

Assessing the Challenges of Managing Public Assets in the Local Government and Traditional Affairs of Mafikeng

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Declaration

I Tebogo Malebe declare herewith that the mini-dissertation entitled Assessing the Challenges of Managing Public Assets in the Local Government and Traditional Affairs of Mafikeng which I herewith submit to the North –West University as completion of the requirements set for the Master in Business Administration degree, is my own work and has not already been submitted to any other university.

I understand and accept that the copies that are submitted for examination are the property of the university.

Signature T. Malebe university-number 17009758

Signed at Mmabatho this 26th day of April 2012

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Abstract

The purpose of this research is to assess the challenges of managing public assets in the Local Government and Traditional Affairs of the Mafikeng district and the impact that these challenges have on the delivery of service. This research aims at highlighting the challenges faced by the Local Government and Traditional Affairs of Mafikeng with regards the efficient and effective management of public assets. The study also aims at highlighting the effect of the current management of public assets on the level of delivery of services to the local community. The literature was reviewed using asset management matrix. Most words found on the articles on asset management were relevant to Local Government and Traditional Affairs of Mafikeng. The questionnaires were developed and distributed to employees of The Department of Local Government and Traditional Affairs and the Mafikeng Local Municipality. That was done without looking at their age, gender, nationality, job position or their years of employment. The findings were that there are challenges on managing public assets within the Department of Local Government and Traditional Affairs. There is a challenge in mis-use of infrastructure assets in the department. It also found that the integration of asset management with other systems in the department will assist the department to reach its goal. The current management program should be adhered to, as it can help to achieve the set strategic goals of the department. The results of this study can be used by management of Local Government and Traditional Affairs to improve the process of public assets management within the Mafikeng district. The research can be used as a model to deal with public assets and finance management in future

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Chapter One

Overview of the Study

1.1 Introduction

Resources are required for the better provision of service to local communities as set out by local government goals. Some examples of resources are assets, which include inventory, immovable property, transport assets, cash and human resources (a number of people with different kinds of expertise). A permutation of these resources used optimally will ensure the set goal and objectives at local government level are achieved efficiently and effectively. This can be achieved through use of a management process that weighs up the advantages and disadvantages of utilizing these resources in a specific way against the risk of not doing so and not achieving the set goals in the shortest period and most effective way possible (Department of Public Works, 2004).

This research aims at highlighting the challenges faced by the Local Government and Traditional Affairs of Mahikeng with regards to the efficient and effective management of public assets. The study also aims at highlighting the effect of the current management of public assets on the level of delivery of services to the local community.

The literature used in this Chapter is derived from academic journals, articles, contemporary literatures and debates, government policies on the management of public assets and public finance from the South African and the international perspective.

This Chapter includes an overview of the study and a description of the background of the study. This is followed by the problem statement. The research objectives of the study are expressed by showing the primary objective and the specific objectives of the study, addressing the purpose of the study. The rationale of the study is described followed by a section that looks the key words used. The research design is then explained in three parts namely; research methods, sample design, analysis, and the data collection instruments. The geographical limit and parameters of the study have been detailed in the scope of the study proceeded by the layout of the entire research, ending with a conclusion.

1.2 Background

Local and municipal government in developing countries is prone to failure with regards to the delivery of social services. This is mainly because of the lack of sound local public budgeting and effective management of resources (Buthelezi & Dollery, 2004).

Proper management of resources can guarantee the attainment of set goals and also ensure resources not utilised properly are applied to alternative needs or even changed for resources that will be more effective in the process towards the attainment of the goal. Applying these principles and the proper keeping of records of the cost of a project and weighing it up against the benefits gained are referred to as “financial management”. Financial gain or service provision cannot be achieved if these principles are not practiced in local government. Local government progress in the provision of service will be constricted because of mismanagement of assets because of inefficiency and inhibitive costs (Department of Public Works, 2004).

A number of government initiatives and policies have been introduced with an effort of tagging the global perspective towards the improved public sector management and accounting. These include the Public Finance Management Act, (1999) (PFMA), the Municipal Finance Management Act, Act 56 of 2003 (MFMA) and the King II guideline report on corporate governance. Sections of the MFMA are relevant to asset management. Good asset management is critical in the public sector, particularly as some of the significant assets are infrastructure assets with long life spans and enormous capital outlay that are vital to providing a foundation for economic activity.

1.3 Problem Statement

Local governments in developing countries are facing increasing fiscal strain as cities and their infrastructure requirements expand and revenue growth lags behind. This international trend is reflected fully in the massive growth in local service infrastructure in South Africa, particularly in electricity, water, sanitation and local roads, as the national government seeks to provide essential local services to the sprawling townships surrounding South African cities (Shah, 2007).

In terms of the management of human resources, although there are shortages of appropriately qualified personnel in all three spheres of the South African government, it is

perhaps more acute in local government. This situation is aggravated by serious under-performance by some municipalities. The seriousness of the situation in some communities has even led to public protests by residents because they are not receiving the services that a municipality should provide (Brand, 2007).

Corporate governance concerns still dominate the challenges faced by local governments, even with the implementation of the various forms of legislation such as the PFMA and MFMA. The assumption would have been that corporate governance in the public sector should improve instead of decline. It is in this context that the current study is undertaken.

In contrast to the Kings Report (2002), Local Municipalities continue to be plagued with issues concerning corporate discipline, transparency, independence and accountability. Other issues that remain are issues which include responsibility. With regard to management responsibility pertains to behaviour that allows for corrective action and for penalising mismanagement; fairness and social Responsibility that encourages placing high priority on ethical standards (King, 2002:11).

1.4 Research Objectives

1.4.1 Primary Objective of the Study

The primary objective of this study is to assess the challenges of managing public assets in the Local Government and Traditional Affairs of the Mahikeng district and the impact that these challenges have on the delivery of service. The primary objective can be divided into the following distinct specific objectives.

1.4.2 Specific Objective of the Study

The aim of this study is to assess the impact of the challenges of the managing of public assets on the service delivery by Local Government and Traditional Affairs of Mahikeng district. The following are specific objectives addressed in this study:

- To examine whether the current asset management program in the Mahikeng District has an effect on the level of delivery of service.
- To determine if the integration of the Asset Management Framework with other strategic objectives and policies of the Department of Local Government and Traditional Affairs will have an effect on the level of service delivery.

- To determine whether effective public assets accountability will have an impact on the level of asset management by the Department.
- To examine whether the current capacity of the Department will have an effect on the implement of an effective asset management program as set out in the Asset Management Framework.

1.5 Rationale of Study

The significance of the study is that it will improve the process of public assets management within the Local Government and Traditional Affairs of Mahikeng. Employees and relevant decision-makers of the Local Government and Traditional Affairs will have a clear understanding of the reasons behind public assets management framework, the Public Finance Management Act (PFMA) and other public assets management policies. The study aims to eliminate ambiguities in the understanding of the policies directed at public assets management. The study will create an integration of public assets management policies with other relevant policies in the Local Government and Traditional Affairs aimed at the improvement in delivery of service. Local Government and Traditional Affairs can use the study as a model to deal with public assets and finance management in the future.

1.6 Key Words

Mahikeng; Local Government; Traditional Affairs; North West Provincial Government; Assets Management; Public Finance Management; Delivery of Service; Corporate Governance

1.7 Research Design

The research method was a quantitative method of obtaining knowledge. This method applies a systematic investigation to a problem, research question or phenomenon, using certain socially accepted principles (Bless & Higson-Smith, 1995: 3).

The units of analysis were individuals, groups and the employees of Local Government and Traditional Affairs within Mahikeng. The sample units were randomly selected from each stratum. The sampling technique used was a proportionate random stratified sample. Using a simple random sampling in each stratum, each employee in the stratum has an equal chance to be selected into the sample, as such making the sample representative of the population. The consideration of the employee's demographics within a particular work place was taken;

therefore it was an ideal to use a random stratified sample proportional to the designation of the target population. The target population was 650 employees of local governments and traditional affairs. A sample of 242 was selected to conduct the study.

Data was analyzed by means of tables, charts, graphs and inferential statistics. Statistical analysis will be conducted during the study and conclusions and recommendation were made thereafter (Welman & Kruger, 1999: 45-66).

1.7.3 Data Collection Instruments

The record method or unobtrusive measures of data collection was used. Self-administered questionnaires were used to collect the primary data for quantitative analysis. The collection of the primary data was by means of the questionnaire to the workforce who should be the beneficiaries of the proper use and management of public assets and the delivery of service within Mahikeng. The secondary data gathering was conducted by reading relevant literature including government policy of public finance management, professional magazines, newspapers, journals, legislation and dissertations.

1.8 Scope of the Study

The geographical parameter of the study is Mahikeng; the capital of the North West Province. The study is limited to employees within the Local Government and Traditional Affairs. There is one local municipality and a traditional office, which is situated at Lowe Building with targeted population. The targeted population was top, middle and lower management.

1.9 Plan of the Study

This chapter gives the reader the general picture pertaining to the fundamental importance that is introduction to the background of the study, research problem, the research objectives are determined.

Chapter 2 reflects the literature review for the study. The literatures review relates the current topic and previous studies conducted based on public assets and finance management and its impact on the level of service delivery at local government level.

Chapter 3 outlines the research methodology followed in the study, with the necessary rationale, the research design and analysis followed in the current study. The aspects to be covered are research design, sampling, measuring instrument and data analysis.

The response rate is dealt with in Chapter 4 and the results of the study are presented and interpreted in relation to the objectives of the research, which were spelled out in Chapter 1.

In Chapter 5 the outcome of the study is discussed, conclusions are drawn and recommendations are made to remedy and corrective measures of the research problem.

1.10 Conclusion

In this Chapter, the reader is introduced to the background of the problem in general terms and detailed statement of the problem is given. Five objectives of the study are articulated, research design is dealt with, the research design is exploratory and mainly quantitative that is indicating the methods sampling technique and the targeted population that was used to conduct the study. The structured self administered questionnaire method was an instrument used to collect data.

This research will alert The Department about the challenges experienced by the asset management team. Proper resource management will be put in place to minimise the costs associated with assets. It will also open communication channel between employees, management and the community.

In Chapter Two a literature review shall be made to place the research problem in the context of the theoretical background of public assets management at local government level. The presentation of existing studies on public assets management that are focusing on service delivery and strategic planning will be reflected. Highlights of existing literature on public assets management and areas previously neglected will be studies in the review.

Chapter Two

Literature Review

2.1 Introduction

Infrastructure is the foundation of social reinforcement, public health and safety. Infrastructure is essential to achieve the increased levels of economic growth through job creation and the establishment of well serviced areas conducive for economic investment (Department of Provincial and Local Government, 2006).

In order to provide effective delivery of service to local communities, assets should be efficiently maintained and renewed in an appropriate way. This can be achieved through a comprehensive planning and management process. Local government is responsible to effectively account for and manage these assets and to take consideration for the long-term and cumulative effects of its decisions.

It is critical that infrastructure assets are well managed given its value and importance, to ensure future sustainability of such infrastructure. Failure to effectively manage infrastructure assets is a key risk that could prevent local authorities from achieving their strategic goals with regards to delivery of service. An existing and urgent concern is that many local authorities have not established asset management systems and practices that will allow them to identify and respond to this challenge (Department of Public Works, 2004).

The Key words used for search of literature are Local Government; Traditional Affairs; Asset Whole Life Cycle; Asset Management; Immovable Assets; Asset Register; Public Finance Management; Delivery of Service and Corporate Governance. Search engines used included Google scholar, Emerald and Business Source Complete.

The layout of the chapter starts with a look at the definition of concepts and key words. Specific literature concerned with asset management in local government is discussed under nine sections that lead to a detail of the research questions being investigated by the study and a conclusion of the chapter.

2.2 Definition of Concepts and Key Words

It is important to define terminology in research as this discharges confusion and gives better understanding, for both those who are new to the subject and those who are familiar with the subject.

Immovable Asset (IA): It is an asset that is immovable, this includes land and any immovable improvement on that land, and which has continuing value and consists of assets of residential, non-residential or infrastructure nature and includes machinery and equipment that have been installed and are an integral part of an IA and includes both state-owned and leased assets (Delport, 2005).

Infrastructure: Economic infrastructure is infrastructure that promotes economic activity, including roads, electrical lines and water pipes. Social infrastructure promotes health, educational and cultural standards of the population, which include schools, clinics, parks and statues (DBSA 1998:4 *cited* in Fourie, 2006).

Asset management (AM): Generally the word “asset” is used to denote something of long-term value. AM has a restrictive connotation than the often casual understanding as the managing of assets. British Standards Institute (BSI) (2004) defines AM as the optimal way of managing assets to attain a preferred and sustainable result. AM is the management of properties or a property portfolio to unlock the fullest potential value of the properties in order to achieve the maximum value. Property management is the qualitative performance of property, ensuring the most efficient, effective economic utilisation of space, timely and effective reporting, accounting of receipts and payments (Cloete, 2001).

The National Treasury (2004) defines AM as a process of directing the procedure of acquisition up to the disposal of assets, management of the related risks and costs of assets over their entire life. This is to develop the definition by Woodhouse (2004) where AM is defined as a business discipline for managing the life cycle of infrastructure assets to achieve a desired service level while mitigating risk. The definition relates the management of “physical assets” to a set of disciplines, methods, procedures and tools in order to optimize the whole life business impact of costs, performance and risk exposures of the company assets. This refers to the accessibility, effectiveness, quality, durability and regulatory, safety, and or environmental compliance of the assets.

In the definition offered by the Federal Highway Administration (FHWA) (1999) engineering principles are put together with business practices and economic theory, and provides tools to facilitate a more organized logical approach to make informed decisions. AM is defined as a business process and a decision-making framework that covers a comprehensive time horizon, integrates the economic assessment of trade-offs amid alternative investment options utilising information to assist with cost-effective investment decisions (FHWA ,1999).

AM is a global management process through which organisations constantly make and execute the highest value decisions about the use and care of assets. The term AM applies to business goals that drive decisions and its asset strategy are determined by operational considerations (Peterson, 2004).

Whole Life Cycle: Due to the relatively long life-cycle of infrastructure asset, the consideration of whole life cycle approach is becoming increasingly important in investment decisions. Thus, life cycle approach is central to asset management by taking account of the total cost of an asset throughout its life (LGV, 2004).

The life cycle of an asset can be defined as that period that an entity can foresee itself utilising an asset on an economically effective and efficient basis for the furtherance of the entity's trade or service deliverance (National Treasury, 2004).

2.3 Function of Local Government and Traditional Affairs

Local authorities in South Africa are commonly referred to as municipalities. In any analysis of the operation of these municipalities, it is important to appreciate the South African municipal government environment, its managerial and administrative capacity, together with the broad constitutional and legislative context in which local government finds itself (Dollery & Graves, 2008).

The primary mandate of municipalities is the provision of basic services to communities. To achieve this, municipalities require the support provided by the Department of Developmental Local Government and Traditional Affairs. An essential part of this support is the assistance with the provision of infrastructure predominantly aimed at the previously neglected areas. The intention of services provided is to increase access to basic services by poor households.

A combination of strategies has been used by municipalities to extend the provision of basic household infrastructure. This includes municipalities' own resources, the equitable share and conditional grants such as Municipality Infrastructure Grant (MIG). This is in line with the strategic priority of the Medium Term Strategic Framework (MTSF) to build social and economic infrastructure and the key focus to ensure universal access to basic services by 2014. Formulated strategies, not only aim at expanding infrastructure, but also at modifying and repairing of aging inappropriate infrastructure (Department of Local Government and Traditional Affairs, 2010).

The strategic role to coordinate and supporting the development of Comprehensive Infrastructure Plans (CIPs) by municipalities is vested in the Department of Developmental Local Government & Traditional Affairs. CIPs are expected to be initiated and supported with the aim of enabling district municipalities in the province to provide a business case for the provision of adequate and affordable infrastructure (Department of Local Government and Traditional Affairs, 2010).

Programmes like the MIG support municipalities to provide infrastructure for effective service delivery. The Department consolidates the provision of service through integrated development planning (IDP). Improved Provincial and Municipal IDP's will ensure that the communities' service delivery needs are captured in line with the planning and budgeting programmes of municipalities. The delivery of services through co-ordination of provincial departments and municipalities is achieved through vertical and horizontal integration and alignment of government processes aimed at enhancing the delivery of services through co-ordination of provincial departments and municipalities.

It needs to be noted that delivery of services to the communities is not conducted directly by the Department. The function of the Department is mainly limited to the monitoring role. Through this, it is able to provide effective support to municipalities so that they deliver services accordingly to the communities. The department as such seeks innovative ways in which it can strategically support municipalities and institutions of traditional leadership for speedy service delivery in the province.

The majority of municipalities have paid insufficient attention to the continuous commitments to operate and maintain the services that they have the mandate to deliver.

Owing to years of neglect, authorities have a backlog of maintenance requirements. The competing demands that are made on limited operational budgets have caused constraint to the proper management of existing and new infrastructure and facilities assets (Wall, 2005).

The next section looks at literature on asset management in Local Government. This will put in perspective the current asset management functions in local government in relation to an ideal asset management position directed at the delivery of service.

2.4 Asset Management in Local Government

Colossal amount of resources are invested in services infrastructure which falls under the responsibility of municipalities to operate and maintain. Between 1994 and 2004 the Development Bank of Southern Africa (DBSA), the Department of Water Affairs and Forestry (DWAF), the Department of Provincial and Local Government (DPLG), and the Infrastructure Finance Corporation (INCA) funded at least R37 billion investments in engineering infrastructure new works, upgrading and rehabilitation. In addition, a significant proportion of the R29.5 billion spent by the Department of Housing has gone to engineering infrastructure (Wall, 2005).

According to the National Treasury (2004), there are five main elements of the Immovable Asset Management process, which begins with the strategic planning of Immovable Assets (IA). This is followed by the acquisition of IA. Having acquired the IA, it is important that it is used for its indented operations that should allow for maintenance of the IA. This is followed by disposal of IA in consideration of the asset performance management. This entails the principle of asset life cycle of the property.

The effectiveness and efficiency of government's connection to intended goals and levels of service delivery objectives are determined by the Immovable Asset Management Plan (IAMP). According to the National Treasury (2004) the IAMP needs to contain the following main elements:

- strategic objectives of the department,
- needs assessment,
- list of stakeholders and beneficiaries,
- defined customer needs,
- stated applicable service delivery baseline and standards, and

- define service delivery gap, and implementation imperatives.

Local governments are faced with an urgency to replace ageing infrastructure as a matter of priority. This is off the background of the previous lack of formal knowledge on management systems prior to modernisation in the later part of the 1980s. In terms of the latter the outcome has been a gross underestimation of the total value of physical assets under the control of local government authorities. Insufficient attention has been paid by the majority of municipalities to the continued commitments that they have incurred to operate and maintain infrastructure. The effect has been that this infrastructure deteriorates even before the end of its designed life. This generally arises due to the lack of or poor asset management practices (Haffejee & Brent, 2008).

The practice of infrastructure asset management begins when Local Government acquires a new piece of infrastructure asset. As owners, operators and maintainers of infrastructure assets, these authorities take on a significant responsibility in ensuring the successful performance of the assets to meet the service needs of their customers. At the heart of asset management is the concept of continuous improvement (Too, Betts & Arun, 2006).

Daya (2004) observes the key elements of infrastructure asset management which include the following. This should apply to municipalities ideally:

- taking a life cycle approach;
- developing cost-effective management strategies for the long term;
- providing a defined level of service and monitoring performance;
- managing risks associated with asset failures;
- sustainable use of physical resources; and
- Continuous improvement in asset management practices.

Asset and property managers in local government are faced with many difficult decisions regarding when and how to inspect, sustain, renovate or renew their existing facilities in a cost-effective manner. In addition, managers have few tools, either literature or intelligent computer software, to assist them in the decision-making process. The majority of managers under local government recognise these service life and asset management problems. Most have corrective measures for isolated problems, but none has an integrated, comprehensive solution to address the needs for retaining their assets efficiently and effectively over their

service life. There are information Technology (IT) solutions that can be used to address the full needs of municipalities; however, these have proved to be only isolated solutions to specific situations (Vanier, 2001).

Making effective decisions on service delivery priorities requires a team effort, with inputs provided by officials from a number of sections of the municipality, including infrastructure, community services, and financial, planning, and corporate services. This will ensure that there is effective utilization of often limited resources to address the most important needs and to achieve a balance between maintaining and renewing existing infrastructure at the same time addressing backlogs in basic services and facing ongoing changes in demand (Department of Provincial and Local Government, 2006).

Another challenge faced in local government management of infrastructure is to balance the competing demands for infrastructure construction, operations and maintenance, and renewal within each service, as well as across the various municipal services (Department of Provincial and Local Government, 2006).

Use of Supply Chain Management (SCM) is essential for successful asset management in local government. Effective public sector SCM has potential benefits such as inventory reduction, improved service delivery and cost reduction across the supply chain (Daugherty *et al.*, 2005). Integrated SCM aims to add value at each stage of the process from demand of goods or services to their acquisition, managing the logistics process and finally, after use, to their disposal. In doing so, it addresses deficiencies in current practices related to procurement, contract management, inventory and asset control as well as obsolescence planning (Holmberg, 2000 *cited in* Migiro & Ambe, 2008).

Despite the importance of SCM, the public sector continues to encounter challenges in the supply chain. Some of the challenges of supply chain management include poor implementation of SCM practices; and lack of skills and capacity in the implementation and execution of SCM (Hendricks & Singhal, 2003).

The next section examines literature concerned with asset register in local government. Asset register forms the corner stone of effective asset management. Most local government authorities have issues with keeping asset registers effectively.

2.5 Asset Register in Local Government

Hope and Rimmington (2005) categorise community assets as assets that include facilities, sites and infrastructure that are publicly owned or which are owned by the community. The assets are generally under the care and management of government in national, provincial or municipal spheres. Under the provincial or municipal care, such assets may include multipurpose centres and halls; sports fields; community gardens; clinics and crèches. Other assets include projects set up for a particular group of people like women's cooperatives; projects set up for a particular purpose such as farming or agriculture projects. Others include offices; transport networks like roads and bridges and buses; water utilities (including water supply pipes and pumps and waste water treatment); rubbish facilities together with landfill sites and dumps; energy utilities and historic monuments and heritage sites.

Government assets are utilised in the delivery of services without a cost charge for the years following their acquisition. The costs of services are, therefore, understated because no asset-related expenses are allocated to the services which are rendered by Government departments (Van Wyk, 2003). The first step towards recording the assets in the records is to capture all the assets in fixed asset registers. A timeline for capturing assets is prescribed in the Asset Management Framework issued by the National Treasury (2004:11). In a study conducted by Van Wyk (2007) it was deduced that most local government departments did not have fixed asset registers. The study also revealed that confusion existed with regards to the identification of assets. Fixed asset registers were required to be in place only by 2011. Therefore it is expected that departments might experience staff capacity problems in implementing this (Van Wyk, 2007).

Government departments will experience capacity problems and government officials will have to be trained to facilitate the capturing process of assets. Although Generally Recognised Accounting Practice (GRAP) provides assistance, some confusion still exists among government officials regarding the measurement of assets that are recognised for the first time. The National Treasury should provide guidance for all government departments (*ibid*).

Applying business principles and keeping record of the cost of a project and weighing it up against the benefits gained is generally referred to as "financial management". The basic principles are in line with local Government pursuit of financial gain and that of effective

service provision. Financial gain and effective service delivery cannot be achieved if proper management principles are not implemented. Incompetence will lead to prohibitive cost, which will eventually make it impossible to deliver service effectively (Department of Public Works, 2004).

Financial management and accounting conventions offer a framework for recording and reporting of the information needed for asset management. Accounting conventions and reporting responsibilities determine the stages of the Asset Life Cycle. In the public sector there are two main systems of recording income and expenditure used. The cash based system has historically been used by most governments for accounting in the past, and the accrual based system. There has been a move towards the use of an accrual system. The cash based system tends to focus on whether or not to spend on new assets as opposed to measuring the full and most effective and efficient use of assets available. Maintenance of assets on hand is frequently ignored or postponed in favour of other pressing needs. Under an accrual based system, concentration extends to maintaining and upgrading existing assets as opposed to only the purchase of new assets by providing information for continued measurement of actual cost against benefits derived (Department of Public Works, 2004).

The Generally Recognised Accounting Practice (GRAP 1) specifically requires financial statements to be prepared on an accrual basis. If accrual accounting is not yet in place, it will be impossible for government departments to apply GRAP 1, 2 and 3 as from 1 April 2006 (Van Wyk, 2007).

Government legislation and good financial management practices dictates the need for an effective Asset Management and a complete Asset Register. This is not only as a result of a change to “Accrual Accounting”. There is no interdependence between the need for keeping asset registers and good asset management practices and the change in accounting basis if and when decided (Department of Public Works, 2004).

The proper management of and accounting for assets have been set as an essential responsibility of the accounting officer. To give effect to this, it is necessary to firstly identify all assets under the control of an entity through reference to original documentation and physical counts and secondly to create a system that will ensure continued monitoring of these assets as well as accounting for additional assets procured on an ongoing basis. A

timeline for capturing assets is prescribed in the Asset Management Framework issued by the National Treasury (2004:11)

The following section looks at literature dedicated to the challenges faced by local government with regards to delivery of service. There are numerous deliveries of service challenges faced by local government authorities. Some of the challenges can directly be attributed to failure to manage infrastructure effectively.

2.6 Service Delivery Challenges in Local Government

The South African economy is characterized by high levels of poor availability of social infrastructure and huge service delivery backlogs (Statssa, 2007). Questions have been advanced as to whether provincial and local governments are assets or a hindrance to social service delivery. Provincial and Local Governments in South Africa are faced with increasing demands as well as higher expectations from the community for an efficient provision of social services. The major problem related to the public sector has been ineptitude in the utilization of the existing resources rather than availability of these resources (Franciscan Youth International, 2004).

Public sector investment in infrastructure such as roads, transport and housing, has a positive impact on economic growth because it prompts and fuels related private sector investments, and it contributes to poverty eradication by providing the basis for social development (Swilling, 2006). The provincial and local governments have the responsibility of making sure that there is good financial management as well as efficiency in the service delivery, especially in the provision of social services through the use of limited resources that they have at their disposal (National Treasury, 2006).

According to the Department of Local Government and Traditional Affairs, strategic plans for 2010 – 2014, a number of service delivery challenges are still eminent in the provinces which include the following:

- Infrastructure backlog in informal settlements
- Lack of capacity within municipalities to utilise Municipal Infrastructure Grant (MIG) within the prescribed financial year.
- The billing system is still depriving municipalities enough capital to provide the necessary infrastructure delivery to services.

- Adequate personnel capacity and skills development for scarce and critical fields is still a challenge.
- Traditional leadership succession disputes (Department of Local Government and Traditional Affairs, 2010).

South Africa has some world-class public-sector built environment infrastructure and service delivery, but also has an increasing amount of deteriorating infrastructure together with poor and often unacceptable quality services. Similarly, some infrastructure owners have world-class policies and practices in place in respect of many aspects of the management, while on the other hand, many do not have even the basics in place and gross shortfalls in management policies and practice exist. Between these two extremes, the full range of capacity and competence can be found. The two principal systemic issues underlying inadequate provision for long-term management and maintenance are inadequate budgets and inadequate skills (and especially technical skills) and experience (Wall, 2008).

Delivery of services does not end with the commissioning of the infrastructure. Once the infrastructure has been commissioned, the activities necessary to ensure that it continues to operate for its desired purpose are very often not carried out. Deficiencies include the lack of appointment of necessary staff or the inability to approve necessary budgets to see the infrastructure through its life cycle (Wall, 2005).

The public sector in South Africa has suffered financially with a decline in the delivery of service standard since 1994. Among the various reasons for the decline include the absence of financial and performance management systems and procedures. There is a strong perception amongst the people of South Africa that there is room for improvement in the delivery of social services in the country (Statssa, 2007).

Local Government has played an important role in the provision of services such as water and sanitation, disaster management, fire brigade services and storm water, roads, electrical, and solid waste infrastructure to the municipalities. There has been an increased need for the supply of services to the community such as access to proper sanitation. The growing rate of urbanisation and informal settlements in the North West Province has made these areas vulnerable to disasters (Department of Local Government and Housing, 2008).

Hope and Rimmington (2005) observe that municipalities, provinces and the national government face three types of challenges in successfully implementing asset management, which are institutional, technical and financial. Under institutional challenges falls the need for leadership and consistent advocacy at senior level commitment and organisational issues such as conflicting priorities, lack of resources, poor communication between departments, silos of knowledge and responsibilities and lack of training and the continued reliance on outsourced agencies. Technical challenges include limitations of asset management systems, lack of data standards, performance measures, or maintenance standards and the lack of automated and cost-effective non-invasive and non-destructive inspection and condition assessment tools. Other challenges under technical ability include the lack of domain-specific decision-support systems to assist in establishing the priorities between competing renewal projects plus the lack of life cycle performance information and of information to calculate social and environmental costs. Lastly, under financial challenges are the inadequate funding and the lack of ongoing funding support.

Although there are shortages of appropriately qualified personnel in all three spheres of government, it is perhaps more acute in local government. This situation is aggravated by serious under-performance by some municipalities. The seriousness of the situation in some communities has even led to public protests by residents because they are not receiving the services that a municipality should provide. (Brand, 2007: 11).

An official Section G of Municipal Finance, published in 1998, captured the urgent need for remedial reform in local government financial management by observing that financial management practices suffer from a number of weaknesses, including unrealistic budgeting, poor credit control and a lack of budgetary and financial discipline (Dollery & Graves, 2008).

High profile failure of infrastructure has led to concerns that have caused poor service performance. Other concerns involve the unnecessary loss of asset value which is caused due to inadequate maintenance and capital renewal. This has driven governments across the globe to demand improvements in infrastructure management practice in the public sector (Department of Provincial and Local Government, 2006). As a key asset management principles the service delivery needs should guide asset practices and decisions (Daya, 2004).

As municipalities attempt to remove backlogs in basic services, concerns are emerging over the deterioration of existing infrastructure and the sustainability of the new infrastructure being built. The problem is made worse at municipalities where revenues are under pressure because of large indigent populations, poor debt collection performance, or both (Department of Provincial and Local Government, 2006).

The following section looks at relevant literature that deals with asset management policy and strategy applied at local government level. An examination is made of the prevailing legislation on asset management and how this has been implemented at local government level.

2.7 Asset Management Policy and Strategy

The past few years have brought a new tendency in the Public Sector accounting which has seen a skew towards transparency and accountability owed to the public in the exploitation of public assets. This has placed responsibility for managing the financial affairs of the State under the spotlight and has raised questions regarding the effectiveness and appropriateness of systems and procedures used to manage state assets. In the Private Sector stringent rules apply for the accounting of funds and the disclosure of financial information in annual financial statements (Department of Public Works, 2004). To stimulate this, a number of policies and regulations have been put in place.

Legislation requires municipalities to provide operational strategies that support the municipality's resources for the achievement of its set development objectives. This ought to include a medium term financial plan that set out how the capital and operational expenditure is matched by its revenue raising strategy (Wall, 2005).

Legislation directly relevant to asset management and aimed at the improvement in public sector accounting include the Public Finance Management Act, 1999 (PFMA); The Municipal Finance Management Act, Act 56 of 2003 (MFMA), and The Government Immovable Asset Management Act, 2007. The main objectives of the Government Immovable Asset Management Act of 2007 includes the provision of a uniform immovable asset management framework aimed at promoting accountability and transparency within government; ensuring effective immovable asset management within government; to ensure coordination of the use of immovable assets with service delivery objects of a national and to optimise the cost of service delivery.

The Public Finance Management Act, 1 of 1999, as amended by Act 29 of 1999 (PFMA), serves to modernise financial management in the South African Public Service in order to support the processes of public administration, which are focused on achieving sustainable development and high-level public services. The PFMA, include the King Committee's Report on Corporate Governance and the Constitution of the, 1996.

The introduction of the Public Finance Management Act, Act No 1 of 1999 (PFMA) and the enactment of the Municipal Finance Management Bill (MFM) has made public sector managers increasingly accountable for the proper management of assets (Daya, 2004).

The effective and efficient use of resources and the financial and risk management of the entity is incumbent on the accounting officer. This is stipulated under Section 38 of the PFMA. The section further specifically tasks the accounting officer with the management, including the safeguarding and maintenance, of assets, and the management of liabilities. Similar use of resources and safeguarding and maintenance requirements are set in Section 62 (1) (a) and 63 (1) (a) of the MFMA.

In terms of the Government Immovable Asset Management Act ("GIAMA") passed into law early in 2008, it is obligatory for national and provincial governments to draw up sound multi-year infrastructure asset management plans. The legislation does not as yet include local government institutions (Wall, 2009).

Other relevant standards of practice for public asset management are contained in the Standards of Generally Recognised Accounting Practice (GRAP). This has been implemented across all spheres of government. Interim standards for municipalities have been approved, which will be replaced over time with GRAP standards. These include standards and guidelines for the management of Property, Plant and Equipment. In addition, the Office of the Accountant-General, National Treasury, has issued Asset Management Guidelines. The Framework is designed to recognize and determine public assets and provides useful information on accounting for and managing assets.

On 7 December 2005 the Government Gazette No. 28095 prescribed that three standards of Generally Recognised Accounting Practice (GRAP 1, 2 and 3) would be applicable to all government departments (Poggiolini, 2006:1). Various other standards have also been

approved by the ASB, including GRAP 16 Investment properties (ASB 2004) and GRAP 17 Property, Plant and Equipment (ASB 2004).

Legislation has also been complemented by the Integrated Development Plan (IDP) as the principal strategic planning mechanism for municipalities. IDP cannot be compiled in isolation. The IDP needs to be informed by vigorous, relevant and holistic information relating to the management of the municipality's infrastructure (Department of Provincial and Local Government, 2006).

The IDP institutes a 5 year program of projects using a process that is implementation-orientated and based on stakeholder consultation. For the IDP to be effective it needs to be informed by holistic and relevant information with a longer-term vision, of about 10 to 20 years. Strategic and tactical planning processes in municipalities need to be strengthened, supported by staged improvements to management practices and organisational capacity that will translate to perceptible improvements to service delivery. These interventions need to be structured to take account of the financial, skills and capacity constraints that exist at many municipalities (Department of Provincial and Local Government, 2006).

Wall (2009) observes that National Infrastructure Maintenance Strategy sets overarching national policy for sector-based initiatives, and describes the framework for a coordinated programme of actions. Simultaneous infrastructure investment and maintenance that will result from this strategy will not only improve infrastructure performance and underpin services sustainability, the strategy also contribution towards national and local economic growth and will add long term jobs (Wall, 2009).

The following section looks at literature dealing with the effect of asset management on delivery of service. Effective asset management contributes to enhanced delivery of service. Enlisting the service delivery challenges will help to understand the importance of effective asset management.

2.8 Effect of Asset Management on Delivery of Service

At an asset management conference in Cape Town John Mitchell held that the public sector may not have a profit motive, but it should adopt service delivery as a driving force towards

maximum performance. Various South African public sector institutions have been criticised for failing to maintain their physical assets, leading to poor service delivery (Mitchell, 2006).

The role of the Department of Local Government and Housing in the North West Province includes the continued support and monitoring of the municipalities to provide infrastructure for services delivery under programmes such as Municipal Infrastructure Grant (MIG). Such programmes provide the required capacity to municipalities. The Department is mandated to consolidate service delivery through integrated development planning. The improvement of Provincial and municipal Integrated Development Plans (IDPs) ensures that the desired community service delivery needs are determined in the planning and budgeting programmes of municipalities. The vertical and horizontal integration and alignment of government processes will enhance the delivery of services through the co-ordination of Provincial Departments and municipalities (Department of Local Government and Housing, 2008).

Municipalities are custodians of community infrastructure that includes roads, waste disposal sites, water and sanitation systems, and public facilities. Local Governments are entrusted to extend infrastructure service delivery to all South Africans through proper management of public assets. Infrastructure is the cornerstone of social emancipation, public health and safety. Infrastructure is essential to achieve the increased levels of economic growth through job creation and the establishment of well serviced areas conducive for economic investment (Department of Provincial and Local Government, 2006).

Good asset management is critical in any business environment and more so in the local Government, predominantly as some of the major assets are infrastructure assets with long life spans and colossal capital outlay that are vital to providing a foundation for economic activity and effective delivery of service (Department of Public Works, 2004).

Public assets are meant to support the delivery of service. It is vital for management of provincial and local governments to appreciate that public assets are acquired to deliver services. Sustainable service delivery depends on the acquisition or creation, maintenance and renewal of community assets. In the event that a public asset can no longer deliver the services desired by the community, the necessity to renew or replace the asset becomes imperative. Municipalities and provincial governments have a legal responsibility over the public assets under their control. Facilities and infrastructure should operate efficiently and

deliver the most wanted level of service to the community. Each public asset therefore needs to be managed in a planned way. It needs routine maintenance, repairs, and provision for replacement at the end of its useful life (Hope & Rimmington, 2005).

Governance makes up an essential element in any development strategy. Appropriate and transparent fiscally management is important for effective governance in the public sector but is an aspect which is often neglected (Huther *et al.*, 1997 cited in Dollery & Graves. 2008). In a particular case of municipal government in developing countries, which is especially prone to local government failure (Buthelezi & Dollery, 2004), sound local public fiscally management is an essential prerequisite to successful service delivery. While the great comparative institutional advantage of local government undoubtedly resides in its superior knowledge of local conditions and local community needs, full realization of that promise requires strong fiscal administration so that citizen interests are reflected in local programs; so that policies are conducted in a fiscally sustainable way; and so that resources are not lost through inefficient, ineffective, wasteful, or corrupt operations (Mikesell, 2007: 15).

Local governments in developing countries encounter increased fiscal strain as cities and their infrastructure requirements expand and revenue growth lags behind. This is an international trend and is reflected fully in the massive growth in local service infrastructure in South Africa, particularly in electricity, water, sanitation and local roads, as the national government seeks to provide essential local services to the sprawling townships surrounding South African cities (Shah, 2007: 3).

World-class infrastructure is vital to the nation economy. It strengthens the delivery of essential services, drives economic growth, supports social needs and is closely linked to the high quality of life (Hardwicke, 2005). The growth in capital investment in infrastructure assets to support the nation's economic development, places importance on developing holistic approaches of infrastructure asset management to with the aim of reducing the cost of owning assets (Too, Betts & Arun., 2006).

The success of asset management is measured based on the provision of better asset at a cheaper cost. A better asset that does not meet the need of the users is no longer acceptable. The prominence should be on service delivery to the community through reducing the creation of new infrastructure asset but using efficiently the existing asset base (Queensland

Government, 1996 *cited* in Too, Betts & Arun, 2006). A better service, not a better asset, is a key indication of successful asset management (LGV, 2004).

Lastly, in as much effective use of infrastructure will contribute to efficient delivery of service, appropriate infrastructure maintenance creates jobs. Maintenance needs to be done year after year, and personnel to do this maintenance will therefore always be needed. Personnel will be needed not just for the limited period of construction, but also for the whole of the designed life of the infrastructure (Wall, 2009).

The following sections addresses literature concerned the management of public assets and performance management. Effective asset management will have an effect of improving performance. The envisaged improvement should be measured to be quantified.

2.9 Effect of Asset Management on Performance Management

There are two areas that should be assessed when measuring an entity's performance. The one is to assess how the entity manages and utilises its resources, and the other is to assess how successful the entity uses its resources to deliver services. The core of the problem however, is that the resources cannot be managed or utilised if they are not recorded and controlled under an accrual system of accounting (Nomvalo, 2005).

Haffejee and Brent (2008) contend performance assessment under asset management is done in terms of the economic or financial impacts, i.e. life-cycle costing or total cost of ownership, the environmental impacts, which includes environmental incursions in terms of chemical spillages, land refills, etc., the social impacts; disasters that affect people in anyway, the technical impacts, these being efficiency and effectiveness and lastly the technical losses.

The concept of asset management is complex to accept as a philosophy and difficult to implement in practice. This is because asset management can mean a range of things to different people. Some disciplines in an organisation may consider the existence of an asset management system in place when they have implemented an inventory system only. Some organisations may have some disciplines that are well-advanced in asset management implementation (i.e. bridges, roads) but will also have many that are lagging behind (i.e. parks, buried utilities). Or, some regions may have reached an equilibrium level and require to advance to a higher level not knowing that a complementary discipline in another region

has the tools and techniques in place to assist them. Because of these obvious differences in organisations and in any particular organisation, an organisation's asset management implementation plan should have a series of overlying principles established at the highest level in that organisation (Vanier, 2001).

Vanier (2001) further observes an effective asset management implementation plan should:

- Assess an organisation's current level of implementation in various regions and disciplines.
- Set minimum criteria for data and information for all levels of implementation.
- Estimate cost of implementation.

Any organisation should be striving to improve its operations, whether from the point of customer satisfaction, increased productivity, better asset quality, better environmental performance or any host of other performance indicators. The role of asset management embraces all of the concerns to some degree as the physical infrastructure asset must support the organisation's activities in ways that allow the organisation to service its customers in the best possible way (Too, Betts & Arun, 2006).

Asset management constitutes an approach to managing infrastructure that is strategic (AASHTO, 2002). The strategic outlook is essential as it takes a long term view of infrastructure performance and cost. Strategic approach considers the assessment of costs, benefits and level of service provided to ensure that the present needs are met without compromising the ability of future generations to meet their needs (NSW Treasury, 2004). Asset management is about creating value. The asset management process should be monitored and evaluation in order to achieve effective and strengthened implementation. This should be combined with mechanisms for the feedback to result in the necessary improvements. Performance changes can be measured this way but, as important, it will draw the attention of the institutions concerned to non-performance (Wall, 2009).

In addition to strategic viewpoint, the life-cycle processes of creating, establishing, exploiting, by way of operating and maintaining, and divesting a physical asset in a manner that satisfies the constraints imposed by economics, ergonomics, technical integrity and business performance (Haffejee & Brent, 2008).

Life-cycle management (LCM) has appeared as a new managerial approach in response to increasing concern about the influence that modern industrial activities have on the environment. LCM can be understood as a way for business to manage an approach to sustainable development. It can be considered as the precondition for sustainability (Westkämper *et al.*, 2000 cited in Haffejee & Brent, 2008).

Daya (2004) contends that the concept of life cycle is fundamental to the new thinking regarding management of fixed assets and can be split in four major phases; the identification of need where the requirement for a new asset is planned for and established; the acquisition phase when the asset is purchased, constructed or otherwise created. Under the operation and maintenance phase, the asset is used for its plan intention. During this phase the asset may be subjected to periodic refurbishment or major repair. The last phase involves the disposal of the asset. This is initiated when the economic life of the asset has expired, or when the need for the service provided by the asset has disappeared.

Schuman and Brent (2005) argue that current asset management models show inefficiencies in terms of addressing life cycle costs comprehensively, as well as other aspects of sustainable development. In order to achieve optimum value from physical assets over a facility's lifetime, operational reliability and systems engineering essential. Activities should be identified that need to be completed during each stage of the asset life cycle. The application of performance measurements for the operation and support stages should be proposed to influence decision making for the asset life-cycle (Schuman & Brent 2005).

In line with international practice, an Infrastructure Asset Management Plan (IAMP) is essential for all sectors. These plans can be used as inputs into the Comprehensive Municipal Infrastructure Plan (CMIP) that presents an integrated plan for the municipality covering all infrastructures. The CMIP will provide a capital works programme involving new works, upgrading, and renewals, and operations and maintenance strategies, risks and priorities, required budgets, funding arrangements and tariff implications now and into the future, and indicate how to improve management practice (Department of Provincial and Local Government, 2006).

Lastly, through the use of relevant Government legislation like the Government Immovable Asset Management Act of 2007, local Government is able to effectively ensure the accountability for capital and recurrent works; acquire, reuse and disposal of an immovable

asset; maintain existing immovable assets and protect the environment and the cultural and historic heritage.

Asset management cannot be seen as an independent process void of other functions in an organisation. The following section looks at literature that examines the integration of asset management framework in local government with other functions.

2.10 Integration of Asset Management Framework in Local Government Functions

Asset management is a promising new approach to infrastructure management. The view is assumed in the light of past management trends like zero-based-budgeting (ZBB), management-by objectives (MBO), total quality management (TQM), and business process reengineering (BPR), asset management may be considered the latest in a long line of management trends (Dornan, 2002).

Infrastructure asset management decisions need to be based on a proper evaluation of options which take into account all costs and benefits over the life of asset, and incorporate an explicit analysis and determination of an acceptable level of risk (Government of South Australia, 1999 *cited in* Too, Betts & Arun, 2006). This represents the optimum balance of stakeholders' aspirations, needs and requirements, and the costs over the life of the asset (Bourke *et al.*, 2005).

Asset planning and management should be integrated with the corporate and business plans, budgeting and reporting processes. This involves making decisions based on evaluations of alternatives that take into account full life cycle costs, benefits and risks of assets. Ownership, control and accountability, and reporting requirements for assets should be established, clearly communicated and implemented. The asset management activities should be undertaken within an integrated government asset management framework. Asset management decisions should form part of the overall guideline for decision-making in an entity and not taken in isolation. Asset planning must be considered equally and concurrently with the other resource requirements used in achieving set objectives of an organisation (Daya, 2004).

The main value of fiscal discipline is drawn from not only avoiding the negative external and internal impacts as in seeking the benefits of hard budget constraints for spending effectiveness and efficiency. Fiscal discipline is best supported by rules or by greater central government oversight and control over sub-national borrowing and, at the local level, own-revenue capacity and efficient local revenue administration, which represent the key pillars of local fiscal discipline (Shah, 2007).

The proposition that the ease or complexity of implementation integrated fiscal discipline plays a crucial role in local public financial management and thus should be carefully matched with administrative and technical capacity implies that decision makers should select formats matching the skills and experience of financial management staff (Shah, 2007).

There are essentially two levels of infrastructure asset management; these are operational and strategic. Operational infrastructure asset management deals with the practical business of keeping the infrastructure in working conditions. The strategic level involves the integration of the user needs, the environment and the business functions of the organisation (Too, Betts & Arun, 2006). Strategic infrastructure asset management is aimed at achieving organisational long term goals and effectiveness through dynamic alignment of the required infrastructure assets to meet changing customer needs. For asset management to become a true value-adding pursuit within a corporate framework, it must be primarily concerned with filling a strategic role, requiring the asset manager to be proactive not reactive in their approach (Best *et al.*, 2003).

Lastly, asset management requires a multidisciplinary approach, drawing on knowledge from disciplines such as the management and social sciences, engineering and accounting (Department of Provincial and Local Government, 2006). Asset management is increasingly being integrated in a broad range of concerns like engineering principles and sound business practices, information management and economic theory as well as the more traditional operational concerns related to maintenance of asset. Consequently, asset management embraces more than the operational concerns of providing and maintaining infrastructure. A strategic approach to infrastructure asset management provides a better understanding of how to align the asset portfolio so that it best meets the service delivery needs of customers, both now and in the future (LGV, 2004).

The way in which municipalities have handled public assets cannot be viewed in isolation with international trends. Incorporation of international trends in local government will encourage the use of best practices from other countries globally. The following section looks at the international perspective on local government asset management.

2.11 International Perspective on Local Government Asset Management

Many governments across the world have intensified their efforts to improve efficiency of public services through transformation of Local Government Authorities (LGAs). Many of these efforts involve integrating various systems to deliver improved services. Local Government Authorities (LGAs) face funding pressures and challenges in terms of improved resource and asset management. LGA also face pressures to reduce the cost of maintaining a infrastructure, provide better services, enhance infrastructure through integration, and support improved ways of working through collaboration (Kamal *et al.*, 2011).

There is an estimated \$33 trillion worth of constructed assets in North America, with 20 percent of that asset base invested in municipal infrastructure. In North America and Australia, there are hundreds of billions of dollars in backlogged maintenance, and a large portion of the asset base must be considered for capital renewal in the near future (Vanier, 2001).

The management of mixed urban infrastructure assets such as federal departments, state or provincial governments, municipalities, universities and school boards involves the management of a diversified set of built assets, ranging from complex underground networks (*e.g.* water distribution, sewers) to buildings. This includes roadway systems, parks and any other equipment necessary to maintain all these infrastructures. The built assets are not protected from deterioration due to ageing, climate, geological conditions, and changes in use. Due to a lack of adequate funding and appropriate support technologies, certain components of urban infrastructure have been neglected and receive only remedial treatments. As a result, these built assets will not last their originally calculated service life unless there are major maintenance and rehabilitation investments (Vanier, 2001).

Asset management can be an effective response to the fiscal challenges confronting the United States' public infrastructure like highways. For example, public sources of funding for the US highway system will not be adequate to renovate or replace current highways, and

build new capacity. Therefore in an attempt to close the expected shortfall in public highway funding, sustained blending of private sector funding will be required. Financing of highways through public-private partnerships will require state and local transportation agencies to radically change the ways in which highway infrastructure is managed. To achieve this, asset management will play an important role in showing prudence in the ownership and maintenance of highway infrastructure in order to attract private sector confidence in highway investments (Dornan, 2002).

In Canada there is a large number of public infrastructure that is run inefficiently due to poor monitoring and control systems, water and road networks are deteriorating faster than anticipated and the overall condition of bridges remains unknown, and potentially hazardous. A lack of knowledge of the condition of the built environment means that the scarce resources that are available for maintenance and repair are often used inefficiently or inappropriately. These challenges affect the community through increased health and safety risks, reduced economic competitiveness, inefficient maintenance strategies, a reduction in the value of a nation's built assets and a need to increase funding to maintain the built environment. In some cases, this overall inefficiency will actually create the need for new buildings and engineering works; even when suitable facilities already exist or can be modified (Vanier, 2001).

Vast amounts of resources are spent on infrastructure but not significantly accounted for. In the US, trillions of dollars of public infrastructure are not reflected in the financial statements of state and local governments. As a result, these assets are considered sunk costs whose only financial significance is the drain they represent on the maintenance budgets of state and local infrastructure agencies (Dornan, 2002).

The Australian accounting profession is promoting infrastructure to be accounted for by reporting it at current written down replacement values, on the basis that financial disclosures provide relevant information to stakeholders. While local councils are required to apply the profession's asset valuation and accrual standards in preparing general purpose financial reports, the State of New South Wales has gone further by requiring local councils to also present information about the physical condition of infrastructure, together with estimates of the cost of bringing that infrastructure to a satisfactory condition, and the annual costs of maintaining infrastructure at that standard thereafter (Walker, Clarke & Dean , 2002) .

Traditionally, government entities reported on a cash or modified-cash basis. A number of countries now either require government entities to prepare accrual-based financial reports or are considering doing so. As examples, the US Government Accounting Standards Board (GASB) requires state and local governments, for the first time, to prepare financial reports on an accrual basis (GASB, 1999).² Likewise, several other countries including Australia, the United Kingdom, New Zealand and Canada, either now require accrual-based financial reports for government entities or have the issue on the regulatory agenda (Luder & Jones, 2004).

Accrual-based financial reporting has been mandatory for local governments in Australia since 1993. In contrast, the use of accrual accounting by US local governments is either mandated by states or is at the discretion of the local governments. The population of financial reports of Australian local governments therefore provides an opportunity to investigate accruals in a context not complicated by discretionary or required deviations from the norm (Pinnuck & Bradley 2009).

The following section looks at a literature on the future of asset management in local government. Discussion is aimed at enlisting the significance of the role played by asset management in local government, new trends and its sustainability in local government.

2.12 Future of Asset Management in Local Government

Considerations of social objectives and political goals in asset management both play an important role to dominate the resource allocation and project selection process. Public skepticism of government, combined with an increasing preference in recent years for using private sector management approached in the public sector, has led to demands that government be more accountable and operates more like a private business (FHWA, 1999).

The shift towards commercial consideration in the public sector asset management approach compels the design, procurement and decision-making on infrastructure asset to be based on whole life value (National Audit Office, 2005). Whole life value encompasses economic, social and environmental aspects associated with design, construction, operation, decommissioning, and where appropriate, the re-use of the asset or its constituent materials at the end of its useful life (Mootanah, 2005).

To achieve managing infrastructure that is strategic, asset management needs to develop systems that allow decision-makers to have ready access to quantitative data on organisation resources and its assets current and projected future performance. The process ensures the requirements of organisations, users and other stakeholders are clearly understood and integrated into an asset management framework that optimises the outcomes achieved from policy and investment decisions (Austroads, 2002).

Wall (2009) contends that where in a country such as South Africa some public sector authorities are able to practice more or less competent management of their infrastructure assets, government intervention and assistance is needed in respect of many other authorities, especially those at local government level. This involves intervention and assistance needed as part of a strategy that is bought into by all government departments. Such strategy should incorporate a broad range of measures that will include the regulatory framework; restructuring of budgets; issues to do with skills; strengthening monitoring and evaluation, and feeding results into an improvement process. Such strategy should be driven by national government, either directly or through a nominee.

A review of some of the current infrastructure asset management practices also revealed that different frameworks have been adopted. Despite differences in the sequence, terms and approaches adopted in each framework, it is noted that the strategic infrastructure asset management processes can be grouped into three key main sequential processes namely strategic analysis; strategic choice; and strategic implementation. These key processes fit within the generic strategic management framework proposed by Johnson and Scholes (1999). All the frameworks adopted in the asset management practices are cyclic and include some form of reassessment, review or control that is used as feedback to improve the overall process. In addition, effective asset management needs reliable data and effective decision support tools. Hence, information is important in each stage of the processes (Too, Betts & Arun, 2006).

Hope and Rimmington (2005) observe that for the effective management of public assets, community members can be part of asset management by:

- being consulted when assets are being identified and assessed;
- giving their opinions when decisions are being made about assets – their repair, replacement or disposal;

- looking after assets either voluntarily or paid;
- being contracted to do work on maintaining or creating assets – so improving local;
- economic development; and
- being part of securing assets against vandalism or theft.

Lastly, infrastructure management must be incorporated into the agendas and culture of organisations like the South African Local Government Association (SALGA). This ought to be extended to the lending practices of major funders. A careful adjustment on the budgeting practices of all municipalities and national and provincial departments ought to be made in line with major infrastructure assets. Legislation on the effective management of infrastructure IT systems, budgets, incentives and guidelines and norms should be integrated in the management of public infrastructure (Wall, 2005).

In light of the review of literature on the topic concerned with the assessment of the challenges faced by the Department of Local Government and Traditional Affairs with regards to the management of public assets in Mahikeng. The following section looks at the research questions that remain to be answered by the research being conducted.

2.13 Research Questions

From the literature reviewed, several thoughts have been thoroughly discussed and reviewed, however the following research questions still remain:

- Is the current public assets management policy within the Department of Local Government and Traditional Affairs effective?
- Is the current asset management framework integrated with other strategic objectives and policies of the Department of Local Government and Traditional Affairs?
- Is there an effective accountability of public assets within the district?
- Does the Department have sufficient capacity to implement and handle the asset management programme in line with the assets management framework within the district?
- Does management of public assets have an effect on the delivery of service within the Mahikeng district?

2.14 Conclusion

The literature suggests a number of views on the challenges of managing public assets in the Local Government and Traditional Affairs of Mahikeng. Literature studied has helped to comprehend the basic meaning of concepts and key words used in the research. Literature on the particular functions of the Department of Local Government and Traditional Affairs is discussed with the aim of determining the perspective of local government towards the concept of asset management. Literature on asset register is discussed considering the importance of such instruments in the management of assets in Local Government. Asset management constitutes an approach to managing infrastructure that is strategic (AASHTO, 2002). Effective implementation of the life-cycle processes can help to satisfy the constraints imposed by external and internal forces imposed on local government asset management performance (Haffejee & Brent, 2008). Asset management needs to be integrated with other functions in local government for it to achieve desired objectives effectively (Dornan, 2002; Bourke *et al.*, 2005; Daya, 2004; Shah, 2007)

The next chapter looks at the research methodologies. The chapter discusses the rationale of the choice of methodology for data collection and data analysis. The advantages and limitations associated with the three research methodologies, mixed research paradigm, the qualitative and quantitative are explored. Based on the relevance of the research paradigm investigated, decisions were made on the type of methodology implementation to get the required information.

Chapter Three

Research Methodology

3.1 Introduction

The research problems highlighted in chapter 2 still remain unresolved. A number of literatures were discussed concerning the research problem; nonetheless no precise solution was reached. This chapter presents a research methodology aimed at working out the questions advanced. Research methodology involves the method of connecting the research questions, objectives and the data collection, followed by analysis and interpretation in a logical sequence (Hartley, 2004).

This research is aimed at explaining research questions on the current public assets management policy within the Department of Local Government and Traditional Affairs effective. The research further resolves the question concerning the integration of the current asset management framework with other strategic objectives and policies of the Department of Local Government and Traditional Affairs. The issue determining accountability of public assets within the district is also examined as well as whether the Department has sufficient capacity to implement and handle the asset management programme in line with the Assets Management Framework. Lastly, the research aims to solve the question on whether the proper management of public assets has an effect on the delivery of service within the Mahikeng district.

Aspects receiving review under this chapter include the research methodology used for the study in relation to the topic and the data collection methods available. The chapter also includes the nature of questions presented to respondents and the appropriateness of the questionnaires used. Special attention has been given to a discussion on the population and sampling. The chapter closes with a declaration on ethical limits to which the researcher has undertaken to comply.

3.2 Research Types

3.2.1 Quantitative and Qualitative

Quantitative, qualitative and mixed or triangulation, are the three main research methodology classifications. The choice of which methodology to apply, depends on the nature of data to be collected and the problem of the research. The quantitative methodology will apply where data is numerical while qualitative methodology will usually be undertaken where the data collected is verbal (Leedy & Ormrod, 2005).

Quantitative analysis is the collection and analysis of data that is non-qualitative (Lofland, 1984). Quantitative method is mostly concerned with the analysis of numerical data. Quantitative research manipulates variables, control natural phenomena, and as such, it is impersonal and experimental. It is generally associated with systematic measurement, statistical analysis and mathematical models. The characteristics of traditional quantitative research are a focus on deduction, confirmation, theory/hypothesis testing, explanation, prediction, standardised data collection, and statistical analysis (Wang, 2003). A quantitative method involves a systematic approach of using numerical data for the purpose of possible correlation among two or more phenomenon. It examines the situation as it is and therefore does not lead to any addition to the investigation, nor does it provide the cause-and-effect relationship (Leedy & Ormrod, 2005).

Researchers under quantitative methods should collect multiple data using different strategies, approaches, and methods in such a way that the resulting mixture or combination is likely to result in complementary strength and non-overlapping weaknesses (Brewer & Hunter, 1989). Grayson (1980) contends that the failure to use quantitative methods by most researchers is because of the inability to understand computational data and models or interpretation of statistical inferences.

Qualitative methods focus mainly on phenomena occurring in its natural settings and aims to study the phenomena in their complexity entirely (Leedy & Ormrod, 2005). Under qualitative analysis, the assumption is that there are differing views to a problem or phenomenon, and the use of this method will deliver an accurate opinion of the matter studied. The researcher is required to dwell on the interpretation of the matter other than focusing on quantifying the situation (Creswell, 2003). Wang (2005) further states that qualitative research as the methodology of study that produces descriptive data where people are written or spoken

words and discernable (Wang, 2003). Qualitative data are generally based on themes that emerge through open-ended interviews, observations, or the review of various documents and audio visual materials such as videotapes, photographs, sounds, and even email and text messages (Creswell, 2005).

Peshkin (1993) asserts that qualitative research has the ability to:

- Enable the researcher to have fresh views concerning a specific phenomenon allowing the development of new concepts or theoretical perspectives and or draw complications pertaining with the phenomenon;
- Expose the nature of certain situations, settings, processes, relationships, systems or people;
- Give the researcher tools to judge the effectiveness of certain policies, innovations and practices; and
- Encourage the researcher to test the validity of particular assumptions, theories, generalizations or claims within a practical setting.

Mixed methods research is formally defined as the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study. It is an expansive and creative form of research. It is inclusive, pluralistic, and complementary, and it suggests that researchers take a heterogeneous approach to method selection and the thinking about and conduct of research. The research question is important to determine the approach that offers the best chance to obtain useful answers. Many research questions and combinations of questions are best and most fully answered through mixed research solutions by mixed methods research, both quantitative and qualitative research are important and useful. The goal of mixed methods research is not to replace either of these approaches but rather to draw from the strengths and minimise the weaknesses of both in single research studies and across studies (Johnson & Onwuegbuzie, 2004).

The following is a comparison of the quantitative, qualitative and triangulation using a table:

Quantitative	Qualitative	Mixed
Testing and validating already constructed theories about how (and to a lesser degree, why) phenomena occur.	Data based on the participants' own categories of meaning	Words, pictures, and narrative can be used to add meaning to numbers
Can generalize a research finding when it has been replicated on many different populations and subpopulations	It is useful for studying a limited number of cases in depth	Numbers can be used to add precision to words, pictures, and narrative
Useful for obtaining data that allow quantitative predictions to be made	It is useful for describing complex phenomena	Can provide quantitative and qualitative research strengths
Data collection using some quantitative methods is relatively quick (e.g., telephone interviews)	Provides individual case information	Researcher can generate and test a grounded theory
The research results are relatively independent of the researcher (e.g., effect size, statistical significance)	Responsive to changes that occur during the conduct of a study (especially during extended fieldwork) and may shift the focus of their studies as a result	Can answer a broader and more complete range of research questions because the researcher is not confined to a single method or approach
It may have higher credibility with many people in power (e.g., administrators, politicians, people who fund programs)	Data in the words and categories of participants lend themselves to exploring how and why phenomena occur	A researcher can use the strengths of an additional method to overcome the weaknesses in another method by using both in a research study
It is useful for studying large numbers of people.		Can provide stronger evidence for a conclusion through convergence and corroboration of findings

Table 3.1 Distinction between quantitative, qualitative and triangulation methodology
(Source: Johnson & Onwuegbuzie, 2004)

3.2.3 Research Method (s) used in this Thesis

The quantitative method is the approach used for the purpose of this research. The quantitative methodology is best used for observation studies, correlation research, development designs and survey research. On the other hand, qualitative methodology can

best be used in descriptive, interpretive, verification and evaluation studies (Leedy & Ormrod, 2005). The reason to use this method has been arrived at based on the comparison of two methods, which are quantitative and qualitative, in relation to the data collection method and the research question. The aim of this research is to determine the correlation between public asset management challenges faced by the Department of Local Government and Traditional Affairs and its impact on the level of service delivery in Mahikeng.

3.2.4 What Data is Required?

Primary and Secondary Data

According to Leedy and Ormrod (2005) primary data is first-hand information collected by the researcher aimed precisely for the study undertaken. Interviews and surveys can be used for the collection of data or information. Secondary data refers to information or data collected from previously gathered sources conducted by someone else for the purpose of a related study and subsequently used by other researcher. Secondary sources include data collected from sources such as books, journals, periodicals, and reports. Leedy and Ormrod (2005) further state that primary data is considered the closest to the actual study and secondary data as a layer farther away from the study performed. Cooper and Schindler (2004) on the other hand consider that secondary data provides background information and direction for a research. This study, therefore, employs both primary and secondary data. As recommended by Leedy and Ormrod (2005), a research methodology is used for obtaining primary data based on a conducted survey. In order to achieve this, a survey is conducted to gather primary data while secondary data is been drawn from journals, reports and available literature in the academic field on the topic.

3.3 Data Collection Method

3.3.1 Methods for Collecting Primary Data

Data collection is categorised as a monitoring and communication process. In monitoring, the researcher does not need any response from subjects but inspects activities or nature of a material. In the interrogation or communication type of data collection, the researcher questions the subjects through interview or telephone conversation, self administered or self-reported instruments (Cooper & Schindler, 2004). There is no simple answer to what is the best data collection instrument. The nature and purpose of the research will just give guide to

which method to use (Blankenship & Breen, 1993). Open-ended questions characterise quantitative studies, while survey interviews are structured (Leedy & Ormrod, 2005). There are number methods that can be employed to collect data, which include interviews, observation and conducting a survey. For the purpose of this research, the survey method has been chosen as highlighted below.

a) Survey

The characteristic of a survey is the collection of numeric or quantitative data from a given group using direct observation. A survey can be used for various reasons that can include one of the following (Leedy & Ormrod 2005):

- Explore differences;
- Examine correlations and associations;
- Exploratory research;
- Testing of a theoretical model; and
- For identification of trend

Structured questionnaires were used to collected data in this research by conducting a survey. The questionnaires was distributed through email to decision makers in the one municipality falling under the Department of Local Government and Traditional Affairs were completed and disseminate the questionnaires to other relevant subjects of the study. Carefully selected officials in the Department formed part of the survey. These included decision makers such as directors and municipal managers directly involved with service delivery of Mahikeng.

3.3.2 Questionnaires

Data collection is the gathering of data that may range from a simple observation at one location to a grandiose survey of multinational corporations in different parts of the world (Cooper & Schindler, 2006:253). Questionnaires have been opted in this study because alternative methods such as personal interviews are costly in time and money. This constraint usually results in a small sample for study (Eless & Higson-Smith, 2000:108-109). Telephone surveys as an option can be costly and therefore interviewing length must be limited. Using this as a basis, it was decided to use a self-administered structured questionnaire in conducting the present study. A questionnaire is an instrument with open or closed ended questions or statements to which a respondent must react. Questions are arranged in a definite

order according to the researcher's choice. In close-ended questions, a series of possible answers are given from which the respondent must make his/her choice. Open-ended questions allow the respondents to give their own opinions and perceptions, among others and do not restrict them to specific alternatives (Leedy & Ormrod, 2005). The managers in the municipalities were approached for approval to distribute copies of the questionnaires amongst staff members. The strategy used to develop the items in the questionnaire was mainly derived from the literature in Chapter 2.

The questionnaire has three sections (Refer to Appendix C). The first part concerns permission to use the respondent's answers in an academic research. The second section aims at collecting biographical data on the respondents such as age, gender and qualifications. The third section contains specific questions pertaining to the challenges of Managing Public Assets in the Department of Local Government and Traditional Affairs and its impact on service delivery in Mahikeng. Responses require the respondent to indicate a yes or no answer. The following table gives the questionnaire outline.

A short disclaimer describing the purpose of the research – refer to Appendix A	
A reminder – refer to Appendix B	
The Questionnaire – Refer to Appendix c	
A 'Thank you' Note – refer to Appendix D	
Section 1	Permission to use the respondent's answers the academic research
Section 2 Questions 1-8	Collects biography data on the respondents including age, gender and qualifications
Section 3	Focuses on collecting response on assessing the challenges of managing public assets in the Department of Local Government and Traditional Affairs of Mahikeng

Table 3.2: Questionnaire Outline

3.3.3 Sampling Methods

A population for a study can be described as a group, usually of people, about whom the researcher wants to draw inferences (Babbie *et al.*, 2003:112). However, with limited time and money, researchers are unlikely to study the entire body of relevant facts about the whole group of people under investigation. Therefore, the findings and conclusions in survey research are based on information gathered from a limited number of people from whom generalisations can be made about the whole number. This selected group from the population is called a sample (Nachmias & Nachmias, 1996: 201). When choosing a sample,

the researcher often has to prepare a comprehensive list of all units in the target population that is called a sampling frame (Leedy & Ormond, 2005).

A list of all participants required for the sample is sourced followed by a random selection of the sample to be used for the purpose of the survey. The population is derived from the municipalities and includes senior management or directors, middle level management, lower level management (supervisors) and functional level staff. After stratifying the population, the respondents are randomly selected from each stratum. By using simple random selection in each stratum, each employee has an equal chance to be selected into the sample, as such making it more representative of the population.

A table prepared by Krejcie and Morgan (1970) can help establish the appropriate sample size (S) based on the population (N). The proposed population size in this particular study $N=650$ therefore $S=242$. This entails that the sample size will require of a minimum of 242 completed questionnaires in order to draw an expressive conclusion from the data collected in the survey.

3.3.4 Types of Variables

Diamantopoulos and Schlegelmilch (2004) describe a variable as an empirical observable characteristic of some phenomenon, which can take more than one value or response category. For example, gender, number of tourists visiting a town, profits derived from a tour business or the percentage of the provincial budget spent on improving infrastructure. Expectation is that all questions raised in a questionnaire generate a variable. The common variables include nominal, ordinal and ratio variables (Diamantopoulos & Sclegelmilch, 2004).

Nominal variables: involve variables where the response can be placed in any order and the numbers assigned to the response categories have no other property except to serve as labels. Their characteristics are:

- Nominal variables allow the classification of responses;
- The responses groups should be mutually exclusive and collectively exclusive in nature;
- The frequency or percentage of occurrence under each category can be determined for nominal variables; and

- No numerical meanings are given to the categories.

Ordinal variables: these are variables where the response categories have a certain order and the numbers assigned to the response categories have an order. They are characterized by the following:

- Response from ordinal variables can be placed in categories;
- The frequency or percentage of occurrence under each category can be determined for nominal variables;
- Order of the number assigned to the categories have meaning;
- The number assigned to the ordinal variables do not have meaning;
- A rank or order of response can be placed on ordinal variables; and
- Difference between consecutive categories need not be the same.

Ratio variables: these are numerical variables where there is some standard unit of the property measured. The distance between consecutive numbers is the same. Therefore, accurate statements on the differences between cases can be made. The following are their characteristics:

- Responses can be categorized;
- The frequency or percentage of occurrence under each category can be determined for nominal variables;
- The number assigned to the rational variables have meaning;
- The order of the number assigned to the categories have meaning; and
- A rank or order of response can be placed on rational variables.
- Distance between two cases can be calculated allowing the measure of how much more or less
- The ratio of the two responses can be calculated

The survey employed a combination of variables. For identifying participants, nominal and ordinal variables will be applied. The nature of questions asked determined variables applied for survey questions varying from ordinal to ratio variables.

3.4 Ethical Consideration Pertaining to the Study

Ethics are concerned with the rules and principles that harmonise the aims and desires of all men. Since human beings are the subject of the study in the social science, this brings its own unique ethical problems to the fore that would never be relevant in the pure, clinical laboratory settings of the natural sciences (De Vos, 1988:23) ethical standards adhered to in this study follow the following norms:

- Justice; where all respondents are treated with respect and fairness
- Beneficence; no respondent is exploited in any way, nor harmed nor even exposed to any discomfort physical, emotionally or psychologically
- Confidentiality where no information provided by the respondents to the researcher is available to any other person
- Privacy; the researcher undertakes necessary precautions to ensure that the self-respect and dignity of the respondents is maintained by collecting the questionnaires privately
- Information consent; full disclosure is given to the respondents on the purpose and objective of the study and how the study is conducted
- Trust between the researcher and the respondents are vital throughout the whole study. Each attempt is made to gain the trust of the respondents during the course of the survey.

3.5 Limitations

Survey technique suffers from a number of shortcomings including the low response rate from the questionnaires. This will tend to impinge on the relevance of the research owing to lack of full representation.

- Other limitations arise where respondents are required to tick one of the possible answers and are not asked to give their true feelings
- Survey respondents are also likely to provide socially acceptable answers or avoid strongly negative or positive views and stick to compromise positions
- Some respondents deliberately and unnecessarily give extreme opinions as their answers. Occasionally, response rates are also low and it takes researchers extra time and expense to collect required number of responses

- Correlation research has a limitation where the correlation may suggest existing relationship between two variables, while proof of change in a variable resulting from that of the other variable may not be given.

3.6 Conclusion

This chapter described the research design and methodology used in this study. Further, it looked at instrumentation, research type, population, sampling method, and data gathering methods from a theoretical perspective.

A discussion of how these were applied in this study was also indicated. Questionnaires have been opted in this study because alternative methods such as personal interviews are costly in time and money. This constraint usually results in a small sample for study (Bless & Higson-Smith, 2000:108-109). The next chapter articulates the study findings that would be used in rejecting or accepting the raised questions.

Chapter 4

Discussion of the Results

4.1 Introduction

The survey conducted involved assessing the challenges of managing public assets in the Local Government and Traditional Affairs of Mahikeng. The aim of the study is to highlight the challenges faced by the Local Government and Traditional Affairs of Mahikeng with regards the efficient and effective management of public assets. The study also aims at highlighting the effect of the current management of public assets on the level of delivery of services to the local community. Corporate governance concerns still dominate the challenges faced by local governments, even with implementation of the various forms of legislation such as the PFMA and MFMA. The assumption would have been that corporate governance in the public sector should improve instead of decline. It is in this context that the current study is undertaken.

The significance of the study is that it will improve the process of public assets management within the Local Government and Traditional Affairs of Mahikeng. The study will create an integration of public assets management policies with other relevant policies in the Local Government and Traditional Affairs aimed at the improvement of delivery of service. Local Government and Traditional Affairs can use the study as a model to deal with public assets and finance management in the future.

The research question being researched seeks to examine whether the current asset management program in the Mahikeng District has an effect on the level of delivery of service. The research also intends to determine if the integration of the Asset Management Framework with other strategic objectives and policies of the Department of Local Government and Traditional Affairs will have an effect on the level of service delivery. It is vital to adhere to good corporate governance; therefore it determined whether effective public assets accountability will have an impact on the level of asset management by the Department. Lastly, the research examined whether the current capacity of the Department will have an effect on the implement of an effective asset management program as set out in the Asset Management Framework?

The chapter begins with a graphic introduction based on the demographics of the respondents. This is followed by a section reflecting the findings of the target survey's perception with regard to assessing the challenges of managing public assets in the Local Government and Traditional Affairs of Mahikeng.

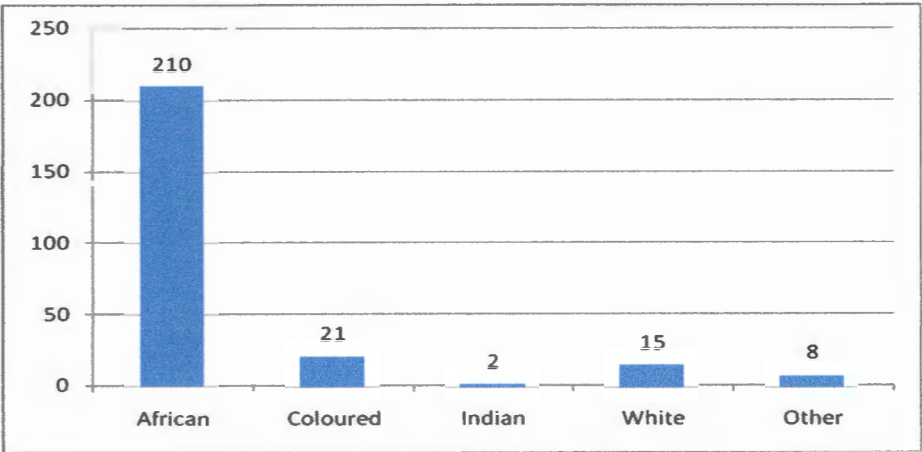
4.2 Return rate

The following sections discuss the results of the survey. There were 300 questionnaire distributed to a population of 650 desired employees of the Local Governments and Traditional Affairs of Mahikeng. There were 256 completed questionnaires returned using simple random sampling technique. Out of the returned questionnaires, 230 were completed satisfactorily. The number of 256 returned questionnaires was considered an adequate sample size according to Krejcie and Morgan (1970). The data was summarized on a spread sheet and statistics were calculated using SPSS. The researcher has tried many times to show that the requirements for the sample were followed. The sample met the strict rules and was randomly selected. All names were allocated a number and numbers were drawn. Where a respondent did not complete a questionnaire, the next number was drawn and the questionnaire used. In this way the sample could be regarded as being representative.

4.3 Demographics of the respondents

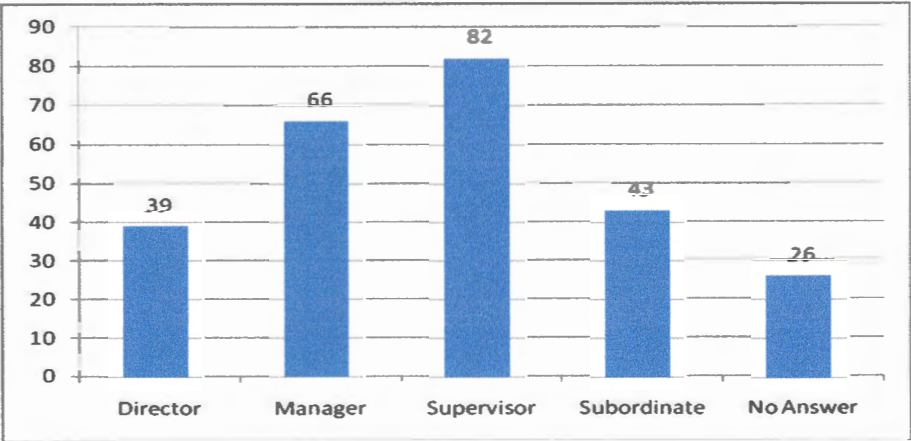
The following section discusses results on demographics. The results include Figures and Tables showing the ethnicity demographic profile, job profiles of the respondents, qualification profiles of the respondents, gender profiles of the respondents, age of the respondents, citizenships of the respondents, places where the respondents were brought up and finally the section looks at the respondents' years of service.

Figure 4.1 Races of the Respondents



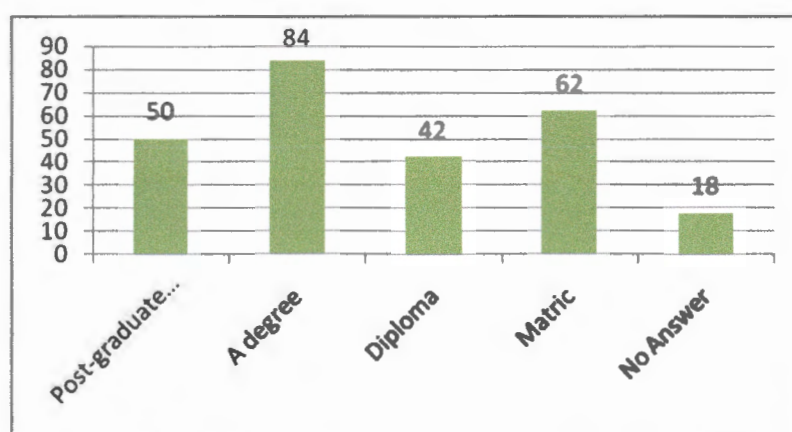
The results in Figure 4.1 above indicate that out of the 256 respondents, there were a large number of African people. There policy has seen an increased exodus of other ethnic groups, especially among the white employees. This result may have an effect on the standard deviation. It shows how much variation there is from the "average" (mean). A high standard deviation indicates that the data is spread out over a large range of values owing to the fact that the African component is so large. This draws the sample out of proportion. The sample size shows variability showing that the sample was picked at random. In any analysis of the operation of these municipalities, it is important to appreciate the South African municipal government environment, its managerial and administrative capacity, together with the broad constitutional and legislative context in which local government finds itself (Dollery & Graves, 2008).

Figure 4.2 Job Position of the respondent



As indicated in Figure 4.2 above, the highest number 82 (32.03%) of respondents was received from supervisors, followed by managers and directors with 66 (25.78%). The targeted sample was mainly of employees who were in discussion making positions such as directors, managers and supervisors and subordinates. The majority of managers under local government recognise these service life and asset management problems. Most have corrective measures for isolated problems, but none has an integrated, comprehensive solution to address the needs for retaining their assets efficiently and effectively over their service life. The response received from the subordinates was 43 (16.80%). The targeted employees have a better understanding of the challenges faced by asset management in the department. This is because of the actually gained through delivering deferent types of services to the community. The number of directors in the department of Local Government and Traditional Affairs of Mahikeng compared to other positions is fair with a response of 39 (15.23%).

Figure 4.3 Qualifications of the Respondents



The information in Figure 4.3, indicates that most of the respondents 84 (32.81%) have a degree qualification. This was followed by 62 (24.22%) and 50 (19.53%) respondents with matric and post-graduate qualification. The results indicate most of the respondents in senior position of the department have adequate qualifications to undertake a proper management of assets in the department. There were 42 (16.41) respondents who had diploma qualifications. In terms of the management of human recourses, although there are shortages of appropriately qualified personnel in all three spheres of the South African government, it is perhaps more acute

The result suggests the 18 (7.03) no answer respondents are made up subordinate employees who have abet qualification, who have been developed by the department. Fixed asset registers were required to be in place only by 2011. Therefore it is expected that departments might experience staff capacity problems in implementing this (Van Wyk, 2007).

Figure 4.4 Genders of the Respondents

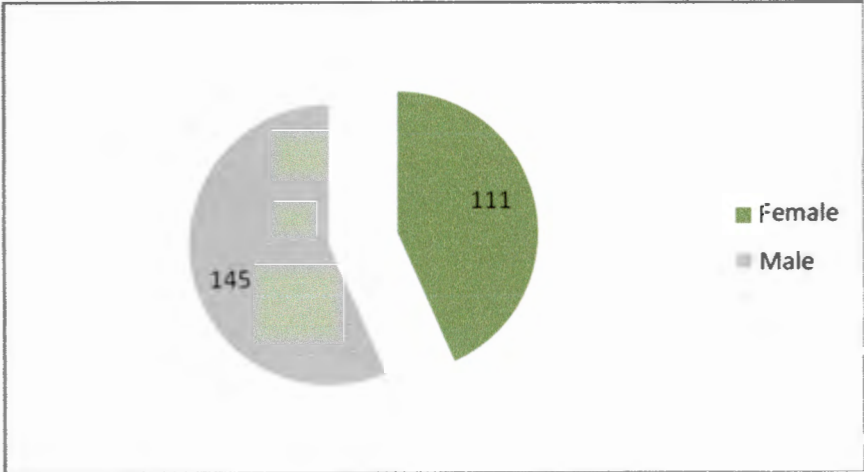
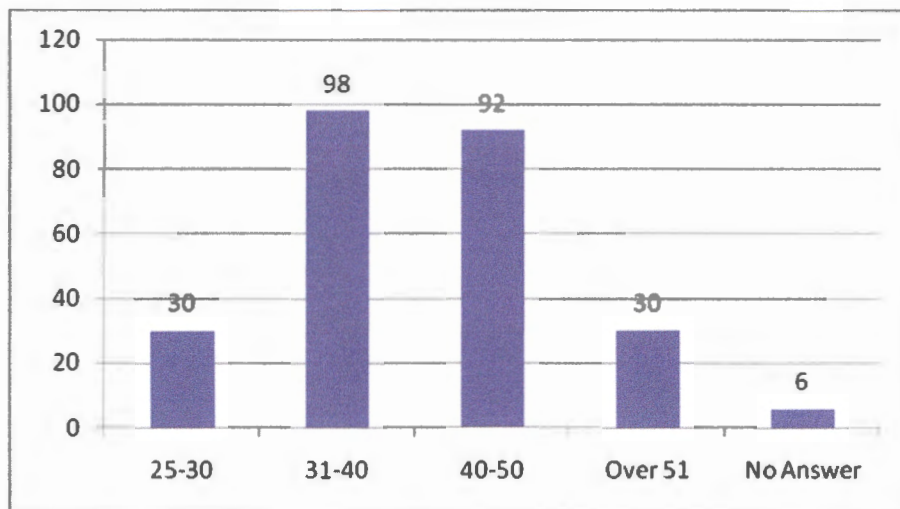


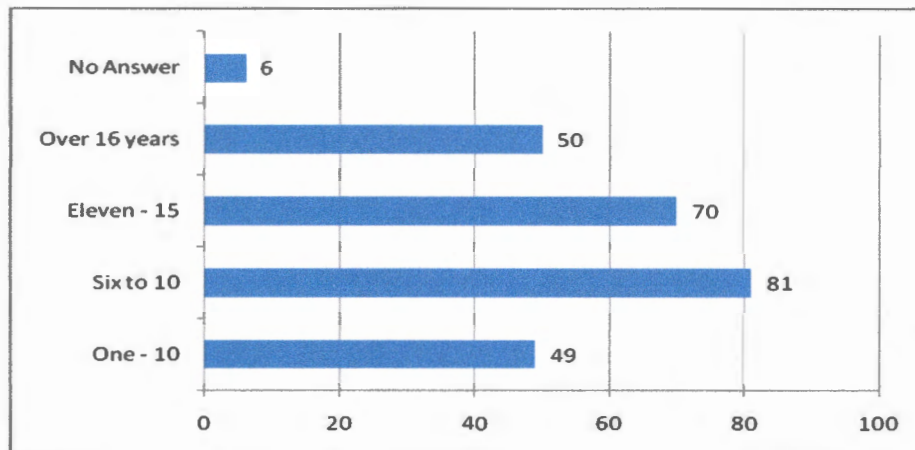
Figure 4.4 indicates that the majority of the respondents 145 (56.64%) were male employees while only 111 (43.36%) was made up of female. The result indicates a high imbalance between male and female employees. This is a cause of concern considering that there have been efforts aimed at employment equality especially in the public sector. The difference in the number of male employees compared to female may have been caused because of the few female employees currently with the necessary qualifications to occupy senior positions. It is anticipated that this will position will change as more female attend university and are prepared to take up senior positions. Government departments will experience capacity problems and government officials will have to be trained to facilitate the capturing process of assets. Although Generally Recognised Accounting Practice (GRAP) provides assistance, some confusion still exists among government officials regarding the measurement of assets that are recognised for the first time. The National Treasury should provide guidance for all government departments (*ibid*).

Figure 4.5 Ages of Respondents



The graph above shows a high number of respondents in their middle age category. Respondents were selected randomly within the department. The intention was to be certain that every category of employee within the Mahikeng Local Municipality is represented. The lower age range is made up mostly of employees who occupy subordinate positions. Government provides secure job security whereby most employees are willing to remain within the employment of the civil service up until retirement. The situation may be a cause for concern because most of the middle and lower position have employee almost reaching retirement age. The no answer respondents are made up of women, who form part of subordinate who did not feel comfortable to disclose their age. In terms of the management of human resources, although there are shortages of appropriately qualified personnel in all three spheres of the South African government, it is perhaps more acute in local government. This situation is aggravated by serious under-performance by some municipalities. The seriousness of the situation in some communities has even led to public protests by residents because they are not receiving the services that a municipality should provide (Brand, 2007).

Figure 4.6 Years of Service in the Department

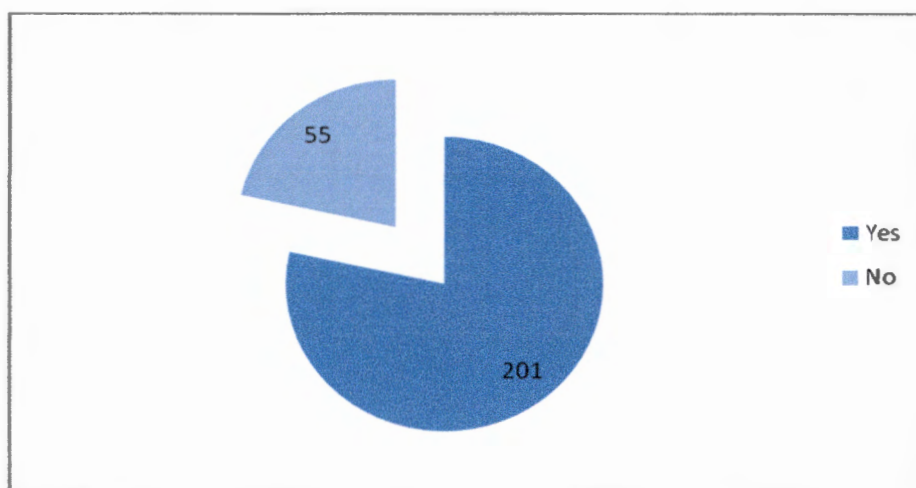


The results in table 4.6 indicate that most of the respondents from the 256 respondents, 50 (19.53%) have been in the service of the state for a period over 16 years. There were 70 (27.35%) respondents who indicated they had been employed between 11 and 15 years. People tend to work long in the State departments because of the job security offered by Government as indicated in the Two Factor Theory of Motivation; people are motivated to work because of their unsatisfied needs, which include job security. To satisfy their needs people look for employment and secure work according to their skills, knowledge and potential (Smit & Cronje, 2004). The 6 (2.34%) respondents could not answer the question as they did not know their years of service as they were employees from the previous government and they are not sure whether they were contractors or employees then.

4.7 Results of Investigation

The following section looks at the frequencies of occurrences using Figures and Tables. Included in the section are frequencies on identification of service delivery challenges in the Department of Local Government in Mahikeng district. This includes employees identifying the existence of effective asset management policies within the department. Other results included frequencies in Tables showing the official attempts made to evaluate the importance of the asset register in the department. Results on frequencies showing the importance of the integration of the asset management programme with other systems in the Department improve delivery of service. Results on frequencies showing the impact of asset management on service delivery problems currently being experienced in Mahikeng have also been included

Figure 4.8 Is Mahikeng district facing delivery of service challenges resulting from mis-use of infrastructure?

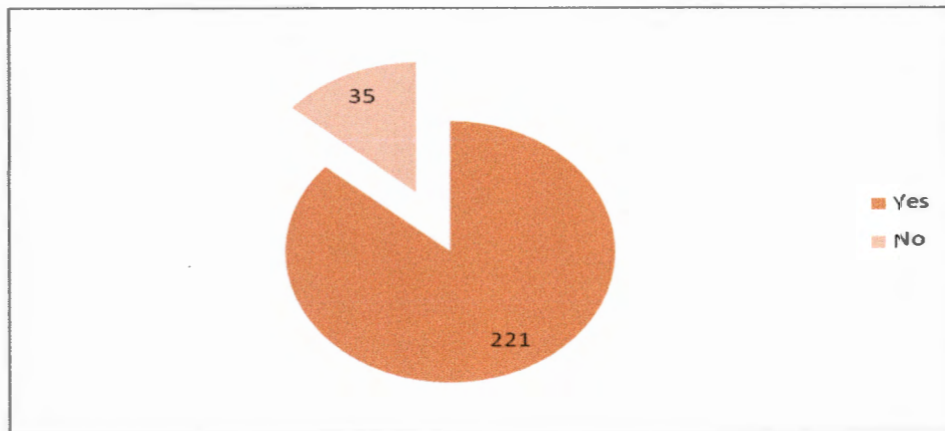


Out of the 256 respondents, the majority 201 (78.52%) indicated that Mahikeng district is facing delivery of service challenges resulting from mis-use of infrastructure, while 55 (21.48%) indicated that it is not the case. Another challenge faced in local government management of infrastructure is to balance the competing demands for infrastructure construction, operations and maintenance, and renewal within each service, as well as across the various municipal services (Department of Provincial and Local Government, 2006). Infrastructure is essential to achieve the increased levels of economic growth through job creation and the establishment of well serviced areas conducive for economic investment (Department of Provincial and Local Government, 2006).

The high number of respondents who responded positively suggests that most of the respondents may have interest in the service delivery by the department; it therefore can be assumed that such respondents cannot indicate otherwise. Of those who responded negatively, it is expected that this may have consisted of respondents who are directly affected by the service delivery challenges. An existing and urgent concern is that many local authorities have not established asset management systems and practices that will allow them to identify and respond to this challenge (Department of Public Works, 2004).

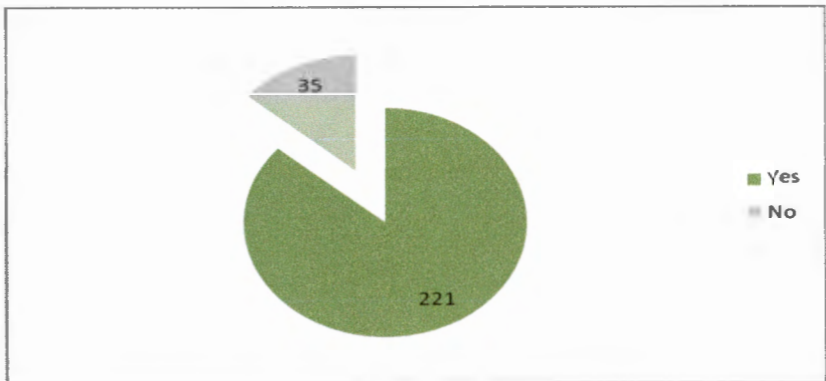
It is expected that from the respondents who indicated that Mahikeng district is facing delivery of service challenges resulting from mis-use of infrastructure, it will be an alarm to the department to improve the speed.

Figure 4.9 Does the department have an effective asset management policy?



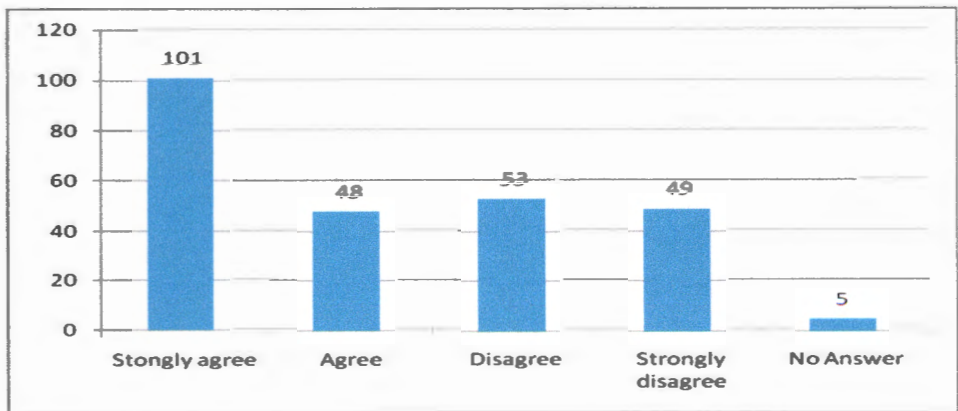
As indicated in Figure 4.9 above, the highest number 221 (90.21%) of respondents was received from those who agree that the department has an effective asset management policy. The targeted sample was mainly of employees who were in decision making positions such as directors, managers and supervisors, who have to use policy to make proper decision. 35 (9.79%) of the respondents do not agree. The case might be that the policy was not communicated to them and that they do not have access to the department's website. The purpose of the policy document is to ensure that the departments' fixed assets are safeguarded, controlled, disposed off and accounted for in accordance with the Public Financial Management Act, 1999 (Act No. 1 of 1999) and used mainly to achieve service delivery objectives. Wall (2009) observes that National Infrastructure Maintenance Strategy sets overarching national policy for sector-based initiatives, and describes the framework for a coordinated programme of actions. Legislation requires municipalities to provide operational strategies that support the municipality's resources for the achievement of its set development objectives. This ought to include a medium term financial plan that set out how the capital and operational expenditure is matched by its revenue raising strategy (Wall, 2005). Financial gain and effective service delivery cannot be achieved if proper management principles are not implemented. Incompetence will lead to inhibitive cost, which will eventually make it impossible to deliver service effectively (Department of Public Works, 2004).

Figure 4.10 Are assets being managed within the set Asset Management Framework?



Out of the 256 respondents, the majority 221 (90.21%) indicated that assets are being managed within the set Asset Management Framework as oppose to 35 (9.79%) of them who indicate that they negatively. The majority might be aware of the purpose of the Asset Management Framework, which is to advance the management of assets and better integrate assets and service provision. They also understand that it provides the capabilities to enable the efficient delivery of services to the community. Asset planning must be considered equally and concurrently with the other resource requirements used in achieving set objectives of an organisation (Daya, 2004). Legislation requires municipalities to provide operational strategies that support the municipality's resources for the achievement of its set development objectives. This ought to include a medium term financial plan that set out how the capital and operational expenditure is matched by its revenue raising strategy (Wall, 2005).

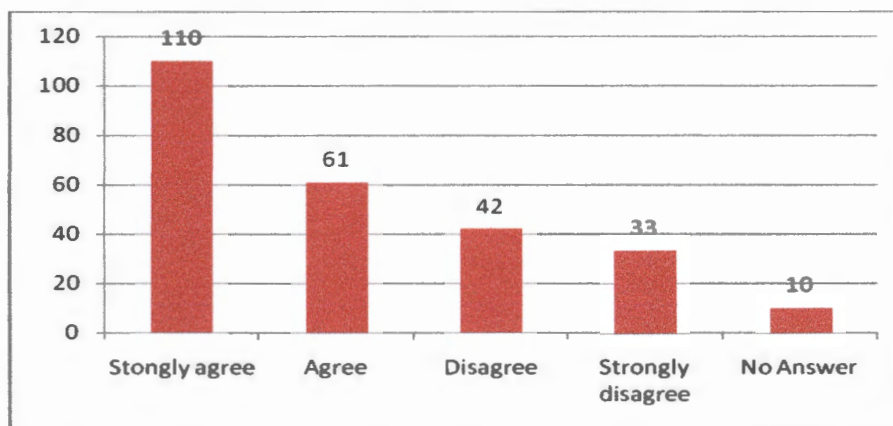
Figure 4.11 Can the integration of the asset management programme with other systems in the Department improve delivery of service?



The results showed that the majority 101 (39.45%) and 48 (18.75%) are positive that the integration of asset management programme with other systems in the department can improve delivery of service. Communication which is very significant in all spheres of the business will improve the effectiveness of running the business. There management will be able to take appropriate decision and action collectively and easily.

On the other hand 107 (148.80) of the respondents were negative. The assumption is that they do not know what that means. It might also be that they are personally benefiting from the current status quo. What the integration means, its importance and the process thereof need to be communicated to them. The vertical and horizontal integration and alignment of government processes will enhance the delivery of services through the co-ordination of Provincial Departments and municipalities (Department of Local Government and Housing, 2008).

Figure 4.12 Can the current asset management programme help to achieve the set strategic goals of the Department?

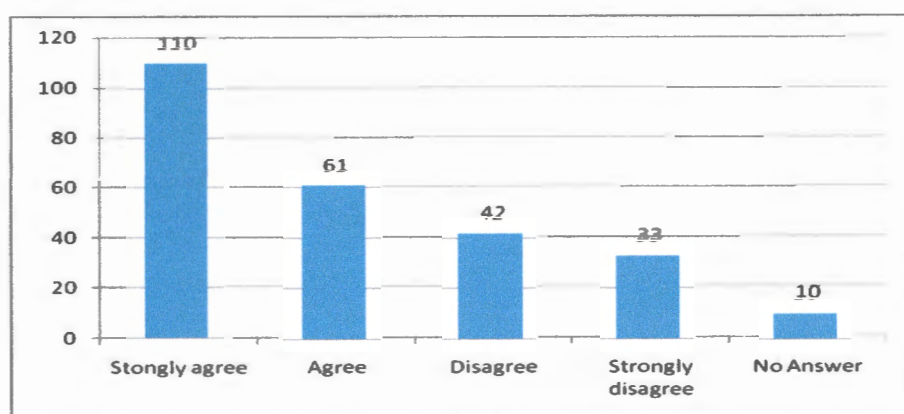


The majority 171 (66.8%) of the respondents were of the view that the current asset management programme can help to achieve the set strategic goal of the department; 110 (42.97%) strongly agreed and 61 (23.83%) agreed. Failure to effectively manage infrastructure assets is a key risk that could prevent local authorities from achieving their strategic goals with regards to the delivery of service. Legislation requires municipalities to provide operational strategies that support the municipality's resources for the achievement of its set development objectives. This ought to include a medium term financial plan that set out how the capital and operational expenditure is matched by its revenue raising strategy (Wall, 2005). Formulated strategies, not only aim at expanding infrastructure, but also at

modifying and repairing of aging inappropriate infrastructure (Department of Local Government and Traditional Affairs, 2010).

The current asset management programme will assist management in ensuring the effectiveness, efficiency and economical procurement of goods and services within department as well as procurement and utilisation of resources. There were 75 (29.30%) respondents who were of the view that the current asset management programme cannot help to achieve the set strategic goal of the department; 42 (16.41%) disagreed, while 33 (12.89%) strongly disagreed. The negative response may have come from respondents representing the segment of employees who have no knowledge of the asset management programme, who feel it is not a concern for them. An existing and urgent concern is that many local authorities have not established asset management systems and practices that will allow them to identify and respond to this challenge (Department of Public Works, 2004).

Figure 4.13 Can an asset register improve the management of assets within the district?



The asset register serves as the asset database consisting of all assets of the department and provides the detail of the Figures disclosed in the financial statements. It stores information on each asset recorded according to a particular classification. 171 (68%) of the respondents agree that an asset register can improve the management of assets within the district. An existing and urgent concern is that many local authorities have not established asset management systems and practices that will allow them to identify and respond to this challenge (Department of Public Works, 2004). The asset register will assist the department to identify assets which are no more beneficial, which can be disposed off. The 85 (32%) are employees who do not have knowledge of the asset register. Holding workshops can assist them to gain knowledge about the importance of the asset register.

4.5 Measures of association

The following section looks at the correlation of the data presented. To ascertain authenticity of the correlation, the mean, standard deviations and p-values have also been discussed in the section. Correlation analysis is a technique that describes the relationship between variables and measures the extent to which a change in one variable is attributed to a change in another. Correlation often measured as a correlation coefficient indicates the strength and direction of a linear relationship between two random variables (Welman & Kruger, 2001: 209-212). S: (n) correlation coefficient, coefficient of correlation, correlation (a statistic representing how closely two variables co-vary; it can vary from -1 (perfect negative correlation) through 0 (no correlation) to +1 (perfect positive correlation)).

Below is an indication of correlation ranges:

Small	0.1 to 0.3
Medium	0.3 to 0.5
Large	0.5 to 1

For the purpose of this study, a correlation that is above the value of 0.5 will be considered to show a strong correlation. The p-value is the probability that the current result would have been found if the correlation coefficient would be zero.

Pearson correlation, assumes that the two variables are measured on at least interval scales, and it determines the extent to which values of the two variables are "proportional" to each other. The value of correlation (i.e., correlation coefficient) does not depend on the specific measurement units used; for example, the correlation between height and weight will be identical regardless of whether inches and pounds, or centimeters and kilograms are used as measurement units. Proportional means linearly related; that is, the correlation is high if it can be summarised by a straight line (sloped upwards or downwards).

The significance level calculated for each correlation is a primary source of information about the reliability of the correlation. As explained before, the significance of a correlation coefficient of a particular magnitude will change depending on the size of the sample from which it was computed. The test of significance is based on the assumption that the distribution of the residual values (i.e., the deviations from the regression line) for the

dependent variable y follows the normal distribution, and that the variability of the residual values is the same for all values of the independent variable x . It is impossible to formulate precise recommendations based on those Monte Carlo results, but many researchers follow a rule of thumb that if your sample size is 50 or more then serious biases are unlikely, and if your sample size is over 100 then you should not be concerned at all with the normality assumptions.

Correlations

		Ethnic	Status	Qualification	Gender	Age	Citizenship	Area	Years	Qu1	Qu2	Qu3
Ethnic	Pearson Correlation	1	-.635**	-.238**	.361**	-.472**	.487**	.826**	-.202**	.788**	-.164**	-.164**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.001	.000	.009	.009
	N	256	256	256	256	256	256	256	256	256	256	256
Status	Pearson Correlation	-.635**	1	.699**	-.738**	-.160*	-.324**	-.685**	.631**	-.714**	.633**	.633**
	Sig. (2-tailed)	.000		.000	.000	.010	.000	.000	.000	.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Qualification	Pearson Correlation	-.238**	.699**	1	-.873**	-.421**	-.116	-.279**	.907**	-.303**	.552**	.552**
	Sig. (2-tailed)	.000	.000		.000	.000	.063	.000	.000	.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Gender	Pearson Correlation	.361**	-.738**	-.873**	1	.388**	.176**	.422**	-.825**	.458**	-.455**	-.455**

	Sig. (2-tailed)	.000	.000	.000		.000	.005	.000	.000	.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Age	Pearson Correlation	-.472**	-.160*	-.421**	.388**	1	-.339**	-.263**	-.372**	-.125*	-.249**	-.249**
	Sig. (2-tailed)	.000	.010	.000	.000		.000	.000	.000	.045	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Citizenship	Pearson Correlation	.487**	-.324**	-.116	.176**	-.339**	1	.644**	-.099	.384**	-.080	-.080
	Sig. (2-tailed)	.000	.000	.063	.005	.000		.000	.116	.000	.202	.202
	N	256	256	256	256	256	256	256	256	256	256	256
Area	Pearson Correlation	.826**	-.685**	-.279**	.422**	-.263**	.644**	1	-.236**	.922**	-.192**	-.192**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000	.000	.002	.002
	N	256	256	256	256	256	256	256	256	256	256	256
Years	Pearson Correlation	-.202**	.631**	.907**	-.825**	-.372**	-.099	-.236**	1	-.257**	.545**	.545**
	Sig. (2-tailed)	.001	.000	.000	.000	.000	.116	.000		.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Qu 1	Pearson Correlation	.788**	-.714**	-.303**	.458**	-.125*	.384**	.922**	-.257**	1	-.208**	-.208**

	Sig. (2-tailed)	.000	.000	.000	.000	.045	.000	.000	.000		.001	.001
	N	256	256	256	256	256	256	256	256	256	256	256
Qu2	Pearson Correlation	-.164**	.633**	.552**	-.455**	-.249**	-.080	-.192**	.545**	-.208**	1	1.000**
	Sig. (2-tailed)	.009	.000	.000	.000	.000	.202	.002	.000	.001		.000
	N	256	256	256	256	256	256	256	256	256	256	256
Qu3	Pearson Correlation	-.164**	.633**	.552**	-.455**	-.249**	-.080	-.192**	.545**	-.208**	1.000**	1
	Sig. (2-tailed)	.009	.000	.000	.000	.000	.202	.002	.000	.001	.000	
	N	256	256	256	256	256	256	256	256	256	256	256
Qu4	Pearson Correlation	.779**	-.716**	-.306**	.463**	-.110	.380**	.911**	-.260**	.989**	-.211**	-.211**
	Sig. (2-tailed)	.000	.000	.000	.000	.078	.000	.000	.000	.000	.001	.001
	N	256	256	256	256	256	256	256	256	256	256	256
Qu5	Pearson Correlation	.861**	-.694**	-.271**	.409**	-.271**	.429**	.880**	-.230**	.895**	-.186**	-.186**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.003	.003
	N	256	256	256	256	256	256	256	256	256	256	256
Qu6	Pearson Correlation	-.420**	.879**	.832**	-.870**	-.384**	-.205**	-.491**	.792**	-.533**	.653**	.653**

	Sig. (2-tailed)	.000	.000	.000	.000	.000	.001	.000	.000	.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Qu7	Pearson Correlation	-.380**	.708**	.790**	-.816**	-.384**	-.185**	-.445**	.675**	-.482**	.319**	.319**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.003	.000	.000	.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Qu8	Pearson Correlation	.861**	-.694**	-.271**	.409**	-.271**	.429**	.880**	-.230**	.895**	-.186**	-.186**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.003	.003
	N	256	256	256	256	256	256	256	256	256	256	256
Qu9	Pearson Correlation	-.380**	.708**	.790**	-.816**	-.384**	-.185**	-.445**	.675**	-.482**	.319**	.319**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.003	.000	.000	.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Qu10	Pearson Correlation	.873**	-.684**	-.249**	.377**	-.383**	.467**	.843**	-.211**	.823**	-.171**	-.171**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.001	.000	.006	.006
	N	256	256	256	256	256	256	256	256	256	256	256
Qu11	Pearson Correlation	.861**	-.694**	-.271**	.409**	-.271**	.429**	.880**	-.230**	.895**	-.186**	-.186**

	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.003	.003
	N	256	256	256	256	256	256	256	256	256	256	256
Qu12	Pearson Correlation	.914**	-.587**	-.211**	.319**	-.614**	.552**	.786**	-.179**	.697**	-.145*	-.145*
	Sig. (2-tailed)	.000	.000	.001	.000	.000	.000	.000	.004	.000	.020	.020
	N	256	256	256	256	256	256	256	256	256	256	256
Qu13	Pearson Correlation	.873**	-.684**	-.249**	.377**	-.383**	.467**	.843**	-.211**	.823**	-.171**	-.171**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.001	.000	.006	.006
	N	256	256	256	256	256	256	256	256	256	256	256
Qu14	Pearson Correlation	-.282**	.454**	.625**	-.782**	-.334**	-.137*	-.330**	.548**	-.358**	.050	.050
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.028	.000	.000	.000	.422	.422
	N	256	256	256	256	256	256	256	256	256	256	256
Qu15	Pearson Correlation	.813**	-.806**	-.438**	.599**	-.108	.530**	.893**	-.405**	.865**	-.273**	-.273**
	Sig. (2-tailed)	.000	.000	.000	.000	.084	.000	.000	.000	.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Qu16	Pearson Correlation	.861**	-.694**	-.271**	.409**	-.271**	.429**	.880**	-.230**	.895**	-.186**	-.186**

Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.003	.003
N	256	256	256	256	256	256	256	256	256	256	256

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Correlations

		Qu4	Qu5	Qu6	Qu7	Qu8	Qu9	Qu10	Qu11	Qu12	Qu13	Qu14
Ethnic	Pearson Correlation	.779**	.861**	-.420**	-.380**	.861**	-.380**	.873**	.861**	.914**	.873**	-.282**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Status	Pearson Correlation	-.716**	-.694**	.879**	.708**	-.694**	.708**	-.684**	-.694**	-.587**	-.684**	.454**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Qualification	Pearson Correlation	-.306**	-.271**	.832**	.790**	-.271**	.790**	-.249**	-.271**	-.211**	-.249**	.625**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.001	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Gender	Pearson Correlation	.463**	.409**	-.870**	-.816**	.409**	-.816**	.377**	.409**	.319**	.377**	-.782**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256

	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Age	Pearson Correlation	-.110	-.271**	-.384**	-.384**	-.271**	-.384**	-.383**	-.271**	-.614**	-.383**	-.334**
	Sig. (2-tailed)	.078	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Citizenship	Pearson Correlation	.380**	.429**	-.205**	-.185**	.429**	-.185**	.467**	.429**	.552**	.467**	-.137*
	Sig. (2-tailed)	.000	.000	.001	.003	.000	.003	.000	.000	.000	.000	.028
	N	256	256	256	256	256	256	256	256	256	256	256
Area	Pearson Correlation	.911**	.880**	-.491**	-.445**	.880**	-.445**	.843**	.880**	.786**	.843**	-.330**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Years	Pearson Correlation	-.260**	-.230**	.792**	.675**	-.230**	.675**	-.211**	-.230**	-.179**	-.211**	.548**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.001	.000	.004	.001	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Qu 1	Pearson Correlation	.989**	.895**	-.533**	-.482**	.895**	-.482**	.823**	.895**	.697**	.823**	-.358**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256

	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Qu2	Pearson Correlation	-.211**	-.186**	.653**	.319**	-.186**	.319**	-.171**	-.186**	-.145*	-.171**	.050
	Sig. (2-tailed)	.001	.003	.000	.000	.003	.000	.006	.003	.020	.006	.422
	N	256	256	256	256	256	256	256	256	256	256	256
Qu3	Pearson Correlation	-.211**	-.186**	.653**	.319**	-.186**	.319**	-.171**	-.186**	-.145*	-.171**	.050
	Sig. (2-tailed)	.001	.003	.000	.000	.003	.000	.006	.003	.020	.006	.422
	N	256	256	256	256	256	256	256	256	256	256	256
Qu4	Pearson Correlation	1	.884**	-.539**	-.488**	.884**	-.488**	.813**	.884**	.689**	.813**	-.362**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Qu5	Pearson Correlation	.884**	1	-.477**	-.432**	1.000**	-.432**	.919**	1.000**	.778**	.919**	-.320**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Qu6	Pearson Correlation	-.539**	-.477**	1	.790**	-.477**	.790**	-.438**	-.477**	-.371**	-.438**	.584**
	Sig. (2-tailed)											
	N											

	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Qu7	Pearson Correlation	-.488**	-.432**	.790**	1	-.432**	1.000**	-.397**	-.432**	-.336**	-.397**	.744**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Qu8	Pearson Correlation	.884**	1.000**	-.477**	-	.432**	1	-.432**	.919**	1.000**	.778**	-.320**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Qu9	Pearson Correlation	-.488**	-.432**	.790**	1.000**	-.432**	1	-.397**	-.432**	-.336**	-.397**	.744**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Qu10	Pearson Correlation	.813**	.919**	-.438**	-.397**	.919**	1	-.397**	.919**	.847**	1.000**	-.294**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Qu11	Pearson Correlation	.884**	1.000**	-.477**	-.432**	1.000**	1	-.432**	.919**	1	.778**	-.320**

	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Qu12	Pearson Correlation	.689**	.778**	-.371**	-.336**	.778**	-.336**	.847**	.778**	1	.847**	-.249**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Qu13	Pearson Correlation	.813**	.919**	-.438**	-.397**	.919**	-.397**	1.000**	.919**	.847**	1	-.294**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000
	N	256	256	256	256	256	256	256	256	256	256	256
Qu14	Pearson Correlation	-.362**	-.320**	.584**	.744**	-.320**	.744**	-.294**	-.320**	-.249**	-.294**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
	N	256	256	256	256	256	256	256	256	256	256	256
Qu15	Pearson Correlation	.870**	.823**	-.695**	-.632**	.823**	-.632**	.799**	.823**	.766**	.799**	-.468**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	256	256	256	256	256	256	256	256	256	256	256
Qu16	Pearson Correlation	.884**	1.000**	-.477**	-.432**	1.000**	-.432**	.919**	1.000**	.778**	.919**	-.320**

Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
N	256	256	256	256	256	256	256	256	256	256	256

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

The correlation between Ethnic and Area Grow Up is .826, a strong positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of <.01. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. Most of the respondents targeted grow up in rural areas which at the time was a common factor. As South Africa becomes more urbanised, more people are now being brought up in urban areas.

The correlation between Ethnic and delivery of service challenges is .788, a strong positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of <.01. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. Most of the respondents targeted grow up in rural areas which at the time was a common factor. As South Africa becomes more urbanised, more people are now being brought up in urban areas.

The correlation between Position in the Organisation and Qualifications is .699, a positive and strong correlation between the two variables. This implies that the more qualified a person is the better the position he or she will have in the department. This is at a significant at the 0.01 confidence level, as shown by the p-value of <.01. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. The longer an employee served in the department, the more qualifications they are expected to achieve. This is as a result of training opportunities offered by the department to its employees.

The correlation between Position in the Organisation and Years of Service is .631, a positive and strong correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is significant since the p-value is below 0.05. Most of the target group was made up of directors and managers, invariably the longer they served in the Department the better the prospects for promotion. The longer a person has served in the department, the better the prospects of occupying senior positions

The correlation between Ethnic and an effective asset management policy is .633, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is significant linear correlation between the two variables and the correlation is significant since the p-value is below 0.05. This implies that the ethnicity of the respondents was a factor in implementing an effective asset management policy.

The correlation between Ethnic and managed within the set Asset Management Framework is .633, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. This implies that the ethnicity of the respondents was a factor in determining the management of assets within the set Asset Management Framework

The correlation between Ethnic and communicated Asset Management Framework is .779, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. This implies that

the ethnicity of the respondents had an impact in communicating Asset Management Framework within the department.

The correlations between grow up area and integration of Asset Management with other policies and systems is .880, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. The asset management activities should be undertaken within an integrated government asset management framework. Asset management decisions should form part of the overall guideline for decision-making in an entity and not taken in isolation. As technology is changing every day, more people are now studying with universities and other institutions with the support from the department. With acquired knowledge and skills, they are able to integrate asset management with other policies and systems.

The correlation between Status and integration of Asset Management with other policies and systems to improve delivery of service is .879, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. Asset planning must be considered equally and concurrently with the other resource requirements used in achieving set objectives of an organisation (Daya, 2004). This implies that the status of an employee in the department had an impact on the Integration of Asset Management with other policies and systems to improve service delivery.

The correlation between qualification and Integration of Asset Management with other policies and systems to improve service delivery is .832, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. The proposition that the ease or complexity of

implementation integrated fiscal discipline plays a crucial role in local public financial management and thus be carefully matched with administrative and technical capacity implies that decision makers should select formats matching the skills and experience of financial management staff (Shah 2007). This implies that most of the senior employees, who have relevant qualifications, have successfully integrated Asset Management with other policies and systems to improve service delivery. The qualification of the respondents was therefore a factor in the Integration of Asset Management with other policies and systems to improve service delivery.

The correlation between Ethnic and Asset Management programme linked to the set of Asset Management Framework is .861, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. The strategic level involves the integration of the user needs, the environment and the business functions of the organisation (Too, Betts & Arun, 2006). The ethnicity of the employees was a factor used in determining whether the department has sufficient capacity to link Asset Management programmes to the set of Asset Management Framework.

The correlation between grow up area and Asset Management programme linked to the set of Asset Management Framework is .880, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. A strategic approach to infrastructure asset management provides a better understanding of how to align the asset portfolio so that it best meets the service delivery needs of customers, both now and in the future (LGV, 2004).

The correlation between delivery of service challenges resulting from the use of infrastructure and Asset Management programme linked to the set of Asset Management Framework is .895, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong

relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. The delivery of service challenges resulting from the use of infrastructure was a factor in determining whether the asset Management programme can be linked to the set of Asset Management Framework

The correlation between Ethnic and All assets accounted for in an Asset Register is .873, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. The first step towards recording the assets in the records is to capture all the assets in fixed asset registers. A timeline for capturing assets is prescribed in the Asset Management Framework issued by the National Treasury (2004:11)

The correlations between Areas grow up and all assets accounted for in an Asset Register is .843, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. The first step towards recording the assets in the records is to capture all the assets in fixed asset register. The department might experience capacity problems in implementing the fixed asset register (Van Wyk, 2007). The department will have to train officials to facilitate the capturing process of assets as required by the National Treasury.

The correlation between delivery of service challenges resulting from the use of infrastructure and all assets accounted for in an Asset Register is .823, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant

since the p-value is below 0.05. Sustainable service delivery depends on the acquisition or creation, maintenance and renewal of community assets. Some of the challenges can be attributed to failure to manage infrastructure effectively. This implies that the delivery of service challenges resulting from the use of infrastructure was a result of some of the district assets not accounted for in the register.

The correlation between Ethnic and urgency to replace the current asset in the district is .779, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. The department is faced with urgency to replace and/or improve ageing infrastructure as a matter of priority. The effect has been that this infrastructure deteriorates even before the end of its designed life. This generally arises due to the lack of or poor asset management practices (Haffejee & Brent, 2008). Ethnicity was therefore a factor in determining the urgency to replace the current asset in the district.

The correlations between grow up area and Urgency to replace the current asset in the district is .880, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. Facilities and infrastructure should operate efficiently and deliver the most wanted level of service to the community. Each public asset therefore needs to be managed in a planned way. It needs routine maintenance, repairs, and provision for replacement at the end of its useful life (Hope & Rimmington, 2005). Ethnicity was a factor in determining the urgency to replace the current asset in the district.

The correlation between Delivery of service challenges resulting from the use of infrastructure and Urgency to replace the current asset in the district is .895, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at

a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. The management of the department need to ensure that resources not properly utilised are applied to alternative needs or changed for resources that will be more effective in the process towards the attainment of the goal

The correlation between ethnic and effective Asset Management in improving the level of accountability for assets is .914, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. The introduction of the Public Finance Management Act, Act No 1 of 1999 (PFMA) and the enactment of the Municipal Finance Management Bill (MFM) has made public sector managers increasingly accountable for the proper management of assets (Daya, 2004).

The correlation between Ethnic and Necessary skill to effectively implement the Asset Management Frame Work is .873, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. Some of the challenges of supply chain management include poor implementation of SCM practices; lack of skills and capacity in the implementation and execution of SCM (Hendricks & Singhal, 2003). Ethnicity was a factor used to determine the Necessary skill to effectively implement the Asset Management Frame Work.

The correlation between areas grows up and Necessary skill to effectively implement the Asset Management Frame Work is .843, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence

level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. The department is still facing a challenge of developing its personnel on scarce and critical skill. These interventions need to be structured to take account of the financial, skills and capacity constraints that exist at many municipalities (Department of Provincial and Local Government, 2006). The department addresses that by requesting employees to identify they need for development. They are offered financial assistance by the department on a yearly basis depending on the course they have applied for. Most of the respondents who benefit mostly are those who were previously disadvantaged, who most of them were from rural areas.

The correlation between Delivery of service challenges resulting from the use of infrastructure and Necessary skill to effectively implement the Asset Management Framework is .779, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. The personnel of the department need to be developed for scarce and critical skills as it is still a challenge in South Africa.

The correlation between Ethnic and the Department achieving a return from the assets in proportion to amounts spent to acquire them is .813, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. A permutation of these resources used optimally will ensure the set goal and objectives at local government level are achieved efficiently and effectively. This can be achieved through use of a management process that weighs up the advantages and disadvantages of utilizing these resources in a specific way against the risk of not doing so and not achieving the set goal in the shortest period and most effective way possible (Department of Public Works, 2004).

The correlation between area grow up and The Department achieving a return from the assets in proportion to amounts spent to acquire them is .893, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Financial gain or service provision cannot be achieved if these principles are not practiced in local government. Local government progress in the provision of service will be constricted because of mismanagement of assets because of inefficiency and inhibitive costs (Department of Public Works, 2004). Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. Having acquired the IA it is used for its intended operations that should allow for maintenance of the IA. This is followed by disposal of IA in consideration of the asset performance management. This entails the principle of asset life cycle of the property.

The correlation between deliveries of service challenges resulting from the use of infrastructure vs. The Department achieving a return from the assets in proportion to amounts spent to acquire them is .865, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. The competing demands that are made on limited operational budgets have caused constraint to the proper management of existing and new infrastructure and facilities assets (Wall, 2005). This implies that the Delivery of service challenges resulting from the use of infrastructure was a factor in determining the Department achieving a return from the assets in proportion to amounts spent to acquire them.

The correlation between ethnic and Confusion experienced with regards to the current Asset Management tools and a programme is .861, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. The confusion existed with regards to the identification of assets. Fixed

asset registers were required to be in place only by 2011. Therefore it is expected that departments might experience staff capacity problems in implementing this (Van Wyk, 2007). Some confusion still exists among government officials regarding the measurement of assets that are recognised for the first time. The department will consult The National Treasury for guidance.

The correlation between areas grows up and Confusion experienced with regards to the current Asset Management tools and programmes is .880, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. The confusion existed in the department with regards to identification of assets. Fixed asset registers were required to be in place only by 2011. Therefore it is expected that departments might experience staff capacity problems in implementing this (Van Wyk, 2007).

The correlation between Delivery of service challenges resulting from the use of infrastructure and Confusion experienced with regards to the current Asset Management tools and programmes is .895, a positive correlation between two variables. According to criteria as set above, those correlations that are above the absolute value of 0.5 will be considered to have a strong relationship. This is at a significant at the 0.01 confidence level, as shown by the p-value of $<.01$. Therefore it can be deduced that there is a significant linear correlation between the two variables and the correlation is a significant since the p-value is below 0.05. Local Government Authorities (LGAs) face funding pressures and challenges in terms of improved resource and asset management. LGA also face pressures to reduce the cost of maintaining a infrastructure, provide better services, enhance infrastructure through integration, and support improved ways of working through collaboration (Kamal, M., *et al.*, 2011). The Confusion experienced with regards to the current Asset Management tools and programmes has an impact on Delivery of service challenges resulting from the use of infrastructure.

4.6 Conclusion

The chapter provided results of the research using statistical methods. Tables, graphs, and statistics have been used to give the results of the survey. The data has also been presented as part of the chapter.

This will guide the strategic planners of the department in determining whether there is a need to improve the processes of managing assets. They will also be able to know if the policies guiding assets need to be reviewed or not. They will be able to know if the department is on the right track to achieve its intended goal.

The following chapter looks at the recommendations arranged in the order of significance to different stakeholders. The aim has been to guarantee easy comprehension of the recommendations, and to add value to existing literature by identifying gaps where new and further research can be conducted.

Chapter Five

Conclusion and Recommendation

5.1 Introduction

The previous chapters looked at the assessment of the challenges of managing public assets in the Local Government and Traditional Affairs of Mahikeng. This chapter provides a summary of the research.

The purpose of this study was to assess the impact of the challenges of the managing of public assets on the service delivery by Local Government and Traditional Affairs of Mahikeng district. The study also establishes the impact that these challenges have on the delivery of service.

The chapter consolidates the findings of the research resulting from the analysis and interpretation of statistical data, which has been discussed in the previous section. Answers to the research questions pertaining to the challenges faced by the Local Government and Traditional Affairs of Mahikeng with regards the efficient and effective management of public assets.

5.2 Summary of the Study

This study sought to highlight the challenges faced by the Local Government and Traditional Affairs of Mahikeng with regards the efficient and effective management of public assets. The effectiveness and efficiency of government's connection to intended goals and levels of service delivery objectives are determined by the Immovable Asset Management Plan (IAMP). The strategic role to coordinate and supporting the development of Comprehensive Infrastructure Plans (CIPs) by municipalities is vested in the Department of Developmental Local Government & Traditional Affairs.

Infrastructure is essential to achieve the increased levels of economic growth through job creation and the establishment of well serviced areas conducive for economic investment (Department of Provincial and Local Government, 2006). The study also aims to highlight the effect of the current management of public assets on the level of delivery of services to the local community. The South African economy is characterized by high levels poor availability of social infrastructure and huge service delivery backlogs (Statssa, 2007).

An existing and urgent concern is that many local authorities have not established asset management systems and practices that will allow them to identify and respond to this challenge (Department of Public Works, 2004). Formulated strategies, not only aims at expanding infrastructure, but is also aimed at modifying and repair of aging inappropriate infrastructure (Department of Local Government and Traditional Affairs, 2010).

The study further looked at the importance of asset registers in the management of assets in Local Government. The first step towards recording the assets in the records is to capture all the assets in fixed asset registers. A timeline for capturing assets is prescribed in the Asset Management Framework issued by the National Treasury (2004:11). Under an accrual based system, concentration extends to maintaining and upgrading existing assets as opposed to only the purchase of new assets by providing information for continued measurement of actual cost against benefits derived (Department of Public Works, 2004).

The study look at service delivery challenges within Mahikeng district. Financial gain and effective service delivery cannot be achieved if proper management principles are not implemented. Incompetence will lead to inhibitive cost, which will eventually make it impossible to deliver service effectively (Department of Public Works, 2004). The provincial and local governments have the responsibility of making sure that there is good financial management as well as efficiency in the service delivery, especially in the provision of social services through the use of limited resources that they have at their disposal (National Treasury, 2006).

The study looked at the application of asset management policy and strategy at local government level. Legislation requires municipalities to provide operational strategies that support the municipality's resources for the achievement of its set development objectives. This ought to include a medium term financial plan that set out how the capital and operational expenditure is matched by its revenue raising strategy (Wall, 2005).

The study also revealed that confusion existed with regards to the identification of assets. Fixed asset registers were required to be in place only by 2011. Therefore it is expected that departments might experience staff capacity problems in implementing this (Van Wyk, 2007).

The Legislations which are directly relevant to asset management and aimed at the improvement in public sector accounting include the Public Finance Management Act, 1999 (PFMA); The Municipal Finance Management Act, Act 56 of 2003 (MFMA), and The Government Immovable Asset Management Act, 2007. The PFMA, include the King Committee's Report on Corporate Governance and the Constitution of the , 1996. Legislation on the effective management of infrastructure IT systems, budgets, incentives and guidelines and norms should be integrated in the management of public infrastructure (Wall, 2005).

The introduction of the Public Finance Management Act, Act No 1 of 1999 (PFMA) and the enactment of the Municipal Finance Management Bill (MFM) has made public sector managers increasingly accountable for the proper management of assets (Daya, 2004).

5.3 Response to Research Questions

The main findings of this research in relation to each of the research questions are discussed. Each of the questions is followed by a discussion of the findings relating to the question.

Is the current public assets management policy within the Department of Local Government and Traditional Affairs effective?

Particular attention should be paid to the effectiveness of the current public asset management policy within the department. The purpose of the policy document is to ensure that the departments' fixed assets are safeguarded, controlled, disposed off and accounted for in accordance with the Public Financial Management Act, 1999 (Act No. 1 of 1999) and used mainly to achieve service delivery objectives. The study also revealed that confusion existed with regards to the identification of assets. Fixed asset registers were required to be in place only by 2011. Therefore it is expected that departments might experience staff capacity problems in implementing this (Van Wyk, 2007).

Legislation on the effective management of infrastructure IT systems, budgets, incentives and guidelines and norms should be integrated in the management of public infrastructure (Wall, 2005). Strategic and tactical planning processes in municipalities need to be strengthened, supported by staged improvements to management practices and organisational capacity that will translate to perceptible improvements to service delivery. These interventions need to be structured to take account of the financial, skills and capacity constraints that exist at many municipalities (Department of Provincial and Local Government, 2006).

In the Private Sector stringent rules apply for the accounting of funds and the disclosure of financial information in annual financial statements (Department of Public Works, 2004). To stimulate this, a number of policies and regulations have been put in place.

This ought to include a medium term financial plan that set out how the capital and operational expenditure is matched by its revenue raising strategy (Wall, 2005). Legislation directly relevant to asset management and aimed at the improvement in public sector accounting include the Public Finance Management Act, 1999 (PFMA); The Municipal Finance Management Act, Act 56 of 2003 (MFMA), and The Government Immovable Asset Management Act, 2007.

The introduction of the Public Finance Management Act, Act No 1 of 1999 (PFMA) and the enactment of the Municipal Finance Management Bill (MFM) has made public sector managers increasingly accountable for the proper management of assets (Daya, 2004). Similar use of resources and safeguarding and maintenance requirements are set in Section 62 (1) (a) and 63 (1) (a) of the MFMA.

In terms of the Government Immovable Asset Management Act (“GIAMA”) passed into law early in 2008, it is obligatory for national and provincial to draw up sound multi-year infrastructure asset management plans. The legislation does not as yet include local government institutions (Wall, 2009).

The results in Figure 4.9 indicated that highest number 221(90.21%) of respondents was received from those who agree that the department has an effective asset management policy. The targeted sample was mainly of employees who were in decision making positions such as directors, managers and supervisors, who have to use policy to make proper decision. 35(9.79%) of the respondents do not agree. The case might be that the policy was not communicated to them and that they do not have access to the department’s website.

Is the current asset management framework integrated with other strategic objectives and policies of the Department of Local Government and Traditional Affairs?

AM is defined as a business process and a decision-making framework that covers a comprehensive time horizon, integrates the economic assessment of trade-offs amid alternative investment options utilising information to assist with cost-effective investment

decisions (FHWA 1999). Asset management needs to be integrated with other functions in local government for it to achieve desired objectives effectively (Dornan, 2002; Bourke *et al.*, 2005; Daya, 2004; Shah, 2007).

Asset planning and management should be integrated with the corporate and business plans, budgeting and reporting processes. The asset management activities should be undertaken within an integrated government asset management framework. A strategic approach to infrastructure asset management provides a better understanding of how to align the asset portfolio so that it best meets the service delivery needs of customers, both now and in the future (LGV, 2004). Formulated strategies, not only aims at expanding infrastructure, but is also aimed at modifying and repair of aging inappropriate infrastructure (Department of Local Government and Traditional Affairs, 2010). The proposition that the ease or complexity of implementation integrated fiscal discipline plays a crucial role in local public financial management and thus be carefully matched with administrative and technical capacity implies that decision makers should select formats matching the skills and experience of financial management staff (Shah 2007). The process ensures the requirements of organisations, users and other stakeholders are clearly understood and integrated into an asset management framework that optimises the outcomes achieved from policy and investment decisions (Austroads, 2002).

Legislation on the effective management of infrastructure IT systems, budgets, incentives and guidelines and norms should be integrated in the management of public infrastructure (Wall, 2005). There are information Technology (IT) solutions that can be used to address the full needs of municipalities; however, these have proved to be only isolated solutions to specific situations (Vanier 2001). Integrated SCM aims to add value at each stage of the process from demand of goods or services to their acquisition, managing the logistics process and finally, after use, to their disposal. In doing so, it addresses deficiencies in current practices related to procurement, contract management, inventory and asset control as well as obsolescence planning (Holmberg, 2000 *cited in* Migiros & Ambe, 2008).

The vertical and horizontal integration and alignment of government processes will enhance the delivery of services through the co-ordination of Provincial Departments and municipalities (Department of Local Government and Housing, 2008). The results showed the majority 101 (39.45%) and 48 (18.75%) are positive that the integration of asset

management program with other systems in the department can improve delivery of service. Communication which is very significant in all spheres of the business will improve the effectiveness of running the business. The management will be able to take appropriate decision and action collectively and easily. On the other hand 107 (148.80) of the respondents were negative. The assumption is that they do not know what that means. It might also be that they are personally benefiting from the current status quo. What the integration means, its importance and the process thereof need to be communicated to them. The vertical and horizontal integration and alignment of government processes will enhance the delivery of services through the co-ordination of Provincial Departments and municipalities (Department of Local Government and Housing, 2008).

Is there an effective accountability of public assets within the district?

The proper management of and accounting for assets have been set as an essential responsibility of the accounting officer. This is stipulated under Section 38 of the PFMA . The section further specifically tasks the accounting officer with the management, including the safeguarding and maintenance, of assets, and the management of liabilities. Similar use of resources and safeguarding and maintenance requirements are set in Section 62 (1) (a) and 63 (1) (a) of the MFMA. The introduction of the Public Finance Management Act, Act No 1 of 1999 (PFMA) and the enactment of the Municipal Finance Management Bill (MFM) has made public sector managers increasingly accountable for the proper management of assets (Daya, 2004).

Asset management constitutes an approach to managing infrastructure that is strategic (AASHTO, 2002). Public skepticism of government, combined with an increasing preference in recent years for using private sector management approached in the public sector, has led to demands that government be more accountable and operates more like a private business (FHWA, 1999). In addition, effective asset management needs reliable data and effective decision support tools. Hence, information is important in each stage of the processes (Too, Betts & Arun, 2006).

Does the Department have sufficient capacity to implement and handle the asset management programme in line with the assets management framework within the district?

Strategic and tactical planning processes in municipalities need to be strengthened, supported by staged improvements to management practices and organisational capacity that will translate to perceptible improvements to service delivery. These interventions need to be structured to take account of the financial, skills and capacity constraints that exist at many municipalities (Department of Provincial and Local Government, 2006).

Some of the challenges of supply chain management include poor implementation of SCM practices; lack of skills and capacity in the implementation and execution of SCM (Hendricks & Singhal, 2003). Fixed asset registers were required to be in place only by 2011. Therefore it is expected that departments might experience staff capacity problems in implementing this (Van Wyk, 2007). Government departments will experience capacity problems and government officials will have to be trained to facilitate the capturing process of assets. Although Generally Recognised Accounting Practice (GRAP) provides assistance, some confusion still exists among government officials regarding the measurement of assets that are recognised for the first time. The National Treasury should provide guidance for all government departments (*ibid*).

The provincial and local governments have the responsibility of making sure that there is good financial management as well as efficiency in the service delivery, especially in the provision of social services through the use of limited resources that they have at their disposal (National Treasury, 2006). The two principal systemic issues underlying inadequate provision for long-term management and maintenance are inadequate budgets and inadequate skills (and especially technical skills) and experience (Wall, 2008).

The results in table 4.6 indicate that most of the respondents from the 256 respondents, 50 (19.53%) have been in the service of the state for a period over 16 years. There were 70 (27.35%) respondents who indicated they had been employed between 11 and 15 years. People tend to work long in the State departments because of the job security offered by Government as indicated in the Two Factor Theory of Motivation; people are motivated to work because of their unsatisfied needs, which include job security. To satisfy their needs people look for employment and secure work according to their skills, knowledge and potential (Smit & Cronje, 2004). The 6(2.34%) respondents could not answer the question as

they did not know their years of service as they were employees from the previous government and they are not sure whether they were contractors or employees then.

Out of the 256 respondents, the majority 221 (90.21%) indicated that assets are being managed within the set Asset Management Framework as oppose to 35(9.79%) of them who indicate that they negatively. The majority might be aware of the purpose of the Asset Management Framework, which is to advance the management of assets and better integrate assets and service provision. They also understand that it provides the capabilities to enable the efficient delivery of services to the community. Asset planning must be considered equally and concurrently with the other resource requirements used in achieving set objectives of an organisation (Daya, 2004).

Does management of public assets have an effect on the delivery of service within the Mahikeng district?

Local and municipal government in developing countries is prone to failure with regards to the delivery of social services. This is mainly because of the lack of sound local public budgeting and effective management of resources (Buthelezi & Dollery 2004).Resources are required for the better provision of service to local communities as set out by local government goals .As owners, operators and maintainers of infrastructure assets, these authorities take on a significant responsibility in ensuring the successful performance of the assets to meet the service needs of their customers. At the heart of asset management is the concept of continuous improvement (Too, Betts & Arun, 2006).

Local government progress in the provision of service will be constricted because of mismanagement of assets because of inefficiency and inhibitive costs (Department of Public Works, 2004). This international trend is reflected fully in the massive growth in local service infrastructure in South Africa, particularly in electricity, water, sanitation and local roads, as the national government seeks to provide essential local services to the sprawling townships surrounding South African cities (Shah, 2007). Formulated strategies, not only aims at expanding infrastructure, but is also aimed at modifying and repair of aging inappropriate infrastructure (Department of Local Government and Traditional Affairs, 2010).

Owing to years of neglect, authorities have a backlog of maintenance requirements. The competing demands that are made on limited operational budgets have caused constraint to the proper management of existing and new infrastructure and facilities assets (Wall, 2005).

This situation is aggravated by serious under-performance by some municipalities. The seriousness of the situation in some communities has even led to public protests by residents because they are not receiving the services that a municipality should provide (Brand, 2007). An existing and urgent concern is that many local authorities have not established asset management systems and practices that will allow them to identify and respond to this challenge (Department of Public Works, 2004).

Making effective decisions on service delivery priorities requires a team effort, with inputs provided by officials from a number of sections of the municipality, including infrastructure, community services, and financial, planning, and corporate services. This will ensure there is effective utilization of often limited resources to address the most important needs and to achieve a balance between maintaining and renewing existing infrastructure at the same time addressing backlogs in basic services and facing ongoing changes in demand (Department of Provincial and Local Government, 2006). The effectiveness and efficiency of government's connection to intended goals and levels of service delivery objectives are determined by the Immovable Asset Management Plan (IAMP).

5.4 Managerial Guidelines

From the results of this study the following guidelines can be given to department:

- Investigate if all infrastructure assets have been accounted for in the asset register
- Communicate, encourage and train qualifying and interested employees on scares and critical skill e.g. technical to reduce the effect that management of public assets have on service delivery within the Mahikeng district.
- More attention should be paid to the effectiveness of the current public asset management policy within the department.
- Ensure that the asset management framework is integrated with other strategic objectives and policies of the department

5.5 Future Research

This study leaves some unanswered questions, which have been suggested for future research.

- Investigation of the reliability and completeness of the infrastructure asset register

- The challenges faced by Local Government and Traditional Affairs of Mahikeng district, the role of the policy.
- The investigation of the benefit of integrating asset management with other systems in the department
- Effect of using asset register in the department
- The impact of asset management on service delivery in Mahikeng district

5.6 Conclusion

The chapter discussed the purpose of the study. Each research question has been discussed followed by a discussion on the findings relating to the questions. The chapter discussed the limitations, ending with recommendations for future research.

The study assessed the challenges of managing public assets in the department of Local Government and Traditional Affairs of Mahikeng. The results shows that the there is a challenge in mis-use of infrastructure assets in the department. It also revealed that the integration of asset management with other systems in the department will assist the department to reach its goal. The current management program should be adhered to, as it can help to achieve the set strategic goals of the department. By so doing the delivery of service to the community within Mahikeng district will improve.

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		1	2	3	4	5	6	7	8	9	10	11	12
	Theme/Source	Definitions of Assets Managemnt concepts	Research and Design Methods	Function of Local Government and Traditional Affairs	Asset management in Local Government	Asset Register in Local Government	Service delivery challenges in local government	Asset management policy and strategy	Effect of Asset management on delivery of service	Asset management vs Performance management	Integration of Asset Management Framework in Local Government Functions	International perspective on local government asset management	Future of asset Management in Local Government
1	Asset Management Framework, Version 3.3.	1		1	1	1	1	1	1				
2	An Exploratory Analysis of Local Government Failure in South Africa			1			1	1					
3	Financial Intergovernmental Relations in South Africa	1					1					1	1
4	Local Budgeting', Public Sector Governance and Accountability Series			1		1		1					
5	The Evaluation of Financial Management in South African Local Government	1			1								1
6	Specification for the optimized management of physical infrastructure assets	1							1				
7	A strategic approach to Infrastructure Asset Management.				1				1	1	1		1

8	Asset Management: "A" TO "Z".				1				1	1		1	
9	Asset Management Framework		1			1		1	1				
10	Guidelines for Infrastructure Asset Management in Local Government 2006 – 2009.	1			1		1	1	1	1			
11	Principle of Property Management.	1						1					
12	Asset Management: Guidelines for Implementing the New Economic Reporting Format	1						1					1
13	Asset Management Decision Making. Conference paper.	1			1								
14	Asset Management Primer: Federal Highways Administration.	1											1
15	The South African Property Practice and Law (SAPPL).	1											
16	An Exploratory Analysis of Local Government Failure in South Africa								1				

17	Fiscal Administration in Local Government: An Overview,								1				
18	Local Budgeting', Public Sector Governance and Accountability Series								1		1		
19	Financial Intergovernmental Relations in South Africa						1						
20	Australian Infrastructure Report Card.								1			1	
21	Improving Public Services through Better Construction.											1	1
22	Researching Whole Life Value Methodologies for Construction.						1						1
23	Achieving Whole Life Value in Infrastructure and Buildings.						1				1		
24	Workplace Strategies and Facilities Management.										1		
25	Asset Management Policy, Strategy and Plan.	1							1		1		
26	Transportation Asset Management Guide									1			
27	Total Asset Management									1			

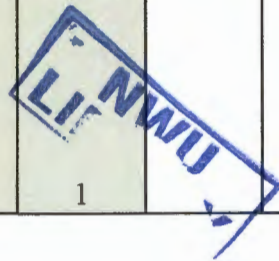
28	Integrated Asset Management Guidelines for Road Networks.												1
29	Exploring Corporate Strategy	1											1
30	Reforming American Government Accounting in the 20th Century	1								1			1
31	Accounting Standards Board Standard of Generally Recognised Accounting Practice Revenue from Non-Exchange Transactions (Taxes and Transfers)									1		1	1
32	Financial Governance Review and Outlook 2005				1		1	1		1			
33	Property, Plant and Equipment (GRAP 17)	1								1			1
34	Accounting Standards Board Presentation of Financial Statements (GRAP 1)				1			1					

35	Evaluation of an integrated asset life-cycle management (ALCM) model and assessment of practices in the water utility sector				1						1		
36	Managing public assets	1			1			1					1
37	Overview of the financing and impact of capital expenditure by provincial and local government					1		1					
38	Asset life cycle management: towards improving physical asset performance in the process industry					1				1	1		
39	The Impact of GRAP On Public Entities						1	1					1
40	Measuring the Public Value of e-Government: Methodology of a South African Case Study					1	1	1					
41	Dealing with the disposal by Public Benefit Organisations of capital assets				1	1				1			
42	The logical link between planning, budgeting and programme performance reporting					1			1	1			1

43	A generic service delivery model for government departments						1			1			
44	A Systems Approach to Performance Management									1	1		
45	Presentation of Budget Information in Financial Statements (GRAP 24)				1	1	1						
46	Perspectives of Effective Financial Management in the Public Sector			1							1		
47	Recognising Public Sector Assets in Statements of The Financial Position – A Mammoth Task					1	1	1					
48	A Framework for Good Governance in Project Management in South Africa		1		1			1					

49	Evaluation of the implementation of public sector supply chain management and challenges: A case study of the central district municipality, North west province, South Africa		1		1	1	1		1				
50	Technical Competency Dictionary Explanatory Note Movable Asset Management		1			1							
51	Reporting on the state of infrastructure by local government			1		1		1	1	1			
52	Urban development and property management in the context of societal transformations: Strategic decision-making										1	1	1
53	Public sector should manage assets				1		1		1				

54	"From rowing the ship to steering it" Reforming the public sector through the tender process: the Msunduzi Municipality as a case study.		1					1	1				
55	Governance in the Public Sector: A Governing Body Perspective									1	1	1	
56	Research on the Municipal Responsibility to Sustainably Manage Services Infrastructure Assets		1		1	1	1	1					1
57	A National Infrastructure Maintenance Strategy for South Africa				1		1				1		1
58	Managing Infrastructure and Underpinning the Planned Environment								1	1	1		
59	An investigation of the efficacy of the Office of the Auditor-General in ensuring public financial accountability in the Gauteng Province		1	1				1					



60	Auditing of Local Government in Terms of the Municipal Finance Management Act (NO. 56 OF 2003) (MFMA)				1			1	1				
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Questionnaire Construction Table

Research Questions	Survey Questions	Variable(s) and or Relationships measured	Statistical Test
To what extent has the current asset management program in the Mafikeng District affected the level of delivery of service?	1.1 Is the Mafikeng District facing delivery of service challenges resulting from the use of infrastructure?	Ordinal/Nominal Variables 1.1 Yes/No	Descriptive statistics, frequency tables, bar charts
	1.2 Does the Department have an effective asset management policy?	1.2 Yes/No	Descriptive statistics, frequency tables, bar charts
	1.3 Are assets being managed within the set Asset Management Framework?	1.3 Strongly Disagree, Disagree, Strongly agree, Agree, Don't know	Descriptive statistics, frequency tables, bar charts
	1.4 Has the Asset Management Framework been communicated within the Department?	1.4 Yes/No	Descriptive statistics, frequency tables, bar charts Measures of association – Phi, Cramers V Convert nominal to ratio 0,1,2,3,4 & do correlation co-efficient testing with personal info – Pearson & Spearman Rho Normal & z-distribution

How will the integration of the asset management framework with other strategic objectives and policies of the Department of Local Government and Traditional Affairs affect the level of service delivery?	2.1 Is the current asset management program been integrated with other policies and systems of the Department?	2.1 Yes/No	Descriptive statistics, frequency tables, bar charts
	2.2 Can the integration of the asset management programme with other systems in the Department improve delivery of service?	2.2 Strongly Disagree, Disagree Strongly agree, Agree, Don't know	Descriptive statistics, frequency tables, bar charts
	2.3 Can the current asset management programme help to achieve the set strategic goals of the Department?	2.3 Yes/No	Descriptive statistics, frequency tables, bar charts
	2.4 Is the current asset management programme linked to the set Asset Management Framework?	2.4 Yes/No	Descriptive statistics, frequency tables, bar charts Descriptive statistics, frequency tables, bar charts Descriptive statistics, frequency tables, bar charts Measures of association – Phi, Crammrs V Convert nominal to ratio 0,1,2,3,4 & do correlation co-

			efficient testing with personal info – Pearson & Spearman Rho Normal & z-distribution
How will effective accountability of public assets within the district impact on the level of asset management by the Department?	3.1 Can an asset register improve the management of assets within the district? 3.2 Are all asset of the District accounted for in an asset register? 3.3 Is there an urgency to replace the current assets in the District? 3.4 Will an effective asset register improve the level of accountability for assets in the District?	3.1 Strongly Disagree, Disagree Strongly agree, Agree, Don't know 3.2 Yes/No 3.3 Yes/No 3.4 Strongly Disagree, Disagree Strongly agree, Agree, Don't know	Descriptive statistics, frequency tables, bar charts Descriptive statistics, frequency tables, bar charts Normal and distribution curve, bar charts, frequency tables Descriptive statistics, frequency tables, bar charts Descriptive statistics, frequency tables, bar charts Measures of association – Phi, Cramers V Convert nominal to ratio 0,1,2,3,4 & do correlation co-efficient testing

			with personal info – Pearson & Spearman Rho Normal & z-distribution
To what extent will the current capacity of the Department affect the implement the of an effective asset management program as set out in the Asset Management Framework?	4.1 Does the Department have the necessary skills to effectively implement the Asset Management Framework work?	4.1 Yes/No	Descriptive statistics, frequency tables, bar charts
	4.2 Are the available resources being adequately distributed for the purpose of asset managing?	4.2 Strongly Disagree, Disagree Strongly agree, Agree, Don't know	Descriptive statistics, frequency tables, bar charts
	4.3 Is the Department achieving a return from the assets in proportion to the amounts spent to acquire them?	4.3 Strongly Disagree, Disagree Strongly agree, Agree, Don't know	Descriptive statistics, frequency tables, bar charts
	4.4 Is there any confusion experienced with regards the current asset management tools and programmes?	4.4 Yes/No	Descriptive statistics, frequency tables, bar charts Measures of association – Phi, Cramers V Convert nominal to ratio 0,1,2,3,4 & do correlation co-efficient testing

			with personal info – Pearson & Spearman Rho Normal & z- distribution
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**VOLUNTARY QUESTIONNAIRE FOR DEPARTMENT OF LOCAL GOVERNMENT AND TRADITIONAL AFFAIRS
EMPLOYEES**

"Assessing the Challenges of Managing Public Assets in the Local Government and Traditional Affairs of Mafikeng"

Graduate School Of Business and Government Leadership

North

Mafikeng Campus of the North-West University

Researchers: Ms Tebogo Malebe

Supervisor: Prof S Lubbe

Note to the respondent

- We need your help to understand the challenges of managing public assets in the Local Government and Traditional Affairs of Mafikeng.
- Although we would like you to help us, you do not have to take part in this survey.
- If you do not want to take part, just hand in the blank questionnaire at the end of the survey session.
- What you say in this questionnaire will remain private and confidential. No one will be able to trace your opinions back to you as a person.

The questionnaire has three parts:

Part 1 asks permission to use your responses for academic research.

Part 2 asks general personal particulars like your age, gender and home language.

Part 3 asks about specific questions related to the challenges of managing public assets in the Local Government and Traditional Affairs of Mafikeng.

How to complete the questionnaire

1. Please answer the questions as truthfully as you can. Please be sure to read and follow the directions for each part. If you do not follow the directions, it will make it harder for us to do our project.
2. We are only asking you about things that you feel comfortable telling us about. If you don't feel comfortable answering a question, you can indicate that you do not want to answer it. For those questions that you do answer, your responses will be kept confidential.
3. You can mark each response by making a tick or a cross, or encircling each appropriate response with a PEN (not a pencil), or by filling in the required words or numbers.

Thank you very much for filling in this questionnaire.

Part 1: Permission to use my responses for academic research

**I hereby give permission that my responses may be used for research purposes
provided that my identity is not revealed in the published records of the research.**

Initials and surname _____ Postal address:

_____ Postal

code: _____

Contact numbers: Home: _____ Cell: _____

	PART 2: GENERAL PERSONAL PARTICULARS <i>Please tell us a little about yourself</i> Please mark only ONE option per question below.		PART 3: DEPARTMENT ASSET MANAGEMENT ITEMS
1.	I am: ☐ African ☐ Coloured ☐ Indian ☐ White ☐ a member of another ethnic group: _____ ☐ I do not want to answer this question	9.	Is the Mafikeng District facing delivery of service challenges resulting from the use of infrastructure? ☐ Yes ☐ No
2.	I am: ☐ Director ☐ Manager ☐ Supervisor ☐ Subordinate ☐ I do not want to answer this question	10.	Does the Department have an effective asset management policy? ☐ Yes ☐ No
3.	I have: ☐ a post graduate degree ☐ a degree ☐ diploma ☐ Matric ☐ I do not want to answer this question	11.	Are assets being managed within the set Asset Management Framework? ☐ Yes ☐ No
4.	I am a: ☐ Female ☐ Male ☐ I do not want to answer this question	12.	Has the Asset Management Framework been communicated within the Department? ☐ Yes ☐ No
5.	I am _____ years old. ☐ I do not want to answer this question	13.	Is the current asset management program been integrated with other policies and systems of the Department? ☐ Yes ☐ No
6.	I grew up: ☐ In South Africa ☐ Abroad ☐ I do not want to answer this question	14.	Can the integration of the asset management programme with other systems in the Department improve delivery of service? ☐ I strongly agree ☐ I agree ☐ I disagree ☐ I strongly disagree ☐ I do not want to answer this question
7.	I grew up in: ☐ a rural area ☐ an urban area ☐ I do not want to answer this question	15.	Can the current asset management programme help to achieve the set strategic goals of the Department? ☐ I strongly agree ☐ I agree ☐ I disagree ☐ I strongly disagree ☐ I do not want to answer this question
8.	How many years of service do you have in the department? ☐ 1-5 years ☐ 6-10 years ☐ 11-15 years ☐ More than 16 years	16.	Is the current asset management programme linked to the set Asset Management Framework? ☐ Yes ☐ No

17.	Can an asset register improve the management of assets within the district? ☐ I strongly agree ☐ I agree ☐ I disagree ☐ I strongly disagree ☐ I do not want to answer this question	22.	Are the available resources being adequately distributed for the purpose of asset managing? ☐ I strongly agree ☐ I agree ☐ I disagree ☐ I strongly disagree ☐ I do not want to answer this question
18.	Are all asset of the District accounted for in an asset register? ☐ Yes ☐ No	23.	Is the Department achieving a return from the assets in proportion to the amounts spent to acquire them? ☐ I strongly agree ☐ I agree ☐ I disagree ☐ I strongly disagree ☐ I do not want to answer this question
19.	Is there an urgency to replace the current assets in the District? ☐ Yes ☐ No	24.	Is there any confusion experienced with regards the current asset management tools and programmes? ☐ Yes ☐ No
20.	Will an effective asset register improve the level of accountability for assets in the District? ☐ Yes ☐ No		
21.	Does the Department have the necessary skills to effectively implement the Asset Management Frame work? ☐ Yes ☐ No		