolitan Council in meeting their service delivery targets?

25. Given the funding deficit, what are the preferred ways of addressing same? Please rank the options with 1 being the most preferred option and 5 being the least preferred option.

RANKING	OPTIONS	% INCREASE (where applicable)	R

	Tariff increases : - Electricity - Water - Sewerage - Refuse - Rate		
	Additional borrowings		
	Additional / New Tax – provide details in comment box		
	Development Levies		
	Other – provide details in comments box		

Any comments:

26. Indicate the impact this will have on the backlogs (see Question 9) how many years will this be reduced to?

SERVICE	NO. OF YEARS
Water	
Electricity	
Sanitation	
Sewerage	
Refuse	
Roads	
Transport	

Stormwater Drainage	
Housing	
Other	

Research Question 2.2: How do Metropolitan Council become smart cities and become globally competitive?

27. What are some of the innovations your Metro has looked at in terms of growing the tax base, job creation, attracting new businesses and retaining existing ones?

	ISSUE	ACTION
1	Growing the tax base	
2	Job creation	
3	Retaining existing businesses	
4	Attracting new businesses	

28. Has your metropolitan councils looked at becoming a SMART city? If so, what are some of the issues being considered? Tick off the issues considered. Also rank them from 1 to 9 with 1 being the most relevant to your municipality and 9 being the least relevant.

SMART ISSUES	CONSIDERED (If yes, tick off)	RANKING
Rollout of fibre optic networks		
Smart Metering		
Technology Improvements		
Increasing Productivity		
Cost Rationalisation/Value for Money		
Attracting New Investments		

Reducing of Distribution losses and theft in Electricity and Water		
Supply Chain Management Improvements		
Other – provide details in comment box		

Any comments:

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29. What improved performance could be gained by increased fiscal effort in:

	INCREASED FISCAL EFFORT	IMPROVED PERFORMANCE	%	R
1	Revenue			
2	Expenditure			
3	Productivity			
4	SCM processes			

Research Question 2.3: How do metropolitan council improve business and investor confidence and attract investments that will create sustainable jobs?

30. What is your main impediment to economic growth?

--

31. What was your credit rating as at 30 June 2013?

SHORT-TERM	
LONG-TERM	
SPECIFY RATING AGENCY	

32. What was the audit opinion obtained in the 2012/2013 audit from the Auditor-General? Tick the applicable choice.

1	Clean	
2	Unqualified	
3	Qualified	
4	Disclaimer	
5	Adverse opinion	

33. List the matters of emphasis included in your 2012/2013 audit report:

	MATTER OF EMPHASSIS
1	
2	
3	
4	
5	
6	
7	

INTERVIEW SCHEDULE

QUESTIONS

1. To what extent are all funding sources being maximised by metropolitan council?
2. To what extent is the current level of funding sustainable?
3. What will the impact of new sources of revenue be on the resource pool of metropolitan council in meeting their service delivery targets?
4. How can metropolitan council become smart cities and become globally competitive?
5. How can metropolitan council improve business and investor confidence and attract investments that will create sustainable jobs?



28 March 2014

Mr Krishnaperdash Aswath-Kumar (213573695)
School of Management, IT & Governance
Westville Campus

Protocol reference number: HSS/0125/014M

Project title: Narrowing the municipal funding gap: A metropolitan perspective in South Africa

Dear Mr Aswath-Kumar,

Full Approval – Expedited

In response to your application dated 03 December 2013, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol have been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

Dr Shenuka Singh (Chair)

/ms

cc Supervisor: Professor Purshottama Sivanarain Reddy
cc Academic Leader Research: Professor Brian McArthur
cc School Administrator: Ms Angela Pearce

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