

# **St. MARY'S UNIVERSITY COLLEGE**

**FACULTY OF BUSINESS**

**DEPARTEMENT OF MANGEMENT**

**AN ASSESSMENT OF PROBLEMS AND CHALLENGES OF  
ADDIS ABABA ANBESSA CITY BUS TRANSPORTATION AND  
ASSIGNMENT PRACTICES: THE CASE OF ADDIS ABABA  
ANBESSA CITY BUS ENTERPRISE**

**BY**

**ADMASU WORESA**

**JUNE, 2011**

**SMUC  
ADDIS ABABA**

**ST. MARY'S UNIVERSITY COLLEGE**  
**FACULTY OF BUSINESS**  
**DEPARTMENT OF MANAGEMENT**

**An Assessment of Problems and Challenges of Transportation and  
Assignment Practices: the Case of Addis Ababa Anbessa City Bus  
Enterprise**

**A SENIOR ESSAY SUBMITTED TO**  
**THE DEPARTMENT OF MANAGEMENT, BUSINESS FACULTY**  
**ST. MARY'S UNIVERSITY COLLEGE**

**IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF**  
**BACHELOR OF ARTS IN MANAGEMENT**

**BY**  
**Admasu Woresa**

**June, 2011**  
**SMUC**  
**ADDIS ABABA**

# ST. MARY'S UNIVERSITY COLLEGE

## An Assessment of Problems and Challenges of Transportation and Assignment Practices: the Case of Addis Ababa Anbessa City Bus Enterprise

BY  
Admasu Woresa

### FACULTY OF BUSINESS DEPARTMENT OF MANAGEMENT

Approved by the Committee of Examiners

---

Department Head

---

Signature

---

Advisor

---

Signature

---

Examiner, External

---

Signature

---

Examiner, Internal

---

Signature

## **ACKNOWLEDGEMENTS**

I would like to thank my deepest appreciation to my advisor Ato Daniel Meraad for his devoting his precious time in reading each and every point of the as well as for his constructive comment and friendly approach without whom this research would have been impossible to be completed.

Special thanks to my family for their moral and material support since my child hood

Thank you my friend, for your direct and indirect inputs to make this research possible.

# Table of Content

	Page
Acknowledgement .....	I
Table of Content .....	II
List of Table .....	V
<b>CHAPTER ONE</b>	
<b>INTRODUCTION</b>	
Chapter One .....	1
Introduction .....	1
1.1 Background of the Study.....	1
1.2 Statement of the Problem.....	4
1.3 Research Question.....	5
1.4 Objective of the Study .....	5
1.4.1 General Objective .....	5
1.4.2 Specific Objective .....	5
1.5 Significance of the Study.....	5
1.6 Delimitation of Study.....	6
1.7 Definition of Terms.....	6
1.8 Research Design and Methodology.....	6
1.8.1 Research Design .....	6
1.8.2 Population and Sampling Techniques.....	6
1.8.3 Types of Data Collected .....	7
1.8.4 Methods of Data Collection .....	7
1.8.5 Data analysis Method.....	7
1.9 Limitation of the study .....	7
1.10 Organization of the Study.....	7

## **CHAPTER TWO**

### **LITERATURE REVIEW**

2.1 Introduction .....	9
2.2 Transport planning perspective .....	10
2.3 Role of Transport .....	10
2.4 Urban Transports .....	11
2.5 Urban Transport problems .....	11
2.6 Urban Trans transport mode.....	13
2.7 Public transports .....	13
2.8 Development of public transport .....	15
2.9 Public transport facilities.....	16
2.10 General nature so modern public transport .....	17
2.11 Role of public transport .....	18
2.12 Urban transport publicly .....	19
2.13 Urban transport planning .....	21
2.14 Public transport network .....	21

## **CHAPTER THREE**

### **DATA PRESENTATION, ANALYSIS AND INTERPRETATION**

3.1 General Characteristics of Respondents .....	24
3.2 Analysis of the Major findings of the Study related to Employees.....	26
3.3 Analysis of the Major findings of the Study related to Customers.....	34

## **CHAPTER FOUR**

### **SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION**

4.1 Summary of the Findings of the Study.....	39
4.2 Conclusions .....	40
4.3 Recommendation .....	40

Bibliography

Questionnaires

Interview

Declaration

## LIST OF TABLES

	<b>Page</b>
<b>Table 3.1.1:</b> Background characteristics of respondents -----	24
<b>Table 3.2.1</b> Transportation and assignment problem in Anbessa city bus -----	26
<b>Table 3.2.2:</b> The extent of improvement in its service delivery system -----	27
<b>Table 3.2.3:</b> Attitude of respondents on the effect of assignment on the eEnterprise	28
<b>Table 3.2.4:</b> Causes of dalliance of city bus transportation -----	29
<b>Table 3.2.5:</b> Methods of controlling operational time -----	30
<b>Table 3.2.6:</b> The Comfortability and compatibility of the bus -----	31
<b>Table 3.2.7:</b> Time Gap for the Dalliance of Bus -----	32
<b>Table 3.2.8:</b> Post assessment for the fulfillment of customer satisfaction -----	33
<b>Table 3.3.1:</b> Attitudes of respondents on the problems in Anbessa city bus -----	34
<b>Table 3.3.2:</b> Extent of the improvement of city bus transportation and assignment	34
<b>Table 3.3.3:</b> Time gap for the dalliance of Anbessa city bus enterprise -----	35
<b>Table 3.3.4:</b> Availability of time chart to departure and destination across the route	36
<b>Table 3.3.5:</b> The fulfillment of customer satisfaction -----	36
<b>Table 3.3.6:</b> Causes of dalliance of city Bus transportation -----	37
<b>Table 3.3.7:</b> Comfortability and compatibility of city Bus -----	37



# CHAPTER ONE

## INTRODUCTION

### 1.1. Background of the Study

Anbessa City Bus Service Enterprise was established in 1951 after the invasion of the Fascist of Italians. The ministry of work and communication gathered the remaining vehicles and garage equipments. At that time its name was public transport and was guided by Italians and foreigners. On December 09, 1951 it organized itself in to a share company by legal entity from the government. At that particular year the enterprise had only 10 buses to serve the people of Addis Ababa in four routs. In 1964 the Enterprise bought 20 Mercedes model buses and increased its routes to 14. The management was also shifted from foreigners to Ethiopians, in 1974 the Enterprise transferred its ownership from share company to public transport service on august 7/1974 enterprise bought 50 city buses and strengthened its transportation services.

In1974 under proclamation number 187/86 it recognized itself by paid up capital of 14 million birr got its current name Anbessa city Bus service Enterprise. At that time the people of Addis Ababa increased tremendously the market system changed form command economy to market economy and the need of transportation service also become essential to fulfill this need, the enterprise bought 466 DAF model city buses from 2007 to 2008

Today the enterprise has DAF464 city Buses, 60 Mercedes Buses in Addis Ababa and of Fiat Busses the enterprise gives transportation service for more the seven hundred thousand people per day through 93 routs in Addis Ababa around. To facilitate the transportation service and decrease the down time of buses the enterprise has its own garage that gives all types of maintenance service.

Today, Addis Ababa is faced with huge challenges of bus transportation, emanating from poor coordination between its existing urban systems. Transportation, one of the components of urban system, which is responsible for brining the gap between areas of production and consumption, as well as creating a medium for spatial interactions, continues to be in the thick of this challenge. The lack of properly planned urban transport

in Addis Ababa is manifested through the low degree of efficiency of urban mobility that is now observed in almost all the cities centre, sub-center and other major traffic corridor (ERA, 2005:15)

Urban mobility, which is increasingly becoming inefficient in Addis Ababa and resulting in congestions, can be viewed as a function of various components of the urban transport system. These elements are, transport system, traffic management and transport infrastructure.

Congestion is becoming a common experience in all the different parts of the city due to the lack of consistent efforts from the various stakeholders. It is also in part result of the numerous socio-economic factors whose combined effect is to increase the pull factor of the city of Addis Ababa and hence resulting in an ever increasing population that in turn makes the battle of curb the gap between the demand for an efficient urban transportation system and the city's ability for provision a seemingly perpetual one.

In light of the preceding scenario this paper hence forth will dwell upon shading some light in to the existing realities of the Anbessa City Bus Transport and assignment system a generated objective of providing solution and suggesting measure that should be taken to make it plays role towards maximizing urban mobility.

In, theory, liberalization of the urban passenger transport market also applies to conventional bus services. So Addis Ababa city Bus Service enterprise can no longer be considered to be holding an exclusive franchise within the city. But no competitor has been able to emerge to challenge it. The control of fares Addis Ababa city Bus service enterprise access to subsidy and public investment act as a barrier to any new market entry. However, there is no reason why commercial bus services, operating at a fare above that of the subsidized services, shouldn't be encouraged.

The market for passenger transport services was effectively deregulated in 1992, but its implementation has so far been limited to the taxi sector, which covers vehicles carrying up to 13 people including the driver. The publicly owned Addis Ababa city bus Services

enterprise has held an exclusive franchise for urban bus services within the country. In practice it still holds a monopoly of conventional bus services.

Overall the city transport and assignment system suffers from many inadequacies. Traffic on the roads is increasing while major routes in the city are still few in number. The primary roads of the city include two east-west and north –south axial, a newly built ring road and a number of other roads.

Only a small proportion of roads and streets have hard paving or asphalt. Due to the topology and unplanned and uncontrolled growth of the city, certain areas of Addis Ababa are without coverage of transport network suitable for vehicle traffic and also blocks with permanent housing and other facilities. At the same time there are some streets and roads in the urban center built properly and with grandiosity. However, some of these roads do not actually have only useful linked to the other existing roads network and thus carry only little traffic.

The traffic in Addis Ababa city is characterized by features that are common to many metropolitan cities of the developing world. Some of these common features include: (Addis Ababa police commission, 2002:5-6)

- Very high proportion of pedestrian trip
- Small number of cars compared to the population
- Relatively less number of buses running on lines.

From my observation, other more rare and peculiar features of traffic in Addis Ababa include:

- Negligible number of bicycles and motorcycles on the road
- High number pack animal on certain routes and during time of the day.
- “Live” transport of meat, especially around holidays.

Today the public transport system of the city and Addis Ababa which mainly consist of the city but facing significant challenges due to the following key and general problems. The continued spatial growth of the city horizontally or urban sprawl is becoming a major cause for the increase of travel distances this phenomenon discourages people from

resorting to non-motorized transport modes such as walking and cycling and result in an increased for public transport.

Further the demand for city bus services in Addis Ababa is growing at a rapid rate (especially rash hour) due to the continued rise of population this is apparent from the mismatch between the estimated growth of need and the reality as car ownership has not gone up corresponding to the population growth rate city bus operation having a dominant role urban mobility.

Furthermore, the limited growth of Addis Ababa city Bus enterprise the only institution tasked with the cumbersome function of public mass transport of passengers continues to show huge disparities (Addis Ababa police commission, 2002:5-6).

## **1.2. Statement of the Problem**

Currently, the survival to any company in this competitive and complex world is highly dependent on its performance. However, company's performance is affected by internal and external problems. To decrease the internal problems the company should have looked back to its system. This is because the effectiveness of transportation and assignment activity usually depends on the operational activity, financial strength, maintenance planning and human resource of the enterprise

The student researcher tried evaluate the problems and challenges of transportation and assignment practices. This encompasses the activity of assigning buses across the routes in the city, monitoring and controlling. According to the key informants the Enterprise's transportation and assignment system faces a variety of problems. Though, it has a lot of customers, it has not yet considered and satisfied their needs and interests. For the poor techniques application in the assignment of Anbessa Bus, its cost has negative impact to the growth of the organization and to the society at large. Consequently, the study will focus on whether handling this problem is necessary or not. In addition, the study will also try to investigate what impact the assignment activity has on other departments in particular on enterprise success.

### **1.3. Research Questions**

The basic questions that the researcher has answered were the following:

1. What are the major causes of Anbessa Bus transportation and Assignment problem?
2. What techniques are applied in the transaction and assignment of Anbessa Bus?
3. What are the effects of Anbessa bus enterprise's transport and assignment activity to the larger system?
4. What are the solutions to improve the service delivery?

### **1.4. Objectives of the Research**

#### **1.4.1. General Objective**

The main objective of the study is assessing the transportation service and assignment of Anbessa City Bus.

#### **1.4.2. Specific Objectives**

The Specific objectives of the study are to:

- Identify the major causes of Anbessa Bus Transportation and Assignment problem.
- Point out the techniques used in the transportation and assignment of Anbessa Bus.
- Explain the effects of Anbessa city Bus enterprises transport and assignment activity to the larger system.
- Proposes possible solutions to improve the service delivery system of the sector.

### **1.5. Significance of the Study**

This research document might have significant value in terms of the following aspects:

- The outcome of this study may enables to overcome the problems related to transportation assignment.
- This study was also be significant in terms of providing the necessary resources in light of the possibility of future urban transport intervention projects that might be proposed or even carried out.
- It's also provides information to understand the important of transport and assignment to suggest possible solution that to enhance more reliable, the finding of the study where initiate to perform a better and in depth study for Anbessa City Bus Service Enterprises.

## **1.6. Delimitation of the Study**

The study is delimited to the transportation and assignment system that exists in Anbessa City Bus Enterprise. Moreover, it only assesses the issue observed here in the capital, Addis Ababa.

## **1.7. Definition of Terms**

### **Transportation:**

Take or carry from one place to another by means of vehicle, air craft, or ship.

### **Assignment:**

A task or duty assigned as part of job.

## **1.8. Research Design and Methodology**

### **1.8.1. Research Design**

The main purpose of this study was to assess the problems and challenges transportation and assignment activity of Anbessa City Bus. Therefore, the research designed which was employed under this survey is descriptive.

### **1.8.2. Population and Sampling Technique**

#### **Population size**

The total population size embodies employees and customers of the organization. The total number of employees was 227. And the customers who use Anbessa Bus are considered as part of the population.

#### **Sampling Technique**

All the employees and customers couldn't be involved in the study. Therefore, the researcher liked to sample the population for the study using different techniques. The researcher selected by using random sampling method, 30% [68] of the employees out of the total 227 employees. Furthermore, 100 customers were also sampled by using convenient random sampling method from different areas or routes( Merkato,Gieorgies, Legehar, & Megenagna).

### **1.8.3. Types of Data Collected**

Two basic types of data were used, primary and secondary data. Primary data includes information from respondents, which were collected through questionnaire, interview, observation, and it was assumed that this data would provide original information to the study. On the other side, secondary data has obtained from related literature; it includes different kinds of published and unpublished books, journal, internets and other relevant available materials.

### **1.8.4. Methods of Data Collection**

The primary data was collected through questionnaires. The questionnaires were distributed to the target respondents found in the Head Office of Anbessa City Bus Enterprise and at randomly selected routes destination. The questions were both closed and open ended in type.

### **1.8.5. Data analysis Method**

Descriptive statistics were applied to analyze the collected, organized and presented data. Furthermore, the qualitative methods of data analysis were also implemented to identify the differences in perception among different respondents.

## **1.9. Limitation of the Study**

During the time of the study the researcher faced with the following problems

- Lack of earlier study related to the topic
- Lack of well organized information among customers
- Lack of sufficient time to gather more information
- Low respondents understanding level to fill open ended questions.

## **1.10. Organization of the Study**

The study is organized in to four chapters; the first chapter is the introductory part. It includes background of the study, statement of the problem, objective of the study, research question, significance of the study, scope of the study, definition of term, research design and methodology, population and sampling techniques, methods of data collection, data analysis method, limitation of the study and organization of the study. The second

chapter consists of literature review regarding the topic under discussion. The third chapter incorporates data analysis and interpretation. The last chapter but not the least focuses on summary of major findings conclusions, and recommendations.



# CHAPTER TWO

## REVIEW OF RELATED LITERATURE

### 2.1. Introduction

Transport plays a vital role in the development of the modern era as an integral part of the socio- economic and political structure of the country. Thus urban transport, transport infrastructures, and traffic management should involve optimal integration of the means and ways of mobility to create maximum ease and comfort maintaining the socio- economic and physical integration of the city.

It is well understood that the modernization and urbanization processes accelerate, the importance of this sector in providing accessibility and mobility reaches higher levels.

Transport is an integral part of human life. Proper transport link enable efficient frequency of services, flow of passengers and commodity on (Rail, Roads, Air, and Water) model of travel. Transport theory (or the law) stresses strongly that whatever the mode will be, it should primarily consider the human aspect (i.e., safety, liability, economy, satisfaction.....etc (Gina P. 2005 pp: 35). This gives every individual the right to choose the services that he/ she desires.

Transport and the different modes have evolved through time to time where now in the request to accommodate the complex pattern of the whole trade and globalization, its magnitude and efficiency in the distribution process is continuously being brought into effect by technological and operational improvement.

The urbanization process increases substantially, the successful and continued existence of urban society depends. It has played a great role in the transformation of the society and facilities modernization at large. By so doing it has changed the lifestyle of society from traditional to modern.

The level of moreover and cost of its accommodation directly correlates with trends in per capital income and the demand for urban transport is affected the city size and population.

## **2.2. Transportation Planning Perspective**

Transportation planner recognizes the access to transportation greatly affects the quality of life. In general people do not travel for the sake of traveling. They travel in order to physically reach activities of interest, health care, employment, grocery; shopping and recreation are some of the activities that require travel of some kind, whether it is by walking, automobile, or public transit. Since transportation is a derived demand, the objective is to minimize travel cost such as travel time, inconvenience, and the monetary cost of travel as much as possible. The Easier it is to travel from one location to another. The more likely the individual is to make the trip (Gina P. 2005 pp: 46)

## **2.3. Role of Transport**

According to Gina P. (2005, pp: 85) Government needs to step up its efforts in monitoring and enforcing traffic regulations and strengthening the institution responsible for ensuring road safety. The provision of foot path, bridges and pedestrian crossings are pertinent, while appropriated by bus shelters and adequate lighting on the streets and sub ways would enhance security. In addition to promoting intermediate means of transport to enhance the mobility and accessibility of service providers and households/ mothers, integrated inter-sector planning would bring services. It is generally accepted that efficient transport infrastructure and service are important to help assist and sustain economic development. They also have an important role in reducing inequalities both spatially and between groups, but for this they must be adequately appraised and appropriate police choose.

Employment related benefits to transport users include easier access to work and access to new work opportunity for individuals. For employer benefits, include access to greater employment markets. (Increasing the availability and chicer labor), supplier and demand markets, together with reduce transport costs, increased productivity and improved reliability's and hence lower risk. Further, transport infrastructure may help attract inward investment (from abroad or from elsewhere in the country), or stimulate local industry. This may lead to local immigration or greater commuting, hence possible increasing local travel and environmental impact. However, there in limited understanding of people's behavior, and in particular the detail mechanism and issues that affect decision by people and business.

## **2.4. Urban Transport**

It is commonly accepted that cities are the engines of growth in most developing as well as developed countries. More importantly, urban transport can be viewed as the oil that prevents this engine from seizing up.

Economically, transport is an essential element of city development that, in turn, is major source of national economic growth. Simply stated, poor transport inhibits growth. Furthermore, socially, transport is the means of accessibility to jobs, health education and social services essential to the welfare of the city residents. Deteriorating transport conditions affect all city residents they impact particularly the poor through a decline in public transport service levels, increased length of the journey to work and other essential services and the negative impacts on environment, safety and security that the poor are least able to mitigate, according to ( peter M. 1990, pp: 90)

The urban sector in most developing countries accounts for at least 50% of the gross national product and in some countries over 70%. Cities in developing counties often devote 15% to 25% of their annual expenditures to their transport system and sometimes much more.

## **2.5. Urban Transport Problems**

Even though, urban transport plays a big role in maximizing the rate of mobility of an urban population, it also has its own problems which are being observed in most cities nowadays. The urban transportation problem is actually complex bundle of interrelated problems. This problem can be grouped into two major categories: Congestion and mobility.

### **Congestion**

Congestion causes increased costs for travelers and freight movement, loss of time accidents, and psychological strain (Peter M.1990, pp:125) this is not simply congestion of transit vehicles during peak hours, congestion of pedestrian on side walks as well as congestion of bicycle.

Congestion is what most people find objectionable about traveling in cities. It is the most common complaint. If there were no congestion, most people would be happy with their cars, and transportation would not be a widely discussed problem.

Congestion has several generic causes (Peter M. 1990, pp: 140)

- The first is urbanization - the concentration of people and economic activities in urban areas.
- The second cause is specialization within cities. People want to travel between different land uses, which are dispersed around the city, work places are concentrated in some areas, living places in other areas, and recreation activities in still others. But these activities are interdependent, and people must travel between them.
- The third cause is the problem of matching supply and demand temporally. Demand, however, greatly over the day, this is the peaking problems. It stems largely from the journey to work and the practice of having most people start and end their work days at about the same time.
- A fourth cause of congestion is that supply often creates demand. Increases in transportation capacity can be self-defeating. A new highway that seems spacious when it opens may fill up with traffic in a few years.

## **Mobility**

It has also been shown in (Gina P. 2005, pp:54) that sustainable mobility requires, among other things, acceptable levels of environmental impacts and costs of development and operation of transportation system etc, three main inferences can be made from these ideas.

The first inference is that sustainable mobility is significantly transportation supply dependent. The better and more sustainable the supply characteristics of a transportation system, higher will be the level of mobility of peoples.

The second inference is that current levels of people mobility in many developing cities can be said to be low and unsustainable largely because of inadequate transportation supply characteristics. The inadequacy of transportation supply in many countries manifests

mainly through inadequate public transportation services, low productivity and level of readability of facilities and high level of transportation related environmental impacts. For example, in many cities, it is difficult to move around by any mode of transportation without physically and /or mentally exhausted in the process. Thousands of people wait for hours at public transportation stops while public transportation vehicles are unable to get to them because they are stuck in queues on the roads. In addition, walkways, pedestrians are often forced to walk on the streets due to market and trading activities occurring on the walkways. Traffic delays and rides by any vehicles are a uncomfortable, unsafe and expensive because of in adequate low enforcement and presence of large service on many roads. Furthermore, there is little or no classification of roads in general and inadequate distributor and access roads in particular in many cities.

The third inference is that sustainable mobility can be engineered. That is, mobility can be sustainability enhanced through appropriate design and management of the facilities and the services they provide.

In general mobility is one of the structural elements which influence the transformation of urban systems. Transport is discussed either as a spatial interaction or as a stage in the marketing process that bridges the gap between points of production and points of consumption. Transport plays probably the most important role in shaping the general structure and urban land use spaces and hence urban transport plays a crucial role in maximizing the degree of mobility.

## **2.6. Urban Transport Modes**

Urban transport is broadly categorized into motorized or non -motorized modes. The choice of particular mode of urban transport depends on such factors as accessibility and ease of operation. Non -motorized modes include Animal drawn Mode, walking mode, and Bicycle. Where as motorized modes include Railways, Air plane, and Vehicular rand motor cycle.

## **2.7. Public Transport**

The first public transportation known to history was introduced by the Romans, who established a system of vehicles for hire during the regimes of Emperors Augustus and

Tiberius(Thrup, 1877) these two - or -four wheel wagons were stationed at every five or six miles along the fine high ways for which the Romans were famous.

Coaches that run on regular schedules between major towns appeared in Europe during the 16<sup>th</sup> century. Stagecoaches were introduced in the 17<sup>th</sup> century. However, most roads were poor, fares were high and the service was slow and uncomfortable.

The first form of public transportation to operate solely within cities was the "hackney carriage" the forerunner of the taxi, which appeared in Paris and London shortly after 16<sup>th</sup> century. The name came from the French word "Haquence", meaning a horse of fair size and quality used for riding, but for war or hunting.

In 1662 century the French philosopher-mathematician Blasé Pascal obtained a patent from the King and began a low-fare coach service on five fixed routes in Paris. Although successful at first, the service lasted less than 2 years. This was partly because Pascal died at the age of 39, but also because hackneys offered competition and people in certain classes (e.g. soldiers and servants ) were not allowed to ride the coaches (Thrup,1877). As the 19<sup>th</sup> century opened, the average person walked to work. Cities were dense and compact; the geographical area of a city was largely limited to the radius of walking distance from the center. Some wealthy families lived on the outskirts and traveled by horseback or carriage, but horses were too expensive for common people to keep.

The modern era of urban mass transit began in 1819 with a coach line in Paris (Thrup, 1941). It used an existing type of stagecoach called "a diligence". The first transit service in the united states was started by Abraham Brower on Broadway in New York City in 1827. For this he designed a modified stagecoach seating 12 passengers, it was named "the Accommodation". The second generation of this stagecoach had a different design all the seats ran lengthwise, and there was a door at the rear with an iron stairway to the ground. This vehicle was named the "Sociable"

## **2.8. Development of Public Transport**

### **Omnibus**

In 1825, a coach builder named George Shill beer built specially built specially designed coaches with large seating capacity for use in Paris. The vehicle was called an omnibus.

### **Horse-drawn Street Railway**

A major advance came in the form of horse- drawn street railway. The first one in the world was the New York and Harlem Railroad, which began Service in 1832. The use of horses was first considered temporary, but the horses per formed well and were never replaced by steam engines.

### **Cable Car**

In this system, a cable is laid in a small through between the rails is kept in continuous motion by a steam located at the end of the line. A car is propelled by gripping on to the cable with a metal arm that reaches down: the grip is released when the car brakes to stop. The car it self has no motor. Besides, a driver conductor, each car carries a grip man, who must develop skills at the trade.

### **Electric Street Car**

The street car also called the electric railway, or tram was the next and most important innovation.

### **The Steam Railroads**

The 19<sup>th</sup> century also witnessed the development of steam railroads. The first intercity railroad service began in 1830 between Liverpool and Manchester in England. This inaugurated a century in which steel wheels on steel rails became the dominant form of intercity transportation. The railroad industry formed a major part of the economy, much as the automotive industry does now.

### **Subway and Elevated Systems**

Several attempts were made to introduce steam trains into the heart of cities. The first Subway in the world, 3.7 miles long, opened in London on January 10, 1863. The trains were pulled by steam locomotives, and while special efforts were made to expel the smoke,

ventilation remained a major problem. The line was popularly called “the sewer railway”. However, it continued to operate for many years and eventually was electrified.

### **Arrival of the Motor Vehicle**

The forerunner of the private motor vehicle was the road locomotive or steam carriage.

This was a steam engine on wheel- something like a railroad locomotive, but with flat surfaced wheels to run on highways.

The automobile was soon accompanied by the truck, the tractor and the bus. The first motor bus service in the world began in London in 1899 and by 1911 the London General Omnibus Company had completely replaced horse-draw omnibus with motor buses (Thrup, 1941). Because of the narrow streets, double-decker buses were designed to increase seating capacity.

Early buses ran on gasoline, but its high price in Europe led to experimentation with the engine invented by the German Rudolf Diesel back in the 1890's.

## **2.9. Public Transport Facilities**

Bus stops, bus shelters and bus bays are rarely adequate in low – income and middle income country cities. Often located near junctions and where the side- walks either no longer exist or are too narrow, bus stops often cannot accommodate the crowds of people waiting for buses. Shelters, when provided, are rudimentary and usually damaged. No provision is made for seating or for the aged and infirm. Rarely are bus stop provided with lighting, Time tables or rout information.

Bus stations vary from being well designed sophisticated terminal (in India) to overcrowded “parking lots” (in Jakarta). Located more for the convenience of the bus operator than the public, they are often difficult to access, impossible to move around in, and centers of chaos and frustration for passenger and bus drivers alike.

In many cities, bus terminals are defined by parked buses on the street. In the case of Para transit, rarely are bus stops or bus terminals/ station available due to the quasi- legal or out rightly illegal nature of these services (Peter M.1990, pp: 22).



## 2.10. General Natures Modern Public Transports

Various studies have classified Modern Public transport into four general categories based on their nature of operation (Dandean Tuffa & Tsegaye Girma 2001, pp:14). These are

1. Buses and trolley buses: operate on public streets in either mixed traffic or bus only lanes or exclusive bus ways. They employ engines that use fuel and or electric energy. Electric buses usually run with the help of cable that are mounted on electric poles which run along the whole line.
2. Light rail transit: operate in mixed traffic long public streets to semi- metric rail systems on exclusive trucks.
3. Rapid rail transit (Metro, Sub ways or underground)-operates on exclusively right -of -ways at high speed and high capacity passengers' board from high level plat form to facilitate rapid loading.
4. Sub- urban Rail transit (commuter rail system) operates on trucks shared with inters - city passenger crews and freight.

Urban Mass Transport Systems can also be classified based on the line system they employee (Dandena Tuffa & Tsegay Girmay, 2001)

- On -street system, buses, trolley -buses, trains.
- Mixed on -street and off -street systems, but lanes bus ways, light rail
- Off-street systems. Metros, commuter -rail

### Comparison of Public Transport Modes

#### 1. City - Bus Service

##### Advantages:

- Can be used on the existing streets
- Low cost of investment (initial)
- Flexibility in use on steps streets
- Accustomed Technology (easy to maintain, operate, etc.)
- Affordability
- Environmentally friendly , in the case of electric bus

### **Disadvantages:**

- Pollution and excessive noise
- Long waiting time where there is no only bus lane
- Moves fewer travelers ( in comparison to light rail transit)

## **2. Light Rail Transits**

### **Advantages:**

- In most case ,the existing rail line can be utilized
- Consumes less energy than buses
- Can move more people
- Emits less pollution
- Reduces congestion on the street

## **3. Trolley -Bus**

### **Advantages**

- Environmentally friendly
- Can move more people
- Cheaper operation cost than normal buses
- Reduces traffic congestion on streets

### **Disadvantages:**

- Very high initial cost
- Relatively high electric consumption
- Doesn't provide flexibility

## **2.11. Roles of Public Transport**

However large-scale the operation of a public transport may be, the economic realities dictate that the services can never be instantly available at all times of day and night, can never be so comprehensive as to cover every road and street within the area and never so easy to use as to remove all physical, mental and psychological strain from travel. Travel by public transport is necessarily subject to constraints in time, space, money and effort, since people are restricted to traveling at certain times and to certain places only. According to (Gina P. 2005, pp:150).

The conflict between the needs of travelers and the cost of satisfying these demands leads to a divergence of views with regard to the role which public transport should play.

- At one end of this spectrum, public transport is expected to pay its way with the services being provided in the most cost-effective way possible and paid for entirely by passenger revenues.
- While at other end public transport is regarded as a social service to be funded largely from public monies so that users pay much less than the true costs, and those with a special need (the old, the infirm, children, those in remote areas, and those with no car available) are treated even more benevolently.
- A role of a rather different nature is the use of public transport to further objectives which are only indirectly connected with public transport travel, these are mainly concerned with problems of the environment such as air pollution, visual intrusion, noise and congestion and urban form which rely on travelers switching from private transport to public transport for their achievement.

## **2.12. Urban Transport Policy**

Good public transport implies that the complete journey between home and work, home and school etc is good. A good public transport must be appropriate to income level of the city and its inhabitants.

Public transport is the lubricant which allows the city to function properly (All port R.1995). As such it is obvious that a workable policy in this area can have a profound influence.

The preceding section has suggested that the roles which public transporter is expected to fill are so various and complex that no single goal can be defined for it, even in given situation these roles overlap considerably, and may even conflict, but the many aspects involved can be divided in to the four main categories listed below. (AllportR.1995) and report of international collaboration study of the factors affecting public transport. (Patronage UK, 1980).

## **Social and Equity Considerations**

It is obvious that some people are able to travel about more easily than others. This difference in the mobility between sections of society are, in practice, largely a reflection of difference in the availability of the private car. This may well result from a number of factors, but the most important one by far is income. Lower income groups without the use of a private car in areas with poor public transport provision are obviously disadvantaged to a considerable degree, but even where the public transport services are very good, the cost can act as a strong deterrent to their use by low income groups.

Indicators which reflect the ease or otherwise with which people can travel to a range of attractions can be used to test the adequacy of other wise of the transport facilities and services of an area. It is important there for, to distinguish between the observed travel patterns and the underlying need which individuals have for travel. On the other hand the need for travel is a difficult item to quantify since needs and expectations are inevitably shaped by the existing possibilities, and so some needs are more necessary than others.

## **Environmental Considerations**

There has been an increasing awareness in recent years of the potential environmental impacts of transport policy. Undesirable environmental impacts are not confined to just certain areas of the country nor are they due solely to particularly types of transport. Almost all modes can be detrimental to the environment in certain locations pollution, for example, is a more serious problem in urban areas than in rural areas and is produced more by road traffic. (Addis Ababa City Government Plan, 2001-2010).

## **Safety Considerations**

There is no doubt that if people traveled by public transport instead of by private car the number of accidents would diminish, but care is needed when assessing the safety implications of different transport policies because in many cases where public transport has increased its share of the market, it has done so at the expense of the walk mode, often involving a shift in destination, so that for example, a short walk trip is converted to a longer bus trip, rather than care mode.

## **Efficiency Considerations**

In situations where there is a high concentration of demand for travel both in space and time, there are likely to be strong economic advantages from public transport compared with private transport.

### **2.13. Urban Transport Planning**

The three important variables that must be quantified before any form of solution can be found while entertaining issues of urban transportation planning are (New town planning and principles):-

1. Desired level of usage of vehicles
2. Standard of desired environment, and
3. Cost of improving the environment by changing existing physical patterns. The solution is largely to be found in the unification of the new separated functions of the road engineer and planner –architect, as well as ‘administered split mindedness.

### **2.14. Public Transport Network**

A network is a kind of graph, which is a geometric figure made up of points and lines. In practical applications, the points and lines are always interconnected. Each line has a point at each end, and several lines may meet a single point. Transportation planners usually refer to a point as a node and to a line as a link. A network is defined as a graph in which there is some sort of flow.

A transit network resembles the route map that a transit operator publishes. The links represent segments of transit routes. For a rail link is a section of track, for a bus route, it is a street on which buses run. (Anbessa City Bus Enterprise 2004-2010).

#### **Bus Network**

In most small cities, bus routes are radials converging. In medium –size and large cities, the bus networks are large and more complex and may not reassemble any simple pattern. Most routes follow major streets, so the network resembles the street pattern.

In cities where radial streets are prominent, the busiest routes are radials. Real bus networks differ from any ideal pattern. There may be irregular streets, topographic constraints, or barriers such as freeways and railroad tracks. Further, routes are adjusted according to demand. In low density area where most households have automobiles, routes are spaced farther apart than in high -density areas that generate more transit rider. Socioeconomic characteristics of the residents also play apart. Low - income communities may be served by numerous routes, while wealthy areas have little service.

### **Designing a Single Route**

Bus routes should follow arterial streets as much as possible and avoid minor streets. Arterial streets are wide enough for buses which are otherwise difficult to maneuver and have higher average speeds because of traffic engineering measures designed to increase flow. Side streets are more likely to be blocked by parked vehicles or children playing

Arterials are more likely to be lined with buildings that have high trip generation. Ideally a bus route should be straight and direct. This is easier for people to understand, and usually it provides a faster trip from end to end.

### **Spacing of Routes**

In a radial city with radial bus transit routes in which population density varies with distance from the center, the following relationship is observed: when the total amount of a service is held constant, wide spacing between routes leads to:

- Lower construction cost, because fewer routes are built,
- More frequent service on each route and hence less waiting time, and
- Greater access distance to the routes which is an important factor if most people walk.

The opposite results hold: Close spacing between routes means greater construction cost, less frequent service on each route, and shorter access distance.

### **Spacing of Stops**

The spacing of stops largely determines the average operating speed on line, which affects the quality of service perceived by travelers. The maximum speed of the vehicles is only secondary. In deciding on the number of stops on a line, it is important to realize that each stop causes time losses for:

- Breaking to a stop,
- Unloading and loading passengers,
- Accelerating back to running speed.

There is a certain spacing of stops that will minimize travel time for passengers. As stops come closer together, each person walks less distance to a stop. At the same time, average speed of the transit vehicles declines and the ride takes longer. The optimal spacing between bus stop should be 0.5 mile. Typical bus routes have 6 to 10 scheduled stops primal but they stop only on demand.

## CHAPTER THREE

### DATA PRESENTATION, ANALYSIS AND INTERPRETATION

Under this chapter data presentation, analysis and interpretation are involved. These are oriented in a continuous and interlinked manner. Data is presented qualitatively and quantitatively. That means, it is expressed in words, number and figures. This is also analyzed according to what is presented. Moreover, the data is also interpreted from different angles like from the point of view of the literature, the writer and existing conditions of Anbessa Bus Transportation.

Therefore, especially this chapter embodies the presentation of data, analysis of data and interpretations.

#### 3.1. General Characteristics of Respondents

The characteristics of respondents basically involve things like age, sex, educational background, marital status, service year (experience), and other aspects of respondents.

**Table 3.1.1:** Background characteristics of respondents

Characteristics	Employee		Customer	
	No.	Percentage	No.	Percentage
<b>Gender</b>				
Male	52	76	80	80
Female	16	24	20	20
<b>Total</b>	<b>68</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Age distribution</b>				
Below 25	23	34	32	32
25- 35	30	44	28	28
36 - 45	6	9	20	20
Above 45	9	13	20	20
<b>Total</b>	<b>68</b>	<b>100</b>	<b>100</b>	<b>100</b>



**Table 3.1.1:** [Continued]

Characteristics	Employee		Customer	
	No.	Percentage	No.	Percentage
<b>Educational Background</b>				
Below high school	8	12	20	20
High School completed	8	12	9	9
Certificate	9	13	10	10
Vocational education	12	18	20	20
College diploma	19	27	23	23
<b>Total</b>	<b>68</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Year of service in the Org/ getting service by the Org</b>				
Less than 5 Years	32	47	24	24
5 -10 years	21	31	36	36
15 - 20 years	9	13	10	10
More than 15 years	6	9	30	30
<b>Total</b>	<b>68</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: Questionnaire (April,2011)

According to the above table, table 3.1.1 the age, educational back round service year and gender of employees and custom is presented. Accordingly, out of 68 employees, the great majority of them were males. They consisted of 76 percent of the target population.

The remaining 24 percent or 16 of the employees were females and 80 percent of he customers, sharing the largest proportion, were males. The remaining 20 percent were females. Here, the figure and percentage are equal in as for as they involve from the same proportion that is hundred.

Concerning age, 34 percent of the employees were below 25 years old, 44 percent between 25 and 35 years old, 9 percent between 36 and 45 years old and 13 percent above 45 years old. Moreover, 32 percent of the customers were below 25 years old, 28 percent between 25 and 35 years old, 20 percent between 36 and 45 years old and the rest 20 percent above 45 years old.

As we observe in the above table, 8(12%) and 20(20%) of the respondents are below high school, 8(12%) and 9(9%) of the respondents are high school; completed, 9(13%) and 10(19%) have certificate, 12 (18%) and 20(20%) of the respondents have vocational education, 19(27%) and 23(23%) of the respondents have a college diploma and the remaining 12(18%) and 18(18%) of them have B.A degree holder and above. Therefore, the researcher may get reliable information because more than the average respondents are well understand about the aim of the questionnaire, which is distributed by the researcher. At the end, the service year of the respondents was also considered, 47 percent of the employees had been less than 5 years, 31 percent between 50 and 10, 13 percent between 15 and 20, 9 percent more than 15 years of experience, Besides, 24 percent of customers had less than 5 years, 36 percent had 5 up to 10 years, 10 percent 15 up to 20 years and 30 percent more than 15 years of experience.

### 3.2. Analysis of the Major Findings of the Study related to Employees

It is thought that there had been problems in the service delivery system of Anbessa Bus. Then, extent of the problem could be seen as follows:

**Table 3.2.1:** Transportation and assignment problem in Anbessa city bus

Item	Respondents	
	No	Percentage
Do you think that there was a big problem in transportation and assignment of bus in you our organization?		
A. Yes	54	79
B. No	10	15
C. No idea	4	6
<b>Total</b>	<b>68</b>	<b>100</b>

Source: questionnaire (April, 2011)

As it was revealed in Table 3.2.1 the great majority of the respondents consisting of 79 percent of the employee respondents answered 'Yes'. However, the 15 percent showed that there were no problems of Anbessa Bus transportation and assignment. And, the rest 6 percent expressed that they didn't have an idea about the problems related with the transportation and assignment of the bus.

Hence, the above mentioned information manifests that the employees in particular and the organization in general had been aware of the existence of problems and complaints related with the assignment and transportations of bus, However, there seemed to have existed people or employees who were not aware of the problem or else who didn't have information about the case.

**Table 3.2.2:** The extent of improvement in its service delivery system

Item	Respondents	
	No	Percentage
The extent of improvement in its service delivery system		
A. Very high	8	12
B. High	10	15
C. Medium	13	19
D. Low	25	37
E. Very Low	12	17
<b>Total</b>	<b>68</b>	<b>100</b>

Source: questionnaire (April, 2011)

As it could be understood from table 3.2.2 great number of respondents explained that the extent of improvement of bus service delivery system was unsatisfactory. For instance, 37 percent of them showed that it was low, 17percent should that it was very low, 19 percent showed medium, 15percent showed high and 12 percent expressed that the improvement status was very high.

Therefore, the above mentioned information manifested more of weaknesses than strengths. Most of them showed that there had been a problem of improving the bus service delivery system.

If there were problems of bus transportation and assignment, there would be much consequences on the operation system of the enterprise.

Accordingly, the following data assure us about the transportation and assignment of city bus in the operation system of the enterprise.

**Table 3.2.3:** Attitude of respondents on the effect of assignment on the enterprise

Item	Respondents	
	No	Percentage
How do you rate the effect of bus transportation and assignment on the enterprise		
A. Very high	50	74
B. High	12	18
C. Medium	4	5
D. Low	2	3
E. Very Low	-	-
<b>Total</b>	<b>68</b>	<b>100</b>

**Source:** Questionnaire (April, 2011)

As show on the above table 3.2.3 74 percent of them showed that it was very high, 18 percent showed that high, 5 percent of respondent showed that medium, 3 percent showed very low the rest null.

Therefore, the above mention information majority of the respondent said that very high affected Anbessa city bus transportation and assignment in the operation system of the enterprise.

Many people complain about the dalliance of city bus transportation. Many people are agreed on the idea that buses didn't reach on time. That was why people desperate and looked for another options. To see this and its major causes, it is stated here under.

**Table 3.2.4:** Causes of dalliance of city bus transportation

Item	Respondents	
	No	Percentage
Causes of Dalliance		
A. Congestion	5	7
B. Lack of coordination	48	71
C. Lack of control and supervision	15	22
<b>Total</b>	<b>68</b>	<b>100</b>

**Source:** Questionnaire (April, 2011)

According to the above table 3.2.4 the great majority or 71 percent of the respondents expressed that lack of coordination was the major cause for dalliance. The other 22 percent of them also indicated that lack of control and supervision was the major cause for dalliance. Furthermore, 7 percent of the respondents showed that congestion was the main cause for the dalliance of city bus transportation.

Therefore, this shows that there had been problems related with the administration of city bus transportation. Things like coordination, supervision and control are activities that should be performed by the administrative organ. The gap must have resulted from the care less handling and follow -up of the administration, it didn't make continuous control and supervision which created great dalliance.

Concerning the methods of controlling operational time of the organization, the respondents gave their opinions of ideas in the given options according to the following information.

Question: Are there clear methods of controlling mechanism the organization's operational time?

**Table 3.2.5:** Methods of controlling operational time

Item	Respondents	
	No	Percentage
Controlling mechanism of operation time		
A. Yes	45	66
B. No	12	18
C. No idea	11	16
<b>Total</b>	<b>68</b>	<b>100</b>

**Source:** Questionnaire (April, 2011)

The great majority of the respondents amounting 66 percent of them responded that the organization had set clear controlling mechanisms at the operational time.

This manifests that the organization was controlling tasks or activities at the operational time.

On the other hand, 18 percent of the respondents expressed that the organization didn't have clear procedures to control at operational time.

The above information shows that the organization has problems related with controlling system.

Besides, 16 percent of the respondents also manifested that they didn't have idea about the issue. This may mean that there had been employees who were not informed about the tasks in the organization.

The other important issue raised in the study was about the compatibility or comfort ability of the bus to carry more than 100 passengers at one trip. To this issue, the respondents gave the following response.

**Table 3.2.6:** The Comfortability and compatibility of the bus

Item	Respondents	
	No	Percentage
The extent of comfortability or compatibility		
A. Very good	-	-
B. Good	2	3
C. Medium	1	2
D. Poor	10	15
E. Very Poor	55	80
<b>Total</b>	<b>68</b>	<b>100</b>

**Source:** Questionnaire (April, 2011)

According to the above table 3.2.6, 80 percent of the respondents assured that the extent of comfortability or compatibility was very poor. The next greater population 15 percent showed that it was poor. Besides, 2 percent of the respondents explained that it was medium and 3 percent said it was good. Finally, no respondent selected the option that it was very good.

Therefore, the above mentioned information clearly manifests about the problem that there had been on the comfortability and compatibility of the bus. It indicates that the service delivery system of bus system has a lot of problem. For instance, the suffocation of the bus, the discomfort of the internal setting, the exchange of differ unpleasant smells, the discomfort of the handling instruments and others were responsible factors for the incompatibility. Moreover, the number of people who get on the bus were overly populated which led to psychological and physical discomfort. Many people didn't feel comfortable and safe when they use bus. And, some other people also thought that they could face physical injury.

**Table 3.2.7: Time Gap for the Dalliance of Bus**

Item	Respondents	
	No	Percentage
Time Gap		
A. Between 5-10 minutes	2	3
B. Between 10-15 minutes	11	16
C. Between 15-20 minutes	13	19
D. Between 20-25 minutes	42	62
<b>Total</b>	<b>68</b>	<b>100</b>

**Source:** Questionnaire (April, 2011)

According to table 3.2.7, 62 percent of the respondents expressed that the time gap was between 20 and 25 minutes, 19 percent between 15 and 20 minutes, 16 percent between 10 and 15 minutes and 3 percent between 5 and 10 minutes.

Therefore, the above explained data shows that the dalliance was very higher. That means, the greater part of the population supported the idea that there had been greater space. This might waste the time of customers.

**Table 3.2.8: Post assessment for the fulfillment of customer satisfaction**

No	Item	Respondents	
		No	Percentage
1	Does your organization evaluate the fulfillment of customer satisfaction?		
	A. Yes	7	10
	B. No	53	78
	C. No idea	8	12
<b>Total</b>		<b>68</b>	<b>100</b>
2	Does Anbess city bus have time chart to departure and destination each route?		
	A. Yes	50	74
	B. No	12	18
	C. No idea	6	8
<b>Total</b>		<b>68</b>	<b>100</b>



**Table 3.2.8:** [Continued]

No	Item	Respondents	
		No	Percentage
3	Does Anbessa city bus transportation uses control and evaluate mechanisms to identify the causes of problem with respect to transportation assignment		
	A. Yes	26	38
	B. No	35	52
	C. No idea	7	10
<b>Total</b>		<b>68</b>	<b>100</b>

**Source:** Questionnaire (April, 2011)

The above table shows that 78 percent of the respondents didn't evaluate the fulfillment of customer satisfaction. 12 percent didn't have idea on the issue. However, 10 percent if they showed that it evaluated the fulfillment of customer satisfaction.

Hence, according to the majority of the respondents, they didn't evaluate the fulfillment of customer satisfaction. This resulted in the continuation and consistence of the problems.

Concerning the time chart of departure and destination, 74 percent showed that the service had its own point of departure and destination. But, 18 percent opposed the idea and 8 percent put that they didn't have idea on the issue.

Therefore, this reveals that they had strength on setting points of departure and destination.

Furthermore, 52 percent showed that the institution didn't control and supervise the service. The other, 38 percent supported that they controlled and supervised the activity, and, 10 percent didn't have idea on the issue.

Hence, this shows that the institution had gaps in controlling and supervising the service of Anbessa bus transportation and assignment.

### 3.3. Analysis of the Major Findings of the Study related to Customers

**Table 3.3.1:** Attitudes of respondents on the problems in Anbessa city bus

Item	Respondents	
	No	Percentage
Presence of problems on Anbessa city bus transportation and assignment		
A. Yes	84	84
B. No	5	5
C. No idea	11	11
<b>Total</b>	<b>100</b>	<b>100</b>

**Source:** Questionnaire (April, 2011)

According to the above table 3.3.1, 84 percent of the respondents expressed that there were problems connected with the assignment and transportation of Anbessa city Bus. But 5 percent indicated that there were no problems in Anbessa bus assignment and transportation. Besides, the 11 percent of the respondents didn't have an idea.

Thus, the above indicated table shows that there had been problems related with the assignment and transportation of Anbessa city Bus enterprise. This was the idea which they agreed on.

**Table 3.3.2:** Extent of the improvement of city bus transportation and assignment

Item	Respondents	
	No	Percentage
The extent of city bus transportation and assignment and its improvement?		
A. Very high	23	23
B. high	15	15
C. medium	17	17
D. low	20	20
E. very low	25	25
<b>Total</b>	<b>100</b>	<b>100</b>

**Source:** Questionnaire (April, 2011)

Table 3.3.2 shows that most of the respondents didn't express their appreciation to the assignment and transportation service of city bus. For instance, 25 percent of the respondents indicated that the extent of city bus transportation, assignment and its improvement was very low. The other 20 percent rated it low, 17 percent put it medium, 15 percent said high and 23 percent explained that it was very high.

Therefore, this manifests that the respondents were not satisfied with the assignment, transportation and improvement of Anbessa city bus enterprise. Most of them gave responses.

Hence, the above mentioned information shows that the institution had problems connected with providing comfortable and compatible service.

**Table 3.3.3:** Time gap for the dalliance of Anbessa city bus enterprise

Item	Respondents	
	No	Percentage
Time gap		
A. Between 5 - 10 minutes	-	-
B. Between 10 - 15 minutes	-	-
C. Between 15 - 20 minutes	5	5
D. Between 20 - 25 minutes	85	85
E. Above 25 minutes	10	10
<b>Total</b>	<b>100</b>	<b>100</b>

**Source:** Questionnaire (April, 2011)

According to the response that they gave to the time gap for dalliance, the city buses were late between 20 and 25 minutes this was supported by 85 percent of the respondents, 5 percent indicated that the gap was between 15 and 20 minutes, Moreover, the remaining 10 percent of them should that it was delayed above 25 minutes. Therefore, another problem was also cited regarding the dalliance of Anbessa city Bus.

**Table 3.3.4:** Availability of time chart to departure and destination across each route

Item	Respondents	
	No	Percentage
Does Anbessa city Bus have time chart to departure and destination across each route?		
A. yes	-	-
B. No	100	100
C. No idea	-	-
<b>Total</b>	<b>100</b>	<b>100</b>

**Source:** Questionnaire (April, 2011)

All (100%) of the customer showed that it did not have times chart for departure and destination of each route. This shows that there had been another critical problem which was related to the time chart of the organization.

**Table 3.3.5:** The fulfillment of customer satisfaction

Item	Respondents	
	No	Percentage
Does Anbessa city bus enterprise fulfill customer satisfaction?		
A. Yes	25	25
B. No	70	70
C. No idea	5	5
<b>Total</b>	<b>100</b>	<b>100</b>

**Source:** Questionnaire (April, 2011)

From the above table we can observed that, 70 percent of the respondent said that Anbessa city bus enterprise does not fulfillment of customer satisfaction, 25 percent of he respondent are satisfied and the rest 5percent was no have an idea which show that there had been problem related with the assignment, transportation and improvement of Anbessa city bus service delivery system. Therefore must of the respondent showed that it

was not satisfied on the part of customers concerning the assignment, transportation and service delivery of customers.

**Table 3.3.6:** Causes of dalliance of city Bus transportation

Item	Respondents	
	No	Percentage
Causes of dalliance		
A. Congestion	10	10
B. Lack of coordination	90	90
C. Lack of control and supervision	-	-
<b>Total</b>	<b>100</b>	<b>100</b>

**Source:** Questionnaire (April, 2011)

As show on the above table concerning the major cause of dalliance for it, they showed that lack of coordination was the most critical factor. City buses did not have effective and efficient coordination according to 90 percent of the respondents, the rest 10 percent of the respondents showed that to mach factor of dalliance was congestion. Therefore, this shows that there had been problem connected with the coordination of buses.

**Table 3.3.7:** Comfortability and Compatibility of city Bus

Item	Respondents	
	No	Percentage
The extent of comfortability and compatibility?		
A. Very good	-	-
B. Good	-	-
C. Medium	-	-
D. Poor	5	-5
E. Very Poor	95	95
<b>Total</b>	<b>100</b>	<b>100</b>

**Source:** Questionnaire (April, 2011)

From the above table 95 percent of the respondents explained that the compatibility and comfortably of Anbessa city bus was very poor. The remaining 5 percent expressed that it

was poor. Therefore, the enterprise focus on this major problem to customized customer want and need of comfortable and compatible bus.

The customers also gave their suggestions on the problems and challenges of Anbessa city bus transportation and assignment. They indicated that the institution should make research on its delivery system. It should also listen the ideas and opinions of its customers so that it can improve its service. The other thing that they suggested is that lit has to promote the number and quality of its buses from time to time as it the interest and number of customers is increasing.

Moreover, the comments and suggestion that they gave will be included in the next or fourth chapter of the study.

The top level management and supervisors, according to the interview conducted, suggested that Anbessa Bus transportation is different from other private transportation services in many ways. Among the differences mentioned by them were the ownership, kind and number of customer, place of departure and destination, means and capacity of getting income and preferably and cheapness of the service are determinant ones.

As addressed to the supervisors, they showed that the price paid and printed on tickets was not the same. This was because of the reason that the organization prints numerable tickets in one time. However, the price of transportation service varies from time to time. Because of currently fuel price is fluctuated in the market.

They also suggested that there were workers who control and supervise buses and their activities. They got information through different professional techniques and report to their super ordinates. They also gave comments and suggestion to concerned employees of her institution.

Moreover, they suggested that they had meeting on the service delivery system and overall activities of the enterprise.

## CHAPTER FOUR

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This Chapter contains summary of the major findings, conclusions and recommendations based on the data analyzed in the previous chapter.

#### 4.1. Summary of Findings of the Study

The following summary of finding is drawn on the bases of the analysis of the data collected through aforementioned data gathering technique:

- 79 percent of the employee respondents showed that there had been transportation and assignment problems in Anbessa City Bus.
- 37 percent of the employee -respondents showed that the extent of improvement of service delivery system was low.
- 74 percent of them also indicated that the rate of effect of bus Transportation and assignment on the enterprise was very high.
- 71 percent of the employee respondents also showed that the major cause of dalliance of city -bus transportation was lack of coordination.
- 66 percent of the also expressed that there had been methods of controlling operational time by the organization.
- 80 percent of the employee-respondents also explained that the comfortably of bus transportation was very poor.
- 62 percent of the employees addressed through questionnaire explained that the time gap for the dalliance of bus was between 20 and 25 minutes.
- 78 percent of he employee-respondents expressed that the organization did not evaluate the fulfillment of customer satisfaction.
- 74 percent of the employee respondents explained that Anbessa city bus had time chart to departure and destination each route.
- 84 percent of the customers, in the questionnaire distributed to them, explained that there have been problems in the assignment and transportation of Anbessa city.
- 85 percent of the customers expressed that the time gap for Anbessa bus was between 20 and 25 minutes
- 100 percent of the customers put that it didn't have time chart to departure and destination each route.

- 70 percent of the customers also showed that it has problems in the fulfillment of customer satisfaction
- 90 percent of the customer-respondents also showed that lack of coordination was the main cause for dalliance
- 95 percent of the customer-respondents indicated that the conformability and compatibility of city bus was very poor.

## **4.2. Conclusions**

According to the major findings of the study, the researches would like to make the following conclusions

- There had been Transportation and assignment problems in Anbessa city Bus enterprise
- The improvement of service delivery system was very low
- The major causes of Anbessa Bus Transportation problems are lack of coordination, higher number of population in a bus, lack of conformability and lack of proper assignment of Buses.
- The organization has its own managing and controlling system or instance, it uses operational time.
- The accommodation of great number of customers, the discomfort resulted from the over population of the passengers and the reasonable price f the service are the effects of using, Anbessa Bus.

## **4.3. Recommendations**

One of the objectives of the research is to recommend and suggest some relevant solutions and options to the organization.

- Firstly, Anbessa Bus enterprise should make investigations and scientific researches on its service delivery system.
- The mentioned causes like lack of effective and efficient coordination, lack of proper controlling and management should be addressed by making solutions.
- The organization should share best experiences from other national and international organizations.



- The assignment problems should be solved planned and organized ways of assignment and transportation ought to be introduced so as to solve the assignment and transportation problems.
- The interests and desires of customers need to be considered and valued in the assignment and transportation process.

## REFERENCES

- Addis Ababa police commission, (2002:5-6). **Annual Report**. Addis Ababa, Ethiopia. Unpublished
- All Porter R. (1995). **Transport and Development in Asia**. World Bank: Washington D.C.
- Anbessa City Service Enterprise. (2010). **General Description**. Addis Ababa.
- Anbessa a City Service Enterprise. (2004 - 2005). **Yearly Report**. Addis Ababa, Ethiopia.
- Darido Georges. (2003). **Regulation of Road-based on Public Transportation**. Washington D.C
- Dundena Tuffa and Tsegaye Girma. (2001). **Modern Public Transport**. Addis Ababa.
- Ethiopia Roads Authority. (2005). **Urban Transport Study and Preparation of Road**. Addis Ababa Ethiopia.
- Gina Porter. (2005). **Africa, Transport and the Millennium Development Goals**. Cambridges scholars.
- Mulugeta Gudeta. (2004). **Challenge of Public Transportation and the Need for Greater Private Sector Involvement**. Addis Ababa, Ethiopia.
- Temesgen Akililu. (2007). **Ethiopia Road Transport Development Problems: Challenges and Constraints**. Addis Ababa, Ethiopia.
- Thrup Matanvich. (1877). **Public Transport in Europe**. The World Bank: Washington D.C.
- Midgley P. (1990). **Urban Transport in Asia**. The World Bank: Washington D.C.
- Public Private Infrastructure Advisory Facility World Bank Transport Consultant Limited. (2005). **Study on Urban Transport Condition in Addis Ababa**. Addis Ababa, Ethiopia.



# APPENDICES

## A. Questionnaire [English Version]

### The Assessment of Problems and Challenges of Transportation and Assignment

#### Practices: the Case of Addis Ababa Anbessa City Bus Enterprise

Addis Ababa, 2011

### For Employees Use only

#### Informed Confidentiality and Consent

I am a prospective graduate of St. Mary's University College from the department of Management. I am conducting a research for the partial fulfillment of my B. A. Degree in management, entitled "The Assessment of Problems and Challenges of Transportation and Assignment Practices: the Case of Addis Ababa Anbessa City Bus Enterprise"

The general objective of the research is to assess the problems and challenges and consequences of transportation and assignment practices in your organization and to suggest possible recommendations that would help to minimize problems.

Since your honest and timely response is valuable for the success of the research, please try to answer the questions frankly with due attention.

**Thank you in advance for your cooperation**

#### Note:

- No need of writing your name since the questionnaire is prepared for academic purpose.
- Please, put a tick mark (✓) in the box or circle choices for your answers
- Discusses briefly open ended questions

### I. General Characteristics of the Respondents

#### 1. Gender

Male  Female

#### 1. Age

Below 25 years  25 - 35 years

36 - 45 years  Above 45 years

#### 3. Education back ground

Below high school  High School

Certificate  Vocational Education

College diploma  B.A degree and above

4. Service year in the Organization
- |                   |                       |                    |                       |
|-------------------|-----------------------|--------------------|-----------------------|
| Less than 5 years | <input type="radio"/> | 5 - 11 years       | <input type="radio"/> |
| 11 - 15 years     | <input type="radio"/> | More than 15 years | <input type="radio"/> |
5. What is your position?
- 
- 

## II. Question Directly Related to the Study

1. Do you think that there is a big problem in Anbessa City Bus Transportation organization regarding transportation and assignment?
- |         |                       |    |                       |
|---------|-----------------------|----|-----------------------|
| Yes     | <input type="radio"/> | No | <input type="radio"/> |
| No idea | <input type="radio"/> |    |                       |
2. To what extent Anbessa City Bus Transportation and assignment improve its service practice?
- |           |                       |      |                       |
|-----------|-----------------------|------|-----------------------|
| Very high | <input type="radio"/> | High | <input type="radio"/> |
| Medium    | <input type="radio"/> | Low  | <input type="radio"/> |
| Very Low  | <input type="radio"/> |      |                       |
3. How do you rate Anbessa city Bus Transportation and Assignment problems to affect the operation of the enterprise?
- |           |                       |      |                       |
|-----------|-----------------------|------|-----------------------|
| Very high | <input type="radio"/> | High | <input type="radio"/> |
| Medium    | <input type="radio"/> | Low  | <input type="radio"/> |
| Very Low  | <input type="radio"/> |      |                       |
4. What are the major causes of the dalliance Anbessa city Bus Transportations?
- Congestion                       Lack of Coordination
- Any others: \_\_\_\_\_
5. Do you agree that Anbessa city Bus Transportation Organization set clear methods of controlling mechanism each rout at operational time?
- |                   |                       |          |                       |
|-------------------|-----------------------|----------|-----------------------|
| Strongly Agree    | <input type="radio"/> | Agree    | <input type="radio"/> |
| Neutral           | <input type="radio"/> | Disagree | <input type="radio"/> |
| Strongly disagree | <input type="radio"/> |          |                       |
6. To what extent compatible and comfortable to carrying in a single bus more than 100 passengers a tone trip?
- |           |                       |           |                       |
|-----------|-----------------------|-----------|-----------------------|
| Very Good | <input type="radio"/> | Good      | <input type="radio"/> |
| Medium    | <input type="radio"/> | Very Poor | <input type="radio"/> |
| Poor      | <input type="radio"/> |           |                       |

7. What was the time gap for the dalliance on estimation?
- Between 5 - 10 minutes       Between 10 - 15 minutes
- Between 15 - 20 minutes       Between 20 - 25 minutes
- Above 25 minutes
8. Does Anbessa City Bus Transportation Organization evaluate the fulfillment of customer satisfaction?
- Yes       No
- No idea
9. If your answer for question no 8 No why? Please mention?
- 
- 
10. Does Anbessa City Bus have time chart to departure and destination each rout?
- Yes       No
- No idea
11. Does Anbessa city Bus Transportation uses control and Evaluates mechanisms to identify the causes of problem with respect to Transportation Assignment?
- Yes       No
- No idea
12. Comment any idea might help this research regarding problems and Challenges of Anbessa city Bus Transportation and Assignment?
- 
-

## A. Questionnaire [English Version]

### The Assessment of Problems and Challenges of Transportation and Assignment Practices: the Case of Addis Ababa Anbessa City Bus Enterprise

Addis Ababa, 2011

### For Customers Use only

#### Informed Confidentiality and Consent

I am a prospective graduate of St. Mary's University College from the department of Management. I am conducting a research for the partial fulfillment of my B. A. Degree in management, entitled "The Assessment of Problems and Challenges of Transportation and Assignment Practices: the Case of Addis Ababa Anbessa City Bus Enterprise"

The general objective of the research is to assess the problems and challenges and consequences of transportation and assignment practices in your organization and to suggest possible recommendations that would help to minimize problems.

Since your honest and timely response is valuable for the success of the research, please try to answer the questions frankly with due attention.

**Thank you in advance for your cooperation**

**Note:**

- No need of writing your name since the questionnaire is prepared for academic purpose.
- Please, put a tick mark (✓) in the box or circle choices for your answers
- Discusses briefly open ended questions

#### I. General Characteristics of the Respondents

##### 1. Gender

Male  Female

##### 2. Age

Below 25 years  25 - 35 years

36 - 45 years  Above 45 years

##### 3. Education back ground

Below high school  High School

Certificate  Vocational Education

College diploma  B.A degree and above

4. For how long have get a service by this Organization
- |                   |                       |                    |                       |
|-------------------|-----------------------|--------------------|-----------------------|
| Less than 5 years | <input type="radio"/> | 5 - 11 years       | <input type="radio"/> |
| 11 - 15 years     | <input type="radio"/> | More than 15 years | <input type="radio"/> |

**II. Question Directly Related to the Study**

1. Do you think that there is a big problem in this organization regarding transportation and assignment?
- |         |                       |    |                       |
|---------|-----------------------|----|-----------------------|
| Yes     | <input type="radio"/> | No | <input type="radio"/> |
| No idea | <input type="radio"/> |    |                       |
2. To what extent Anbessa city Bus transportation and assignment improve its service practice?
- |           |                       |      |                       |
|-----------|-----------------------|------|-----------------------|
| Very high | <input type="radio"/> | High | <input type="radio"/> |
| Medium    | <input type="radio"/> | Low  | <input type="radio"/> |
| Very Low  | <input type="radio"/> |      |                       |
3. What is your thought about the major causes of the dalliance Anbessa city bus Transportations?
- |           |                       |      |                       |
|-----------|-----------------------|------|-----------------------|
| Very high | <input type="radio"/> | High | <input type="radio"/> |
| Medium    | <input type="radio"/> | Low  | <input type="radio"/> |
| Very Low  | <input type="radio"/> |      |                       |
4. For how long did stay for waiting a bus in a given station or What is your estimate on the time gap for the dalliance?
- |                        |                       |                      |                       |
|------------------------|-----------------------|----------------------|-----------------------|
| Between 5 - 10 minute  | <input type="radio"/> | Between 10-15 minute | <input type="radio"/> |
| Between 15 - 20 minute | <input type="radio"/> | Between 20-25 minute | <input type="radio"/> |
5. Does Anbessa city bus have time chart to departure and destination across each route?
- |         |                       |    |                       |
|---------|-----------------------|----|-----------------------|
| Yes     | <input type="radio"/> | No | <input type="radio"/> |
| No idea | <input type="radio"/> |    |                       |
6. Do you think that Anbessa City Bus enterprise fulfill customer satisfaction?
- |         |                       |    |                       |
|---------|-----------------------|----|-----------------------|
| Yes     | <input type="radio"/> | No | <input type="radio"/> |
| No idea | <input type="radio"/> |    |                       |
7. To what extent compatible and comfortable to carrying in a single bus more than 100 passengers at one trip?
- |           |                       |           |                       |
|-----------|-----------------------|-----------|-----------------------|
| Very Good | <input type="radio"/> | Good      | <input type="radio"/> |
| Medium    | <input type="radio"/> | Very Poor | <input type="radio"/> |
| Poor      | <input type="radio"/> |           |                       |
8. Comment any idea might help this research regarding problems and challenges of Anbessa city bus transportation and Assignment?



# Interview Check List

## **This interview is prepared for Supervisors**

1. What makes Anbessa bus different and unique from other urban public transport service?
2. Why did not match price printed on ticket with current transport fee?
3. How many Anbessa city bus are assigned to serve customer per a day?
4. Which type of method is used for controlling system at operation time?
5. What is the relationship between Anbessa city bus transportation with public and private transportation organization?
6. Comment any idea might help this research regarding problems and challenges of Anbessa city Transportation and assignment?

••••• ••••• •••••••• ••••

••••• •••••

•••••••• •••••••• •••••

•••••• •••••••••• •••••••• •••••••• •••••

•• •••• •••••• ••••• •••• •••••• ••• ••••• ••• ••• •••••• ••• ••• ••••••  
••••• ••••• ••••• ••••• ••••• ••••• ••••••••••• ••••• ••••• •••••• •••••  
••••• ••• ••• •••••••• ••• ••••• •••••• ••••• ••••• ••••••••••• •••••  
••••• ••••• ••••• ••• ••• •••••••• ••••• •••••••• •••••••• ••••••••

•••••••• - •• ••• ••••••••

••••• •••••••• •••••••• ( ✓ ) •••••• •••••• •••••• ••••••  
•••••• •••••• ••••••••

••••• •••••

1. •• •• •• •••  •• ••

2. ••• •• ••••• ••• •••  •• ••• 36 - 45   
•• ••• 25 - 35  •• ••• 45 •••

3. •••••• •••  
•• 2 ••• •••  •• •••••••••••••••• / ••   
•• •••••• •••••••••••• / ••  ••••••

4. •••••• ••• ••• ••• ••••••••  
•• ••• 5 ••• •••  •• ••• 15-20 •••   
•• ••• 5-10 •••  •• ••• 20 ••• •••

5. ••• ••••••• ••• ••• -----  
-----

••••• ••• •••••• •••••• •••••• •••••••

1. ••••• •• ••• ••• ••• ••• •••••••?



10. .... ..?

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

11. .... ..?

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

12. .... ..?

-----  
-----  
-----  
-----

## DECLARATION

I, the undersigned, declare that this senior essay is my original work, prepared under the guidance of Ato **Daniel Meread**. All sources of materials used for the manuscript have been duly acknowledged.

Name: **Admasu Woresa**

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

Place of submissions: St. Mary's University College  
Faculty of Business  
Department of Management  
Addis Ababa

Date of submission: \_\_\_\_\_

## SUBMISSION APPROVAL SHEET

This Senior Research Paper has been submitted to the Department of Management in partial fulfillment for the requirement of BA Degree in Management with my approval as an advisor.

Name: Daniel Merread

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

Date: \_\_\_\_\_