FACTORS AFFECTING TRANSPORT INFRASTRUCTURE ACCOUNTING IN COUNTY GOVERNMENTS: CASE STUDY OF NAIROBI COUNTY.

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D61/72760/2009

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

2016

DECLARATION

This research project is my original work and has not been presented for a degree in any other University

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This project has been submitted for examination with my approval as University Supervisor;

Name---------- Signature---------- Date----------

DEDICATION

This thesis is dedicated to my late father-Patrick Asewe, who did not live to see this work. It is also dedicated to my mother-Jane Awino, who taught me that even the largest task can be accomplished if it is done one step at a time.

To my friends Elijah Korir and Samuel Mwendia thank you too for all the support. Not forgetting Mr. Gichana Jay my supervisor and mentor who guided me throughout the project, i am totally indebted.

ACKNOWLEDGEMENT

I acknowledge the almighty God for his mercies and grace that have seen me come this far. I am sincerely thankful to my wife Linnet, daughter Keira-Jayne and son Patrick Asewe for moral and financial support during my MBA studies.

My deepest gratitude goes to Mr. Gichana Jay who has worked tirelessly to ensure my Project is a success. He has provided me with valuable knowledge and guidance in ensuring i understand the theoretical concept of research.

ABSTRACT

Transport infrastructure is a critical ingredient in economic development at all levels of income. It supports personal well-being and economic growth. Transport infrastructure plays a role as a capital input into production and wealth generation. The purpose of this study is to examine the factors that affect the effective transport infrastructure accounting with the following objectives, to examine the role of valuation (allocation of cost) and depreciation in transport infrastructure accounting, examine the role of maintenance, repairs and operations in transport infrastructure accounting, examine the role of proper financial reporting in transport infrastructure accounting. A case study of Nairobi County has been conducted to accomplish this. The method is based on a qualitative approach applied the descriptive survey design. A total of 50 interviews were conducted. The interviewees possess different positions within the company, ranging from the top management down through the junior staffs. The study concludes that Maintenance and repairs, proper financial reporting, valuation and depreciation affect transport infrastructure accounting. Having established the factors that affect transport infrastructure accounting, the study recommends that organizations should update their departmental asset valuation and depreciation registers regularly for effective recording keeping and ideal asset valuation. The study also recommends proper financial reporting by organizations to ensure the availability of useful financial statements that are accurate, faithful to the financial circumstances and can be produced in time to help the decision-making process.

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CHAPTER ONE
INTRODUCTION

1.1 Background of the study

Though no definite definition of infrastructure exists, the accounting world describe infrastructure as the basic structural foundation of a society or enterprise that includes roads, bridges, sewers among others and are greatly regarded as a country's economic foundation (Braconier, Pisu and Bloch, 2013; Morisugi and Hayashiyama, 1997). The existence and condition of infrastructure affects everyone from individuals to governments and the modern society cannot function or grow without infrastructure.

Carlevaro (2011) argue that the indirect contribution of infrastructure to economic development arises through a multitude of channels, including the enabling of productive private investment, the creation of new activities (supply chains), or the reshaping of economic geography. It plays a determining role in a community's ability to diversify, expand, cope with population increases and improve environmental conditions. A well-developed infrastructure can to larger extent boost productivity and lower costs (Morisugi and Hayashiyama, 1997).

Over the years, billions of United States Dollars have been invested in transport infrastructure in both developed and developing countries (Carlevaro, 2011).In developing countries, much of the transport infrastructure has been developed with grants from developed countries and the World Bank. In Africa, the African Development Corporation (ADC) has funded thousands of tarmac roads across the continent (Kumar

and Sankar, 2012). In Kenya, the famous Thika Super highway was a joint partnership between the Government of Kenya (GoK) and the People's Republic of China (PRC) government. Roads with Nairobi County and its environs were either funded by the national government or international donor agencies.

Against this background, accounting of transport infrastructure is crucial to determine its performance. A central point in deciding an administration's money related capacity to keep up its existing service levels is access to budgetary data about the stock, utilize and state of its vehicle framework. Such data is key for comprehension the budgetary requests

Foundation puts on governments, including the cost of its projects, and for the ongoing upkeep and substitution of that framework (Prud'homme, 1996). At the point when the cost of utilizing framework is not reported, the cost can't be taken into account and governments can't sufficiently practice the stewardship responsibilities assigned to them. Facilitate, without comprehension the future upkeep and replacement costs connected with having framework, governments can't easily assess whether they can bear to keep up existing projects or grow both the type and nature of projects (Fogel, 2009).

Looney (2013) includes that knowing the supply of foundation is critical in light of the fact that it bears an immediate relationship to the cost of giving current administrations and gives a premise to evaluating maintenance and substitution costs over the long haul. The issues of present and future affordability and money related manageability of foundation must be a noteworthy point of convergence in the choice making process (Wagenvoort and Kappeler, 2010).

1.1.2 The Concept of Transport Infrastructure

Transport infrastructure is a critical ingredient in economic development at all levels of income. It supports personal well-being and economic growth. Transport infrastructure plays a role as a capital input into production and wealth generation (Fogel, 2009).The economic impact can be transformative, especially at lower levels of income. Developments experts argue that transport infrastructure is a necessary input into the production of transport services which, in turn, are necessary to allow for the market exchange of final goods and inputs or for broader welfare benefits. From this perspective and given its central economic role, transport infrastructure is often referred to as the backbone of a modern economy (Fritsch and Prud'homme, 1997).

1.1.3 Overview of Nairobi County

The Nairobi City County is the creation of the Constitution of Kenya 2010 and successor of the defunct City Council of Nairobi. The County operates under the auspices of the Cities and Urban Areas Act, The Devolved Governments Act and a host of other Acts. It is the smallest yet most populous of the counties; its capital is Nairobi, which is also the capital and largest city of Kenya. The County is charged with the responsibility of providing a variety of services to residents within its area of jurisdiction. These include the services that were hitherto provided by the defunct City Council and the ones that have been transferred from the national government.

The former include Physical Planning, Public Health, Social Services and Housing, Primary Education Infrastructure, Inspectorate Services, Public Works, Environment Management while the latter include Agriculture, Livestock Development and Fisheries, Trade, Industrialization, Corporate Development, Tourism and Wildlife, Public Service Management.

1.2 Statement of the problem

Despite the huge budgets that have been spend on transport infrastructure; most governments do not have financial information about the transport infrastructure, its use and maintenance especially at the local level. This lack of information can directly affect the financial management of existing transport infrastructure systems and financial planning for new systems (Prud'homme, 1996). From a financial management standpoint, information about operating costs and the extent of maintenance requirements is crucial (Braconier, Pisu and Bloch, 2013)

Previous studies have found out that less transport infrastructure accounting happen and this has affected the performance of the transport sector (Looney, 2013). For instance, a study on financial failure of a city in north eastern United States found out that the authorities were unable to adequately provide for maintenance and replacement of its aging infrastructure. This led to collapsing of bridges and roads become unusable because of inadequate funding (ESA, 2010).

Another study on transport infrastructure accounting found out that some governments constructed facilities, such as roads and bridges, from the proceeds of various lottery programs. These facilities were seen as a major advantage, but some did not factor into their future funding requirements the ongoing, incremental maintenance and operating costs of them which in turn led to the collapse of many of them (Crafts, 2009). A different study on decision making in infrastructure accounting cited that the understanding of the responsibilities and costs associated with infrastructure is critical to any government and that in view of the long-lived nature of transport infrastructure, the financial resources required must be planned for over the long term (Carlevaro, 2011).

The rainy season is a nightmare to the residents of Nairobi County and its environments. Majority of the roads have huge potholes and almost half of the city roads get flooded whenever the city experiences rain. This can be linked to failure of proper decision making on appropriate financial information about the costs of operating and maintaining the existing transport infrastructure within the city.

Though several studies have been done on transport infrastructure, the accounting part of it has not been fully exhausted hence creating a gap (Braconier, Pisu and Bloch, 2013; Kumar and Sankar, 2012; OECD, 2009). Many governments and private institutions have been unable to fully account for their transport infrastructure hence increasing the cost or surpassing the allocated budget which in turn affects the overall financial performance. The allocation of cost and depreciation to transport infrastructure by county governments is dominated by financial issues and has little, if any, bearing on the efficient and effective management of these assets. It is against this backdrop that this study

endeavored to close this gap by examining the factors that affect the effective transport infrastructure accounting with a case study of Nairobi County.

1.3 Research Objectives

1.3.1 General Objective

The general objective of this study was to examine the factors that affect the effective transport infrastructure accounting in Nairobi County.

1.3.2 Specific Objectives

The specific objectives of the study were:

1. Examine the role of valuation (allocation of cost) and depreciation in transport infrastructure accounting in Nairobi County.
2. Examine the role of maintenance, repairs and operations in transport infrastructure accounting in Nairobi County
3. Examine the role of proper financial reporting in transport infrastructure accounting in Nairobi County

1.4 Research questions

The study was guided by the following research questions

1. To what extent does valuation (allocation of cost) and depreciation affect transport infrastructure accounting in Nairobi County?
2. To what extent does maintenance and repairs affect transport infrastructure accounting in Nairobi County?
3. To what extent does proper financial reporting affect transport infrastructure accounting in Nairobi County?

1.5 Value of the Study

This study sought to highlight the factors that affect transport infrastructure accounting and the benefits that the findings accrue to the organization. The beneficiaries of the study are the county government of Nairobi, the national government, county governments and private institutions. The study further outlines and discuss the pitfalls of transport infrastructure and effectively let the player(s) and policymakers in this field have a grip of how they can be able to improve their transport infrastructure accounting practices for better management and performance. To Nairobi County, the core beneficiary, the study gives recommendations for better transport infrastructure accounting. To theory, the research contributes to the existing literature on transport infrastructure accounting.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter introduces the already existing literature reviewed from the library and internet to provide a theoretical background for the study. It identifies the research issues to be addressed through a conceptual framework and a detailed outline of the underlying concepts and variables on the factors that affect transport infrastructure accounting.

2.2 Theoretical Foundation of the Study

This study depends on the three ideas of financial hypothesis. Monetary hypothesis demands that the objective of any economy is to ideally allot its accessible assets, for example, arrive, work, materials, gear crosswise over endless competing needs. Defenders of this hypothesis contend that the rationale behind the hypothesis is straight-forward in that if the general public confers assets to some set of activities while better open doors lie in hold up, it is just harming its long-run economic success (Morisugi and Hayashiyama, 1997).In terms of freely held common foundation and related basic leadership, this rationale is reflected in three central (and reasonable) strategies for monetary appraisal specifically money saving advantage examination, lifecycle costing and financially savvy investigation.

Cost Benefit Analysis (CBA)

As indicated by the hypothesis, the reason for Cost Benefit Analysis is to look at the immediate expenses of proposed foundation ventures, arrangements and additionally programs against direct, estimated dollar-esteemed advantages (Wagenvoort and

Kappeler, 2010). In such a case, where different ventures are in examination, the one posting the most astounding net present esteem (NPV, the distinction between estimated discounted advantages and expenses over some pre-decided arranging skyline) is typically recommended for execution (Kumar and Sankar, 2012).

Lifecycle Costing (LCC)

Life cycle costing is frequently used to look at the anticipated expenses of engineering plan as well as administration choices over the normal administration life of the infrastructure segments or frameworks being referred to (Christensen, 2005; Fabryckyand Blanchard 1991). Like Cost Benefit Analysis, the strategy is near. The venture or choice posting the lowest expected LCC (every now and again esteemed in yearly or present worth terms) is typically recommended for usage.

As indicated by Wagenvoort and Kappeler (2010) LCC certainly assumes that variety in client costs crosswise over considered alternatives are either: immaterial (in which case the investigation can concentrate exclusively on organization and any purported outside costs),or differ adequately to incorporate into the costing procedure yet don't warrant the more careful and monetarily faultless bookkeeping of CBA (i.e., the experience of users are reflected as costs as opposed to financial advantages).

Cost-effectiveness analysis (CEA)

Cost-effectiveness analysis is utilized where the interpretation of, for instance, infrastructure execution is hard to mean some dollar-esteemed equivalent (e.g., client cost or advantage gauges). For this situation, the adequacy per-dollar of alternative framework

outline or administration choices are contrasted with determines which may be best for some pre-built up capacity. Some framework asset management frameworks (IAMS), for instance, look for an upkeep plan that maximizes expected execution picks up (however measured) against the treatment costs acquired (Lytton 1987).

Specialists in infrastructure improvement refer to that in any occasion, utilized fittingly inside an open framework office, these financial apparatuses and their look inside formal IAMS – help building managers recommend great approach, speculation, restoration and upkeep projects to elected officials who thus then are in a position to use sound judgment for society's benefit (Arnekudzi, Herabat, Wang and Lancaster, 2003). In this setting, it is the chosen authority's obligation to settle on the choice with deference to the suitable level of administration to be given. The net impact of this is the general public can be sensibly certain that the foundation resources on which they depend are being very much oversaw from a financial point of view and, along these lines, that their expense dollars are being great spent.

2.3 Determinants of independent variables

2.3.1 Valuation and depreciation

There are four main determinants of depreciation namely asset cost, salvage value, useful life and obsolescence. Each organization is free to adopt the most appropriate depreciation method for its operations. The depreciation method should allocate asset cost to accounting periods in a systematic and rational manner.

2.3.2 Proper financial reporting

The determinants of financial reporting are carelessness, lack of information, misinterpreting data or dishonest employees. Whatever the cause, the results can range from inconvenience to major problems. As a departmental head, one needs to be cognizant of the potential problems and be sure that the accounting is managed correctly.

2.3.3 Maintenance, Repair, Operations (MRO)

MRO Exercises incorporate preventive support; substitution of parts, frameworks, or segments; and different exercises expected to protect or keep up the benefit. Upkeep and repairs, as recognized from capital changes, reject exercises coordinated towards growing the limit of a benefit or generally updating it to serve needs not quite the same as, or essentially more prominent than, its present utilize (Fogel, 2009).

2.4 Empirical review

2.4.1 Valuation and depreciation

Depreciation is a method of allocating the cost of a tangible asset over its useful life. Businesses depreciate long-term assets for both tax and accounting purposes (Wagenvoort and Kappeler, 2010).Looney (2013) adds that for accounting purposes, depreciation indicates how much of an asset's value has been used up. For tax purposes, businesses can deduct the cost of the tangible assets they purchase as business expenses; however, businesses must depreciate these assets in accordance with governing rules about how and when the deduction may be taken based on what the asset is and how long it will last.

According to Kumar and Sankar (2012) devaluation cost is the intermittently distributed cost of a benefit's unique buy esteem over the administration life of the advantage. At the point when organizations put an altered resource in operations for use over different years, they can't cost the benefit in one single period, yet should devalue the estimation of the advantage after some time and charge related cost assignment to devaluation cost. Utilizing devaluation cost helps organizations better match resource utilizes with the advantages gave by a benefit (Cowe, 2004).

Monetary counselors urge that one noteworthy favorable position of devaluation cost is that it helps organizations reasonably express the measure of cost brought about as a consequence of utilizing a benefit amid a bookkeeping period to legitimately coordinate with the income that the advantage utilize means to produce in a similar period (Christensen, Sparks, and Kostuk, 2005). Without fittingly charging a benefit's buy cost to devaluation cost, organizations may downplay or exaggerate add up to costs and in this way misquote incomes, reporting deluding money related data.

Creates (2009) add that utilizing devaluation cost additionally helps organizations effectively report resources at their net book esteem. Organizations at first record altered resources at their unique buy costs. Nonetheless, Fogel (2009) takes note of that benefit esteem decay after some time as the aftereffect of advantage uses that reasonable cause an advantage's wear and tear. In this manner, organizations must change a benefit's esteem to its the net outstanding quality. An advantage's net book esteem is the first buy cost subtracted by the benefit's collected devaluation, the aggregate deterioration cost from every single past period.

As indicated by Sparks (2007) depreciation cost gives an approach to recuperating the buy cost of an advantage. Not at all like resource expensing by which organizations can recoup the cost of a benefit instantly, utilizing resource deterioration, organizations recuperate add up to resource cost over the valuable existence of the advantage through occasional devaluation cost. Carlevaro (2011) refers to that devaluation cost is a non-money charge against income, which permits organizations to set aside part of the income as assets for future resource substitution. Without charges of devaluation cost, the segment of income may have been improperly utilized for different purposes.

Different creators refer to that deterioration cost helps organizations produce impose reserve funds (Braconier, Pisu and Bloch, 2013; Carlevaro, 2011; Fogel, 2009). Assess rules permit deterioration cost be utilized as duty derivation against income in touching base at assessable salary. The higher the devaluation cost, the lower the assessable pay and, in this way, the more the duty funds. Actually, here and there organizations utilize quickened devaluation to charge higher deterioration cost in specific periods when they hope to have higher income to deliberately bring down assessable salary and accomplish impose investment funds (Townley, 1998).

2.4.2 Proper financial reporting

Fogel (2009) cite that accounting rules and regulations exist to ensure that financial statements are useful to their end users in their financial decision-making. For financial statements to be useful, the information presented therein must be accurate, faithful to the financial circumstances and be produced in time to help the decision-making process. Poor ethics in accounting result not only in increased incidences of criminal activities, but

also hurt the business through harming its reputation and rendering their financial statements untrustworthy and thus useless (Fabrycky and Blanchard, 1991).

Sparks (2007) notes that inaccurate financial reporting may be the result of carelessness, lack of information, misinterpreting data or dishonest employees. Whatever the cause, the results can range from inconvenience to major problems. As a departmental head, one needs to be cognizant of the potential problems and be sure that the accounting is managed correctly.

The bad numbers that are the result of inaccurate financial reporting lead to bad decision-making (Carlevaro,2011). For many small businesses that are too small to hire a full-time accountant, inaccurate reporting may be difficult to ferret out. The owner may accept the reports on face value, which will distort his ability to track income and expenses as well as to budget accurately. Miscalculating profit is detrimental whether the number is too low or too high. If profit is reported too low, it will result in the company being undervalued. If profit is reported too high, the consequence will be high tax liability (Townley, 1998).

The quality of financial reporting affects stakeholder's relationship. Stakeholders in the organization or company may be affected by inaccurate reporting, especially if they uncover the inaccuracies. Faulty reporting will hurt the company's credibility with the board of directors and investors. If the business is a non-profit organization, faulty reporting may affect donations. Crafts (2009) advise that if one is planning to sell the business, he may enlist the services of an appraiser. He is not an accountant and will

accept the reports at face value. The organization will then risk a buyer uncovering the inaccuracies or worse, buying the business and discovering the flaws after the sale. An outside independent auditor who will assure that generally accepted accounting principles are followed can allay these woes.

However, whatever the cause for inaccuracy, Carlevaro (2011) cite that the organization can take steps to correct the deficiencies. Frequently, bookkeeping in a small business is handled by a family member or someone without accounting experience. Make sure that those who keep the books have the training and expertise to fulfill the role. Establish procedures for all the accounting activities. Design a transaction registers and journals to make them easy to use and review. If the bookkeeping is done manually or with simple spreadsheets, the organization can consider purchasing accounting software and should not hesitate to hire an outside auditor if there are any concerns about the accuracy of your financial reports (Crafts, 2009).

2.4.3 Maintenance, Repair, Operations (MRO)

Maintenance, repair, operations (MRO) items are supplies consumed in the production process but which do not either become part of the end product or are not central to the firm's output. MRO items include consumables (such as cleaning, laboratory, or office supplies), industrial equipment (such as compressors, pumps, valves) and plant upkeep supplies (such as gaskets, lubricants, repair tools), and computers, fixtures, furniture among others (ESA, 2010).

MRO reporting empowers the legislature to be accountable to natives for the best possible organization and stewardship of its benefits. In particular, MRO reporting helps clients by giving a substance's reasonable gauge of MRO sums and the effectiveness of benefit upkeep rehearses the elements utilize in satisfying their missions (Fritsch and Prud'homme, 1997).

Upkeep and repairs are exercises coordinated toward keeping altered resources in an acceptable condition. Activities incorporate preventive support; substitution of parts, systems, or components; and different exercises expected to save or keep up the benefit. Support and repairs, as recognized from capital changes, avoid exercises coordinated towards expanding the limit of a benefit or generally updating it to serve needs not the same as, or significantly more noteworthy than, its present utilize (Fogel, 2009).

Bookkeeping specialists refer to that sums for MRO might be measured utilizing the accompanying however not constrained to: condition appraisal surveys, life-cycle cost figures, or other techniques that are like the condition evaluation review or life-cycle costing methods. Condition appraisal surveys are intermittent visual (i.e., physical) examinations of property, plant and gear (PPE) to decide their present condition and assessed cost to correct any lacks. Then again, life-cycle costing is a securing or acquirement system which considers operating, maintenance, and different expenses notwithstanding the procurement cost of advantages. Since it comes about in forecasts of upkeep and repairs cost, these figures may serve as a premise against which to contrast genuine support and repairs cost with touch base at a gauge of deferred support and repairs (Kumar and Sankar, 2012).

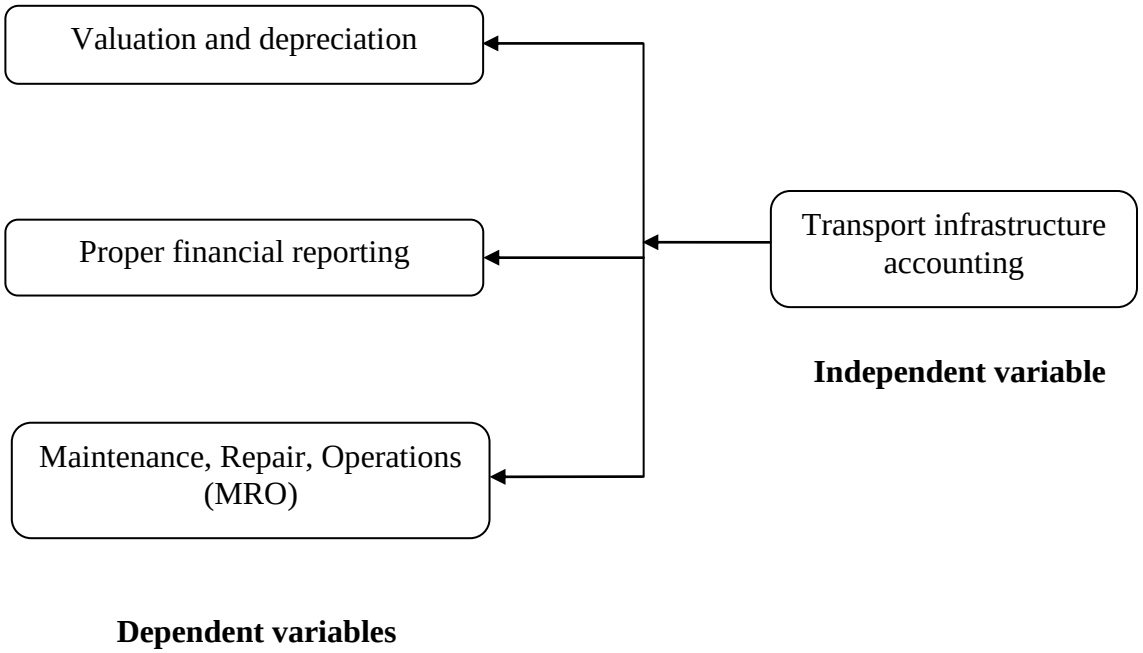
Wagenvoort and Kappeler (2010) refer to that the administration ought to figure out which strategies to apply and what condition principles are acceptable. Once decided, condition principles, related appraisal techniques, and reporting arrangements ought to be reliably connected unless administration decides that changes are important. In spite of the fact that condition data is fundamental in creating MRO amounts, reporting of condition data is not required. Changes to strategies or formats that administration decides are vital ought to be joined by an explanation documenting the justification for the change and any related effect on the MRO estimate(s).Looney (2013) add that to best meet the objective of MRO reporting, correspondence with, and thought of, input from experts in different trains, for example, designing, offices administration, finance, budgeting and bookkeeping is vital.

As indicated by Morisugi and Hayashiyama (1997) MRO ought to be measured and reported for promoted general PPE and stewardship PPE. MRO likewise might be measured and reported for non-promoted or completely devalued general PPE. MRO ought to incorporate supported upkeep and repairs (MR) that have been delayed for a future period and also unfunded MR. MRO on idle and additionally abundance PPE should be incorporated to the degree that it is required to keep up idle or overabundance PPE inacceptable condition. For instance, latent PPE might be kept up or repaired either to comply with existing laws and controls, or to save the estimation of PP&E pending disposal.

Kumar and Sankar (2012) reasons that MRO reporting ought to give MRO starting and closure parities for the reporting period and account data identified with MRO exercises. Substances are required to present both subjective and quantitative information. A synopsis of the element's MR approaches and brief portrayal of how they are applied; method of measuring MRO, Policies for positioning and organizing MR exercises, calculates the element considers deciding worthy condition principles, whether MRO relates exclusively to promoted general PPE and non-promoted stewardship PPE or additionally to sums identifying with non-promoted or completely devalued general PPE, promoted general PPE, and non-promoted legacy resources and stewardship arrive for which administration does not quantify or potentially report MRO and the reason for the prohibition (Crafts, 2009)

2.5 Conceptual Framework

Table 2.1: Conceptual framework



The conceptual framework highlights both the independent variables and the dependent variables. The independent variables are Valuation and depreciation, Proper financial reporting Maintenance, Repair, Operations (MRO). All the three variables play a key role in transport infrastructure accounting and are being used in this study as the guides to the study.

2.6 Summary of the Literature review

This chapter has reviewed existing literature on transport infrastructure accounting based on Valuation and depreciation, Proper financial reporting Maintenance, Repair, Operations (MRO). The literature review has established that valuation and depreciation helps companies to fairly state the amount of expense incurred as a result of using an asset during an accounting period to properly match with the revenue that the asset use intends to generate in the same period and that without appropriately charging an asset's purchase cost to depreciation expense, companies may understate or overstate total expenses and thus misstate revenues, reporting misleading financial information. Maintenance, repair, operations (MRO)reporting enables the government to be accountable to citizens for the proper administration and stewardship of its assets and assists users by providing an entity's realistic estimate of MRO amounts and the effectiveness of asset maintenance practices the entities employ in fulfilling their missions. Proper financial reporting is crucial for financial statements to be useful and the information presented therein must be accurate, faithful to the financial circumstances and be produced in time to help the decision-making process.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the methods that were used to carry out the research. It entails research design, population, and the entire outline for the data collection, measurements and methods of data analysis to be used.

3.2 Research design

The research applied a descriptive survey design which is usually used in the preliminary and exploratory studies to allow researchers to gather information, summarize, present and interpret it (Orondo, 2002). According to Mugenda and Mugenda (1999), the purpose of descriptive research is to determine and report the way things are, attempting to describe such things as behaviour, attitudes, values and characteristics. We can thus conclude that, descriptive research intends to produce statistical information about aspects thus making it the most suitable method for the study topic for it would allow for unbiased research findings.

3.3 Study Population

Target population is as a universal set of the study of all members such as real hypothetical set of people, events or objectives to which an investigator wishes to generalize results (Kothari, 2008). In this case, the target population was Nairobi County employees working in public works department. The department has a total of 486 staff members inclusive of senior staff, middle level management and junior staff (GCN, 2016).

Table 3.1: Target population

Category	Frequency	Percentage
Senior staff	35	7.2
Middle level management	169	34.8
Junior staff	282	58
Total	486	100

Source: NCC HR, (2016).

3.4 Sample size and sampling technique

Sampling is the process of drawing a study sample from the study population. The main purpose is to obtain a representative group which enables researcher get information about a study population. The technique used therefore should ensure that it's the representative of a population and not biased in any way. Ngechu (2004) emphasizes the importance of selecting a representative sample by use of a sampling frame. From the sampling frame, the required number of subjects, respondents, elements or firms is selected in order to make a sample. Stratified random sampling technique was used to select the sample.

According to Deming (1990) stratified random sampling technique produce estimates of overall population parameters with greater precision and ensures a more representative sample is derived from a relatively homogeneous population. Stratification aims to reduce standard error by providing some control over variance. From each stratum the study used simple random sampling to select 50 respondents; this will be 10% of the entire population, According to Mugenda and Mugenda (1999), a representative sample

is one that represents at least 10% of the population of interest. Random sampling frequently minimizes the sampling error in the population. This in turn increases the precision of any estimation methods used (Cooper and Schindler, 2003).

Table 3.2: Sample size

Category	**Frequency**	**Percentage**	**Sample size**
Senior staff	35	10	4
Middle level management	169	10	16
Junior staff	282	10	30
Total	486	10	50

Source: NCC HR, (2016).

3.5 Data Collection tools and techniques

The primary data collection method was the most suitable for this study and entailed the use of questionnaires. This is due to its advantage of allowing the researcher to get first-hand information from the respondents. In this case, the researcher self-administered the questionnaires. The questionnaires had both open ended and closed ended questions to capture the objectives of the research. Close-ended questions deal with numerical values while open ended questions allow for explanation of facts. The data that was collected was based on the three variables discussed in chapter two.

3.6 Data collection procedures

Before the actual data collection, the researcher carried out a pilot study to pre-test and validate the questionnaire. According to Somekh, and Cathy (2005) validity is the degree by which the sample of test items represents the content the test is designed to measure. Content validity which is employed by this research is a measure of the degree to which

data collected using a particular instrument represents a specific domain or content of a particular concept. Mugenda and Mugenda (1999) contend that the usual procedure in assessing the content validity of a measure is to use a professional or expert in a particular field.

To establish the validity of the research instruments the researcher sought the opinions of experts in the field of study especially the lecturers in the School of Business. This facilitated the necessary revision and modification of the research instrument thereby enhancing validity and reliability. Reliability refers to the consistency of measurement and is frequently assessed using the test–retest reliability method (Walliman, 2001). Reliability is increased by including many similar items on a measure, by testing a diverse sample of individuals and by using uniform testing procedures. The researcher selected a pilot group of 10 individuals from the target population to test the reliability of the research instrument. This was achieved by first stratifying the individuals according to their level of employment. The researcher then administered the questionnaires to selected employees through 'drop and pick later' method.

3.7 Data analysis and presentation

This includes the process of packaging the collected information, putting it in order and structuring main components in a way that the findings can be easily and effectively communicated. After the distribution of the questionnaires, they were adequately checked for clarifications and to ensure that all the questions have been answered. The data was then be analyzed and the findings recorded by use of tables and figures. Responses were analyzed in percentages. Percentages were calculated by getting the response divided by

the total number multiplied by a hundred. The computer package SPSS- Statistical Package for Social Sciences was used as an aid.

3.8 Ethical considerations

Due to ethical considerations, the researcher sent out an initial contact letter alerting respondents that they would participate in the study. Confidentiality of all participants were assured at all levels of the research. Names of the respondents were not included in the questionnaire. In addition, the respondents had the option of participating or declining to the process.

CHAPTER FOUR

RESEARCH FINDINGS

4.1 Introduction

This chapter presents the findings and results of the study in the order of the research objectives. The results are based on a response rate of 90% (n=50).

4.2.1 Response rate

The response rate was high at 90% (45 Staffs), only 10% (5 staffs) of the administered questionnaires were returned unanswered or with errors. The majority of the 45 respondents were male at 63% (n=30) while the female respondents constituted 37% (n=15) of the sample.

In terms of age, the 18-35 age group of respondents consisted of 22% (n=10) of the respondents, the others were as follows; 36-45 (45%), 46-50 (22%), > 50 (11%). The 36-45 age groups formed the largest proportion of the study population, with more than 40% representation from the age categories in this group. Years of work at the Public works department show that 44% of the employees had worked for over 5 years at public works department. This was followed by those who had worked for a period between 3 and 5 years (40%), and 1-2years (9%). The least group of workers were those who had worked for less than 1 year (7%).In terms of position in the organization, the middle level management constituted 71% of the respondents. The others are junior staff and senior staff at 22% and 7% of the sample respectively. On the respondents understanding on transport infrastructure accounting, 22.2% of the respondents fully understand transport infrastructure accounting and 44.4% of the respondents have partial understanding of on

transport infrastructure accounting 4.4% and 6.6% do not have any clue or are not sure respectively.

4.3 Factors that affect transport infrastructure accounting

Table 4.1: Respondents perception on factors that affect transport infrastructure accounting

Factors	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total	Mean	Rank
Valuation and depreciation	0(0)	2(4.4)	3(6.6)	30(66.6)	10(22.2)	45(100)	4.06	3
Maintenance and repairs	0(0)	5(11.1)	5(11.1)	25(55.5)	15(33.3)	45(100)	4.44	1
Proper Financial reporting	0(0)	0(0)	0(0)	40(88.8)	5(11.5)	45(100)	4.11	2

Values in parentheses ( ) are row percentages, while values outside parentheses are frequencies.

Table 4.1 show that about 33% of the respondents strongly agreed that Maintenance and repairs is a factor that affects transport infrastructure accounting. About 60% of the respondents agreed that Valuation and depreciation are factors that affect transport infrastructure accounting. None of the respondents disagreed that Proper Financial reporting are factors that affect transport infrastructure accounting. Less than 4% of the respondents disagreed that Valuation and depreciation are factors that affect transport infrastructure accounting.

On ranking the factors on the basis of mean, the factors, in order of priority, were rated as Maintenance and repairs, proper financial reporting, Valuation and depreciation.

4.4 Valuation and Depreciation

Table 4.2: Respondent's perception on Valuation and Depreciation factors that affect transport infrastructure accounting

Factors	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total	Mean	Rank
Correct reporting of assets	2(4.4)	3(6.6)	5(11.1)	30(66.6)	5(11.1)	45(100)	3.73	3
Cost Recovery	0(0)	0(0)	2(4.4)	40(88.8)	3(6.6)	45(100)	4.02	1
Tax Deduction	1(2.2)	2(4.4)	5(11.1)	30(66.6)	7(15.5)	45(100)	3.88	2

Values in parentheses ( ) are row percentages, while values outside parentheses are frequencies.

Table 4.2 shows that 15.5% of the respondents strongly agreed that tax deduction is a valuation and depreciation factors that affect transport infrastructure accounting. About 60% of the respondents agreed that correct reporting of assets and cost recovery are valuation and depreciation factors that affect transport infrastructure accounting. About 6% of the respondents disagreed that correct reporting of assets are valuation and depreciation factors that affect transport infrastructure accounting. None of the respondents disagreed that cost recovery is valuation and depreciation factors that affect transport infrastructure accounting. On ranking the factors on the basis of mean, the factors, in order of priority, were rated as cost recovery, tax deduction and correct reporting of assets.

4.4.1 Updating of department asset valuation and depreciation register

Table 4.3 shows that 67% of the respondents agree that department asset valuation and depreciation register is updated regularly will 22% of the respondents are not sure.

Table 4.3 Updating of department asset valuation and depreciation register

Content	Frequency	Percentage
Yes	30	67
No	5	11
Not sure	10	22
Total	45	100

4.5 Maintenance and Repairs

Table 4.4: Respondent's perception on maintenance and repairs factors that affect transport infrastructure accounting

Factors	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total	Mean	Rank
Keeping fixed assets in an acceptable Condition	0(0)	1(2.2)	1(2.2)	40(88.8)	3(6.6)	45(100)	3.99	1
Improving infrastructure reporting	1(2.2)	2(4.4)	4(8.8)	32(71.1)	6(13.3)	45(100)	3.78	3
Budgeting and decision making	1(2.2)	2(4.4)	5(11.1)	30(66.6)	7(15.5)	45(100)	3.88	2

Values in parentheses ( ) are row percentages, while values outside parentheses are frequencies.

Table 4.4 shows that 15.5% of the respondents strongly agreed that budgeting and decision making is maintenance and repairs factors that affect transport infrastructure accounting. About 70% of the respondents agreed that improving infrastructure reporting and Keeping fixed assets in an acceptable condition are maintenance and repairs factors that affect transport infrastructure accounting. Only 2.2% of the respondents disagreed that budgeting and decision making is maintenance and repairs factors that affect transport infrastructure accounting. On ranking the factors on the basis of mean, the factors, in order of priority, were rated as keeping fixed assets in an acceptable condition, budgeting and decision making, improving infrastructure reporting.

4.6 Financial Reporting

Table 4.5: Respondent's perception on financial reporting factors that affect transport infrastructure accounting

Factors	**Strongly disagree**	**Disagree**	**Neither agree nor disagree**	**Agree**	**Strongly agree**	**Total**	**Mean**	**Rank**
Criminal Activities	1(2.2)	1(2.2)	1(2.2)	39(86.6)	3(6.6)	45(100)	3.93	2
Organization Reputation	1(2.2)	2(4.4)	5(11.1)	30(66.6)	7(15.5)	45(100)	3.88	3
Stakeholders Affected	0(0)	1(2.2)	1(2.2)	40(88.8)	3(6.6)	45(100)	3.99	1

Values in parentheses ( ) are row percentages, while values outside parentheses are frequencies.

Table 4.5 shows that about 15% of the respondents strongly agreed that organization reputation is financial reporting factor that affect transport infrastructure accounting. About 60% of the respondents agreed that organization reputation, criminal activities and stakeholders affected are financial reporting factors that affect transport infrastructure accounting. Only 2.2% of the respondents disagreed that criminal activities and organization reputation are financial reporting factors that affect transport infrastructure accounting. About 11% of the respondents neither agreed nor disagreed that organization reputation is a financial reporting factors that affect transport infrastructure accounting. On ranking the factors on the basis of mean, the factors, in order of priority, were rated as stakeholders affected, criminal activities and organization reputation.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings of the research, discusses the results, draws conclusions and makes recommendations for transport infrastructure accounting.

5.2 Discussion

Significant findings that arose from the study were;

The factors that affect transport infrastructure accounting in order of priority were: Maintenance and repairs, proper financial reporting, valuation and depreciation. The questionnaire had provision for the respondents to add other factors. Of the factors added by the respondents, they were all related to the above factors. For instance, the respondents cited timely repairs and replacements, proper record keeping and accountability in budgeting.

The valuation and depreciation roles that affect transport infrastructure accounting in order of priority were: cost recovery, tax deduction and correct reporting of assets. The questionnaire had provision for the respondents to add other roles. Of the roles added by the respondents, they were all related to the above roles. For instance, the respondents cited helping companies better match asset uses with the benefits provided by an asset.

The maintenance and repairs roles that affect transport infrastructure accounting in order of priority were: keeping fixed assets in an acceptable condition, budgeting and decision making, improving infrastructure reporting. The questionnaire had provision for the

respondents to add other roles. Of the roles added by the respondents, they were all related to the above roles. For instance, the respondents cited proper administration and stewardship of assets.

The financial reporting roles that affect transport infrastructure accounting in order of priority were: stakeholders affected criminal activities and organization reputation. The questionnaire had provision for the respondents to add other roles. Of the roles added by the respondents, they were all related to the above factors. For instance, the respondents cited hurting organizations credibility.

5.3 Conclusion

Transport infrastructure is a critical ingredient in economic development at all levels of income. It supports personal well-being and economic growth. Transport infrastructure plays a role as a capital input into production and wealth generation. Despite the huge budgets that have been spend on transport infrastructure; most governments do not have financial information about the transport infrastructure, its use and maintenance especially at the local level. This lack of information can directly affect the financial management of existing transport infrastructure systems and financial planning for new systems.

From a financial management standpoint, information about operating costs and the extent of maintenance requirements is crucial. Many governments and private institutions have been unable to fully account for their transport infrastructure hence increasing the cost or surpassing the allocated budget which in turn affects the overall financial performance. The allocation of cost and depreciation to transport infrastructure by county

governments is dominated by financial issues and has little, if any, bearing on the efficient and effective management of these assets.

This study has tested three key variables in that affect transport infrastructure accounting. Hence, this study concludes that Maintenance and repairs, proper financial reporting, valuation and depreciation affect transport infrastructure accounting.

5.3 Recommendation

Having established the factors that affect transport infrastructure accounting, the study recommends that organizations should update their departmental asset valuation and depreciation registers regularly for effective recording keeping and ideal asset valuation. The study also recommends proper financial reporting by organizations to ensure the availability of useful financial statements that are accurate, faithful to the financial circumstances and can be produced in time to help the decision-making process.

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APPENDIX 1: QUESTIONNAIRE

FACTORS AFFECTING TRANSPORT INFRASTRUCTURE ACCOUNTING IN COUNTY GOVERNMENTS

A CASE STUDY OF NAIROBI COUNTY

This research is meant for academic purpose. You're kindly requested to provide answers to these questions honestly and precisely as possible. Responses will be treated with utmost confidentiality. Please tick [√] appropriate or fill in the required information on the spaces provided.

SECTION A: DEMOGRAPHIC INFORMATION

1. Gender of the respondent

[ ] Male

[ ] Female

2. Age in years of respondent

[ ] 18-35

[ ] 36-45

[ ] 46-50

[ ] Above 50

3. Years worked at public works department

[ ] Below 1 year

[ ] Between 1- 2 years

[ ] Between 3 - 5 years

[ ] Over 5years

4.What is your position in the organisation?

[ ] Senior staff

[ ] Middle level management

[ ] Junior staff

SECTION B: TRANSPORT INFRASTRUCTURE ACCOUNTING

1. To what extent do you understand transport infrastructure accounting? Please rank between 1-5 (5 being the highest).

Not at all	Small Extent	Not Sure	Some Extent	Large extent
1	2	3	4	5

2. To what extent do you think the following factors that affect transport infrastructure accounting? Please rank between 1-5 (5 being the highest priority)

	1 Strongly Agree	2 Disagree	3 Neither agree nor disagree	4 Agree	5 Strongly Agree
Valuation and depreciation					
Maintenance and repairs					
Proper Financial reporting					

3. In your opinion what other factors would you add to the above?

.....
.....
.....
.....

SECTION C: VALUATION AND DEPRECIATION

4. To what extent do you think the following are roles of valuation and depreciation in transport infrastructure accounting? Please rank between 1-5 (5 being the highest priority)

	1 Strongly Agree	2 Disagree	3 Neither agree nor disagree	4 Agree	5 Strongly Agree
Correct reporting of assets					
Cost Recovery					
Tax Deduction					

5. In your opinion what other roles would you add to the above?

   .....

   .....

   .....

   .....

6. Is the department asset valuation and depreciation register updated?

   [ ] Yes

   [ ] No

   [ ] Not sure

SECTION D: MAINTENANCE AND REPAIRS

7. To what extent do you think the following are maintenance and repairs roles in transport infrastructure accounting? Please rank between 1-5 (5 being the highest priority)

	1 Strongly Agree	**2 Disagree**	**3 Neither agree nor disagree**	**4 Agree**	**5 Strongly Agree**
keep fixed assets in an acceptable condition					
Improves infrastructure reporting					
Budget and decision making					

8. In your opinion what other roles would you add to the above?

……
……
……

9. How often are repairs done on the infrastructure under transport department?

……
……
……

SECTION E: FINANCIAL REPORTING

10. To what extent do you think the following are effects of poor financial reporting? Please rank between 1-5 (5 being the highest priority)

	1 Strongly Agree	**2 Disagree**	**3 Neither agree nor disagree**	**4 Agree**	**5 Strongly Agree**
Criminal Activities					
Organization Reputation					
Stakeholders Affected					

11. In your opinion what other effects would you add to the above?

……
……
……