ADDIS ABABA UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

SCHOOL OF COMMERCE

DEPARTMENT OF PROJECT MANAGEMENT

The Effect of Right-of-way Acquisition on Road Construction Projects Performance: The Case of Addis Ababa City Road Authority Projects under Lemi-Kura Sub-City.

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Addis Ababa, Ethiopia

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A project work submitted to Addis Ababa University College of Business and Economics School of Commerce in partial fulfillment of the requirements for the Degree of Master of Arts in project management

Advisor: Fesseha Afework (Asst. Prof)

July, 2022

AAU, Ethiopia

Statement of Declaration

I, the undersigned, declare that this research entitled" The effect of right-of-way acquisition on road construction projects performance: the case of Addis Ababa city road authority projects under lemi-kura sub-city" is my original work and has not been presented for degree requirement in any other university, and all the sources used to support this particular study have been appropriately acknowledged.

By: Abrham Dagne Wassie

Signature ----------

Date ----------

Letter of Certification

This is to verify that the project work conducted by Abrham Dagne Wassie, entitled" The effect of right-of-way acquisition on road construction projects performance: the case of Addis Ababa city road authority projects under lemi-kura sub-city" submitted in partial fulfillment of the requirements for the degree of master of Arts in project Management fulfills with the procedures of the university and encounters the recognized standards from the originality and quality perspectives.

Research Advisor ----------

Signature ----------

Date ----------

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ENDORSEMENT

This is to certify that the project work titled " The effect of right-of-way acquisition on road construction projects performance: the case of Addis Ababa city road authority projects under lemi-kura sub-city " prepared by Abrham Dagne Wassie and submitted in partial fulfillment of the requirements for the degree of Masters of Arts in project management complies with the accepted standards of the University's regulations with respect to originality and quality.

Signed by the Examining Committee:

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Advisor	Signature	Date
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Internal Examiner	Signature	Date
_____	_____	_____
External Examiner	Signature	Date
_____	_____	_____
Coordinator	Signature	Date

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Abbreviation and Acronyms

AACG	Addis Ababa City Government
AACRA	Addis Ababa City Road Authority
AAPCo	Addis Ababa City Government Plan Commission
AASHTO	American association of state highway and transportation officials
AAWSSA	Addis Ababa Water Supply and Sewerage Authority
ANOVA[a]	Analysis of variance
CIS	Cadastral Information System
EFQM	European federation for quality management
EPRDF	Ethiopia people republic democratic federation
EVM	Earned value management
FHWA	Federal Highway Administration
GIS	Global Information System
KPI	key performance indicators
LDP	Land Development plan
LDRA	Land Development and Renewal Agency
LDRO	Land Development and Renewal Office
LMDO	Land Management and Development Office
MnDOT	The Minnesota Department of Transportation
MSME	Medium, Small and Micro Scale Enterprise
PC	Plan Commission
PMBOK	Project Management Body of Knowledge
PMI	Project management Institute
PPI	Project Performance Indicators
Q-Q	Plot Percentile Percentile plot
RoW	Right-of-way
SPSS	Statistical Package for Social Science
STIP	Statewide Transportation Improvement Program
URA	Uniform Relocation Assistance
VIF	variance inflation factor

ABSTRACT

Prior research has shown that right-of-way acquisition is critical to the performance of road projects. The current research study designed to check the effect of right-of-way acquisition on performance of road projects under lemi-kura sub city. The study points out different RoW acquisition variables and examines their effect on the performance of road projects. To achieve the study objective, Descriptive and Explanatory research design along with quantitative approach was employed. The quantitative data was analyzed by using suitable methods of descriptive, correlation and regression analysis using SPSS version 26 tool.To address the objective of the study a five-point Likert scale survey questionnaire was distributed to 67 governmental staff and had 97% response rate, Census inquiry was used to choose respondents from various government organizations who participated in five different projects under Lemi-Kura sub city. The major findings of the study revealed that there was poor RoW acquisition performance in road projects and as a result the performance of road projects was affected To be more successful in RoW acquisition related projects, the study recommends that the organization must focus On participating the public in the right-of-way acquisition process, increasing agencies capabilities to perform RoW acquisition, and lowering barriers related to property management(demolishing) and relocation(resettlement).

***Key words**: RoW acquisition, Road project performance, Lemi-Kura*

CHAPTER ONE

INTRODUCTION

In this section of the study: background of the study, statement of the problem, objectives of the study, research questions, significance of the study, limitation of the study, scopes of the study and definition of Terms are presented in a way that they are clear and easily comprehensible

1.1 Background of the study

Right-of-way /ROW/ acquisition is the act of getting the land from its original owner by another party that has legal rights to take the real property and that provides a monetary compensation for the value of the property (Francis, 2009). Most highway projects involve acquiring some form of right-of-way. This acquisition process involves many stages, participants, and a great deal of information. Compensating land owners for loss of land and/or associated damages is an important part of this process. (Zhang, 2006).Because ROW acquisition occurs before the road project's construction begins, there is a lot of pressure to get the necessary properties and avoid any delays that might have a substantial impact on the project's final cost and schedule (David, 2016). Factors like alignment coordination issues, diverse state and local laws, conflicting public policies, environmental issues, public involvement, agency staffing, appraiser qualifications, mediation processes, condemnation processes, project characteristics, parcel types, and location can all have a significant impact on the cost and duration of ROW acquisition (David, 2016).

According to the Arizona of Transportation Infrastructure Delivery and Operations Division Right-of-way Manual (ADOT, 2018), Project Management Section is responsible for but not necessarily limited to the following:

a. Coordinating and monitoring the schedule of the project activities of the Right-of-way Group for the timely acquisition of right-of-way
b. Coordinating the clearing of construction projects relative to right-of-way requirements
c. Appraisals / Market Analysis
d. Appraisal review
e. Advance acquisition program

f. Local agency assistance program

g. Red letter program

h. Provide Project Estimates

(MnDOT 2015), State and federal criteria must be followed while conducting appraisals and acquiring right-of-way (ROW). The cost of ROW is a key consideration in the department's project development. The district right-of-way administrator appoints a certified appraiser who has been pre-approved. Following the completion of appraisals, and before initiating parcel acquisition, appraisal reviews should be done. Making offers based on appraisal price, negotiating, and, if necessary, employing eminent domain are all part of the ROW acquisition process. Relocation assistance includes assisting residents and business owners who have been relocated as a result of ROW acquisition. This task may take a long time and should be factored into the project's overall timeline.

Aleithawe (2012) A key element in moving a highway construction project forward is the ability to acquire the right-of-way (ROW) in a timely manner. Delay in the acquisition process can lead to poor performance. Identifying the delay factors will allow for a better acquisition management process and greater road performance. When the RoW activity is not properly managed, it causes uncertainty for agencies and property owners alike due to a lack of transparency, poor public involvement, internal managerial capability, parcel characteristics, scheduled and cost effective, property management activities and fund limitations, political pressure, plan revision, and available replacement housing which leads to poor performance of the road project (Aleihawe, 2010). Furthermore, open communication and collaboration across different divisions within an organization can help to reduce design modifications, revisions, and plan mistakes.

The Addis Ababa City Government Roads Authority (2018) said that the 'Right-of-way' system is the major bottleneck for the poor performance and delay of city road projects. Elias Tegenge (2019) With more than 40 active major road projects under construction across the capital many residences with business in close proximity with the construction have lost their patient, In some case, road projects to be finished by know are not even half completed but constructors blame right-of-way issues for poor performance of the project.

Road developments in Ethiopia are completely controlled by the Ethiopian government, and ROW acquisition begins with governmental entities collecting data such as project plans, preliminary ROW and utilities evaluations, identification of the owners of the relevant properties (title), survey maps, and so on. Appraisals are then used to assess the fair market value of each property. Following that, the government will contact property owners, give the estimated compensation value, and finish the payment and relocation procedure based on the valuations.

In Addis Ababa city government, the process is guided by Compensation and Replacement Directive No. 19/2006 on Land to be released for public use. Addis Ababa city government, Addis Ababa City Government Land Management and Development Office, Addis Ababa City Government Land Development and Renewal Agency, sub-cities, Woreda administration, sub-city Land Development and Renewal Office, Addis Ababa City Road Authority, and people displaced by development are all involved in this directive (LDRA, 2016).

1.2 Background of the Company

As it is known, majority of Addis Ababa's roadways are experiencing time, money, and quality issues. There are numerous causes for these issues, one of which are the ROW problems and are mainly carried out by the Addis Ababa Roads Authority and Addis Ababa Sub-Cities AACRA (2012). For this study, however Lemi-Kura sub-city was selected, and here is a summary of the two organizations

Addis Ababa City Council has approved Lemi-Kura to be the 11th sub-city of Addis Ababa in 2013 E.C. The new sub city formed in order to provide equitable access to city dwellers in a balanced distance and in a timely manner by balancing the population, enhancing access to services and managing capacity. The new sub-city has ten woreda administrations, by detaching woreda administrations from Yeka and bole sub cities. As a result, the new sub-city will contain yeka Abado condominium, Ayat, Bole Lemi Industrial Park area, Bole Arabsa, Meri, Goro, Ayat 49 and Ayat condominium regions. Land administration and development office is one of the bureaus established with Lemi-Kura sub city, and Land Development and Renewal Office is one of the department offices under it that is

responsible for right-of-way questions received from various organizations, primarily the Addis Ababa road authority (Abiy 2022).

The first one to be established by the Government to construct roads was Public Works Department. It was established to construct roads in Addis Ababa and in its surrounding. After a few years this department was raised to a minister level and Addis Ababa also got the chance to establish its road development organizational structure.

When it was decided for Addis Ababa to have a mayor and a council in 1942, the city roads construction and maintenance was organized under the municipality. To fulfill the road construction activities together with building works the "Road and Building works" department was established. This department stayed till the replacement of the Haile Sellase regime by the Derge regime performing its duties. But no fundamental organizational change of the department was observed in the Derg regime(AACRA 2012).

In 1993 (EPRDF) The Ethiopian People's Revolutionary Democratic Front has established regional governments and gave them power to administer their regions with autonomy. During this time Addis Ababa was also established as one of the regions. The Addis Ababa administration during this period established the "bureau of works and urban development" and the bureau organized a department under it to carry out the road construction and maintenance works. The newly established road department constructed and maintained the city roads till the establishment of the Addis Ababa City Roads Authority in March 15, 1998 by regulation No. 7/1998 to be administrated by board of directors to construct maintain and administer the road works in Addis Ababa by the city Administration. The Border Enforcement Office was also founded following the foundation of AACRA, and it collaborates with Addis Ababa sub-cites in the process of RoW acquisition.

1.3 Statement of the Problem

Effective performance of road infrastructure projects is important for countries growth and development. Successful construction industry plays essential role for a country's economic development. The construction industry plays important role in the economy of developing countries like Ethiopia. For example, in many developing countries, major construction

activities account for about 80% of the total capital assets, 10 % of their GDP, and more than 50% of the wealth invested in fixed assets. In addition, the industry provides high employment opportunity, probably next after agriculture. E. Achuenu, (2013)

The construction sector is undoubtedly a national asset whose development ought to reflect the growth and transformation of a wider people. Also, a countries economic development is influenced by the physical infrastructure that is delivered by the construction sector and its main participants (Le-Hoai, 2008), Due to this, it is imperative that the construction industry needs to improve its capacity and delivery way to meet social and economic development. Besides, as large amounts of resources are required/or involved in infrastructure work. It is important to explore if the method put in place and the step adopted are valid in achieving the targeted objectives.

Right-of-way acquisition continues to be a bottleneck in the implementation of government infrastructure projects, according to Sebastian & Ajay (2007, p. 1), who claim that uncertainties, risks, and delays related to land acquisition, as well as protests and resistance from displaced persons, have become the most significant bottleneck for investments, particularly in the infrastructure sector. As a result, land acquisition has become a source of mobilization and protest in a number of nations.

(Le-Hoai, 2008), used data from eight countries to identify the factors that cause schedule and expense overruns. Some of the cost-related challenges are: Poor Finance management, Inflation, Scarcity of finance, poor project management system, high cost of ROW compensation, and delay of compensation (for ROW), and others are mentioned. The challenges of schedule-related factors are inadequate early planning of the project, poor project management assistance, very loose coordination and integration among stakeholders, Design change / Variation order, Transportation and logistics problems, and environmental factors are mentioned as the main challenges of construction projects performance.

In this sense, According to reports, the delivery method and procedures used in the Ethiopian road construction industry are very inefficient. one of the main cause for this problem is right-of-way acquisition challenges (ERA, 2019). This bad effectiveness affect the country‟s resources, as it means, with others, allocation of additional resources required

to implement the projects, a necessity to maintain infrastructure before their due period and not delivering the intended purpose the projects are incepted for.

According to (Shambel G., 2018), in their study paper, mentioned; within 10 completed rod construction projects in Addis Ababa identified cost and time overrun was at least 25 percent and the maximum overrun was more than 264 percent. Related to that as (Worku K., 2016), in Addis Ababa Road construction projects identified only 8 percent of the road construction projects are completed as their schedule the remaining 92 percent of the projects get difficult to finish as a planned. And according to the above authors, 100 percent of the projects face difficulties to finish on their planned cost. .

In the same way (Assefa, 2015) identified in his study 20.66% to 500% of delays in 15 Ethiopian road construction projects. One of the primary reasons projects poor performances in the aforementioned studies have been delay in right-of-way acquisition-related issues.

It has been proven by FHWA (2012) that land acquisition must be completed in the early stages of a project since it will determine the success and the efficiency of the project. Normally, in roadwork projects undertaken by Addis Ababa city road authority, the main problem is acquiring the land from the landowner. Therefore, the Government needs to put in more effort in handling the issues which may arise in the process of land acquisition. Otherwise, it may affect the performance of the project in term of time, cost and quality. In roadwork projects undertaken by Addis Ababa city road authority, land acquisition issues prolong the project, causing an increase in cost as the material price escalates and the Contractor claims for additional expenses. Therefore, land acquisition process for road work projects undertaken by sub cities requires serious attention. The land acquisition process is not new in Addis Ababa road projects, but what has been lacking is the methodologies that can help personnel assess the level of effectiveness in their land acquisition process

Amanuael Alemie (2019) The main cause for the problem related to RoW activity in Addis Ababa is they are not properly managed, there are different parcel and properties characteristics ,limitation of fund for compensation payment, shortage of land for relocation ,shortage of available replacement housing, political pressure, lack of proper planning and scheduling, lack of qualified professionals, communication problems between different

parties engaged in RoW activates ,people's reluctance to leave the place which lead the road projects to have poor performance . When it comes to road projects in the Lemi-Kura sub-city, majority of the projects are behind schedule or have not yet begun because of RoW activities.

Therefore, it appears that the problem of performance in road construction projects is critical and should be studied more,, this research was planned to assess the effect of right-of-way acquisition on performance of road projects of different area under lemi kura sub city and fill the gap of low performance of road projects by provides a better understanding and a clearer picture of the Land Acquisition challenges during the process of acquisition, by providing overviews of the resulting effects on performance of road project, provided with solutions and recommendations which hopefully prevent a recurrence of the issue at hand. The researcher aimed to minimize this gap and enable readers to choose the best strategy dealing with land acquisition matters.

1.4 Research Questions

The research questions that were addressed in this study are:

- What effect does Right-of-way acquisition have on road project performance?

The sub - questions were:

- What are the current practices for acquiring right-of-way?
- What level of performance have road projects achieved related to right-of-way acquisition?
- What is the relationship between the right-of-way acquisition and performance of road projects?

1.5 Objectives of the Study

1.5.1 General objective

The overall aim of the study is to assess the effect of right-of-way acquisition on performance of road projects in Lemi-Kura, Addis Ababa.

1.5.2. Specific Objective

specifically, the study will try to address the following key research objectives:

- To identify the current practices of Right-of-way acquisition.
- To assess the extent of the performance of road projects.
- To identify the relationship between the right-of-way acquisition and performance of road projects.

1.6 Significance of the study

The research is important in a number of ways. First, for its contribution to policy by providing strategic direction to governmental bodies and the Addis Ababa Road Authority, as well as a detailed assessment of the performance road projects related to right-of-way acquisition in Addis Ababa, as well as identifying serious challenges while carrying out activities and preparing them for corrective action, and disseminating those issues to policymakers during strategy and policy formulation.

Second, there are no plentiful local resources related to the influence of right-of-way acquisitions on road project performance, thus the purpose of this study is to add additional information on local issues related to right-of-way in road construction projects.

Finally, the findings of the study will be used in future research with the goal of extracting more information about the issues and motive to exploit new information about right-of-way acquisition and its impact on the performance of road projects in Addis Ababa.

1.7 Delimitation/Scope of the Study

The study focuses on the effect of right-of-way acquisition on performance of road projects in Lemi-Kura, Addis Ababa. The project study has limited scope in terms of time, methodology, concept and geography.

conceptual scope:- The study seek on related factors which has direct and indirect relationship to the acquisition process completion and the study plan to answer whether the performance of road projects affected by Participation of public in RoW acquisition process, Agency RoW acquisition capabilities, Quality of appraisal and acquisition process and Barriers of property management and relocation

Geographically :-It is not cover all parts of Ethiopia due to time, cost, and addressability; so, the study will be limited to AACRA (Addis Ababa City Road Authority) projects under Lemi-Kura sub city. The study area will be limited within five Addis Ababa City Road Authority Road construction projects

Timely :- In time perspective the study done by under consideration of only projects which are started from the year 2021 to present due to the fact that Lemi-kura Sub City is a young, two year old sub city.

Methodologically the study use census sampling because of there were small number of employees participated in each projects from different governmental organizations and there was small number of projects in Lemi kura sub city.

1.8 Organization of the Research Report

This research paper is organized in to five chapters. The first chapter contains introduction of the study which consists of background of the study, background of the organization, statement of the problem, research questions, and objective of the study, significance of the study, scope and limitation of the study and organization of the paper. Chapter two contains assessment of different literatures both on the area which discusses various theories and concepts on right-of-way acquisitions related empirical reviews and the conceptual framework of the study. In chapter three the research methodology, design, approaches and sampling techniques and target population was detailed. Then, chapter four present all the collected data in a clear manner and the analysis accordingly. And finally, the last chapter is about conclusion and recommendation.

1.9 Definition of Terms

These terms are selected in order to establish the ground work for the follow-up discussion. The following are the definitions applicable to this research:

Right-of-way (RoW):- It is a general term referring to land, property, or interest acquired for or devoted to a transportation facility. Right-of-way is the entire width of land between the property lines on either side of a highway (TxDOT,2012).

Right-of-way (ROW) acquisition:-It is the act of taking the land from its original owner by another party, with legal rights to take the real property, by providing a monetary compensation for the value of the property (Francis 2009).

Right-of-way planning: -It is the first phase of the ROW acquisition process and mainly involves environmental assessments, location and design studies, and public involvement activities. (David,2016).

Appraisal: - It is the process of determining a certified estimate of the market value of the land or property, or the amount of damage owed to the owner. Obtaining the right-of-way (ROW) at a reasonable cost and at fair market value is an important part of establishing the project cost for highway and transportation projects (Aleithawe 2010).

Relocation:- It is the displacement of individuals, families, businesses, farms, and nonprofit organizations, the agency needs to conduct a proper analysis of all proposed acquisitions in the relocation planning(MnDOT 2015).

Property Management:-It is demolishing, selling or moving Depending on the condition and movability of the structures in the right-of-way parcel (Caldas et al. 2006).

Parcel(s):- A piece of land that the state agency needs to acquire for a public project (Caldas et al. 2006).

Market Value: - The compensation of the value derived from market sales that have sold in the area of the project or parcel (Aleithawe 2010).

Compensation Payment: - It is cash or other assets given in exchange for the taking of land and buildings, in whole or in part, and all fixed assets on the land and buildings (e.g. fences, crops). There are two types: land compensation and asset compensation. (David, 2016).

Project performance: - performance refers to the quality of a construction site's operation as well as the site's overall success (Rodolfo, 2018).

Project success:-It is a project that meets its objectives under budget and under schedule. This evaluation criterion has remained as the most common measure in many industries (Rodolfo, 2018).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section covers review of literature from different scholars and authors that have been reviewed in the area of process and procedures for acquiring right-of-way, challenges related to ROW acquisition, and Relationship between Road Project performance and Right-of-Way Acquisition. It deals with theoretical, empirical, and conceptual findings of various researchers concepts. It deals with the review of related literature gathered from different secondary sources such as published books, articles and related websites. In this regard, efforts were exerted to include as much significantly related literatures as possible by reviewing available documents that exhibits points, targeting at the attainment of the research objectives.

2.2 Theoretical literature review

2.2.1 Right-of-Way Acquisition Process

The process of developing a road project includes acquiring ROW. The process of acquiring a right-of-way (ROW) begins with the gathering of information such as project plans, preliminary ROW and utility evaluations, identifying the owners of the relevant properties, survey maps, and so on. Right-of-way acquisition is the first step before commencing a project. The Sub City Project Office takes the authorized RoW assignment from the Addis Ababa City Road Authority and/or the City Government Land Development and Renewal Agency. Ensure that the papers meet the relevant standards before receiving them from the Sub City Agency (Land Development Renewal Agency [LDRA], 2016).

The Addis Ababa city administration and the relevant plan commission are tasked with determining the location of the needed land and providing suitable justification to the society regarding the project's description and advantages to the society. In general, acquisition is driven by the Addis Ababa city government's plan commission and led by the city's approved LDP, and the project gains suitable public and stakeholder awareness of the project's benefits and projected performance requirements as the project progresses. When seeking acquisition documentation from the agency, you must first complete the following

requirements (LDRA, 2016). These included the project name, project area and land use, project money, hard copy and soft copy project plans, City governance committee decision, and other significant decisions. Unless acquisition needs permission from Agency City Government General Manager of the Agency by referring the importance of the acquisition and advantages to the public at large, the agencies accept requests and make registration early April 15 before the end of the fiscal year. Finally, in both scenarios, the agency organizes itself, collects all of the necessary documents, and creates a new folder for the acquisition program (Land Development Renewal Agency [LDRO], 2015).

According to the Right-of-way Manual (MnDOT 2015), the Minnesota Department of Transportation (MnDOT) divides ROW acquisition activities into six categories:

- Pre-Acquisition
- Appraisal
- Acquisition
- Relocation Assistance Program
- Property Management
- Special Procedures

2.2.1.1 Pre-acquisition

The first phase in the ROW acquisition process is pre-acquisition. Gathering information regarding the titles, performing a survey and field investigation, formulating a ROW acquisition strategy, and authorizing the acquisition is all part of this process. Because each state is responsible for developing a long-range transportation plan and allocates funds for transportation projects through the Statewide Transportation Improvement Program, the pre-acquisition process begins with the original program formulation (STIP). All regionally relevant transportation projects must be included in the STIP, which includes a prioritized list of projects for at least the next three years, as well as projects designated for federal aid monies (FHWA 2009).

Public involvement is as critical as the environmental assessment during the planning phase. The purpose of initial public involvement is to notify a community of the agency's intentions and to communicate the necessity of a project. Moreover, in public forums, the

people of affected communities can learn about a project's possible social and environmental impacts, and they can voice their opinions on the project and on the RoW acquisition process. There are several avenues for such communication with the public: public meetings, newspaper, television advertisements, and letters. However, the degree of public participation can vary depending on the complexity or size of a project and its impact on a community (Doris et al., 2006).

In the Netherlands, project teams are wholly charged with a project from planning to construction. In Germany, ROW and utilities are considered at the planning stage and treated as a critical path element of the project. In England, a coordination facilitation framework is utilized that defines and documents the roles and responsibilities of each team member.

The first stage of acquisition is acquisition initiation, which is a general stage of the acquisition process that focuses on scanning the micro and macro environments of a project, such as economic, legal, political, technological, and cultural factors, and is followed by acquisition planning, which is the stage where necessary acquisition variables are identified and the 5 w's questions (What/where/why/how/when) to acquire are answered. The acquisition process is then characterized by the stage when the theoretical suggested plan is laid out on the ground, as well as the start of acquisition activities. Finally, there comes the acquisition procedure, which is followed by completion and delivery. The agency conducted actions in this step, including obtaining the parcel directly from the owner and delivering it to AACRA for the proposed road construction project (LDRA, 2016).

Acquisition planning is a part of the acquisition lifecycle that takes place before and after the acquisition, and it includes the tasks listed below. Plan and information gathering, agreement and resource preparation, contractual agreement signing, communication and participation with owners, and appraisal and relocation information collecting are among them. Plan and information collection focuses on coordinating overall acquisition efforts by addressing the five Ws questions: what to acquire, when to acquire, and how to get relevant data from both internal and external sources. Internal information was acquired from the company's manuals, reports, procedures, and organizational process asset. Information acquired from

outside the company might also be utilized as an external source. For example, Woreda administration, the Land Tenure Office for parcel rights, and other parties who are affected by the acquisition directly or indirectly. The following is the most important data gathered during this period. These include preparing a master plan and action plan, cross-checking the acquisition plan with the ground, assessing and evaluating the property type and amount observed, and classifying property evaluations. Collect appraisal and relocation information is the final step in the acquisition planning process. Focusing on basic data will help you develop more detailed appraisal and relocation information later (LDRA, 2016).

2.2.1.2 Appraisal

The appraisal phase, also known as valuation, is the process of determining a certified estimate of the market value of the land or property, or the amount of damage owed to the owner. Obtaining the right-of-way (ROW) at a reasonable cost and at fair market value is an important part of establishing the project cost for highway and transportation projects (Aleithawe 2010). Licensed staff appraisers (internal) or licensed fee appraisers (outsourced) should make the estimate (MnDOT 2015). If a land is donated or the planned acquisition is simple and low-valued, the appraisal may be waived (Caldas et al. 2006).During this phase, valuation of properties, field inspection, review of recent sales of properties in the neighboring areas, preparation of the valuation report, and review of the appraisal according to the state rules and regulations are performed by appraisers.

Following the planning phase, the acquisition life cycle entails planning, identifying characteristics that require additional information, acquiring GIS and CIS information about the acquisition area, preparing an information collection schedule and communicating with the owners, opening appraisal documents for each individual, and cross-checking information collected from the owner with government documentation for verification. Gather relevant information for appraisal and engage planning, invite assigned community agent while appraisal officers collect property related information, photos, and video, start office appraisal activities, picture printing, and suitable paperwork and reporting.

Extensive interviews with property owners to discuss the project's impacts and potential gains and the property itself could contribute to a better appraisal. The Arkansas, Illinois,

and Texas DOTs let the property owners or the owners' designated representatives accompany the appraiser during the inspection of the parcels. This enables the owners to provide more information, establishes a good relationship and trust between the agency and property owners, and can eventually increase the likelihood of better valuations and successful negotiations (Caldas et al. 2006)

Appraisal officer completes activities and submits compiled document to higher level approval to ensure that activities are carried out in accordance with the organization's standard, rules, and regulations. This includes ensuring that activities are carried out in accordance with the organization's standard, rules, and regulations, as well as determining whether the appraisal followed the appropriate procedure or not, piloting measured items and obtaining verification from community agents, checking competence and consistency, and comparing pilot results to the final result (LDRA, 2016)

2.2.1.3 Acquisition

Acquisition is the next phase. The real estate or property right is often acquired through direct purchase talks between the project owner (DOT, counties, and cities) and the property owner, similar to a traditional real estate transaction. The acquisition agency makes an initial offer to the property owner based on the assessment results. To reduce unnecessary litigation and expenses while speeding up the acquisition process, the agency should make a good faith effort to settle in direct purchase negotiations rather than eminent domain procedures (MnDOT 2015). The agency's offer could be revised in cases where a compensable item has been overlooked or where it is administratively determined that an adjustment is in the Best interest of the agency prior to commencement of an eminent domain action. This revised offer is called a last written offer.

The most essential milestone in the acquisition process is information compilation, which occurs before the agency begins paying the owner. This allows the agency to ensure that the owner is free of any restrictions, such as legal rights to the property, bank debt, and claims. Legal right to property, bill compensation amount, digitalized owner related information appropriately, convert digitalized information to CD, and include in separate owner file are all part of the information compilation process. The agency then assesses the owner's ability

to receive compensation and begins to pay compensation, which includes establishing an operational plan, ensuring the availability of liquid cash, disclosing the payment period and notifying the woreda administration leaders of the implementation, payment, filing payment copies and storing computerized data base system, compiling appraisal-related information with soft copies and transferring to the documentation office for permanent storage, and preparing an operational report and transfer (LDRA, 2016).

2.2.1.4 Relocation Assistance Program

If ROW acquisition requires the displacement of individuals, families, businesses, farms, and nonprofit organizations, the agency needs to conduct a proper analysis of all proposed acquisitions in the relocation planning. The agency should analyze the detailed relocation plan, the associated cost estimate, and the lead time estimate to provide adequate relocation services. According to The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (The Uniform Act or URA), any eligible displaced person must be informed of relocation at least 90 days in advance with a written notice (90 day notice) and must receive advisory services (pertinent information, counseling, and advice) and payments such as moving and related expenses. The relocation payment differs by the type of property owner or resident, whether residential home owner, residential tenant, residential occupant, qualifying business, farm, or non-profit organization.

2.2.1.5 Property Management

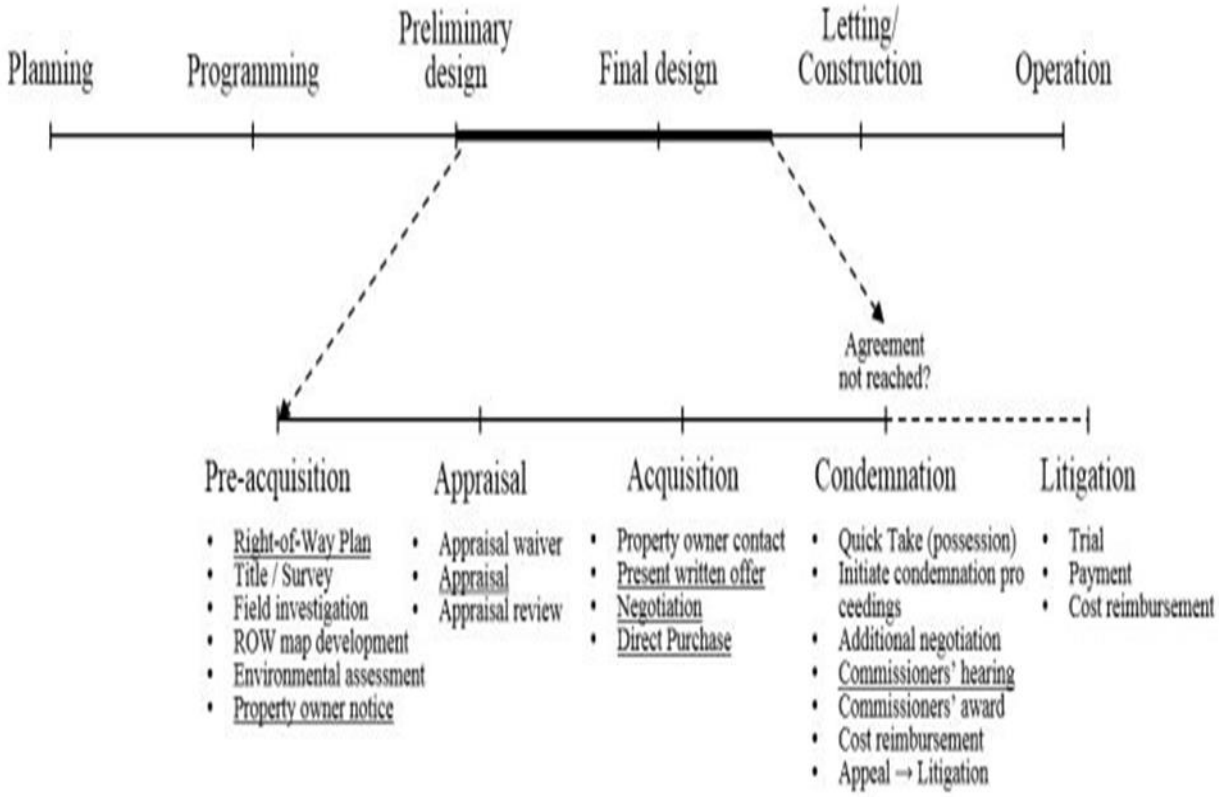
Buildings may be included in the agency's property acquisitions (including houses). Rather of being demolished, some of the structures can be sold and moved. Depending on the condition and movability of the structures, the agency may benefit from the sale and retain a considerable percentage of its investment. However, because this process might take a long time and produce severe timetable delays (Caldas et al. 2006), agencies will need advanced time management, marketing, and finance skills. If a structure needs to be demolished or relocated, the agency may use a separate letting to clear the new ROW area before awarding the prime contract for construction.016).The agency should then prepare a building removal status report, which deals with the building and related items such as water wells, underground tanks, or any miscellaneous structure to be removed (MnDOT 2006).

Another milestone in the acquisition process is demolishing according to the design, which entails planning, acquiring a zone and number, starting the marketing process to sell the property, opening a competitive bid to sell the property, giving the owner first priority and involving MSME, following the appropriate bidding process, disclosing the qualified bidder to the public, and payment, and the qualified bidder is responsible for displacing the property according to the contract. Unless and until the personnel is given a training program to improve their performance and a final assessment report is prepared. Following the demolition activities, displacing infrastructure structure lines includes appropriate planning, selecting infrastructure lines ready for displacing, disclosing a notice to AAWSA about the acquisition project and time plan for measuring cost incurred for executed lines before receiving a reimbursable from the agency, payment based on the report of payment bill received from AAWSA, and displacing infrastructure lines properly. Finally, it is necessary to cart away any unnecessary debris from the site, which includes the following activities: measuring the amount of caraway, opening bids for caraway activity, monitoring the bidding process, disclosing and selecting bidders, establishing a contract and starting work, monitoring and evaluation, clearing the site of debris, payment, and finally, preparing an operational report (LDRA, 2016)

2.2.1.6 Special Procedures

Special procedures for cemetery sites, permits impacting public waters, custodial control transfer between state DOTs, ROW acquisition from local government agencies, property held by the US, gifts, and other items are included in the final step of ROW acquisition. Due to the peculiarities of ownership and the acquisition manner, parcels in these categories require a different ROW acquisition process. This chapter does not go into depth about each special procedure; instead, the Right-of-way Manual has such information (MnDOT 2015).

Figure 2.1 Right-of-Way Acquisition Process



Source; David Jeong, Research Project Final Report 2016-28

2.2.2 Barriers to the ROW acquisition process

Barriers related to ROW acquisition process are discussed below:

Lack of coordination and sequential hand-off environment among project teams: studies (Cambridge Systematics 2006, Moeller et al. 2002, Kockelman et al. 2004) emphasized that all teams and even the public should be involved at the early project planning stage so that the agency can determine the design alignments that are likely to be problematic when acquiring private properties, thus helping avoid potential litigation in advance.

Lack of appraisers' knowledge, skills, and experience: The professional competency of appraisers is the key to developing proper appraisals of the properties under consideration. The competency of an appraiser encompasses the knowledge, skills, and experience of property appraisal. An appraiser's incompetence may result in incomplete appraisals due to

mistakes such as the omission of items, incorrect zoning, miscalculations, poor judgment, etc. The result would be inaccurate appraisals and rework David Jeong(2016).

Lack of ROW staff's experience: The level of experience of ROW staff plays a key role in successfully acquiring properties and is important for managing and administering some of the critical ROW acquisition activities. The staff should be able to understand and interpret the property owners' concerns and other stakeholders' issues and effectively handle them during the ROW acquisition process David Jeong(2016).

Property owners' distrust of agency and/or appraisal: According to David Jeong(2016) It is not uncommon to find property owners who believe that the acquiring agency would not present an offer at a fair market value and just compensation. This group of property owners often refuses to communicate with the ROW agents or agency appraisers. Some property owners simply distrust any information from the acquiring agency and believe that only a condemnation can result in just compensation. Some others may simply be interested in maximizing their compensation, and the condemnation is their leveraging tool to accomplish this goal.

Less communication between the agency and the public, including property owners: ROW staff sometimes faces difficulty in communicating with property owners. Poor communication usually results in incomplete information to develop the agency's appraisal, insufficient opportunities for negotiation with the property owners, and lack of good faith in ROW acquisition efforts (FHWA 2014).

Limited information provision to the public (e.g., price disclosure): The provision of sufficient information to property owners is a critical component for increasing operational efficiency and reducing the time for ROW acquisition (Aleithawe 2013). If important information such as real estate price and appraisal estimate is not readily available, this lack of information typically leads to delays and additional costs.

Absence of motivation for property owners to settle early: Under the current system, property owners do not have motivation to accept the agency's offer early because there is no incentive for them. Some owners strongly believe that they can get more compensation if

they reject the agency's offer and go to the condemnation. Accordingly, it is necessary to provide incentives to increase the owner's motivation to settle early. For example, VDOT tested a pilot project in which an incentive payment was offered in addition to the relocation payment based on an early move date, and VDOT was able to accomplish significant schedule reductions (FHWA 2014).

ROW plan changes and revisions: If the ROW plan is changed or revised for some reason, such as an engineering design change or ROW acquisition issues, the ROW staff must incorporate those changes into the ROW acquisition process, which typically results in a delay of the agency's internal work(FHWA 2014).

Limited access to the property due to the resistance of the property owners: This barrier is also related to the relationship with property owners and the property owners' attitudes toward the agency. When an agency's appraiser is visiting and investigating a private property for the agency's appraisal, some uncooperative property owners do not provide sufficient information about the property and even block the agency's appraiser from entering the property. (Aleithawe 2013)Such limited access may cause an incomplete appraisal, ROW acquisition delay, rework, and, in the worst case scenario, a condemnation case.

Parcel Characteristics:-Heiner and Kockelman (2010) analyzed the historical ROW acquisition project data from Texas corridors using regression analysis and found that land use types, location variables, improvements, and variables associated with damages are significant in estimating the ROW acquisition cost.

Problem related to compensation Payment: Payment of compensation is one of the activities of land acquisition. However, Viitanen et al. (2010), identified four common problems related to compensation of the affected peoples. The first one is 'on the ability to define the level of compensation caused by price tension, where the law requires the valuation to be based on pre-acquisition land uses.' The main reason behind this problem is that the amount of compensation is not sufficient to replace the original dispossessed property. The second problem is associated with 'pricing where governments set values rather than values are set by the market' (Mahalingam & Vyas, 2011). The third problem is that 'the land

rights claimed by owners and occupants may be unregistered, and may not be entitled legally for compensation as a result of land acquisition.' The fourth problem is due to lack of cooperation among land owners in their removal from their businesses and homes' (Viitanen et al., 2010).

2.2.3 Relationship between Road Project performance and Right-of-Way Acquisition

The success of a construction project may be measured using project performance. In a construction project, performance refers to the quality of a construction site's operation as well as the site's overall success (Salminen, 2005). Project success is monitored for a variety of purposes, including benchmarking, awarding, and monitoring whether the organization's plan is being implemented effectively at all levels (Sezer, 2016).

Performance is measured in several ways as time, cost, quality, client satisfaction; productivity and safety. Delays due to material shortages; lack of resources; lack of project leadership skills; escalation of material costs; lack of highly experienced and qualified staff; and poor quality of available equipment and raw materials are the most significant variables impacting project performance (Enhassi, 2009).

The 'iron triangle' was coined by Atkinson (2015) to describe these three aspects of project performance. Cost performance (Budget KPI), Scheduling performance (Timeliness KPI), Quality performance (Quality KPI), and Stakeholder satisfaction (Effectiveness KPI) are the four indications of project performance standards discovered through a review (Ahmed & Anantatmula 2017). For measuring project performance, the study employs four factors that have been discovered. Cost, time, quality, and client satisfaction are the four factors (effectiveness).

ROW acquisition is a critical component of a highway and transportation project development and is related to other project development activities. According to Noor Fazura Abu Samaan (2015) With regards to the impact of the land acquisition problems with the overall project performance, ten major impacts encompassed the problems in land acquisition, which are time overrun, cost overrun, loss and expense claim, disputes with neighboring owner, additional cost for rental of land, delay in the relocation of utility services, termination of contract, arbitration, litigation and total abandonment. From these

ten impacts, the most frequent occurrence is due to the time overrun, cost overrun and loss and expense claim.

(Le-Hoai, 2008), used data from eight countries to identify the factors that cause schedule and expense overruns. Some of the cost-related challenges are: Poor Finance management, Inflation, Scarcity of finance, poor project management system, high cost of ROW compensation, and delay of compensation (for ROW), and others are mentioned. The challenges of schedule-related factors are inadequate early planning of the project, poor project management assistance, very loose coordination and integration among stakeholders, Design change / Variation order, Transportation and logistics problems, and environmental factors are mentioned as the main challenges of construction projects performance.

Henock asrat(2015)The study has identified client, consultant, contractor and external environment related factors that that resulted on cost overrun. The important factors related to performance of the road include delay to deliver the site (right-of-way problem), award to list bidder, change in scope of the project, and delay to payment and finance problem.

Yishak Maeregu (2021) In the perspective of client's inflation, Delay of compensation (for ROW), and High traffic jam are the main three challenges for the low performance of road construction projects. in the consultant's perspective Delay of compensation (for ROW) is the number one challenge more than other challenges.

To improve the performance of road projects, it is imperative to identify significant factors affecting the costs and duration of ROW acquisition. Because ROW acquisition for highway projects involves many stakeholders (Le 2009), the interaction and communication between the parties not only between the agency and the property owners, but also between different divisions within the agency and between the parties and utilities are very important for successful ROW acquisition. The agency's management capability to deal with the ROW acquisition process and the characteristics of parcels are also significant for ROW acquisition. Many studies have identified the major factors that affect the cost of ROW acquisition.

An extensive review of prior studies revealed that the pre-acquisition, appraisal, and acquisition phases are sensitive and vulnerable to ROW cost increases and schedule delays which .can affect the performance of road projects Especially in the appraisal phase, the estimation of the property's market value or damage payable was found to contribute to time extensions. The acquisition phase also has a significant impact on ROW cost and schedule, especially due to the acquisition type, which is determined by the negotiation and communication with the property owners David Jeong (2016)

2.3 Empirical Literature Review

Many contractors in developing countries and others do not take care at the beginning of the projects of compensating for individual properties, but the major problem is the right-of-way or legal right to private or public property. Cities in developing countries must adopt policies and strategies to address legal property rights to solve problems and maintain things running smoothly (Bingham, 2010).

According to a research conducted by the Federal Highway Administration (FHWA), the timing of property owners' engagement in the design process, as well as the frequency of agency interaction with them can have a significant influence on successful acquisition. The establishment of this link might lead to more prompt acquisitions and less damage to the impacted homes. Similarly, conducting in-depth interviews with property owners allows agents to have a better knowledge of how they utilize the property and assists them in developing a detailed estimate of appropriate compensation, both of which aid discussions with property owners (FHWA, 2014). Several successful tactics for ROW valuations and negotiations were found in this paper on current ROW practices in Europe. Early property owner engagement in the planning phase, assigning the same individual to function as appraiser and negotiator, and passing specific laws are examples of these methods. In addition, several trials including the use of incentive payments and the widening of conflict-of-interest rules that enable the same individual evaluating a property to also bargain for it are underway in various U.S. states (FHWA, 2014).

The AASHTO Publication discusses a variety of issues encountered throughout the negotiation process (2003). They are as follows:

- Materials provided to property owners are insufficient or too hard to understand; Property owners have confusion about the project, the design, the impact of the property after acquisition, and damages;
- Property owners often do not believe the negotiators are making every effort to reach a Reasonable valuation of the property; and
- Property owners feel the agency is hiding something from potential sellers by furthering or fostering negotiation efforts.

Carlos et.al (2006) states valuation is one of the initial steps in the process of acquiring a particular property. Its success depends on many aspects, such as quality of appraisers and appraisal reviewers, property owner involvement, and cost/time efficiency. For a successful valuation process, a number of guidelines and best practices are outlined. These were regularly train, monitor and guide appraisal, fee appraisal and approval through offer opportunity for the appraisal team and approval periodical lesson and training about acquisition method, rules and procedure. Those individual attending the training program has dramatically increasing right-of-way performance and make large number of acquisition activities. The other recommendation is facilitating refreshing periodical course or ongoing developmental program helps to appraisal team, fee appraisal and appraisal reviewer to sharpening interest and improve proficiency. In addition assigning experienced appraisal to complex acquisition if project is complex it is possible to let acquisition activity to more experienced employees. Purpose of this practice is to reduce error during complicated situation.

According to Carlos et.al (2006) also investigate on collaboration of owner early of the acquisition process contains contact owner in person early in acquisition process increase the chance of better valuation and negotiation by opening face to face communication. And facilitating trust between the owner and appraisal and finally create a conducive environment for valuation and owner agree on the valuation

(Assefa, 2015), identified in his study mentioned some factors of road construction projects which are related to the client's side are the delay of clearing the project site from the claim of property right, the financial problem of client or owners, lack of coordination with other

public utility or infrastructure providers, contract change or recodification are considered as client's responsibility.

The ROW problem in Addis Ababa city road building projects is connected to land acquisition issues from the community for the purpose of infrastructure development and utility moving. The land required for these projects includes land for road construction, which includes appropriate ROW in accordance with Addis Ababa city master plan standards, as well as land that will be used by contractors as local material sources, such as quarry sites, spoil areas, and temporary land for material stock piling, pre-casting yards, warehouses, workshops, parking lots, and so on. ROW obstacles are one of the most common concerns impeding road building in urban areas unless immediate action is taken, AACRA (2012).

According to City Government LDRO, (2014) report states that problem arises from all projects were fail and finally setback the start of road project and these are caused by political commitment, state instability, budget shortage, qualified professional and commitments, poor employee motivation, management leadership style, failure of BPR/business process reengineering, kayizen, other reform activities, absence of required material for the tasks, absence of trust among parties involved in Acquisition Activity, poor integration and communication among responsible parties of acquisition for instance integration between the community representative with agency, the same is true poor relationship between the Agency and AARA, parcel characteristics, the larger the problem in the Agency facilitating the existence of cases leads to eminent domain and condemnation.

People's participation in Addis Ababa's compensation process has lately been proven to be limited. People felt cheated of their rights and saw the compensation as insufficient for their losses due to their limited participation in the acquisition and compensation process. The affected community also claimed that their living conditions worsened as a result of the acquisition, citing challenges such as family discord over the distribution of compensation awards, traffic, dust from partial demolition of the habitable house, loss of business customers and profits, difficulty in finding new housing, and 'other damages,' specifically 'injurious affection,' for which compensation is required. complaints to the authorities

responsible for paying compensation, access difficulties, insecurity for example demolition of the frontages and security walls of some houses rendered them open, inflation on cost of building materials, unduly delayed compensation payments and delay in undertaking the road construction as some affected persons prevented the demolishing team from pulling down their structures because their compensations were yet to be paid Amanuael Alemie (2019).

2.4 Conceptual Framework

The study will concentrate on the key acquisition-related aspects that have a direct and indirect impact on the road project performance. The study will introduce a conceptual framework that investigates the relationship right-of-way acquisition process and performance of road project. In more detail, the conceptual framework of the study will examines causal relationships between four research variables (constructs):

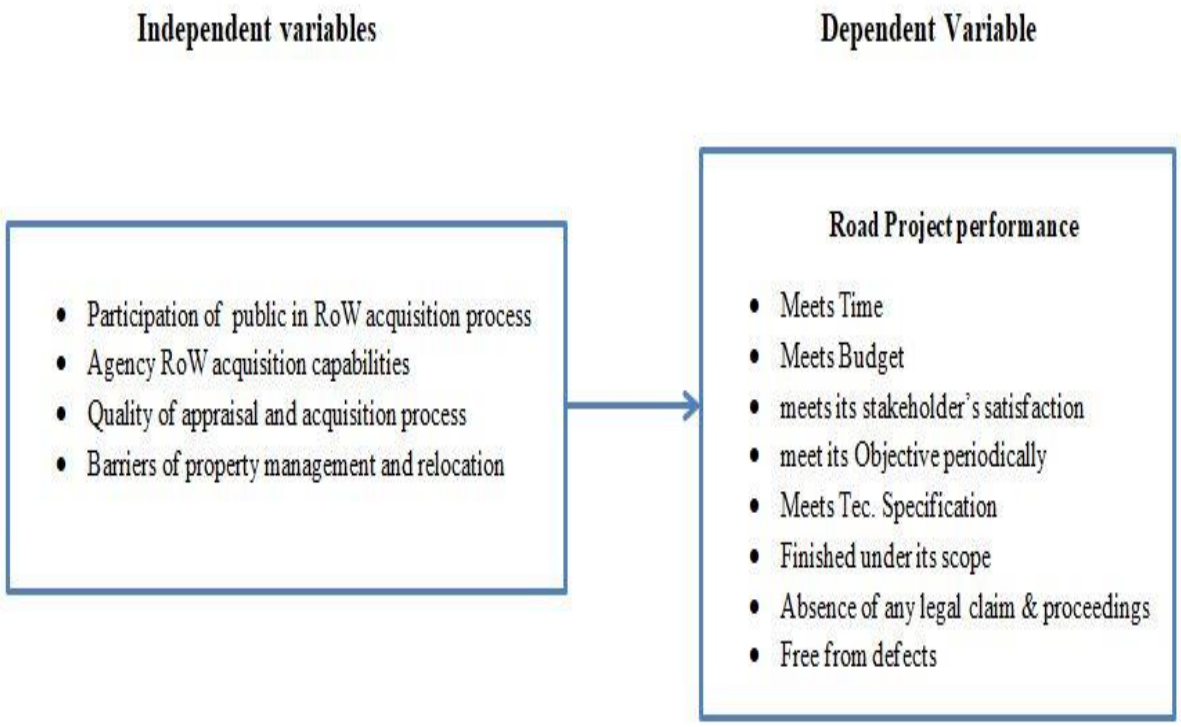


Figure 2.2 conceptual framework

Source; self-develop from literature review, 202

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter discusses procedures and activities undertaken, focusing on the study's research design, Research Approach, data collection methods, instrument of data collection, targeted population, sampling strategy, sample size, Data Analysis and presentation Methods, Data cleaning methods, Data editing and coding and Validity and Reliability of Instruments Besides, the section deals with a discussion on the ethical issues followed while conducting the study.

3.2 Research Design

The study adopts both descriptive & explanatory research method. Descriptive research involves gathering data that describe events and then organizes, tabulates, depicts, and describes the data collection. It often uses visual aid such as graphs and charts to aid the reader in understanding the data distribution (Hopkins, 2001) the study is descriptive because it attempts to describe and determine the current practices and procedures of ROW acquisition practices,

Explanatory research is a research method that explores why something occurs when limited information is available. It can help you increase your understanding of a given topic, ascertain how or why a particular phenomenon is occurring, and predict future occurrences The study is It is partly explanatory because it emphasizes to explain the association between RoW acquisition and project performance.

3.3 Research Approach

The study is quantitative in its approach. Quantitative research is a research strategy that focuses on quantifying data collection and analysis of data. Quantitative research approach also allows the researcher in order to use objective measurement, to quantifying the relationships between variables. According to prithabhandari (June 2020); the quantitative data research relies on the measurement and analysis of statistical data to produce quantifiable conclusions. Therefore, for this study quantitative research approach is used to

quantify the existing situation of Right-of-way acquisition and its effect on road project performance.

3.4 Target Population

Addis Ababa city administered by city government, sub city government & Woreda administration when move from top to down and acquisition operation mandated by City Government Land Development and Renewal Agency. Furthermore, Addis Ababa is divided into ten sub-cities, with each sub-city Land Development and Renewal Office reporting to the cities higher-level Land Development and Renewal Agency (Agency & Manual, 2016).

Based on the research objective, the population for this study was set to be Right-of-way acquisition department of the above governmental organizations. For the successful right-of-way acquisition almost all member of the organizations are responsible since they are involved directly or indirectly in the process. But due to limited number of projects in lemikura sub city the sample was limited to five ongoing and finished Road construction projects in Lemi-Kura those were Yeka tafo condominium road project,Beshale 40/60 asphalt road project,Arabesa lot 1 and 2 road projects Bole ayat 140/60 road project and summit-goro road project.

3.5 Sampling method

The study adopts Census sampling method. According to Kothari (2004) Census inquiry needs to be emphasized that when the universe is a small one, it is no use resorting to a sample survey. Census is a complete enumeration of all items in the 'population'. It can be presumed that in such an inquiry, when all items are covered, no element of chance is left and highest accuracy is obtained. Using Census was appropriate because there were small number of employees participated in each projects from different governmental organizations and there was small number of projects in lemi kura sub city. In addition it enabled the highest accuracy on the finding of the study. Therefore all of the target population addressed for information inquiry on the subject under study.

3.6 Sample size

The optimum size of 67 respondents is taken from the above mentioned organizations in order to managing the study. Even though the projects were constructed by Addis Ababa

City Road Authority projects, the targeted population includes 6 employees from the City Government Land Development and Renewal Agency, 30 employees from the sub-city Land Development and Renewal Office, 19 employees from Woreda administration who participated in the acquisition operation and 12 members of the Addis Ababa city road authority project team.

3.7 Method and Sources of Data Collection

The research use primary data collection. The primary data source gathered from employee working in Addis Ababa city road authority, Land Development and Renewal Agency, sub-citiy land Development and Renewal Office and Woreda administration that were participated in right-of-way acquisition process using five point Likert Scale Questionnaires. Questionnaires were developed and distribute to employees' to gather information in order to assess the current practices of Right-of-way acquisition and its effects on the performance of road projects

The questionnaires were comprised of three parts. Part one was prepared just to gather information about the respondents' such as, gender, education, and the length of time the employee has been working on the project.

In part two of the questionnaires, respondents were asked the degree of their agreement and disagreement on the questions related to independent variables including participation of the public in the RoW acquisition practice, Agency internal capabilities for RoW acquisition process, Quality of appraisal and acquisition in RoW acquisition process and barriers of property management and relocation .For each question of the questionnaire a number indicating 1, 2, 3, 4 and 5 were assigned and measured as Strongly Disagree, Disagree, neutral, agree and strongly respectively

In part three of the questionnaires, respondents were asked the degree of their agreement and disagreement on the questions related to dependent variable which is performance of road projects For each question of the questionnaire a number indicating 1, 2, 3, 4 and 5 were assigned and measured as Strongly Disagree, Disagree, neutral, agree and strongly respectively

On the other hand, another primary data sources are gathered in different techniques. This includes observation, and discussion (creating conversation in the concerned officials).

3.8 Data Analysis and presentation Methods

The data, after collection, must be processed and analyzed in order to get findings. Depending upon the nature of the problem the study used quantitative analysis. For the quantitative (numerical) response of descriptive statistics concerned the practice of right-of-way acquisition percentage, frequency, measures of and central tendency were used and tables were used to summarize the responses.

Inferential analysis such as correlation and regression analysis was used to assess the relationship between each independent variable with the dependent variable and the aggregate effect, using SPSS (Statistical Package for Social Science) version 26.

Correlation analysis was to conducted relationship between the performance of road projects, participation of the public in the RoW acquisition practice, agency internal capabilities for RoW acquisition process, Quality of appraisal and acquisition in RoW acquisition process and barriers of property management and relocation. The study adopt Pearson's coefficient of correlation .The bivariate analysis Pearson's coefficient of correlation, abbreviated as r, is a measure of the degree of association between two variables. Essentially, a Pearson product-moment correlation attempts to draw a line of best fit through the data of two variables, and the Pearson correlation coefficient was used to investigate the relationship between variables. The Pearson correlation coefficient, r, indicates how far away all of these data points are from this line of best fit (how well the data points fit this new model/line of best fit). The Pearson correlation coefficient, r, can be anything between +1 and -1. A value of 0 implies that the two variables have no relationship (B.Burns & R.Burns 2008,).

The Pearson correlation coefficient, r, can be anything between +1 and -1. A value of 0 implies that the two variables have no relationship (B.Burns & R.Burns 2008,). The magnitude of the correlation coefficient (r) can be interpreted as follows: If the correlation coefficient is between 0.1 and 0.20, it is a minor correlation; if it is between 0.20 and 0.40, it is a weak relationship; if it is between 0.40 and 0.70, it is moderate; if it is between 0.70 and

0.90, it is a significant relationship; and if it is between 0.90 and 1.00, it is a very high correlation or very strong correlation between variables (B.Burns & R.Burns 2008,)

Regression analysis was made to determine by what extent right-of-way acquisition affect the performance of road projects. Tools like tables and percentage were also used. For the sake of reducing possibility of getting wrong answers and to ensure the soundness of this study, the following measures were taken.

1. Data was carefully collected from trustworthy sources, from respondents who have worked on RoW acquisition.
2. The questionnaire was based on literature review
3. The latest SPSS software version was employed to analyze the statistical data and maximum was made during data coding.

3.9 Data editing and coding

Following data collection from employees from four government organizations and from five road construction projects in lemikura sub city editing of the data was undertaken in order to check the omission, completeness, and consistence of the data. There were two missing data in the study.Coding was used to allocate numbers to each answer and facilitates the transfer of data from the questionnaire to SPSS.In this study, the coding procedure was conducted by establishing a data file in SPSS version 26, and all measurement items were all pre-coded with numbers (see survey questionnaire in Appendix 1).

3.10 Data cleaning methods

Data cleaning helps the study to assess the impact of missing data, find outliers, and evaluate the assumptions that most multivariate algorithms are based on. The goal of these data evaluation procedures is to eliminate any possibility of biasing the results. Statistical Package software for Social Sciences version 26 was used to analyze the data.

3.10.1Outliers and normality

Because correlation analysis and regression analysis used in this study and both need variables to be normally distributed, the data were evaluated to determine normality of distribution. The normality of the distribution of variables to be employed in the analysis

was examined (Hair et al. 2006,).. The normality was measured by two indicators skewness and kurtosis. Skewness assesses whether the distribution of responses are heavily concentrated on one end of the scale. The actual deviation from the normality of distribution was determined using skewness and kurtosis. Skewness refers to the "measure of symmetry of a distribution; in most instances the comparison is made to a normal distribution," and Kurtosis refers to the "measure of the peakedness or flatness of distribution when compared with a normal distribution" (Hair et al., 2006,).

Because all variables in this study are based on Likert-type scales, there was no reason to eliminate variables based on skewness. Kurtosis is another measure, compared with normal distribution, to check if the distribution is flat or peaked. Both data that are tightly distributed or distantly distributed around the mean have kurtosis issues.

Table 3 .1 Skewness and kurtosis result

Statistics						
		Participation of public in RoW acquisition process	Agency RoW acquisition capabilities	Quality of appraisal and acquisition process	Barriers of property management and relocation	performance of road projects
N	Valid	65	65	65	65	65
	Missing	2	2	2	2	2
Skewness		.408	.609	.485	-.190	.589
Std. Error of Skewness		.297	.297	.297	.297	.297
Kurtosis		-.573	.087	-.027	-.899	.329
Std. Error of Kurtosis		.586	.586	.586	.586	.586

Source: Survey study (2022)

To determine the seriousness of skewness and kurtosis of the distribution, Fishers skewness and kurtosis coefficient can be used (kellar and kelvain 2012, p.56). If the results fall between -1.96 and 1.96, it suggests that the distribution is not significantly different from normal distribution (kellar and kelvain 2012). Table 3.1 showed that, the Fishers skewness and kurtosis coefficient of the study were lies between -1.96 and 1.96 and therefore the data

were free from any skewness and kurtosis issues. A variable with an absolute value of Kurtosis index greater than 10.0 indicates there is a problem with normality and values greater than 20.0 indicate a more serious normality problem (Kline 2005). Therefore, the acceptable absolute value of skewness and kurtosis should not exceed three and ten respectively and the study results were also in the acceptable range

3.11 Validity and Reliability of Instruments

To ensure the quality of the research and make it credible for the project management community, the researcher gave due care to both validity and reliability issues of the data, the research process in general as well as the research output.

3.11.1 Validity

Validity defined as the extent to which data collection method or methods accurately measure what they were intended to measure (Sounders et. al., 2003). Validity is concerned with whether the findings are really about what they appear to be about. The researcher used different source of data form literature, questionnaire, observation and document review to triangulate the data. The need for triangulation arises from the ethical need to confirm the validity of the processes involved. On the other hand the validity of the questionnaire was done through consultations with the advisor in order to establish any built-in errors in the measurement of the questionnaire.

3.11.2 Reliability

Reliability refers to the lack of random error, which allows succeeding researchers to reach the same conclusions if they repeat the same processes (Yin, 2003). A five-scale system (Likert scale) questionnaire was employed to boost the survey's dependability. When compared to a two-scale system, this scale has a better level of dependability (Hayes, 1992). The researcher used SPSS (Statistical Package for the Social Sciences) to conduct a Cornbach's alpha reliability test to ensure the questionnaire's dependability.

Table 3. 2 Cronbach's Alpha result

Reliability Statistics	
Cronbach's Alpha	N of Items
.804	31

Source: Survey study (2022)

The Cronbach's Alpha result of 31 items under dependent and independents variables was 80% and it has alpha value on acceptable reliability range.An alpha of 0.70 or more, according to Hair and colleagues (1992), is considered appropriate.

3.12 Ethical consideration

Maintaining strict ethical standards is still crucial and important during the research. To develop trust with the participants, privacy and confidentiality must be respected at all times. Information about each participant would be kept secret and private. Participants get a survey questionnaire, which includes a brief summary of the survey's objectives, benefits, and participant confidentially information. Respondents were not permitted to provide their identities in the questionnaire in order to preserve anonymity. Respondents were permitted to provide truthful replies as long as their anonymity was ensured (valuable information). During the data collecting process, consent was also prepared. The required and highest care for plagiarism was taken into account.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter covers data analysis, presentation and interpretation of the general information of the respondents which includes the study of the respondent's demographics. This research paper is organized based on Likert scale technique of gathering information through questionnaire and it also tackles the research questions where each of the questions is answered by the analysis of the obtained data and presented through tables. The correlation between The RoW acquisition practice in relation with road project performance, and its effect on project performance is evaluated by the research findings obtained and analyzed using, mean, standard deviation, correlation, regression and percentages.

4.2 Response rate of respondents

Table 4.1 Respondents' response rate

Questionnaires Distributed	Questionnaires Returned	Percentage
67	65	97.01%

Source; Survey Results and Own Computation, 2022

As shown in table 4.1 above, about response rate, 67 questionnaires were distributed to respondents and 65 were appropriately filled and retuned with the rate of 97.01%. According to Ruta, (2017), response rate of 50% is satisfactory, 60% is good and 70% and above is excellent for a study therefore. This response rate is excellent for further analysis and reporting. This helps the researcher to gain detailed and well explained answer for the research questions

4.3 The demographic characteristics of respondents

This section summarizes the first part of the questionnaire which consist the socio demographic characteristics of the respondents (gender, age, educational level, project they are in, Governmental organization they are working and total work experience in project work). The main purpose of the Socio-demographic analysis in this research is to describe

the characteristics of the respondents in terms of personal and professional characteristics so that the analysis could be more meaningful for readers.

Table 4.2 The demographic characteristics of respondents

No	Factor	Categories	quantity	Percentage
1	Gender	Male	51	78.5%
		Female	14	21.5%
2	Age	20-30	19	29.2%
		30-40	27	41.5%
		40-50	16	24.6%
		Above 50	3	4.6%
3	educational level	Below Diploma	2	3.1%
		Diploma	16	24.6%
		Bachelor's Degree	42	64.6
		Master's Degree and above	5	7.7%
4	project they are in	Yeka tafo condominium road project	16	24.6%
		Beshale 40/60 condominium asphalt project	14	21.5%
		Arabesa lot 1 and 2 condominium road project	13	20%
		Bole ayat 1 40/60 condominium road project	11	16.9%
		Summit-Goro road project	11	16.9%
5	Governmental organization they are working	Woreda administration	18	27.7%
		LDRO	30	46.2%
		LDRA	5	7.7%
		AACRA	12	18.5%
6	Total work experience in project work	1-5 years	29	44.6%
		6-10 years	24	36.9%
		11-15 years	10	15.4%
		16-20 years	2	3.1%
		Above 20	0	0%

Source; Survey Results and Own Computation, 2022

As shown in table 4.2 above, concerning gender distribution of respondents, 51(21.5%) were females whereas 14(78.5%) males. This shows that there were more male respondents than females who took part in Right-of-way acquisition process.

According to the respondents' ages, which are displayed in table 4.2 above, 19(29.2 %), were between the ages of 20 and 30. 27 (29.2%) were between the ages of 30 and 40, 16 (24%) were between the ages of 40 and 50, and 3 (4.6%) were beyond the age of 50. This shows that the majority of respondents were between the ages of 30 and 40, and that 20 to 30 and 40 to 50 made up approximately half of the remaining respondents.

According to table 4.2 above, there were 2 respondents (3.1%) with less than a diploma, 16 respondents (24.6%) with a diploma, 42 respondents (64.6%) with a bachelor's degree, and 5 respondents (7.7%) with a master's degree or above. This leads us to the conclusion that the majority of respondents held bachelor's degrees, followed by diploma holders.

According to the project respondents working , as shown in the table 4.2 above 16 (24.6%) were working on Yeka tafo condominium road project, 14(21.5%) were working on Beshale 40/60 condominium asphalt project, 13(20%) were working on Arabesa lot 1 and 2 condominium road project, 11(16.9%)working on Bole ayat 1 40/60 condominium road project and 11(16.9%) and 11(16.9%) working on Summit-Goro road project This shows that respondents are spread equally among all projects.

As shown in table 4.2 above, concerning Total work experience in project work of respondents 29(44.6%) had 1-5 years of experience, 24(36.9%) had 6-10 years of experience, 10(15.4%) had 11-15 years of experience, 2(3.1%) had 16-20 years of experience and no respondent had above 20 years' experience and as per the result most of the respondents had 1 up to five years of experience and The experience they have in project was enough to inform the choices and perceptions of the respondents in answering the questionnaire. An experience of over one years was adequate enough to provide answers to the research questions

4.4 Descriptive Analysis of ROW acquisition practices

To assess the current practices of Right-of-way acquisition practices respondents were requested to rate the level of agreement using a Five-point Likert scale (1=Very strongly disagree, 2= Disagree, 3= neutral, 4= Agree and 5=Very high strongly agree. The mean statistical values of the items were based on the 5 point Likert scale and illustrated through the following assumptions: if the mean (M) score is below 2.5 it implies that the respondents

disagree with the statement, if the mean score is equal to 2.5 it indicates that the respondents prefer to stay Neutral, and finally if the mean score is above 2.5 it implies that the respondents agree with the statement.

A standard deviation of >0.9 indicates that there is a considerable disparity in the respondents' right-of-way acquisition practices. The mean scores of the variables of right-of-way practices practices are reported in the tables below. As a result, mean scores for all four right-of-way practices have been calculated. The public's participation in the RoW purchase process, the agency's RoW acquisition skills, the quality of the appraisal and acquisition process, property management and relocation barriers, and the dependent variable, the performance of road projects, were all equally weighted. The average mean result of each right of acquisition practice dimension, as well as their respective variables, was presented, analyzed, and interpreted independently as follows:

4.4.1 Participation of the public in ROW acquisition process

Table:4.3 summarize respondents' level of agreement on Participation of the public in ROW acquisition process. Most of the respondents were disagreed that Property owners and stakeholders actively participated in critical ROW acquisition decisions by a mean score of 2.1 and SD of 1.12 and disagree on the understanding of the property owner on project's goals and objectives by a mean score of 2.33 and SD of 0.97, and most of the respondents believe there is lack of trust between property owners and agencies and/or appraisals by mean 2.37 and SD 1.11

By the table 4.3 most of the respondents have a neutral feeling on the property owner and the agency willingness to work together to achieve a common acquisition goal by a mean 2.53 and SD 1.01, but they agree on Property owner initiation and willingness to be present in the public participation forum held for the purpose of the acquisition by mean 2.8 and SD 1.13

Table 4. 3 Mean value of Participation of the public in ROW acquisition

No	Items	Rating Scales					Mean	St. dev
		1	2	3	4	5		
1	The project's goals and objectives have been understood by the property owner.	16	24	18	6	1	2.26	0.99
2	Both the property owner and the agency are willing to work together to achieve a common acquisition goal.	9	25	21	7	3	2.53	1.02
3	Property owner have initiation and willingness to be present in the public participation forum held for the purpose of the acquisition	6	24	17	12	6	2.81	1.13
4	Property owners put their trust in agencies and/or appraisals.	16	23	14	10	2	2.37	1.11
5	Property owner have understood and willing to carry out their roles and responsibility effectively.	14	23	21	6	1	2.34	0.97
6	Property owners and stakeholders actively participated in critical ROW acquisition decisions.	24	21	11	7	2	2.10	1.12
Overall (aggregate) mean							2.40	

Source; Survey Results and Own Computation, 2022

Amanuael Alemie Dessie (2019) public involvements were the primary agenda needs effective collaboration between the agency and property owner because “project can’t exist without community but community can exist without project”. In addition all projects executed for the benefits of the society, however projects were resisted somewhere in project lifecycle because of premature public agency involvement so projects were blocked in early stage. Pre-acquisition public involvements are vital component of every project. The primary agenda of projects were meeting needs and wants of directly affected property owner and near side community.

Creighton (2005), defined public participation as “the process by which public concerns, needs, and values are incorporated in to governmental and corporate decision making.” Li et

al. (2012), described that ‘public participation in the planning and design of major public infrastructure and construction projects is crucial for success., According to Creighton (2005), ‘the process of public participation has to be managed in a two way communication and interaction with the overall goals for better decisions supported by the public, but not be just provided with information in any decision making processes.’

The provision of sufficient information to property owners is a critical component for increasing operational efficiency and reducing the time for ROW acquisition (Aleithawe 2013). If important information such as real estate price and appraisal estimate is not readily available, this lack of information typically leads to delays and additional costs. In Addis Ababa this issue is a critical barrier. The immediate availability of information that interests property owners and the willingness of the agency to work with property owners to get the information that the property owners need would greatly help reduce the number of condemnation cases that result from the distrust of the property owners.

The findings indicated that, Participation of the public in ROW acquisition accepted to a lesser degree as indicated by the composite (Mean=2.4). this is implies the agency didn’t provide sufficient information to property owners and stakeholders in the ROW acquisition process and in critical ROW acquisition decisions as a result they didn’t understood project's goals and objectives, they didn’t know and willing to carry out their roles and responsibility effectively and they didn’t trust in agencies and/or appraisals this leads the projects to have poor performances.

4.4.2 Quality of appraisal and acquisition process

The respondents' levels of agreement on the quality of the appraisal and acquisition process are summarized in Table 4.4 below. Most respondents have strong disagreements on the following topics: Consistency of appraisal evaluation throughout the acquisition life time to reduce property owner dissatisfaction by a mean 1.57 and SD 0.70, the success of preparing both the compensation bill and relocation parcel in a timely manner by a mean 1.67 and SD 1.02, and the use of sufficient professional and skilled employees for the project by a mean 1.92 and SD 0.94.

However, the respondents were agreed in their examination of the effect of road design changes on the ROW acquisition process. By a mean of 3.17 and a standard deviation of 0.89, the appraisal team at the agency has the necessary knowledge, abilities, and experience to take property measurements, sketch, CAD, describe, encode, and close with the evaluation summary number 6 by mean 3.06 and SD 1.04 and Several land and property factors have an impact on the ROW Appraisal and Acquisition Process by a mean of 2.92 and a standard deviation of 1.22.

Table 4. 4 Mean value of Quality of appraisal and acquisition process

No	Items	Rating Scales					Mean	St. dev
		1	2	3	4	5		
1	The appraisal team at the agency has the necessary knowledge, abilities, and experience to take property measurements, sketch, CAD, describe, encode, and close with the evaluation summary number 6.	2	22	16	20	5	3.06	1.04
2	Sufficient number of professional and skilled employees is employed for the project.	25	24	14	0	2	1.92	0.94
3	The appraisal team has been successful in preparing both the compensation bill and relocation parcel in timely manner	38	16	5	3	2	1.67	1.02
4	The ROW Appraisal and acquisition process was influenced by several land and property characteristics.	10	15	16	18	6	2.92	1.22
5	There was road design change that can affect The ROW acquisition process.	2	8	39	9	7	3.17	0.89
6	There was Consistence appraisal evaluation throughout the acquisition life time to reduce dissatisfaction from property owner	35	24	5	1	0	1.57	0.70
Overall (aggregate) mean							2.39	

Source; Survey Results and Own Computation, 2022

David Jeong (2016) **barriers of Quality of appraisal and acquisition process** can be explain by the occurrence of the following barriers:

1) ROW plan changes and revision
2) Lack of appraiser's knowledge, skills, and experience
3) Lack of ROW staff's experience
4) Insufficient number of ROW staff or appraisers

Aleithawe (2010) and Chang-Albitres et al. (2014) also identified unique characteristics of individual parcels that influence the cost and duration of ROW acquisition, such as location, ROW acquisition type, ownership

As shown in table 4.4 above The average mean value of Quality of appraisal and acquisition process (M=2.38) revealed that the majority of respondents disagree with the quality of evaluation and acquisition process in projects this implies there is no of Sufficient number of professional and skilled employees is employed for the project, Appraisal and acquisition process was influenced by several land and property characteristics, and there was road design change that can affect The ROW acquisition process. This affects Consistence appraisal evaluation throughout the acquisition life time and the timely preparation of from property owner compensation bill and relocation parcel even though The appraisal team at the agency has the necessary knowledge, abilities, and experience.

4.4.3 Barriers of property management and relocation

Table 4.5 summarize respondents' level of agreement on Barriers of property management and relocation process and Most of the respondents were agreed all points lists on the table 4.5 they strongly agree on the reluctance of the property owners to leave there houses and parcel by a mean 3.6 and SD 1.09,the delay in executing Property management (demolishing) by a mean 3.6 and SD 1.12,The shortage of relocation parcel according to plot, land use, grade, location and ownership type of parcel by a mean 3.75 and SD 1.03,The shortage of replacement houses for property owners who had to leave their residence by a

mean 3.83 and SD 1.05,The delay in executing compensation payment by a mean 3.89 and SD 1.04,The delay in executing Displacement and relocation by a mean 3.95 and SD 0.92 As a result of this finding, we can conclude that respondents agree that there are barriers to property management and the relocation process. Barriers to property management and the relocation process were found more frequently in projects, as evidenced by the composite (Mean=3.77).

Table 4. 5 Mean value Barriers of property management and relocation

No	Items	Rating Scales					Mean	St. dev
		1	2	3	4	5		
1	There was shortage of replacement houses for property owners who had to leave their residence.	3	3	15	25	19	3.75	1.03
2	There was property owners reluctance to leave there houses and parcel.	4	5	17	26	13	3.6	1.09
3	There was shortage of relocation parcel according to plot, land use, grade, location and ownership type of parcel	2	6	14	27	16	3.75	1.03
4	There was delay in executing Displacement and relocation.	1	3	14	27	20	3.95	0.92
5	There was delay in executing Property management (demolishing)	2	10	16	21	16	3.6	1.12
6	There was delay in executing compensation payment.	2	5	12	25	21	3.89	1.05
Overall (aggregate) mean							3.77	

Source; Survey Results and Own Computation, 2022

FHWA(2014).In order to reach early agreement and facilitate relocation from the project area, the compensation payment and relocation parcel should be based on an early move date.

Amanuael Alemie Dessie (2019) Property management of the acquired parcel begins after property owner showing agreement to accept amount of compensation and relocation parcel. Projects were commenced early before getting acceptance from property owner and at last resisted somewhere in project lifecycle and acquired property waiting unclear.As a result of the property owner's worries about moving to a new location and their resistance to the project's execution, the RoW acquisition timeline was delayed, and the road project's schedule management was compromised. Property management of the acquired parcel procedures were poorly conducted at the agency, due to a lack of integration between the demolition department of the sub city and front line wereda administration, leaving the acquired parcel unclear. Besides the property owner's reluctance to relocating the site due to an unresolved claim for compensation, relocation, and payment delay.

As shown in table 2 above Barriers to property management and the relocation process were found more frequently in projects, as evidenced by the composite (Mean=3.77 and standard deviation=0.77).which implies there was property owners reluctance to leave there houses and parcel ,delay in executing Property management (demolishing) , shortage of relocation parcel shortage of replacement houses, delay in executing compensation payment, and delay in executing displacement and relocation.

4.4.4 Agency RoW acquisition capabilities

Table:4.6 summarize respondents' level of agreement on Agency RoW acquisition capabilities and most of the respondents were strongly disagree some points such as The availability of Sufficient amount of fund for pay compensation by a mean 1.8 and SD 0.66 ,the effectiveness of coordination and communication amongst government agencies in relation ROW acquisition process by a mean 1.93 and SD 0.91 and most of them are moderately dis agree on The adequacy of resources, such as supplies, equipment, machinery, and capital, to acquire ROW by a mean 2.30 and SD 1.02 The adequacy of laws, directives and circulars for ROW(right-of-way) acquisition implementation by a mean 2.32 and SD 1.09

But there is some level of agreement by the respondents on Proper documentation starting from acquisition initiation to completion including measurement, sketching, cad,

description, encode, summary number 6, payment and relocation related information by a mean 2.7 and SD 0.86 and the occurrence of Political interference that can affect The ROW acquisition process by a mean 2.8 and SD 1.13 but in general there is disagreements by the respondents on Agency RoW acquisition capabilities by a mean 2.33 and SD 0.55.

Table 4. 6 Mean value Agency RoW acquisition capabilities

No	Items	Rating Scales					Mean	St. dev
		1	2	3	4	5		
1	There were adequate resources, such as supplies, equipment, machinery, and capital, to acquire ROW (right-of-way).	14	29	11	10	1	2.30	1.03
2	There were adequate laws, directives and circulars for ROW(right-of-way) acquisition implementation.	17	22	16	8	2	2.32	1.09
3	Proper documentation starting from acquisition initiation to completion including measurement, sketching, cad, description, encode, summary number 6, payment and relocation related information.	3	23	28	9	2	2.75	0.87
4	Sufficient amount of fund was available to pay compensation.	22	34	9	0	0	1.8	0.67
5	There was Political interference that can affect The ROW acquisition process.	9	14	24	13	5	2.86	1.13
6	There was effective coordination and communication amongst government agencies in relation ROW acquisition process. .	26	20	16	3	0	1.94	0.92
Overall (aggregate) mean							2.33	

Source; Survey Results and Own Computation, 2022

Sohn et al. (2009) developed a spreadsheet-based ROW and utility duration adjustment tool to help TxDOT estimate the ROW acquisition costs in the project planning stage. Many factors were identified and applied to develop the estimation model. Among the identified

factors, four were found to be significant in predicting ROW duration: dedication of funds to the project, level of local availability of replacement housing facilities, funding limitations for the project, and level of political pressure

While the relationship with the public is an external issue, local agencies should also try to develop and use tools and methods to promote communication and negotiation between them. Aleithawe (2013)

The findings indicated that, Agency RoW acquisition capabilities is poor indicated by the composite (Mean=2.33and standard deviation=0.55). This is implies there is no Sufficient amount of fund was available to pay compensation. There wasn't effective coordination and communication amongst government agencies and there weren't adequate resources.

4.5 The extent of the performance of road projects

Table:8 summarize respondents' level of agreement on Performance of road projects and Most of the respondents were agreed all points lists on the table 4.7 they disagree on completion of the project's with is Objective periodically by a mean 1.97 and SD 1.05 ,completion of the project's with in the budget by a mean 2.05 and SD 1.05,completion of the project's with stakeholder's satisfaction by a mean 2.01 and SD 1.01,completion of the project's with technical specification by a mean 2.3 and SD 0.93,completion of the project's under its scope by a mean 2.29 and SD 0.91,The absence legal claims and disputes as result from ROW acquisition by a mean 2.3 and SD 0.8 and project can goes to total abandonment because of ROW acquisition by a mean 2.35 and SD 1.09.

As demonstrated by the composite (Mean=2.20) on the table 4.7 , the majority of survey respondents disagree on the performance related statements which implies there is poor performance of road projects.

Table 4. 7 Mean value Performance of road projects

No	Items	Rating Scales					Mean	St. dev
		1	2	3	4	5		
1	The project meet its Objective periodically	26	23	10	4	2	1.97	1.05
2	The project accomplished with in the budget	24	22	13	4	2	2.05	1.05
3	The project meets its stakeholder's satisfaction	20	27	10	7	1	2.10	1.01
4	The project was under its scope.	13	27	18	7	0	2.30	0.91
5	There were not legal claims and disputes as result from ROW acquisition.	8	35	18	3	1	2.30	0.80
6	The project can goes to total abandonment because of ROW acquisition.	16	24	12	12	1	2.35	1.09
7	The project meets its technical specification.	12	30	16	6	1	2.30	0.93
Overall (aggregate) mean							2.20	

Source; Survey Results and Own Computation, 2022

4.6 The relationship between right-of-way acquisition and Performance of road project

The bivariate analysis Pearson's coefficient of correlation, abbreviated as r, is a measure of the degree of association between two variables. Essentially, a Pearson product-moment correlation attempts to draw a line of best fit through the data of two variables, and the Pearson correlation coefficient was used to investigate the relationship between variables. The Pearson correlation coefficient, r, indicates how far away all of these data points are from this line of best fit (how well the data points fit this new model/line of best fit). The Pearson correlation coefficient, r, can be anything between +1 and -1. A value of 0 implies that the two variables have no relationship (B.Burns & R.Burns 2008,).

The Pearson correlation coefficient, r, can be anything between +1 and -1. A value of 0 implies that the two variables have no relationship (B.Burns & R.Burns 2008,). The magnitude of the correlation coefficient (r) can be interpreted as follows: If the correlation coefficient is between 0.1 and 0.20, it is a minor correlation; if it is between 0.20 and 0.40, it is a weak relationship; if it is between 0.40 and 0.70, it is moderate; if it is between 0.70 and 0.90, it is a significant relationship; and if it is between 0.90 and 1.00, it is a very high correlation or very strong correlation between variables (B.Burns & R.Burns 2008,)

Table 4. 8 Result of Pearson's coefficient of correlation

Correlations						
		Participation of public in RoW acquisition process	Agency RoW acquisition capabilities	Quality of appraisal and acquisition process	Barriers of property management and relocation	performance of road projects
Participation of public in RoW acquisition process	Pearson Correlation	1	.410**	.021	-.140	.546**
	Sig. (2-tailed)		.001	.867	.266	.000
	N	65	65	65	65	65
Agency RoW acquisition capabilities	Pearson Correlation	.410**	1	.440**	.089	.605**
	Sig. (2-tailed)	.001		.000	.480	.000
	N	65	65	65	65	65
Quality of appraisal and acquisition process	Pearson Correlation	.021	.440**	1	.276*	.117
	Sig. (2-tailed)	.867	.000		.026	.355
	N	65	65	65	65	65
Barriers of property management and relocation	Pearson Correlation	-.140	.089	.276*	1	-.310*
	Sig. (2-tailed)	.266	.480	.026		.012
	N	65	65	65	65	65
performance of road projects	Pearson Correlation	.546**	.605**	.117	-.310*	1
	Sig. (2-tailed)	.000	.000	.355	.012	
	N	65	65	65	65	65
**. Correlation is significant at the 0.01 level (2-tailed).						

Source; Survey Results and Own Computation, 2022

Hence, in the study Bivariate Pearson Coefficient (r) was used to examine the relationship between the four independent variables (Participation of public in RoW acquisition process, Agency RoW acquisition capabilities, Quality of appraisal and acquisition process, Barriers of property management and relocation) , and performance of road projects by using a two-tailed test of statistical significance at the level of 99% significance, $P< 0.05$. The correlation coefficients on the main diagonal are always 1.0, because each variable has a perfect positive linear relationship with itself. Base on the respondents answer the correlation between the variables are summarized below.

The above table 4.8 shows the overall Pearson product-moment correlation matrix for the Participation of public in RoW acquisition process, Agency RoW acquisition capabilities , Quality of appraisal and acquisition process, Barriers of property management and relocation and performance of road projects . This implies:

There is moderate positive correlation between Participation of public in RoW acquisition process and performance of road projects that was (r=0.546, N=65, P=0.000). That means both variables move in tandem (in the same direction). When Participation of public in RoW acquisition process increases so do performance of road projects, or on the other hand When Participation of public in RoW acquisition process decreases as the performance of road projects decreases. This implies Participation of public in RoW acquisition process would result to project success.

There is moderate positive correlation between Agency RoW acquisition capabilities and performance of road projects that was (r=0.605, N=65, P=0.000). That means both variables move in tandem (in the same direction). When Agency RoW acquisition capabilities increase so do performance of road projects, or on the other hand When Agency RoW acquisition capabilities decrease as the performance of road projects decreases. This implies Participation of public in RoW acquisition process would result to project success.

There is weak negative correlation between Barriers of property management and relocation and performance of road projects that was (r=-0.310, N=65, P=0.012). That means both variables move in the different direction. When Barriers of property management and relocation increase the performance of road projects decrease, or on the other hand When

Barriers of property management and relocation decreases as the performance of road projects increase. This implies Barriers of property management and relocation would result to project poor performance.

There is minor positive correlation between Quality of appraisal and acquisition process and performance of road projects that was (r=0.117, N=65, P=0.355). That means both variables in the same direction but having weak correlation. When Agency Quality of appraisal and acquisition process increase or decreases it has a minor effect on the performance of road projects,. This implies Quality of appraisal and acquisition process has a minor impact project success.

4.7 The effect of right-of-way acquisition on the performance of road projects

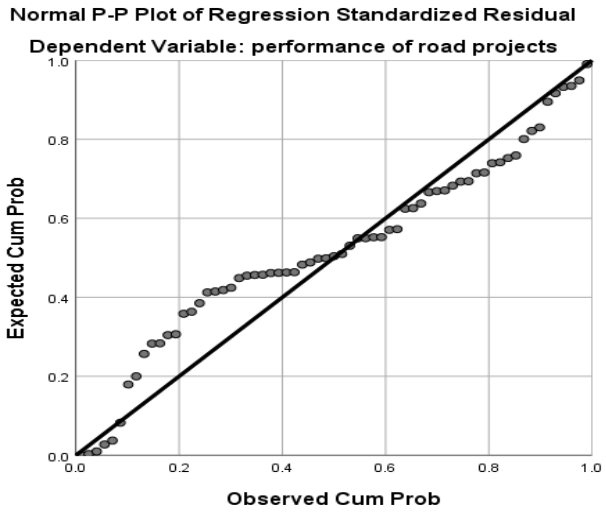
The relationship between the right of acquisition practices and the performance of road projects was investigated in this study. There for Participation of the public in ROW acquisition, Quality of appraisal and acquisition process, Barriers of property management and relocation and Agency internal capabilities (independent variables) were regressed using linear method on project performance (dependent variable) this method will help to measure the relative strength of relationship of independent variables with dependent variables.

4.7.1 Tests of Assumptions for Regression Model

4.7.1.1 Test for Normality of Residuals

The assumption of normality of residuals is one of the assumptions of linear regression. There are a variety of tests that may be used to determine if regression residuals are nominal. The assumption of residuals is examined in this study using a Percentile Percentile plot, or P P plot. The P-P plot dots are closer to the 45-degree diagonal line in Figure 4.1, showing that the premise of nominality of residuals holds true.

Figure 4. 1 Result of normality test



Source; Survey Results and Own Computation, 2022

7.7.1.2 Multi-Collinearity

Multi-collinearity refers to the correlation between predictor variables. The significance levels of the best coefficients are reduced when there is a lot of multi-collinearity. In this study, the variance inflation factor (VIF) was used to assess the degree of multicollinearity among explanatory variables. As a rule of thumb, any variable with a VIF value larger than 10 should be studied further. The VIF of beta coefficients was less than ten in Table 4.9 showing that multicollinearity was not a significant concern in this investigation

Table 4. 9 Result of Multi-Collinearity

a.Dependent Variable: performance of road projects

Coefficients[a]			
Model		Collinearity Statistics	
		Tolerance	VIF
1	Participation of public in RoW acquisition process	.782	1.278
	Agency RoW acquisition capabilities	.645	1.551
	Quality of appraisal and acquisition process	.733	1.365
	Barriers of property management and relocation	.902	1.109
a. Dependent Variable: performance of road projects			

Source; Survey Results and Own Computation, 2022

4.7.1.3 Testing of Autocorrelation

The Durbin-Watson test statistic was used to determine whether residuals from an ordinary least-squares regression were linearly auto-correlated or not in this study. If the Durbin-Watson test value is between 1.5 and 2.5, it indicates that the residuals are not auto correlated. The computed DW statistic of 1.89, which falls between 1.5 and 2.5, is shown in Table 4.10 This indicates that the residuals were not auto-correlated in this study.

Table 4. 10 Result of testing of Autocorrelation

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.754[a]	.569	.540	.47475	1.892
a. Predictors: (Constant), Barriers of property management and relocation, Agency RoW acquisition capabilities, Participation of public in RoW acquisition process, Quality of appraisal and acquisition process					
b. Dependent Variable: performance of road projects					

Source; Survey Results and Own Computation, 2022

4.7.2 Multiple linear regression analysis among study variables

Table 4. 11 Result of multiple regression analysis

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.754[a]	.569	.540	.47475	.569	19.789	4	60	.000
a. Predictors: (Constant), Barriers of property management and relocation, Agency RoW acquisition capabilities, Participation of public in RoW acquisition process, Quality of appraisal and acquisition process									

Source; Survey Results and Own Computation, 2022

Table 4.11 Result of multiple regression analysis of Participation of public in RoW acquisition process, Agency RoW acquisition capabilities, Quality of appraisal and acquisition process Barriers of property management and relocation on road, Project performance

According to Table 4.11 Barriers of property management and relocation, Agency RoW acquisition capabilities, Participation of public in RoW acquisition process, Quality of appraisal and acquisition process collectively all together explains 56.9% of the total variation in road Project performance. In this case R = 0.75, which is a strong relationship. This suggests the model is a relatively good predictor of the outcome.

Table 4. 12 Result ANOVA

ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	17.841	4	4.460	19.789	.000[b]
	Residual	13.524	60	.225		
	Total	31.365	64			
a. Dependent Variable: performance of road projects						
b. Predictors: (Constant), Barriers of property management and relocation, Agency RoW acquisition capabilities, Participation of public in RoW acquisition process, Quality of appraisal and acquisition process						

Source; Survey Results and Own Computation, 2022

Table 1.12 shows that the calculated F-statistic for both model 1 is high indicating the model is statistically significant ($F_{4,60}=19.78$ p-value $0.000 < 0.01$).

This regression analysis suggests that the data support to retain Barriers of property management and relocation, Agency RoW acquisition capabilities, Participation of public in RoW acquisition process, Quality of appraisal and acquisition process in the regression equation to jointly explain variation in performance of road projects.

According to Table 4.12 Barriers of property management and relocation, Agency RoW acquisition capabilities, Participation of public in RoW acquisition process, Quality of appraisal and acquisition process statistically significantly predict the performance of road projects.

Table 4. 13 Result of Multiple Regression Analysis

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant	1.011	.435		2.325	.023
	Participation of public in RoW acquisition process	.317	.106	.286	2.982	.004
	Agency RoW acquisition capabilities	.678	.134	.533	5.048	.000
	Quality of appraisal and acquisition process	.049	.123	.040	.401	.690
	Barriers of property management and relocation	-.277	.081	-.306	-3.431	.001
a. Dependent Variable: performance of road projects						

Source; Survey Results and Own Computation, 2022

Table 4.13 shows that Participation of public in RoW acquisition process Agency RoW acquisition capabilities Quality of appraisal and acquisition process have appositive effect on project performance with coefficient of (β=0.317), (β=0.678), and (β=0.49) respectively. However, Barriers of property management and relocation have a negative effect on project performance with coefficient of (β=-0.277).

The coefficient Participation of public in RoW acquisition process (β=0.317), shows that a unit increase in Participation of public in RoW acquisition process will lead to a 31.7% unit increase in road project performance. The t-statistic for practice of project communication management variable (t=2.98) shows Participation of public in RoW acquisition process has a statistically significant influence on project performance (i.e.p-value=0.004<0.05).

The coefficient of Agency RoW acquisition capabilities (β=0.678), shows that a unit increase in Agency RoW acquisition capabilities will lead to 67.8% unit increase in road project performance. The statistic for communication channel variable (t=5.04) shows project Agency RoW acquisition capabilities has a statistically significant influence on project performance (i.e.p-value=0.00<0.05).

The coefficient of Quality of appraisal and acquisition process (β=0.049), shows that a unit increase in Quality of appraisal and acquisition process will lead to 4.9 % unit increase in project performance. The t-statistic for Quality of appraisal and acquisition process (t=0.40) shows Quality of appraisal and acquisition process has not significant positive influence on project performance and P-value=0.69>0.05.

Likewise, the coefficient of Barriers of property management and relocation (β=-0.277), shows that a unit increase in Barriers of property management and relocation will lead to 27.7% unit decrease in project performance. The t statistic for communication barrier variable (t=-3.43) shows Barriers of property management and relocation has a statistically significant influence on project performance (i.e. Pvalue=0.01>0.05).

In regression, we can produce a statistical model that allows us to predict values of our outcome variable based on our predictor variable. This model takes the form of a statistical equation where:

Y= 1.01+0.317X1+0.678X2+0.04X4-0.277X3

Where: Y: is the dependent variable (performance of road projects),

X1: is Participation of public in RoW acquisition process

X2: is Agency RoW acquisition capabilities

X3: is Quality of appraisal and acquisition process

X4: is Barriers of property management and relocation

According to the regression equation established, taking all factors includes Barriers of property management and relocation, Agency internal capabilities, Participation of the public) constant at zero, performance of road projects in the Lemi-Kura will be 1.01as a result of these independent variables.

CHAPTER FIVE:

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the conclusion of the study findings that are presented in the previous data analysis and presentation and the recommendation of the study, and also this chapter contains suggestions for the future project study authors.

5.2 Summary of major findings

This part will summarize the major findings of the study on the effect of right-of-way acquisition on performance of road projects.

Regarding **the Participation of the public in ROW acquisition process**, most of the respondents were disagreed on Participation of the public in ROW acquisition statements except on Property owner have initiation and willingness to be present in the public participation forum held for the purpose of the acquisition and most of respondents had a neutral response on the property owner and the agency willingness to work together to achieve a common acquisition goal. The mean value of the statements under the Participation of the public in ROW acquisition process part has a mean value of 2.10 which implies that there is poor Participation of the public in ROW acquisition process. Additionally, the multiple linear regression analysis reviled that Participation of the public in ROW acquisition process has positive significant effect on road project performance and it can be considered as good predictor to project success with the unstandardized coefficient(= 0.317) and with p-value of 0.023 ($p<0.05$). This is supported by the positive moderate correlation realized between Participation of the public in ROW acquisition process and road project performance with ($r=0.546, N=65,$).

Regarding the **Agencies RoW acquisition capabilities**, most of the respondents were disagreed on Agencies RoW acquisition capabilities statements except on Proper documentation starting from acquisition initiation to completion and if there was Political interference that can affect The ROW acquisition process.The mean value for the statements under the Agencies RoW acquisition capabilities part have a mean value of 2.33 which implies that there is poor Agencies RoW acquisition capabilities in acquisition process.

Additionally, the multiple linear regression analysis reviled that Participation of the public in ROW acquisition process has positi ve significant effect on road project performance and it can be considered as good predictor to project success with the unstandardized coefficient(= 0.68) and with p-value of 0.00($p<0.05$) .. This is supported by the positive moderate correlation between realized Agencies RoW acquisition capabilities and project performance(r=0.60,N=65,).

About the **Barriers of property management and relocation**, the level of agreement of the respondents for all the statements indicating Barriers of property management and relocation and the mean value for the statements under the part have a mean value of 3.77 which implies that Barriers related to property management and relocation in ROW acquisition process are not properly handled . Additionally, the multiple linear regression analysis reviled that Barriers of property management and relocation has negative significant effect on project successes and it can be considered as good predictor to project success with the unstandardized coefficient(= -0.277) and with p-value of 0.01 ($p<0.05$). and the negative weak correlation realized between Barriers related to property management and relocation and project success (r= -3.10, n= 72,),

About the **Quality of appraisal and acquisition process**, most of the respondents were disagreed on statements including The appraisal team has been successful in preparing both the compensation bill and relocation parcel in timely manner, Sufficient number of professional and skilled employees is employed for the project and There was Consistence appraisal evaluation throughout the acquisition life time to reduce dissatisfaction from property owner. most of the respondents were agreed on statements including The ROW Appraisal and acquisition process was influenced by several land and property characteristics, the appraisal team at the agency has the necessary knowledge, abilities, and experience and There was road design change that can affect The ROW acquisition process. The mean value for the statements under the Quality of appraisal and acquisition process part has a mean value of 2.38 which implies that there is poor Quality of appraisal and acquisition process in ROW acquisition.

Regarding the **Performance of road projects** as per the collected data from the respondent the mean value under this section show that those projects had poor performance, projects doesn't meet their intended goal and objectives, required scope, stakeholder's satisfaction, technical specification and most of the projects faced time delay and poor cost performance and most of the time there was legal claims and disputes as result from ROW acquisition. In general, the analysis results of the collected data for studying the effect of right-of-way acquisition on performance of road projects. Shows that there is poor RoW acquisition practice and it affects performance of road. additionally, the multiple linear regression analysis showed that, Participation of the public in ROW acquisition process, Agency RoW acquisition capabilities would increase performance of road projects with 31.7%, 67.8%, respectively and Barriers of property management and relocation would decrease performance of road projects by 27.7% Furthermore, the analysis reviled that holding all variables at zero will result project performance equal to 1.10.

5.3 Conclusion

The main conclusions of the study corresponding to research objectives and questions are summarized hereunder.

The first conclusion is that there was lack of participation of public in RoW acquisition process on the selected projects as a result property owners didn't understand the project's benefits and descriptions, lack of property owners engagement in important ROW acquisition decisions, property owners didn't get an access to ongoing meetings with the agency, majority of property owners distrusted agencies and/or appraisals however they were willing to participate in a forum held for the purpose of acquisition pre-acquisition process. The above mentioned reasons for lack of public participation in the acquisition process had a considerable impact on the performance of road projects in Lemi-Kura sub city.

The study concludes from the findings the agencies executing the right-of-way acquisition had a lesser capabilities because the agencies had not enough resources, such as supplies, equipment, machinery, and capital, there was a shortage of laws, directives and circulars for right-of-way for the implementation, lack of fund for compensation

payment, lack of coordination amongst government agencies and there was Political interference that can affect the ROW acquisition process but In contrast the agency had Proper documentation starting from acquisition initiation to completion. The above-mentioned causes for the Agency's lack of RoW acquisition capabilities had a significant influence on the execution of road projects in the Lemi-Kura sub-city.

One of the major issues in ROW acquisition process was property management (demolishing) and relocation (resettlement). the main reasons were shortage of relocation parcels, shortage of replacement housing for property owners who had to leave their residence, property owners reluctance to leave their place, delay in executing Property management (demolishing)and delay in executing compensation payment .because of the above listed reasons the performance of the road project was affected.

Quality of the appraisal and acquisition process was determined by the performance of the sub city employees. However, there was a shortage of professional and skilled employees. The team had also struggled to reach the project's objectives there are a variety of reasons for this, including many land and property features which were difficult to analyze and quantify, as well as RoW design revisions throughout acquisition implementation.

According to survey data, the majority of the projects in this study had difficulty meeting their objectives, scope, technical specifications, stakeholder satisfaction, and have cost overruns, as well as occasional disputes and claims this is because lack of Participation of the public in ROW acquisition process, there is poor Agencies RoW acquisition capabilities in acquisition process and Barriers related to property management and relocation in ROW acquisition process are not properly handled but the projects didn’t went to total abandonment due to the ROW acquisition process

According to Correlation Analysis, public engagement in the ROW acquisition process, appraisal and acquisition process quality, Agency RoW acquisition capabilities, and project success are all positively associated, however property management and relocation barriers are negative related. And according the regression analysis Participation of the public in ROW acquisition and Agency RoW acquisition capabilities

has Positively significant effect on performance of road projects and Barriers of property management and relocation has negatively significant effect performance of road projects.

5.4 Recommendation

As a result of these study findings, the researcher put forward the following recommendations:

Recommendation on Participation of public in RoW acquisition process

Adequate public participation is necessary both before and after the RoW acquisition process begins, and this includes informing property owners about the project's definition and the level of their responsibilities. It is also important for the public to participate appropriately in the appraisal acquisition process in order to develop trust between the agencies and property owners.

Recommendation on Quality of appraisal and acquisition process

In order to improve the quality of appraisal and acquisition process there should be Sufficient number of professional and trainings must be provided that include lows regulation directives and the newly coming circulars this helps the Consistency appraisal evaluation throughout the acquisition life time to reduce dissatisfaction from property owner and additionally Prior to starting the RoW acquisition process, the final road design must be finished.

Recommendation on Agency RoW acquisition capabilities

Before putting the project into action in the future, the responsible actor should ensure that the needed amount of cost for compensation payment should be prepared for the acquisition of right-of-ways, the decision-making agencies should develop sufficient corresponding laws, directives, circulars, and regulations that completely fulfill the interests of agencies and property owners and these rules must also be free from political interference. Additionally, there should be adequate tools, materials, and machines for the acquisition of RoW, as well as effective coordination across government entities and short communication channels.

Recommendation related to Barriers of property management and relocation

Payment procedures, relocation parcels, and replacement homes should be ready on time for property owners who had to leave their residence in order to speed up resettlements and property management (demolishing).

Recommendation on performance of road projects

In order to finish right of way related road project with the planed budget, cost, scope, technical specification, stake holder satisfaction and without any dispute with property owner the project should Participation of the public, the agencies must increase internal capabilities and decrease barriers related to property management and relocation.

Finally this study suggest RoW acquisition policy to consider Participation of public in RoW acquisition process, set minimum Agencies RoW acquisition requirements and Quality of appraisal and acquisition process .

The study recommends the following areas for further study;

1. This study is dedicated to Lemi-Kura sub city, so it is advisable to study the right-of-way acquisition practice on places and organizations.
2. In addition, the study's framework was made up of four constructs, each of which included numerous major characteristics that were thought to be capable of improving project performance. Additional right-of-way acquisition related elements to road project performance could be examined in future research to determine their importance.

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Appendix 1: Questionnaire

Online Questionnaire link: https://forms.gle/cs7qSDLji1mJFNwL8

Addis Ababa University
College of Business and Economics
School of commerce
Masters of Arts in Project Management

Dear respondents

Thank you for agreeing to take part in conducting the research: "The effect of right-of-way acquisition on road construction projects performance: the case of Addis Ababa city road authority projects under Lemi-Kura sub-city" I am Abrham Dagne, currently pursuing my master's in project management at Addis Ababa university school of commerce. By assuring you that your information will be used only for academic research purposes and confidentiality of your response is 100% granted, I kindly request you to answer the entire questions provided below believing that the quality of this research findings highly depends on your honest and accurate information.

Thank you again for your generous time!

Abrham Dagne
Email:abrhamdagne03@gmail.com

Part I – Background Information

This section collects basic information of the professional and his or her organization. Please specify the choice that belong to you below, please tick (X) in the box provided.

1. Gender: Male Female

2. Age : 20-30 yrs ☐ 30-40yrs ☐ 0-50yrs ☐ yrs and above ☐

3. Level of Education

Below Diploma ☐ Diploma ☐ Bachelor's Degree ☐ Master's Degree and above ☐

If other please specify ----------

4. In which road project are you in?

☐ Yeka tafo condominium road project

☐ Beshale 40/60 condominium asphalt project

☐ Arabesa lot 1 and 2 condominium road project

☐ Bole ayat 1 40/60 condominium road project

☐ Summit-Goro road project

If other please specify ----------

5. In which Governmental organization do you work?

☐ Woreda administration

☐ LDRO(Sub city land development and renewal office)

☐ LDRA(land and development and renewal agency)

☐ AACRA(Addis Ababa city road authority)

If other please specify ----------

6. How many years of experience do you have in project works?

☐ 1-5 years ☐ 6-10 years ☐ 11-15 years ☐ 16-20 years ☐ above 20 years

Part II: Items relate to Independent variables

I. Think the Participation of the public in Right-of-way Acquisition process in your project and select the number that best fits your agreement.

1=strongly disagree 2=disagree 3 = neutral 4=agree5=strongly agree

No.	Description	Level of agreement				
		1	2	3	4	5
1	The project's goals and objectives have been understood by the property owner.					
2	Both the property owner and the agency are willing to work together to achieve a common acquisition goal.					
3	Property owner have initiation and willingness to be present in the public participation forum held for the purpose of the acquisition					
4	Property owners put their trust in agencies and/or appraisals.					
5	Property owner have understood and willing to carry out their roles and responsibility effectively					
6	Property owners and stakeholders actively participated in critical ROW acquisition decisions.					

II. Think the quality of Appraisal and Acquisition process related to Right-of-way acquisition practices in your project and choose the number that best describes your agreement.

1=strongly disagree 2=disagree 3 = neutral 4=agree5=strongly agree

No.	Description	Level of agreement				
		1	2	3	4	5
1	The appraisal team at the sub city has the necessary knowledge, abilities, and experience to take property measurements, sketch, CAD, describe, encode, and close with the evaluation summary number 6.					
2	Sufficient number of professional and skilled employees is employed for the project.					
3	The appraisal team has been successful in preparing both the compensation bill and relocation parcel in timely manner					
5	The ROW Appraisal and acquisition process is influenced by several land and property characteristics.					
6	There was road design change that can affect The ROW acquisition process.					
7	There was Consistence appraisal evaluation throughout the acquisition life time to reduce dissatisfaction from property owner					

III. Think the property management and relocation barriers related to Right-of-way acquisition practices in your project and choose the number that best describes your agreement.

1=strongly disagree 2=disagree 3 = neutral 4=agree5=strongly agree

No.	Description	Level of agreement				
		1	2	3	4	5
1	There was shortage of replacement houses for property owners who had to leave their residence.					
2	There was property owners reluctance to leave there houses and parcel					
3	There was shortage of relocation parcel according to plot, land use, grade, location and ownership type of parcel					
4	There was delay in executing Displacement and relocation.					
5	There was delay in executing Property management (demolishing)					
6	There is delay in executing compensation payment.					

IV. Think the agency internal capabilities in Right-of-way acquisition practices in your project and choose the number that best describes your agreement.

1=strongly disagree 2=disagree 3 = neutral 4=agree5=strongly agree

No.	Description	Level of agreement				
		1	2	3	4	5
1	There were adequate resources, such as supplies, equipment, machinery, and capital, to acquire ROW (right-of-way).					
2	There were adequate laws, directives and circulars for ROW(right-of-way) acquisition implementation					
3	Proper documentation starting from acquisition initiation to completion including measurement, sketching, cad, description, encode, payment and relocation related information					
4	Sufficient amount of fund was available to pay compensation.					
6	There was Political interference that can affect The ROW acquisition process.					
7	There was effective of coordination among government agencies.					

Part III: Items relate to Dependent variable

Think the performance of road projects in related to Right-of-way acquisition practices in your project and choose the number that best describes your agreement.

1=strongly disagree 2=disagree 3 = neutral 4=agree5=strongly agree

No.	Description	Level of agreement				
		1	2	3	4	5
1	The project meet its Objective periodically					
2	The project accomplished with in the budget					
3	The project meets its stakeholder's satisfaction					
4	The project is under its scope					
5	There were not legal claims and disputes as result from ROW acquisition.					
7	The project meets its technical specification					
8	The project can goes to total abandonment because of ROW acquisition					

Thank you very much for sparing your time and for the valuable information you have given God bless you