

**VAAL UNIVERSITY OF TECHNOLOGY**

**MANAGEMENT OF FINANCES IN THE IMPLEMENTATION OF  
INFRASTRUCTURE DEVELOPMENT PROGRAMMES IN THE LIMPOPO  
PROVINCIAL GOVERNMENT**

**by**

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## DECLARATION

I hereby declare that this dissertation, Management of finances in the implementation of infrastructure development programmes in the Limpopo provincial government, is the result of my independent investigation and has not been presented for a degree or any other academic award at any university or institution of learning. All the sources used have been acknowledged by means of complete references.

Signature: \_\_\_\_\_

Portia Anna Semanya

\_\_\_\_\_

Date

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## **DEDICATION**

To my parents, Phuti Alfred and Bhelankie Welheminah Mashilo,  
(1944-2012) and (1948-2010):

For teaching me to always strive for the best in life.

I miss you dearly!

## LIST OF ABBREVIATIONS AND ACRONYMS

AO	-	Accounting Officer
APP	-	Annual Performance Plan
BAS	-	Basic Accounting System
CIMA	-	Chartered Institute of Management Accountants
CIPFA	-	Chartered Institute of Public Finance and Accountancy
CSIR	-	Council for Scientific and Industrial Research
DBSA	-	Development Bank of Southern Africa
DoRA	-	Division of Revenue Act
EFMS	-	Education Facility Management System
EPRE	-	Estimates of Provincial Revenue and Expenditure
EXCO	-	Executive Council
GIAMA	-	Government Immovable Assets Management Act
GRAP	-	Generally Recognised Accepted Standards
HOD	-	Head of department
IA	-	Implementing Agents
IDMS	-	Infrastructure Delivery Management System
IDP	-	Integrated Development Planning
IDT	-	Independent Development Trust
IPIP	-	Infrastructure Project Implementation Plan
IPMP	-	Infrastructure Programme Management Plan
IRM	-	Infrastructure Reporting Model
IYM	-	In-Year Monitoring
KPA	-	Key Performance Areas
LDP	-	Limpopo Development Plan Management
MEC	-	Member of Executive Council
MTEF	-	Medium-Term Expenditure Framework
MTSF	-	Medium Term Strategic Framework
NDP	-	National Development Plan
NPC	-	National Planning Commission
OAG	-	Office of the Auditor General
PBSI	-	Performance Based Information System

PFMA	-	Public Finance Management Act
PMIS	-	Project Management Information System
PSP	-	Professional Services Providers
SAIIA	-	The South African Institute of International Affairs
SCM	-	Supply Chain Management
SCOPA	-	Standing Committee on Public Accounts
SDA	-	Service Delivery Agreement
SIPDM	-	Standard for Infrastructure Procurement and Delivery
SOP	-	Standard Operating Procedures
Stats SA	-	Statistics South Africa
U-AMP	-	User-Asset Management Plan

## **ABSTRACT**

The provision of infrastructure delivery programmes in Limpopo province is an important agent in the reduction of poverty, unemployment and strengthening of social capital. The infrastructure development programmes create opportunities for job creation through approaches such as maintenance of existing infrastructure in order to retain resources in the local areas. However, the provision of basic infrastructure still faces serious challenges, notwithstanding the fact that the PFMA and Treasury Regulations (issued by the National Treasury in terms of Section 76 of the PFMA) provide for control measures government has put in place for effective and efficient service delivery in general.

The objective of this study was to scrutinise management of finances in the planning, implementation and monitoring of infrastructure programmes and further seek to propose measures to strengthen financial management controls in the implementation of infrastructure programmes to bolster service delivery in the Limpopo province. The literature reviewed indicated that successful implementation of infrastructure development in the province depends on skills and knowledge of the players and financial resources. This study used qualitative research methodology in examining the management of finances in the planning, implementation and monitoring of infrastructure programmes in the Limpopo provincial government. An open-ended questionnaire was used to collect data from the participants. The researcher utilised purposive selection method to obtain information from relevant participants who are directly involved in infrastructure management.

The study revealed that Limpopo government departments do not utilise capital budgeting models to appropriately plan and fund infrastructure projects. There are challenges, including procurement processes, lack of appropriate skills to monitor and implement infrastructure projects and lack of standard operating procedures to encourage a culture of uniformity, responsibility and accountability in the processing of payments.

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## **CHAPTER 1: OVERVIEW OF THE STUDY**

### **1.1. INTRODUCTION**

The South Africa Constitution (1996) establishes the roles and responsibilities for the “three spheres of government, namely national, provincial and local government”. These three spheres of government play critical roles in the implementation of the governments’ socio-economic plans. The National Development Plan (NDP) (NPC 2011:5) proposes to invigorate and expand the economic opportunities through investment in infrastructure, more innovation, private investment and entrepreneurialism. The anticipation is that the economy will absorb more labour especially of new work seekers and wage moderation at all levels will contribute to rising employment. Broadening these opportunities requires faster, more inclusive economic growth and higher levels of economic growth (NPC 2011:11).

Infrastructure development programmes play a significant role in job creation and stimulating economic growth.

The Limpopo provincial government complied on the initiative to align its plans and activities to the NDP by subsequently developing and approving the Limpopo Development Plan (LDP). In terms of the LDP, all provincial departments promote the attainment of both the national and provincial priorities in the execution of their mandates. This is only possible through complete alignment of departmental strategies and annual performance plans (APPs) to these priorities. Therefore, results are measured through sustainable service provision to communities and attainment of clean audit outcomes.

The Public Finance Management Act (PFMA) (1 of 1999) as amended by Act (29 of 1999), which is a legislative instrument for national and provincial departments, was introduced to govern or regulate the general administration of public funds. The PFMA make emphasis on the adoption of accountability and transparency in public financial management.

The above background presumes that each sphere of government will have the required capacity to deliver on their mandates as enshrined in the Constitution (1996) and other relevant legislations. However, the opposite seems to be true, evidenced by a number of service delivery protests that confirm the existence of challenges in infrastructure provision in the Limpopo province as a whole.

The Office of the Auditor General (OAG), audit outcomes for the financial years 2009/10 - 2013/14 in Table 1 paints a glaring picture on provincial financial management.

**Table 1.1: Audit outcomes for Limpopo departments for 2009/10 – 2013/14**

<b>FINANCIAL YEAR</b>	<b>UNQUALIFIED</b>	<b>QUALIFIED</b>	<b>DISCLAIMER</b>
<b>2009/10</b>	9	2	1
<b>2010/11</b>	7	5	1
<b>2011/12</b>	8	2	3
<b>2012/13</b>	7	3	3
<b>2013/14</b>	6	6	1

Source: Auditor General (2014)

In five consecutive financial years, the provincial government failed to improve its audit outcomes. No department has attained a clean audit while some departments still receive disclaimer of opinions irrespective of the introduction of the administration by National Government through section 100(1) (b) of the Constitution during December 2011. The Auditor General's (AGs) report of 2013/14 highlighted slight improvements in cash management to reduce the overdraft position within the province. A concern was raised on irregular expenditure that increased to R3.5 billion from R2 billion in the previous year. The most significant reason for irregular expenditure incurred in the province was the non-compliance with the requirements in supply chain management (SCM). Infrastructure programmes were identified as the main contributor to the irregular expenditure.

## 1.2. PROBLEM STATEMENT

Management of finances is an important aspect in any development initiative, whether implemented by private or public sector institutions. By the researcher's observation, it is not enough to have good infrastructure programmes or realistic project plans and budgets as these are all doomed to fail if an institution does not adopt good financial management principles of ensuring that the programme delivers its intended objectives. This finds relevance in government programmes initiated by the Limpopo provincial government (LDP 2015:112).

Limpopo is a rural province with an estimated population of 5.654 million and 38 percent rely on social grants with others living in high poverty-stricken areas (Stats SA, 2015). In order to turn around the situation, government has introduced programmes that will stimulate economic growth and encourage job creation mainly through infrastructure development. The NDP highlights the interdependence between economic growth and infrastructure development. It is for this reason that government dedicates a significant amount of its budget to infrastructure development (NPC 2011:137).

The provincial government developed and approved transversal policies to emphasise the importance of accountability and transparency on government expenditure. Madue and Mahwai (2008:360) maintain that even though legislation and policies are a foundation in public financial management, mismanagement and misallocation of financial resources continue to be challenges in public institutions. In the midst of all these principles, some government departments persistently underspend their allocated budgets and this directly impacts on delivery of infrastructure development programmes.

Limpopo provincial government is not immune to this challenge. The province is currently in distress from the same challenge of underspending, especially on infrastructure programmes. A key indicator of poor spending on infrastructure in the province is the Medium Term Expenditure Framework (MTEF) budget over the past three financial years. In terms of the provincial treasury infrastructure reports, with specific reference to the Limpopo Provincial Treasury Medium Term Budget Policy

Statement 2013/14, the province spent R4.906 billion or 74.0 percent (of the allocated budget R6.629 billion), R3.346 billion or 71.7 percent (of the allocated budget R4.668 billion) and R4.170 billion or 81.5 percent (of the allocated budget R5.115 billion), of its total infrastructure allocated budget during 2012/2013, 2013/2014 and 2014/2015 financial years, respectively.

In addition, the current budget returned to national government on conditional grants amounted to R1.3 billion in 2013/14 and R559.5 million in 2014/15 respectively on infrastructure allocations, which subsequently emanated in the province tabling an amendment act (Limpopo Adjustments Appropriation Amendment Act, 2015) to its budget, serves as a point of concern. The causes of these systematic challenges that impede the delivery of infrastructure in the province are unknown and need to be investigated.

The connection between strategic plans and budgets is crucial in determining both the allocation of resources (public) and processes to support the socio-economic goals of government (OECD 1997:178). Government departments are required to prepare Annual Performance Plans (APPs) that are linked to approved five-year strategic plans and annual budgets. Mkhize and Ajam (2006:769) argue that, “the link between strategic plans and budgets is crucial in explaining the MTEF prioritisation and resource allocation process”.

Ferreira (2012:275) indicates that, “many organs of state fail to spend their budgetary allocations for various reasons, including lack of capacity and skills, incompetence, financial mismanagement, inadequate procurement mechanisms and corruption.” To remedy this problem, the province has promulgated a Preferential Procurement Policy Framework Act ( 5 of 2000).

The above scenario portrays the existence of challenges that exist in financial management systems within the Limpopo provincial government. Against this backdrop, this study seeks to investigate the systematic challenges impeding the delivery of infrastructure in the province.

### **1.3. AIM AND OBJECTIVES OF THE STUDY**

#### **1.3.1. Aim**

The aim of this study is to identify challenges in management of finances affecting execution of infrastructural programmes/plans in the Limpopo provincial government and make recommendations on how to address these challenges.

#### **1.3.2. Objectives of the study**

##### **1.3.2.1. Primary objective**

To identify key factors contributing to the underspending and/or surrendering of infrastructure funding by Limpopo provincial departments.

##### **1.3.2.2. Empirical objectives**

- To ascertain challenges in management of finances faced by Limpopo provincial government departments in executing infrastructural projects
- To evaluate the extent to which Limpopo provincial government departments adhere to key government financial management legislation, regulations and policies governing the implementation of infrastructure projects.
- To recommend financial management best practice for Limpopo provincial government to improve the implementation of infrastructure programmes/projects in the province.

### **1.4. RESEARCH QUESTIONS**

This study was guided by the following research questions:

- What are the key factors contributing to the underspending and/or surrendering of infrastructure funding by Limpopo provincial departments?
- What are the systematic challenges faced by provincial departments in executing infrastructural projects?



- To what extent do provincial departments adhere to key government financial management regulations/ policies/ acts governing the implementation of infrastructure projects?
- What systematic recommendations can be made for the improved implementation of infrastructure programmes/projects in the province?

## **1.5. LEADING THEORETICAL STATEMENTS**

Financial management is defined widely as “an integrated decision-making process concerned with acquiring, financing and managing assets to accomplish some overall goal within a business entity” (Paramasivan & Subramanian, 2009:3). Financial management’s primary concern has to do with “procurement of funds and their effective utilization in the business” Paramasivan & Subramanian (2009:3).

However, Lethoko (2014:779) argue that, “financial management is about allocation and utilisation of scarce financial resources to ensure efficient, effective and transparent use of public funds and to achieve value for money through the provision of service delivery as one of the key objectives of government.” The difference between this and the first definition is that the latter seeks to strike a balance between scarcity in public funds and high demand on provision of services; a situation that can be managed through sound financial management principles and this is what forms the basis for financial management in South African government system.

Furthermore, the Chartered Institute of Public Finance and Accountancy (CIPFA, 2010:3) definition of public financial management emphasises “contribution to achieving strategic and operational goals as a key aspect of good governance”. Accordingly, the CIPFA regards public finance management “as the system by which financial resources are planned, directed and controlled to enable and influence the efficient and effective delivery of public service goals.”

The definition by CIPFA (2010:3) refers to good governance as one of the key components of financial management. In this instance, the South African

government encourages compliance to King reports in managing its day-to-day operations, particularly in the financial administration environment. However, the level of compliance to these principles leaves much to be desired, given the current financial position of the province.

Furthermore, CIMA (2006:3) defines a budget “as a quantitative expression of a plan for a defined period, which may include planned revenues, resource quantities, costs and expenses, assets, liabilities and cash flows. Section 28 of the PFMA provides that the Member of Executive Council (MEC) for finance in a province must annually table in the provincial legislature multi-year budget projection of estimated revenue expected to be raised, estimated expenditure expected to be incurred per vote (department), differentiating between capital and current expenditure.” To a large extent, infrastructure programmes are provided for under the capital expenditure.

Addison and Roe (2004:99) argue that the planning and budgeting relation is critical, especially in circumstances where there is an absence of detailed expenditure plans and budgets are prepared separately by finance sections. The current situation in Limpopo province is that parallel processes are conducted where the strategic operations units prepare strategic plans and APPs without detailed costing of programmes and projects. On the other hand, MTEF budgets submitted to the provincial treasury for tabling in the legislature are prepared by budget units based on the previous year’s baselines and infrastructure programmes prepared by infrastructure units.

Koch, Mayper and Wilner (2009:13) indicate that “capital budgeting decisions are among the most important decisions to be made by organisations which is essential to their survival and success in the long term”. This view is also supported by Bennouna, Meredith and Marchant (2010:226) and Carmona, Iyer and Reckers (2011:62). Capital expenditures require large amounts of resources while it is also vital that firms or institutions are in a position to acquire and return such resources. Chan (2004:42) states that capital budgeting decisions demand long-term commitments.

The above citations highlight the critical role of financial management with emphasis on capital budgeting for infrastructure programmes and the impact on economic growth and development of citizens within the provincial government.

## **1.6. RESEARCH METHODOLOGY**

### **1.6.1. Research design**

Hammond and Wellington (2013:131) define the research design as a detailed plan on how the research will be carried out. This study employs a qualitative research approach to provide insights and generalisation about the role of financial management in the implementation of infrastructure programmes. The study utilised a combination of desktop analysis to determine trend analysis and an open-ended research questionnaire distributed to research participants identified in relevant provincial departments who are implementing infrastructure programmes. The advantage of adopting this approach was that it would allow the research to be objective and avoid being influenced by what is observed.

### **1.6.2. Population and sampling**

#### **1.6.2.1. Population**

Kumar (2011:24) defines a population as a group, such as families living in an area, or people belonging to an organisation, about whom the researcher wants to find out through the research endeavour. Accordingly, the population refers to all potential subjects who possess the attributes the researcher is investigating.

The population of this study was the infrastructure and budget managers responsible for the implementation of infrastructure projects within the Limpopo provincial departments. In each department, three to five officials are employed in the infrastructure units depending on the size of the department (for bigger departments such as health and education, up to five officials are appointed in the infrastructure unit) and one official is responsible for financial management reporting. In total, the population of this study is 40 officials.

Departments, which form part of the population, include the departments of Agriculture, Co-operative Governance, Human Settlement and Traditional Affairs, Education, Economic Development, Environment and Tourism, Health, Transport, Sport, Arts and Culture, Social Development, Provincial Treasury and Public Works, Roads and Infrastructure. The Department of Public Works, Roads and Infrastructure and Provincial Treasury are considered the responsible departments to provide policy directives and render monitoring functions on infrastructure management in the province.

#### **1.6.2.2. Sampling**

Thompson (2012:1) provides that sampling consists of selecting some part of a population to observe that one may estimate something about the whole population. The sampling technique chosen for this study was the purposive selection method. This method allows the researcher to focus on the sample that is representative of the population. The sample of this study comprised of 20 participants who are responsible for the implementation of infrastructure projects in the departments of Agriculture, Co-operative Governance, Human Settlement and Traditional Affairs, Education and Health, Public Works, Roads & Infrastructure and Provincial Treasury.

This sample is based on the consideration that these departments implement key provincial infrastructure programmes and the majority of the infrastructure budget is allocated to them. The Provincial Treasury is included in the sample due to its monitoring role in the implementation of infrastructure programmes.

#### **1.6.3. Data collection**

Data collection is a critical stage of the research to which the accomplishment of research objectives may be attributed. There are various data collection methods used by researchers, which include interviews and questionnaires and some methods involve a structured approach wherein the questionnaire is an example of

such a method of data collection (Bryman 2012: 12). For this study, an open-ended self-developed research questionnaire was used.

#### **1.6.4. Data analysis strategy**

According to Neuman (2006:467), “data analysis involves examining, sorting, categorizing, evaluating, comparing, synthesising and contemplating the coded data as well as reviewing the raw and recorded data”. The purpose of analysing data is to obtain usable and useful information. This study used Creswell’s data analysis spiral as a guide to manually analyse data. Leedy and Ormrod (2005:150) state that data analysis spiral entails the following steps:

- Organising the data;
- Reading and writing notes;
- Generating categories, themes and patterns; and
- Summarising and writing the report.

### **1.7. LIMITATIONS AND DELIMITATIONS**

Leedy and Ormrod (2010:57) described limitations as the limits of the problem and delimitations as these things the researcher will not do during the course of study. This is determined by what is relevant and what is not relevant to the problem. These represent things, beyond the control of the researcher, that place restrictions on the methodology and conclusions.

#### **1.7.1. Availability of data and target group**

The sensitivity of the problem may distort the collection of required data in that the research may expose deficiencies of the system, such as poor capacity, lack of implementation skills, poor planning and others. This may possibly limit effective participation. The researcher does not intend to coerce participants to provide data but to use tactics of persuasion to obtain the required information.

The availability of the target group is also a limiting factor that the researcher is anticipating. In this regard, the researcher did not impose a schedule for meetings

on the participants. Instead, the researcher sent electronic copies of the research questionnaire to participants and allowed sufficient time for completion and return.

### **1.7.2. Ethical considerations**

Ethical considerations can have a negative impact on the study, thereby affecting its validity and reliability. According to De Vos, Strydom, Fouche and Delport (2011:129) ethics- “is a set of widely accepted moral principles that offer rules for and behavioural expectations of the most correct conduct experimental subjects and participants, employers, sponsors, other researchers, assistants and students”. Researchers have the obligation to inform the participants that they have rights either to participate or not (De Vos, Strydom, Fouche & Delport 2002:65, 66) and that their participation is voluntary.

A consent form is also used to uphold a high ethical standards by allowing participants to decide whether they want to take part in a research study (Struwig & Stead 2001:66). In this research, all participants were issued with a consent form that informs them of the nature of the research in which they are requested to participate, that their participation is voluntary and for permission to utilise their information for the purpose of this research. The copies were properly kept and filed as part of the package of research documents.

### **1.7.3. Resource requirements**

The major resources for this study will be money and time needed to see this study to completion. This included requesting the employer to give the researcher time to carry out interviews sometimes during working hours, making presentations to relevant stakeholders on the research topic and general consultation on the research during official hours.

## **1.8. SIGNIFICANCE OF THE STUDY**

This study contributes towards identifying underlying systematic challenges on management of finances in the implementation of infrastructure programmes by

provincial departments, determining methodologies, skills and competency requirements to provide quality services through capacitating infrastructure and financial management units. The study contributes towards enhancing public administration performance to the outlined challenges in the province and outside the province.

The management of finances in the implementation of infrastructure programmes by the Limpopo provincial governments departments has been ignored for quite a while. The study can assist departments in Limpopo provincial government in the following ways:

- Policy makers to be aware of the systematic challenges faced by Accounting Officers (AOs) and managers concerning implementation of infrastructure projects
- Stakeholders to realise measures to improve infrastructure spending by provincial departments
- AOs and Senior Management in Provincial departments will be made aware of the impact of failure to spend allocated funds and will be enabled to adhere to conditions of Infrastructure funding as well as different legislations and Treasury Regulations and
- Propose suitable financial management systems and methodologies relevant to conditions of Limpopo province that shall result in the effective implementation of provincial Infrastructure development initiatives.

## **1.9. CHAPTER CLASSIFICATION**

The provisional report structure is outlined hereunder:

Chapter 1 covers the introduction of the topic and concept research proposal, its focus and rationale. It provided the background in which the infrastructure programmes are implemented and monitored in provincial departments.

Chapter 2 covers the relevant literature, theories, legislation, policies and any other relevant material in the form of journals, books and articles published and unpublished on financial management and infrastructure programmes.

Chapter 3 outlines the problem, research design and methodology by addressing the literature content and aligning that to this research.

Chapter 4 presents analysis of data and interpretation of the results in relation to the research objectives. This chapter will provide solutions to the research problem.

Chapter 5 will provide recommendations and conclusions, assessments on whether the research objectives have been achieved and the possible implementation of results in daily activities of provincial departments.



## **CHAPTER 2: LITERATURE REVIEW**

### **2.1. INTRODUCTION**

This chapter provides an in-depth literature study on management of finances in a public sector context. The chapter begins by examining the legal framework that governs public finances and key role players from various sources of the literature found in textbooks, journals and other published documents. In addition, the chapter reviews the literature available in areas of the study to help the researcher to review work already done by other researchers, scholars and authors relevant to this study.

### **2.2. LEGAL FRAMEWORK**

The main South African legal framework for management of public funds is pronounced by the PFMA, which puts together a framework on financial management and has been at the cornerstone of government's efforts to enhance public financial management and accountability. The PFMA and Treasury Regulations provides for control measures government has put in place for effective and efficient service delivery. The PFMA designates heads of departments and constitutional institutions and boards of public entities as AOs or accounting authorities and gives them the responsibility for the effective, efficient, economical and transparent use of resources. Thus, the PFMA requires that monthly and annual financial reports be produced in order to grant effective, efficient and transparent systems in financial and risk management, internal control and procurement; failure to do so is liable to criminal proceedings with possible conviction.

### **2.3. KEY ROLE-PLAYERS IN PUBLIC FINANCE**

South Africa's Constitution (1996) in conjunction with the PFMA state that central government institutions are expected to play a prominent role in public finance management (Moeti 2014:46). Madue (2009:413) raised the point that the manner in which South African government manages its finances is not only a concern for the South African society, but of the entire world, more especially from a developing

country context. Some of the leading role-players in the management of public finances in South African are conversed below.

### **2.3.1. National Treasury**

Section 5 of the PFMA established the National Treasury as key stakeholder in the South African financial management system. PFMA (Section 6:1) of the Act, outlines the functions and powers by prescribing that the National Treasury must –

- “Promote the national government’s fiscal policy framework and the coordination of macro-economic policy
- Coordinate inter-governmental financial and fiscal relations
- Manage the budget preparation process
- Exercise control over the implementation of the annual national budget, including any adjustments budgets
- Facilitate the implementation of the annual Division of Revenue Act
- Monitor the implementation of provincial budgets
- Promote and enforce transparency and effective management in respect of revenue, expenditure, assets and liabilities of departments, public entities and constitutional institutions
- Perform the other functions assigned to the National Treasury in terms of this Act”.

Overall, the National Treasury is responsible for ensuring that efficient and effective financial management systems are in place and are implemented throughout all government spheres in order to promote good governance and public accountability. Furthermore the National Treasury is responsible for prescribing and issuing policy guidelines in ensuring uniform application of legislation on financial management.

The National Treasury has prescribed formats and financial systems, which public institutions utilise for reporting from time to time. These systems are monitored from

time to time and national reports are made available to the public through the National Treasury website.

### **2.3.2. Provincial Treasury**

Provincial Treasury was established through Section 17 of the PFMA and its powers and functions are set out as per Section 18:1, which states a provincial treasury must :

- Prepare the provincial budget
- Exercise control over the implementation of the provincial budget
- Promote and enforce transparency and effective management in respect of revenue, expenditure, assets and liabilities of provincial departments and provincial public entities and
- Ensure that its fiscal policies do not materially and unreasonably prejudice national economic policies.

The Limpopo Provincial Treasury assists the National Treasury in enforcing financial management principles in the province. The Provincial Treasury assumes the role of monitoring and supporting provincial departments and public entities by ensuring the efficient, effective and transparent financial management systems are in place and implemented. Amongst the roles prescribed by the Act, the Provincial Treasury must enforce the PFMA and any prescribed national and provincial norms and standards, including any prescribed standards of generally recognised accounting practices and uniform classification systems in provincial departments.

The Provincial Treasury is responsible for consolidating provincial reports and submitting to the National Treasury as per prescribed formats. Departments are supported to comply with reporting requirements by Treasury officials whom together with the National Treasury ensure that financial systems are in place and are operational in all provincial departments.

### **2.3.3. Provincial legislature**

The fundamental role of the provincial legislature is to make quality laws and policies for the citizens of the province. Moeti (2014:47) highlighted that the legislative authority is liable for taking the leading role in financial legislations. The legislature has the responsibility to define how much money is to be collected, means of collection and execution of control on the financial transaction. The Limpopo Legislature presides over the budget of the provincial government. The budget is prepared and tabled by the Limpopo Provincial Treasury in accordance with the stipulations of the PFMA. From time to time, oversight committees of the Legislature monitor and call upon provincial departments and public entities to account for budget allocations and the utilisation of public funds against predetermined objectives.

### **2.3.4. Public Accounts Committee**

This is a Standing Committee of Parliament, commonly known as SCOPA. The purpose of this committee is to ensure accountability in government performance on how departments spend funds allocated to them. Upon presentation of audit reports to respective departments by the AG, SCOPA reviews these audit reports for commendations and anomalies are noted. The committee subsequently summon heads of departments to account for their spending of public funds and thereafter recommend appropriate corrective actions to the legislature.

The Legislative Oversight Guidelines (2005:13-14) stipulate that the Public Accounts Committee must fulfil its very important and specialised role of being the "protector of the public purse". To give effect to this role, the committee has to consider annual reports of various provincial departments to effect accountability by focusing on:

- Matters raised in the report of the AG on audit outcomes;
- Compliance with the PFMA, Treasury Regulations and other related legislations taking into account matters that the AG may have reported on in this regard;
- The interrogation and evaluation of instances of over expenditure (relative to appropriations); and

- SCM and procurement processes.

Parliament's Brochure on Committees of Parliament (2011:2) indicates that Standing Committee on Public Accounts acts as Parliament's watchdog over the way taxpayers' money is spent by the Executive.

### **2.3.5. The Auditor General (AG)**

According to the AG Audit Process (2011-12), the public auditor assesses the stewardship of public funds, implementation of the government policies and compliance with key laws and regulations in an objective manner. Auditing of public funds enhances the reliability of information by promoting accountability. De Jager (2004:1) contends that accountability describes the requirement to give account of the performance of a duty or competency, entrusted to a person or organisation. This account is normally given to the employer or principal. Where there is a distinction between the owners of the funds and the administrators of the funds, there is a need to put mechanisms in place to assure the owners of the funds and the public that information provided is accurate and reliable (De Jager 2004:1). Mainly, the AG focuses on determining whether public funds have been spent for the purposes for which they were designated. The scope of auditing is sufficiently broad and the objectives of an audit include compliance with budget appropriations as well as attaining value for money.

Thornhill (2011:79) augured that the AG has unrestricted powers, at all reasonable times, to any document and may inspect and question any person or direct a person to disclose any information relevant for the audit.

### **2.3.6. The Public Protector**

The Public Protector is the person who protects citizens from the administrative excess (Moeti 2014:51). The authority and functions of the Public Protector are provided for in sections 182 and 183 of The Constitution and Public Protector Act (23 of 1994). Section 6(4) of the Public Protector Act (23 of 1994) demonstrated the powers and functions of the Public Protector. The office of the Public Protector aims

at giving citizens a way to obtain corrective action for all wrongdoing without approaching a court of law (Thornhill 2011:79). Thornhill (2011:82) believed that the appointment of Ms Thuli Madonsela as the Public Protector boosted public confidence and, subsequently, the office investigated many cases of alleged misconduct, abuse of power, illegal actions and wasteful and unauthorised expenditure. In order to promote access to services of the Public Protector, the office has established provincial offices responsible for investigating cases in each province using less resources.

#### **2.4. KEY COMPONENTS IN MANAGEMENT FINANCES**

The key components in management of finances are financial planning, budget preparation, implementation, accounting, auditing, cash management, debt management, tax administration and financial management information systems (World bank, 1998:137). According to the City of Johannesburg's Monitoring and Evaluation Framework (2012:8), monitoring refers to an ongoing process focused on the assessment of projects, programmes and those day-to-day activities and deliverables required for their achievement, with performance tracked through data collection and reviews. The framework further says monitoring allows for real-time analysis of delivery against plans by providing a continuous flow of information and enabling positive decision-making.

The Department of Public Works, Roads and Infrastructure is responsible for ensuring that all provincial departments prepare appropriate plans for the implementation of infrastructure projects in the province whereas the Provincial Treasury is responsible for resource allocation, monitoring that resources allocated for the implementation of these projects are in line with approved plans, ensuring that departments implement internal control systems for proper recording and accounting for funds allocated per project. The Office of the Premier is responsible for the overall monitoring and evaluation of each project.

## **2.5. INTEGRATING PLANNING AND THE BUDGET PROCESS**

The planning process in the South African public service is centrally managed and every year departments have to compile and submit their strategic plans within which service delivery priorities are identified (Fourie & Jordaan 2007:41). This implies that responsible officials of various departments have to identify Key Performance Areas (KPA's), determine the priorities of the department and the funding thereof. The strategic plan contains measurable objectives with an indication of output-outcome, indicators and targets, which means that the objectives of a budget must be clear. There should be a clear relationship between strategic planning and budgeting to deliver services effectively and efficiently.

Financial management reforms plays an integral part to ensure that line departments attain financial management maturity and are capable of achieving objectives of the PFMA (Ajam & Fourie 2014:52). The National Treasury Framework for Managing Programme Performance Information (2007:4) requires a certain degree of integration between planning and budgeting. Addison and Roe (2004:99) argue that the linkage between planning and budgeting is critical where government lacks a comprehensive expenditure plan and budgets are prepared separately by finance sections. The improved processes for departmental planning and budgeting empower management to make better informed decisions and are fundamental to sustainable and efficient service provision.

The current situation in Limpopo province is that parallel processes are conducted where strategic plans and APPs are prepared by the strategic operations units without detailed costing of programmes and projects. The MTEF budgets submitted to the Provincial Treasury for tabling in the legislature are prepared by budget units on the basis of previous year's baselines and infrastructure programmes prepared by infrastructure units. This practice creates a gap for accountability in cases where funding irregularities are reported.

Reliable costing of an operational plan gives an opportunity to line managers to have confidence in the execution of the plans (Erasmus 2008:62). Spending in the department takes place within the budget allocation of each main division and

reliable fund estimates allow service delivery targets to be achieved without difficulties. The department's performance (financial and non-financial) culminates in the achievement of targets through the delivery of services to its communities.

The PFMA requires that planning documents (Strategic plans and APPs), which depict government's needs in terms of service delivery, be tabled in Parliament or the Legislature and should be made public (Fourie 2006:438-439). The integrated policy planning and budgeting ensures that expenditure programs are driven by policy priorities and disciplined by budget realities. Table 2 emphasises the differences between planning and budgeting:

**Table 2.1: Contrasting planning and budgeting**

	<b>PLANNING</b>	<b>BUDGETING</b>
Dominant orientation	Transformation and change oriented, concerned with taking decisions today, which will contribute to a desired future state of affairs	Incremental in the sense that budgets seldom fluctuate drastically over time. Personnel, debt service costs, entitlements and other statutory non-discretionary expenditures inhibit radical re-prioritisation over the short term. Takes the status quo as a starting point
Orientation	Primarily forward looking	Backward looking and forward-looking
Time frames	Long term, medium and short term	Primarily short term with occasional medium term focus
Resource constraints	Budget constraints often ignored and unrealistic	Budget constraints often the overriding emphasis
Main drivers	Political priorities and social needs	Fiscal pressures and compliance
Risk profile	More risk tolerant, seeks opportunities	Conservative and prudent

Source: Brennan & Solomon (2008)



According to Ajam (2008:47), planning and budgeting have the following similarities:

- Seek to link allocations to the departments and its intended ends;
- Both encompass top-down and bottom-up decision-making and information flows; and
- Both are responsive to environmental uncertainty.

## **2.6. SETTING FINANCIAL CONTROLS IN INFRASTRUCTURE PROGRAMMES**

The importance of financial management control is reflected in the Constitution of South Africa. According to section 216(1) of the Constitution (1996), national legislation must establish a National Treasury and prescribe measures to ensure expenditure control in each sphere of government. Limited compliance with laws and regulations by government departments and agencies negatively affects both the quality and quantity of outputs in service delivery. Fourie (2005:684) contends that government has to establish structures that will ensure its policies are carried out without failure or compromising service delivery and that control measures are put in place to ensure that public money is always used in ways that advance the public interest. The head of the department has the ultimate responsibility over the following financial controls:

### **2.6.1. Adherence to legislative framework**

The first step to achieve effective and efficient infrastructure service delivery in Limpopo province is for legislation, regulations and policies for proper delivery of infrastructure projects to be in place. In the article titled: "The new dispensation in the public sector", De Jager (2000) states that legislation is required to be followed by a process of implementation of the letter and spirit of law. De Jager (2000:03) further explains that legislation is the most important instrument of government in organising society and protecting citizens. It determines amongst others the rights and responsibilities of individuals and authorities to whom the legislations apply.

Fourie (2015:873) reasons that legislation is a crucial element in ensuring accountability and transparency in the utilisation of public funds. The importance of a regulatory framework in provincial spheres of government cannot be denied because it serves as the baseline for budgeting. The rules regulating the interaction between the individual (groups of citizens), society (organisation's) and authority (the departments) can be perceived as the regulatory dimension to judge the degree of procedural formalisation required to achieve maximum benefits (Fourie & Reuterner 2012:86). Khalo and Fourie (2006:141) reason that government activities are complex and require to be structured in programmes and be monitored in an effective and efficient manner. The arrangement of these activities in programmes assists not only the allocation of funds to the programmes but also assists the legislative and executive authority to understand the broader policy implications of the decisions.

The provincial legislature is given vested powers by the Constitution (1996) to exercise oversight in the budgetary process. The Constitution (1996) is viewed as the bedrock for good governance in the financial management of the State.

### **2.6.2. Budget preparation, execution and reporting**

Fourie (2005:680) postulates that the budgeting process is continuous and often characterised in blocks to show various views. These views are either long, intermediate or short views. The short view shows expenditure of either a month, quarterly, semi-annually or current budget year. The intermediate perspective gives an outline of expenditure within the next three- to five-year period while the long-term view gives expenditure of a large framework and its implications.

Madue (2009:417) highlights that the South African government budgeting system is characterised by the following five fundamental functions that support public administration:

- Planning – viewed as two-fold, namely strategic and tactical;
- Co-ordination – the budget is viewed and used as an instrument that brings together components or units of the organisation to foster

harmonious relations of various units in realising common organisational objectives;

- Communication – the budget communicates in monetary terms (through the projected income and expenditure) how the organisational objectives are to be realised;
- Control – the budget is used as an instrument that assists employees to utilise funds for the purposes for which they were intended; and
- Motivation – in directing the organisation towards its intended objectives, the budget is used to motivate employees to remain focused, since funds are available to ensure that the objectives are achieved.

When the legislature approves the budget, government engages in a process of spending public funds. Spending of public funds is done in order to meet stated policy objectives while ensuring value for money is often just as challenging as planning how to spend it. Financial reports on implementation of the budget at each stage of the expenditure cycle are produced at the end of each month and submitted to the Provincial Treasury.

### **2.6.3. Budgetary compliance**

The appropriate management processes and systems that allow departments to detect and correct significant deviation in the delivery of infrastructure projects are significant. These include detecting and correcting abnormalities in the implementation of the budget. Imuezerua and Chinomona (2015:366) indicate that strict compliance to the approved annual budget should be adhered to at all times and if there are any expenses not approved, they must be incurred and a full disclosure of such be made. The departments are required to review the budget on a monthly basis comparing the actual spending against the projections. The contingency plans to address significant deviation should also be considered.

#### **2.6.4. Financial controls for infrastructure programmes**

Departments in the Limpopo provincial government are required by the PFMA to have a strong system of financial controls in order to implement the tasks of infrastructure planning, programming, budgeting, accounting, reporting, archiving and monitoring as discussed above. This could result in better control of expenditure and possible greater efficiency and effectiveness in implementing policies, programs and projects.

Furthermore, the PFMA section 38(1)(j), elaborates that before funds are transferred to any entity within or outside government an AO needs to obtain a written assurance from the entity that the entity implements effective, efficient and transparent financial management and internal control systems. All conditional grants can only be spent in a way consistent with their intended use (Treasury Regulations: 6.4.3.). If provinces under-spend or make improper use of conditional grants the transferring national department can either delay further payments, or withhold funds if there is a serious or persistent material breach of the conditions to which the allocation is subject (SAIIA 2006:136).

#### **2.6.5. Keeping accounting records**

In order to advance the standard of infrastructure service delivery in the province, all provincial departments need to improve processes of tracking and recording budget appropriations and their uses. Abedian, Strachan and Ajam (1998:7) comment that accounting is the component of financial management that is concerned with the recording and reporting of financial information. HM Treasury (2013:17) emphasises that each department should run efficient systems for managing payments and should keep its use of public funds within the agreed budget, taking the limits into account when entering into commitments and generally ensuring that its spending profile is sustainable.

To ensure effective public expenditure management by government departments, the PFMA sets out the general requirement that AOs should maintain effective,

efficient and transparent systems of financial and risk management and take steps to safeguard departmental assets.

#### **2.6.6. Preparation of strategic plans for accomplishment of set objectives**

To ensure that infrastructure service delivery is as efficient and economical as possible, all government institutions are required to formulate strategic plans, distribute resources to the implementation of those plans, monitor and report the results (National Treasury 2007:1). The linking of the strategic plans, budget and priorities of the department helps to achieve the strategic objectives of the departments. If there is no clear link between the strategic plan and the budget it could result in overspending or underspending by provincial departments. The department's ability to align its plans and budgets successfully depends on the legislative framework, departmental systems, structures, processes, leadership responses, organisational culture, information flows and the interaction among these factors (Ajam 2008:48).

Strategic goals provide information about the department's planned outcomes at the end of a specified passage of time. Nkoana and Bokoda (2009:53), believe that to monitor the achievement of strategic goals, departments should describe measurable objectives for each strategic goal. The APP that is aligned with the proposed budget, includes information on how the budget will be used to achieve specific performance targets. The PFMA (Section 27.4), requires that when the annual budget is tabled in the National Assembly or a Provincial Legislature, the AO for each department must present measurable objectives for each programme. The measurable objectives are the specific outcomes utilised to determine the relative success of the department in realising the strategic goals.

#### **2.6.7. Reporting of performance information**

The purpose of performance reporting is to report on overall progress made with the implementation of the department's performance plan, both on a quarterly and annual basis (Tembo 2012:16). Performance reporting was initiated in the mid-1980s and is functional in various countries including South Africa. The main reason

was to move the focus away from reporting on financial inputs to models that are intended to provide a clearer picture of what government achieves for their expenditure on inputs, in other words, the outcomes or the impact sought or expected by government (Australian National Audit Office 2011:13).

Governments utilise performance data in the budget process and their budget decision-making processes (Melkers 2003:105-106). The performance reporting can be seen as an enabling mechanism that gives AOs opportunity to monitor progress against what has been planned and what is actually achieved with regards to service delivery outputs. This is supported by Public Service Regulations (1999), which requires the Executive Authority and the AOs of various departments to be held accountable for the performance of their respective departments, particularly the utilisation of public funds in terms of the provision of the PFMA. The Constitution (1996) set out that each department is required to table a report of its performance and all related activities to the legislative authority, National Treasury, media and the public. The PFMA and the Public Service Regulations direct how government departments should establish and define performance goals and how the level of performance is to be achieved by a programme activity expressed in an objective, quantifiable and measurable format.

The information provided by government departments is useful to evaluate performance of the various departments in an attempt to carry out government mandates. According to the National Treasury (2007:4), performance is evaluated at the end of the financial year, though the performance information process begins when policies are being developed and continues through each of the planning, implementation and reporting stages.

#### **2.6.8. Risk management and internal controls**

In each government department, there should be measures for recognising, tracking and managing departmental opportunities and risks. Each government department should make a considered choice about its desired risk appetite, taking into account its legal obligations, objectives and public expectations of what it should deliver (HM Treasury 2013:16). The head of department is accountable for effective delivery of

infrastructure in the department by managing public funds in a legal, economical, efficient and effective manner. This includes management of all processes and risks that may prevent the realisation of departmental objectives. For example, risks can be the delay in work processes, not fulfilling the goals of the department, non-compliance with legislation, the creation of obligations over available financial assets, uneconomic and unintended budget spending, inefficient and ineffective utilisation of human resources.

## **2.7. IMPLEMENTATION OF CAPITAL BUDGETING PRACTICES**

The Limpopo provincial government implements infrastructure programmes that are funded through the normal budgeting process. Three-year budget allocations are made available to departments by the Provincial Treasury and infrastructure units are responsible for allocating individual project funding based on estimates determined during the feasibility study. The implementation of capital budgeting practices in maintaining, replacing and acquisitioning of the capital asset is very significant. According to Lukes, Ripoll-Feliu, Giner-Fillol and Silva da Rosa (2015:39), capital budgeting is the method of making planning decisions and analysis of opportunities for long-term investments in assets to produce benefits for more than one year. It is important for Limpopo provincial government to adopt the following capital budgeting practice for guiding the service provision of maintenance, replacement and capital asset:

### **2.7.1. The development of capital budget practice**

The development of capital budgeting practice plans benefits the departments in ensuring that needed capital assets or improvements receive proper attention in the budget process and the redundant assets are considered for replacement and disposal. Koch, Mayper and Wilner (2009:13), maintain that capital budgeting decisions are among the most important decisions to be made by an organisation, which is essential to their survival and success in the long term; Bennouna *et al* (2010:226) and Carmona *et al* (2011:62) affirm this.

### **2.7.2. Effective control of capital expenditure costs**

Capital budgeting entails effective control on cost of capital expenditure projects and assists departments to avoid over and under investment in the delivery of the particular projects. According to standards of Generally Recognised Accounting Practices (GRAP 17), cost is the amount of cash or cash equivalents paid or the fair value of the other consideration given to acquire an asset at the time of its acquisition or construction or, where applicable, the amount attributed to that asset when constructed or, where applicable, the amount attributed to that asset when initially recognised in accordance with the specific requirements. The costs of the capital budgeting project need to be controlled and kept as minimal as possible because departments become tied to the project and lose flexibility during the duration of the project in terms of budget spending.

### **2.7.3. Condition assessment of infrastructure projects**

It is very important to conduct condition assessment of any capital assets, including the factors that could affect the need to maintain the assets in the future. Ehlers (2014:11) argues that a key obstacle to the emergence of infrastructure as a separate asset class is the heterogeneity in the setup of projects and the lack of readily available data. The findings of this condition assessment should provide details on how well the assets are meeting their intended purpose. The information obtained during condition assessments serves as an important component of evaluating and addressing the community needs and issues (e.g. damaged road or dilapidated hospital). The capital assets that have been identified by the department to require more maintenance need to be inspected more regularly than assets requiring minor maintenance. This is supported by the view of Rigopoulos (2015:1), reasoning that capital budgeting decisions are critical for organisation's performance and future prospects.

### **2.7.4. Development of capital project options for addressing capital needs**

The establishment of specific capital project options for addressing capital needs that are consistent with financial and asset management policies is required for



evaluating alternatives for acquiring and maintaining the capital assets. The evaluation of alternative mechanisms assist in ensuring the best approach for providing use of a capital asset and funding options are reaching consensus on the development of the province. Ehlers (2014:01) points out that mobilising the necessary funds to satisfy the growing demand for infrastructure investments requires new sources and instruments of finance. The department needs to be encouraged to ensure that all capital project proposals meet policies and plans, including availability of funds and conditional grant eligibility.

## **2.8. BETTER MANAGEMENT OF INFRASTRUCTURE FINANCES**

The foundation for management of finances is key to the effective implementation of infrastructure programmes, service delivery expansion efforts, improvements, reliability and frequency of services. Section 18 of PFMA provides for intervention by the Provincial Treasury in departments that are experiencing persistent financial problems. These problems are as a result of weak financial management and poor practices by the departments. It is, therefore, critical for the Limpopo Provincial Treasury to provide the necessary support required by provincial departments in financial management to accelerate provision of infrastructure service delivery. Skelton (2014:4) indicate that a reason for departments to underspend is poor capacity within the departments to plan and manage the size of the infrastructure projects.

Most communities are holding government accountable for failing to deliver on their obligations of infrastructure development. Conditional grant funding is not improving the infrastructure delivery in Limpopo province because of inability to plan and manage large infrastructure projects. These infrastructure conditional grants are allocated to provinces by the National Treasury for provision of basic infrastructure-related services to poor communities. The role-players in the infrastructure delivery such as infrastructure planners, procurement experts and construction experts need to execute their responsibilities diligently in order to clear the infrastructure backlogs. According to Skelton (2014:1), the Centre for Child Law commissioned a study by Cornerstone Economic Research to track school infrastructure spending and delivery. The report of the study reveals poor performance by contractors as a

result of inappropriate planning and lack of skills and competence to monitor contractors.

Mulenga and Bekker (2015:333) emphasise that the main causes of poor infrastructure delivery are inadequate planning, inadequate funding and discrepancies in the procurement processes and policies.

## **2.9. CONCLUSION**

This chapter has reviewed the relevant literature in relation to the role of financial management in the implementation of infrastructure development programmes in the Limpopo provincial government. Furthermore, the chapter highlighted the key role players in financial management and financial management challenges affecting execution of infrastructural programmes. Finally, the chapter concluded by highlighting the importance of infrastructure development in the Limpopo province. The following chapter describes the methodology used to gather information for this study.

## **CHAPTER 3: RESEARCH METHODOLOGY**

### **3.1. INTRODUCTION**

This chapter deals with research methodology in general and more specifically, the research methodology applied in this study. The researcher provides a broad overview of the research methodology used to collect and to analyse variables that were used to identify financial management challenges affecting execution of infrastructural programmes in the Limpopo provincial government and make recommendations on how to address these challenges.

### **3.2. RESEARCH METHODOLOGY**

The research methodology is the approach to systematically resolve the research problem. All research is based on some underlying philosophical assumptions about what constitutes valid research and which research methodology is suitable for the development of knowledge in a given study. According to Henning, Van Rensburg and Smit (2004:36), research methodology refers to the coherent group of methods that complement one another to deliver data and findings that will reflect the research question and suit the research purpose. This study adopted a detailed research methodology, which outlines the sampling methods, data collections and analysis methods.

### **3.3. RESEARCH DESIGN**

A research design, according to Terre Blanche and Durrheim (2002:29), is a strategic framework for action that serves as a bridge between the research questions and the execution or the application of the research. According to Hammond and Wellington (2013:131) a research design outlines how the research is going to be carried out. There are two research approaches researchers have to select from, namely quantitative and qualitative approaches. This study employs the qualitative research methodology to provide insights and generalisation about the role of financial management in the implementation of infrastructure programmes.

Rangongo (2011:63 – 64) indicates that the qualitative research approach is based on the following notions indicated in Table 3.1:

**Table 3.1: Qualitative research methodology**

Assumption about the world	Qualitative research is based on the constructivist philosophy that assumes that reality is a multilayered interactive, shared social experience that is interpreted by individuals.
Research goal	It deals with understanding phenomena from participants' views
Research methods and process	Study participants' perspective with interactive strategies: Participants observation, in-depth interviews and supplementary techniques. It is flexible
Researcher's role:	The qualitative researcher believes that human actions are strongly influenced by the settings in which they occur.

Source: Rangongo (2011)

### **3.3.1. POPULATION**

Kurmar (2011:24) defines a population as a group, such as families living in an area, people belonging to an organisation whom the researcher wants to investigate through the research endeavor. Bless and Higson-Smith (2004:155) share the same view that a population is the complete set of events, people or things to which the research findings are to be applied. Heppner and Heppner (2004:110) define a population as organisations, students, employees or objects of the study. Accordingly, the population refers to all potential subjects who possess the attributes the researcher is investigating.

The population of this study were the infrastructure and budget managers responsible for the implementation of infrastructure projects within the Limpopo provincial departments. There are 40 officials in total, of which 16 are budget managers and 24 are infrastructure managers and specialists. These are the departments of Agriculture, Cooperative Governance and Human Settlement and Traditional Affairs, Education, Economic Development, Environment and Tourism,

Health, Sport, Arts and Culture, Social Development, Provincial Treasury, Public Works, Roads and Infrastructure and Transport. The rationale behind this choice is that the selected departments are allocated budgets for infrastructure development programmes. The Provincial Treasury is included as a department responsible for monitoring implementation of infrastructure programmes. The target population provided a fairly representative sample, which assisted in answering the proposed research questions.

### **3.3.2. SAMPLE**

A sample represents a set that is selected from the intended population in a study (Breakwell, Hammond & Fife-Schaw 2000:251). Bless and Higson-Smith (2004:156) agree that a sample is a group of elements considered representative of the population and which is studied in order to acquire knowledge about the whole population. Thompson (2012:1) provides that sampling consists of selecting some part of a population to observe that one may estimate something about the whole population. The sampling method can be broken down into two sets, namely probability sampling and non-probability sampling. Lankesar (2014:33), mention that when researchers have a complete list of the entire population, it is possible to use a probability sampling technique that suits their intended research methodology, whereas non-probability sampling is used when a complete list of the population is unavailable.

The researcher selected the non-probability sampling method known as the purposive or deliberate sampling method for qualitative data collection. Palinkas, Horwitz, Hoagwood, Green, Wisdom and Duan (2013:536) contends that purposive sampling is a technique widely used in qualitative research for the identification and selection of information-rich cases for the most effective use of limited resources. This includes identifying and choosing individuals that are knowledgeable about or experienced with a phenomenon. Wamundila (2008:25) indicates that purposive sampling is a non-parametric sampling technique in which the researcher purposively selects the participants as a source of data.

The sample of this study comprised of 20 participants who are responsible for the implementation of infrastructure projects in the departments of Agriculture, Co-operative Governance, Human Settlement and Traditional Affairs, Education, Public Works, Roads and Infrastructure, Health and the Provincial Treasury during the 2014/2015 - 2015/2016 financial years.

These participants were selected because their departments are implementing key provincial infrastructure programmes and the majority of the infrastructure budget is allocated to the selected departments. The Department of Public Works, Roads and Infrastructure and Provincial Treasury are considered to be the responsible departments to provide policy directive on infrastructure management in the province. Table 3.2 shows the Limpopo Provincial Infrastructure Budget.

**Table 3.2: Limpopo Provincial Infrastructure Budget 2014/15 and 2015/16**

<b>Description</b>	<b>Adjusted Budget 2014/15 R'000</b>	<b>Budget 2015/16 R'000</b>
Agriculture	329 304	185 940
Cooperative Governance and Human Settlement and Traditional Affairs	1 387 103	1 285 877
Education	1 298 625	805 128
Economic Development, Environment and Tourism	92 473	62 749
Health	575 626	324 626
Public Works, Roads and Infrastructure	2 122 251	2 171 423
Sport, Arts and Culture	40 014	43 000
Social Development	35 924	63 866
Transport	19 874	89 304
<b>Total</b>	<b>5 901 194</b>	<b>5 031 913</b>

Source: Limpopo Provincial Treasury (2014)

### **3.4. DATA COLLECTION METHODS**

According to Burns and Grove (2005:732), data collection refers to the precise, systematic gathering of information relevant to the research purpose or the specific objectives of a study. Data collection involves the gathering of information to address a research problem. Babbie (2004:215) argues that no matter how carefully designed a data collection instrument is, there is some possibility of an error. De Vos, Strydom, Fouche and Delpont (2002:172-184), distinguish between three types of quantitative data collection methods, namely

- Questionnaires;
- Indexes and scales; and
- Checklists

The researcher made use of an open-ended questionnaire as a data collection instrument, which is accepted as an appropriate data collection instrument for purposes of a survey. This type of questionnaire is also known as unstructured or unrestricted type of questionnaire, which calls for a free response from the participant. The participant formulates and supplies the answer to the questions raised in the questionnaires (Annum 2015:03). The open-ended questionnaire was selected because it gives the participants an opportunity to express their opinions from the set of options. The advantages of using open-ended questionnaires are as follows:

- It allows the participant to answer in his/her own words, with no influence by any specific alternatives suggested by the interviewer;
- It often exposes the issues that are most important to the participant and this may reveal findings, which were not originally anticipated when the survey was initiated; and
- It gives the participants opportunity to qualify their answers or emphasise the strength of their opinions.

Ferligoj and Marvar (2003:161) argue that open-ended and close-ended questions differ in several characteristics, especially the role of participants when answering such questions. Close-ended questions limit the participant to the set of alternatives

being offered, while open-ended questions allow the participant to express an opinion without being influenced by the researcher.

According to De Vos (2002:172), a questionnaire is a set of questions on a form, which is completed by the participant in respect of a research project. De Vos, Strydom, Fouche and Delport (2002:172-174) distinguish between the following types of questionnaires:

- Mailed (posted or e-mailed) questionnaires;
- Telephonic questionnaires;
- Personal or self-administered questionnaires;
- Group administered questionnaires; and
- Electronic questionnaires.

For this study, the researcher utilised a personal or self-administered questionnaire as the data collection method. The self-administered questionnaire is a type of questionnaire that a participant completes on his/her own. The researcher has chosen to focus on the self-administered questionnaire because it offers several advantages over alternative methods:

- Participants answer the questions at their convenience;
- There is no need to set up interview appointments with the participants; and
- No interviewer is present to inject bias in the way questions are asked.

Furthermore, the researcher reviewed the literature available in the area of this study to familiarise herself with the work done by the previous researchers, scholars and authors. The utilised literature was found in textbooks, the Internet and in other published and unpublished documents. This was done to help the researcher to know other researcher's ideas, arguments and observations on the topic under study.

### **3.5. DATA ANALYSIS STRATEGY**

According to Neuman (2006:467), "data analysis involves examining, sorting, categorising, evaluating, comparing, synthesising and contemplating the coded



data as well as reviewing the raw and recorded data". De Vos (2002:339) shares the same sentiment by stating that data analysis is the process of bringing order, structure and meaning to the mass collected data. This is a process whereby the researcher reduces data to a story and its interpretation. Data analysis consists of processes of reducing the data into a manageable size, developing summaries, displaying the data and drawing conclusions from the collected data. According to Dominic and Wimmer (2003:111), data analysis is done early in the collection process and continues throughout the study. This means that data analysis is an ongoing process.

The purpose of analysing data is to obtain usable and useful information. The analysis, regardless of whether the data are qualitative or quantitative, may describe and summarise the data; identify relationships between variables; compare variables; identify the difference between variables; and forecast outcomes. The researcher has used the Creswell's analytical spiral together with the processes of Marshall and Rossmann (cited in De Vos 2005:334), to form the following guidelines of data analysis:

- Planning for the recording of data: This involves the planning before the beginning of data collection. The researcher properly planned when and how the open-ended questionnaires will be distributed;
- Data collection and preliminary analysis: The data were obtained from open-ended questionnaires. The literature from various sources such as books and journals were utilised to enhance the data collected;
- Organising the data: The identified data from questionnaires was typed and organised electronically into various folders used by the researcher. The researcher used the alphabet letters to indicate the participants and protect their identity;
- Reading and writing notes: The data were perused thoroughly to get the sense of what it contains;
- Generating categories, themes and patterns: Each piece of the identified data has been classified accordingly; and
- Summarising and writing the report: The data were integrated, summarised and the report was produced.

### **3.6. LIMITATIONS OF THE STUDY**

Leedy and Ormrod (2010:57) describe limitations as the limits of the problem and delimitations as the things that a researcher will not be able to cover during the course of the study. The following are the key limitations that the researcher foresees in the proposed methodology and the scope of the study.

- The sampling method used is purposive sampling; bias is apparent as the researcher selected departments she preferred.
- The study was conducted over a short period, therefore, an adequate sample that would give the needed information was chosen.
- The sample size was confined to departments that have a bigger infrastructure budget and those responsible for monitoring infrastructure programmes in the province. Therefore, results cannot be generalised among the population.
- Interpretation of the results obtained may affect the accuracy and validity of the research results.

### **3.7. ETHICAL CONSIDERATIONS**

Ethical considerations can have a negative impact on the study thereby affecting its validity and reliability. De Vos, Strydom, Fouche and Delport (2011:129) define ethics as a set of widely accepted moral principles that offer rules for and behavioral expectations of the most correct conduct by experimental subjects and participants, employers, sponsors, other researchers, assistants and students. The ethical issues are very important in the study and they serve as a basis on which each researcher ought to evaluate his/her conduct. The ethical issues below were of importance to this study:

- Voluntary participation

The researcher has the obligation to inform the participants that they have the right either to participate or not (De Vos *et al.* 2002:65,66) and that their participation is voluntary. In this study participants were informed that they are allowed to withdraw at any time during the study.

- Informed consent

According to Struwig and Stead (2001:66), informed consent is used to uphold ethical standards. In this research, all participants were asked whether they wanted to participate and only those that agreed were included in the study. Consent forms were used, which outlined the purpose and objective of the research in which they are requested to participate.

- Privacy, anonymity and confidentiality

Privacy refers to the individual's right to decide when, where, how, to whom and to what extent the information can be revealed (Strydom 2005:61). The researcher considered the principle of confidentiality, privacy and protection of the participants' rights in this study.

### **3.8. CONCLUSION**

This chapter provided the methodology that was used to conduct this study. This study used the qualitative research methodology while the purposive sampling technique was used to draw out participants. The data were collected through an open-ended questionnaire and selected a personal or self-administered questionnaire as a data collection method. The questionnaire was aligned to the research objectives and questions, which assisted the researcher in grouping data received. The limitations of this study were provided. The next chapter will serve to outline and analyse the findings of this chapter.

## **CHAPTER 4: PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA**

### **4.1. INTRODUCTION**

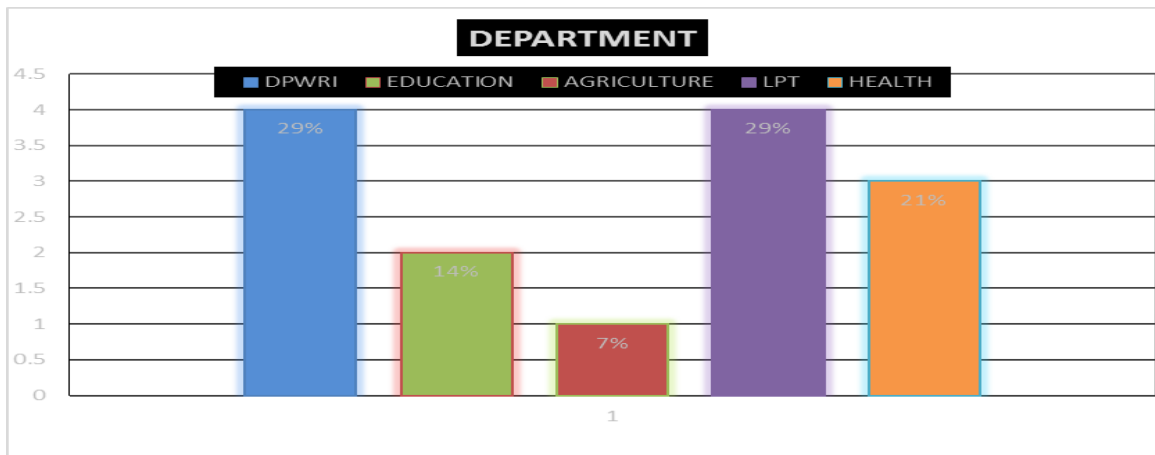
The previous chapter presented a broad overview of the research methodology that was followed in this study to gather research data. The financial management challenges affecting execution of infrastructure programmes/ plans in the Limpopo provincial government prompted this study. This study sought to ascertain the identified challenges and evaluate the extent to which Limpopo provincial government departments adhere to key government financial management legislation and regulations as well as policies governing the implementation of infrastructure projects.

The data was collected through an open-ended questionnaire and 23 of these questionnaires were issued. In terms of the population, nine departments implement infrastructure programmes in the province. Of the nine departments, six are selected in the sample. In the six departments, 20 officials responsible for infrastructure programmes were issued with questionnaires and only 14 completed questionnaires were received back from the participants representing 70 percent of the sample selected. Other participants could not return their questionnaires on time due to work commitments and others being on leave. The researcher then analysed data by grouping each response according to themes from the questions asked in the questionnaire.

### **4.2. DATA PRESENTATION AND ANALYSIS**

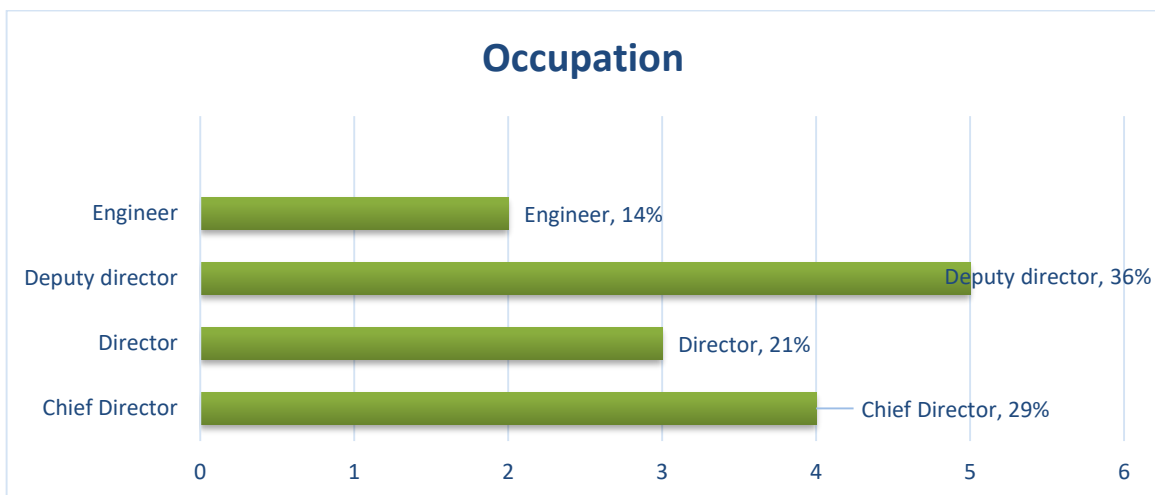
#### **4.2.1. Demographic Information**

This section presents the biographical information of the participants. Figure 4.1 shows the clustered column chart of government departments where participants were drawn from.



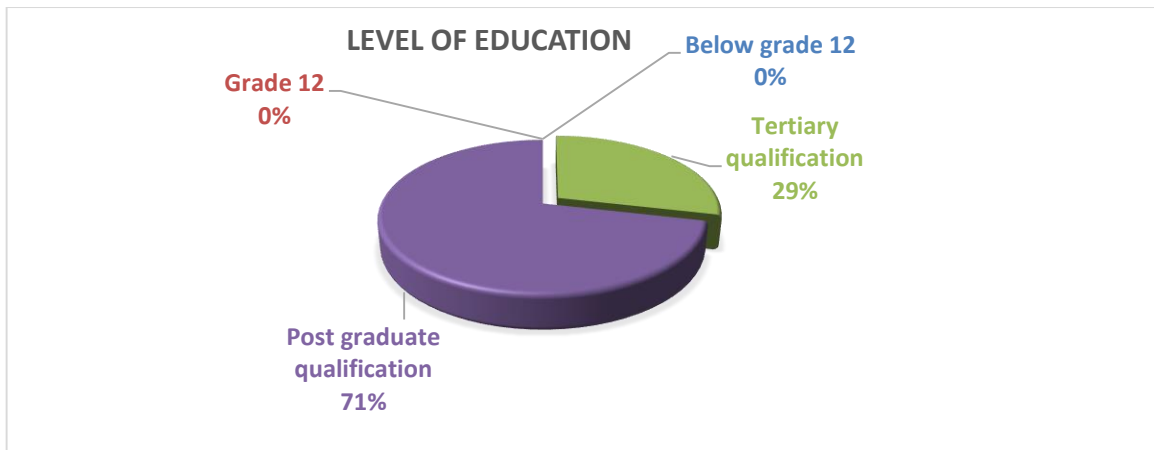
**Figure 4.1: Clustered column chart of departments**

The participants comprised of provincial government officials who work for various departments in the province. Of the 20 targeted participants, only 14 responded. Four (29%) of the participants are working at the Department of Public Works, Roads and Infrastructure, another four participants are working at Provincial Treasury, two (14%) participants are from the Department of Education. The Department of Health had three (21%), whilst Agriculture had one (7%) participant.



**Figure 4.2: Clustered bar chart of occupation**

The participants had to indicate their occupation within the Limpopo provincial government. The results show that majority of the participants (36%) were Deputy Directors. The Chief Directors, Directors and Engineers constituted 29 percent, 21 percent and 14 percent respectively. This information was necessary to establish the level and expertise of the participants who participated in the study.



**Figure 4.3: Pie chart for level of education**

From the 14 participants who responded in the sample none reported having educational qualification of grade 12 and below. Ten (71%) of the participants are in possession of a post-graduate qualification and four (29%) are in possession of a tertiary qualification.

The above demographic information presented indicated that the positions and level of qualification of the participants are adequate to address the financial management challenges affecting execution of infrastructure delivery within provincial government departments. The participants should be able to deal with the identified challenges.

#### **4.2.2. The key role players**

The following questions were asked of the participants (as per Annexure A).

*Q1: The Auditor General is an important stakeholder in financial management. In your own understanding, what is the role of the Auditor General on infrastructure development?*

The data collected on the question of the role of the AG on infrastructure development indicated that all (100%) participants agreed to the sentiment that the AG is an important stakeholder on infrastructure development. According to these

participants, the following roles played by the AG on infrastructure development are identified. The AG is responsible:

- To verify execution of infrastructure plans, value for money, existence of property and ownership
- To give an independent opinion on whether processes, guidelines, regulations and laws were followed on the delivery of infrastructure projects
- To check if infrastructure projects are implemented as planned, as well as to check the quality of infrastructure delivered
- To verify that funds are committed to the identified priority infrastructure projects
- To ensure that infrastructure delivery is done within the given project budgets and in line with applicable specifications
- To ensure full accountability and compliance to relevant policies and procedures.

It is evident from the above responses that the AG is a key stakeholder in the development of infrastructure. The AG provides independent assurance that public infrastructure activities are carried out and accounted for, consistent with the statutory frameworks such as the PFMA, Division of Revenue Act (DoRA), Standard for Infrastructure Procurement and Delivery Management (SIPDM) and Infrastructure Delivery Management System (IDMS). In short, the AGs role on the development of infrastructure is to validate that the public infrastructure funds have been utilised in a manner that enforces value for money.

*Q2: Are there any major accountability issues of infrastructure development or spending brought out by the Auditor General in the audit report of your department in the past three years?*

The data collected on the question showed that 57 percent of the participants' departments experienced accountability issues on infrastructure development or spending brought out by the AG in the past three years. The following was reported in this regard:

- Participant B reported the poor workmanship that resulted in additional costs of the infrastructure projects and the misstatements on reporting the work in progress. The other issues raised relates to poor development of Infrastructure

Project Implementation Plan (IPIP) resulting in difficulties of monitoring performance, ill-defined roles of service providers and ineffective delivery of the infrastructure projects.

- Participant F reported that the department received a finding on misstatements in the financial statements, which is a non-compliance with sec 40(1) of PFMA.
- Participant K mentioned the ineffective monitoring of the Service Delivery Agreement (SDA) between the department and the implementing agent (IA).

Other participants (43%) indicated that their departments do not have infrastructure development issues that the AG has raised in the past three years. The abovementioned findings exposed that most of the sampled departments are not complying with applicable legislation regarding financial matters, financial management and infrastructure statutory frameworks. There is no consequence management for both affected officials and the department for lack of monitoring of infrastructure projects, which results in poor workmanship, incurring fruitless and wasteful expenditure as well as lack of monitoring of implementing agents (IAs).

*Q3: Are there any recommendations made by the Auditor General in 2014/15 and/or 2015/16 audit reports or management letters that have not yet been implemented, which relates to infrastructure development programmes?*

Nine (64%) of the 14 participants indicated that all the recommendations relating to infrastructure development programmes made by the AG in 2014/15 and/or 2015/16 financial years were implemented. Participant A indicated that:

“The roads infrastructure unit always ensures that Auditor General issues are corrected and there should always be internal controls in place to avoid any reoccurrence of audit queries”.

Five (36%) of the 14 participants mentioned that their departments are experiencing challenges in terms of implementation of the AG recommendations. Participant F indicated that steps were not taken to prevent irregular expenditure as disclosed on note 32 of the Annual Financial Statements (AFS) of the department.



It is the responsibility of every department and public entity or institution to implement fully the recommendations of the AG immediately. The current tendency of agreeing on timeframes to implement recommendations and non-compliance to such timeframes is unacceptable. When dealing with public funds, those people or offices entrusted to manage must account to citizens without being granted a legal right to move out of the accountability obligation.

#### **4.2.3. Planning, implementation and monitoring**

The following questions were asked to the participants as per Annexure A.

*Q1: What is your understanding of financial management planning in relation to infrastructure delivery?*

The participants had similar responses to the question indicating that financial management planning on infrastructure delivery begins with how much funds are allocated, then scheduling of payments according to phases of infrastructure development implementation, monthly or quarterly expenditure monitoring and, lastly, reporting on the progress as well as remedial actions on any missed targets or deadlines.

The responses provided indicated that participating departments in the study had a challenge with the availability of funds. This limits planning for infrastructure delivery and project scheduling is compromised. It is noted further that there is lack of integration between the budget office and infrastructure units.

*Q2: Who are the main role players in infrastructure provision?*

The participants had identified the following department, section within the department, institutions, service provider and professionals as the main role players for provision of infrastructure in the province:

- Community members that highlight the needs of a particular infrastructure

- Heads of department and programme managers that conceptualise the identified infrastructure needs and interact with other role players such as municipalities in line with integrated development planning (IDP)
- Chief financial officers and financial planners to mobilise funding for the projects
- Infrastructure planners, architects and engineers to plan the projects and develop required specifications. This includes contract site supervision and monitoring after construction has resumed
- IAs (Independent Development Trust (IDT), Development Bank of Southern Africa (DBSA), Mvula Trust, etc.).
- Strategic planners to include the projects to be undertaken in the departmental Strategic Plan and/or Annual Performance Plan of the indicated financial years
- Supply chain practitioners who undertake the procurement process for required professional service providers (PSPs) and contractors.

Participants clearly identify the different role players.

*Q3: Does government have a credible infrastructure development strategy?*

Ten (71%) of the 14 participants indicated that government has a credible infrastructure development strategy. The participant D indicated:

“Conditional assessment of our schools was conducted by CSIR.  
We know the conditions of our schools and the cost implications thereof”.

Four (29%) of the 14 participants indicated that the province does not have a credible infrastructure development strategy. The departments are using the Limpopo Infrastructure Delivery Management System (IDMS), which was developed in 2012 and reviewed on an annual basis for submission and approval by the Executive Council (EXCO). Other guiding documents such as NDP, MTSF, LDP and spatial frameworks are utilised to align departmental plans.

Based on the information provided by the participants, it could be assumed that the Limpopo IDMS is the infrastructure strategy that should be implemented by all

departments in the province. However, due to capacity constraints, the departments partially utilise and apply the IDMS.

*Q4: Which methodologies does your directorate/unit apply to fund infrastructure projects?*

This question also required the participants to mention methodologies that are used in the department to fund the infrastructure projects. Most participants indicated that the multi-year funding (MTEF) and costing of the activities for the operational plan of each year is the method applied to fund projects. Participant K indicated that the performance based system is used at present to fund departmental infrastructure projects. The quality of the Infrastructure Reporting Model (IRM), infrastructure plans, namely the User-Asset Management Plan (U-AMP), IPMPs, expenditure performance, Human Resource (HR) capacitation and reporting forms a basis for a Performance Based Information System (PBIS).

It is assumed that most participants in the study are not aware of different methodologies available to fund infrastructure projects and for those who mentioned the MTEF methodology indicated that it is not applied. None of the participants mentioned utilisation of financial management principles including capital budgeting methods to allocate funds for infrastructure projects.

*Q5: Do you think the current budget allocated for infrastructure development in your department is sufficient to fund sustainably the planned projects?*

The responses from all (100%) participants showed that budget allocated to provincial departments for infrastructure delivery is not sufficient to fund sustainably the planned projects. Participant K indicated that:

“The infrastructure fiscal is not sufficient to fund the planned provincial projects. This is evident in the backlogs sections of the U-AMPs submitted. The road network condition assessments reports, health and education condition assessments indicate that billions of rand are required if we were to eradicate these backlogs i.e. the 2017/18 financial year U-AMP of Health submitted to

Provincial Treasury indicates approximately R23 billion in infrastructure backlogs”.

According to participant G, there is a mismatch between planned projects, available funds and community needs, particularly on roads infrastructure projects and maintenance.

The data collected in this question shows that departments require more funding, even though they are persistently underspending the allocated budget of infrastructure development. Infrastructure backlogs are a reality but even if additional funds can be made available, the capacity of IAs to uptake the additional assignments leaves much to be desired. The province must enhance the infrastructure service delivery model. Currently, the Department of Public Works, Roads and Infrastructure, as the implementing agent of choice, transfers 80 percent of the assignments given by sector departments to alternative IAs such as IDT and DBSA only leaving approximately 20 percent portfolio, rendering it a post office.

*Q6: What are the main challenges your unit/ directorate encounter during the planning and implementation of infrastructure projects?*

Participants indicated the shortcomings that they experience during the planning and implementation of infrastructure projects as follows:

- Budget constraints for funding all planned projects;
- SCM capacity constraints because its processes such as bid evaluation and adjudication delay the start and completion of the projects;
- Delays in the finalisation of the projects to be undertaken in a particular financial year and the costing thereof;
- Last minute amendments of the project list delay timeous procurement of contractors thereby delaying the start of the projects as planned;
- Lack of development of effective infrastructure project implementation, which hampers monitoring and delivery of quality projects within the stipulated contract period; and

- Non-compliance and non-adherence by the departments to timeliness in terms of submission of documents as outlined in the legislation and regulations.

The above list clearly indicates challenges such as SCM capacity constraints, non-compliance to project management principles, shortage of qualified and skilled staff to implement and monitor infrastructure projects. All these challenges are cited as major challenges, which ultimately lead to underspending of allocated funding and incomplete projects.

*Q7: Do you have any suggestions for the department to promote better financial planning for infrastructure development programmes?*

The question was posed to the participants to establish if they have suggestions that can be used by departments to promote better financial planning for infrastructure development programmes in the province. Participants indicated the following suggestions:

- A project list for projects to be undertaken in the ensuing year must be finalised at least six months before the start of the financial year. There should be no late amendment of the project list allowed unless there is emergency that justify such amendment;
- After planning of the type of an infrastructure is required, the department should use activity based costing (ABC) to ascertain how much it will cost to implement the infrastructure programme. The proper costing of each project with aligned cash flow requirements per stage of completion should be done to avoid cost overrun or underspending of estimated costs;
- Setting realistic lead times for project completion that correspond with resource allocations;
- Government should share and maximise on the available skills (engineers and architects) in order to develop a proper and effective IPIP for the province to assist in sourcing relevant contractors and improved monitoring of projects;
- The infrastructure units in departments must be strengthened. The programme managers must take ownership of the delivery of infrastructure and not leave

everything to the head of the infrastructure unit. The AO must also take action where the work is not performed; and

- The establishment of a procurement office dedicated to the procurement of infrastructure procurement to eliminate existing shortcomings in the procurement processes.

*Q8: Does the infrastructure management unit have established financial management reporting responsibilities that specify what reports are to be prepared, what they are to contain and how they are to be used?*

Ten (71%) of the 14 participants indicated that the management units have established financial management reporting responsibilities that specify what reports are to be prepared, what they are to contain and how they are to be used. Participant B mentioned that:

“The Infrastructure Reporting Model and Project Management Information System are used to capture expenditure values per project and update project information, including progress certificates at a particular given time. The monthly in-year monitoring report indicated spending per funding source against the budgeted amount and variance reporting on over/under performance”.

Four (29%) of the 14 participants reported that there is no established infrastructure financial management reporting responsibilities in the province. The reporting still relies on Ms Excel spreadsheets that proved to have errors.

The above responses indicate there is an IRM in place that is used to report monthly spending on infrastructure projects. In addition to this reporting model, a monthly input that infrastructure units provide in the IYM report is presented at the head of department’s (HoDs) forum and submitted to the National Treasury in terms of section 32 of the PFMA.

#### 4.2.4. Integrated planning

The below-mentioned questions were asked to the sampled participants as per Annexure A.

*Q1: Briefly describe your directorate/unit role in the planning phase (strategic planning) of the department.*

Commenting on the role of their directorate in the strategic planning of the department, 14 (100%) participants indicated that the directorate:

- Provide financial guidelines or advise relating to the projects to be undertaken;
- The unit's role is to ensure that the plan is linked to the budget;
- The integrated planning takes into consideration the provincial integrated plan, i.e. informed by IDP from local government;
- Plans that produce annual performance plans (APPs) are crafted in a strategic planning process together with other internal stakeholders such as senior management and middle managers;
- The APPs are documented and approved departmentally; and
- The plans are adjusted according to the availability of the budget.

All the participants are clearly aware of their roles and responsibilities in the planning process including aligning planning tools and the budget process.

*Q2: How do you ensure that there are linkages between the budget and infrastructure projects in the Annual Performance Plan (APP) and operational plan of the department per financial year?*

This question was asked to understand the linkages between the budget and infrastructure projects in the APP and operational plan of the department per financial year. The participants mentioned that:

- Table B5 of the budget submission (database) consists of project data that should align to the APP annexures/ targets.

- Integrated planning assist in the correct alignment of the projects with available funds over the MTEF
- Through costing of infrastructure projects activities as they appear on APP and Operational Plan and adhering to the timelines as indicated on the operational plans.

Based on the responses, it is clear that linkages between the budget and planning documents are essential and encouraged in the province.

*Q3: How often and which mechanism does your directorate/unit utilise to monitor actual performance of projects against the budget?*

The participants indicated that the monthly and quarterly reports are used by the directorates to monitor the actual performance of projects against the budget. The responses to this question reflected that monthly and quarterly reports are utilised to monitor actual performance of projects against the budget. The site visits are conducted on selected active projects on site to check alignment between actual activities, construction progress on site and expenditure reported through the IRM and monthly standard reports, however, progress reported is not normally aligned to expenditure.

#### **4.2.5. Setting financial controls**

The participants were asked the following questions as per Annexure A.

*Q1: Does your department have a system that allows for the proper recording of project financial transactions, including the allocation of expenditures and sources of funds?*

When asked about whether the department have a system that allows for the proper recording of project financial transactions, including the allocation of expenditures and sources of funds, eight (57%) of the 14 participants responded by saying that there is no provincial project information system within Limpopo that links financial



information to physical progress of projects on site. Projects are reported as per sector preferred information management system, for example the Human Settlement System in CoGHSTA, PMIS in Health and EFMS in Education. The Department of Public Works has procured the PROMAN system as a way of resolving this challenge within the province.

Six (43%) of the 14 participants indicated that project spending is worked outside the system as the current system is only giving the overall spending of projects. Participant C mentioned that the Basic Accounting System (BAS) has a project segment where financial information is captured.

Based on the responses above, there are no systems to properly record project financial transactions and project progress.

*Q2: Are there controls in place concerning the preparation and approval of transactions and ensuring that all transactions are correctly made and adequately explained?*

13 (93%) of the 14 participants responded to the question by saying that through the infrastructure delivery system, documents are uploaded onto the IRM once signed. Although the departments are not complying, there is a need for full implementation. One (7%) of the 14 participants indicated that there are no controls in place concerning the preparation and approval of transactions. Participant H explained this lack of control resulted in a rush to spend the budget at the end of the financial year in order to commit unspent funds.

From the responses, there are high risks of authorising payments for work not done in order to boost spending trends.

*Q3: Are all accounting and supporting documents retained in the department on a permanent basis in a defined system that allows authorized users easy access?*

Ten (71%) of the participants alluded that accounting documents are stored safely in the expenditure section and access is duly controlled (e.g. to access a stored record a person should write a request). Four (29%) of the 14 participants indicated that across various departments in the province there is no filing storage for infrastructure projects. Infrastructure project files are in most cases with the IAs, which is not ideal for auditing.

*Q4: Do invoice-processing procedures provide for comparison of contract, prices, terms and conditions and checking the accuracy of calculations?*

According to 78% of the participants, the department and IAs do comparisons of contract, prices, terms and conditions and check the accuracy of calculations before invoice processing. Other participants (21%) mentioned that the invoice-processing procedures are a concerning matter because there is no provincial guideline that can be adopted by provincial departments to develop their invoice processing procedures.

The above responses indicate that each department and implementing agent has its own payment process designed to suit their own circumstances. This matter needs to be addressed by Provincial Treasury because payment processes that are not well designed result in late processing of payments and under- or overpayment of service providers, which can lead to variations in orders.

*Q5: What do you think should be done to improve beneficiary participation in the infrastructure delivery process?*

According to the participants, it is important to improve beneficiary participation in the infrastructure delivery process. The participants mentioned the following suggestions:

- More awareness and education is needed to improve beneficiary participation;
- Regular interaction with the beneficiary is critical to address concerns that may arise;

- Proper consultations should take place with communities before projects are implemented. The beneficiary must also be involved during the planning of the infrastructure projects;
- Consultative meetings should be held with beneficiaries regularly to share on progress made; and
- When projects are implemented/ handing over of site, local structures must be involved and they must participate in the steering committees.

#### **4.2.6. Challenges affecting execution of infrastructure programmes**

The below-mentioned questions were asked to the sampled participants as per Annexure A.

*Q1: Do you think Limpopo province needs an alternative funding model for the planning and implementation of infrastructure development projects?*

Ten (71%) of the 14 participants mentioned that the current funding model needs to be improved as it is not integrated enough to allow for sufficient resource allocation as it is done per department while there are projects that can be done jointly. Participant G specified that:

“Budget allocations are far less when compared to the demand of infrastructure in almost all sectors. The risk level for service delivery related to community unrest keeps increasing year in year out and calls for alternative funding models to mitigate”.

Four (29%) of the 14 participants believed that there is no need for an alternative funding model for the planning and implementation of infrastructure development projects. The participants indicated that the current system works but its efficiency could be improved.

*Q2: What are the financial management challenges that your department is experiencing in relation to delivery of infrastructure programmes.*

Fourteen (100%) participants indicated that the financial management challenges that their department is experiencing in relation to delivery of infrastructure programmes centre around the following matters:

- Inadequate funding to address infrastructure backlog and maintenance of existing infrastructure. Communities are impatient and cannot wait for too long without the delivery of the planned projects by government. They embark on service delivery protest and civil unrest to demonstrate their dissatisfaction;
- Delays in awarding of projects by IAs (mainly Department of Public Works) resulting in delay of the start of the projects and under spending on the allocated funds;
- Slow/poor performance by some appointed contractors contributing to late completion of projects, under spending of the allocated budget and overlapping commitments;
- Contractors not delivering the projects in accordance to service level agreements, which resulted in contract termination and this causes delays. Some contractors abandon projects before completion, which requires a new process of procurement for the same projects and causing delays in infrastructure budget spending;
- Price escalation is also a challenge. The department end up paying more than originally planned due to price escalations and sometimes contracts variations are causing the department to pay more than originally planned;
- Poor workmanship on some projects requires continuous funding of the same projects. Departments are unable to compete with the market relating to acquiring relevant skills necessary to capacitate infrastructure delivery units;
- Non alignment between reporting systems (IRM, BAS, IYM) and budget documents such as EPRE;
- Misallocations of funds of the projects funded by conditional grants instead of equitable share or from the equitable share misallocated to the conditional grant.
- Reporting not in accordance to infrastructure delivery milestones; and
- Elimination or reduction of inefficiencies in the infrastructure procurement processes and late submission of invoices.

*Q3: Are available legislations sufficient for ensuring accountability and transparency in financial management of infrastructure programmes?*

All 14 (100%) participants agreed that there are sufficient legislation in the province for ensuring accountability and transparency in financial management of infrastructure programmes. The responses further indicated that available legislation are sufficient and clear. However, the capacity building for infrastructure officials on financial management in the form of training and workshops is necessary on an ongoing basis due to high staff turnover within the infrastructure cluster.

Participant B mentioned that:

“Division of Revenue Framework and PFMA are sufficient to ensure accountability of the finances and GIAMA also provide an adequate framework on the handling of Government Infrastructure Projects”.

*Q4: How does your unit/directorate ensure compliance to legislation, regulations and policies for proper delivery of infrastructure projects?*

Commenting on how the unit or directorate ensures compliance to legislation, regulations and policies for proper delivery of infrastructure projects, 14 (100%) participants indicated that legislation, regulations and policies are used as the foundation for what needs to be done in relation to infrastructure projects. Participant F mentioned that there is strict adherence to the policies and transcripts through constant review of actions taken by those who deal with financial management matters.

*Q5. Do reports produced by your directorate/unit provide sufficient information for decision making?*

The responses revealed that 13 (93%) of the 14 participants agree to the asked question citing that the reports produced are using a standard format aligned to IDMS to ensure uniformity across sectors. These reports serve up to a level of political cluster and are used to give a synopsis of the infrastructure in the province

per department and make recommendations on corrective actions to be implemented. One (7%) of the 14 participants disagreed with the asked question citing that the information provided in the report is not credible.

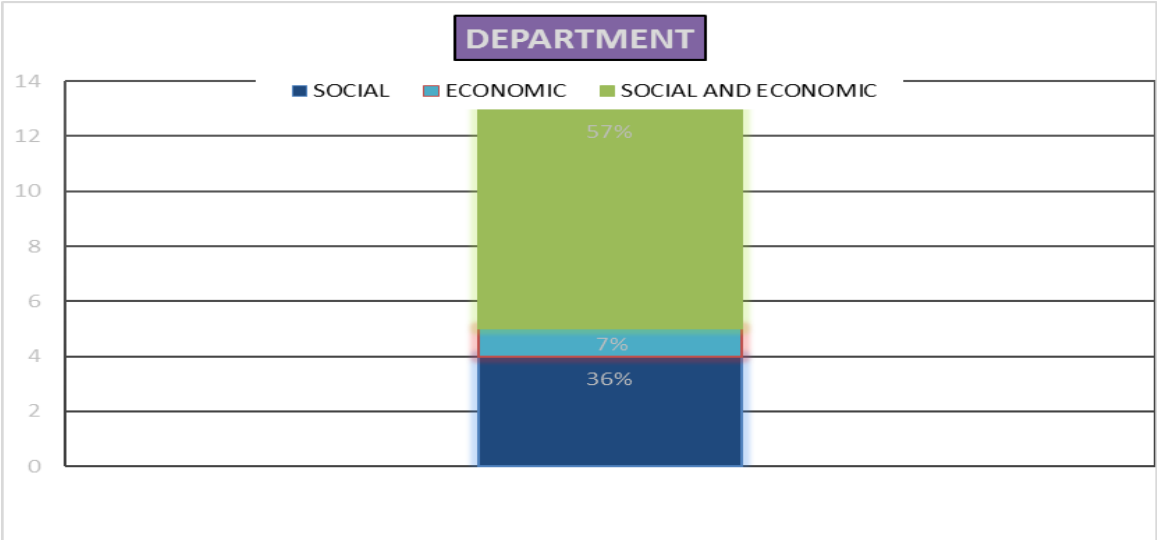
The above responses indicate the importance of infrastructure delivery reports produced by the departments on a monthly basis. Proper reporting systems and enhancement of current reporting standard formats that can generate the management information needed for sound financial and economic decision-making are necessary.

**4.2.7. Implementation of infrastructure programmes**

The participants were asked the following questions: (as per Annexure A)

Q1: *What are the infrastructure projects that your department is currently implementing?*

The participants of the study represented the departments who are dealing with the infrastructure delivery in the province. The provision of these infrastructure projects are in line with LDP for promotion of economic and social development of the province. Figure 4.4 reflected the infrastructure classification of the participants.



**Figure 4.4: Custom combination**

Eight (57%) of the 14 participants are dealing with the delivery of both social and economic infrastructure in their departments. Five (36%) of the 14 participants are in charge of social infrastructure, whilst one participant (7%) is responsible for the delivery of economic infrastructure projects.

The above responses reflect that the province is concentrated much on the delivery of social infrastructure projects. The provision of social infrastructure projects is very important because the communities depend on government to deliver essential services such as water supply, sewerage, houses, clinics, libraries and schools. Again, it is for the province to invest more in economic infrastructure so that communities become sustainable through economic participation.

*Q2: Does your department provide quality infrastructure in the province which promotes social and economic development?*

Eleven (79%) of the 14 participants indicated that most of the infrastructure projects that the province embarks on provide quality infrastructure in the province, which promotes social and economic development. Participant B mentioned that department of Health is providing quality clinics, community health centres and hospitals that promote social and economic development in the Limpopo province. Three (21%) of the 14 participants disagree to the asked question indicating that most of the projects delivered quality below the required standard and value for money was questionable. The provision of quality infrastructure by provincial departments is very important as it supports economic growth, labour market and the well-being of the people in the province.

*Q3: Does infrastructure provision have an impact on economic development?*

Fourteen (100%) participants provided the following inputs:

- The province is economically depressed, whenever infrastructure provision happens people are absorbed in the economy through job opportunities, though temporarily;
- Increase investments opportunities that boost the economy of the province; and

- Better utilisation of infrastructure improves the economic development in the form of a large number of people visiting the province contributing to the transport industry and other sectors.

The above responses indicate a need for the province to prioritise economic infrastructure that can enhance economic growth. In the long run, the province will derive benefits from these projects by generating revenue to implement more social projects.

#### **4.2.8. Better use of resources**

The following questions were asked to the participants: (as per Annexure A)

*Q1: Are financial management skills available in your department adequate for implementation of infrastructure programmes?*

Seven (50%) of the 14 participants indicated that there are financial management skills available in the department for adequate implementation of infrastructure programmes. According to these participants, officials in the infrastructure unit are trained in managing projects including financial management of projects and most of them hold degrees in financial management.

Another seven (50%) of the 14 participants cited that financial management in their department is not adequate for infrastructure programmes delivery. Participant B mentioned that:

“Poor costing of projects and inadequate estimation on cash flow for each project still warrants capacity building of involved staff.”

The responses presented above show that there is a need for financial management skills in various departments in order to implement infrastructure programmes in the required manner. Government financial management activities are complex and require to be executed by officials who are well capacitated in the field of financial management. Financial management is significant in the allocation of funds to the programmes and monitoring of the expenditure thereof.



*Q2: What measures can be put in place to reduce wastages during the implementation of infrastructure projects?*

Commenting on what measures can be put in place to reduce wastages during the implementation of infrastructure projects, 14 (100%) participants indicated the following:

- There should be integrated planning among all spheres of government. There should always be proper consultation between government and stakeholders. The use of a well costed IPIP can assist in early identification of wastage/cost escalation;
- Close monitoring of projects is critical to address wastage. There should always be a resident engineer on site and the quantity surveyors must go on site to regularly verify and quantify the work done. The security must be vetted together with all people on the site, as there are leakages when it comes to materials on site;
- Cost breakdown by contractors when invoicing can also assist to identify prices used in acquiring necessary supplies;
- Training of officials on contract management will prevent wasteful expenditure such as breach of contracts, which results in litigations;
- Contracts that are not completed on time may result in price escalations and penalties;
- Improvement of infrastructure procurement will eliminate time wastages and allow more time for quality assurance and better costing (i.e. time value of money, a project implemented today is cheaper than a project implemented in a year time for a similar scope);
- Alignment between the Infrastructure Delivery Cycle and either the Budget Cycle or the Strategic Planning Cycle and compliance to planning processes in accordance with GIAMA and IDMS; and
- Budget for large multi-year projects should be committed and apportioned across the MTEF.

*Q3: What measures can be put in place to avoid underspending of allocated budget for infrastructure projects?*

This question was meant to understand the participants' opinions in relation to the measures that can be put in place to avoid underspending of the allocated budget for infrastructure projects. Fourteen (100%) participants provided the following suggestions:

- The use of a well costed IPIP and Annual Implementation Plan with well-estimated cash flow can assist in avoiding under-spending of the project budget;
- Awarding of contracts before the beginning of the financial year and projects must be implemented at the beginning of the financial year;
- Avoid changes of projects during the year that will influence the spending pattern of the budget;
- Appointment of experienced and credible contractors will assist in the completion of projects within the set timeframes and those contractors who do not perform must be terminated following the appropriate processes;
- Improve on turnaround time of payments of certified progress certificates.
- Timely reprioritisation where there is identified under-spending against the projected cash flow; and
- That the infrastructure delivery cycle is amended to include the IPMP, the IPIP and the SDA and that these plans are made mandatory for all departments.

*Q4: Are the project plans and budgets of the department realistic or based on valid assumptions and developed by knowledgeable individuals?*

Participants were asked this question to determine whether the project plans and budgets of the department are prepared based on valid assumptions and developed by the knowledgeable individuals. Eight (57%) of the 14 participants indicated that budget and plans are based on assumption because all infrastructure departments are supposed to conduct a full condition assessment of their immovable assets at least every five years, but this is not the case in Limpopo.

Six (43%) of the 14 participants indicated that infrastructure plans are aligned to priority areas, such as growth points, mines and agriculture. Participant G indicated that:

“Most budgets are realistic and some are unrealistic. Perhaps we can say they are generally realistic. Normally where budgets are unrealistic, the major reason could be that it was a rush job, which points back to non-compliance to the infrastructure planning process”.

The abovementioned responses indicated that provincial departments are not doing condition assessment of the infrastructure projects. The condition assessment is the basis from which plans are developed and projects prioritised based on their state of condition.

*Q5: Which management practices can you recommend to improve financial management of infrastructure projects?*

In responding to the asked question, 13 (93%) of the 14 participants recommended the following measures to improve financial management of infrastructure projects:

- Improvement of the relationship between finance staff and infrastructure professionals such as engineers, architects, project managers and others to ensure that budgets and cash flow are properly aligned to each project;
- There must be consequences management and the AOs must be held accountable for non-delivery of infrastructure projects;
- The professionals must be retained in the departments to eliminate the outsourcing of the services to the consultants;
- Due care should be taken to ensure that contracts prices are not exceeded and Progress certificates must be prepared by professionals and approved by authorised person;
- There must be emphasis on improvement of infrastructure procurement in line with standard for procurement in infrastructure delivery is key. The National Treasury has introduced the new Standard for Infrastructure Procurement and Delivery Management (SIPDM), which provides an opportunity to improve the infrastructure delivery value chain of sector departments. If all departments can

develop their own SCM policy in line with the SIPDM, a lot of wastage can be reduced;

- Reports on infrastructure are a standing item on the agenda of management; and
- Penalties should be imposed on the service providers who are failing to complete projects within the agreed timeframes.

### **4.3. KEY RESEARCH FINDINGS**

This section provides the discussion of the findings based on the experiences of the 14 participants in relation to infrastructure delivery programmes. The discussion of the findings is presented in the following thematic manner:

#### **Theme 1: Key role players in financial management**

The findings indicate that five (36%) of the 14 participants are experiencing challenges in terms of implementation of the AG recommendations.

#### **Theme 2: Financial management planning, implementation and monitoring of infrastructure programmes for achieving results**

This study identified that four (29%) of the 14 participants believed that the province does not have a credible infrastructure development strategy; however, utilise the IDMS developed in 2012.

The findings also indicate that the following shortcomings are experienced during planning and implementation of infrastructure projects are as follows:

- SCM capacity constraints because its processes such as bid evaluation and adjudication delay the start and completion of the projects;
- Lack of development of effective infrastructure project implementation, which hampers monitoring and delivery of quality projects within the required contract period; and
- Non-compliance and non-adherence by the departments to timelines in terms of submission of documents as outlined in the legislation.

#### **Theme 3: Integrated planning and performance information in the budget process**

All participants in the study demonstrated awareness in their role during the departmental strategic planning phase, ensuring linkages between the APP and the budget as well as to monthly and quarterly reporting mechanisms.

#### **Theme 4: Setting of financial management controls in the implementation of infrastructure programmes**

Eight (57%) of the 14 participants responded by saying that there is no provincial project information system within Limpopo that links financial information to physical progress of projects on site. The study identified that the invoice-processing procedures are a concern because there are no provincial guidelines that departments can adopt.

#### **Theme 5: Financial management challenges affecting execution of infrastructure programmes**

Ten (71%) of the 14 participants believe that the current funding model needs to be improved. The study identified financial management challenges that departments are experiencing in relation to delivery of infrastructure programmes centres around the following matters:

- Delays in awarding of projects by IAs (mainly Department of Public Works) resulting in delay of the start of the projects and under spending on the allocated funds;
- Slow/poor performance by some appointed contractors contributing to late completion of projects, under spending of the allocated budget and overlapping commitments;
- Price escalations are also a challenge. The department ends up paying escalated prices and sometimes contracts variations causing the department to pay more than originally planned; and
- Poor workmanship on some projects requires continuous funding of the same projects. The department is unable to compete with the market relating to relevant skills necessary to capacitate infrastructure delivery units.

### **Theme 6: The importance of social and economic infrastructure development in Limpopo province**

The responses reflect that the province is concentrated much on the delivery of social infrastructure projects. The majority of participants (79%) believe that the province provides quality infrastructure while three (21%) had a dissenting view.

### **Theme 7: Better use of resources to bolster infrastructure delivery in Limpopo province**

Findings suggested that financial management skills in the infrastructure departments are not adequate for radical delivery of the infrastructure programmes in the province. In addition, the findings illustrated that budgets and plans are based on assumptions because infrastructure departments are not conducting a full condition assessment of their immovable assets.

## **4.4. CONCLUSION**

This chapter presented the results and discussion of the data collected through the use of open-ended questionnaires. The participants gave a thorough account of the role of financial management in the implementation of infrastructure development programmes in the Limpopo provincial government. In the next chapter, the researcher will present the summary, recommendations and the conclusion of the study.

## **CHAPTER 5: SUMMARY, RECOMMENDATIONS AND CONCLUSIONS**

### **5.1. INTRODUCTION**

The empirical findings presented in the previous chapter have shown obstacles towards management of finances in the implementation of infrastructure projects. The findings also showed the challenges affecting delivery of infrastructure programmes by the departments. The purpose of this chapter is to provide the summary, recommendations and conclusions of the study. The aim of the research study was to investigate challenges in management of finances affecting execution of infrastructural programmes/plans in the Limpopo provincial government and make recommendations on how to address these challenges. The specific objectives of the study were as follows:

- To identify key factors contributing to the underspending and/or surrendering of infrastructure funding by Limpopo provincial departments;
- To ascertain challenges in management of finances faced by Limpopo provincial government departments in executing infrastructural projects;
- To evaluate the extent to which Limpopo provincial government departments adhere to key government financial management legislation, regulations and policies governing the implementation of infrastructure projects; and
- To recommend financial management best practice for Limpopo provincial government to improve the implementation of infrastructure programmes or projects in the province.

### **5.2. FINDINGS OF THE STUDY**

The results of the study showed that the AG is a key stakeholder in the development of infrastructure. The AG provides independent assurance that public infrastructure activities are carried out and accounted for, consistent with the statutory frameworks. The data collected showed that participants' departments experienced accountability issues on infrastructure development or spending brought out by AG in the past three years and departments are experiencing challenges in terms of implementation of AG recommendations. This study identified that the participants

believed that the province does not have a credible infrastructure development strategy.

The results of the research indicated that the following shortcomings are experienced during planning and implementation of infrastructure projects:

- SCM capacity constraints and its processes, such as bid evaluation and adjudication, delay the start and completion of the projects;
- Lack of development of effective infrastructure project implementation, which hampers monitoring and delivery of quality projects within the required contract period; and
- Non-compliance and non-adherence by the departments to policies, regulations and acts including non-compliance to timelines in terms of submission of documents as outlined in the legislation.

The findings of the study reflected that the province should improve on the funding model for infrastructure projects. Furthermore, no provincial project information system links financial information to physical progress of projects and there are no established financial management reporting systems. The reporting still relies on Ms Excel-based spreadsheets that could be easily manipulated from time to time.

#### **5.2.1. Factors contributing to the underspending and/or surrendering of infrastructure funding by Limpopo provincial departments**

The research findings identified the following factors that were contributing to the underspending of infrastructure funding by Limpopo provincial departments.

- The provincial departments are yet to implement capital budgeting for improving the long-term planning of infrastructure projects. Therefore, the failure to implement a capital budgeting model affects their operation.
- Current infrastructure programmes and projects are not informed by any scientific methodology. This implies that there are no scientific assessments for infrastructure projects in order to establish their worthiness.



- There is inadequate monitoring of infrastructure projects by officials, which results in poor workmanship, incurring irregular, fruitless and wasteful expenditure.
- Currently, each department and implementing agent has its own payment process designed to suit its own circumstances. This has the potential to affect payment processes leading to late processing of payments, under or overpayment of service providers and leads to orders variations.

### **5.2.2. Challenges faced by Limpopo provincial government departments in executing infrastructural projects;**

The study identified financial management challenges encountered by Limpopo provincial government departments in their delivery of infrastructure programmes.

- Delays in awarding of projects by IAs (mainly Department of Public Works) resulting in delay of the start of the projects and under-spending on the allocated funds.
- Poor performance by some appointed contractors contributing to late completion of projects, under spending of the allocated budget and overlapping commitments.
- Price escalations are a challenge. The department ends up paying price escalations and sometimes contract variations causing the department to pay more than originally planned.
- Poor workmanship on some projects requires continuous funding of the same projects. Departments are unable to compete with the market relating to relevant skills necessary to capacitate infrastructure delivery units.

The participants mentioned that proper reporting systems that can generate the management information needed for sound financial and economic decision-making are necessary.

### **5.3. RECOMMENDATIONS**

This study identified the barriers affecting the implementation of infrastructure projects. To address these barriers, the following strategies are recommended to eliminate financial management challenges affecting delivery of infrastructure programmes.

- Application of capital budgeting models for provincial infrastructure programmes

Capital budgeting is a very important financial management model, which deals with the process of acquisition and investment of capital. The provincial departments have to implement capital budgeting for improving the long-term planning of infrastructure projects because it gives them opportunities to invest funds for addition, disposition, modification and replacement of fixed assets. By utilising the capital budgeting models, economic infrastructure projects will be prioritised resulting in enhancement of economic development in the province. In the end, the province will derive benefits from these projects by generating revenue through attraction of investors. In turn, this will create sustainable jobs for the community, who will afford to pay for services and the revenue may be utilised for implementation of more social projects.

- Implementation of infrastructure projects to be informed by approved condition assessments

In the province, current infrastructure programmes and projects are not informed by any scientific methodology. Therefore, it is recommended that provincial departments should conduct condition assessments for their infrastructure projects in order to establish the basis from which plans are to be developed and projects to be prioritised. Condition assessment results should inform the basis of allocation of funds to departments by the Provincial Treasury. This will reduce the risk of incurring fruitless and wasteful expenditure.

- Implementation of consequence management

The provincial departments have no consequence management for the lack of monitoring infrastructure projects by officials, which result in poor workmanship, incurring irregular, fruitless and wasteful expenditure as well as lack of monitoring of IAs. As part of the accountability, it is important to apply consequence management when the performance is not as desired. The provincial government should develop and implement consequence management strategies to foster a culture of accountability within the province. The implementation of consequence management must be applied in a fair and consistent manner in order to prevent future occurrences of undesirable actions.

- Separate SCM unit for infrastructure projects

SCM challenges are cited always as the main reasons for poor delivery of infrastructure programmes within the provincial government. The departments are failing to spend their budgetary allocations for various reasons, including inadequate procurement mechanisms and corruption. Therefore, it is recommended that provincial departments should have the dedicated supply chain officials/ units for procurement of infrastructure projects. These officials should have necessary skills and knowledge to execute their job responsibilities with greater competence to deliver the intended objectives of a project more successfully and achieve value for money in projects.

- Appointment of qualified and skilled staff to implement and monitor infrastructure projects

The provincial government should develop strategies to attract and retain appropriately qualified and skilled personnel in the infrastructure units. Capacity building for infrastructure officials on financial management in the form of training and workshops is necessary on an ongoing basis due to high staff turnover within the infrastructure cluster. The provincial departments should empower their infrastructure and budget management officials with appropriate training that will

enable them to acquire potential skills that are significant in undertaking their responsibilities.

- Enforcement of the IRM - linking project financial transactions to projects progress

The Provincial Treasury should enforce implementation of the IRM by all provincial departments implementing infrastructure projects. This will reduce the risks of authorising payments for work not done in order to boost spending trends. The reports generated will assist the AOs of provincial departments to hold departmental officials accountable in terms of poor budget spending and taking of remedial actions.

- Standardisation of payment procedures

In the province, there must be the standard operating procedures (SOP) to foster a culture of uniformity, responsibility and accountability in the processing of payments. Currently, each department and implementing agent has its own payment process designed to suit their own circumstances. It is recommended that Provincial Treasury should establish the SOPs for payments of infrastructure-related programmes because the payment processes that are not well designed result in late processing of payments, under or overpayment of service providers and leads to order variations. This will assist the provincial departments to ensure that all payments are made within 30 days of receipt of a valid and correct invoice, except if the contract agreement stipulates different payment terms in line with Treasury Regulations 8.2.3.

#### **5.4. CONCLUSION**

This study examined the management of finances in the implementation of infrastructure development programmes in the Limpopo provincial government. It identified factors contributing to underspending of funds by the Limpopo provincial departments. These factors included failure to incorporate capital budgeting models in the planning of infrastructure projects. Furthermore, the study identified financial

management challenges encountered by Limpopo provincial government departments in their delivery of infrastructure programmes. Therefore, this chapter summarised the research findings and provided the recommendations of the study. The recommendations could be formulated into a workable implementation plan to address financial management challenges affecting execution of infrastructural programmes.

## **5.6. SUGGESTIONS FOR FURTHER RESEARCH**

This study focused on identifying key factors contributing to the underspending and/or surrendering of infrastructure funding and ascertaining challenges in management of finances in executing infrastructural projects. Future studies should focus on identifying appropriate capital budgeting model for implementation of government infrastructure projects. The study also found that SCM units play a critical role in implementation of infrastructure projects, therefore further studies should focus on unblocking SCM processes to fast-track infrastructure projects.

## REFERENCES

Abedian, I., Strachan, B. & Ajam, T. 1998. Transformation in action: budgeting for service delivery. Cape Town: University of Cape Town Press.

Addison, T. & Roe, A. 2004. Fiscal policy for development: poverty, reconstruction and growth. New York: Palgrave Macmillan.

Ajam, T. & Fourie, D.J. 2014. The role of the provincial treasury in driving budget reform in South Africa's decentralised fiscal system. *Administratio Publica*, 22(3): 52-53.

Ajam, T. 2008. Integrating strategic planning and budgeting: a PFMA perspective. *Southern African Journal of Accountability and Auditing Research*, 8(1):45-56.

Annum, G. 2015. August 23. Research instrument for data collection. [Online]. Available at: <http://www.academia.edu/11695245/RESEARCH>. Accessed: 19/09/2017.

Auditor-General South Africa. 2012. Audit process 2011-12. Pretoria. South Africa.

Auditor-General South Africa. 2014. General report on audit outcomes of Limpopo for 2013/14. Pretoria. South Africa.

Australian National Audit Office (ANAO). 2011. Development and implementation of key performance indicators to support the outcomes and programme framework Audit report no 5 2011-12. Australia. ANAO.

Babbie, E. 2004. The practice of social research. 10<sup>th</sup> ed. USA: Wadsworth Publishing Company.

Bennouna, K., Meredith, G.G. & Marchant, T. 2010. Improved capital budgeting decision making: evidence from Canada. *Management Decisions*, 48(2):225-247.

Bless, C. & Higson-Smith, C. 2004. *Fundamentals of Social Research Methods. An African Perspective*. 3<sup>rd</sup> ed. Landsowne: Juta Education.

Breakwell, G.M., Hammond, S. & Fife-schaw, C.R. 2000. *Research methods in Psychology*. 2<sup>nd</sup> ed. London: Sage.

Brennan, N.M. & Solomon, J. 2008. Corporate governance, accountability and mechanism of accountability: an overview. *Accounting, Auditing & Accountability Journal*, 21(7):885-906.

Bryman, A. 2012. *Social Research Methods*. 4<sup>th</sup> ed. New York: Oxford University Press.

Burns, N. & Grove, S.K. 2005. *The practice of nursing research: conduct, critique and utilization*. 5<sup>th</sup> ed. St Louis: Elsevier/Saunders.

Carmona, S., Lyer, G. & Reckers, P.M.J. 2011. The impact of strategy communications, incentives and national culture on balanced scorecard implementation, *Advances in Accounting*, 27(1):62-74.

Chan, Y.L. 2004. Use of capital budgeting techniques to capital investment decisions in Canadian municipal governments. *Journal of Business Financial Accounting*, 24(2):40-58.

Chartered Institute of Management Accountants (CIMA). 2006. Budgeting topic. Gateway 27. Great Britain: CIMA.

Chartered Institute of Public Finance and Accountancy (CIPFA). 2010. *Public financial management: A whole system approach 1 and 2*. London: CIPFA.

De Jager, H. 2000. The new dispensation in the public sector. Auditing SA. [Online]. Available at: <http://www.saiga.co.za/publications-auditingsa.htm>. Accessed: 10/11/2016.

De Jager, H. 2004. The accountability chain. Auditing SA. [Online]. Available at: <http://www.saiga.co.za/publications-auditinga.htm>. Accessed: 10/11/2016.

De Vos, A.S. 2002. Intervention research. 2<sup>nd</sup> ed. Pretoria: Van Schaik.

De Vos, A.S. 2005. Qualitative data analysis and interpretation. Research at grass roots: for the social sciences and human service professions. 3<sup>rd</sup> ed. Pretoria: Van Schaik.

De Vos, A.S., Strydom, H., Fouché, C.B. & Delpont C.S.L. 2011. Research at grass roots. 2<sup>nd</sup> ed. Pretoria: Van Schaik Publishers.

De Vos, A.S., Strydom, H., Fouché, C.B. & Delpont, C.S.L. 2002. Research at grass roots for the social sciences and human service professions. 2<sup>nd</sup> ed. Pretoria: Van Schaik Publishers.

De Vos, A.S., Strydom, H., Fouché, C.B., & Delpont, C.S.L. 2005. Research at grass roots for the social sciences and human science professions. 3<sup>rd</sup> ed. Pretoria: Van Schaik.

Dominick, J.R. & Wimmer, R.D. 2003. Mass media research: Introduction. 7<sup>th</sup> ed. London: Routledge.

Ehlers, T. 2014. Understanding the challenges for infrastructure finance. BIS working papers No 454.

Erasmus L.J. 2008. Financial performance in terms of the PFMA – what does it mean. *Southern African Journal of Accountability and Auditing Research*, 8(1):57-66.

Ferligoj, A. & Marvar, A. 2003. Open-ended vs. close ended questionnaires. Kardejava plascad: University of Ljubljana. Slovenia.



Ferreira, N. 2012. Feasibility constraints and the South African bill of rights: fulfilling the Constitution's promise in conditions of scarce resources. *The South African Law Journal*, 129(2):274-302.

Fourie, D. & Jordaan, J. 2007. Contextualising the measurement of governance in public financial management. *Journal of Public Administration*, 42(5):35-45.

Fourie, D. & Reuterner, M. 2012. Revisiting participatory budgeting as a potential service delivery catalyst. *African Journal of Public Affairs*, 5(2):80-92.

Fourie, D. 2006. The application of good governance in public financial management. *Journal of Public Administration*, 41(2.2):434-443.

Fourie, D. 2015. The management of public funds: an analysis of performance of the South African government. *Journal of Public Administration*, 50(4):873-886.

Fourie, D.J. 2005. The utilisation of the budget as a strategic and managerial tool. *Journal of Public Administration*, 40(4.1):677-686.

Hammond, M. & Wellington, J.J. 2013. Research methods: the key concepts. London, England: Routledge.

Henning, E., Van Rensburg, W. & Smit, B. 2004. Finding your way in qualitative research. Pretoria: Van Schaik Publishers.

Heppner, P.P. & Heppner, M.J. 2004. Writing and publishing your thesis, dissertation and research: a guide for students in the helping professions. USA. Thomson Learning.

HM Treasury. 2013. Managing public money. [Online]. Available at: [www.gov.uk](http://www.gov.uk). Accessed: 20/08/2016.

Imuezerua, E & Chinomona, E. 2015. Analysing the concept of municipal budgeting and service delivery pattern in a South Africa's district municipality. *Mediterranean Journal of Social Sciences*, 6(1):359-367.

Khalo, T. & Fourie, D.J. 2006. Transforming and modernising South African public financial management to accelerate service delivery. *Journal of Public Administration*, conference proceedings, 131-143.

Koch, B.S., Mayper, A.G. & Wilner, N.A. 2009. The interaction of accountability and post-completion audits on capital budgeting decisions, *Academy of Accounting and Financial Studies Journal*, 13:1-26.

Kumar, R. 2011. *Research Methodology: a step-by-step guide for beginners*. 3<sup>rd</sup> edition. London: SAGE Publications.

Lankesar, A. 2014. *Organisational Change during knowledge management*. Pretoria: University of Pretoria.

Leedy, P.D. & Ormrod, J.E. 2005. *Practical research: planning and design*. 8<sup>th</sup> ed. New Jersey: Pearson Education, Inc.

Leedy, P.D. & Ormrod, J.E. 2010. *Practical Research: Planning and Designs*. New Jersey: Pearson.

Lethoko, M. 2014. Budget underspending in Limpopo province: is corruption to blame. *Journal of Public Administration*, 49(3):779-793.

Limpopo Provincial Treasury. 2014. *Medium Term Budget Policy Statement 2013/14*. Polokwane: Limpopo Provincial Government.

Lukes, R.J., Ripoll-feliu, V., Giner-fillol, A. & Silva Da Rosa, F. 2015. Capital budgeting practices: a comparative study between a port company in Brazil and in Spain. [Online]. Available at: <http://www.academicjournals.org/JPAPR>. Accessed: 31 August 2016.

Madue, S.M. & Mahwai, V.S. 2008. Public expenditure (mis)-management in the Ekurhuleni and Sedibeng health region. *Journal of Public Administration*, 43(3):359-375.

Madue, S.M. 2009. An overview of current public financial management in South Africa today. *Journal of Public Administration*, 44(3):413-423.

Melkers, J.E. 2003. Budgeting, performance-based. *Encyclopedia of Public Administration and Public Policy*. New York. Marcel Dekker.

Mkhize, N. & Ajam, T. 2006. The new budgeting approach in South Africa: a critical assessment. *Journal of Public Administration*, 41 (4):761-775.

Moeti, K. 2014. Public finance fundamentals. Cape Town: South Africa. Juta.

Mulenga, E. & Bekker, M.C. 2015. Causes of cost overruns of municipal infrastructure grant funded projects at the OR Tambo District Municipality. *Journal of Public Administration*, 50(2):333-344.

Neuman, W.L. 2006. Social Research Methods: Qualitative and Quantitative Approaches. Boston: Pearson Education International.

Nkoana, J.I. and Bokoda, P. 2009. Towards performance budgeting. *Southern African Journal of Accountability and Auditing Research*, 9(1):49-55.

OECD. (1997). Budgeting for the Future. OECD/GD 1997, Paris: Organisation for Economic Cooperation and Development.

Office of the Premier. 2015. Limpopo Development Plan. Polokwane: Limpopo Provincial Government.

Paramasivan, C. & Subramanian, T. 2009. Financial Management. New Age International Publishers Limited.

Pilankas, J., Horwitz, S., Hoagwood, K., Wisdom, J.P., & Duan, N. (2013). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research Journal*, 42(5):533-544.

Rangongo, P.N. 2011. The functionality of the school governing body with regard to the management of finances in public primary schools. Pretoria: University of Pretoria.

Rigopoulos, G. 2015. A review on real options utilization in capital budgeting practice. *International Journal of Information, Business and Management*, 7(2):1-16.

Skelton, A. 2014. Leveraging funds for school infrastructure: The South African 'mud schools' case study. Pretoria: University of Pretoria.

South Africa 1996. The Constitution of the Republic of South Africa, 1996. Pretoria: Government Printer.

South Africa. 2005. National Treasury: Guideline for Legislative Oversight through Annual Reports. Pretoria. Government Printer.

South Africa. 2007. National Treasury: Framework for Managing Programme Performance Information. Pretoria: Government Printer.

South Africa. 2011. National Planning Commission, National Development Plan, Vision 2030 Pretoria: Government Printer.

South Africa. 2011. Parliament's Brochure on Committees of Parliament. Cape Town: Parliament Media.

South Africa. 1999. Public Finance Management Act, (Act 1 of 1999 as amended by Act 29 of 1999). Pretoria: Government Printer.

- South Africa. 1999. Public Service and Administration. Public Service Regulations. Pretoria: Government Printer.
- Statistics South Africa (STATS SA). 2015. Mid-year Population Estimates. Pretoria. STATS SA.
- Struwig, F.W. & Stead, G.B. 2001. Planning, reporting and design research. Cape Town: Maskew Miller Longman Publishers.
- Strydom, H. 2005. Ethical aspects of research in the social sciences and human service Professions. *Research at grass roots. For the social sciences and human service professions*, 3(1):56-70.
- Tembo, G. 2012. Framework for Strategic Plans and Annual Performance Plans: Portfolio Committee on Public Works. 06 March 2012. [Online]. Available at: <http://pmg-assets.s3-website-eu-west1.amazonaws.com/docs/120306framework.pdf>. Accessed: 20/10/2016.
- Terre Blanche, M. & Durrheim, K. 2002. Research in Practice: Applied Method for the Social Science. 2<sup>nd</sup> ed. Cape Town: UCT Press.
- The City of Johannesburg's Monitoring and Evaluation Framework. 14 May 2012. [Online]. Available at: <http://www.joburg.org.za>. Accessed: 30/11/2016.
- The South African Institute of International Affairs (SAIIA). 2006. South African APRM technical report for thematic area 2: economic governance and management. South Africa. SAIIA.
- The World Bank. 1998. Public Expenditure Management Handbook. Washington, D.C. 20433, U.S.A.
- Thompson, S.K. 2012. Wiley Series in Probability and Statistics Sampling. Toronto: John Wiley and Sons.

Thornhill, C. 2011. South African Public Administration and Management. 10<sup>th</sup> ed. Pretoria: Van Schaik Publishers.

Wamundila, S. 2008. Developing Guideline for a Knowledge Management Policy to enhance knowledge retention at the University of Zambia. Pretoria. University of South Africa.