Chapter 1: Background of the Study

1.1. Introduction/Background of the Research Problem

Local government in South Africa plays a significant role in providing infrastructure, being responsible for the provision of essential infrastructure services such as water, electricity, sanitation, roads, and sewage. Essential financing means and powers, on the one hand through intergovernmental transfers and on the other hand through significant own source revenues such as user charges and property tax, generally make South African municipalities sufficiently independent and financially viable, although this strongly differs within municipalities. Nevertheless, infrastructure backlogs throughout the country, especially in formerly neglected areas, are still enormous, indicating the necessity to increase infrastructure spending (Liebig, 2008:2).

The Development Bank of Southern Africa (DBSA) estimates that the total cost of providing all South Africans with basic services amounts to an additional 57 billion rand (equals roughly 5.7 billion euros) for the period from 2005 to 2014. The current macro-economic situation, with annual growth rates at about 5% of GDP, together with a good financial sector performance, create a favourable environment for increasing infrastructure investments in the coming years. Additionally, municipal borrowing is no new phenomena in South Africa, as during Apartheid era it was common for local governments to access capital markets to finance their investments. This, of course, had been restricted to the former privileged white areas that could achieve high standards in infrastructure provision. Due to the transition process, municipal borrowing, however, had largely dried up. It is now on the political agenda to foster and reanimate municipal borrowing for financing municipal infrastructure delivery (Liebig, 2008:2).
The post-1994 democratic South Africa significantly raised expectations of a 'better life for all' (the ANC's popular slogan). But neo-liberal policies (cost recovery, decentralization of responsibilities for financing delivery to local government and cutbacks in intergovernmental grants) adopted around 1996 derailed social reform at least until 2000. Since 2001, however, fiscal constraints have been loosened and a skeletal welfare system has emerged (Ruiters, 2007:488).

Metropolitan areas in the South African context require special consideration in any local governance system as they are generally viewed as engines of economic growth, have high population density and multiple overlapping externalities. The Local Government: Municipal Demarcation Act, 1998 (Act 27 of 1998) and the Local Government: Municipal Structures Act, 1998 (Act 27 of 1998) defined metropolitan areas as large urban settlements with high population densities, complex and diversified economies and a high degree of functional integration across a larger geographical area than a normal jurisdiction of a municipality (De Vries, 2008:52).

Metropolitan government as initially conceptualised was viewed as a vehicle for integrating sprawling black townships, historically white suburbs and city centres into a single municipality and tax base. The 'one city one tax base' campaign largely influenced thinking in this regard. It was felt that an integrated metropolitan city and tax base would ensure a fair distribution of resources. The key considerations were to democratise local government in terms of the broad principles of redistribution, efficiency and non-racialism. In this regard, metropolitan government was seen as a mechanism to cope with the uncoordinated and fragmented growth of large, densely populated areas by providing, managing and delivering services best provided on a wider scale than could be accomplished by individual municipalities (functional role), to consolidate resources for more equitable redistribution, and to prevent and
reduce duplication (strategic role) as a result of fragmented local government (Khan and Maharaj, 1997:156)

One of the current emphases of government is on supplying new infrastructure to meet the backlog in provision of basic services and broaden the service delivery footprint across the country while keeping abreast with growth and migratory patterns within society. It is also acknowledged that insufficient cognisance is placed on the need to account and plan for the ongoing consequences of maintaining the integrity of those assets once developed. The outfall of this situation occurs where the assets intended for the upliftment of the citizen of South Africa can rapidly become expensive liabilities at the municipal level and cause extreme frustration and degeneration of confidence in Government (DPLG, 2008:23).

It has been long recognised in South Africa's democratic movement that basic human needs related to infrastructure - especially basic access to water, sanitation, energy, housing, a clean environment, transport and communications - are vital to many aspects of everyday life: to women's status (at home and in society); to children's welfare; to personal and public health; to the natural environment; and to a better balanced local and national and indeed international economy. Moreover, it is also axiomatic that there are modes of appropriate technology available in South Africa that do not require the kinds of 'megaproject' (like Lesotho dams) often associated with infrastructure but that nevertheless would meet universal coverage of basic needs - if affordable approaches that entail sufficient subsidies and cross-subsidies could be developed. This possibility is growing increasingly remote, however, in a South African environment characterised by growing poverty (and its 'feminisation'), unequal distribution of resources, intensifying fiscal discipline and budget cuts, high interest rates, heightened competition between cities and towns, and - in many cases - a lack of respect by the World Bank and even the African National
Congress government itself for mass social movements, community-based organisations and non-governmental organisations (Bond, 1998:39).

The backlog of service delivery and lack of adequate infrastructure in municipalities, particularly municipalities that serve black people was inherited from the apartheid era, when in 1993, the Koornhof Bills of 1993 established the Black Local Authorities which instituted municipalities in black areas for the purpose of increasing revenue at the expense of service delivery. Defiant campaigns towards municipal service delivery in townships were organised by United Democratic Front (UDF), an organisation which was formed to complement the gap left by the banning of liberation movement. The apartheid legacy left inequities of resource distribution in local governments and Bantustans. During 1980’s, defiance campaigns against black municipalities institutions contributed to the collapse of apartheid, hence the challenges of gross inequities in municipalities (Parnell, 2002:175).

After the 1994, the South African government realised that the democratisation of South Africa is not complete through political freedom, but social and economic factors poses challenges in all three spheres of government. The local government as the government which is closest to the people encountered massive backlogs in terms of service delivery in the context of provision of basic service and acceleration of economic growth. To fulfil government’s constitutional obligation of providing services, municipalities are mandated to provide access to basic municipal services. The Local Government: Municipal Systems Act, Act No. 32 of 2000, Chapter 1, defines basic municipal services, as a service that is necessary to ensure an acceptable and reasonable quality of life and which if not provided, would endanger public health, safety and the environment (Khosa, 1999:8).

Local government, which is responsible for water and sanitation services in terms of the constitution, has undergone a fundamental transformation since 1994. A
White Paper on Local Government (March 1998) was published and a suite of municipal legislation promulgated (including the Local Government Municipal Demarcation Act 27 of 1998, the Municipal Structures Act 117 of 1998, the Municipal Structures Amendment Act 33 of 2000, and the Municipal Systems Act 32 of 2000). The 1994 White Paper focussed largely on the role of DWAF and basic services for households. The new water services White Paper needs to be much more focussed on the role of local government with respect to water and sanitation services for all consumers (urban and rural, domestic and non-domestic), and on the nature of the regulatory, leadership and support role that DWAF and other institutions can and should play (DWAF, 2002:23).

Transformation requires an understanding of the historical role of local government in creating and perpetuating local separation and inequity, and the impact of apartheid on municipal institutions. (White Paper on Local Government, 1997: 5).

Through the Freedom Charter and the Reconstruction and Development Plan (RDP), a practical dispensation has evolved for the delivery of services and specifically the provision of access to basic infrastructure to all households in South Africa. The cornerstone for infrastructure provision and service delivery is still the RDP which clearly articulated the Government’s vision upon which the current policy and legislative dispensation is founded. The RDP sets a vision stating that an “integrated process of transformation must ensure that the country … becomes a prosperous society, having embarked upon a sustainable and environmentally friendly growth and development path…”(Khosa, 2000).

1.2. Statement of the Problem

Since 1994, the South African government has shown a sustained commitment to reducing backlogs in municipal infrastructure in order to redress the inequalities of the past. Budget allocations have grown significantly over years,
and there have been large strides in providing housing and basic services such as electricity, water supply and sanitation. Yet, despite larger budgets for municipal infrastructure and services, there are still backlogs. This sometimes results in tensions between communities and municipalities on the other one hand, and between municipal officials and politicians on the other (DBSA, 2008: 122).

Municipalities face constitutional, institutional and also financial challenges in providing infrastructure in the built environment. These challenges affect the rolling out of infrastructure and municipal services.

It has been established that municipalities are not delivering infrastructure service in a sustainable manner. This is exacerbated by the lack of matching capital operations and maintenance funds. Most of the challenges mentioned above are due to planning, implementation and monitoring systems failure. Whilst national and provincial governments are responsible for creating an enabling policy, financial, and institutional (support) environment for municipal infrastructure, municipalities are responsible for planning, implementing and maintaining municipal infrastructure. This is reflected in the various policies, which support the devolution of responsibility for municipal infrastructure development to the lowest possible level (Khosa, 1999:7-8).

Led by efficiency and democratization reasons, many countries throughout the world have been decentralizing responsibilities for infrastructure provision from the national state to lower spheres of government during the last two decades. In many countries it is now local governments that are responsible to deliver essential infrastructure services such as water, electricity, roads, sewage, and sanitation. It is widely acknowledged in development literature that providing essential infrastructure is crucial not only for enhancing growth, but also for directly reducing poverty. Investments in infrastructure are therefore crucial to spur development. Infrastructure spending in developing, however, is far below
what is needed, and most developing countries experience severe infrastructure backlog (Liebig, 2008:1).

The global trend towards democratization and decentralization has implications for local governance as municipalities increasingly assume responsibility for service provision and an improved quality of life at the local level. The required capacity to respond to this challenge has to be developed particularly in relation to local institutional arrangements, funds and human resources. Furthermore, quite often services are decentralised to the local sphere without the required funding and this impact negatively on the efficient and effective rendering of such functions. These ‘unfunded mandates’ have created intergovernmental tensions and resulted in resource constraints which have in turn raised concerns about the municipality’s capacity to deliver (De Vries, 2008:65). eThekwini Municipality, for example, currently has a large number of non-core functions and services being rendered on behalf of the national and provincial government, namely libraries, health, museums, housing and hostel/townships. The reduction or non-payment of subsidies for these services has resulted in the municipality allocating its own resources to make up the shortfall, which amounted to R546.10 million in 2005 (eThekwini Municipality, 2006:11).

Infrastructure development at a local level is dependent on both programme based and project based activities. Both types of activities are dependent upon adequate resources in terms of skills and funding. Programme based activities refer to those activities which are cyclical in nature, where the processes are repeated periodically. Historically, most local government revenue in urban South Africa was self-generated, mainly through property taxes and the delivery of services to residents and business. This particularly suited white municipalities which had small populations to serve and large concentrations of economic resources to tax. Financial shortfalls were built into local government for black areas. Apartheid regulations barred most retail and industrial developments in black areas. This limited the tax base and forced residents and retailers to spend
most of their money in white areas. Municipalities in black areas were therefore deprived of the means to meet the needs of local residents due to the inequities in infrastructural development at their local municipalities (Khosa, 1999:8).

Most municipalities in the country are experiencing challenges of service delivery backlogs. The provision of infrastructure in most metros and districts still show major backlogs, particularly in the provision of water supply and sanitation. It is evident that most municipalities are characterised by lack or inadequate funding budgeted for service delivery. Primary infrastructure is not build, operated and maintained in a sterile environment or in isolation to other government programmes, nor is such infrastructure isolated or independent of the bigger picture. It is therefore necessary to ensure that there is integration of planning, sector coordination and life cycle sustainability of all infrastructure assets and sustained municipal capability to deliver services (Siyenza Manje Business Plan, 2007:9).

1.3. Aim of the Study

The study seeks to provide a common understanding of the challenges faced by South African municipalities in the context of sustainable infrastructure development and provision of service delivery.

1.4. Objectives

1.4.1. Primary Objective

- To assess the manner in which municipalities utilize MIG in infrastructure development for basic service delivery.
1.4.2. Specific objectives

- Assess the relationship between municipal infrastructure and service delivery.
- To discuss the challenges faced by municipalities in management of MIG funds.
- To assess the trend in MIG allocation and spending patterns from 2007/08 to 2009/10 municipal financial years.
- Identify the causes of infrastructural backlog towards service delivery.
- Analyse the impact of funding in infrastructural development and improved quality of life.
- Discuss approaches of redressing the infrastructural backlog to enhance municipal service delivery.
- To explore the potential opportunities offered by various types of infrastructure on municipal development.

1.5. Research Questions

The study seeks to respond to the following questions as basis for research:

- What is the role of infrastructure in service delivery?
- What is the impact of funding towards the upgrading of infrastructure for service delivery?
- How to address the municipal service backlog?
- Is there technical and administrative skills to municipal employees for managing MIG funded projects?
- What are the root-causes for under-spending and over-spending of MIG funds in municipalities?
- What impact do the patterns of utilizing MIG funds have in community development?
1.6. Research Design

According to Johan and Marais, (1991: 66) the research design is a basic plan for a research involving all issues in planning and executing a project, from identifying the problem through the reporting and publishing the results. The researcher is able to attach the study to a human experience. Research design is a blue print of how the researcher intends to conduct the research.

Guy (1987:10) defined research design as a plan of collecting data to investigate the research hypothesis or question in the most economical manner. The study design focused more on qualitative for social enquiry rather than the quantitative approach which is particularly focused on natural science enquiry.

1.6.1. Choice of Design

The paramount importance of the research design is that it is consisted of three common features, namely, focus; objects (i.e units) for data collection; and also time dimension which is cross-sectional or longitudinal (Miles and Huberman,1994: 53).

With regard to the focus of this research, the researcher pursued a case study design instead of field study design and used a qualitative research method largely instead of quantitative method. The researcher also had respondents who responded to the questionnaire designed. The respondents were, amongst others, the City of Tshwane Metropolitan Municipality (CTMM) municipal officials, the Department of Cooperative Governance and Traditional affairs (COGTA), National Treasury and SALGA. The focus of this research was to understand and describe the phenomenon of the utilization of MIG funds and how best can the municipalities improve their expenditure patterns of these funds to ensure quality service delivery to the benefit of the communities. This made the research design to be descriptive whereby there will be limited calculations whilst mainly
words, pictures and graphs were used to portray, analyse, and interpret the findings. The descriptive research designs enable researchers to describe or present the picture of a phenomenon or phenomena under investigation. It is the opposite of another form of research methodology called Analytical.

This research needed a period of three (3) months which was deemed to be sufficient for data collection and the analysis of such data was done after the collection. Data collection was done through questionnaire and interviews of the representatives of the above mentioned stakeholders. Site visits were also done for purposes of gathering the photographic evidence to support the findings of this study which are discussed in detail below.

1.6.2. Rationale for Design Choice

For the purposes of this research, the rationale behind the research design was that according to the Division of Revenue Act (DORA) the allocation of MIG funds is supposed to develop and improve the livelihood of people in the communities through provision of effective, efficient, quality and sustainable municipal services of which history has shown that the purpose of these funds is not fully realized by the municipalities in South Africa.
Chapter 2: Literature Review

The literature review served as a secondary source for the study. The review was from journals, municipal policies and white paper documents. The documents such as government department policies, legislation and scholarly books also formed part of the study:

2.1. Legislative and Policy Framework

Local government plays a pivotal role in the social and economic development of communities and in enhancing democracy. Section 152 of the Constitution specifies the objectives of local government as: to provide democratic and accountable government; to ensure the provision of services in a sustainable manner; to promote social and economic development and a safe healthy environment; and to encourage the involvement of communities in the matters of local government (National Treasury, 2004:21)

Within the framework of the Constitution, the White Paper on Local Government establishes the basis for a new developmental local government system, which is committed to working with citizens, group and communities to create sustainable human settlements that provide for decent quality of life and meet the social, economic and material needs of the communities in a holistic way.

Metropolitan areas, secondary municipalities and various settlement types in rural areas are identified. The various settlement patterns contains a diversity of communities and households. Their needs are determined by their daily lives and activities. The need for employment creates migration to urban areas, which influences settlement patterns and which will have major impact on local government. Municipalities can play a key role in transforming settlement types, but they are faced with many challenges, like huge backlogs in service infrastructure, spatial segregation and the recognition and development of
linkages between urban and rural settlements. It is stated that that relations between municipalities and the local communities need to be rebuilt, while private sector resources need to be leveraged for development and services delivery (van der Waldt, 2007: 52).

Municipalities have a central responsibility to work together with local communities to find sustainable ways to meet the needs of the community members and improve the quality of life.

Developmental local government requires municipalities to become more strategic, visionary and ultimately influential in the way they operate. In this way they can impact on the lives of their communities. Key development outcomes that must be sought include:

- the provision of household infrastructure and services;
- the creation of inhabitable integrated cities, town and rural areas;
- the promotion of local economic development; and
- community empowerment and redistribution (White Paper, 1998:22)

Policies are needed for local government to have a stronger basis to increase transparency and improve accountability, e.g., indicators and standards for performance measurement, guidelines for internal managerial controls, and expanded role of oversight institutions (Work, 2005:23).

The main post-apartheid infrastructure policies through which we can trace the influence of neo-liberal advice are the Housing White Paper of November 1994 (Department of Housing), the Water Supply and Sanitation White Paper of November 1994, the Urban Infrastructure Investment Framework of March 1995 (RDP Ministry), the Urban and Rural Development Strategies of October 1995 (RDP Ministry), the Urban and Rural Development Frameworks of May 1997 (Departments of Housing and Land Affairs), the Municipal Infrastructure Investment Framework of July 1997 (Department of Constitutional Development),
the *Local Government White Paper* of February 1998 (Department of Constitutional Development), the April 1998 *Policy Paper on Intergovernmental Finance* (Department of Finance), and the August 1998 *Draft Regulatory Framework for Municipal Service Partnerships*. Other papers from the Departments of Water Affairs and Forestry, and Energy and Minerals, are similar in tone and content. A variety of laws and regulations have codified these policies, even if implementation has been uneven. (Notably, many of these can be read as entailing a profound conflict with the South African Constitution, which, amongst other socio-economic rights, confers "the right to have access to...sufficient... water") (Bond and Ruiters, 2000:2-3).

Taken together, these core policy statements of infrastructure and municipal services policy represent the main barriers to provision of basic water, sanitation, electricity and other household and community infrastructure investments, and to the cross-subsidisation necessary to pay for the recurrent costs associated with minimally decent standards of consumption.

Current research in post-apartheid South Africa shows that despite the redistributive promises of the 1994 constitution and the local government restructuring, little has changed with respect to the patterns of inequality created during the years of apartheid. Several studies underline the significance of a swift swing in the national government's development framework in 1996, from the equity-oriented Reconstruction and Development Program (RDP) to the growth-oriented Growth Employment and Reconstruction program (GEAR). While RDP, which was the main feature of the 1994 election platform of the African National Congress (ANC), advocated a lifeline tariff for access of all citizens to the most basic of services, GEAR, a homegrown neoliberal program designed by the South African government in 1996, advocates full recovery of service costs from the users. GEAR prescribes growth through the usual neoliberal list of more freedom of the market, less regulation of international trade, more integration into the global economy and restructuring the state to facilitate those processes. The
adoption of the neoliberal GEAR framework by the post-apartheid government, has perpetuated great divides between different population groups’ access to basic urban amenities: waste collection, water, electricity, shelter and transportation, and has regenerated the casual labour markets created under the apartheid government (Miraftab, 2004:877).

The division and allocation of the total government income (revenue) between the spheres of government and within government is regulated by the Division of Revenue Act, 2009 (DORA). The different spheres of government depend on each other for support in project implementation. In order to implement the principles on cooperative government set out in Chapter 3 of the Constitution, the Intergovernmental Relations Framework Act, 2005 (IGR) was enacted. The Act seeks to set up mechanisms to coordinate the work of all spheres of government in providing services, alleviating poverty and promoting development. It also establishes a line of communication that goes from municipalities to the provinces and directly to the Presidency.

In pursuit of the objectives of the Constitution, local government is obliged to perform certain minimum developmental duties. These duties include to structure and manage municipal administration, budgeting and planning processes, and, in doing so, give priority to the basic needs of the community and promote the social and economic development of the community. The same Constitution requires municipalities to participate in national and provincial development programmes.

Of particular importance to municipalities and municipal entities is Sections 151 to 164 (Chapter 7) of the Constitution, Local Government: Municipal Structures Act, 1998, MSA, the Local Government: Municipal Finance Management Act, 2003 (MFMA) and the Local Government: Municipal Systems Amendment Act, 2003. These Acts form the cornerstones for municipal operations, planning, governance and accountability. More specifically, the regulations of these Acts
promote effective planning, budgeting, revenue and expenditure management, reporting, oversight, social and economic upliftment, universal access to essential services and effective performance management (CTMM, 2010:4).


National and Provincial government must support and strengthen the ability of municipalities to manage their own affairs, exercise their powers and perform their functions through legislative and other measures as highlighted in Section 154 of the SA Constitution. The Municipal Structures Act, the Municipal Systems Act and the Municipal Finance Management Act are legislative measures taken by national government to enable municipalities to perform their powers and functions. Other measures are the Municipal Infrastructure Grants (MIG) and other funds from the Department of Mineral and Energy Affairs to help eradicate the backlogs in infrastructure for roads, water, sanitation and electricity (van der Waldt, 2007:49).

The Housing Act (2007) clarifies the roles of each sphere of government in identifying and managing housing projects and funding. The Act allows for the accreditation of municipalities to administer housing programmes. This arrangement of institutional powers and functions require the funding streams between the different spheres of government to be properly coordinated. Better alignment between housing subsidy, the municipal infrastructure grant (MIG) and the integrated national electrification programme (INEP) would remove the
current obstacles in providing integrated planning for sustainable human settlements (National Treasury, 2007: 64)

The Water Service Act (108 of 1997) established the basic framework within which water and sanitation services would be provided in future. Specifically, the role of local government as the Water Service Authority, the distinction between the Water Service Authority and the Water Service Provider, and the creation of the mechanism of Water Services Development Plans which were set up as a key planning, management and monitoring instrument. From late 1996, starting with an external review of Mvula Trust and culminating in the DWAF Appropriate Practices Conference in East London in March 1999, several evaluations into the water and sanitation service sector were conducted. Chapter 5 of this Act recognises the constitutional role of local government in the provision of water services and also the need for National and Provincial governments to financially support local government through allocation of funds (Water Services Act, 1997).

The first assessment of existing policies confirmed that South Africa has policies to ensure the sustainable delivery of infrastructure and services. The provision of unsustainable municipal infrastructure services therefore could not be attributed to lack of legislation. Further assessments revealed that municipalities do not comply with basic principles for sustainable service delivery which were confirmed during several consultations with municipality.

2.2. Hierarchical Responsibilities for Municipal Infrastructure Service Delivery

2.2.1. National Perspective

The Constitution establishes three spheres of government: national, provincial and local, that are distinctive, interrelated and interdependent. It enjoins them to observe principles of cooperative governance. Amongst others, the national
government perform concurrent functions which include policy-making, legislation, implementation, monitoring and performance assessment. Functions like school education, health services, social welfare services, housing and agriculture are shared between national and provincial government (National Treasury, 2007: 2).

The Department of Provincial and Local Government (DPLG) is the leader of the municipal sector and thus the custodian department of municipal infrastructure. DPLG fulfils an overall municipal infrastructure policy making and implementation support role (including administering the MIG programme), which involves all those activities related to policy development, facilitating cross sectoral coordination and ensuring collaboration across the spheres of government. It is also responsible for putting in place the necessary structures and systems to ensure efficient and effective monitoring, identification of interventions needed, reporting, and auditing.

Whilst it does not get involved in the actual planning and implementation of municipal infrastructure projects, it has an overarching responsibility for coordinating municipal infrastructure policy and implementation thereof. It is also responsible for overseeing the municipal infrastructure activities of all sector institutions and municipal service delivery support structures with respect to municipal infrastructure. It leads the collaboration effort to ensure that the delivery of municipal infrastructure is planned and implemented within a sector wide approach.

According to DPLG (2008), national sector departments (and their provincial counterparts) retain their policy making and regulatory functions in terms of municipal infrastructure. They also retain their constitutional rights to intervene directly in the affairs of municipalities where it pertains to their sector mandate. In addition, each department has specific responsibilities in terms of municipal infrastructure. These responsibilities include the following:
• Develop sector policy and set norms and standards for the sector, which addresses infrastructure development;
• Provide a sector planning oversight role, which includes ensuring alignment between regional / provincial sector plans and the municipality’s sector development plan within the IDP and monitor performance against specific KPI’s
• Provide support to municipalities for implementing municipal infrastructure projects and in ensuring sustainability (this includes, feasibility studies, business plans, procurement of service providers, construction, project related capacity building and reporting);
• Initiate remedial interventions where necessary related to sector specific infrastructure issues;
• Ensure that funds allocated for sector infrastructure are budgeted and spent responsibly towards ensuring the provision of sustainable services (for example ensuring correct choice of technology); and
• Support municipalities to prepare and implement their sector development plan (for example in the case of DWAF, support should be provided to municipalities with the development of their Water Services Development Plan)

National Treasury is responsible to co-ordinate the overall allocation of government’s contribution towards municipal infrastructure through DoRA and monitor financial reporting on revenue related criteria and spending trends. They are also responsible for ensuring that municipalities and sector departments fully understand and operate within the macro economic framework driven by national government. Furthermore, they provide support to municipalities in terms of all financial matters relating to municipal infrastructure.

The Department of Public Works is responsible for developing policy and setting criteria related to poverty alleviation and employment generation through the Expanded Public Works Programme (EPWP) and co-ordinating the EPWP and
collaborating with sector departments where appropriate. Its role in the implementation of municipal infrastructural projects also includes advising and training municipalities on EPWP guidelines and monitoring the municipal compliance to these guidelines. Additionally, it is expected of this department to liaise with municipalities concerning procurement reforms and providing them with support in terms of all financial matters relating to municipal infrastructure (DPLG, 2006:17).

The National Department of Transport plays a largely facilitative and regulatory role in respect of roads and transport. It develops policy and legislation, which is then implemented through provincial departments, local government and a range of public entities. Provincial roads and traffic management are exclusive Schedule 5A provincial functions, while municipal roads, traffic and parking are exclusive Schedule 5B municipal functions. Public transport is a concurrent Schedule 4A national and provincial function and municipal public transport is a Schedule 4B concurrent provincial and municipal function (Constitution of RSA, 1996).

2.2.2. Provincial Perspective

Provinces have the responsibility in terms of section 155 (6) of the Constitution to monitor and support municipalities as well as promote the development of local government capacity to enable municipalities to perform their functions and manage their own affairs. Within this context, a key role player in this process at provincial level is the department responsible for local government which is responsible for coordinating the monitoring and support. The role of provincial departments of local government in terms of municipal infrastructure is to:

- Ensure proper co-ordination between all municipal infrastructure programmes and sector departments at the provincial level;
Monitor the performance of municipalities with regard to infrastructure delivery;
Ensure that planning for regional scale infrastructure is guided by provincial government working collaboratively with municipalities and relevant sector departments;
Ensure that IDPs properly address municipal infrastructure requirements;
Support municipalities to develop their capacity to effectively manage the delivery of infrastructure;
Assist municipalities to establish and maintain programme management systems and functionality of Project Management Units (PMUs); and
Provide technical support and advice as required by municipalities through feasibility, planning, design, tender and construction phases of a municipal infrastructure project (DPLG, 2006: 18).

At provincial level a Premier’s Inter-governmental Forum (PIF) exists which consults on broad development in the province, as well as on the implementation of national and provincial policy and legislation. It also seeks to coordinate the alignment of provincial and municipal development planning and strategic planning. In many development projects, more than one sphere of government may be involved in implementation. Where necessary, the different organs of state may enter into an implementation protocol that describes the role and responsibility of each organ of state; outlines priorities and desired outcomes; and provides for monitoring, evaluation, resource allocation and dispute settlement procedures. The Intergovernmental Relations (IGR) has been set up to facilitate cooperation and avoid legal proceedings between different spheres of government.

Provincial budgets are spent on social services like education; health and social welfare services; economic functions include agriculture and roads; and provincial governance and administration include the legislature, provincial
treasury, local government and housing (National Treasury, 2007: 4). Below are some of the priorities which informed the provincial share of revenues:

- Accelerating housing delivery;
- Upgrading of economic infrastructure, which includes the rehabilitation and expansion of road networks;
- Expanding social welfare services and building stronger partnership with non-governmental welfare organisations;
- Strengthening the education system to ensure further investment in people and the skills needed to sustain and speed up economic growth; and
- Bolstering the health system to ensure an efficient and effective response to people’s health and care needs.

It has been argued that county governments, with their geographic scope and their potential access to broader fiscal resources, should assume a more active service delivery role. It has also been noted that the ability of county governments to expand has been constrained by their governmental structure. In particular, the traditional form of county government--a board of county commissioners--often has been regarded as less capable of responding to the challenges of metropolitan growth and service delivery than county governments led by an elected chief executive or by a professional administrator (Schneider and Park, 1989:349)

2.2.3. Local Perspective

Whilst national and provincial governments are responsible for creating an enabling policy, financial, and institutional (support) environment for municipal infrastructure, municipalities are responsible for planning, implementing and maintaining municipal infrastructure. This is reflected in the various policies, which support the devolution of responsibility for municipal infrastructure
development to the lowest possible level. Infrastructure development at a local level is dependent on both programme based and project based activities. Both types of activities are dependent upon adequate resources in terms of skills and funding. Programme based activities refer to those activities which are cyclical in nature, where the processes are repeated periodically (DPLG, 2008:8).

The tensions between GEAR and the RDP are acutely felt at local level. National government sees municipalities as the main delivery agent for the government’s ambitious (RDP-inspired) development programmes. At the same time, municipalities face tight financial constraints that restrict the capacity of councils to deliver effective services. Municipalities’ ability to borrow (both domestically and internationally) is tightly controlled in an effort to reduce overall government borrowing. The constraints municipalities confront as a result of the macro-economic environment are compounded by a range of structural and systems weaknesses, many inherited from the former regime, that have undermined the ability of the new councils to fulfil their development mandate (Pycroft, 1999).

Consequently, South Africa’s monumental developmental backlog remains largely unchanged. This article explores South Africa’s effort to restructure and reorganize local government. The article analyses the new municipal legislation that has emerged from the March 1998 White Paper on Local Government assessing whether the legislation can provide the necessary framework to overcome the structural and systems weaknesses of the existing form of local government. The extent to which the proposed municipal restructuring can be seen as part of the broader strategy to restructure South Africa’s public administration to complement the GEAR macro-economic strategy and position South Africa within the global economy is also important (Pycroft, 1999).

Metro and District Municipalities are responsible to co-ordinate the drafting of the comprehensive infrastructure plan and provide an oversight roll with regard to
implementation. Local Municipalities are responsible for the implementation and monitoring of project implementation.

Communities cannot develop in isolation and the process of integrated development planning strives to systematically and transparently find acceptable solutions within given time frames regarding allocating resources to service delivery.

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<th>Entity</th>
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<tr>
<td>DPLG</td>
<td>Co-chair of City Budget Forum.</td>
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<td>Exercises financially accountability for the MIG-CITIES programme.</td>
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<td></td>
<td>Administration of grant transfers.</td>
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<tr>
<td>National Treasury (NT)</td>
<td>Oversees MIG-CITIES policy framework.</td>
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<td>Administrators legislation that has implications for the MIG-CITIES programme, notably</td>
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<td></td>
<td>Convener and co-chair of BDRF.</td>
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<td>Reviews city submission and performance matrix, in consultation with sector</td>
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<td></td>
<td>Coordinates monitoring.</td>
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<td>Incorporation of MIG-CITIES conditions and transfers into DORA.</td>
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<td></td>
<td>Ensure that municipalities observe and operate within the macroeconomic framework.</td>
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<tr>
<td>Department of Water Affairs and Forestry (DWAF)</td>
<td>Policy making, including the setting of norms and standards for water services</td>
</tr>
<tr>
<td></td>
<td>Planning oversight (regional and water service development plans).</td>
</tr>
<tr>
<td></td>
<td>Monitoring of water sector related conditions and progress in meeting targets.</td>
</tr>
<tr>
<td></td>
<td>Initiating intervention related to water services activities.</td>
</tr>
<tr>
<td>Department of Public Works (DPW)</td>
<td>Set criteria related to poverty alleviation and employment generation.</td>
</tr>
<tr>
<td></td>
<td>Advise municipalities on intensive labour based processes, systems, techniques and</td>
</tr>
<tr>
<td></td>
<td>Approve or disapprove proposals.</td>
</tr>
<tr>
<td></td>
<td>Liaise with municipalities on procurement reforms.</td>
</tr>
<tr>
<td></td>
<td>Monitor performance in relation to employment generation, labour based technology and</td>
</tr>
<tr>
<td></td>
<td>Labour relations.</td>
</tr>
<tr>
<td></td>
<td>Identification and ring-fencing of existing INEP allocations to eligible municipalities.</td>
</tr>
<tr>
<td></td>
<td>Identification of existing contractual commitments to Eskom in the jurisdictions of</td>
</tr>
<tr>
<td></td>
<td>Policy making, including the setting of norms and standards.</td>
</tr>
<tr>
<td></td>
<td>Planning oversight.</td>
</tr>
<tr>
<td></td>
<td>Monitoring of energy sector related conditions and progress in meeting targets.</td>
</tr>
<tr>
<td>Department of Transport (DoT)</td>
<td>Policy relating to municipal roads and municipal transport.</td>
</tr>
<tr>
<td>Department of Housing (DoH)</td>
<td>Monitoring of the performance of municipalities in the provision of roads and</td>
</tr>
<tr>
<td></td>
<td>Coordination of policy and planning of housing development and the provision of</td>
</tr>
<tr>
<td></td>
<td>Synchronisation between the MIG-CITIES programme and the Housing Fund,</td>
</tr>
<tr>
<td>Department of Sport and Recreation South Africa (DSRSA)</td>
<td>Policy relating to sports and recreation, including establishment of sector targets by</td>
</tr>
<tr>
<td>Provincial Governments</td>
<td>Engagement with individual municipal investment plans as part of negotiation of</td>
</tr>
<tr>
<td></td>
<td>Performance matrix.</td>
</tr>
<tr>
<td></td>
<td>Monitor conditions applicable to this sector, by municipality in terms of performance</td>
</tr>
<tr>
<td></td>
<td>a) Ensuring that municipal IDPs combine to form a viable development framework across</td>
</tr>
<tr>
<td></td>
<td>the Province, and are vertically integrated with the Provincial Growth and Development</td>
</tr>
<tr>
<td></td>
<td>b) Ensuring that IDPs give priority to the basic needs of communities and promote the</td>
</tr>
<tr>
<td></td>
<td>c) Promoting the development of Local Government capacity to enable municipalities to</td>
</tr>
<tr>
<td></td>
<td>d) Providing technical advice to municipalities on the MIG-CITIES programme.</td>
</tr>
</tbody>
</table>

Table 1: Roles of National and Provincial Governments (source: MIG-Cities, 2010:48-49)

Local municipalities use integrated development planning as a tool to plan future development in their areas in a sustainable manner. Integrated development planning is a process by which the planning efforts of different spheres and
sectors of government and other institutions are coordinated at local government level. It combines the various economic, social, environmental, legal, infrastructural and spatial aspects applicable to development or provision of services and infrastructure and allocates the necessary budget. This takes place in a way that enhances development and provides sustainable empowerment, growth and equity for the short, medium and long term. Integrated development planning and the product of this process, the Integrated Development Plan (IDP) is a constitutional and legal process required of municipalities. Planning in general and the IDP in particular, is a critically important management tool to help transformation, growth and development at local government level. It is an approach to planning that involves the entire municipality and its citizens in finding the best solutions to achieve good long-term development (CTMM IDP Review, 2010:3).

2.3. Principals Governing the Delivery of Sustainable Municipal Infrastructure

According to (DPLG, 2007) the Department of Provincial and Local Government (DPLG) has developed key principles governing the delivery of sustainable municipal infrastructure and are as follows:

a) Levels of sustainability determined by local government: The ability of Government and municipal government is limited by its resource base. As a constitutional principle, a municipality cannot exceed the bounds of its financial and institutional capacity in general. It implies that municipalities must know its capacity limits and must plan, implement, operate and maintain municipal infrastructure services accordingly. In other words, only local government can determine where its levels of affordability and sustainability lies and only local government can be responsible for the consequences of exceeding these limits.
However, infrastructure service delivery should consider household affordability in terms of service level policies and within the context of targeted financial support for the poor by Government.

b) Partnering in infrastructure service delivery as a mechanism to assist municipalities to fulfil their obligation to the communities. Municipalities should through the process provided for in legislation, assess its own capabilities in rendering the infrastructure services and the most appropriate institutional mechanisms to be used to provide financial sustainable services.

c) Integrated development planning though which local infrastructure needs is aligned with national and provincial objectives: Infrastructure provision and municipal service delivery must be integrated through all associated activities, projects and programmes.

d) Planning for infrastructure, delivery, operating and maintaining municipal infrastructure services must be a people driven process. It recognises the political, institutional and political dynamics and differences in all communities. Projects must be identified within the context of national and local planning and budgeting frameworks which implies spatial integration and alignment of sector strategies.

e) Maintenance and operations of infrastructure throughout the infrastructure. The development of infrastructure services should be properly planned and managed throughout the infrastructure life cycle (from planning to disposal) and would necessitate activities at a local level to include Asset management policies, strategies, plans and systems.

f) Local sector priorities and objectives informed sector master planning: The sector master plans provide a national/ regional / local overview of status of service delivery, priority areas to be addressed with regard to a particular
sector with the objective of providing adequate information to assist municipalities with decision making in infrastructure investment planning.

g) Appropriate Public Control/Ownership: A municipality may not transfer ownership or permanently dispose of a capital asset needed to provide a basic level of municipal service. The public ownership of assets will be preserved.

h) Setting a basic level of service: Requirements for a safe and healthy environment determine the minimum/appropriate levels of services to be provided through infrastructure provision and service delivery. Service delivery and infrastructure provision practices cannot lead to a degradation of the environment. It must be environmentally sustainable and contribute to improved individual and community health. It is necessary to set basic service levels in terms of norms and standards set by sector departments which apply nationally.

i) The poor is the primary target for Government support for basic infrastructure through dedicated conditional grant mechanisms. Government support is aimed at providing services to the poor through basic or appropriate infrastructure and funds will therefore be targeted to reach them. The grant mechanisms are:

- Eligible beneficiaries: Government cannot afford to subsidise local inefficiencies and households who can afford to pay for infrastructure services. Targeting problems can be overcome with appropriate cost recovery policies and mechanisms.

- Efficiency and optimisation: Government support must be used to provide the greatest possible improvement in access to basic services at the lowest possible cost. This would imply that there should be an appropriate selection of infrastructure service levels.
- Equitable access to funding: The mechanism for allocating and distributing Government support must provide for equitable access to such support by the poor in order to make uniform progress in closing the infrastructure provision gap.

- Pledging of grant funds to secure loan finance: A municipality may, by resolution of its council, provide security for any of its debt obligations and undertaking to effect payment directly from money or sources that may become available. These principles should be read with Chapter 6 of the Municipal Finance Management Act.

- Predictability and transparency: Government support should reflect predictability and transparency in order to allow for municipalities to plan and budget in terms of a secure resource base. Predictability and transparency also implies that government actions should be aligned and work towards the broader national development goals. Horizontal integration and alignment of sector policies and support strategies are important over the medium term.

- Maximise local economic spin-offs: Government support will be managed to ensure that the local economic spin-offs through providing infrastructure are maximised. This includes employment creation and the development of enterprises. It is however the responsibility of each municipality to decide on the cost and benefits of generating maximum local benefits.

\[\text{Infrastructure service provision should be fair and equitable: Individuals or groups of individuals should not be discriminated against and all people should be treated equally within agreed policy and strategy frameworks at local level. The constitution states that every South African has a right to basic services which includes farm land.}\]
k) Service delivery and infrastructure must demonstrate a developmental impact: In providing infrastructure and services, municipalities must ensure that the developmental impact of such ventures is central to the planning and implementation thereof. Infrastructure provision and service delivery must directly contribute in an effective and efficient way to social and economic development. Municipalities have a key role in creating a conducive environment for investment through provision of infrastructure and quality services.

However, Government investment across the space economy must be guided by the principles contained in the National Spatial Development Perspective (NSDP). This means that whilst investment in basic infrastructure and services should occur across the board, when it comes to economic fixed capital formation, limited resources should be applied strategically and investment should go into areas that will yield the highest impact in terms of economic output, employment creation and poverty reduction.

l) Accelerating empowerment through infrastructure delivery: The introduction of approaches such as preferential procurement and delivery strategies such as gender mainstreaming, youth and disabled which promotes accelerated empowerment.

2.4. Planning Processes and Community Participation

Participation is a social and political activity that requires awareness, organization and mobilisation for it to become an effective, reliable and predictable mechanism of decision-making and action. Individuals in key positions and voluntary organisations often play a crucial role in activating, initiating or mobilising public participation in issue-specific activities, interest-based initiatives or institutional mechanisms of governance. This phenomenon is
variously referred to as change agents, catalysts, windows of opportunity, or leadership (Work, 2005:15).

Participation is not only about drawing all stakeholders in a policy, programme or project together to assure its appropriateness and assist in its implementation. Participation processes must address the differential costs and benefits of privatisation and be prepared to host conflicts over differing interests that are at stake. It is easy to demonstrate that the primary risk associated with municipal infrastructure privatisation is that low-income people will receive substandard, unaffordable services (Hemson, 1997: 8).

Before the 1950s, it was taken for granted that the planner was a professional whose expert advice reflected community interests. Administering development regulations and preparing the master plan for land use were principal responsibilities of most planners. That role changed with the development problems brought about by rapid economic growth after World War II and the increased funding of planning provided by Federal Housing Act of 1954. Consequently, more planners were hired, increasingly sophisticated planning methods were applied. These changes that occurred in the 1950s and the 1960s are thought to have fundamentally altered the way local government planning is carried out: (1) the emergence of functional planning; (2) citizen participation; and (3) the dispersion of decision-making process (ICMA, 2000:140).

A case of a poor South African township, Ivory Park, was successful in convincing its residents to pay for municipal services. Most families in the township live in informal settlements and formal sector unemployment is very high, although there is extensive informal business activity. Given this economic context, a low rate in payment for municipal services among residents might be expected. In fact, payment for municipal services increased rapidly after municipal elections, from 3.2 percent in June 1996 to 80 percent in August 1997. Such performance stands in stark contrast to the dismal payment rates in many
other townships, where boycott of service payments has prevailed for almost a decade. The high payment rate in Ivory Park can be attributed to the participation of various stakeholders in the determination of their service needs, which resulted in improved service delivery in the township. The participation of stakeholders is facilitated through their representation on local committees and through consultations during development plan formulation at the Johannesburg Metropolitan council level (Work, 2005: 6).

Functional or single-purpose planning has actually been around for decades, but it did not become very noticeable until the passage in 1956 of the Interstate Defence Highway Act. Although adopted by Congress without a planning requirement (that was added six years later), the “interstates” soon made an impact on communities, both in the form of bypasses that went around the smaller places and the urban links that began to bifurcate the larger, central cities. Although a continuing, cooperative, and coordinated planning process was mandated and funded by Congress beginning in 1962, the program still involved functional planning, albeit on very large scales. The geographic scale was the metropolitan area. The data-base scale consisted of large quantities of land use and transportation behaviour information (ICMA, 2000, 140).

The importance of participation in effective delivery of local public goods is well recognised, and it is central to community provision of service. Without local participation, projects often either foundered at the implementation stage or were not maintained and failed to produce sustained benefits. There are risks of exploitation of the poor and of low labour productivity under the banner of self-help and voluntarism. Participatory processes take time and often require the skill of professional intermediaries who interact with formal sector agencies, explain technology options, and help resolve disputes. Special interests, local elites, or powerful minorities can capture the process to the exclusion of others. User groups and other interested parties need to be consulted by the public officials
and technical specialists who usually lead the process and mechanisms for conflict resolution are necessary (World Bank, 1994:76-78).

Similarly, wastewater collection and treatment facility grants were provided by the federal government several years before watershed planning requirements were mandated and funded. The same was true of planning for health facilities, recreation facilities, and other essential public services. The consequence was the establishment of functional planning staffs (health services planning, transportation facilities planning, park planning and so on) that complemented the comprehensive planning staff that had existed. These functional planning staffs have been oriented towards service delivery or the construction of projects rather than overall community goal setting and implementation. At about the same time, citizens in many states were complaining about controversial highway projects, especially people in central cities in the states that were aggressively implementing the Interstate Defense Highway Act. Their organised political pressure produced a Federal Highway Administration regulation requiring that public meetings be held before project construction began (ICMA, 2000:140).

Both functional and comprehensive planning brought forth new information on the development issues faced by local governments. In addition, increased citizen participation brought multiple lay perspectives to bear on the evaluation of these issues. With more information to process and multiple constituencies to respond to, local governments found decision making more complicated. Citizen groups, meanwhile, took advantage of information available and became skilled in building and presenting their cases to local officials. Furthermore, citizen group coalitions were created in response to single issues and then were dissolved as issues were resolved. The legacy of more planning and citizen participation is a pluralistic decision-making process in local government (ICMA, 2000:141).

Directed by the MSA the City of Tshwane Metropolitan Municipality (CTMM) actively seeks community participation in matters affecting the community. The
MSA in Chapter 4 deals with community participation. It stipulates that a municipality must encourage and create conditions for, the local community to participate in the affairs of the municipality, including in the preparation, implementation and review of its IDP as well as the preparation of its Budget. The CTMM has established participation of the community through a ward system of which there are 76 wards within the municipal area. The central role of ward committees is to facilitate local community participation in decisions which affect the local community; to articulate local community interests; and to represent these interests within the municipal governing structures. The CTMM's participation process comprises:

- Conducting zonal planning meetings;
- Specific ward Izimbizo; and
- Participation sessions and comments on the draft IDP and Budget.

The Process Plan indicated, among others, that the Zonal planning sessions be conducted in August 2009 in order to facilitate community inputs into the planning process of the IDP and the Budget. In order to facilitate meaningful developmental discussions, the Office of the Executive Mayor and City Manager together with the City Planning Development and Region Services Department divided the City into development programmes. Development programmes are homogeneous areas that require similar interventions. The Speaker’s Office arranged two councillor briefing sessions in order to prepare the ward councillors for the respective ward planning sessions which would in turn be inputs into the zonal planning sessions. The zonal meetings were arranged for after hours during the week and over weekends (CTMM IDP, 2010:13).

In conclusion, citizen participation in budgeting in the municipal sphere is easier than in the national and provincial spheres, because of the complexity of the budget and budgeting issues in the latter two spheres, as well as the size of the country. The budget document becomes a more effective tool of public
accountability than in the national and provincial spheres because of active
citizen participation in the municipal sphere through activities such as residents
attending council meetings to express their views and municipal managers and
council members presenting budget proposals to citizen forums and obtaining
responses directly from voters (van der Waldt, 2007: 187)

2.5. Essential Municipal Services

2.5.1. Water and Sanitation

The Reconstruction and Development Programme (RDP) adopted by the
Government of National Unity is more than a list of the services required to
improve the quality of life for the majority of South Africans. It is not just a call for
South Africans to unite to build a country free of poverty and misery. It is a
programme designed to achieve this objective in an integrated and principled
manner. The lack of basic services such as water supply and sanitation is a key
symptom of poverty and underdevelopment. The provision of such services must
be part of a coherent development strategy if it is to be successful. The way in
which South Africa's limited water resources are used must also be part of such a
development strategy. The creative management and use of water will be vital to
assure the RDP’s objectives of eradicating poverty, promoting sustainable
economic and social development (DWAF, 1994:7).

One of the most crucial functions of every municipality in South Africa is the
administering of potable water and suitable sanitation services to all its customer
within a municipality’s area of responsibility. In a large municipality, the
department responsible for water and scientific services usually has to see to a
constant supply of safe potable water and related water supply services to all the
water users and consumers in the specific municipal area. Some specific
functions of such a unit might include the management and control of water,
waste water operations and services, governance of water regulations, planning
and tariff setting for the municipal area and the planning and construction of minor works (van der Waldt, 2007:156)

This inequity in access to water has a simple origin. The public funds available for water supply development have been invested mainly to assure that bulk supplies are available to those who can afford to exploit them. This has benefited farmers who can install pumps to take water from rivers to irrigate their fields, and municipalities which build plants to extract and purify water to sell to their citizens. Poor communities, for lack of both funds and organisation, have not been able to take advantage of their "right" to primary water supplies (DWAF, 1994:9).

The aspect of sanitation warrants more clarification. It means the collecting and disposing- in a hygienic manner- of waste, including human excreta, household waste water and rubbish. If this is not done, neighbourhoods become dirty and people fall sick. Unfortunately, South Africa’s sanitation problem has three main causes:

a) The fact that many people do not realise that they need to wash their hands after defecating or changing nappies;

b) The fact that many use the outdoors as a toilet; and

c) The fact that there is severe lack of sanitary infrastructure (no readily available toilets with water for hand washing) (South Africa, 2002:2)

The period from 1994 to 2001 in the water services sector can be broadly split up into three different stages. The first, from 1994 to 1997, saw the launch of the new government’s RDP programme, and the presidential lead projects. This was a period characterised by an emphasis on delivery and rapid roll-out of the government Community Water Supply and Sanitation (CWSS) programme as well as service provision through the national housing subsidy mechanism and the Consolidated Municipal Infrastructure Programme (CMIP)(DWAF,2002:13).
The second period is characterised by the establishment of permanent local government structures and the introduction of the government’s Free Basic Water (FBW) policy that coincided with the local government elections in December 2000. Sustainability is still a key concern, but with the introduction of FBW, this now translates into designing schemes that are affordable to the local municipality, rather than the household. The focus has shifted away from “communities” towards local government and delivery is increasingly being implemented by local government. Due to the changed playing field, many of the lessons learnt from late 1996 to the Appropriate Practice conference in March 1999 are not directly relevant in their original form, but need to be adapted to the new context. Emphasis on rapid delivery still remains, increased attention is being paid to creating sustainable schemes, with local government the key focus. In other words, the key question has become: how can local government deliver sustainable services to its residents effectively, efficiently and equitably? It should be noted that very little attention has been given to date to free basic sanitation services (DWAF, 2002:13).

There have been two main challenges facing the water services sector since 1994: addressing the service backlog, and creating technically and financially sustainable water supply schemes. While the first period emphasised delivery, the second highlighted the merits of sustainability through demand-based delivery, increased cost-recovery and delegated management. With the end of cost-recovery from users (for small basic amounts of water) there is a need to re-examine the implications of this for sustainability and how best to achieve it under the current policy framework (DWAF, 2002:13).

Water and sanitation services are presently funded through a number of different mechanisms including direct DWAF financing of schemes (both operating and capital), a consolidated municipal grant (CMIP which is to be transferred into a Municipal Infrastructure Grant), the equitable share subsidy, RSC levies and user
charges. DWAF’s support to WSPs has focussed on meeting basic needs and operating existing schemes. It is proposed to rationalise funding streams in terms of the programme outlined in DORA (2002) which will pose some challenges to the water and sanitation sector, especially in the transition (DWAF, 2002:22).

Water is central to development. A small amount is essential for people’s physical survival. Beyond this, a limited amount is needed for basic personal hygiene and household uses. In more affluent communities, water is used as a "luxury", for gardens and swimming pools. In a similar manner, basic sanitation services are required to ensure personal and public health. Many communities desire and demand the convenience and comfort which higher levels of sanitation service can provide. The contribution of water and sanitation services to development is of course far wider than their impact on households. Water is a key factor of production in manufacturing industry, power generation, mining and agriculture. It sustains the natural environment which is why it is not only the quantity of water available which is critical but also its quality and its fitness for use. For this reason, both sanitation services and economic activities; which can pollute water and render it unfit for use must be controlled (DWAF, 1994:7).

The improvement of sanitation is everybody’s business. Role-players include communities and households; community-based contractors; local, provincial and national governments; the private sector; and non-governmental organisations (NGOs). Municipalities must provide access to basic services, including sanitation and water, and the national and provincial governments must support municipalities with suitable legislation and other measures. Households and communities are responsible firstly for their own health, a clean environment and improved water and sanitation. Incorrect hygiene practices can jeopardise their own health and the health of specific municipal community and the nation (van der Waldt, 2007: 156).
Providing improved toilets is one part of the solution. At the same time, there has to be improved community knowledge of health matters, improved hygiene and greater community participation in sanitation programmes. Government has a constitutional responsibility to ensure that all South Africans have access to adequate sanitation and sufficient information about the establishment of good sanitation practices.

A summary of the water schemes and assets that are supplying the City of Tshwane municipality’s five (5) regions is in table 2 below:

<table>
<thead>
<tr>
<th>Water Supply Infrastructure</th>
<th>Regions of the City of Tshwane</th>
<th>Southern</th>
<th>Central</th>
<th>Eastern</th>
<th>North East</th>
<th>North West</th>
<th>Outside of Tshwane</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reservoir</td>
<td>Number</td>
<td>24</td>
<td>36</td>
<td>28</td>
<td>15</td>
<td>23</td>
<td>7</td>
<td>133</td>
</tr>
<tr>
<td></td>
<td>Total capacity (l)</td>
<td>198 350</td>
<td>630 746</td>
<td>311 155</td>
<td>988 720</td>
<td>269 925</td>
<td>143 200</td>
<td>1 650 496</td>
</tr>
<tr>
<td>Water towers</td>
<td>Number</td>
<td>8</td>
<td>1</td>
<td>5</td>
<td>8</td>
<td>4</td>
<td>3</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Total capacity (l)</td>
<td>3 742</td>
<td>0</td>
<td>1 797</td>
<td>2 880</td>
<td>1 336</td>
<td>888</td>
<td>10 423</td>
</tr>
<tr>
<td>Pumping Stations</td>
<td>Number of pumps</td>
<td>35</td>
<td>8</td>
<td>32</td>
<td>28</td>
<td>7</td>
<td>12</td>
<td>122</td>
</tr>
<tr>
<td></td>
<td>Pipeline (bulk and network)</td>
<td>Length (m)</td>
<td>1 373 129</td>
<td>1 362 795</td>
<td>2 281 706</td>
<td>1 165 706</td>
<td>2 257 402</td>
<td>314 518</td>
</tr>
<tr>
<td></td>
<td>Pipeline networks</td>
<td>Length (m)</td>
<td>1 250 908</td>
<td>1 225 694</td>
<td>2 110 942</td>
<td>1 050 614</td>
<td>2 188 803</td>
<td>167 258</td>
</tr>
<tr>
<td></td>
<td>Pipeline bulk</td>
<td>Length (m)</td>
<td>121 469</td>
<td>136 777</td>
<td>164 591</td>
<td>100 942</td>
<td>65 354</td>
<td>142 657</td>
</tr>
<tr>
<td></td>
<td>Pipeline schematic</td>
<td>Length (m)</td>
<td>752</td>
<td>324</td>
<td>8 173</td>
<td>5 210</td>
<td>5 215</td>
<td>4 603</td>
</tr>
</tbody>
</table>

Table 2: Table indicating a global summary of City of Tshwane’s water supply *(Source: IMQS, Nov 2007)*

### 2.5.2. Electricity

The electrification of households in historically disadvantaged communities and the provision of free basic electricity (FBE) have been the two priorities of government policy in the electricity sector. The electrification of over 3,5 million from 50 percent to 68 percent of all households in the first decade of democracy is a significant step towards realising the basic rights and improving the quality of South Africans. Electricity brings immeasurable benefits to human life. With electricity comes lighting, cooling, heating and cooking. Electricity also facilitates communication, transportation and production. The energy sector thus has both
economic and social functions in that it powers productive activities and also provides basic energy services for households. Government aims to eliminate electricity backlogs by 2012 (National Treasury, 2004:142-143).

Next to the availability of potable running water, electricity is the second most important basic service that a developing country needs to improve the quality of life for all its citizens. eThekwini Electricity, for example, is a licensed electricity distributor of the eThekwini Municipality in the Durban area, on the east coast of South Africa. It purchases approximately 10 000gWh of power annually from Eskom at 275 000V. It transform and redistributes this power to approximately 550 000 customers, ranging from the large sophisticated customer supplied at 132 000V to the rural and peri-urban informal communities supplied at 230V. It operates under the Electricity Act of 1987 and its executive policies are determined by the eThekwini Municipality and the National Energy Regulator of South Africa (Durban, 2006a)

The candidates for municipal electricity authority discretion are electrification capital subsidies and free basic electricity operating subsidies. Decentralised decision-making on these matters fits well with the concept of developmental local government. Government has already put in place some of the fiscal and inter-governmental components necessary to support this system (the equitable share grant for free basic services) and, if existing proposals are adopted, will soon put the remaining components into place (the consolidated Municipal Infrastructure Grant or MIG). By institutionally separating electricity authority functions (the allocation of capital and operating subsidies) from electricity service provider functions (the deployment of such subsidies to provide access to electricity through grid or off-grid technologies) government can also create pressure for competition and innovation between service providers to serve remote rural areas. By integrating decision-making on capital and operating subsidies within one institution (the local municipality)(National Treasury Report, 2005: 13).
The electrification programme is supported by government’s programme to provide free basic electricity/energy to poor households. The free basic electricity allocation of 50kWh per month per household is sufficient for basic functions, such as basic cooking, lighting and ironing. Municipalities have applied different free basic electricity/energy approaches. One is a blanket approach, which involves providing the stated amount of free basic electricity to all households having access to infrastructure. The other is a targeted approach, which involves distinguishing between different types of households and providing free basic electricity to the identified poor only (applied in the City of Cape Town and the City of Tshwane (from July 2007). Municipalities develop indigent registers to assist them in applying the targeted approach (National Treasury, 2008:120).

Although a number of stakeholders have requested that budget transfers for electrification and Free Basic Electricity (FBE) be made directly to service providers, such as Eskom, it is important that a clear distinction be made between a service authority and a service provider. Transfers from the National Treasury are made to municipalities in acknowledgement of their service authority roles, as contained in the Constitution. Appropriate service delivery and funding agreements need to be put in place between municipalities and Eskom. Accordingly, municipalities will be required to make funds available to Eskom for FBE in its municipal boundary in line with a municipality’s integrated development plan (IDP), indigent policy and affordability constraints (National Treasury, 2004:144).

The meagre electricity consumed by low-income households, i.e., about 3% of the total, comes at a high price in relation to the very low-cost supply of power to large corporate consumers, particularly the mines and mineral smelters. Corporations have enjoyed electricity at roughly one quarter of the price that low-income families in rural area have paid. Hence, even after more than one million households were added to the electricity grid during 1990s, many could not
afford to maintain consumption at levels sufficiently profitable for the state electricity company, relying instead for lighting, cooking and heating on paraffin, notwithstanding burn-related health risks; coal, in spite of high levels of domestic and township-wide air pollution; and wood, whose consequences for deforestation are severe. Women are far more adversely affected by the unaffordability of the electric power sources, as well as in expending time and energy to obtain alternative energy sources (Bond, 2002:38). Hence this study has further investigated on the role played by the City of Tshwane in the supply of electricity to communities particularly wherein this is funded by MIG.

2.5.3. Housing

Land use planning by local government has gradually evolved into a more sophisticated framework, including not only the administration of zoning ordinances and subdivision regulations but also growth management techniques that link land use controls to operating budgets and capital improvements programs. As land use and comprehensive planning have evolved, new opportunities have emerged to make housing a more integral part of the total community development process. Because housing depends on infrastructure-transportation, public facilities, utilities- any improvement in comprehensive development planning provides new opportunities for housing in optimum locations relative to future city development (Nenno & Brophy, 1982:11).

An important objective of any recognisable municipality with some standing is to facilitate and actively participate in effective and efficient housing delivery and the creation of sustainable human settlements in its area of jurisdiction. This is with a view to ensuring that all its citizen have equal access to housing opportunities, which includes secure tenure, basic municipal services and support in achieving incremental housing improvement in living environments, with the necessary social, economic and physical infrastructure. In the larger municipalities, the organisational unit responsible for housing usually forms part of the unit allocated
with the macro task of development of planning in the municipality administration (van der Waldt, 2007: 155)

Sorting out the various components of housing is not easy. Glenn Beyer characterizes housing as both “a highly complex product” and “an economic and social process.” As a product, it is “bulky, durable, and permanent.” In the economic system, Beyer points out that builders, materials manufacturers, and bankers rely on housing for their livelihoods and housing programs provide employment opportunities. Further, “housing has highly significant social implications because it provides shelter for our basic unit— the family” (Nenno & Brophy, 1982:2)

The Constitution establishes housing as concurrent competency of national and provincial governments. The national Department of Housing is responsible for setting up and facilitating a sustainable national housing development process. It does this by developing policy and strategy, determining delivery goals, monitoring and evaluating performance of the housing sector. It also provides capacity building and implementation support to provincial and local government, and establishes funding framework for the allocation of provincial housing budgets (National Treasury, 2007:64). The extent to which the spending is translated into the delivery of housing is not clear, as sometimes transfers are made to municipalities as prepayments in anticipation of housing construction. The Division of Revenue Act (2004) requires that provinces should reconcile the amounts actually spent by municipalities with transfers over the past years (National Treasury, 2004:121-122)

Even though the activities of local authorities directly associated with the provision of council housing and its management are financed through the housing revenue account mechanism, the account interlocks with the general rate fund of a local authority in two ways. The first is through the rate fund payments (or subsidies) which have to be made to the method of calculating the
interest charges which flow from the capital expenditure on housing. The second point is that housing generates the largest demand for capital, so much so that it overshadows all other borrowing requirements in the district authorities. Housing capital debt is increasing rapidly and probably more quickly than other debt. The relative and growing size of the housing debt financed at high interest rates is pulling up the average consolidated loans fund interest rates. Because the average rate is charged to all accounts of a local authority this averaging process provides hidden subsidy from the rate fund to the housing revenue account (Hepworth, 1980:179).

While South Africa’s rate of delivery of subsidised housing is unparalleled internationally, the supply of low cost housing has not met the demand, which has resulted in rising prices. This is evident in rising property prices, which have doubled and in some cases trebled since 1998 and increased prices in building materials over the same period. Capacity constraints in both the low income housing construction sector and at municipal level are preventing the growing housing backlog from being eradicated. The process for registration and approval alone takes up to 59 months, while the timeframe for actual housing development has increased from 5 to 19 months. Broad sector and market trends impact on the successful creation of sustainable settlements. In the current market, there is a clear lack of affordable housing units, particularly units smaller than 80m² (National Treasury, 2007:69). Provincial governments promote, coordinate and implement housing programmes within the framework of national policies. Provinces approve housing subsidies and projects and provide support to municipalities for housing development (National Treasury, 2004, 120).

A greater role for municipalities in housing delivery could result in faster housing delivery. For municipalities to play a more prominent role in the development of integrated sustainable housing settlements, the planning of housing function needs to be done at municipal level. This will allow for better more localised needs analysis; improved land identification; zoning and procurement; facilitate
integrated and inclusionary residential areas; improve planning and procurement of public facilities; encourage private investment; improve the supply of bulk infrastructure and services. It will also lead to greater accountability at local level and widen options for cross-subsidisation and funding (National Treasury, 2007: 64).

2.5.4. Roads and Storm Water

Municipalities are responsible for the construction and maintenance of roads and streets within its jurisdiction that are proclaimed as municipal roads. Metropolitan transport advisory boards govern urban areas which have been declared metropolitan transport areas. Both short- and long-term programmes for adequate transportation development are drawn up by the core city of each area and are revised and adjusted annually. There are nine core areas: Johannesburg, Cape Town, Tshwane (Pretoria), eThekwini (Durban), Msunduzi (Pietermaritzburg), Nelson Mandela (Port Elizabeth), Ekurhuleni (East Rand), Mangaung (Bloemfontein) and Buffalo City (East London). Metropolitan centres-(Cape Town, eThekwini, Ekurhuleni, Johannesburg and Tshwane) have sophisticated road networks with responsive traffic signal control systems located at traffic control centres. These centres have surveillance cameras which are also used for monitoring crime as well (National Treasury, 2007:90)

The roads and storm water unit of a municipality will usually consist of a project management unit taking care of aspects such as the design of capital road and road rehabilitation projects, a unit taking care of all aspects of effective contract management and administration, a construction unit responsible for the building of the roads and other small civil engineering works, and a maintenance section responsible for maintaining the roads and storm water systems in a satisfactory state (van der Waldt, 2007:155)
Responsibility for roads is often spread among half a dozen central government ministries and a whole range of local government agencies. For example, in Ghana during the early 1970s, construction and maintenance of trunk roads was handled by the Public Works Department; feeder roads construction fell under the Department of Social Welfare and Community Development (maintenance was left to regional organizations); the Cocoa Marketing Board, Volta River Authority and timber companies constructed roads to serve their needs; and city and municipal councils dealt with city and town roads (Heggie, 1995:24)

In a process of assigning responsibilities for road infrastructure development and improvements, the first task is to prepare a functional classification of the road network. That means measuring its length and condition and establishing the legal status of individual roads (i.e., whether they have been gazetted and assigned to a legally constituted road agency). This calls for an accurate road inventory, a condition survey (also recording pavement strength) and identification of the responsible road agency. Since some roads may not have been gazetted, the second task is to assign these roads to a legally constituted agency or, in the case of community roads, to the responsible community group (e.g., village council). There may also be a need to reclassify selected roads. Traffic may have grown on some roads and their status will need to be upgraded (e.g., from regional to trunk roads), while traffic may have fallen on others which might need to be upgraded.

Once the network has been classified, responsibility for managing different parts of the road network has to be assigned. The organizational structure attempts to reconcile three conflicting objectives. First, it attempts to assign responsibility to agencies with sufficient financial and technical capacity to manage the roads placed under their jurisdiction. Second, most countries are attempting to decentralize managerial responsibility to reduce the fiscal burden on the central government and strengthen accountability. Managerial responsibilities are thus being increasingly assigned to provincial and district-level governments, even
though local governments rarely have the financial and technical capacity to effectively discharge these responsibilities. Finally, there are always areas where responsibilities overlap. Most countries attempt to deal with this by establishing formal coordination mechanisms (Heggie, 1995,91).

Most countries have large backlogs of deferred road maintenance. Governments are furthermore short of fiscal revenues and are generally unable to finance much road rehabilitation from their own resources. So where will funds come from? The first thing to recognise is that Africa cannot afford to rehabilitate all roads in poor condition. The best it can hope for is to rehabilitate a core network which the country can afford to maintain on a sustainable long-term basis. The remaining roads in poor condition will either have to receive minimal maintenance or be handed over to lower levels of government and local communities. However, even rehabilitation of the core road network will still cost an estimated $1.5 million per year over the next ten years. There are three possible ways of financing this: (i) by reallocating existing spending from new construction, (ii) through donor-financed loans and grants, and (iii) through the road tariff (Heggie, 1995:74).

In South Africa, the urban roads in the declared Metropolitan Transport Areas are financed through local government rates and grants made from an Urban Transport Fund (UTF) administered by a subcommittee of the South African Roads Board. The original intention was to partially support the UTF with revenue collected by applying road congestion charges in urban. However, these charges were never introduced. Instead, money was channelled to the UTF from road fund (in 1986-87 $30 million was transferred), and it is currently financed entirely through a central government grant amounting to about $16 million per year. Money from Fund is used to finance urban transport plans and infrastructure improvements, provided the latter are designed to assist public transport. The Fund finances 50 percent of the costs of road studies (the remaining costs are shared between the provincial government (30 percent), and
the local government (20 percent). It finances 60 percent of road infrastructure improvement costs, with the balance being equally shared between the province and the local authority (Heggie, 1995:75).

2.5.5. Waste Management

The eThekwini Municipality (Durban) has a cleansing and solid waste department whose role is to protect the environment and its municipal communities from the adverse effects of poor waste management practices through an environmentally acceptable, cost-effective and sustainable waste management service recognising solid waste as a useful resource wherever possible. It provides a weekly domestic waste removal service to approximately 650 000 households by employing labour directly or appointing contractors or community cooperatives to provide the service. Its products and services range from the collection and transportation of domestic, commercial and industrial waste to landfill site management, street cleansing, community waste management awareness and the selling of black domestic refuse bags and bins (van der Waldt, 2007:154)

Integrated waste management requires the implementation of a hierarchical approach to waste management, i.e. a sequential application of waste prevention/minimisation, recycling and re-use, treatment, and ultimately disposal. Hence, recycling is an integral activity in the way waste management will be implemented in the future. The policy and strategy vision for these preventive and proactive waste management steps are that the rate of increase of increase of waste disposed to landfill sites will be slowed down and informal salvaging at landfills will decrease.

Natural resources (renewable and non-renewable) will be better conserved, landfill air-space will be more effectively utilised and pollution and environmental degradation will be reduced. In addition, recycling has the potential for job
creation by promoting entrepreneurs to establish community collection system and recycling centres (DEAT, 2005:10)

The publication by Government of its White Paper on Integrated Pollution and Waste Management (IP&WM) for South Africa has heralded a new approach to waste management, a move away from traditional ‘end of pipe’ solutions to a holistic integrated approach. This policy sets out the principles that underpin the National Waste Management Strategy. The National Waste Management Strategy (NWMS) translates the policy principles into high level strategic plans and actions. The key elements of the IP&WM and the NWMS are currently being formulated as draft legislation. The emphasis will be on holistic and integrated waste management following the waste hierarchy approach, i.e. starting with waste prevention as the highest priority, followed by waste minimisation, waste reuse and recycling, and thereafter, waste treatment and finally waste disposal (DEAT, 2005:10).

The DPLG, through its municipal infrastructure grant (MIG) programme, will consider motivations for waste management projects, including waste recycling. However, to date 95% of the funds have gone to other priority areas, e.g. roads and water supply. Municipalities need to develop innovative approaches to obtain funding for waste related projects e.g. IWMPs should become part of their IDPs and could be funded in this manner. However, municipalities and other stakeholders need to be capacitated to access these funds.

2.6 . Definition of Concepts

2.6.1. Municipal Service Delivery.

This is a ‘municipal service that is necessary to ensure an acceptable and reasonable quality of life and if not provided would endanger public health or safety or the environment’ (van der Walt et al, 2007:148)
A municipal service is the service provided by a municipality as it is experienced by the consumer. Many, but not all, municipal services require infrastructure, notably water supply, sanitation, roads, stormwater and electricity. In all cases the service does not only involve the provision of the capital works associated with infrastructure, sound operation and maintenance arrangements, including customer interface arrangements, are also required for the proper provision of the service (Municipal Systems Act, 2000).

Municipal service, compared to the previous definition, this definition is wider in its scope in so far as it sees municipal services as ‘a service that a municipality in terms of its powers and functions provides or may provide to or for the benefit of its responsibility area irrespective of whether such a service is provided through an internal or external mechanism and whether fees are levied in respect of such a service or not (Craythorne, 2006: 158-159)

Municipal service must be equitable and accessible; be provided in a manner that is conducive to the prudent, economic, efficient and effective use of available resources as well as the improvement of standards of quality over time; be financially and environmentally sustainable; and be regularly reviewed with a view to upgrading, extension and improvement (van der Walt, 2007:148)

Service delivery, on the other hand, is the provision of public activities, benefits or satisfaction. A service relates both to the provision of tangible public goods and to intangible services themselves (Fox and Meyer, 1995:118)

2.6.2 Municipal Infrastructural Development

Municipal infrastructure is defined in broad terms as ‘the capital works required to provide municipal services. It includes all the activities necessary to ensure that the works are delivered effectively such as feasibility studies, project planning
and capacity building to establish sound operational arrangements for the works. The term ‘works’ is taken to exclude readily movable assets such as specialised vehicles, equipment and land not directly required for the construction of municipal infrastructure. This definition excludes vehicles whether these can be conventional trucks or specialised vehicles such as fire engines. But it includes the mechanical and electrical equipment that is required for, amongst others, water and wastewater treatment works (DPLG, 2007)

2.6.3. Municipal Income Structure

Municipal own revenue is obtained through property taxes, regional levies and service charges and fees. Own revenue covers more than 90 per cent of the operating income of local government as a whole. Total central transfers to local government in 2000/2001 amounted to R6.7 billion. R1.867 billion of this was in its portion of the equitable share, and the rest was in the form of conditional and unconditional grants (Cameroon, 2002:121).

Municipal budgets are forecasts or estimates of the revenue needed to pay for the expenditure incurred during a financial year. The budget should be seen as a document that is generated during the planning phase by a municipality and should therefore be seen as an integral part of the IDP planning process. Since the budget deals with the provision of funds, it should be seen as an important aspect of planning. The approved budget is in essence the financial plan of a municipality and all the activities for the next financial year revolves around it. In simple terms, a municipal budget can be defined as the financial programme of a municipality for a specific period, usually one year, which consist of two equally important parts, namely, an expenditure plan and a plan for funding of the expenditure of the municipality (i.e. a revenue plan), see table 1 below (van der Waldt, 2007:186).
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<td>42,936,806</td>
<td>92%</td>
<td>81,578,000</td>
<td>82,561,204</td>
<td>99%</td>
<td>60,320,000</td>
<td>53,105,845</td>
<td>83%</td>
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<td>4,283,612</td>
<td>54%</td>
<td>15,150,000</td>
<td>11,314,396</td>
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<td>61%</td>
<td>71,178,000</td>
<td>44,139,248</td>
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<td>7,412,385</td>
<td>53%</td>
<td>20,956,411</td>
<td>17,212,332</td>
<td>82%</td>
<td>11,156,489</td>
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<td>90%</td>
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<td>4,996,367</td>
<td>23%</td>
<td>11,900,000</td>
<td>11,131,247</td>
<td>94%</td>
<td>21,025,135</td>
<td>15,587,970</td>
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<td>15,352,934</td>
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<td>18,864,611</td>
<td>61%</td>
<td>40,473,750</td>
<td>22,544,229</td>
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<td>47,459,230</td>
<td>43,322,650</td>
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<td>Health &amp; Social Development</td>
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<td>6,272,719</td>
<td>100%</td>
<td>33,198,826</td>
<td>15,799,947</td>
<td>47%</td>
<td>11,156,489</td>
<td>6,603,707</td>
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<td>195,462,663</td>
<td>78%</td>
<td>233,234,998</td>
<td>186,957,340</td>
<td>80%</td>
<td>349,737,034</td>
<td>288,752,011</td>
<td>82%</td>
<td>191,560,725</td>
<td>123,959,918</td>
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<tr>
<td>Office Of the City Manager &amp; Executive Mayor</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>563,545</td>
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<td>288,789,693</td>
<td>100%</td>
<td>421,985,549</td>
<td>398,567,457</td>
<td>94%</td>
<td>459,364,171</td>
<td>450,017,421</td>
<td>99%</td>
<td>565,561,653</td>
<td>441,509,429</td>
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<td>Public Works: Roads &amp; Stormwater</td>
<td>242,054,000</td>
<td>234,191,906</td>
<td>97%</td>
<td>482,970,509</td>
<td>472,038,537</td>
<td>98%</td>
<td>524,054,000</td>
<td>508,732,011</td>
<td>97%</td>
<td>380,355,624</td>
<td>332,617,023</td>
<td>86%</td>
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<td>45,480,000</td>
<td>27,057,170</td>
<td>60%</td>
<td>71,300,000</td>
<td>44,257,549</td>
<td>62%</td>
<td>301,142,600</td>
<td>237,163,663</td>
<td>79%</td>
<td>105,560,264</td>
<td>81,976,020</td>
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<td>309,897,544</td>
<td>99%</td>
<td>470,283,357</td>
<td>472,038,537</td>
<td>98%</td>
<td>644,945,470</td>
<td>634,646,700</td>
<td>99%</td>
<td>236,847,930</td>
<td>206,424,730</td>
<td>37%</td>
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<td>Sport &amp; Recreation</td>
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<td>79,049,909</td>
<td>88%</td>
<td>73,998,900</td>
<td>66,666,245</td>
<td>90%</td>
<td>192,378,000</td>
<td>186,505,553</td>
<td>96%</td>
<td>74,887,081</td>
<td>68,871,280</td>
<td>86%</td>
</tr>
</tbody>
</table>

Table 3: Budget allocation and actual expenditure per Department from 2006/07 to date for the City of Tshwane. Source: MIG Cities, 2010

Note: The cumulative actual for 2009/10 is up to 31 March 2010, while all the other financial years are the figures at year-end.

The structure of municipal income sources is an important determinant for local creditworthiness. The stability and predictability of the revenue stream is the most important factor, irrespective of whether funds come from intergovernmental transfers or own-source revenues. However, to assure municipalities’ independence and flexibility, it is essential that a part of the revenue is raised locally. This means local taxes and/or decision-making about some significant revenue sources should be left at the local level (Liebig et al., 2008:71).

A municipal budget allocates resources to public services and projects and balances the resources drawn from the community against the demands for services and projects, while keeping municipal taxes within acceptable limits and ensuring that services are sufficient to allow economic growth and social stability (Bland & Rubin, 1997:4)
On average, South Africa municipalities obtain 86% of their income from their own resources (IDASA, 2005:1). However, it is important to keep in mind that this is an unweighted average and the share of own-source revenue varies significantly among the municipalities. While the six metropolitan municipalities in South Africa generate about 97% of their budget through own revenues, smaller municipalities with annual budgets of less than 300 million rand generate on average only 65% through own revenues. Municipalities in poor, rural areas sometimes even generate less than 10% of their income through own resources (Glasser & White, 2004:318)

2.6.4. Financial Grant and Subsidies to Municipalities

Local Authorities are dynamic organizations in the sense that their natural desire is to improve the range and standard of services which they provide in order to meet perceived need. The problem for local authorities, particularly given a high rate of inflation, a non-buoyant tax base, an increasing reliance upon central government grant and the needs of national economic management, is how to reconcile these constraints with their natural inclination. The ratepayer demands that his liability shall be held down, yet on the other hand consumer of local services wants better services (Hepworth, 1980:30).

Local authorities are attacked on grounds that they are inefficient organizations with too many administrative staff and yet more administratively costly services are imposed upon them. But criticisms of the efficiency of local authorities are very often a guess for objecting to the policies of local authorities. Another point is that local authorities are administering public funds and cannot take the risks with those funds that might appeal to the ordinary prudent businessman. Local government probably only suffers the same degree of inefficiency as any large organization but on the whole it fails to dispel these criticisms (Hepworth, 1980:31).
As a general rule, it can be suggested that the most autonomous of local revenue is when local government has a substantial tax base and has wide discretion to vary the rate of the tax collected. Grants from central government are less conducive to local autonomy because local government is dependent on another body for its revenue and is accordingly unable to vary the rate allocated. Grants can be divided into specific and general grants. General grants are more conducive to local autonomy in that while local authorities cannot determine the amount of revenue raised, they can determine how it is spent. Specific grants, on the other hand, mean that central government money is earmarked for specific programmes and local governments have little say in how the money is spent. A problem with grants generally, even where there are formulae calculating the degree of subsidisation to local government, is that central government often reduces the anticipated amount for a particular financial year arbitrarily. This makes balancing expenditure and income very difficult for local authorities. The conventional view of the relationship between central government grants and local government autonomy is that the greater the degree of central government subsidisation of local authorities, the greater the degree of control (Cameroon, 2002:115).

Over-dependence on central transfers can also undermine the accountability of sub-national governments to the local electorate, and facilitate shifting of blame for breakdowns in service delivery to upper tiers of government. The extent to which the design of intergovernmental transfers affects local accountability depends upon the nature of political relations between national and sub-national governments—if institutions of political competition promote accountability to the local electorate, there will be stronger incentives for quality service delivery (Ahmad, 2005:8).

Fiscal interdependence between different tiers of governments means that budgeting and evaluation of transfers are also important elements in ensuring efficient service delivery and getting value for money. In their budgeting process,
a number of countries have implemented a medium term expenditure framework (MTEF) that allows sub-national entities to participate in a multi-year budgeting system e.g South Africa. Even if the fiscal transfer system does not have a predictable, formula-driven division of total revenues between different tiers of government, the multi-year nature of the MTEF can provide some certainty, usually over a three-year span. To complement its MTEF process, South Africa has introduced a comprehensive Treasury Bill that focuses on financial management within the intergovernmental system, including the regular publication of comprehensive financial information for each tier of government to assist in the monitoring of public resources. This facilitates public monitoring by nongovernmental civil society groups that can make budget information comprehensible to citizens. Some countries, such as Brazil, have gone one step further by involving communities in the budget process through a participatory approach such as in city municipalities in Porto Alegre and Belo Horizonte (Ahmad, 2005:8).

Debt financed projects in South Africa are not implemented in a way different to projects with other funding sources. This goes against theoretical expectations, which can be operationalized in three possible ways: Debt-capital financed projects could have more efficient cost-calculation, they could be implemented faster and the maintenance per project could be higher. The reason behind these expectations is that the need to repay the borrowed capital induces the municipality. First, to calculate the expenses for the project more carefully; second, to implement the projects in a fast way because of the accountability to the lender; and third, to budget for proper maintenance to increase the economic life span of the project and thereby the projected revenue base (Peterson, 2000:13)

The largest conditional grant is the consolidated Municipal Infrastructure Programme, which is for major infrastructure. Grants (including the equitable share) from national government comprised about seven per cent of the
projected R58 billion local government budgets in the 1999–2000 municipal financial year. Municipalities can also raise loans for capital and operating expenditure (for bridging purposes only) in accordance with reasonable conditions determined by national legislation (Section 230(1)). This provision is intended to enhance local government access to the capital market. These financial sections must also be seen in the context of socio-economic rights enshrined in the Bill of Rights, which give citizens the right to access to services such as housing, health care, food, water and social security. They are intended to promote local government’s capacity to provide such services. However, these rights have not led to significant increases in local government revenue (Cameroon, 2002:122).

The municipal infrastructure grant (MIG) is the single largest external contributor of finance for municipal infrastructure investment. This grant is intended to supplement municipal budgets for infrastructure and ensure a focus on the provision of basic infrastructure for poor households. To maximise its benefit, the MIG programme must be aligned with other programmes funded by national government and by municipalities themselves. In particular, the alignment of the housing and MIG grants is critical. There are also grants that complement MIG such as the bulk infrastructure grant funding cross-boundary water schemes, the public transport infrastructure systems grant, the national electrification grant and the neighbourhood development partnership grant.

The Municipal Infrastructure Grant will simplify the transfer of funds to the various municipalities by consolidating funding from government to local authorities. It is designed to replace existing municipal capital grants such as the consolidated municipal infrastructure programme, the local economic development fund, the water services project, the municipal sports and recreation programme, the national electrification programme to local government and the urban transport fund. See table 4 below (Parnell, 2002:34).
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<td>1,492,007,500</td>
<td>1,279,795,271</td>
<td>86%</td>
<td>2,156,568,400</td>
<td>2,043,881,208</td>
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<td>1,699,444,814</td>
<td>1,030,879,945</td>
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<td>-</td>
<td>0%</td>
<td>-</td>
<td>-</td>
<td>0%</td>
<td>-</td>
<td>-</td>
<td>0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Grands and Subsidies</td>
<td>25,766,865</td>
<td>17,376,911</td>
<td>68%</td>
<td>185,410,000</td>
<td>127,366,630</td>
<td>75%</td>
<td>289,095,000</td>
<td>206,785,122</td>
<td>72%</td>
<td>342,070,000</td>
<td>238,279,272</td>
<td>61%</td>
</tr>
<tr>
<td>Government Housing</td>
<td>130,000,000</td>
<td>86,304,181</td>
<td>66%</td>
<td>185,410,000</td>
<td>127,366,630</td>
<td>75%</td>
<td>289,095,000</td>
<td>206,785,122</td>
<td>72%</td>
<td>342,070,000</td>
<td>238,279,272</td>
<td>61%</td>
</tr>
<tr>
<td>Municipal Infrastructure Grant</td>
<td>255,944,000</td>
<td>164,024,158</td>
<td>64%</td>
<td>234,130,000</td>
<td>208,975,272</td>
<td>89%</td>
<td>289,095,000</td>
<td>206,785,122</td>
<td>72%</td>
<td>342,070,000</td>
<td>238,279,272</td>
<td>61%</td>
</tr>
<tr>
<td>National Electrification Programme</td>
<td>-</td>
<td>-</td>
<td>0%</td>
<td>32,400,000</td>
<td>32,227,673</td>
<td>100%</td>
<td>65,590,000</td>
<td>65,785,095</td>
<td>100%</td>
<td>52,770,000</td>
<td>25,659,137</td>
<td>49%</td>
</tr>
<tr>
<td>Capital Replacement Reserve Fund</td>
<td>6,830,000</td>
<td>6,751,968</td>
<td>99%</td>
<td>24,520,305</td>
<td>17,196,276</td>
<td>68%</td>
<td>74,705,205</td>
<td>61,197,789</td>
<td>83%</td>
<td>15,784,631</td>
<td>6,848,708</td>
<td>43%</td>
</tr>
</tbody>
</table>

Table 4: Capital Programme performance per funding source from 2006/07 to date for the City of Tshwane, Source: MIG Cities, 2010

Note: The cumulative actual for 2009/10 is up to 31 March 2010, while all the other financial years are the figures at year-end

Subsidized provision of infrastructure is often proposed as a means of redistributing resources from higher-income households to the poor. Yet its effectiveness depends on whether subsidies actually reach the poor, on the administrative costs associated with such targeting and on the scope for allocating budgetary resources to this purpose without sacrificing other socially beneficial public expenditures. Price subsidies to infrastructure almost always benefit the non-poor disproportionately. There are, however, ways in which infrastructure subsidies can be structured to improve their effectiveness in reaching the poor. For example, for water, increasing block tariffs can be used - charging a particularly low 'lifeline' rate for the first part of consumption (for example, 25 to 50 Dimes per person per day) and higher rates for additional "blocks" of water (Bond,1998:57).

This block tariff links price to volume and it is more efficient at reaching the poor than a general subsidy because it limits subsidized consumption. Increasing-block tariffs also encourage water conservation and efficient use by increasing charges at higher use. These tariffs are most effective when access is universal. When the poor lack access, as is frequently the case, they do not receive the
lifeline rate and typically end up paying much higher prices for infrastructure services or their substitutes (Bond, 1998: 57).

Another fundamental initiative for public infrastructure development is the Expanded Public Works Programme (EPWP) spearheaded by the Department of Public Works (DPW). The EPWP conditions have been placed on the Provincial Infrastructure Grant (PIG) and the Municipal Infrastructure Grant (MIG) via the 2004 Division of Revenue Act (DORA). The DORA requires provinces and municipalities to execute all low-volume roads, storm water drains and trenching work (funded through PIG and MIG) in a labour-intensive way, in accordance with guidelines produced by DPW and approved by SALGA and National Treasury. The guidelines provide implementing bodies with the contractual tools that they need to ensure that contractors carry out certain work activities by hand and to ensure that the minimum requirements in for employment conditions in the Code of Good Practice for Special Public Works Programmes are adhered to. In order to ensure the EPWP Guidelines are well understood and used properly, DPW is providing customised training to provincial and municipal officials on the use of the guidelines (Phillips, 2004:11-12).

Access to capital markets by sub-national governments is important for several reasons. First, long-term financing is necessary given the lumpiness of public expenditures for infrastructure services and the inefficiency of relying on pay-as-you-go schemes. Without access to long-term finance, investment in infrastructure may be sub-optimal. Second, infrastructure investments benefit future generations, so equity requires that future generations should also bear the cost of financing. Financial markets offer this inter-temporal linkage. Third, financial markets play an important role in signalling the performance of regional and local governments. The accountability created for sub-national governments on the fiscal side by providing an own-revenue base can be further strengthened by providing access to capital markets on the debt side. In fact, the implicit threat that poor policy management and service delivery may force local policymakers
to raise own-taxes or pay higher borrowing costs, are important incentives in ensuring that service delivery is managed efficiently (Ahmad et al, 2005:8-9).

2.6.5. Municipal Infrastructure Backlogs

While there are arguments about the meaning of the concepts ‘backlog’ there is consensus that backlogs exist and that they need somehow to be quantified and addressed. The Municipal Infrastructure Investment Framework (MIIF) provides a narrow definition: a ‘backlog’ is a “number of dwellings (premises in which the consumers are living) which do not have access to basic service level”. This definition implies that a backlog is static and can be reduced accordingly. The State of Cities Finance Report provides a more comprehensive definition by establishing that backlogs are not a singular number but comprise the four variables or levels of service of service (DBSA, 2008: 124).

2.6.5.1. Apartheid Backlog

This component refers to ‘matchbox housing’ characterized by “a lack of sewer, and water connections, tarred roads, electricity connections, sports and social facilities, and other amenities, specifically in residential areas formerly reserved for Africans, Coloureds and sometimes Indians”. This type of backlogs is colloquially known as an ‘historical backlog’. However, apartheid backlogs went broader than this and include backlog in the rural areas, particularly in connection with access to water, proper sanitation, electricity and roads. Interestingly, the low-cost houses that were built after 1994 show the same disadvantages as the matchbox houses in which majority of them are smaller than the former matchbox houses and have fewer rooms. The post-1994 low-cost houses are colloquially known as ‘RDP houses’.
2.6.5.2. Housing Backlog

This component refers to all households in South Africa who are poorly or informally housed, "whether living in shacks, in overcrowded inner-city blocks, or on the street". This type of backlog is not unique to South Africa, and is symptomatic of public housing provision lagging behind new household formation. This component is quite prevalent in cities that attract migrants due to perceived improved or better socio-economic conditions. By its very nature, the figure is not static, it continues to change in line with the new household formation and migration trends. It is thus difficult to predict when it may be eradicated, notwithstanding the acceleration of housing delivery by any sphere of government.

There is a myriad of issues surrounding the handing over of new houses. These include allegations that people not on the housing lists are being given new houses, the refusal of communities to vacate informal settlements to make room for new housing projects, and people selling or renting their new houses. In other instances, communities feel that the handing over of houses is so tedious or unfair that they simply occupy them illegally. All these challenges make it hard to track the progress that the government has made in addressing housing shortage.

2.6.5.3. Maintenance Backlog

This backlog refers “to the inadequate maintenance history of many public assets required for service delivery, giving rise to a backlog in the maintenance and refurbishment of existing assets”. This type of backlog is also not unique to South Africa and is symptomatic of organizations that are facing financial distress or embarking on cost-reduction strategies. History and practice show that the first victim of cost-cutting measures in most organizations is the maintenance and refurbishment of assets. In the longer term this leads to poor performance and
the premature ageing of assets. The suboptimal performance of assets does not augur well for improved service delivery. South Africa has recently been plagued by the consequences of the failure to maintain infrastructure assets, such as frequent blackouts in some areas and burst water pipes.

2.6.5.4. The ‘infrastructure for growth’ Backlog

This refers to the need for infrastructure to stimulate economic growth. The need for this infrastructure for growth arises from the sheer expansion of the cities and new private investments in residential and commercial and industrial property. However, if the cities are perceived to be slow to provide infrastructure ‘where required’, then even this form of infrastructure spending may be included in the backlog. This is the type of backlog that has led to government initiatives such as ASGISA. Again the issue of dealing with backlog is whether municipalities can absorb and effectively apply the growth needed to keep pace with infrastructure needs arising in fast-growing areas. Secondly, rapid or accelerated investment in infrastructure results in further challenges to the operation and maintenance of assets.

<table>
<thead>
<tr>
<th>Municipal service</th>
<th>Service level representing a backlog</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>• No reticulation</td>
</tr>
<tr>
<td></td>
<td>• Public standpipes below RDP standards (i.e. more than 200 metres from dwelling)</td>
</tr>
<tr>
<td>Sanitation</td>
<td>• No sanitation available to the household</td>
</tr>
<tr>
<td></td>
<td>• A pit latrine not provided with ventilation and fly proofing</td>
</tr>
<tr>
<td></td>
<td>• Dicket latrines</td>
</tr>
<tr>
<td>Electricity</td>
<td>• No electricity for lighting</td>
</tr>
<tr>
<td></td>
<td>• No reticulation</td>
</tr>
<tr>
<td></td>
<td>• No solar home system</td>
</tr>
<tr>
<td>Solid Waste Management</td>
<td>• No rubbish disposal</td>
</tr>
<tr>
<td></td>
<td>• Collection less than weekly</td>
</tr>
<tr>
<td>Housing</td>
<td>• Single informal dwelling, or</td>
</tr>
<tr>
<td></td>
<td>• Backyards shacks more than 7% of housing, or</td>
</tr>
<tr>
<td></td>
<td>• Overcrowding in urban formal areas more than 10 %</td>
</tr>
</tbody>
</table>

Table 5: Key Municipal Services Backlogs (Source: MIIF, 2008)
Municipalities are struggling to maintain their current assets and this situation would be exacerbated by accelerated investment in more assets. National and provincial government need to offer capacity to the municipalities to assist them in dealing with their existing and future assets. An example of municipal service backlog is shown in table 5 above.

While the infrastructure is a very important political topic in South Africa, one should not over-emphasize the backlog in this analysis for two reasons. First, each municipality needs to strike a balance between poverty-reducing infrastructure and infrastructure that generates economic growth. The most important criterion of a municipality as quoted by one expert is “not going bankrupt”. Second, it is necessary to keep in mind the interaction with other funding sources when analysing the contribution of debt capital to the infrastructure backlog. Grants will remain a major funding source in addressing backlogs (Liebig, 2008:46).

2.6.6. Public Private Partnerships (PPPs)

Public Private Partnership (PPPs) is the participation of a wide range of actors and stakeholders, which are involved as contracting parties. These include consumers, users, NGOs, trade unions, environmental groups and independent operators. It is the association of two or more persons in a business enterprise, sharing expenses, profits and losses (http://www.dpmd/partnership-modalities).

PPPs are an important component of government’s strategy for service and infrastructure rollout, but their viability has to be properly tested in each case. PPPs are being considered among a range of possible mechanisms for delivery in all spheres of government (National Treasury, 2004: 34).
Municipalities face numerous challenges on a daily basis in their duty to provide services. Essential cheaper services and services of a higher quality are central to the existence of all municipalities in South Africa including the City of Tshwane Metropolitan Municipality. The under-resourced and ineffectual institutional capacity within the municipalities in service rendering to the citizens further poses an added challenge to an already volatile service delivery situation in which services provided were inequitable and were based (for decades) mainly on a colour preference.

The utilisation of Alternative Service Delivery (ASD) approaches in which formal and informal partnering arrangements are made with other service providers may enhance service delivery. In particular, PPPs have been accredited with various successes and reports in which service rendering has been significantly improved, especially in poverty-stricken previously disadvantaged locations. The injections of innovative means flexibility and responsiveness with tangible outcomes such as the collection of refuse and sustainable water provisions have been attributed to the utilisation of PPPs as a service delivery mechanism. Various factors should be taken into account during the facilitation and implementation of the legislative processes pertaining to PPPs within municipalities (specifically within the CTMM):

- the readiness of a municipality to deploy a PPP. That is, relevant administrative functions such as the establishment of the task team should be in place to facilitate the implementation of a PPP;
- the type of PPP considered for a particular service delivery including the time frame for its implementation;
- public services such as waste products removal, water as well as sanitation services targeted for a PPP;
- the establishment of the overall policy in guiding every decision taken for and during an implementation process;
the involvement of the key stakeholders in ensuring transparency and accountability (Phago and Malan, 2004:488-489).

When unilateral approaches to municipal service delivery decisions are taken without proper consultation with the communities and other relevant stakeholders, more threats than successes are anticipated in terms of PPP initiatives. Stakeholder participation plays a decisive role in these decision-making proceedings. Active involvement of community forums, non-governmental organisations (NGOs) and community-based organisations (CBOs) are highly influential in gaining the overall communal support for alternative service delivery options. Based on the disadvantages and advantages of community participation, proactive measures can be identified well in advance.

In Poland, partnerships between public authorities and the local business communities have been the cornerstone of the successful municipalities in Poland. In addition to improving the business operating environment, the Polish cities have all privatised or contracted out various types of public facilities and there have also been some instances in which partnerships were developed with higher levels of government, both in delivery of services and in the promotion of local businesses (Work, 2005:14)

Privatization and outsourcing of basic services is not a new phenomenon in South Africa. Rather, the process begun in the late 1980s by the Apartheid government and continued by the new South African government in the post-1994 era. Guided by the neoliberal principles of GEAR, whose primary objective was cost recovery, privatization initiatives continued to encourage new local governments to operate as private sector entities do. Privatization, of course, spans a spectrum of strategies from outright sale of public assets to simply the adoption of private sector principles (what in South Africa is referred to as corporatization). Furthermore, local government privatization in South Africa, has not been conflict-free, nor has it followed the same speed in all states or regions.
Although in Gauteng, for example, the process occurred early and quickly, leading to the contracting state's water services to a multinational private water company, in Cape Town it took a more twisted turn. In Cape Town, the opposition managed to legally challenge the privatization of basic services, using the Municipal Systems Act, Section 77 and 78, which required the Council to address internal service delivery mechanisms before considering external mechanisms. Hence, every new project identified by the Cape Town unicity had to undertake an assessment of internal service delivery mechanisms before advertising for tender to private companies (Miraftab, 2004:884-885).

The legal challenge made the process of privatization slower and more cumbersome to the local governments and later to the unicity, but was overruled in September 2002 by the Executive Committee of Council. The unicity now finds itself more secure to pursue outsourcing and privatization of its municipal services. Cape Town's senior officials praise the committee's ruling as a victory, ensuring that initiatives with private sector companies and contractors will proceed without outside legislative interference (Miraftab, 2004:884-885)

Public funding is not adequate for municipal programmes and projects. Consequently, there has been a global trend encouraging the active participation of the private sector in the provision on municipal services, particularly at metropolitan level. This is a positive development as it ensures market competition, use of modern technology, improved operational efficiency, lower unit costs, improved quality and customer-orientated services. However, there has to be a buy-in from the private sector in terms of ensuring the success of such key initiatives, namely the revitalization of inner cities, spatial reintegration and, most importantly, cross-subsidization. Municipalities are still experiencing difficulties mobilizing resources from the private sector as the required trust has to be developed and, furthermore, both role-players have to realise that they accept joint responsibility for growing the local economy. In this context, municipalities would have to place considerable emphasis on developing formal
relationships and strategic partnerships with the private sector (De Vries, 2008:65). A key challenge in this regard is managing the contract and performance management to ensure at least minimum standards of services provision are adhered to as detailed in the Local Government: Municipal Systems Act, 2000 (Act 32 of 2000)

Stiglitz cites the example of China, which managed to sustain double-digit growth by extending the scope of competition, without privatising state-owned enterprises, and Russia, which in contrast privatised a large fraction of its economy without doing much so far to promote competition. The consequence of this and other factors has been a major economic collapse (Stiglitz, 1998:18-19).

The conclusion Stiglitz reaches is that 'Privatising monopolies creates huge rents. It has proved difficult to administer privatisation without encouraging corruption and other problems. Entrepreneurs will have the incentive to try to secure privatised enterprises rather than invest in creating their own firms' (Stiglitz, 1998:19).

The effects of privatisation bear most radically on the poorest in the community; there is widespread evidence of more cut offs in service and generally a harsher attitude towards low-income customers. Water in Britain is a case in point. Water and sewerage bills have increased by an average of 67 per cent between 1989/90 and 1994/95, and during roughly the same period the rate of disconnections due to non-payment by 177 per cent. The inflexibility and hostility which often characterised public utilities attitude towards non-payment has over the same period been replaced by an emphasis on pre-payment meters and ‘self-disconnection’ as public goods have been commodified (Bond, 1998:67).

Prepayment metering is greatly advantageous to companies as the problem of poorer customers is avoided, there is a continuous revenue stream in advance of consumption, less of a ‘political’ problem in confronting disconnections and better
form of debt recovery. Self-disconnection is associated with the reduction of consumption below the level consistent with health, safety and participation in normal community life (Bond, 1998:67).

Studies have shown a surprisingly high number of self-disconnections of water supply for various periods by as much as 49 per cent by those using prepayment devices over a trial period. The most critical feature of privatisation, however, has been that cross-subsidies are rooted out after privatisation. Those who need costly help have to pay for these services directly themselves. Rather than cross-subsidies there has been the introduction of ‘cost-reflective’ pricing (in which prices reflect the particular costs associated with a particular customer). This will end with greater differences in regional charges, the poorer paying more and better off people with cheque accounts paying less with direct debits (Bond, 1998:67).

In South Africa most municipal services - water, electricity, and roads - represent public goods with monopoly status and large sunk infrastructure costs and the lessons from past experience that Stiglitz draws should have been high on the public agenda for debate. Yet it is precisely these services that are today being promoted as privatisation prospects (in the process generating private monopolies). To do so requires redefining the notion of public participation.
Chapter 3: Research Methodology

3.1. Introduction

A research methodology is a process of expanding in one’s field through scientific methods. In social science the research methodology attempts to understand the human behaviour through research study. Various methods of research are applied in case study. Research is a process which comprises of various procedures such as research design, research approach, sampling and population, research measurement, research ethics, data generation and analysis of data. (Holloway, 1997 :12)

The following methods are procedures followed in this research. Procedure selected depends on the field of study. e.g in collection of data, some researchers use questionnaires or interviews. This study pursued the closed-ended questionnaire.
3.2. Study Area

![Map of CoT Metropolitan Municipality (Dermacation Board, 2003)]

Figure 1: Map of CoT Metropolitan Municipality (Dermacation Board, 2003)
The City of Tshwane (CoT) Metropolitan Municipality is one of the three Metropolitan Municipalities in the Gauteng Province. Tshwane is located on the north-western quadrant of the Gauteng Province. It is bordered by the Waterberg District municipality on the north-east, the Metsweding District on the east, Bojanala District municipality on the west, the West Rand District on the south-west, the City of Johannesburg on the south and the Ekurhuleni Metropolitan Municipality on the south–west.

Tshwane forms part of the Gauteng Conurbation (Tshwane/Johannesburg/Ekurhuleni) which is growing into one of the major city regions in the world. This vast conurbation forms the economic powerhouse of South Africa and indeed of Africa.

The Gauteng Spatial Development Perspective identified that the “Provincial Economic Core” is anchored by Rosslyn to the north (Tshwane) and is linked to the O.R. Tambo International Airport to the east (Ekurhuleni) via the N1/R21 and the Central Business District of Johannesburg to the south via the N1/M1 highway.

From a regional perspective, the most important elements affecting Tshwane’s growth and development within the Gauteng City Region are:

- The direct N1 road link between Tshwane and Johannesburg;
- High-tech and information technology related development along the N1 highway from Tshwane’s eastern suburbs to northern Johannesburg;
- The provincial economic core which encompasses large parts of southern, south-eastern and central Tshwane;
- The R21 link between the Inner City and O.R. Tambo International Airport;
- The Bakwena/Platinum highway link to Rustenburg/Brits; and
- The industrial link along the railway line between Tshwane and Germiston.
The Gauteng Growth and Development Strategy (GGDS) is aimed at further accelerating the economic growth within the province, while at the same time making sure that services are delivered and development happens. The strategy sets for the province the goal of building on the smart province concept and to improve on its economic growth sectors. The following are the key strategic objectives:

- Social and economic infrastructure;
- Labour absorptive initiatives; and
- Sustainable socio-economic development.

The Tshwane space economy has been for a long time propelled by the heavy industrial development in the areas of manufacturing. However, the Gauteng Growth and Development Strategy (GGDS) expressed a need throughout the province that Gauteng Province need to take into account the broad economic and spatial strategies and goals of Gauteng Province, which include the realignment of the manufacturing sector away from traditional heavy industry input markets and low value-added production towards sophisticated, high value-added production, as well as the development of other high value-added production activities in the agriculture and mineral sectors.

Furthermore, the GGDS outlines the provincial objectives, these objectives also include the development of the province as the smart centre of the count with specific emphasis on information technology, telecommunications equipment, research and development and bio-medical industries; and the development of the finance and business service sector with specific emphasis on financial services and technology, auxiliary business services and technology, corporate head office location and business tourism.

The Tshwane Growth and Development Strategy (GDS) indicated that the CoT in 2004 contributed a healthy 45% to GGP and tangible imports contributing 22%. It further mentioned that the Services Sector is a strong contributor to the Gauteng
The economy as a whole and employs large numbers of people. It is therefore a reasonable assumption that the services sector is also quite prominent contributor to the Tshwane's economy. The Tshwane GDS also identified that the international trading activity of any real significance in Tshwane takes place in 13 tangible goods sectors namely:

- Motor Vehicles, Parts and Accessories
- Basic Iron and Steel
- Machinery & Equipment
- Furniture
- Television, Radio and Communication Equipment
- Professional and Scientific Equipment
- Agriculture (Cut Flowers)
- Mining and Quarrying
- Chemicals and Man Made Fibres
- Other Transport Equipment
- Electrical Machinery
- Non-metallic Minerals
- Metal Products (Excl. machinery)

It is worth mentioning that the Motor Vehicles, parts and accessories sector in Tshwane are the main contributor both in terms of contribution to the Metro's total export value and to total trade, skills development and sustainable jobs. The GDS noted that Tshwane outperformed all other metros and had the highest percentage growth in both imports and exports during the nine year period (1995-2004).

3.3. Population of the Study

Arkava and Lane (1983:27) draw a distinction between the term universe and population. Universe, they write, refers to all potential subjects who possess the attributes in which the researcher is interested. Population, on the other hand, is
a term that sets boundaries on the study units. It refers to individuals in the universe who possess specific characteristics. Powers et al. (1985:235) define a population as a set of entities in which all measurements of interest to the practitioner or researcher are represented. Seaberg (1988:240) also defines a population as the total set from which the individuals or units of the study are chosen. Whilst Bless and Higson-Smith (2000:85) see a population as a set of elements that the research focuses on and to which the obtained results should be generalised. McBurney (2001:248) refers to the population as the sampling frame. A population is the totality of persons, events, organisations units, case records or other sampling units with which the research problem is concerned.

For the purposes of this paper, the population is comprised of three (3) senior officials from the National Treasury, National Department of Cooperative Governance and Traditional Affairs (COGTA), and SALGA respectively. This also included conducting a personal-administered questionnaire and interviewing five (5) senior executives from service rendering departments in the City of Tshwane. The population cover has included an interview with minimum of two (2) families representing community members in each region mainly from two regional areas, namely, North East and North West regions of the City of Tshwane covering Hammanskraal (Themba) and, Mabopane (Soshanguve).

Geographically, the city is characterised by a rapidly growing population. The population of the City of Tshwane is estimated to comprises approximately 2 345 908 individuals and 686 640 households. The situation is exacerbated by immigration, resulting in an increase of informal settlements and an estimated 26.8% of all households residing in informal housing. Although the population of the city is scattered all over the city, the map below depicts the areas within the CTMM where the highest density of people is to be found.
Figure 2: Schematic representation of the areas of high population densities in CoT, Source: Tshwane MIG Cities Submission 2010/11

Except for the Inner City the highest density of people is found within the previously disadvantage areas, such as Atteridgeville, Mamelodi, Olievenhoutbosch, Soshanguve, Ga-Rankuwa, etc. The home language profile of Tshwane indicates that the most widely used home language is Sepedi (Northern Sotho), followed by Afrikaans, Setswana, Xitsonga, isiZulu and English. These six languages account for 84.68% of the population (CoT Annual Report, 2008/09:8).

The projected annual growth of the population between 1996 and 2001 was 4.1%. According to the Stats SA 2007 Community Survey, the population has since 2001 grown by 15.4%, whilst the CoT’s Household Survey 2008 indicates a growth of 3.4% between 2007 and 2008. The number of households has also increased with approximately 22% since 2001 (Statistics SA Community Survey, 2008)
3.4. Economic Growth

The City of Tshwane’s economy is influenced by various internal and external factors. The external factors include developments in the global markets and these have generally benefited South Africa and the City positively. South Africa has also enjoyed its longest period of growth and this has rubbed off on the local economy. On the other hand, the high oil prices and other international factors may influence the economy. Increasing inflation and interest rates are predicted to have a negative impact on the growth of the local economy. In terms of economic development, the City has embraced prevailing policy objectives set by national and provincial government. The City is therefore focused on growing and developing the economy in order to reduce poverty and unemployment, to create jobs and to be globally competitive to create a better life for all.

On the whole, the City's economy is doing well, having yielded a higher than national average annual growth rate. According to Global Insight, in 2005 the City enjoyed a growth rate of its Gross Value Added (GVA) of 6,7% and 7,8% in 2006. The GVA achieved in the 2006/07 year was higher than both the provincial and national average. Despite this, there are numerous challenges to address the vast list of community based needs.

Spatially and sectorally the economy is diverse, although the tertiary sector (service sector e.g. government services) contributes 80% to the GVA, while the secondary sector (manufacturing) makes up 19% and the primary sector (e.g. agriculture and mining) less than 1%. The dominant economic sub-sectors are automotive manufacturing, government, services and retail. It should however be noted that the current global economic climate has had a major negative impact on the automotive and support industries. The negative impact on these industries will have a significant impact on the rate base of the City of Tshwane.
The tertiary sector in the City of Tshwane is also quite strong and it is one of the discerning factors in the City’s landscape. At a national level the tertiary sector contributes approximately 72% to the national economy, which shows Tshwane’s comparative advantage and is indicative that the City is becoming a global role player.

Despite the very positive growth that the City has enjoyed in the past few years, the population has also grown. This can be seen in Graph 1 below.

Graph 1: Graphical representation of the population and economic growth of the City of Tshwane (CoT)- Source: Global Insight (2007)

With an increasing population and an economic growth rate that is insufficient to create jobs, the number of unemployed will continue to grow should the above trends continue. There are an increasing number of new entrants into the job market. If the economy grows slower than projected there is a risk that the City will reach a point where businesses will close down or leave, resulting in a loss of revenue for the City.
3.5. Sample Size and Selection

In qualitative studies non-probability sampling methods are utilised and, in particular, theoretical or purposive sampling techniques rather than random sampling are used (Strydom et al., 2002:334). Denzin and Lincoln (2000:370) point out that qualitative researchers seek out individuals, groups and settings where the specific processes being studied are most likely to occur. A process of constant comparison between individuals and groups being studied is essential since the researcher is in pursuit of understanding all aspects of his research topic. Sampling, according to Kerlinger (1986:110), therefore means taking any portion of a population or universe as representative of that population or universe.

For purposes of this study, purposive sampling was used in identifying the MIG projects of the research focus and the respondents who are relevant to the subject matter. This type of sampling method is based entirely on the judgement of the researcher, in that a sample is composed of elements that contain the most characteristics, representative or typical attributes of the population (Singleton et al., 1988: 153). Judgement sampling occurs when a researcher selects sample members to conform to some criterion (Cooper & Schindler, 2006:424). From the entire City of Tshwane project portfolio funded from different sources, the purposive sampling method was employed to narrow down the focus to only MIG funded specific projects.

Sample sizes for qualitative research vary by technique but are generally small. A study might include just two or three focus groups or a few dozen individual depth interviews (Cooper & Schindler, 2006: 203).

Now the larger the population, the smaller the percentage of that population the sample needs to be. If the population itself is relatively small, the sample should comprise a reasonably large percentage of the population (Strydom et al., 2002:
Larger samples enable researchers to draw more representative and more accurate conclusions, and to make more accurate predictions than in smaller samples, although this is more costly (Bless & Higson-Smith, 2000:93). Sample sizes may or may not be fixed prior to data collection, depend on the resources and time available, as well as the study's objectives. Purposive sample sizes are often determined on the basis of theoretical saturation (the point in data collection when new data no longer bring additional insights to the research questions).

This research paper envisaged assessing the utilization of MIG funds at City of Tshwane Metropolitan Municipality through interviewing the five (5) executive directors of various functional departments. As already indicated, the personal-administered questionnaire and interviews were also conducted with three (3) officials from the National Department of Cooperative Governance and Traditional Affairs (COGTA), National Treasury, and SALGA respectively. The researcher also visited some of the MIG funded projects in the North East and North West Regions of the municipality and also interviewed two families from each of these regions in order to assess the views of the community members on this matter. In both regions, only 12 out of more than 30 MIG projects were investigated. The sample size of projects were selected based on their status of completion to enable the researcher to determine the development impact of the projects on the lives of the people.

3.6. Data Collection Method

The data collection method included observation, semi-structured and in-depth interviews as well as un-structured conversations on individual basis by the researcher and participants to facilitate broader discussion and greater engagement with the issues raised. The research has applied more of qualitative approach in collecting the data than quantitative method.
According to Babbie and Mouton (2002:230) few observations are made in relation to qualitative research techniques as a means of data collection. Firstly, the qualitative approach is more applicable to social sciences. It is more likely undefined and a more philosophical mode of approach, whereas the quantitative approach is highly formalized, highly structured and exactly defined. Unlike in natural science, social phenomena are complex and impact on people’s behaviour, attitudes and perceptions.

Secondly, the qualitative research is a naturalistic as its goal is to understand behaviour in a natural setting. It helps to understand the phenomena from a phenomenon from the perspective of research participants and provide understanding of the meaning people give to their experiences.

Thirdly, the qualitative research includes wide range of ways to analyse the data. It focuses on understanding, rather than controlling or predicting phenomena. It seeks to understand complex, interrelated and or changing phenomena, is more relevant to challenges of understanding human behaviour and the quest for managing such behaviour. In this case study, the researcher established reasons for the spending patterns and behaviours around the MIG funding in the municipality and the impact thereof on service delivery.

Fourthly, in social phenomena, qualitative research is very useful, not only in providing rich descriptions of complex phenomena, but in constructing or developing theories or conceptual frameworks, and in generating hypotheses to explain those phenomena. The research methodology was able to bring out the realities of the problem to the surface.

Lastly, the advantage of the qualitative approach is directly involved in the setting, interacting with the people and the researcher becomes the “instrument” as the researcher should give his/her own perspective as to how the researcher
view the topic. The methodology emphasizes the importance of getting close to the people for a better insight of the formulated hypotheses.

Qualitative research includes an array of interpretive techniques which seek to describe, decode, translate, and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world. Qualitative techniques are used at both the data collection and data analysis stages of a research project. At data collection stage, the array of techniques includes focus groups, individual depth interviews, case studies, ethnography, grounded theory, action research, and observation (Cooper & Schindler, 2006:196).

In this research paper, open-ended questionnaire was used wherein the participant or respondent chooses the words to frame the answer to a measurement question posed. One of the primary reasons for using open questions is that insufficient information or lack of hypothesis may prohibit preparing response categories in advance. Researchers are forced to categorize response after the data are collected. Other reasons for using open-ended responses include the need to measure sensitive or disapproved behaviour, discover salience or importance, or encourage natural modes of expression. Also may be easier and more efficient for the participant to write in a known short answer rather than read through a long list of options (Cooper & Schindler, 2006:445-446). Open questions gives the respondent the opportunity of writing any answer in the open space (Strydom et al., 2002:179).

A mailed questionnaire is, according to Grinnell and Williams (1990:216-217), a questionnaire that is sent off by mail in the hope that the respondent will complete and return it. However, this does not always happen; actually, a response rate of 50% is considered adequate, 60% as good and 70% as excellent. According to Powers et al. (1985:122), the mailed questionnaire is perhaps the survey technique most frequently used. The researcher compiles the
questionnaire and it is accompanied by clear, carefully worded prescriptions at the level of understanding of the target population.

The advantages of the mailed questionnaire are that the costs are relatively low and that extension of the geographical area to be covered by the researcher does not increase the cost. However, the mailed questionnaire has certain limitations. The non-response rate may be very high, especially with regard to long questionnaires and unclear or open questions (Strydom et al., 2002:172).

Personal questionnaire, on the other hand, according to Strydom et al. (2002:173) is handed to the respondents who completes it on his own, but the researcher is available in case problems are experienced. The researcher (or field worker) limits his own contribution to the completion of the questionnaire to the absolute minimum. The researcher thus largely remains in the background and can at most encourage the respondent with a few words to continue with his contribution, or lead him back to the subject.

The telephonic completion of a questionnaire has certain advantages similar to personal questionnaire. The fieldworker gets an opportunity to explain, literacy is not a requirement, and the response rate is high because respondents do not easily refuse. A major limitation is the cost of long-distance calls. For most research, this constraint limits the length of interviews. Also, because not everyone has a telephone, bias can creep into the sampling because only households with telephones can be reached. For these reasons, telephone interviews should be used mainly for exploratory rather than in-depth research (Arkava and Lane, 1983:172)

Questionnaires and interview schedules (an alternative term for the questionnaires used in personal interviews) can range from those that have a great deal structure to those that are essentially unstructured (Cooper & Schindler, 2006:363)
The administration of the questionnaire involved personally handing the instrument to the participants to respond to the array of questions designed seek information relevant to the subject matter. After the successful completion of the questionnaires, the researcher also had an in-depth interview with the respondents to be able to clarify and obtain more detailed information on the subject matter. The researcher also recorded on his own, the response from the community members interviewed. E-mails facilities and telephonic conversations were utilised to administer the questionnaire with those few respondents who were not available for one-on-one interviews.

In addition to the above ways of data collection used, the researcher also used annual reports of the municipality involved as reflected in the study area, the annual reports from the office of National and Provincial Treasury, Auditor-General and National COGTA and other expenditure reports from relevant institutions as secondary data.

3.7. Data Analysis Method

Data obtained from the questionnaire and conducted interviews was captured and analysed. The analysis formed the basis of the recommendations made in this paper. The data analysis reflected the outcome of the assessment of how the MIG funds are utilized in these municipalities and how is that affecting the overall development at community level.

During analysis, the qualitative researcher uses content analysis of written or recorded materials drawn from personal expressions by participants, behavioural observations, and debriefing of observers, as well as the study of artifacts and trace of evidence from the physical environment (Cooper & Schindler, 2006:196). For the purpose of this case study, the researcher’s method of data analysis involved the use of three-dimensional histograms, tables, and pictures taken on
site during field work to depict the situational environment and the views expressed by participants on the subject matter.

Case studies are designed to bring out the details from the viewpoint of the participants by using multiple sources of data. Case studies are particularly useful in depicting a whole picture of a client's experiences and results regarding a topic. They are used to organise a wide range of information about a case and then analyse the contents by seeking patterns and themes in the data and by further analysis through cross comparison with other cases.

3.8. Ethical Consideration

Ethical issues are the concerns and dilemmas that arise over the proper way to execute research, more specially not to create harmful conditions for the subjects of inquiry and humans in the research process.

Miles and Huberman (1994) imply that only the research should be aware of the identity's participation. Anonymity means no one including the researcher, should be able to identify any subject afterwards.

The researcher use averages instead of information about individuals that may be identifiable to the researches. Procedures for collecting data such as participatory observation, questionnaire or interview about sensitive matter should be treated as consideration. (Vos, 1998:68).

Researchers normally requests distributions, or other third parties to be given access to the data collected and as such should be treated as confidential or anonymity. It can have adverse effect on the ethical consideration. Use of media in research should be connected with the participants knowledge. It is also indicated that researchers are responsible for sensitive information (Miles and Huberman, 1994:19).
The researchers should sought permission to collect data and respect all ethical consideration for research. Qualitative research is the most popular method used in social sciences where human beings are objects of the study.

Permission was sought from the municipalities involved in the City of Tshwane for this research. Due to the sensitivity of the study, ethical guidelines were also adhered to. Confidential and anonymity of the participants was protected as participants comprised of municipal officials and sector departments representatives including SALGA. As a result, the researcher did not attach the names of the respondents to the questionnaire in order to adhere to anonymity due to sensitivity of the research. Respondents were assured that information gathered will be treated with confidentiality. Data will be used for the stated purpose of the research.
Chapter 4: Research Findings

4.1. Introduction

The purpose of this research study was to make an assessment on the manner in which municipalities and City of Tshwane in particular, utilize MIG in infrastructure development for basic service delivery. The findings of this research study present an overall relationship between the development of infrastructure and provision of essential services to the community in the City. The findings also reflect on the prevalent challenges that this municipality is facing in the management and utilization of the MIG funding and the municipal backlog of services that needs to be eradicated. However, for this study to meet its objectives an analysis was also made on the trend of MIG allocation and spending patterns for the past three financial years and the possible impact made to the lives of the community in the City of Tshwane.

The justification in terms of the cut-off in relation to the financial years in which the investigation has focused was based on the fact that the three financial years presented were able to provide comprehensive findings on City’s project spending at a period which the political and administrative term of office is expected to be finalizing project planning and ensuring implementation of infrastructure development programmes aimed at quality service delivery for the benefit of the community. Very little has been done in the first two financial years of the five year term (2006-2010) of the political office bearers elected and its administration since much focus has been on the conceptualisation, designing and budgeting for major infrastructural projects to be implemented in the five year term.

In fulfilling the objectives of this paper, administration of questionnaire and structured interviews were conducted with officials of City of Tshwane in various departments such as water and sanitation, roads and stormwater, housing and
human settlement, electricity and lastly environmental management (waste removal). These interviews were also done with the external stakeholders such as the SALGA, CoGTA and National Treasury, and the community members.

From these internal departments of the municipality and the external stakeholders that participated, primary data was obtained through the interviewer recording the responses and also telephonically and through web e-mail facilities for those who could not be available for one-on-one interviews. The obtained data was then utilised for data analysis as discussed in detail below. In addition, scattered secondary data was also obtained from the participants to formulate and compute the tables and graphs shown below to present the results of the investigation. One of the advantages of using this method of data collection was that it standardises the order in which questions are asked to the respondents to ensure that questions are always answered within the same context.

This research has shown that, by and large, municipal borrowing in South Africa finances both growth-enhancing and backlog-reducing infrastructure. Unsurprisingly, debt capital assists with financing growth-enhancing infrastructure which indicates that debt capital helps in reducing municipal backlog by providing basic services.

4.2. Summary of Key Findings as per Financial Year

After intensive interviews with the respondents from various departments of the Council, it became evident that the municipality has fairly spent the allocated funding for infrastructure development and service delivery although some of the departments could be seen with cumulative backlog from financial year 2007/08 to 2009/10.

Table 6 below depict the MIG allocation and expenditure for the 2007/08 financial year with the waste management and housing services units poorly spending

85
their allocation. The interviews revealed that the two units were understaffed which affected their capacity to spend the funds. In housing services, for example, the available staff could not manage the magnitude of contractors needed to build the low cost houses and this affected the scope of work attached to the approved budget.

In the 2007/08 financial year, departments that ensured quality service delivery by spending their allocation properly were water and sanitation, roads and stormwater, with electricity having overspent the allocated budget. The respondents from these performed departments highlighted pro-active and integrated planning, staffing and stakeholder management as the key aspects in ensuring proper MIG allocation and expenditure management. Some of the specific infrastructure projects accompanying the spending patterns below as confirmed during field work with community members include the rehabilitation of storm water and sidewalks with a budget of R 10 million and an expenditure of R 5 million in this financial year. This also included the storm water drainage system project in Mahube village with an expenditure of R 431 355.00 from a budget of R 3 200 000.00.

In the area of electricity the City implemented projects such a streetlight refurbishment in Mabopane; high mast lighting in block C, E and D in Soshanguve; and Themba phase 1 and 2 electrification which collectively spent a budget of R 60 million. Water and sanitation projects included upgrading of water networks in Majaneng and Greater Themba with a total budget of R 18, 7 million and an expenditure of R 14,4 million.

A detailed report that evaluates each service and assesses the allocation and spending patterns per financial year including the developmental impact is discussed further below in the paper.
### Table 6: Summary of Funding Allocation and Expenditure for Infrastructure Development in CoT in financial year 2007/08

<table>
<thead>
<tr>
<th>Strategic Unit</th>
<th>Approved Budget 2007/08</th>
<th>Cumulative Actua/Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste management</td>
<td>17 000 000</td>
<td>13 673 067</td>
</tr>
<tr>
<td>Housing and Sustainable Human Settlements</td>
<td>452 695 000</td>
<td>186 957 340</td>
</tr>
<tr>
<td>Public Works: Electricity</td>
<td>368 335 000</td>
<td>398 567 457</td>
</tr>
<tr>
<td>Public Works: Roads &amp; Stormwater</td>
<td>617 988 000</td>
<td>442 896 465</td>
</tr>
<tr>
<td>Public Works: Water &amp; Sanitation</td>
<td>490 245 000</td>
<td>470 283 353</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1 946 263 000</strong></td>
<td><strong>1 512 379 682</strong></td>
</tr>
</tbody>
</table>

Showing much improvement from the previous financial year, Table 7 below indicates a considerable change by the departmental units in the 2008/09 financial year regarding the management of funds allocated for developing infrastructure and ensuring service delivery particularly the waste management and housing services. The water and sanitation, and electricity units received more funding in this financial year for purposes of eradicating the backlog in these services. This is evident in the water and sanitation projects such as the Soshanguve bulk pipeline replacement with a budget of R 18,3 million and spent R 9,8 million; refurbishment of sewer networks in Mabopane with a budget of R 2 million and managed to spend R 1,8 million; and the extension of Themba waste water treatment plant which had an overspending of R 5,1 million of its R5 million budget.

The community also benefitted from electricity projects like the electricity-for-all with a budget of R 60 million and spent R 16,5 million; the public high mast lighting programme with a budget of R 20 million and managed to spend R 17 million. In terms of roads projects, examples are the Soshanguve upgrading of roads and storm water which spent R 52,6 million of the R95,4 million planned; and flooding backlog road project in Kudube which spent its total budget of R 6 million. Other projects included the development of housing facilities-low cost housing with a budget of R 3,6 million and spent R 3 million; and sewer-low cost
housing with a budget of R 14.8 million and spent R 10 million. Details in these aspects are discussed below.

According to the findings, this improvement is attributed to having relevant personnel for the positions, community engagement in the planning and execution of projects, and proper financial management.

<table>
<thead>
<tr>
<th>Strategic Unit</th>
<th>Approved Budget 2008/09</th>
<th>Cumulative Actual/Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste Management</td>
<td>19 200 000</td>
<td>18 421 695</td>
</tr>
<tr>
<td>Housing and Sustainable Human Settlements</td>
<td>245 334 988</td>
<td>282 598 572</td>
</tr>
<tr>
<td>Public Works: Electricity</td>
<td>442 790 065</td>
<td>442 422 730</td>
</tr>
<tr>
<td>Public Works: Roads &amp; Stormwater</td>
<td>582 157 240</td>
<td>555 857 711</td>
</tr>
<tr>
<td>Public Works: Water &amp; Sanitation</td>
<td>773 241 700</td>
<td>700 328 128</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2 062 723</td>
<td>2 645 531 966</td>
</tr>
</tbody>
</table>

Table 7: Summary of Funding Allocation and Expenditure for Infrastructure Development in CoT for financial year 2008/09.

Depicted in Table 8 below, the 2009/10 financial year has marked a maintained performance by departments from the previous year with only water and sanitation, and Housing and Sustainable Human Settlements services decreasing in their expenditure against the approved budget. The interviews revealed that the supply chain management and procurement processes of the municipality delayed the tendering and adjudication processes leading to late appointment of consultants and contractors to implement the projects. Details highlighting service rendered and backlogs and the impact in the lives of the community are discussed further below.

<table>
<thead>
<tr>
<th>Strategic Unit</th>
<th>Approved Budget 2009/10</th>
<th>Cumulative Actual/Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste Management</td>
<td>10,300,000</td>
<td>8,430,000</td>
</tr>
<tr>
<td>Housing and Sustainable Human Settlements</td>
<td>431,964,145</td>
<td>168,046,526</td>
</tr>
<tr>
<td>Public Works: Electricity</td>
<td>607,994,987</td>
<td>526,207,820</td>
</tr>
<tr>
<td>Public Works: Roads &amp; Stormwater</td>
<td>577,339,597</td>
<td>524,739,963</td>
</tr>
<tr>
<td>Public Works: Water &amp; Sanitation</td>
<td>828,438,803</td>
<td>493,844,205</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2,456,037,532</td>
<td>1,721,268,514</td>
</tr>
</tbody>
</table>

Table 8: Summary of Funding Allocation and Expenditure for Infrastructure Development in CoT for financial year 2009/10
The summary above shows a holistic performance of the units under investigation and snapshot reasoning behind the portrayed performance as provided by the respondents during interviews. Waste management projects for example, has seen 8,561 households receiving new kerbside waste removal services and 31,836 tons of waste reclaimed constituting a waste reduction of 1.59%. Housing projects included the so-called project linked housing-water provision; and project linked housing-sanitation with a total budget of R 5 million and an overall expenditure of R2.8 million. From electricity point of view, this financial year also achieved an expenditure of R20 million from the R 24 million budgeted for the Tshwane public lighting programme.

In addition to the above, the summary in table 8 also include road projects such as the storm water drainage system in Garankuwa with an expenditure of R 6 million of the R 10 million budget; and internal roads in Tshwane North with a budget of R 60 million accompanied by an expenditure of R 40 million. Some of the water and sanitation projects which the community members are proud of benefitting from them are upgrading of the water network in Themba; and the Garankuwa water networks refurbishment with a total budget of R 13 million and spent more than R 10 million.

During the interviews it became evident that a participation process was ensured in the drafting of budget and IDP as this was discussed in wards across the City and community members had an opportunity to engage with the proposed project plans and budgets for the City and the areas envisaged for implementation. A comment period was provided and communities and interested parties provide comments on the draft IDP and Budget.

It has also been evident that citizen or community participation has affected both the decisions of elected politicians and officials in the City of Tshwane including the programmes, methods and actions of planners who gather and analyse
information which is also pertinent to the IDP process. The Members of Mayoral committees in the different portfolios or units discussed above depend on organised community participation and technical advice from officials in their efforts to recognise major courses of actions and in making project decisions. Community groups in this municipality are seen as sources of information and major links to constituencies. This tendency to rely on community groups can produce decisions that reflect narrow preferences rather than broader and more diverse interests of the people represented by these groups. At the same time, the interaction of the technical complexity and community participation has gone a long way in strengthening the sophistication of development planners and the planning process itself although many problems are experienced in the implementation stages.

The interviewees in the City of Tshwane indicated that the MIG in particular, accounts for the bulk of the municipal funding sources for purposes of rendering basic service. This emphasises the fact that grants will remain a major funding boost for municipalities in the country in addressing service backlogs.

An analysis was made of the previous financial years to determine the historic expenditure performance of Council. This was based on the Fiscal Analysis that was submitted to National Treasury for the relevant financial years. The tables below reflect that expenditure was more or less constant over the period within the Strategic Units. This is evident in the Public Works and Infrastructure Development Department, which was responsible for implementing the major part of the Capital Budget, consists of the strategic units for Electricity, Roads and Stormwater, Transport Development and Water and Sanitation.

Interviews stated that particularly MIG provides the municipality with money for basic services. However, the MIG money is not able to tackle the backlogs sufficiently. One way to supplement the MIG money is to use debt capital for backlog-reducing projects, as stated by the City of Tshwane and the government.
officials. However, loans would not be used for non-revenue generating projects, which constitute a large part of the backlog-reducing project.

4.3. Detailed Analysis of Findings on Essential Services

4.3.1. Water and Sanitation

According to the findings of this research paper, the City of Tshwane Metropolitan Municipality has its water supplied from both internal (municipal) which supplies 21% of the water and external sources (Magalies Water and Rand Water) which supply 79% of the water in the municipality. For the purposes of this research paper, the water and sanitation backlogs which are considered here are only the Formalised Areas and not the Housing Backlog areas (Informal Settlements)

As depicted in Graph 2 below, the MIG allocation and expenditure since 2007/08 financial year to date indicate a fluctuation particularly in the spending patterns which is attributed to vacant positions of technical expertise, lack of proper planning and delayed procurement processes.

During the interviews with SALGA, National Treasury, and CoGTA it was confirmed that indeed lack of integrated planning which encompasses the plans of other internal departments in the City is one of the key reasons that surfaced as a cause to this spending patterns. SALGA further confirmed that the involvement of political office bearers in the supply chain management also causes unnecessary delays and poor implementation of infrastructure projects.

Supported by Graph 2 also is the fact that in 2006/07 financial year which is a year before the period under review in this paper, the baseline historical backlogs that existed were 24 403 households with below basic water services and 35 705 households with below basic sewer services. These figures were revealed during
interviews with the Water and Sanitation department of CoT but also confirmed by the National Treasury, MIG and Free Basic Service section of CoGTA.

The backlogs that still remain as at March 2010 excluding Informal Areas under Housing backlogs are zero (0) households with below basic water service which is magnificent achievement by the City but also 32 140 households with below basic sewer service which indicates that more work still need to be done in the sanitation services. The respondent in the interviews indicated that they are now sceptical about achieving the national target of zero backlog by December 2010 as extended from 2008.

However, it was also indicated that amidst this allocation and expenditure trends, in 2007/08 financial year the City achieved 11 168 households provided with water services, 36 289 households provided with water through tanker services and stand pipes, and 12 006 households were provided with flush toilets for sanitation services to eradicate the backlogs.

In 2008/09 financial year, the City indicated that 13 380 households were provided with water services and 1 212 households benefitted from sanitation service to eradicate backlog. In this instance, the National water services backlog eradication target for December 2008 as determined by the Central Government (Department of Water Affairs, SALGA, National Treasury and CoGTA) was met by the Water and Sanitation department of the Council.

As shown in Graph 2 below and the summary Table 9, the approved budget allocated for 2009/10 financial year was R 800 million with the City managing to spend over half of the allocation. The National Treasury, CoGTA, and SALGA confirmed that lack of financial resources is not the main reason for non-delivery of services but it is the mismanagement of such resources and lack of coordinated efforts that leads to people living in the midst of backlog of services.
Table 9: Summary of the Water and Sanitation MIG Allocation and Expenditure for CoT between 2007/08 and 2009/10 FY

<table>
<thead>
<tr>
<th>Approved Budget</th>
<th>Cumulative Actual/Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007/08</td>
<td>490,245,000</td>
</tr>
<tr>
<td>2008/09</td>
<td>773,241,700</td>
</tr>
<tr>
<td>2009/10</td>
<td>828,438,803</td>
</tr>
</tbody>
</table>

However, the City managed to mark the 2009/10 financial year by an achievement of 5,857 households upgraded with water services from basic to full service, with 2,525 households provided with sanitation service to eradicate backlogs. Looking at the expenditure patterns particularly for this financial year, more development impact could have been achieved through quality service delivery.

Graph 2: Graphical representation of the City of Tshwane MIG allocation and expenditure patterns for water and sanitation from 2007/08 to 2009/10 FY

As highlighted in the introduction of this paper, the two regions covered in the field work for this investigation are the North West and North East of CoT. These regions contain areas that are totally unserviced with neither water nor sanitation.
Their only means of survival is through the bulk water supply wherein trucks carry water to certain points of the zoned (formal) areas without communal or stand pipes. During field work, people were seen collecting water through containers for their households as depicted in figure 3 and 6 below.

Figure 3: Bulk Water Supply Reservoir in Themba with Trucks collecting water for the un-serviced areas in the part of North East region

Figure 4: Waste water treatment plant in Themba Area (North East) servicing the population

The Temba Waste Water Treatment Plant (TWWTP) shown in figure 4 above, has a current capacity of 12.5Ml/d with a maximum of 15Ml/d. The upgrading of
TWWTP through the Backlog Eradication Programme of the will assist the City of Tshwane in towards achieving the national target dead line for provision of basic sanitation to all citizens by December 2010. It is envisaged that that completion of this upgrading project will ensure additional connections to sewage reticulation in Themba. This upgrade will see to it that an additional 36 000 households are being supplied with waterborne sanitation and increase the average flow from 15M/l/d to 18M/l/d with an expected average maximum of 36M/l/d. Considering the backlog in sanitation services in the North East Region of the City, the required capacity for the TWWTP alone should be 51M/l/d.

4.3.2. Electricity

The City of Tshwane is responsible for providing a safe, effective and efficient supply of electricity to communities and customers within its licensed area of supply. This includes the generation of electricity, repair, maintenance, construction and development of the electricity network to serve all industrial, commercial and residential consumers in the licensed area of supply. The provision of electricity to households has resulted in approximately 78,5% of households (539,401h/h) having access to electricity. Both Eskom and Tshwane supply most of the areas to the north of the city like Ga-Rankuwa, Winterveld, Themba and Mabopane which covers the two regions under investigations.

For the past three financial years which the research is reviewing, the MIG allocation and expenditure for electricity in the City of Tshwane is highlighted in Table 10 and Graph 3 below. As shown below, the achievements of the City of Tshwane in the area of electricity provision are marked over expenditure of the approved budget in the financial year 2007/08 which implies that the municipality managed to electrify more households and develop more infrastructures like high mast lighting than planned. Over 11 250 houses were provided with electricity in this financial year. In the Mabopane area alone 5 152 occupied houses were electrified. In addition to these achievements, 6 375 new private connections
were added to the existing network, 18 619 households that were not electrified were supplied with free alternative energy equivalent to 50 kW per month, about 2 651 residences were provided with prepaid meters.

The interview sessions also revealed that R 251 213 170,00 was spent on the maintenance of electricity infrastructure. It was also revealed that the maintenance of existing infrastructure is an integral part of the planning and budgeting processes to ensure sustainable provision of infrastructure for quality service delivery. Moreover, the 2007/08 financial year has seen a creation of 915 short-term jobs in the supply and maintenance of electricity infrastructure.

It has also become evident, as supported by the interviews, that the municipality maintained the level of performance in the financial year 2008/09 which also reflects an increase in the approved budget compared to the previous financial year. During the interview with Electricity division, it was indicated 5 862 houses were electrified, 1 609 new streetlights were erected and about 480 streetlights got refurbished. In addition, 30 high mast lights were also provided. Lighting up public roads and public areas for safety and security reasons in the disadvantaged communities is one of the visible development impact that could be noted during the field work.

The interpretation is that the Service Delivery Budget Implementation Plan (SDBIP) which is the financial component of the IDP, could have been adjusted through the SDBIP Adjustment Process wherein funds are increased or decreased depending on the service delivery needs. Needless to say that the increased budget for this financial year has taken into consideration the electricity backlogs that needed to be eradicated. It should be noted however, that an increased budget must be accompanied by suitable institutional capacity of the municipality to spend and achieve the planned targets.
During interviews, the Electricity Division highlighted that due to shortage of staff and increased backlog target, the performance in terms of electricity supply has slightly gone down by 20% in the financial year 2009/10 except that the budget to be spent was now much higher than the previous year as shown in Table 10 and Graph 3 below. The backlog also covers formalised areas (formal shacks) with housing backlog as depicted in figure 5 below.

### Public Works : Electricity

<table>
<thead>
<tr>
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</thead>
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<td>Approved Budget 2009/10</td>
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Table 10: Summary of the Electricity MIG Allocation and Expenditure for CoT between 2007/08 and 2009/10 FY

Graph 3: Graphical representation of the City of Tshwane MIG allocation and expenditure patterns for Electricity Services from 2007/08 to 2009/10 FY

The Electricity Division realised that most of its target set for the 2009/10 financial year, however there were some shortfalls, for example the target set for
the provision of high mast light could not be achieved as per the set target due to delays in the tender process. However, the division channelled the resources to street lighting and far exceeded the set target. The division also receives applications from new businesses/industrial for connections, but is only committed to those who have paid.

As much as there were some failures marked in 2009/10 financial year, the investigation also brought to light the milestones which were achieved in this financial year in the areas of eradicating backlogs and providing for growth and development in the lives of the people in the City particularly the two regions which the study is focused. The field work confirmed that 7,942 completed houses electrified to eradicate backlog and 552 completed and occupied houses electrified to cater for growth. About 3,088 new street lights provided which improves the safety of the people and prevent and promote reduced crime. In addition to this, 93% (141 of 152 applications) of new businesses/commerce and industrial were provided with connections and 7,286 household meters converted from conventional to prepaid meters.

Figure 5: Themba Electricity Sub-station reticulating to population (North East Region).
4.3.3. Housing

As enshrined in the Constitution of country, basic shelter in the form of houses is a right, amongst others, that every citizen should exercise as a need for proper livelihood. In an effort to realize this provision, the City shown fluctuations in the spending patterns from 2007/08 financial year to date as reflected in Table 11 and Graph 4 below. The findings of this research shows that poor performance by the municipality in providing sustainable housing services particularly in 2007/08 and 2009/10 financial years is attributed to fraud and corruption in the procurement of housing development services which lead to appointment of unqualified and inexperienced service providers. Understandably, this was also due to non-decision making in the part of executive management regarding the appointments since their political superiors have preferred bidders which are not based on merit.

Guided by the objectives of this study, it is clear in the findings that there is a recurring pattern of unacceptable expenditure by these crucial divisions of the municipality which are very central to the provision of quality service delivery. To a certain extent, it is strongly arguable that the reasons for poor expenditure in housing services amongst others, is due to vacant positions and delayed procurement processes. The researcher's observation in this instance, apart from what has been obtained during interviews, is that there is lack of commitment by some of the existing staff which is a large attributing factor to this sluggish expenditure of municipal infrastructure grant.

It was revealed that, for example, in the financial year 2007/08 only 6 208 families were relocated into RDP houses and serviced stands with limited funds being the reason for this low number of people receiving houses. Arguably, Table 11 below shows that there were adequate MIG funds allocated for the provision of houses. The CoGTA and SALGA indicated that apart from vacant
position which the municipality claims to be the attributing factor, corruption in the supply chain management is the reason behind these expenditure trends.

Furthermore, CoGTA and SALGA again suggested that the procurement of these kinds of important basic services should be centralized and managed from the National Department of Human Settlement working jointly with CoGTA and National Treasury. However, this debate still need to be thoroughly investigated since municipalities are autonomous and have constitutional rights to procure their own services.

<table>
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Table 11: Summary of the Housing Services MIG Allocation and Expenditure for CoT between 2007/08 and 2009/10 FY

The findings of this study revealed that the provision of affordable housing in South Africa on areas which are well located to fully fledged existing infrastructural services and close to places of employment has also been hindered by non-availability of government owned land. As in the case of CTMM, this resulted in most of the housing projects, both funded by MIG and otherwise, being developed in the peri-urban areas which are not yet developed in terms of infrastructure resulting in increased cost of services to the residents in low income housing project e.g. Themba Community in the North East Region of CTMM as shown in figure 7 below. It is the sole responsibility of the CTMM to acquire and manage land fulfilling this function in alignment with the IDP and spatial development framework of the council.
According to the findings of this paper, housing will remains a challenge in Tshwane, as government funding is not sufficient to meet the need without institutional capacity to manage the provision of this service. Although the City is almost on track to meeting its five-year target (ending 2011) of 30 000 houses, the 6 000 houses per annum target (spread throughout 24 areas) is by far not sufficient to meet the backlog and increased migration into these areas. Projects to convert inner city buildings and hostels into family units, such as the Community Residential Units Programme, are providing some relief and the City’s target is to develop at least 240 units per annum.

Figure 6 below shows backlog of houses that need to be built in the formalised but un-serviced areas of Kudube wherein people are still living in shacks that are not electrified and no stand pipes provided amongst other crucial services. The view from community members in this area is that the municipality has promised to build houses for the residents but such efforts has never come to fruition and lack of budget remains one of the famous reason used by the councillor and officials from the municipality for not providing houses.
In addition to this, Figure 7 below shows the shortage of houses in the formalised and serviced areas wherein electricity, water and sanitation, and others services are present. The picture shows two households next to each other whereby the other household has received the RDP house while it is taking the other household almost three years waiting to receive the house and living in a shack.

During the field work the household confirmed that they have registered to receive the houses for this long period and nothing has yet happened. Making it worse, there is no timeous communication from the municipality to update the residents in the waiting list on progress towards receiving their own houses. Some of the residents claim that contractors which were appointed to build houses for everyone did not complete their scope of work hence some households are still with no houses. This calls for municipal staff who are skilled enough to ensure tighter and close management of professional service providers and contractors who are awarded tenders for building houses.
In conclusion, housing was identified as the most important infrastructural challenge, with the large backlog, problems surrounding the sharing of houses, slow pace of resettlement and contractor problems-uncompleted projects, labour and financial issues, project management, low quality of workmanship- raised as major issues. However, some good achievements were also noted.

4.3.4. Roads and Stormwater

The responses from the participants representing the Roads and Stormwater Division of the City of Tshwane have shown that a considerable work has been done around the City but in particular the North West and North East regions to ensure that ample roads are constructed and stormwater drainage systems developed. This position has been supported by the figures 8 and 9 below captured during the field work presenting tarred roads and open stormwater drainages systems.

However, acknowledgement has been made by the respondents that a lot still need to be done in this respect as shown in figure 8 below. Since high turn-over of staff has been one of the reasons for delayed decision-making process in most
projects, the respondents indicated that there have been historic baseline backlogs existing before the period which the researcher is reviewing. For example, in the year 2006/07 about 2300 km of gravel roads needed to be upgraded to paved roads and 2400 km of stormwater drainage systems needed to be installed, as well as 1600 km of natural water courses requiring attention.

It has also come to light that to date, the backlog that still exist are 2300 of stormwater drainage systems to be installed and 2200 km of gravel roads to be upgraded to paved roads at an estimated cost of R 5.5 billion. Important to note is the fact that it is difficult to reduce these backlogs since in every new RDP or Project Linked housing development the roads and stormwater backlogs are increased but also due to the fact that there are never sufficient funds to apply to these aspects.

<table>
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Table 12: Summary of the Roads and Stormwater MIG Allocation and Expenditure for CoT between 2007/08 and 2009/10 FY

It is only prudent to indicate that despite the above mentioned, the interview has also gathered some tangible successes which were achieved in the three financial years under review. From the 2007/08 to 2009/10 financial year, the approved budget allocation and expenditure as shown in Table 12 above and Graph 5 below has seen a construction of 247 km of roads and 194 km of stormwater drainage systems and further 162 stands provided with roads and stormwater drainage towards the eradication of backlogs.
Graph 5: Graphical representation of the City of Tshwane MIG allocation and expenditure patterns for Roads and Stormwater from 2007/08 to 2009/10 FY

Figure 8: A gravel road in the Themba RDP area (North East Region)

Figure 8 above shows that as much as the municipality is able to spend what it has been allocated for, high expenditure does not entirely mean that all communities are serviced properly. The nearest interpretation would be that there are no adequate funds allocated for eradicating the outstanding backlogs which still need attention.
Figure 9: A newly constructed road and stormwater drainage in Themba Community (North East Region)

Figure 10: A newly constructed roads and stormwater drainage in Soshanguve (North West Region of CoT)

Even though the landscape in most parts of the northern side of the CoT proves to be a low laying area prone to heavy flooding, it became evident that the construction of road and the stormwater channels have gone a long way in properly controlling and directing massive water that leads to flooding. As shown in Figures 9 and 10, these properly done stormwater drainages are well maintained and any silt that accumulates over time is removed timeously.
4.3.5. Waste Management

In line with the objectives of this study, the research has gathered and analysed the financial allocations and expenditure on waste management services since 2007/08 financial year to date leading to the presentations made in Table 13 and Graph 6 below. The field work has shown that formalised areas receive more attention in terms of waste management services. This situation where full services can only be provided in proclaimed areas and where there is no backlog for full service provision within this environment. The Waste Management Division, like the Electricity Division, competes with private waste removal service providers.

Although this service is crucial for communities to receive, in the City of Tshwane like in most municipalities, this function is put in the back banners particularly at a political level. Table 13 and Graph 6 below prove the point as the allocated budget for this service is far lower compared to other services already discussed.

The respondents in the interviews indicated that there is need for sector departments such as that of Environmental Affairs to champion waste management in municipalities and assist in raising the necessary awareness to both politicians and officials but also to community members since limited or poor service in this regard also poses serious health risks. This calls for total change in mindset regarding waste management and recycling. This can be achieved through awareness raising, education and capacity building.

Nevertheless, the expenditure trend shows that there has been fairly well performance in terms of utilization of the allocated MIG funds particularly in the 2008/09 and 2009/10 financial years. It became apparent during interviews that the poor performance in the 2007/08 financial year is attributed to vacant positions in the waste management division which has been since resolved.
Some of the achievements made through the allocated MIG funds during the 2007/08-2009/10 period for example, include the 9,364 new kerb side waste removal service points were added to cater for growth. About 896,419 tons of domestic waste were collected and 582,653 tons of garden refuse were disposed of. In addition, 152,666 tons of commercial waste were collected whilst 241,690 tons of illegal dumping was removed. The respondents also indicated that 73,000 households in informal (unproclaimed areas) were provided with communal skips and 48,300 households in informal (unproclaimed areas) received a waste removal service with plastic bags.

<table>
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Table 13: Summary of the Waste Management MIG Allocation and Expenditure for CoT between 2007/08 and 2009/10 FY

Graph 6: Graphical representation of the City of Tshwane MIG allocation and expenditure patterns for Waste Management from 2007/08 to 2009/10 FY
Although this service might not be receiving enough attention from decision-makers, it offers good job opportunities to community members if planned properly. One proposal which is being considered by the waste industry is to create landfill reclaimer cooperatives. For example, the Tshwane Municipality has registered a corporative for landfill reclaimers in Tshwane and has built buy-back centres at two of their major landfills. However, the challenge that the Tshwane Municipality have been faced with has been to find a suitable operator that will take ownership and management responsibility for the corporative. This lack of a formal management structure has resulted in sub-optimal management and ineffective use of infrastructure.

Figure 11: A new kerb side waste removal service point in Themba Community (North East Region)

Figure 11 above shows the need to have more funding allocated towards this service as more and more waste is produced everyday with health hazards and odour which poses risks to the well being of people.

The National Treasury is of the opinion that adequate funds can be allocated to municipalities for waste management like any other service as long as there is
enough motivation in the IDP and Service Delivery Budget Implementation Plan (SDBIP) for having such funds allocated. This implies that communities need not to seat back and voice out the need to have this service rendered.

SALGA and CoGTA however, believes that the filling of vacancies in this fraternity of the municipal function will be a cornerstone of prioritization of this service and call for more funding for the filling of such vacancies first.

4.4. Development Impact of Services Rendered

The quality, regular and consistent supply of water through the provision of water tanks and stand pipes was raised as an important achievement, as was the timely response to rectifying water problems on complaint. Regarding sanitation services the provision, replacement and improvement of sanitation facilities within individual households and the improvement and expansion of sanitation infrastructure was also regarded as a manner in which the lives of CoT communities had improved. Communities also acknowledged the impact that the dismantling of the Bucket System and the provision of toilets at the level of the household has done to their lives including the work done on new and existing pipelines. The eradication of the bucket system, the construction of new sewerage pumps, the improvement in the bulk sanitation system and the provision of VIP toilets in rural areas also went a long way in changing the lives of people and their perception on municipal service delivery.

In terms of electricity services, community participants praised CoT for the introduction of high mast street-lighting, thereby increasing and improving the safety in these areas during the night and contributing to the reduction of crime activities. The safety and security improvement as a result of infrastructure projects on public lighting could also not go unnoticed. Women and children also indicated the relief of collecting fire wood in the bush which they mentioned that it use to pose threat to their lives. The short-term jobs created in the maintenance
of infrastructure are seen crucial in improving the impoverished livelihood in the community under investigation.

The development impact that came with the construction and hand-over of new houses to families were also seen as one of the great achievement of the municipality in providing for some of the shelter needs of the local communities, and lessening the tension and conflict inherent in the house sharing scheme introduced by the former homeland government, through enabling more families to possess their own houses. However, more work still need to be done in providing houses to communities as discussed earlier-on in the paper.

The community members and officials who participated pointed to recent interventions by CoT in improving the quality and accessibility of roads and pavements in their areas, through the repair, reconstruction, and tarring of streets and main roads, the fixing of potholes and the provision and/or repair of gravel roads. There was however, the feeling that much more still needed to be accomplished in this respect as in the housing services.

Waste management has also brought positive development impact and contributed to better livelihoods for low income poor residents through activities such as waste collection ensure re-cycling and re-use of waste materials by selling the collected reusable waste to buy-back centres and controllers of landfill sites in CoT. This contributes to employment creation, poverty alleviation as well as environmental cleanliness. During interviews, CoT has expressed its keen interest in maintaining partnership with the local private sector to provide municipal services such as waste collection, waste recycling and waste disposal wherein more jobs can be created.

Notably, one of the indicators of assessing whether government is responsive to people’s needs is through the experiences and perceptions people have of service delivery in their day-to-day lives, more specifically if they perceive an improvement in service or collapse in service.
Chapter 5: Conclusions and Recommendations

5.1. Conclusions

In line with the background of the research problem, it became clear that municipalities share a lot commonality in terms of the service delivery challenges but in particular the utilization of Municipal Infrastructure Grant (MIG) for providing housing, water and sanitation, roads and stormwater, electricity, and waste removal services. The key findings have shown that municipality is adhering to the policy framework and legislation of the country in terms of service delivery even though a lot still need to be done around this compliance matter.

From the above discussion, chapter one to four, local municipality should endeavour to act responsively to people’s needs and not doing the rhetoric of service delivery as lip service. The preceding discussion has illustrated significant progress made by CoT in improving the lives of its people and important challenges still affecting the delivery of services.

This paper has shown that local government has greater potential for ensuring public participation and need-based service delivery, public accountability and political education to all. However, there are diverse internal limitations and external challenges facing the local government system that need to be overcome in order to make it effective in realizing the above mentioned objectives. It is therefore necessary to reduce the presence of state bureaucracy in the composition of local governance at all levels and to change the bureaucratic mindset held by some of the local government representatives and officials, a conclusion which is consistent with most of the earlier literature.

As the key site of service delivery and development - the point of delivery where all spheres of government converge - local government must play its rightful role in intergovernmental relations. Without its full participation, the vital contribution
of locally articulated preferences (based on municipalities’ participatory governance procedures - ward committees and IDP processes) will be missing. Yet, the participation of local government in national and provincial intergovernmental processes is ad hoc rather than systematic. In many instances local government is not represented in these processes because the institutional machinery does not exist. The participation of local government in national and provincial IGR forums and processes should therefore, where appropriate, be institutionalized.

In achieving this goal the Regions are mandated to bring services to the people by coordinating service delivery to ensure delivering the services in accordance with the needs of a specific community. The purpose is further to ensure cost savings by programming service delivery in such a manner that duplication does not take place. The Regions are in terms of its mandate required to enter into Service Level Agreements (SLA) with CoT departments that will be involved in service delivery in the area of its responsibility.

It was established (during interviews) that most municipal operational and functional employees are not kept abreast with the legislative mandate and other PPP developments implemented in other municipalities. The reason for not being abreast with the developments in terms of service delivery in other municipalities may be that there is a lack of active and effective participation in joint municipal affairs as is promoted by the SALGA and CoGTA. These pitfalls and therefore impediments to recognise the significance of legislation and other municipal experiences in the implementation process can negatively influence the success of entire PPP projects in municipalities throughout the country. PPPs are not isolated means of service delivery, but are ingredients and portions of municipal planning, in this case for instance, the Integrated Development Planning (IDP). The implication is that even in the consideration of the PPP as an alternative means of service delivery by a municipality, the municipal IDP should be consulted to ensure compliance and compatibility of both initiatives (PPP and
IDP). If a match is not found, then modifications on either the PPP mechanism or the IDP should be sought.

Regarding housing services for example, the findings presented and indicated that one of the key challenges in the provision of integrated human settlements is to come up with an integrated planning process which recognises the need to ensure alignment between socioeconomic infrastructure and provision of services in housing development. In most cases in the South African government system, business planning processes do not recognise the necessity of alignment amongst the municipal infrastructure services and provincial and national infrastructure planning for services such as clinics, hospitals, schools, dams and police stations. This therefore, calls for better coordination within the housing sector and national and provincial government to ensure sustainable integrated human settlements.

Inter-governmental relations go beyond the IGR and the MFMA also requires consultation in the budgeting and planning process. All government programmes are developed based on the laws and policies that are made by Parliament. Every department and every unit within a department has to develop implementation and action plans based on the overall strategic plan of government. Apart from the Annual Performance Plan, every department also has to develop a Service Delivery Improvement Plan. The relationship between national planning instruments such as the NSDP, provincial plans such as Provincial Growth and Development Strategies (PGDS) and municipal plans (IDP’s) must be determined in the context of a set of intergovernmental planning principles.

The Department of CoGTA’s view is that many of the financial problems of local authorities are owing to their inefficiency. Throwing more money at local government will not necessarily solve their financial problems. The department’s view is that the problems of local government finance are primarily managerial
rather than systemic. The Deputy Director-General in the Department of Finance called local government budgetary systems archaic and based on unrealistic planning and inefficient revenue collection. The department focuses on capacity building with a view to improving financial and managerial systems and capacity. As pointed out, this perception that South African local government is inefficient is not new: it resonates through South Africa’s history. The department’s view is that the lack of finance is sometimes overplayed. Often the problem is that municipalities cannot manage funds or utilise them properly. Many municipalities do not have the capacity to perform their functions, including basic treasury functions such as billing ratepayers and keeping a proper credit control system. A study found that the lack of financial management skills is the biggest capacity problem facing municipalities.

According to the Department of National Treasury, municipal financial management is weak and apparently deteriorating amid increased demands for services and development. Project Viability was a government initiative consisting of a combination of strategic and operational measures aimed at restoring the financial health of municipalities. It included measures to improve municipalities’ financial management and accounting and to improve credit control. While there has been some improvement in better financial management, local authority debt has increased owing to the unaffordability of rent and service charges for poorer residents, the culture of non-payment and inadequate revenue collection systems. Capital expenditure has actually fallen as a result of deficits and liquidity problems in many municipalities. This is a reflection of the department’s position that municipalities should first put their house in order before coming to the Treasury for more money.
5.2. Recommendations

5.2.1. Project Management Office (PMO)

The results of this study calls for improvement in the manner in which the municipality manages the planning, design and implementation of infrastructure projects. Adherence to principles of project management should be monitored in all projects implemented. This will ensure effective and efficient monitoring and evaluation of projects done on behalf of government as a whole but also assist the municipality in developing a turn-around strategy for responding to community needs. This would require the municipality to appoint relevant staff with project management qualifications and experiences. A strong project management office should be established and become the central point of control for all project reporting and accountability.

5.2.2. Development of Service Norms and Standards

Adherence to Batho Pele Principles, all the departments and divisions of the municipality must have a set of norms and standards which guide all the officials and councillors on the standard of service they need to provide to the people. This will be clear in terms of the response time that the officials and politicians would have to take to attend to complaints from communities on any of the services discussed above. This norms and standards should form the basis of performance management systems and clear targets must be set and adhered to. Such must also be made public for the communities to know and be aware of the type of services they deserve from the municipality and the performance contracts which officials have committed to for quality and sustainable service delivery.
5.2.3. Regular Consultation, Communication and Accountability

The most significant finding of this research paper is related to the lack of an effective and efficient system for monitoring, evaluation, feedback and accountability, most noticeably in the housing arena, but also apparent in other areas of municipal delivery, participants pointed to challenges surrounding.

Human resources and labour issues in contributing to delays in or non-completion of projects. Poor processes of engagement and communication and confusion over the division of roles and functions of the three spheres of government (Local, provincial and national).

The tendering process again has severe negative consequences for effective and efficient service delivery while a number of Projects had been initiated, and work commenced, the progress towards completion was often slow and delayed due to the lack of coherent and consistent system of holding contractors and service providers accountable. In some instances, these Projects had even been abandoned before they were completed. Processes of engagement and communication with CoT officials and councillors necessitate significant this suggested improvement.

5.2.4. Development of Training Manuals for Education and Awareness

The municipality must develop community sensitization manuals for all the services rendered for its people. For example, in the waste management function the community sensitization strategy can be aimed at improving stakeholder’s participation in solid waste management activities and more specifically increasing community participation in paying for the solid waste collection services. This will gradually improve stakeholder’s involvement in all levels as a result of sensitization.

The successful application of the recommendations provided should however facilitate efficient and effective service delivery to the people of CoT.
6. References


Babbie L & Mouton F, 2002, The Practice of Social Research, Oxford University Press, USA


Bless C. & Higson-Smith C, 2000, Fundamentals of Research Work Methods, Cape Town: Juta


Bond P. & Ruiters G., 2000, Transformation in Infrastructure Policy from Apartheid to Democracy: Municipal Services Project, Background and Research Series, RSA


City of Tshwane Metropolitan Municipality, 2006, *City of Tshwane Integrated Development Plan (May 2006)*

City of Tshwane Metropolitan Municipality, 2010, *City of Tshwane Integrated Development Plan Review (June 2010)*

City of Tshwane Metropolitan Municipality, 2010, *MIG-Cities Submission by the City of Tshwane, 1st Draft for 2010/2011, Version 4, RSA*


Department of Provincial and Local Government, 2006, *Municipal Infrastructure: Roles and Responsibilities of National Sector Departments, Provincial Counterparts and Municipalities*, RSA

Department of Provincial and Local Government, 2008, *Business Plan For Sustainable Municipal Infrastructure In The 52 District And Metropolitan Areas 2008-2014*, RSA


Municipal Systems Act (MSA) 32 of 2000, RSA


Parnell C, 2002, Democratising Local Government, The South African Experience, University of Cape Town, RSA

Peterson L, 2000, Building Local Credit Systems, Urban and Local Background Series 3, World Bank, Washington, DC


Ruiters G., 2007, Critical Social Policy: Contradictions in Municipal Services in contemporary South Africa- Disciplinary Commodification and Self-Disconnections, Volume 27, Published by Sage, RSA


Statistics SA, 2008, Community Survey


Water Services Act 108 of 1997


http://www.dpmd/partnership-modalities