KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,

KUMASI, GHANA

Factors Impeding the Implementation of Public Private Partnership (PPP) Road project in Ghana

By

Patrick Adu-Antwi

(BSc. Quantity Surveying and Construction Economics)

A Thesis Submitted to the Department of Construction Technology and Management,

College of Art and Built Environment,

in partial fulfillment of the requirement for the degree of

MASTER OF SCIENCE

NOVEMBER, 2018

DECLARATION

I hereby declare that this submission is my own work towards the award of an MSc and that, to the best of my knowledge; it contains no material previously published by another person or material, accepted for the award of any other degree of the university, except where the due acknowledgement has been made in the text.

Patrick Adu-Antwi	…….	…….
PG 9187517	Signature	Date

Certified By

Dr Gabriel Nani	…….	……
Supervisor	Signature	Date

Certified By

Prof. Bernard Baiden	……	…….
Head of Department.	Signature	Date

ABSTRACT

Ghana's ability to finance its infrastructural projects has been a major impediment to development since independence. As a result, the country resorted to the donor agencies like the International Monetary Fund (IMF) and the World Bank for support. The onus lies on government now to fall on the private sector to assist in the provision of infrastructure such as roads, water, housing and others. Public private partner presents a more viable options to government in provision of public infrastructure. The aim of the study was to investigate factors impeding the implementation of public private partnership (PPP) road project in Ghana. A purposive sampling method was used in the selection of respondents, questionnaires were distributed to some public-sector workers involved in the provision of road infrastructure and some selected road contractors. Responses received from the respondents were analyzed in accordance with the objective of the research. The study measured the respondents' views on how the following factors impede the PPP implementation: toll adjustment mechanism, current economic challenges, inflation rates, high cost of doing business and interest rates. It also measured the influence of factors like political will of government in procuring of PPP projects, high financial cost in procuring of PPP projects and high cost of relocating services along the corridor. A relative significance index was used to rank the factors. The study discovered that the toll adjustment mechanism was the most significant factor impeding PPP implementation whilst the procurement models used and project viability were the least impactful. The research also suggested strategies that will help in the smooth implementation of PPP road project in Ghana. These strategies include low cost of doing business, good political will of government in procuring models, realistic toll charges, stable political environment, easy access to credit facility. The respondents also believed that a lowered cost of doing business in the country would significantly ease PPP implementation. Other suggested strategies include realistic toll charges, a stable political environment, easy access to credit among others. It's therefore recommended that the government should focus on improving the macro-economic fundamentals so that private investors can build the financial muscle to invest in capital intensive projects like the PPP road projects. The government also needs to demonstrate a commitment in terms of policy direction to maximizing PPP opportunities. Education and publicity are also needed to increase public awareness of PPP models of procurement for road infrastructure.

ACKNOWLEDGEMENT

Thanks to the Almighty God for his guidance and Mercies throughout this journey and making it possible for me to undertake this academic programme. The lord has been faithful throughout this journey. I am particularly grateful to Dr Gabriel Nani who supervised this research and gave me valuable advice and suggestions from the start to the end of this dissertation. I am also grateful to the Ghana Highway Authority, Ministry of Roads and Highways, the Department of Feeder Roads, and Department of Urban Roads for their contribution to the successful contribution of this work, I am very grateful to Mr David Adukwei Hammond Deputy chief Executive (Administration) and Mr Richard Kudjawu Chief Engineer both of the Ghana Highway Authority for their immense contribution and guidance to the successful completion of this work. Worthy of mention here also, are all my lecturers who taught me in KNUST and my fellow course mates whose contribution resulted in the successful completion of this project. The Lord has been faithful through this journey

Thank you, Lord, Ave Maria Gracia Plena.

DEDICATION

I dedicate this work to my wife and Children, Obuobia and Eno Serwaa for the incessant prayer, selfless and restless contribution, moral support and encouragement to the success of my education.

TABLE OF CONTENT

DECLARATION ..... **ii**

ABSTRACT ..... **iii**

ACKNOWLEDGEMENT ..... **iv**

DEDICATION ..... **v**

TABLE OF CONTENT ..... **vi**

LIST OF TABLES ..... **xi**

LIST OF FIGURES ..... **xii**

CHAPTER ONE **1**

INTRODUCTION **1**

1.1 Background study 1

1.2 Statement of the problem 3

1.3 Aim or Objective of the Study 4

1.4 Specific objectives 4

1.5 Scope of the Study 4

1.6 Research Methodology 5

1.7 Significance of the Study 5

1.8 Organisation of the Study 6

CHAPTER TWO **7**

LITERATURE REVIEW **7**

2.0 Introduction 7

2.1 Definition of Public Private Partnership 8

2.2 Types of Public Private Partnership 9

2.2.1 Design Build Finance Operate (DBFO) 9
2.2.2 Design Build Operate Maintain 10
2.2.3 Operation and Maintenance (O & M) 10
2.2.4 Build Operate Transfer (BOT) 11
2.2.5 Build Own Operate (BOO) 11
2.2.6 Build Own Operate Transfer (BOOT) 12
2.2.8 Build Transfer Operate (BTO) 12
2.2.9 Joint Ventures (JV) 12
2.2.10 Leasing 12
2.2.11 Lease Purchase 13
2.2.12 Sale Leaseback 13
2.3 Procurement process 14
2.3.1 Planning 14
2.3.2 Procurement Stage 15
After the planning stage, the next stage involves the creation of tenders. It begins with the advertisement in the papers inviting potential bidders to submit bids for the project (Li.et.al 2004). Selected bidders are given an invitation to negotiate and this includes instructions to bidders, specification, contractual terms, risk list and Evaluation criteria. Meeting are held with each bidder to assess their submitted bids and also to determine their suitability for the job. After these meetings it required of each bidder to submit a best and final offer, based on which the most qualified bidder would be selected (Li.et.al.2004). 15
2.3.3 Evaluation 15
2.3.4 Award of Contract 15

2.3.5 Records of Procurement Process 16
2.4 Source of Finance 16
2.4.1 Public source financing 16
2.4.2 Private source financing 17
2.6 Advantages of PPP 18
2.7 Disadvantages of PPP 18
2.8 Strategies of PPP Implementation 19
2.8.1 Changes in policies and laws. 19
2.8.3 Improvements in current mechanisms and processes 20
2.8.4 Financial and capital capacity building 20
2.9 The Accra – Kumasi Highway (National Road Six N6) 21
CHAPTER THREE 23
RESEARCH METHODOLOGY 23
3.1 Introduction 23
This chapter deliberates on the research methodology used in conducting the study. It deals, among other things, with the data acquisition tools, the sample size and the sampling method, the data analysis technique. It delivers thorough interpretations of the systems used and how the approaches used to achieve the objective and purposes of the study. 23
3.2 Research Design 23
3.3 Study population/sample size and sampling techniques 23
3.3.1 Study population 23
3.3.2 Sample Size 24
3.3.3 Sampling Technique 24

3.4 Data Collection methods. 25
3.4.1 Questionnaire Design 26
3.4.2 Questionnaires issued 26
3.5 Method Data Analysis 26
3.6 Ethical Considerations 27
3.7 Summary 27
CHAPTER FOUR 28
ANALYSIS AND DISCUSSION OF RESULTS 28
4.1 Introduction 28
4.2 Presentation and Descriptive Analysis of Data (Demographic) 28
4.3 Sector of Affiliation 29
4.3.1 Respondents Years of Practice. 30
4.3.2 Professional Background 32
4.3.3 Road Construction Respondents Manage. 32
4.4 Factors Impeding the Implementation of PPP Road Project In Ghana 33
4.5 Occurrence frequency of impeding factors 36
4.7 Strategies to Help in the Implementation of Public Private Partnership (PPP) 39
4.8 Effectiveness of Strategies for the Implementation of Public Private Partnership (PPP) ... 42
4.9. Advantages of public private partnership (PPP) road project in Ghana 44
4.10. Disadvantages of implementation of public private partnership (PPP) road projects 45
4.11 Factors Impeding the Implementation of Public Private Partnership (PPP) 47
4.9.4 Implementation Strategies for PPP Road Projects in Ghana 50
CHAPTER FIVE 53

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION..... 53

5.1 Introduction 53

In total, 46 questionnaires were sent to a number of experts in the road sector, all of which were answered. The fragment follows the following structures: A summary of how the main objective was content and discussion about the study's purpose is provided to highlight the contributions of the research. The chapter concludes with a recommendation for further research that can be conducted on the basis of the conclusion and the limitation of the study. Investors rely on the cash flow generated from the project to repay their backlogs from the project..... 53

5.2 Summary of Findings 53

5.3 Conclusion..... 54

5.4 Recommendations 56

5.5 Limitation of Study 57

REFERENCES..... 58

APPENDIX..... 63

LIST OF TABLES

Table 3.1 Method Data Analysis 25

Table 4.1: Distribution of Respondents' Sector 29

Table 4.2: Distribution of Respondents' Years in the Organization 31

Table 4.3 of Road Construction Managed 33

Table 4.4 factors impeding the implementation of public private Partnership (PPP) road projects 35

Table: 4.5 Occurrence Frequency of impeding factors 38

Table 4.6 Strategies to help in the implementation of public private Partnership (PPP) road project 41

Table 4.7 Effectiveness of Strategies for the Implementation of Public Private Partnership (PPP) 43

Table 4.8 Rankings of the Advantages of PPP on road projects 45

Table 4.9 Ranking Disadvantages of PPP on road projects 46

Table 4.10 Factors Impeding the Implementation of Public Private Partnership (PPP) road project. 49

Table 4.11 Implementation strategies 52

LIST OF FIGURES

Figure 4 1: Respondents Sector 30

Figure 4 2: Respondents Years of Practice 31

Figure 4 3: Respondents Professional Background 32

CHAPTER ONE

INTRODUCTION

1.1 Background study

After the second world war, majority of governments both in the developed and developing countries have been entrusted with the development of their countries through infrastructure project such as roads, transportation, telecommunication, energy, water, sanitation, health, education and others to stated owned monopolies or sector / government, department (Grimsey and Lewis,2002). But unfortunately, Public sectors often do not have the experience and the technical knowhow when it comes to the efficient implementation of Public-Private Partnership (PPP). However, for effective management of PPP, government officials are required to be guided on how to apply PPP in various sectors of the economy, for them to be sure that optimum service is delivered to the citizen. This should be done because the private sector in most cases is fully aware about PPP when engaging with government in such issues as development projects (Savas, 2000).

In several countries, the situation was (and for quite a number still is) that government builds or purchases physical asset, retains ownership, uses public sector employees or a private contractor to deliver the required service through the traditional mode of procuring public Infrastructure and service (Grout, 2000).

However, fiscal constraint experiment by countries has resulted in developing of new and innovative approaches to the financing of public infrastructure and service. Governments traditional role of providing infrastructure and services is gradually being supplemented with private sector expertise and financing. (Government of Ghana, 2011). The lack of insufficient knowledge about the Public-Private Partnership tool in the public sector has been clarified around

the world in key numerous international institutions around the globe such as World Bank, European Union and United Nations with the aim of offering amicable solution to these challenges and matters facing the government's efforts in provision of adequate services to its citizenry. Many governments have acquired training, education and advocacy services from international institutions. A partnership could be comprehended as a voluntary collaborative agreement between two or more parties, in this case, however, parties engage come to work together hand in hand in order to accomplish a common objective (Ikejiofor, 1998).

The funding of public project is a way of solving the increased demand for infrastructure and services, and this is pertinently important to developing countries. Bennet (1999) also indicated that it is also very crucial to develop new infrastructure in the bid to alleviate poverty and meet other social demands. PPP is a contractual arrangement between a public entity and private sector party, with a clear arrangement on a shared objective for the provision of public infrastructure and service which was traditionally provided by the public sector (Government of Ghana, 2011).

In an effort to address these bottle necks, the Government of Ghana is considering various forms of models like, Build Operate and Transfer (BOT), Design -Build Operate (DBO), Build Lease Transfer (BLT) Design Build Finance Operate (DBFO) and other concepts of Public Private Partnership (PPP) for the building and maintenance of road infrastructure in the country. Government is also looking at a means or modes to improve the building and maintenance of road infrastructure. GNA (2014) highlighted that 40% of the road infrastructure maintenance in Ghana is being catered for by the Ghana Road fund whiles the remaining 60% is catered for by the Government of Ghana and its developing partners to develop and maintain the roads as confirmed by the Ministry of Roads and Highways and the Ghana Highway Authority. The habits of always

sourcing for Donors and Developing Partners to come and fund or support road infrastructure project should be a thing of the past. This therefore necessitates efforts to look at other means to develop road infrastructure project and effective road network in Ghana. Therefore, Public Private Partnership is created to improve the distribution of costs, risks and profits between the public and the private sectors for infrastructure project through appropriately utilization their side strengths while at the same time addressing their shortcomings. Public Private Partnership has also been successfully applied to various road infrastructure projects throughout the world and this form the basis for various facets of model of road construction and maintenance in Ghana.

1.2 Statement of the problem

From Pre to Post independence most of Ghana's infrastructure projects have been financed by the State. In the 1980's when Ghana was by with serious economic crisis, the country resorted to the International Monetary Fund (IMF) and the World Bank inspired the Structural Adjustment Program (Ghana Business Media, 2011). Ghana's declining revenue base coupled with the global economic recession has made it very difficult for government funded road infrastructure projects. Public Private Partnership (PPP) presents the most viable alternative to the challenge posed by the global economic crisis. Another lifeline for the government in the era of its depleting resource is the private sector. The need to embrace the opportunities to assist government in the provision of services and infrastructure projects, in the face of the numerous advantages expected from PPP after it was introduced as a national policy, there have been some challenges in the procuring and implementation of road projects in Ghana under PPP. The Government of Ghana is discovering new avenues to improve the maintenance and development of road infrastructure,

Since Ghana road fund currently sustains only 40% of the maintenance cost of the road network. (GNA, 2014);

The impasse in adopting the PPP model by road agencies and departments could be attributed to a number of impeding factors which needs to be explored.

1.3 Aim or Objective of the Study

The aim of the study is to investigate factors impeding the implementation of Public Private Partnership (PPP) road project in Ghana.

1.4 Specific objectives

In achieving the above stated aim, the following specific objectives were developed.

1. To identify factors impeding the implementation of PPP Road Project in Ghana.
2. To Determine the Benefits and Disadvantages of PPP road Projects
3. To Assess the Various Strategies that will help in the smooth implementation of PPP Project in Ghana.
4. To Promote some policy recommendations to help promote PPP Accra - Kumasi Highway projects in Ghana.

1.5 Scope of the Study

Geographically the scope of this study was limited to Accra. The targeted respondents for the study were from the Ministry of Roads and Highways and its agencies like the Department of Urban Roads, Department of Feeder Roads and the Ghana Highway Authority.

The study specifically involves the Contract Managers, Project Managers, Civil Engineers and Quantity Surveyors of these agencies as well as Road Contractors of A1B1 Classification. It is hoped that data obtained from the study give a true reflection of the assessment of the factors

impeding the implementation of PPP road projects in Ghana. The road sector was chosen because of the huge capital investment needed to improve the road network which government alone cannot provide due to the current global financial crises and Challenging.

1.6 Research Methodology

In conducting this research, a critical review of relevant literature on PPP road projects, its Benefits and disadvantages was done and it aided the identification of successful work done as well as. Its application, limitation and constraints. Data was collected from the field by the administration of questionnaires, and face to face interviews. In designing the questionnaires attempts were made to ask relevant questions which were devoid of uncertainty to facilitate analytical interpretation and for reasonable conclusions to the study to be made. Data collected will be analyzed using descriptive statistics and Relative important index (RII) Regular follow Ups will be made after distribution of questionnaires to clarify any difficulties faced by the respondents, Calls and electronic mail reminders will also be sent periodically.

1.7 Significance of the Study

The study will be significant for the various agencies under the Ministry of Roads and Highways and also, stakeholders in the Road construction industry in developing alternative models of financing and procuring road infrastructure projects. The research will address issues on factors impeding the implementation of Public Private Partnership (PPP) road project in Ghana focusing on the Accra-Kumasi Highway N6 and also to enhance other PPP's in the road sector. The findings of this study would be very crucial to policy makers as well as players in the industry on how to develop and find alternative means of addressing road infrastructure project financing in Ghana. The findings will also contribute to knowledge in academia and will stimulate further research into

the constraints and opportunities of Public Private Partnership in developing Road infrastructure in Ghana offers.

1.8 Organisation of the Study

The study has been divided into five main chapters,

Chapter One is the introduction which briefly describes the whole content of the study and what it is about. The background talks about the importance of Public Private Partnership in the road sector. It also introduces the Topic, Aim and objective of the study. Methodology and Significance of the study.

Chapter Two contains the Literature Review. It is an account of the current state of knowledge on the topic. It discusses relevant works that have been published by accredited scholars and researchers. It also discovers the importance of the study and it summarizes the main issue discussed.

Chapter three discusses the Research Methodology. This chapter deals with the methods used in conducting the study, modes of collecting data, sampling of respondents, design and administration of questionnaires for analysis.

Chapter Four report on the Research Analysis. It is the collection of all relevant formulas and Statistics used in studying and inferring collected data used for the study.

Chapter five is the conclusion and gives the final summary of the research work done. The conclusion also states the opinion of the author on the situation found based on the results obtained. It also discusses the limitation of the research work and gives recommendation to its findings of the data analysis.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter contains reviews of previous studies relating to the topic under study to inform the current researcher on previous researches and findings. Literature review is important for every study as it helps to review and discuss the subject under study. This is in line with the statement by (Jankowicz, 2005 as cited by Anon, 2009, p.48) that "Knowledge does not exist in a vacuum and your work only has value in relation to other people". And the one's work together with his or her findings will only be valued only to the extent that they are the same as, or different from another person's own. It is significant to note that the concept of Public-private partnership (PPP) has no single definition and clarity and is patronized in a full extent and implemented in the area of public procurement (Meidute & Paliulis, 2011). In addition, there has been some form of confusion within the international experiences and in academic literature as there is no clear-cut difference for what partnership is assumed to be a Public Private Partnership or a form of a traditional procurement. As a result of high patronage of the concept of Public Private Partnership, many perceive it to be a new phenomenon or concept though it is not.

According to (Grimsey and Lewis, 2004), a lot have developed a strong interest in this concept mostly due to the changing characteristics and expectations in our fast-changing society towards the government and public sector. The society requires infrastructure of better quality with a more efficient provision of public services and better use of public money. As a result, Public Private Partnerships have been seen as a procurement mode that may facilitate these dynamic needs (Meidute and Paliulis, 2011). In light of this, this chapter seeks to throw light on the definition of Public Private Partnerships, types of Public Private Partnerships, the Procurement process, source

of finance for Public Private Partnerships, successful PPPs projects, advantages and disadvantages of PPPs, Strategies of PPPs and the Accra Kumasi Project.

2.1 Definition of Public Private Partnership

This concept is much acknowledged in literature that there is no clear definition for the term PPP that will cover all the essential aspects of the various relationships these partnerships consist of but the concept of PPP can be said to be a form of Private sector involvement where a partner from the private sector brings its commercial innovation, capital and skills into the delivery of the services which the government is initially responsible for providing. It should be noted that the above definition only caters for a part of the broad concept. Levy (2011) defines Public Private Partnership as a way of awarding long-term concessions often utilizing project companies set up by a consortium of private firms to design, finance, build and operate individual infrastructure assets earlier operated and financed and by government. Weihe (2005) indicated that the concept of PPP "allows for great variance across parameters such as time, types of products/services, closeness of cooperation, complexity, costs, level of institutionalization as well as number of actors involved", therefore almost any kind of the PPP relationships that comprises the private and the public sector (whether a joint venture or a service contract) can be referred to as a public-private partnership (Coopers, 2005). To be able to make distinction between the varieties of definitions available, Weihe (2006) in his effort to classify the different partnerships into 5 categories categorized them as Infrastructure, Governance, Local regeneration, Development and Policy approaches. Public Private Partnership has been a vital policy used in facilitating public facilities and services in numerous countries. For the purpose of this thesis, Rostiyanti and Tamin (2010) defines Public Private Partnership as a collaborative effort between public and private sector

organizations in public service delivery in which there are rules, institutional obligations, roles and responsibilities notwithstanding accountability to all involved parties.

2.2 Types of Public Private Partnership

There are many types of PPPs used all over the world. A number of them operates similarly but under different names and is dependent on the country where it is used whereas for some cases there will be different approaches. Some of the different types of Public Private Partnership commonly mentioned have been listed as follows.

2.2.1 Design Build Finance Operate (DBFO)

Levy (1996) defines it as way where the government will retain title of the land and lease it to the private consortium over the life of the concessionary agreement. Also, a single contract is awarded for the design, construction, and operation of a capital improvement and the title to the facility remains with the public sector unless the project is a design/build/operate/transfer or design/build/own/operate project. The DBFO method of contracting is contrary to the separated and sequential approach ordinarily used in the United States by both the public and private sectors. This is where a private partner designs, builds and operates the facility or the project. It is where an architect or engineer first designs the project, followed by a different contract with a builder for the construction of the project, which is also followed by the operation of the project or facility by the owner.

A simple design-build approach creates a single point of responsibility for design and construction and can speed project completion by facilitating the overlap of the design and construction phases of the project. On a public project, the operations phase is normally handled by the public sector under a separate operations and maintenance agreement. Combining all three passes into a DBFO

approach maintains the continuity of private sector involvement and can facilitate private-sector financing of public projects supported by user fees generated during the operations phase.

2.2.2 Design Build Operate Maintain

Though DBM is similar to the DB the maintenance of the facility for some period of time which is the sole duty of the private partner or sector is the distinguishing factor of DBM. Moreover, there is similarity when it comes to the benefit packages with maintenance risk being allocated to the private sector or private partner and the guarantee expanded to include the maintenance also. Thus, sole owner and the operator of the asset becomes the public-sector partner. Sabuza (2010) explained that, the private investor takes the running and maintenance roles of the facility for an agreed period of time and then transfer to government.

2.2.3 Operation and Maintenance (O & M)

This arrangement makes it possible for publicly owned asset to be managed and maintained by the private sector or company. Akbiyikli & Eaton, (2018) claim that Operation and Maintenance is the longest phase of these kinds of infrastructural projects since it could range for lengths of between 30-40 years. They assert that it is the most important phase because that is where the service delivery and payment conditions are created.

It is noted that in Mainland China, majority of assets are owned by the state and it is very common in the country. Due to a number of state owned facilities and services in the country a heavy burden has been placed on the Chinese government, thus by the adoption of this PPP the financial commitment can be released. This type of PPP may sometimes not be as favorable as compared to ones that start from scratch. Whereas for new projects the benefits of employment are obvious, for existing facilities and services a consortium taking over can cause changes to the existing employees.

2.2.4 Build Operate Transfer (BOT)

It is interesting to note that one of the most traditional types of PPP used in the early days mainly for transport economic infrastructure projects is the BOT. According to Amusan et al. (2013), this type of PPP allows risks to be easily transferred to the party that can best absorb them. Hong Kong is noted for using this traditional option. The Build Operate Transfer involves both the construction and the operation of the facility, and thus at the end of the contract period it will be transferred back into the hands of the government. The private partner builds a facility to the specifications agreed to by the public agency, operates the facility for a specified time period under a contract or franchise agreement with the agency, and then transfers the facility to the agency at the end of the specified period of time. In most cases, the private partner will also provide some, or all, of the financing for the facility, so the length of the contract or franchise must be sufficient to enable the private partner to realize a reasonable return on its investment through user charges. At the end of the franchise period, the public partner can assume operating responsibility for the facility, contract the operations to the original franchise holder, or award a new contract or franchise to a new private partner. The BTO model is similar to the BOT model except that the transfer to the public owner takes place at the time that construction is completed, rather than at the end of the franchise period.

2.2.5 Build Own Operate (BOO)

This is commonly used in Australia and quite different from the BOT. This is where the contractor constructs and operates the facility without transferring ownership to the public sector after completion. In this arrangement, there is no obligation for the public sector to purchase the facility or take title as the legal title to the facility that has been constructed remains in the confines of the private sector. Sometimes a BOO arrangement may qualify for tax-exemptions status as a service contract if all Internal Revenue Code requirements are satisfied (Quium,2010)

2.2.6 Build Own Operate Transfer (BOOT)

This is similar to BOT but a larger emphasis on the ownership. According to the World bank, (2014 contained in Effah et al ,(2017)) the BOOT model has the advantages of assigning the risk of delivering large infrastructure projects such as roads, water supply systems etc. on budget and on time to the private sector, improving the efficiency of project delivery, and marshalling alternate sources of capital for continuous infrastructural development.

2.2.7 Buy-Build Operate Transfer (BBOT)

The BBO arrangement brings to light an expansion or rehabilitation of already existing facility. Thus, in this case the asset is sold to the private sector by the government in partnership in which the private sector then effects the improvements necessary to operate the facility in a profitable manner when the validity period is over, the ownership right is given back to the government (Algami.et.al.2007)

2.2.8 Build Transfer Operate (BTO)

This approach is a method that enables relieving the consortium of the furnishing high cost insurance required by the project during operation of the facility (Levy, 1996).

2.2.9 Joint Ventures (JV)

Also, in Joint ventures the public sector and private sector jointly finance, own and operate the facility or asset (Grimsey and Lewis, 2004).

2.2.10 Leasing

This is where all or a substantial part of all the risks associated with funding, developing and operating the facility are taken up by the private sector and the facility is given on lease to the public sector (Sapte, 1997).

2.2.11 Lease Purchase

In the case of a lease or purchase, an installment form of purchase contracted. This approach is a model where the private sector finances and builds a new facility which is afterwards leased to a public sector or agency. The public sector then gives scheduled lease payments to the private party. The public agency accrues equity in the facility with each payment. When the end of the lease term arrives, the public agency then assumes ownership of the facility or purchases it at the cost of any remaining unpaid balance in the lease. This arrangement allows for the facility to be operated by either the public agency or the private developer during the term of the lease. Lease or purchase arrangements have been used by the General Services Administration of projects such as the building of federal offices and by a number of states in the building of prisons and other correctional facilities. According to Levy (2011) the whole facility is managed by the private agency and at the expiration of the occupancy period, the project is given back to the public entity for outright ownership.

2.2.12 Sale Leaseback

This arrangement is a financial form that allows the owner of a facility to sell the facility to another entity, and subsequently to lease it back from the new owner. Both public and private entities may enter into sales or leaseback arrangements for a variety of reasons. An innovative application of the sale or the leaseback approach is having the sale of a public facility to a public or private holding company with the aim of limiting the governmental liability by certain statutes. With this arrangement, the government that sells the facility also leases it back and continues to operate it after it is constructed (Rossi and Civitillo 2014).

2.2.13 Tax Exempt Lease

This lease form for public partners enables the financing of capital assets or facilities through the borrowing of funds from a private investor or financial institution. The private partner usually acquires the title to the asset and then later transfers it to the public partner either at the beginning or end of the lease term. Rossi& Civitillo (2014) indicated that the portion of the lease payment used to pay interest on the capital investment is tax exempt under state and federal laws. Tax-exempt leases have been used to finance a wide variety of capital assets, ranging from computers to telecommunication systems and municipal vehicle fleets.

2.3 Procurement process

When looking forward to undertake any Public Private Partnership project, there are three staged involve project, and these are Planning, Procurement and Contract management (Li.et.al 2004). These processes are very much important when considering and PPP project.

2.3.1 Planning

According to Li.et.al (2004), the first stage of the procurement process and it begins with developing a business case. it's when a business identifies a need for goods or services either internal or external. Internal goods and services are materials required to run the business whilst the external goods and services are the materials that the business will sell. This stage of the procurement process also includes setting a budget. Not only budget allocation, the responsibilities that comes along with the project. In this, the need to determine the cost of the materials needed to undertake the projects, the time the materials have to arrive and why they need to arrive on time and approximately how much the material should cost.

2.3.2 Procurement Stage

After the planning stage, the next stage involves the creation of tenders. It begins with the advertisement in the papers inviting potential bidders to submit bids for the project (Li.et.al 2004). Selected bidders are given an invitation to negotiate and this includes instructions to bidders, specification, contractual terms, risk list and Evaluation criteria. Meeting are held with each bidder to assess their submitted bids and also to determine their suitability for the job. After these meetings it required of each bidder to submit a best and final offer, based on which the most qualified bidder would be selected (Li.et.al.2004).

2.3.3 Evaluation

The next stage of the procurement is the evaluation stage. After considering, the above aspects in the procurement stage, there are four major criteria in the evaluation of Bids under PPP projects. These are Financial, Technical, Health Safety and Environmental and Managerial (Kwak.et.al.2009). Proposal are tested against risk transfer mechanism, value for money and most importantly affordability (Li.et.al.2004). There is the need to determine evaluation criteria, the weighting of the criteria, the need to create a grid or scheme and lastly the need to nominate evaluation team to evaluate the best and final offers submitted by the short-listed bidders.

2.3.4 Award of Contract

According Li.et.al (2004) this is the final stage of the procurement process, where all negotiation and details of the project are agreed upon after the selection of the most responsive evaluated bid. The contract or concession is then package and awarded to the selected bidder the terms of agreement.

2.3.5 Records of Procurement Process

When the tendering and awarding processes are completed, and a selected bidder is chosen. The results of the procurement process are made known to all bidders for fairness and transparency purposes and also serves as evidence of the process. Such transparency of the procurement of the procurement process allows all bidders to have information concerning the intent to award the contract or concession to the winning bid, this affords all bidders the opportunity to contest the decision of the award if they have any disagreement (Grimsey and lewis,2007)

2.4 Source of Finance

Infrastructure is really essential to the growth of economy, most especially in low-to-middle income countries where a funding gap exist for building and maintenance of the infrastructure. Generally, public-private partnership projects are funded using the available financial resources. The private sector together with the development finance institutions (DFI), which include both bilateral and multilateral development banks can help in bridging this gap often alongside with public sector financing (PPP-investment, 2015).

2.4.1 Public source financing

Public Private Partnership financing may come from public, private, or DFI sources. Public source financing includes (a) state-owned enterprises (SOE) investing equity, (b) state-owned banks extending loans and (c) governments providing part of a project's upfront capital costs through grants or viability gap funding thus government subsidies. Kuala (2015) indicated any time there is Public Private Partnership project, there are two sources of financing and that is the public support and the private finance. With the public support, two main sources of finance contribute towards it. Thus, the Guarantees and the Capital Grant (Viability Gap Funding).

In addition, the private source financing includes equity (including equity financed by corporate debt through the project's developer or project finance debt through private lenders, which can be either commercial banks or institutional financiers. Specifically, to low-to-middle countries, a Development finance institution (DFI) provides diverse support forms.

2.4.2 Private source financing

Similarly, the private finance also has two sources which are the Project finance and the corporate finance. With the project finance, financing only relies on projected cash flows of the project in focus whiles with the corporate finance, financing relies on the quality of the sponsor thus its balance sheet. The source of private finance is mainly through the banking sector which includes domestic banks, international banks, multilateral and bilateral development banks, Export credit Agencies and the like.

Stockholders depend on the cash flow created from the project to reimburse their arrears from the venture and, in return, make gains from their investment. A consistent financial plan is vital to the implementation from any public private partnership development. The financial plan serves as a standard of against the financial market with the financial plan prospective stockholders can determine whether or not the project is at least desirable as what is available on the financial market. (Ross.et.al, 2003). This idea serves as a means of influencing financial criterion to assess Public Private Partnership proposals. For example, the government of Hong Kong has adopted three sets criteria and thus engineering, planning and financial to evaluate tender documents for their Build Operate Transfer (BOT) developmental projects. The rating percentages assigned to these three benchmarks are approximately 65%, 20% and 15% respectively.

2.5 Advantages and disadvantages of PPP

With Public Private Partnership, there are a number of advantages and demerits that should really be considered before undertaking any kind of joint venture. In recent years, a public private partnership is increasingly becoming popular in different countries. PPP is common in different areas including transportation as well as gas and oil exploitation ventures. Nowadays the public needs a lot of infrastructures but many governments are faced with budgetary constraint. Nonetheless, PPP is circumspect in ensuring the development of the country's economy. Duffour (2011) indicated that the overall aim is to have well-planned terms of a whole wide range of quality and timely public infrastructure and timely services which could be achieved as a result of utmost leveraging of Public funds, faster project execution, proper responsibility and a swing of whole life cycle cost and infrastructure supervision by the private sector.

2.6 Advantages of PPP

PPP increases value for money by providing a more efficient and affordable public infrastructure. It also reduces lifecycle cost and project delivery times. It promotes innovation in infrastructure delivery and also promotes economic growth. (kwak.et.al.2009)

Also, there is reduction in the cost of completing a particular project due to public private partnership this is because both the government and the private company provides the required capital for completion of development projects.

2.7 Disadvantages of PPP

Although PPP is mostly beneficial, it also comes with some disadvantages. As PPP is a relatively new concept it is saddle with lack of experience and appropriate skills on the part of both public and private partners (Morledge and Owen 1998; Ezulike.et.al 1997)

Due to the high cost involve in tendering for PPP projects competition is limited to a few bidders (Li.et.al.2005) PPP project are likely to be negatively affected by public opposition and political interference (Kwak.et.al. 2009)

2.8 Strategies of PPP Implementation

There are a lot of developmental projects that are not well managed. Some of the projects are abandoned as the resources that are allotted for such projects are not properly exploited for its sustenance. It has been noted that PPP is trying to implement some of the principles of the private sector to curb economic problems is the government sector. Therefore, Ahmad, et.al (2016) indicated that in Iran, more than half of the funds of the health sector of the country are allotted to hospitals; however, the low hospital bed occupancy rate as compared with the developed countries show that the resources available are not properly exploited. In addition, several studies have revealed some factors or strategies ensure the implementation and success of executing PPP projects. Therefore, in order to ensure to attain successful implementation of PPP projects and its promotion and development, these factors should be considered to avoid any failure in the implementation and operation of these PPP projects (Ahmad.et.al 2016).

2.8.1 Changes in policies and laws.

One of the strategies that can set the context for the development and promotion of PPP is changes in current policies and laws. In this light, the stability of government policies could be lead to the development of the PPP and its projects implemented. This is in agreement with many interviewees that "Governments must have stable policies". For example, a certain President might say that I will reduce the bank interest to 5%, another might come and abandon it: then, another President will even promise to reduce it to zero. This situation makes any investor lose interest. This is the situation in Ghana which is not helping PPP in realizing its goals and objectives.

Therefore, the attitude of ever changing policies and laws of developmental projects in the country should be changed. This will ensure the development and the promotion of PPP to ensure proper management of its projects (Barati.et.al,2016).

2.8.2 Socio-cultural changes

Another factor that has been identified to ensure the promotion of PPP is the Socio-cultural changes. For proper maintenance and promotion of the PPP in the country, there should be a change in the mindset and belief of individuals regarding the usage of the various projects implemented by PPP. There is a belief that all people involved in government are very good and those that are involved in the private sector are bad, this paradigm mentality should change if we want to promote PPP (Ahmad.et.al.2016.)

2.8.3 Improvements in current mechanisms and processes

Another necessary strategy in promoting PPP is the improvement of the current mechanisms and processes. One of these mechanisms according researches is the need to create a strong and single entity for managing relationships within the private sector of the economy. Ahmad.et.al.2016) There is the need for a committee to be set in issuing qualifications to private partners. It is therefore significant that in all countries, there should be a very strong consortium that sets up the contracts, approves the qualifications of private sector, and monitors every activity. We need such framework which will still function with any changes in the government. This will ensure that PPP functions at its best.

2.8.4 Financial and capital capacity building

Provision of necessary conditions and ways of attracting investment in the country is another strategy for promoting PPP. In this respect, there must be government guarantees for return on capital and earnings to the investors. This is because everyone is willing to invest in a country

where there will be returns on the investment made. In this light, the government should provide incentives and awards to attract investors. In order to attract investors in the various projects we would like to undertake in the country, the number of facilities that government has can be given to the private sector in order to keep the cost low which will in turn increase the earnings (Ahmad.et.al.2016). The government should ensure that there is market and that there is a guarantee about the existing risks and take the domestic and exchange rate risks from the investors (Ahmed.et.al.2016)

2.9 The Accra – Kumasi Highway (National Road Six N6)

The Accra – Kumasi (N6) is one of the very important trunk roads providing a major access to the northern part of Ghana as an international transit route to the Sahelian regions such as Burkina Faso, Niger and other countries. The entire trunk road spans a distance of 230km starting from the Achimota -Neoplan. It location makes it an important road network in Ghana which serves the 3 northern regions, and Brong Ahafo. (Ghana Highway Authority). (GHA)

In 2004 the then Government of President John Adjekum Kuffour got a grant from the Chinese government to begin the dualization of the Accra kumasi Highway which started with the Nsawan – Ofankor in June 2004, the followed with the Achimota Ofankor Section, The Nsawan By Pass, Kwafokrom – Apedwa Section, Apedwa – Bunso section, Bunso – Anyinam section, The Nkwakaw By-Pass, and then the Konongo Ejisu Section. However, some of the sections till date have not been completed due to lack of funds. (GHA, MRH,2010).

A PPP proposal was table for consideration on the entire trunk road, however several factors and conditions did not allow this proposal to see the light of Day. The Concessionaire raised several issues to be considered by government.

- Issues of legislation about PPP projects in Ghana.

- Relocation of major Utility lines along the Corridor

- Political interference ie. The by passing of major Towns along the Corridor. Etc.

(PPP UNIT, GHA/MRH 2010)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter deliberates on the research methodology used in conducting the study. It deals, among other things, with the data acquisition tools, the sample size and the sampling method, the data analysis technique. It delivers thorough interpretations of the systems used and how the approaches used to achieve the objective and purposes of the study.

3.2 Research Design

The research design serves as the plan or a set of procedures that guides the researcher on how the data and analysis of the research will be conducted (Baiden, 2006: Creswell, 2006)). Research design is made up of the exploratory, explanatory and descriptive research designs (Saunders et al, 2009). The study which sought to establish the factors impeding the implementation of public private partnership road project in Ghana adopted the exploratory research design in the quest to understand the factors through the distribution of questionnaires and collecting data from professionals for the study.

3.3 Study population/sample size and sampling techniques

3.3.1 Study population

The current study used the Accra Kumasi Highway as the case study in Ghana. Geographically, the scope of this current study is limited to Accra.

The study targeted respondents from the Ministry of Roads and Highways and its agencies like the Department of Urban Roads, Department of Feeder Roads and the Ghana Highway Authority. The study specifically involves the Contract Managers, Project Managers, Civil Engineers and Quantity Surveyors of these agencies as well as Road Contractors of A1B1 Classification.

3.3.2 Sample Size

The process of choosing the research units from a target population is known as sampling. According to Fellows and Liu (2008), sampling is the group of units you select as part of your study unit. The sample size required for this particular study is influenced by a number of factors. These factors include the population size, the purpose of the study, the level of precision, the level of confidence or risk and the degree of variability in the attributes measured (Miaoulis and Michenser, (1976). sample size can be determined using (i) sample size of similar studies (ii) figures in published tables (iii) A consensus for small populations and (iv) sample size of similar studies. A sample of sixty respondents was used. The number was obtained by first arriving at the number appropriate to cover the largest group. A commensurate number was then obtained for the other respondent groups based on relative size.

3.3.3 Sampling Technique

The idea of the researcher introducing his own judgement on who is the best person to give him the answers to the research is purposive sampling. Generally, the researcher establishes what should be added or what will be needed and goes on to gather data from individuals who have the right experience on the subject matter (Bernard, 2002; Lewis and Sheppard, 2006). This study adopted the purposive sampling under the non-probability sampling technique. It was established that professionals from the various institutions mentioned below had the qualification the researcher needed in carrying out the work. Respondents from the Head office of the Department of Urban Roads were engineers and quantity surveyors who are professionals registered with the relevant professional bodies. Similarly, respondents from the Head office of the Department Feeder roads were also selected based on the same criterial as that of the Department of Urban Roads. Both the Ministry of Roads and Highways and the Ghana Highway Authority had PPP

units and all the respondents were selected from the Units. A1B1 Road Contractors were selected base on previous experience they had in PPP projects both locally and internationally. A total number of 60 respondents were issued to willingly qualified participants, the study aim targeted all professional involve in the PPP value chain, however only 60 were willing to submit themselves to the process. Out of the number that had demonstrated the wiliness to participate only 46 actually responded to the questionnaire.

Table 3.1 Method Data Analysis

TARGETED RESPONDENTS	NO OF QUESTIONNAIRE TO BE SUBMITTED
MINISTRY OF ROADS AND HIGHWAYS	**15**
DEPARTMENT OF URBAN ROADS	**10**
DEPARTMENT OF FEEDER ROADS	**10**
GHANA HIGHWAY AUTHORITY	**15**
A1B1 ROAD CONTRACTORS	**10**
TOTAL	**60**

Source: Field Survey,2014

3.4 Data Collection methods.

Data collection is one of the most important phases in research works. Data collection according to Bohrnstedt and Knoke (1994) helps in gathering data to address research questions therefore this process should be tactfully planned out. In this current study both secondary and primary data were collected. The secondary data was collected through review of a number of literatures and existing studies on factors impeding PPP implementation of road projects especially Accra Kumasi

Highway. Primary information or data was gathered as a result of the findings from these sources as the basis.

3.4.1 Questionnaire Design

Information was solicited from the respondents through structured questionnaires. Self-administered questionnaires were used to gather primary data from the respondents. The use of questionnaire was chosen due to the fact that it helps the researcher to quickly and/or easily get a lot of information from people in a non-threatening way (Fellows and Liu, 2008). Data was collected from the field by the administration of questionnaires. In designing the questionnaires attempts were made to ask relevant questions which were devoid of uncertainty to facilitate analytical interpretation and for reasonable conclusions to the study to be made. Regular follow Ups was made after distribution of questionnaires to clarify any difficulties faced by the respondents, Calls and electronic mail reminders was also sent periodically.

In all, the questionnaire had both close and open-ended questions. The closed-ended questions were meant to ensure consistency of the respondents' feedback and moreover aid the data analysis. On the other hand, the open-ended questions gave the respondent the opportunity to add up other issues which were not captures on the questionnaires but relevant to the study.

A copy of the questionnaires can be found at the Appendix.

3.4.2 Questionnaires issued

Sixty (60) questionnaires were delivered to the targeted respondents.

3.5 Method Data Analysis

Data collected was analyzed using descriptive statistics and Relative important index (RII) in finding the relative importance of the various variables in a particular group. Charts and Tables

were used to present the results. The Relative Importance Index (RII) was determined using the formula as indicated (Fagbenle *et al.*, 2004).

$$\text{RII} = \frac{\sum \mathbf{W}}{\mathbf{nN}} \text{ .... } (3.1)$$

Where RII = Relative importance index***;*** $\sum$w = respondent rating of severity of the challenges; N= sample size; n =the highest attainable score.

3.6 Ethical Considerations

First of all, prior consent of the respondents was solicited and the brain behind the study explained to them explicitly. This ensured that the respondents answered the question with all frankness. Also, the confidentiality of the information provided by the respondents was ensured. Documents used for the study were referenced in order to avoid plagiarism.

3.7 Summary

This particular chapter addressed the research methods used for the study and the justification for the choice of each method. The chapter also captured the study population, sample size, sampling technique, data collection and analysis method. The analysis of the data and the results from the survey will be captured in the next chapter.

CHAPTER FOUR

ANALYSIS AND DISCUSSION OF RESULTS

4.1 Introduction

In this chapter, scientific analysis and interpretations were used extensively on the data gathered from the survey. Statistical package for social science (SPSS) was used in this chapter in the introduction of the data analysis and discussion of the results. Descriptive statistics and Relative Importance Index were the main statistical tools used to analyze data received from the respondents.

The analysis of the data is divided into seven sections. The first section of analysis dealt with the general information on respondents. The second section (Section B) dealt with the factors impeding the implementation of PPP road project in Ghana, A Case of Accra – Kumasi Highway (N6). The third section (Section C) dealt with the strategies to help in the Implementation of PPP road project in Ghana, A case study of Accra-Kumasi Highway (N6). The fourth section (Section D) dealt with how often these factors impeding the implementation of PPP road project in Ghana, A case study of Accra-Kumasi Highway (N6). The fifth section (Section E) dealt with how effective these strategies will help in the smooth implementation of PPP road project in Ghana A case study of Accra – Kumasi Highway (N6). The sixth section (Section F) dealt with the Advantages of PPP. The Seventh Section (Section G) dealt with the Disadvantages of PPP.

There were forty – Six primary data collected in all.

4.2 Presentation and Descriptive Analysis of Data (Demographic)

In this segment of the survey consist of question demanding personal information to provide detailed respondent's characteristics. Data in this section included: the sector of respondents,

number of years respondents have been with organization respondents' professional background and the biggest type of construction respondents managed.

4.3 Sector of Affiliation

The question was intended to enquire the various sectors the respondents belonged to **Table. 4.1** below show the sectors every respondent was. 28.26% forming the majority of respondents were working with the Ghana Highway Authority, this was followed by the Ministry of Roads and Highway with 26.08%. The Department of Urban Roads got 17.40% with Department of Feeder Roads having 15.22% with A1B1 Contractors having 13.04%.

Table 4.1: Distribution of Respondents' Sector

Respondents Sectors	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Ministry of Roads & Highways	12	26.09	26.09	26.09
Dept. of Urban Roads	8	17.39	17.39	43.48
Dept. of Feeder Roads	7	15.22	15.22	58.70
Ghana Highway Authority	13	28.26	28.26	86.96
A1 B1 Contractors	6	13.04	13.04	100.00
Totals	46	100.00	100.00	

Source: Field Survey,2014

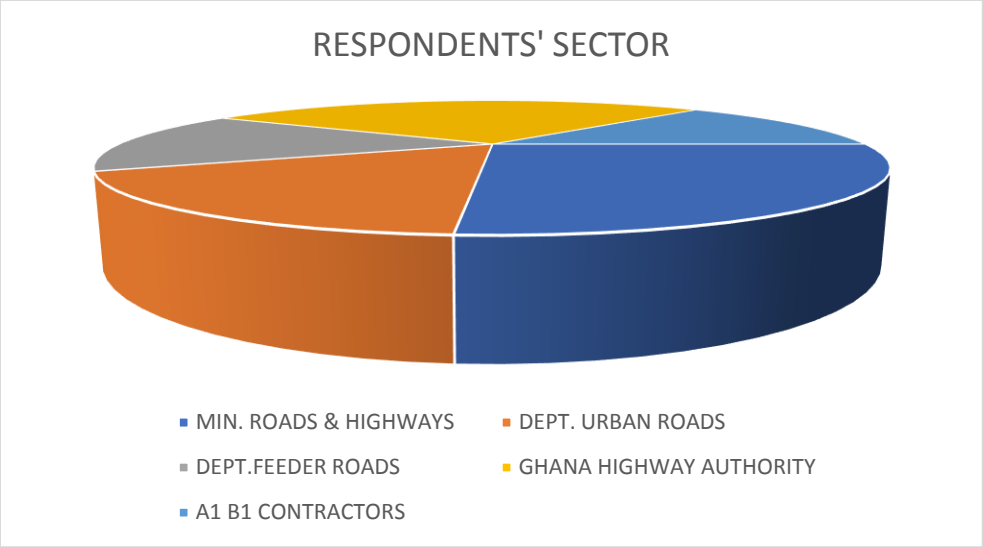

Figure 4 1: Respondents Sector

4.3.1 Respondents Years of Practice.

The number of years the respondents have been with their various organization tells the level of experience of the respondents hence affecting the quality of response. Table 4.0 and Figure 2. below show the respondents have been practicing, 15.22% indicated they have been in service less than five (5) years, 32.61% and 28.26% have been in their organization for 6-10years and 11-15years respectively, with 23.91% been in the service for more than 15 years. Due to the number of years in service, respondents can give extensively give response to the need for using PPP in road sector, Factors that impede the Implementation and the assessment of policies and structures.

Table 4.2: Distribution of Respondents' Years in the Organization

Years	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Less than 5 years	7	15.22	15.22	15.22
6 - 10 years	15	32.61	32.61	47.83
11 - 15 years	13	28.26	28.26	76.09
Above 15 years	11	23.91	23.91	100.00
Total	46	100.00	100.00	

Source: Field Survey, 2014

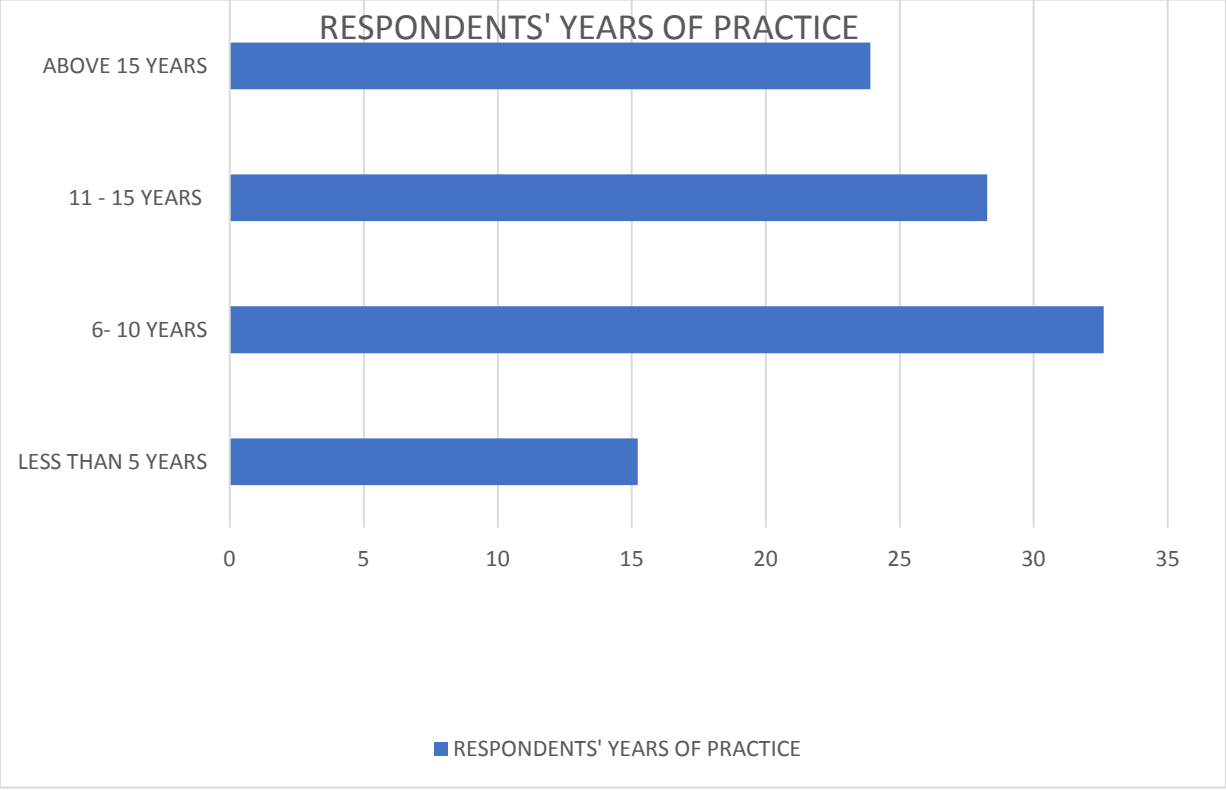

Figure 4 2: Respondents Years of Practice

4.3.2 Professional Background

Respondents were asked to indicate their professional background, from Fig 8 below, the results below show that 18 (39.13%) of the respondents were Civil Engineers, this shows the level of knowledge in the Construction of roads. 12 (26.09%) of the respondents were Quantity Surveyors, 10 representing (21.74%) were Contract Managers and 6 representing (13.04%) were Contractors with knowledge in Road Construction.

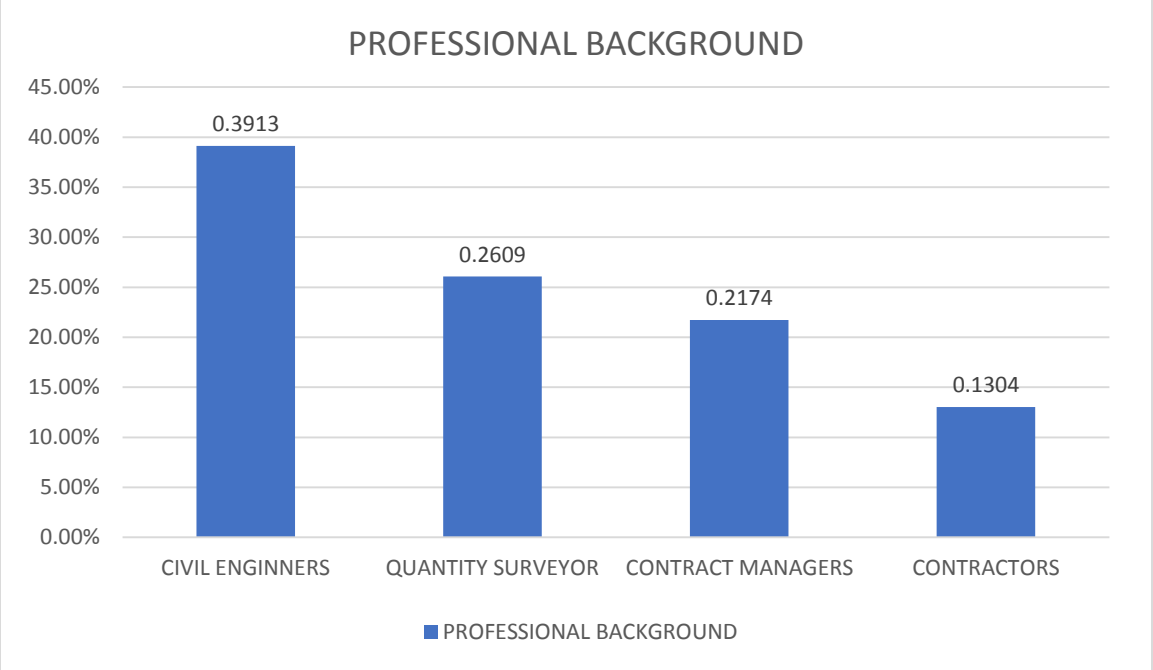

Figure 4 3: Respondents Professional Background

4.3.3 Road Construction Respondents Manage.

This questionnaire sought to find out the major type of road construction the respondents manages in Ghana. The results presented in a Table.47.83% total respondents managed Highway Road Construction, 19.56% respondents managed Urban Roads Construction, 17.39%of the respondents managed Feeder Roads and 15.22% of the respondents, managed Highway, Urban and Feeder roads in Ghana.

Table 4.3 of Road Construction Managed

Types of Road	Frequency	Percentage
Highway	**22**	**47.83**
Urdan Road	**9**	**19.57**
Feeder Road	**8**	**17.39**
Highway, Urban, and Feeder Road	**7**	**15.22**
Total	**46**	**100.00**

Source: Field Survey,2014

4.4 Factors Impeding the Implementation of PPP Road Project In Ghana

Factors impeding the implementation of Public Private Partnership (PPP) Road Project in Ghana, sector have been acknowledged in **Table 4.4** beneath, together with the mean scores of all (46) participants as well as the their RII scores and ranks, these factors associated with impeding the implementation of PPP road Project in Ghana. A case study of the Accra -Kumasi Highway (N6). High cost of Relocating Services along the Corridors, Political Will of Government in Procuring of PPP Projects, Complex Procurement Models, Public Acceptance of PPP, High financial cost in Procuring PPP Projects, Local Banks inability to provide long terms loans for

PPP road projects, Toll adjustment Mechanism, Non - existent of pricing Mechanism for PPP Concession Road Project, Lack of legal framework backing the Procurement of PPP Projects,

Budgetary restriction by the IMF and Other Donor Agencies, Current Economic Challenges (Inflation Rates, High Cost of Doing Business and Interest Rates, Lack of Understanding of

Concession Project, Viability and Profitability in implementing PPP model Projects.

From Table 4.4**,** Toll Adjustment Mechanism preceded as the highly Important factor with a mean score of 4.43 and RII score of 0.89, this shows the importance of Toll adjustment Mechanism,. The toll adjustment mechanism has a high rating because it determines the amount of pricing space that the contractor is allowed. This is especially important because of the levels of inflation and currency depreciation that is characteristic of developing countries like Ghana. Both the current Economic Challenges (Inflation Rates, High Cost of Doing Business and Interest Rates, and Political Will of Government in Procuring of PPP projects with a mean score 4.41 & 4.39 and with an RII score of 0.88 respectively, High Financial Cost of Procuring PPP projects and High Cost of Relocating Services along the Corridor had a mean score of 4.13 each and an RII score of 0.83 respectively, lack of legal Frame work Backing the Procurement of PPP Projects with a mean score of 3.93 and an RII score of 0.79, Both Lack of Understanding of Concession Projects and Local Banks inability to provide long term loans of PPP Road projects had a mean score of 3.89 and an RII score of 0.78 respectively, Non-existent of Pricing Mechanism for PPP Concession Road Projects, Budgetary Restriction by the IMF and other Donor Agencies and Risk of the Private Investor not able to Recoup their investment with the Concession Period had a mean score of 3.85, 3.85 and 3.87 respectively and an RII of 0.77, Public Acceptance of PPP had a mean score of 3.48 and an RII of 0.70, Lack of Performance Evaluation of Road Project had a mean score of 3.30 and an RII of 0.66, Complex Procurement Models had a mean score of 3.24 and an RII of 0.65, Viability and Profitability in Implementing PPP Models Project had a mean score of 3.04 and an RII of 0.61 were deemed averagely important by the respondents in respect to their organization.

Table 4.4 factors impeding the implementation of public private Partnership (PPP) road projects

	OPINION	1	2	3	4	5	N	ΣW	Mean	RII	Ranking
1	Toll Adjustment Mechanism	0	0	5	16	25	46	204	4.43	0.89	1st
2	Current Economic Challenges (Inflation Rates, High cost of Doing Business and Interest rates	0	0	6	15	25	46	203	4.41	0.88	2nd
3	Political Will of Government in Procuring of PPP Projects	0	0	6	16	24	46	202	4.39	0.88	2nd
4	High Financial Cost in Procuring of PPP Projects	0	2	10	14	20	46	190	4.13	0.83	3rd
5	High Cost of Relocating Services along the Corridor	0	2	10	14	20	46	190	4.13	0.83	3rd
6	Lack of legal Framework Backing the Procurement of PPP Projects	0	5	10	14	17	46	181	3.93	0.79	4th
7	Lack of Understanding of Concession Project	0	6	8	17	15	46	179	3.89	0.78	5th
8	Local Banks inability to Provide long term loans for PPP Road Projects	2	2	10	17	15	46	179	3.89	0.78	5th
9	Non - existent of Pricing Mechanism for PPP Concession Road Project	0	7	8	16	15	46	177	3.85	0.77	6th
10	Budgetary Restriction by the IMF and Other Donor Agencies	0	6	10	15	15	46	177	3.85	0.77	6th
11	Risk of the Private Investor not able to Recoup their investment with the Concession Period	1	6	8	14	17	46	178	3.87	0.77	6th
12	Public Acceptance of PPP	1	10	8	15	11	46	160	3.48	0.70	7th
13	Lack of Performance Evaluation of Road Project	5	10	9	10	12	46	152	3.30	0.66	8th
14	Complex Procurement Models	5	0	10	16	10	46	149	3.24	0.65	9th
15	Viability and Profitability in Implementing PPP Model Project	5	10	17	6	8	46	140	3.04	0.61	10th

Source: Field Survey,2014

4.5 Occurrence frequency of impeding factors

Factors impeding the implementation of Public Private Partnership (PPP) Road Project in Ghana, sector have been identified in Table 4.5 below, together with the mean scores of all (46) respondents as well as the their ROI scores and ranks, these factors associated with impeding the implementation of PPP road Project in Ghana. A case study of the Accra -Kumasi Highway (N6). High cost of Relocating Services along the Corridors, Political Will of Government in Procuring of PPP Projects, Complex Procurement Models, Public Acceptance of PPP, High financial cost in Procuring PPP Projects, Local Banks inability to provide long terms loans for PPP road projects, Toll adjustment Mechanism, Non - existent of pricing Mechanism for PPP Concession Road Project, Lack of legal framework backing the Procurement of PPP Projects, Budgetary restriction by the IMF and Other Donor Agencies, Current Economic Challenges (Inflation Rates, High Cost of Doing Business and Interest Rates, Lack of Understanding of Concession Project, Viability and Profitability in implementing PPP model Projects.

From Table 4.5, Political Will of Government in Procuring of PPP Projects preceded as the most frequent factor with a mean score of 4.48 and an ROI score of 0.90, Current Economic Challenges (Inflation Rates, High Cost of Doing Business and Interest Rates) with a mean score of 4.41 and an RII score of 0.88, Both Toll Adjustment Mechanism and Public Acceptance of PPP with a mean score of 4.22 and an ROI score of 0.84, High Financial Cost in Procuring of PPP Projects, High Cost of Relocating Services along the Corridor and Complex Procurement Models with a mean score of 4.15,4.15 and 4.13 and an ROI score of 0.83 respectively. Lack of Legal framework Backing the Procurement of PPP Project with a mean score of 3.96 and an ROI of 0.79, Risk of the Private Investor not able to Recoup their Investment with the Concession Period, Budgetary Restriction by IMF and Other Donor Agencies and Lack of Understanding of Concession Project

with a mean score of 3.78, 3.83 and 3.87 and an ROI score of 0.77, Non-Existent of Pricing Mechanism for PPP Concession Road Project with a mean score of 3.78 and an ROI score of 0.76, Both Viability and Profitability in Implementing PPP Model Project and Locals.

Banks Inability to Provide long term loans for PPP Road Projects with a mean score 3.78 and 3.67 with an ROI score of 0.73, Lack of Performance Evaluation of Road Project with a mean score of 3.17 and an RII score of 0.63 were deemed to be less frequent by the respondents in respect to their organization.

Table: 4.5 Occurrence Frequency of impeding factors

	OPINION	1	2	3	4	5	N	ΣW	Mean	ROI	Ranking
1	Political Will of Government in Procuring of PPP Projects	0	0	3	18	25	46	206	4.48	0.90	1st
2	Current Economic Challenges (Inflation Rates, High Cost of Doing Business and Interest rates	0	0	5	17	24	46	203	4.41	0.88	2nd
3	Toll Adjustment Mechanism	0	4	7	10	25	46	194	4.22	0.84	3rd
4	Public Acceptance of PPP	0	4	7	10	25	46	194	4.22	0.84	3rd
5	High Financial Cost in Procuring of PPP Projects	0	1	11	14	20	46	191	4.15	0.83	4th
6	High Cost of Relocating Services along the Corridor	0	1	11	15	19	46	190	4.13	0.83	4th
7	Complex Procurement Models	0	1	11	14	20	46	191	4.15	0.83	4th
8	Lack of Legal framework Backing the Procurement of PPP Project	0	5	9	15	17	46	182	3.96	0.79	5th
9	Risk of the Private Investor not able to Recoup their investment with the Concession Period	1	6	8	14	17	46	178	3.87	0.77	6th
10	Budgetary Restriction by the IMF and Other Donor Agencies	2	6	8	12	18	46	176	3.83	0.77	6th
11	Lack of Understanding of Concession Project	0	6	8	18	14	46	178	3.87	0.77	6th
12	Non -existent of Pricing Mechanism for PPP Concession Road Project	2	5	8	17	14	46	174	3.78	0.76	7th
13	Viability and Profitability in Implementing PPP Model Project	0	6	14	15	11	46	169	3.67	0.73	8th
14	Local Banks inability to Provide long term loans for PPP Road Projects	0	4	18	15	9	46	167	3.63	0.73	8th
15	Lack of Performance Evaluation of Road Projects	6	9	13	7	11	46	146	3.17	0.63	9th

Field Survey,2014

4.7 Strategies to Help in the Implementation of Public Private Partnership (PPP)

Strategies mapped up for the implementation of Public Private Partnership Road Project in Ghana have been identified in **Table 4.6** below. The strategies are shown together with the mean score of all (46) respondents as well as their RII scores and rank these strategies associated with the implementation of PPP road project. These include Low Cost of Doing Business; Good Political Will of Government in Procuring of PPP Models; Realistic Toll Charges, Stable Political Environments; Easy Access to Credit Facility; Flexible Procurement Models; Enabling Political Environments in Procuring of PPP Models; Sound Legal Framework backing the Procuring of PPP Projects; Appropriate Mean of Dispute Resolution; Non - Budgetary Restriction by IMF and other Donor Agencies; Viability and Profitability of Intended PPP Projects; Detailed and Proper Performance Evaluation Mechanism on Projects; Use of Current Trend of Contract Management Practices.

From Table 4.6, Low Cost of doing Business was identified as a highly important Strategy for the smooth implementation of Public Private Partnership (PPP) Road Project in Ghana with a mean score 4.41 and a RII score of 0.88; Both Good Political Will of Government of Procuring of PPP Models and Realistic Toll Charges with a mean score of 4.35 and a RII score of 0.87 respectively; Both Stable Political Environment and Easy Access to Credit Facility with a mean score of 4.24 and 4.26 and a RII score of 0.85 respectively; Both Flexible Procurement Models and Enabling Political Environment on Procuring of PPP Models with a mean score of 4.22 and a RII score of 0.84 respectively; Sound legal Framework backing the Procuring of PPP Projects with a mean

score of 4.17 and a RII score of 0.83; Appropriate Means of Dispute Resolution with a mean score of 4.07 and a RII score of 0.81; Non-Budgetary Restriction by IMF and other Donor Agencies with a mean score 4.00 and a RII score of 0.80; Viability of and Profitability of Intended PPP Projects with a mean score of 3.91 and a RII score of 0.78; Detailed and Proper Performance Evaluation Mechanism on Projects with a mean score of 3.80 and a RII score of 076; Use of Current Trend of Contract Management Practices with a mean score of 3.72 and a RII score of 0.74; were deemed averagely important by the respondents in respect to their organization.

Table 4.6 Strategies to help in the implementation of public private Partnership (PPP) road project

	OPINION	1	2	3	4	5	N	ΣW	Mean	RII	Ranking
1	Low Cost of Doing Business	0	0	6	15	25	46	203	4.41	0.88	1st
2	Good Political Will of Government in Procuring of PPP Models	0	0	7	16	23	46	200	4.35	0.87	2nd
3	Realistic Toll Charges	0	6	16	10	20	46	200	4.35	0.87	2nd
4	Stable Political Environment	0	0	9	17	20	46	195	4.24	0.85	3rd
5	Easy Access to Credit Facility	0	0	10	14	22	46	196	4.26	0.85	3rd
6	Flexible Procurement Models	0	0	10	16	20	46	194	4.22	0.84	4th
7	Enabling Political Environment in Procuring of PPP Models	0	0	10	16	20	46	194	4.22	0.84	4th
8	Sound legal framework backing the Procuring of PPP Projects	0	1	10	15	20	46	192	4.17	0.83	5th
9	Appropriate Means of Dispute Resolution	0	0	14	15	17	46	187	4.07	0.81	6th
10	Non- Budgetary Restriction by IMF and other Donor Agencies	0	6	8	12	20	46	184	4.00	0.80	7th
11	Viability and Profitability of Intended PPP Projects	0	6	9	14	17	46	180	3.91	0.78	8th
12	Detailed and Proper Performance Evaluation Mechanism on Projects	0	7	10	14	15	46	175	3.80	0.76	9th
13	Use of Current Trend of Contract Management Practices	2	6	10	13	15	46	171	3.72	0.74	10th

Source: Field Survey,2014

4.8 Effectiveness of Strategies for the Implementation of Public Private Partnership (PPP)

Strategies mapped up for the implementation of Public Private Partnership Road Project in Ghana have been identify in Table 4.7 below together with the mean score of all (46) respondents as well as their RII scores and rank these strategies associated with the implementation of PPP road project, Low Cost of Doing Business; Good Political Will of Government in Procuring of PPP Models; Realistic Toll Charges, Stable Political Environments; Easy Access to Credit Facility; Flexible Procurement Models; Enabling Political Environments in Procuring of PPP Models; Sound Legal Framework backing the Procuring of PPP Projects; Appropriate Mean of Dispute Resolution; Non - Budgetary Restriction by IMF and other Donor Agencies; Viability and Profitability of Intended PPP Projects; Detailed and Proper Performance Evaluation Mechanism on Projects; Use of Current Trend of Contract Management Practices.

From Table 4.7, Low Cost of Doing Business was identified a more effective strategy in the smooth implementation of PPP Road Project in Ghana with a mean score of 4.41 and a RII score of 0.88; Good Political Will of Government in Procuring of PPP Models with a mean score of 4.35 and a RII score of 0.87; Stable Political Environment with a mean score of 4.26 and a RII score of 0.85; Enabling Political Environment in Procuring of PPP Models with a mean score of 4.22 and a RII score of 0.84; Easy Access to Credit Facility, Sound Legal Framework backing the Procuring of PPP Projects and Realistic Toll Charges with a mean score of 4.17,4.17 and 4.13 and RII score of 0.83 respectively; Both Non-Budgetary Restriction by IMF and Other Donor Agencies and Flexible Procurement Models a mean scores 4.0 and a RII score of 0.80; Both Appropriate Means of Disputes Resolution and Viability and Profitability of Intended PPP Projects with mean scores of 3.87 and 3.83 and a RII score of 0.77 respectively; Detailed and Proper Performance Evaluation Mechanism on Projects with a mean score 3.80 and RII score of 0.76; Use of Current Trend of

Contract Management Practices with a mean score of 3.72 and RII score of 0.74 were deemed averagely effective by the respondents in respect to their organization.

Table 4.7 Effectiveness of Strategies for the Implementation of Public Private Partnership (PPP)

	OPINION	**1**	**2**	**3**	**4**	**5**	**N**	**ΣW**	**Mean**	**RII**	**Ranking**
1	Low Cost of Doing Business	0	0	6	15	25	46	203	4.41	0.88	1st
2	Good Political Will of Government in Procuring of PPP Models	0	0	7	16	23	46	200	4.35	0.87	2nd
3	Stable Political Environment	0	0	8	18	20	46	196	4.26	0.85	3rd
4	Enabling Political Environment in Procuring of PPP Models	0	0	10	16	20	46	194	4.22	0.84	4th
5	Easy Access to Credit Facility	0	0	12	14	20	46	192	4.17	0.83	5th
6	Sound legal framework backing the Procuring of PPP Projects	0	1	10	15	20	46	192	4.17	0.83	5th
7	Realistic Toll Charges	0	4	6	16	20	46	190	4.13	0.83	5th
8	Non-Budgetary Restriction by IMF and Other Donor Agencies	0	6	8	12	20	46	184	4.00	0.80	6th
9	Flexible Procurement Models	0	0	15	16	15	46	184	4.00	0.80	6th
10	Appropriate Means of Disputes Resolution	0	3	15	13	15	46	178	3.87	0.77	7th
11	Viability and Profitability of Intended PPP Projects	0	6	11	14	15	46	176	3.83	0.77	7th
12	Detailed and Proper Performance Evaluation Mechanism on Projects	0	7	10	14	15	46	175	3.80	0.76	8th
13	Use of Current Trend of Contract Management Practices	2	6	10	13	15	46	171	3.72	0.74	9th

Source: Field Survey,2014

4.9. Advantages of public private partnership (PPP) road project in Ghana

Advantages of PPP in its implementation in Ghana's Road Sector have been identify in **Table 4.8** together with the mean scores of all (46) respondents as well as their RII scores and rank the advantages of PPP, Risk are Fully appraised early on to determine Project feasibility.

In this sense, the private partner can offer a break on unrealistic government promises or expectations,

Ensure Higher quality and Timely Provision of Public Services, Mostly Investment Project are implemented in due terms and do not impose public sectors extra expenditures, High quality standards are better obtained and maintained throughout the life cycle of the project, Ensure Higher quality and Timely Provision of Public Services.

From Table 4.8 Risk are fully appraised early on to determine Project feasibility. In this sense, the private partner can offer a break on unrealistic government promises or expectations was identified as the most advantage of PPP with a mean score of 4.50 and a RII score of 0.90;

Ensure Higher quality and Timely Provision of Public Services with a mean score of 4.41 and a RII score of 0.88, Mostly Investment Project are implemented in due terms and do not impose public sectors extra expenditures with a mean score of 4.24 and a RII score of 0.85, High quality standards are better obtained and maintained throughout the life cycle of the project with a mean score of 4.22 and a RII score 0.84; Ensure Higher quality and Timely Provision of Public Services with a mean score of 4.17 and a RII score of 0.83 were deemed average advantage by the respondents in respect to their organization.

Table 4.8 Rankings of the Advantages of PPP on road projects

	OPINION	1	2	3	4	5	N	ΣW	Mean	RII	Ranking
1	Risk are fully appraised early on to determine project Feasibility. In this sense, the private partner can offer a break on unrealistic government promises or expectations	0	0	4	15	27	46	207	4.50	0.90	1st
2	Ensure Higher quality and Timely Provision of Public Services	0	0	8	16	23	46	203	4.41	0.88	2nd
3	Mostly Investment projects are implemented in due terms and do not impose public sectors extra expenditures	0	1	11	15	20	46	195	4.24	0.85	3rd
4	High quality standards are better obtained and maintained throughout the life cycle of the project	0	0	9	18	19	46	194	4.22	0.84	4th
5	Ensure Higher quality and Timely Provision of Public Services	0	0	11	16	19	46	192	4.17	0.83	5th

Source: Field Survey,2014

4.10. Disadvantages of implementation of public private partnership (PPP) road projects

Disadvantages of PPP in it Implementation of road project in Ghana have been acknowledged in

Table 4.9 Beneath together with the mean score of all (46) participants as well as their RII scores and rank these disadvantages associated with the implementation of PPP road project in Ghana, High Risk of Contract Renegotiation, Difficulty in demonstrating value for money in advance, Infrastructure or Service Delivered Could be more Expensive, PPP service Procurement Procedure is longer and Costlier in Comparison with the traditional method of Procurement, Complex Procurement Process with associated High cost Transaction Cost.

From Table 4.9, High Risk of Contract Renegotiation was identified as a major disadvantage for the smooth implementation of PPP Road Project in Ghana with a mean score of 4.35 and a RII score of 0.87; Difficulty in Demonstrating Value for Money in advance with a mean score of 4.28 and a RII score of 0.86; Infrastructure or Service Delivered Could be More Expensive with a mean score of 4.24 and a RII score of 0.85; Both PPP Service Procurement Procedure in longer and Costlier in comparison with the traditional method of Procurement and Complex Procurement Process with Associated High Transaction Cost with a mean score of 4.11 and 4.09 and a RII score of 0.82 respectively were deemed to be minor disadvantages by the respondents in respondents in respect to their organization.

Table 4.9 Ranking Disadvantages of PPP on road projects

	OPINION	**1**	**2**	**3**	**4**	**5**	**N**	**ΣW**	**Mean**	**RII**	**Ranking**
1	High Risk of Contract Renegotiation	0	0	6	18	22	46	200	4.35	0.87	1st
2	Difficulty in demonstrating value for money in advance	0	0	8	17	21	46	197	4.28	0.86	2nd
3	Infrastructure or Service Delivered Could be more Expensive	0	0	9	17	20	46	195	4.24	0.85	3rd
4	PPP service Procurement procedure is longer and Costlier in comparison with the traditional method of Procurement.	0	1	10	18	17	46	189	4.11	0.82	4th
5	Complex Procurement Process with associated high transaction cost	0	3	8	17	18	46	188	4.09	0.82	4th

Source: Field Survey,2014

4.11 Factors Impeding the Implementation of Public Private Partnership (PPP)

Here, the research investigates the perception of the respondents about the factors impeding the implementation of PPP road projects in Ghana. Fifteen (15) factors were acknowledged from literature and participants were requested to rank their level of importance based on a 5-point Likert scale, where 1= Not important, 2= least Important, 3= Averagely Important, 4=Very Important, 5= Highly Important.

In evaluating the outcome of the level of importance of each factor impeding the implementation of PPP road project in Ghana, Relative Importance Index (RII) were used. From the table below, it was realized that all the factors are important, recording mean scores greater than 3.00. But looking at the factors in order of priority, *Toll Adjustment Mechanism* came first with a mean score of RII score of 0.89. According to Chen et.al (2017), toll adjustment mechanism is key in helping the private sector guard against simple traffic demand risk and government from substantial fiscal problem. It also assures the private investor, a realistic but not unwarranted rate of return in PPP concession Contract.

Economic Challenges (Inflation Rates, High Cost of Doing Business and Interest rates) and *Political will of Government in Procuring of PPP projects* came second with a RII score of 0.88 respectively. Kagwe (2013) stated that lack of political will of government and poor infrastructure are some major challenges to successful public private partnership in Sub-Sahara –Africa. Also, Li et al. (2005) opined that favorable socio-economic factors are key to the development of a PPP project.

High Financial cost in Procuring of PPP models and High Cost of Relocating Services along the Corridor came fourth with a RII score 0.83 respectively. According to Akintoye et.al (2003) high cost of procuring process and lengthy and complex nature of negotiations and difficulty in

specifying the quality of service needed constitute an impediment to the development of PP arrangements. Further, according to the Ghana Highway Authority (2016) cost of relocations of services along the corridors come at a high cost to project development.

Viability and Profitability in implementing PPP model project came last but showed a significant RII of 0.61 as shown in Table 4.12. A number of studies have shown the relevance of these factors in the implementation of PPP road Project (Chen et.al 2017, Kagwe 2013, Li et.al 2005, Akintoye et.al 2003, Ghana Highway Authority 2016).

There are difficulties in implementing PPP because of lack of understanding of concession project. It advantages and disadvantages are still unclear to the majority of would be investors and governments. Local banks inability to provide long term loans for PPP road projects make it very difficult for would be investors to secure loans for the procurement of PPP project since it's a high capital adventure and also the duration of the concession periods too. Also, the Non - existence of pricing mechanism for PPP Concession road project reduces the probability of successful outcomes. Pricing mechanism are very relevant in determining how key pricing models affect the procurement of concession projects. In addition, restriction on budget by the IMF, Donor agencies and others makes it difficult to borrow or secure loans to procure PPP project. This affects infrastructure development. Risk of the Private sector not being able to recoup their investment during the concession period is a relevant factor that cannot be ignored when considering PPP. Public Acceptance of PPP it's a very important factor to consider when procuring a PPP project, the acceptance of the concept alone will help in the successful implementation of PPP projects. Lack of Performance Evaluation mechanism for Road Project does not help in assuring value for money invested. Since performance evaluation of projects is key in the life of every successful project, it is very important to implement performance evaluation at every stage of the road project.

Finally, Procuring of PPP projects is a very complex model that could take some number of years before a successful project could take off due it complex procurement nature. This is a disincentive for risk averse investors.

Table 4.10 Factors Impeding the Implementation of Public Private Partnership (PPP) road project.

Impeding Factors	Mean	RII	Ranking
Toll Adjustment Mechanism	4.43	0.89	1st
Current Economic Challenges (Inflation Rates, High Cost of Doing Business and Interest Rates)	4.41	0.88	2nd
Political Will of Government in Procuring of PPP Projects	4.39	0.88	2nd
High Financial Cost in Procuring of PPP Projects	4.13	0.83	4th
High Cost of Relocating Services along the Corridor	4.13	0.83	4th
Lack of legal framework backing the procurement of PPP projects	3.93	0.79	6th
Lack of Understanding of Concession Projects	3.89	0.78	7th
Local Banks inability to Provide long term loans for PPP road projects	3.89	0.78	7th
Risk of the Private Investor not able to Recoup their investment with the concession period	3.87	0.77	9th
Non-existent of Pricing Mechanism for PPP Concession Road Project	3.85	0.77	9th
Budgetary Restriction by the IMF and other donor agencies Agencies	3.85	0.77	9th
Public Acceptance of PPP	3.48	0.70	12th
Lack of Performance Evaluation of Road Project	3.30	0.66	13th
Complex Procurement Models	3.24	0.65	14th
Viability and Profitability in Implementing PPP model Project	3.04	0.61	15th

Source: Field Survey, 2018

4.9.4 Implementation Strategies for PPP Road Projects in Ghana

Respondents were asked to rank on a 5-point Likert scale the level of importance of thirteen (13) strategies identified from literature where, 1=Not important;2= least Important; 3= Averagely Important, 4= averagely important; 5=Highly Important.

Data collected under this section was analyzed and findings presented using the RII scores of the respective variables. From table 4.13, it was realized that all the strategies mapped up for the implementation of PPP road project are significant, evidenced in mean score values greater than 3.5 and correspondingly high RII scores.

As seen from the table, *Low* cost *of doing Business* with a RII score of 0.88 ranked first. Tang et.al (2013) stated that a stable macro -economic condition are suitable investment environment of doing Business. *Good Political will of Government in Procuring of PPP models* and *Realistic Toll Charges* with RII score of 0.87 came second. This is in line with the assertion of Sanni (2016) that, in the implementation and procurement on PPP models, the support of political leaders and citizens are vital to the success of PPP arrangement. Similarly, Qing (2017) reports that realistic toll charges are key to the investor in developing of PPP road projects.

Stable Political Environment and *Easy Access to Credit Facility* came fourth with a similar RII score of 0.85. According to Dulaimi et.al (2010), good governance and strong political support is key in the procuring of PPP projects. Also, Hwang et.al (2013) reports that available financial market helps in the implementation of PPP project. Use of Current Trend of Contract Management Practice which appeared last but displayed a significant RII score of 0.74 (see table 13.00). A number of studies have shown the importance of these strategies to the implementation of PPP road project (Tang et.al 2013, Sanni 2016, Qing 2017, Dulaimi et.al 2010, Hwang et.al 2013).

Several Strategies are available which would help in the smooth implementation of PPP road projects. Flexible procurement models for instance would ensure that solution are custom -built for each problem. In the procuring of PPP models, an enabling Political environment is a useful tool as stated by Dulaimi et.al (2010) . he asserts that an enabling political environment is very essential in procuring of PPP models. A Sound legal framework backing the procuring of PPP projects, Tang et.al;(2013) also provides a congenial business environment for the implementation of PPP projects. In particular, an appropriate means of disputes resolution its important as would be investors will like to see dispute resolution as part of their concession contracts. Removal Budgetary Restriction by the IMF and other donor agencies, it's very important to the implementation of PPP road projects. Viability and Profitability of Intended PPP project must be based on sound financial modeling. Finally, Detailed and Proper Performance Evaluation Mechanism on projects is very necessary in the evaluating of project which would serve as benchmark to future projects.

Table 4.11 Implementation strategies

Implementation Strategies	Mean	RII	Ranking
Low Cost of Doing Business	4.41	0.88	1st
Good Political Will of Government in Procuring of PPP Models	4.35	0.87	2nd
Realistic Toll Charges	4.35	0.87	2nd
Easy Access to Credit Facility	4.26	0.85	4th
Stable Political Environment	4.24	0.85	4th
Flexible Procurement Models	4.22	0.84	6th
Enabling Political Environment in Procuring of PPP models	4.22	0.84	6th
Sound legal framework backing the Procuring of PPP Projects	4.17	0.83	8th
Appropriate Means of Dispute Resolution	4.07	0.81	9th
Non- Budgetary Restriction by IMF and other Donor Agencies	4.00	0.80	10th
Viability and Profitability of Intended PPP Projects	3.91	0.78	11th
Detailed and Proper Performance Evaluation Mechanism on Project	3.8	0.76	12th
Use of Current Trend of Contract Management Practices	3.72	0.74	13th

Source: Field Survey, 2018

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This part brings the study carried out to an end. It concludes and discusses recommendation to the study. It's also the last chapter of the project would conclude the analysis in the chapter 4 that's being referred to the objective of the study. The objective of the study was to identify the factors impeding the implementation of PPP road project in Ghana, a case study of the Accra-Kumasi Highway (N6) and also to assess the various strategies to help in the smooth implementation of PPP road project in Ghana.

In total, 46 questionnaires were sent to a number of experts in the road sector, all of which were answered. The fragment follows the following structures: A summary of how the main objective was content and discussion about the study's purpose is provided to highlight the contributions of the research. The chapter concludes with a recommendation for further research that can be conducted on the basis of the conclusion and the limitation of the study. Investors rely on the cash flow generated from the project to repay their backlogs from the project

5.2 Summary of Findings

As a recap on what was mentioned in section 1:3 of the research, the aim of this study is to investigate the factors impeding the implementation of Public Private Partnership (PPP) road Project in Ghana, a case study of the Accra – Kumasi Highway (N6). To achieve the stated aim, two objectives were set in the same section. Literature reviews and survey questionnaire were conducted to achieve both objectives.

Factors impeding the implementation of PPP's were acknowledged from the literature and participants were requested to rank them on the source of it being not important or highly

important. From the fifteen (15) factors were identify to be very relevant to impede the implementation of PPP's the results. indicates that, Toll Adjustment Mechanism was identified as a key factor impeding the implementation of PPP road project in Ghana, although Current Economic Challenges (Inflation Rates, High Cost of Doing Business and Interest Rates), Political Will of Government in Procuring of PPP project, High Financial Cost of Procuring PPP projects and High Cost of Relocating Services along the Corridor were deemed relevant.

To assess the various strategies that will help in the smooth implementation of PPP road project in Ghana, a case study of the Accra – Kumasi highway (N6) were identify from the literature and respondents were asked to rank them. Low Cost of Doing Business was identified as the key strategy to help in the implementation of PPP road project in Ghana, Good Political Will of government in Procuring of PPP Models, Realistic Toll Charges, Stable Political Environment, and Easy Access to Credit Facility were deemed to be relevant in the smooth implementation of

5.3 Conclusion

This research work explored the factors impeding the implementation of PPP road project in Ghana focusing on case of the Accra-Kumasi highway (N6).

One can conclude that the factors that impede the implementation of PPP road projects in Ghana are as numerous as they are varied. They range from economic issues through political as well as technical factors.

The most critical impacting factor is a technical issue which is the toll adjustment mechanism. Even though this is deeply rooted in the nature of the business environment, vis-à-vis interest rates, exchange rates, inflation etc. it is also important to establish a clear policy implementation plan to ensure that the benefits of PPP are maximized.

In conclusion the research sought to directly address the objective of the study which are as follows: To identify factors impeding the implementation of PPP road project in Ghana, To evaluate the Benefits and Disadvantages of PPP road projects, to identify factors that confront or impede the implementation of PPP Accra-Kumasi Highway (N6), To assess the various strategies that will help in the smooth implementation of PPP Accra-Kumasi Highway project in Ghana, and to highlights some policy recommendation to help promote PPP Accra-Kumasi Highway project in Ghana.

Toll adjustment factors are the most impactful factor affecting PPP implementation in Ghana. A properly formulated toll adjustment factor can help realize the benefits of tolling a road section without overburdening the road user. It can also help the private partner relize the economic benefits of their investment.

The general economic environment is also very important for the successful implementation of PPP in road projects in Ghana. The study results indicate a high relative significance for economic related factors like inflation, interest rates and cost of doing business. It is reasonable to conclude that better macro-economic fundamentals would enable local private sector players to be able to participate in PPPs.

The political factor is also very significant in PPP implementation in Ghana. This is more so because Ghana operates a unitary form of government and hence have centralized decision-making systems. It takes Central government decisions to even establish the legal frameworks that that are so important to partnerships with the private sector. The position of government in source of debt also plays a role in PPP viability since some funding sources come with all sorts of restrictions on government expenditure.

The study also identified the strategies that will curb these factors impeding the implementation and to help in the smooth implementation of PPP road project in Ghana. It has become clear that Low Cost of Doing Business was identified as the key strategy to help in the implementation of PPP road project in Ghana. The government needs to implement economic policy that reduces the cost of doing business in Ghana. Taxes that make it difficult for business to operate efficiently should be avoided.

Good Political Will of Government in Procuring of PPP Models was also one of the favoured strategies for curbing the factors that militate against PPP implementation. A demonstrated commitment by government to the development of PPP policy, guidelines and facilities will give confidence to private investors that their capital is safe once they invest in PPPs. Sovereign guarantees and tax rebates are some ways by which government can make this work.

Realistic Toll Charges are also important in ensuring that PPP road projects are attractive to private investors. This will ameliorate the fears associated with the risk of the investment when the private partners carry out their appraisals.

5.4 Recommendations

With respect to the above assumption and verdicts from the chapter 4, the subsequent recommendation are projected for appraisal and development. Sound business environment, with low cost of doing business, lower interest rates and easy access to loans. Potential Political unrest which creates political constraints can be curbed, when government develops long term policies that will be in support of PPP models to guide against incessant changes which usually occur anytime there is a change in leadership. Government and Private Institution involved in the usage of PPP models should ensure that procurement processes are fair, transparent and well managed.

A clear definition of value for money should be encouraged in the various road sectors in order to build up its meaning throughout the various organizations. This can motivate the usage of PPP models in Procuring road infrastructure. There should be a clear legal framework for the usage of PPP models.

5.5 Limitation of Study

This study did not seek to build an implementation plan or roadmap to success for PPP road projects in Ghana.

Time available for this research was not enough to adequately exhaust all issues available. For instance, the public perception of PPP road projects was not adequately investigated even though the public is a major stake holder. The perception of the average Ghanaian on PPP projects could give a better understanding of how to marshal political and resource support for PPP.

The study is still constrained although lots of efforts have gone into planning. The responses obtained from respondents of the study could not yield concrete evidence on the difficulties with actual implementation.

REFERENCES

Akbiyikli, R. & Eaton, D. (2018). Operation and Maintenance (O&M) Management in Pfi Road Projects in The Uk . https://www.researchgate.net/publication/268353914_operation_and_maintenance_om_management_in_pfi_road_projects_in_the_uk [accessed Aug 15 2018].

Algarni, A. M., Arditi, D., & Polat, G. (2007). Build-operate-transfer in infrastructure projects in the United States. *Journal of Construction Engineering and Management*, *133*(10), 728-735.

Amusan, L. M., Joshua, O., & Oloke, C. O. (2013). Performance of Build-operate-Transfer Projects: Risks' cost implications from professionals and concessionaires perspective. *European International Journal of Science and Technology*, *2*(3), 239-250.

Avle, S. (2011). Global flows, media and developing democracies: The Ghanaian case. *Journal of African Media Studies*, *3*(1), 7-23.

Awortwi, N. (2011). An unbreakable path? A comparative study of decentralization and local government development trajectories in Ghana and Uganda. *International Review of Administrative Sciences*, *77*(2), 347-377.

Baiden, B.K., (2006), "*Framework for the integration of the project delivery team*", unpublished Doctoral Thesis submitted in partial fulfilment of the requirement for the award of Doctor of Philosophy at Loughborough University, Loughborough United Kingdom.

Bernard, H.R., (2002), "Research Methods in Anthropology: Qualitative and quantitative methods", 3rd Ed. California: Altamira Press, Walnut Creek.

Bohrnsteadt G. W., & Knoke, D. (1994). Statistics for Social Data Analysis.

Chen, Qing, Shen, Geoffrey, Xue, Fan, & Xia, Bo (2017) Real options model of toll-adjustment mechanism in concession contracts of toll road projects. *Journal of Management in Engineering*, *34*(1), Article number: 04017040.

Coopers, P. W. (2005). Delivering the PPP Promise: A Review of PPP Issues and Activity.". *PwC, available at: www. pwc. com (accessed 21 January, 2018)*.

Creswell, J. W. (2006). Understanding mixed method research. *JW Creswell, & VP Clark, Designing and Conducting Mixed Methods Research*, 1-19.

Davies, P., & Eustice, K. (2005). Delivering the PPP promise: A review of PPP issues and activity. *London: PWC*.

Duffour, K. (2011) National Policy on Public Private Partnerships (PPPS).

Dulaimi, M. F., Alhashemi, M., Ling, F. Y. Y., & Kumaraswamy, M. (2010). The execution of public–private partnership projects in the UAE. *Construction management and economics*, *28*(4), 393-402.

Effah, E., Chan, A.P.C., Owusu-Manu, D., David, E. & Dartey, F. (2017). A fuzzy-based evaluation of financial risks in build–own–operate–transfer water supply projects.. Journal of Infrastructure Systems. 23. 04017033(1-13). 10.1061/(ASCE)IS.1943-555X.0000390.

Ezulike, E. I., Perry, J. G., & Hawwash, K. (1997). The barriers to entry into the PFI market. *Engineering, Construction and Architectural Management*, *4*(3), 179-193.

Fadhley, S. A. (1991). A study of project finance banking with special reference to the determinants of investment strategy. *unpublished Doctoral Theses, submitted to the Loughborough University*.

Fagbenle, O. I., Adeyemi, A. Y., & Adesanya, D. A. (2004). The impact of non- financial incentives on bricklayers' productivity in Nigeria. *Construction Management and Economics*, *22*(9), 899-911.

Fellows, R. and Liu, A., (2008) Research Methods for Construction. Oxford, Wiley -Blackwell.

Fu, F. H., Bennett, C. H., Lattermann, C., & Ma, C. B. (1999). Current trends in anterior cruciate ligament reconstruction. Part 1: Biology and biomechanics of reconstruction. *The American journal of sports medicine*, *27*(6), 821-830.

Grimsey, D. and Lewis, M. (2007) "Public Private Partnership Public Procurement" Agenda -14 (2): 171.88. http://construction.about.com/od/Government/a/Public-Private-Partnership-Pros-And-Cons.htm.

Grimsey, D., and Lewis, M. K. (2002). Evaluating the risks of public private partnerships for infrastructure projects. *International journal of project management*, *20*(2), 107-118.

Grimsey, D., and Lewis, M. K. (2004). The Governance of Contractual Relationships in Public-Private Partnerships. *Journal of corporate citizenship*, (15).

Hwang, B., Zhao, X. and Gay, M. J. S., 2013. Public Private Partnership Projects in Singapore: Factors, Critical Risks and Preferred Risk Allocation from the Perspective of Contractors. *International Journal of Project Management*, 31(3), pp.424–33.

Ikejiofor, U. (1998). Access to land, development control and low-income housing in Abuja, Nigeria: Policy, Politics and Bureaucracy. *Planning Practice & Research*, *13*(3), 299-309.

Jankowicz, A. D. (2005). *Business research projects*. Cengage Learning EMEA.

Kagwe, W. (2013) Lack of political will is slowing public-private projects – IFC. https://www.the-star.co.ke/news/2013/03/20/lack-of-political-will-is-slowing-public-private-projects-ifc_c749819. (Accessed on 18th August, 2018).

Lekan, A., Opeyemi, J. & Olayinka,O. (2013). Performance of build-operate-transfer projects: risks' cost implications from professionals and concessionaires' perspective. European International Journal of Science and Technology. 2. 239-250.

Levy, S. M. (1996). *Build, operate, transfer: paving the way for tomorrow's infrastructure*. John Wiley & Sons.

Levy, S. M. (2011, September). Public-private partnerships: Case studies on infrastructure development. American Society of Civil Engineers.

Lewis, J. L. and Sheppard, S.R., (2006). Culture and communication: can landscape visualization improve forest management consultation with indigenous communities? *Landscape and Urban Planning*, *77*(3), pp.291-313.

Li, B., Akintoye, A., Edwards, P. J., & Hardcastle, C. (2005). Perceptions of positive and negative factors influencing the attractiveness of PPP/PFI procurement for construction projects in the UK: Findings from a questionnaire survey. *Engineering, Construction and Architectural Management*, *12*(2), 125-148.

Meidutē, I., & Paliulis, N. K. (2011). Feasibility study of public-private partnership. *International Journal of Strategic Property Management*, *15*(3), 257-274.

Miaoulis, G., & Michener, R. D. (1976). *An introduction to sampling*.

Morad, Z., Choong, H.L., & Tungsanga, Kuala. (2015). Funding renal replacement therapy in southeast Asia: Building Public -Private Partnership in Singapore, Malaysia, Thailand, and Indonisia.

Morledge, R., & Owen, K. (1998, September). Critical success factors in PFI projects. In *14th Annual ARCOM Conference* (pp. 9-11).

Owusu, S. K. (2014). *Exploring the Challenges and Structural Changes for Effective Implementation of PPP in the Road Sector* (Doctoral dissertation).

Quium, A. (2011) A Guide Book on Public Private Partnership in Infrastructure. Bangkok UNESCAP.

Relocation of Services (Ghana Highway Authority 2016)

Ross. S.A., Westerfield, R.W., Jaffe J.F., (2003) Corporate finance (Sixth Edition). Tata McGraw-Hill Education.

Rossi. M & Civitillo. C (2014), Public Private Partnerships: a general overview in Italy, 2nd World Conference On Business, Economics And Management WCBEM 2013. Procedia - *Social and Behavioral Sciences 109* (2014) 140 – 149.

Rostiyanti, S. F., & Tamin, R. Z. (2010, March). Identification of challenges in public private partnership implementation for Indonesian toll road. In *Proceedings of the First Makassar International Conference on Civil Engineering, March* (pp. 9-10).

Sabuza, Y. (2010) Social Housing in South Africa: Are PPPs the Solution? University of Petoria: South Africa.

Sadeghi, A., Barati, O., Bastani, P., Daneshjafari, D., & Etemadian, M. (2016). Strategies to develop and promote public-private partnerships (PPPs) in the provision of hospital services in Iran: a qualitative study. *Electronic physician*, *8*(4), 2208.

Sanni, A. O. 2016. Factors determining the success of public private partnership projects in Nigeria, *Construction Economics and Building,* 16(2), 42-55. DOI: http://dx.doi.org/10.5130/AJCEB.v16i2.4828

Sapte, W. (1997). The Guide to Financing Build-Operate-Transfer Project Uses in PPP.

Saunders, M., Lewis, P., & Thornhill, A., (2009), "Research Methods for Business Students", 2nd Ed, London: Pearson Education Limited.

Savas, E. S., & Savas, E. S. (2000). Privatization and public-private partnerships.

Stokes, J., & Schmidt, G. (2012). Child protection decision making: A factorial analysis using case vignettes. *Social Work, 57*(1), 83-90.

Tang, L., Shen, Q., Skitmore, M. and Cheng, E. W.L., 2013. Ranked Critical Factors in PPP Briefings. *Journal of Management in Engineering*, 29(2), pp.164-71.

Weihe, G. (2005). Public-private partnerships. *Addressing a Nebulous Concept*.

APPENDIX

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

KUMASI

COLLEGE OF ARCHITECTURE AND PLANNING

DEPARTMENT OF BUILDING TECHNOLOGY KUMASI

MSc. CONSTRUCTION MANAGEMENT

FACTORS IMPEDING THE IMPLEMENTATION OF PUBLIC PRIVATE PARTNERSHIP (PPP) ROAD PROJECT IN GHANA

Introduction

This questionnaire will be used by the researcher to solicit data aimed at exploring the factors impeding the implementation of Public Private Partnership (PPP) Road Project in Ghana. The essence of this questionnaire is to allow the researcher to quickly and realistically identify the factors and also establish the need for PPPs in the road sector. The Research is strictly for academic purposes and information given will be kept confidential.

INSTRUCTIONS: You are please required to tick (√) the appropriate options

(SECTION A)- GENERAL QUESTIONS

1. **Which of the following sectors do you belong?**

   Urban Roads [ ] Feeder Roads [ ] Ministry of Roads & Highways [ ]

   Ghana Highway Authority [ ] Consultant [ ] Contractor [ ]

   Others, please specify…….

2. **How long have you been with the organization?**

   Less than 5 years [ ] 6 – 10 years [ ] 11-15 years [ ] above 15 years [ ]

3. **What is your professional background?**

   Civil Engineer [ ] Structural Engineer [ ] Quantity Surveyor [ ]

   Project Manager [ ] Contract Manager [ ]

   Others, please specify…….

4. **What major type of road construction do you manage?**

   Highways [ ] Urban Roads [ ] Feeder Roads [ ]

   Others, please specify……

(SECTION B) FACTORS IMPEDING THE IMPLEMENTATION OF PUBLIC PRIVATE PARTNERSHIP (PPP) ROAD PROJECT IN GHANA, A CASE STUDY OF THE ACCRA-KUMASI- HIGHWAY (N6)

5. **How would you rank the following factors impeding the implementation of PPP? Please rank from 1 – 5, where: 1 – Not Important, 2- least Important, 3- Averagely Important, 4 – Very Important, 5 – Highly Important.**

   Please use the space below the table to add any other factors.

Factors	1	2	3	4	5
High Cost of Relocating services along the The Corridor.					
Political Will of Government in Procuring Of PPP Projects					
Complex Procurement Models					
Public acceptance of PPP					
High financial cost in Procuring of PPP projects.					
Local Banks inability to provide long terms loans for PPP road projects.					
Toll adjustment Mechanism					
Risk of the Private Investor not able to recoup their investment with the concession period.					
Non-existent of Pricing Mechanism for PPP Concession Road Project.					
Lack of legal framework backing the procurement of PPP projects					
Budgetary Restriction by the IMF and other Donor Agencies					
Current Economic Challenges (Inflation rates, High Cost of Doing Business and Interest rates					
Lack of Understanding of Concession projects					
Lack of Performance Evaluation of Road Projects					

Viability and Profitability in Implementing PPP model Project.					
Others (Please Specify					

(SECTION C) FACTORS IMPEDING THE IMPLEMENTATION OF PUBLIC PRIVATE PARTNERSHIP (PPP) ROAD PROJECT IN GHANA, A CASE STUDY OF THE ACCRA-KUMASI- HIGHWAY (N6)

6. **How Often do these factors which impede the implementation of PPP? Please rank from 1 – 5, where: 1 – Very Rarely, 2- Not Rare, 3- Normally, 4 – Often, 5 – Very Often.**

   Please use the space below the table to add any other factors.

Factors	1	2	3	4	5
High Cost of Relocating services along the The Corridor.					
Political Will of Government in Procuring Of PPP Projects					
Complex Procurement Models					
Public acceptance of PPP					
High financial cost in Procuring of PPP projects.					
Local Banks inability to provide long terms loans for PPP road projects.					
Toll adjustment Mechanism					
Risk of the Private Investor not able to recoup their investment with the concession period.					
Non-existent of Pricing Mechanism for PPP Concession Road Project.					
Lack of legal framework backing the procurement of PPP projects					
Budgetary Restriction by the IMF and other Donor Agencies					
Current Economic Challenges (Inflation rates, High Cost of Doing Business and Interest rates					
Lack of Understanding of Concession projects					
Lack of Performance Evaluation of Road Projects					

Viability and Profitability in Implementing PPP model Project.					
Others (Please Specify					

(SECTION D) STRATEGIES TO HELP IN THE SMOOTH IMPLEMENTATION OF PUBLIC PRIVATE PARTNERSHIP ROAD PROJECT IN GHANA

7. **How would you rank the following in terms of strategies to help in the smooth implementation of Public Private Partnership Road Project in Ghana, please rank from 1- 5, where: 1 – Not Important, 2 – least Important, 3 – Averagely Important, 4 – Very Important, 5 Highly Important.**

   Please use the spaces below the table to add other strategies.

STRATEGIES	1	2	3	4	5
Sound legal framework backing the procuring of PPP projects					
Appropriate means of Dispute Resolution					
Low Cost of Doing Business					
Non-Budgetary Restriction by the IMF and other Donor agencies					
Easy Access to Credit facility					
Enabling Political Environment in procuring of PPP models					
Stable Political Environment					
Good Political Will of Government in Procuring of PPP models					
Viability and Profitability of intended PPP Projects					
Detailed and Proper Performance Evaluation Mechanism on Project					
Realistic Toll Charges.					
Flexible Procurement Models.					
Use of Current Trend of Contract management practices.					
Others (please Specify					

(SECTION E) STRATEGIES TO HELP IN THE SMOOTH IMPLEMENTATION OF PUBLIC PRIVATE PARTNERSHIP ROAD PROJECT IN GHANA

8. **How would you rank the following strategies in terms of their effectiveness in the smooth implementation of Public Private Partnership Road Project in Ghana, please rank from 1- 5, where: 1 – Very Ineffective, 2 – Ineffective, 3 – Effective, 4 – Very Effective, 5 Highly Effective.**

   Please use the spaces below the table to add other strategies.

STRATEGIES	1	2	3	4	5
Sound legal framework backing the procuring of PPP projects					
Appropriate means of Dispute Resolution					
Low Cost of Doing Business					
Non-Budgetary Restriction by the IMF and other Donor agencies					
Easy Access to Credit facility					
Enabling Political Environment in procuring of PPP models					
Stable Political Environment					
Good Political Will of Government in Procuring of PPP models					
Viability and Profitability of intended PPP Projects					
Detailed and Proper Performance Evaluation Mechanism on Project					
Realistic Toll Charges.					
Flexible Procurement Models.					
Use of Current Trend of Contract management practices.					
Others (please Specify					

(SECTION F) FACTORS IMPEDING THE IMPLEMENTATION OF PUBLIC PRIVATE PARTNERSHIP (PPP) ROAD PROJECT IN GHANA, A CASE STUDY OF THE ACCRA-KUMASI- HIGHWAY (N6)

9. How would you rank the following Advantages of PPP? Please rank from 1 – 5, where: 1 – Not Important, 2- least Important, 3- Averagely Important, 4 – Very Important, 5 – Highly Important.

Please use the space below the table to add any Advantages.

Advantages of PPP	1	2	3	4	5
Ensures the necessary investment into public sector and more effective public resource management					
Ensures Higher quality and Timely provision of public services					
Mostly Investment projects are implemented in due terms and do not imposes public sectors extra expenditures					
Risks are fully appraised early on to determine project feasibility. In this sense, the private partner can offer a break on unrealistic governments promises or expectations					
High quality standards are better obtained and maintained throughout the life cycle of the project					
Others please Specify					

(SECTION F) FACTORS IMPEDING THE IMPLEMENTATION OF PUBLIC PRIVATE PARTNERSHIP (PPP) ROAD PROJECT IN GHANA, A CASE STUDY OF THE ACCRA-KUMASI- HIGHWAY (N6)

10. How would you rank the following Disadvantages of PPP? Please rank from 1 – 5, where: 1 – Not Important, 2- least Important, 3- Averagely Important, 4 – Very Important, 5 – Highly Important.

Please use the space below the table to add any Disadvantages.

Disadvantages of PPP	1	2	3	4	5
Infrastructure or Service delivered could be more expensive.					
PPP service Procurement procedure is longer and costlier in comparison with the traditional method of Procurement					
Complex Procurement Process with associated high transaction cost					
High Risk of Contract Renegotiation					
Difficulty in demonstrating value for money in advance					
Others please Specify					

THANK YOU