

ADDIS ABABA UNIVERSITY  
SCHOOL OF GRADUATE STUDIES  
COLLEGE OF BUSINESS AND ECONOMICS

DEPARTMENT OF PUBLIC ADMINISTRATION AND  
DEVELOPMENT MANAGEMENT (PADM)

# Transport Problems of People with Disabilities and Its Policy Issues: Cases in Addis Ababa

A THESIS SUBMITTED TO THE SCHOOL OF GRADUATE STUDIES  
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE  
DEGREE OF MASTERS OF ARTS IN PUBLIC MANAGEMENT AND  
POLICY (MPMP)

BY  
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ADDIS ABABA

MAY 2017

## **Approval Sheet**

**ADDIS ABABA UNIVERSITY, SCHOOL OF GRADUATE STUDIES,  
COLLEGE OF BUSINESS AND ECONOMICS, DEPARTMENT OF  
PUBLIC ADMINISTRATION AND DEVELOPEMNET MANAGEMENT  
(PADM)**

### **Transport Problems of People with Disabilities and Policy Issues: Cases in Addis Ababa**

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**APPROVED BY BOARD OF EXAMINERS      Signature**

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# Declaration

I declare that this thesis entitled, *Transport Problems of People with Disabilities and Policy Issues in Addis Ababa* for the Master's Degree of this Addis Ababa University Department of Public Administration and Development Management is my bonafide work and that all sources of the materials used for this thesis have been dully acknowledged.

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With high regards,

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## **ACKNOWLEDGMENT**

Foremost, I would like to thank the Almighty God for His Love, Protection and Blessing me with health and life opportunities including the opportunity for the then situation and completion of this study.

Secondly, I would like to extend my very special thanks to my advisor Dr. Elias Birhanu for his limitless effort, sociable encouragement, academic stimulation as well as productive and helpful comments starting from research proposal development to the completion of this thesis write up.

Thirdly, I thank all the community partners without whose help, this study would not have come to reality. The following is a list of the community partners whom I would like to express our gratitude to informants namely Ethiopian Centre for Disability and Development (ECDD), Ministry of Labour and Social Affairs, Cheshire Service Ethiopia and Ethiopian National Association of the Blind, all the people with disabilities and their guardians who responded to the survey and agreed to be part of this study and for their valuable and contractive information they provided to me during data collection.

Finally my humble gratitude and appreciation goes to my family and family members for their love, support, and encouragement. God bless you all!!!

## **LISTS OF ACRONYMS**

|        |                                                                      |
|--------|----------------------------------------------------------------------|
| BoLSA  | Bureaus for Labor and Social Affairs                                 |
| CRPD   | Convention on the Rights of Persons with Disabilities                |
| CSA    | Central Statistics Agency                                            |
| DDA    | Disability Discrimination Act                                        |
| ECDD   | Ethiopian Centre for Disability and Development                      |
| ENAB   | Ethiopian National Association of the Blind                          |
| FGD    | Focus Group Discussion                                               |
| GTP    | Growth and Transformation Plan                                       |
| ILO    | International Labor Organization                                     |
| MOLSA  | Ministry of Labor Social Affairs                                     |
| PWD    | People with Disabilities                                             |
| SNE    | Special Needs Education                                              |
| TVET   | Technical and Vocational Education and Training                      |
| UN     | United Nations                                                       |
| UNCRPD | United Nations Convention on the Rights of Persons with disabilities |
| WB     | World Bank                                                           |
| WHO    | World Health Organization                                            |

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## ABSTRACT

Transport disability – *the unnecessary exclusion of disabled people from current forms of transport. It has a major impact on the lives and life choices of any disabled people.* Many people with disabilities do not have equal access to health care, education, and employment opportunities, they do not receive the disability-related services that they require, and experience exclusion from everyday life activities. Transport is essential for disabled people to access education, employment, health services, social events and leisure pursuits. A lack of accessible means of transport creates social exclusion for many disabled people. The aim of this paper was to study the transportation problems of people with disabilities and policies issues in Ethiopia. In addition, it helped to bring together the empirical evidence on the nature and type of the problems of the transportation of People with Disabilities and to develop policy-relevant data on disability as well as to add necessary data to the pool of existing policies to be used by policymakers in designing transportation systems that serve everyone equally. The study was conducted in Addis Ababa using both qualitative and quantitative research using different instruments. The study basically relied on the use of primary data collected in the month of March, 2017 from randomly selected clients. In addition, secondary data, semi structured interviews, observation and desk study were used to collect data for analysis. As it has been revealed Transport disability has a major impact on the lives and life choices of any disabled people to access education, employment, health services, social events and leisure pursuits. A lack of accessible means of independent travel creates social exclusion for many disabled people. The study also confirmed that Transportation is an extremely important policy issue and lack the inclusion of transportation disabilities in the country's policies and direction.. Recommendations based on the findings of the study in transportation disability are presented.

**Key Words:** Transportation Disability, Disability, Traveller Diary, Policy issues

# **CHAPTER ONE**

## **INTRDUCTION**

### **1.1 Background of the Study**

Disability is an impairment that may be physical, cognitive, intellectual, mental, sensory, developmental, or some combination of these that results in restrictions on an individual's ability to participate in what is considered "normal" in their everyday society. A disability may be present from birth or occur during a person's lifetime (WHO, 2016).

Disabilities are an umbrella term, covering impairments, activity limitations, and participation restrictions (WHO, 2016). Impairment is a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations. Disability is thus not just a health problem. It is a complex phenomenon, reflecting the interaction between features of a person's body and features of the society in which he or she lives (Linton, Simi 1998).

Transport disability has a major impact on the lives and life choices of any disabled people. Transport is essential for disabled people to access education, employment, health services, social events and leisure pursuits. A lack of accessible means of independent travel creates social exclusion for many disabled people.

Transportation plays an important role in enabling people with disabilities to travel and live independently. Depending on where they live, their destination and physical needs, transportation choices might include paratransit, accessible taxis, public transportation or volunteer drivers from non-profit organizations or local government agencies (Sandra 2012). Without access to transportation, people with disabilities will not be part of society's economic environment and will continue to be alienated from the economic mainstream, thus causing a myriad of other problems, like homelessness and institutionalization.

Transport disability defined as 'the unnecessary exclusion of disabled people from current forms of transport'. Transport includes both public transport (buses, trains, taxis,

aircraft and ferries) and private individual transport (cars and bicycles), as well as walking and community transport (eg dial-a-ride). (Mitchell, 1997).

Research suggests that 12-13% of the population is transport disabled in some way, that is they experience problems in accessing some or all modes of transport (Henderson, 1999; Jensen et al, 2002; Mitchell, 1997).

Transport issues are important to disabled peoples' lives, being the single most prominent concern at local level (DPTAC, 2002a). Accessible transport enables disabled people to live independent lives and means: "...having transport services going where and when one wants to travel; being informed about the services; knowing how to use them; being able to use them; and having the means to pay for them". (Ling Suen & Mitchell, 1998). Education and business are the greatest reasons for using public transport in any country, and if disabled people are to access employment, education and services they need access to transport.

Porter (2002) suggests that 'those involved in policy and research into transport disability always have to place transport in the bigger picture'. Experience of transport disability is shaped by expectations and experiences as well as the services available.

Estimates of worldwide and country-wide numbers of individuals with disabilities are problematic. The varying approaches taken to defining disability notwithstanding, demographers agree that the world population of individuals with disabilities is very large. For example, in 2012, the World Health Organization estimated a world population of 6.5 billion people. Of those, nearly 650 million people, or 10%, were estimated to be moderately or severely disabled.

The study found that people with disabilities travelled less and reported more mobility problems than those without disabilities. But some disabilities were so severe that people were unable or unwilling to leave their houses; almost 2 million people, or roughly 4 percent of those with a self-reported disability, were homebound—including 9 percent of those ages 65 and over( WHO 2011) .

Transportation is an extremely important policy issue for those with disabilities. People with disabilities have consistently described how transportation barriers affect their lives in important ways.

However, the policy debates over the local transportation needs of these travellers often revolve around dichotomies that may be misleading—arguing over the role of buses compared with the role of paratransit (Sandra2012). Moreover, these debates often focus on some topics at the expense of other equally important issues. For example, there is a legitimate concern about ensuring that people with disabilities receive the services mandated by the UNCRPD, but most of the transportation needs of these travellers are not addressed at all.

Colored by this perspective, many policy analyses ignore the fact that most travellers with disabilities, as is true for travellers in the world at large, make the majority of their trips in private vehicles and rely heavily on walking to facilitate their use of all modes of travel. A narrow policy focus tends to limit discussions of the barriers to both auto use and pedestrian travel while slighting the connection between transportation programs and other important policy initiatives, from land use planning to human and medical service delivery (Thomas 1999, Oliver 1990, Porter 2002).

To expand traditional discussions, this study tries to make a clear distinction between the kinds of transport services and facilities that are required by regulations or law and those that are required to address the far larger mobility needs of most people with disabilities.

It is not only highlights the value of understanding and enforcing the policies and related legislation but also indicates when and why policy discussions must go beyond a focus on the policies and regulation to address the full spectrum of the needs of travellers with disabilities. It also tries to suggest that providing effective mobility options for those with disabilities requires attention to a variety of interrelated policy areas and service delivery models: from how, when, and where the needed services are provided to the places where people are able to live.

The paper had also addressed local ground transportation; beyond its scope are issues of air, sea, and intercity travel for people with disabilities.

More importantly, the study had tried to analyze that more and better accessible transportation is a necessary but not a sufficient resource for overcoming the multiple barriers faced by most people with disabilities. Addressing the transportation needs of

such travellers requires active cooperation between transportation planners and those in a number of other policy and program arenas. Relevant personnel range from educators to medical personnel, from employment counsellors to urban designers, and from housing remodels to land use planners

## **1.2 Statement of the problem**

Disability is an important development issue with an increasing body of evidence showing that persons with disabilities experience worse socioeconomic outcomes and poverty than persons without disabilities. There is no agreement on definitions and little internationally comparable information on the incidence, distribution and trends of disability. There are few documents providing a compilation and analysis of the ways countries have developed policies and responses to address the needs of people with disabilities.

Many people with disabilities do not have equal access to health care, education, and employment opportunities, do not receive the disability-related services that they require, and experience exclusion from everyday life activities. Following the entry into force of the United Nations *Convention on the Rights of Persons with Disabilities* (CRPD), disability is increasingly understood as a human rights issue. Despite the magnitude of the issue, both awareness of and scientific information on disability issues are lacking.

The CRPD promise's of equal opportunity in transportation for people with disabilities, resulting in isolation from jobs, housing, health care, and education. Policymakers when discuss such important issues as how best to rebuild and repair our nation's roads, bridges, railways, and ports, and where and how to prioritize investments in public transportation it is also vital that they take into consideration the needs of people with disabilities. Though people with disabilities live in every community so that transportation policy has undermined them.

People with disabilities have difficulties in getting the transportation they need, because many people with disabilities do not have the option to drive cars, lack of access to other modes of transportation disproportionately harms them. (VSO 2011).

Accessible transportation options including accessible buses, railway systems, taxis, and paratransit—allow people with disabilities important opportunities in education, employment, health care, housing, and participation in community life. People with disabilities who live in rural communities face even greater barriers to accessible transportation. A significant lack of funding to rural communities means that public transportation, and especially accessible transportation, is often in very short supply

The major identified problems by the World Report on Disability include : Inadequate policies and standards, Policy design does not always take into account the needs of people with disabilities, or existing policies and standards are not enforced, Negative attitudes, Beliefs and prejudices constitute barriers when health care workers cannot see beyond the disability, teachers do not see the value of teaching children with disabilities, employers discriminate against people with disabilities, and family members have low expectations of their relatives with disabilities (WHO 2011).

Moreover, Inadequate funding, Resources allocated to implementing policies and plans are often inadequate. Strategy papers on poverty reduction, for instance, may mention disability without considering funding (Zola 1987, WHO 2011).Lack of accessibility, built environments, transport systems and information are often inaccessible.

These problems contribute to the disadvantages experienced by people with disabilities, such as poor health outcomes and depending on the group and setting, people with disabilities may experience greater vulnerability to preventable secondary conditions and co-morbidities, untreated mental health conditions, poor oral health, higher rates of HIV infection, higher rates of obesity, and premature mortality (Louca 2003).

PWDs cannot always live independently or participate fully in community activities. Reliance on institutional solutions, the absence of community living, inaccessible transport and other public facilities, and negative attitudes leave people with disabilities dependent on others and isolated from mainstream social, cultural and political opportunities (Yohanes, 2012).Roughly one-third of people with disabilities have no

public transportation or other transportation available to them, so the accessibility of those services is beside the point. (Aurbach,2001).

The aim of this paper, therefore, is to study the transportation problems of people with disabilities and policies issues in Ethiopia and to bring together the empirical evidence on the nature and type of the problem and patterns of the transportation of People with Disabilities and develop policy-relevant data on disability and add data to the pool of existing policy for policymakers to use in designing transportation systems that serve everyone equally.

### **1.3 Research Questions**

The study had tried to address the following major research questions;

1. How is the Transportation Problems of People with Disabilities?
2. What policy issues are included in transportation disability in the study population?
3. Is there a clear distinction between the kinds of transport services and facilities that are required by regulations or law and those that are required to address the far larger mobility needs of most people with disabilities?
4. When and why policy discussions go beyond a focus on the existing legislation and regulation to address the full spectrum of the needs of travellers with disabilities?
5. What are the challenges faced by the People with Disabilities regarding transportation?

## **1.4 OBJECTIVES OF THE STUDY**

### **General Objective**

To study the Transportation Problems of People with Disabilities in the study area.

### **Specific Objectives**

To see the travel patterns of people with disabilities highlighting the problems that they face with various modes of travel

To analyze a more and better accessible transportation services and policies to People with Disabilities with sufficient resource in the study population

To study the major challenges and problem faced by PWD in transportation

## **1.5. SIGNIFICANCE OF THE STUDY**

This study was undertaken to assess the transportation patterns and problems of People with Disabilities (PWD) and its policies issues in Ethiopia. The purpose of the survey will be paramount to add to the pool of data available to policymakers for use in designing transportation systems that serve everyone equally. Despite, the operation and issues raised in transportation disability.

Affordable and reliable transportation allows people with disabilities access to important opportunities in education, employment, health care, housing, and community life. No exhaustive study has been conducted with same target as this study pursue. Hence, in addition to addressing this knowledge gap the findings of the study will point out potential areas that People with Disabilities need to put more efforts in transportation to the People with Disabilities and the communities at large.

As the nation considers its transportation policy for the 21st century, it is crucial to consider the needs of all individuals living in the country, especially those People with

Disabilities who have traditionally been left behind; this study provides guidelines for strategy and policy formulation aiming at improving the operational conditions of the People with Disabilities.

Policy makers, scholars, interested parties and government authorities will also benefit in the sense that the findings provide informed suggestions on how institutional policy can be improved and how the People with Disabilities s will be able to access and benefit from the services of transportation.

Moreover, the study will be provide pertinent information and benefit to the community at large. Additionally, the result of the study will serve as a basis for further researches on the area and it will also add further findings on to disabled peoples' use and experiences of transport, with a particular focus on strategic and policy priorities.

## **1.6. SCOPE OF THE STUDY**

Disability is a multi- dimensional and extremely complex thus creating many challenge for analyzing complex survey data. Since there is a considerable complexity because they occur in social context , it is this scope are issues of social context that is most crucial to assessing transportation and mobility needs so that the researcher prefer the WHO terminology, Although no generally accepted definition of disability exists in this country, this definition exclude broader categories of persons with disabilities found in national law, including persons with short-term disabilities or persons who had disabilities in the past and as a person with disabilities may be regarded as such in one society or setting,

This study was also be informed by the social model of disability, the view that society disables people with impairments through the construction of social and environmental barriers (Barnes and Mercer, 2003). Transport disability is defined as 'the unnecessary exclusion of disabled people from current forms of transport'. (Heiser 1995).

## **1.7 LIMITATION OF THE STUDY**

Transport includes both public transport (buses, trains, taxis, aircraft and ferries) and private individual transport (cars and bicycles), as well as walking and community transport. Considering that transportation to be commonly available modes of

movements of persons from one place to another place, this study included all forms of transportation and accessible transportation options—including accessible buses, railway systems, taxis, and paratransit that allow people with disabilities important opportunities in education, employment, health care, housing, and participation in community life. Several forms of transportation that are rare, and meet very specific needs or because they are used within the house or apartment will not be included,

This study also limited to local ground transportation; beyond its scope are air, sea and intercity travel for people with disabilities. Even though People with disabilities, who live in rural communities, facing even greater barriers and challenges to accessible transportation, this study is limited in the hub of the country, Addis Ababa.

The other limitation of the study is time and financial constraint. Because the study is limited to time and finance as compared to the wideness and intensiveness of the work. Lack of reliable and up to date information due to absence of a baseline survey and current studies on the issues of PWD in the country also a problem.

## **1.8 ORGANIZATION OF THE PAPER**

This paper will be organized in to five chapters. Chapter one incorporates the introduction (preliminary) parts of the study: the back ground of the study, the statement of the problem, objectives, significance, scope and limitation of the study. The second chapter is Literature review.

The third chapter gives detailed account of the study area and institution; the research design including the selection of sample; the data that will be collected and analyzed. Chapter four discusses the presentation, analysis and discussion of findings. Finally, chapter five presents general summary of the findings, conclusion as well as recommendation

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Disability An overview

Disability is part of the human condition. Almost everyone will be temporarily or permanently impaired at some point in life, and those who survive to old age will experience increasing difficulties in functioning. Most extended families have a disabled member, and many non-disabled people take responsibility for supporting and caring for their relatives and friends with disabilities (Zola 2001 Ferguson 2001, Mishra 2006).

Every epoch has faced the moral and political issue of how best to include and support people with disabilities. This issue will become more acute as the demographics of societies change and more people live to an old age (Lee 2003).

Responses to disability have changed since the 1970s, prompted largely by the self-organization of people with disabilities (Campbell 1996, Charlton 1993), and by the growing tendency to see disability as a human rights issue (Quinn G, 2002). Historically, people with disabilities have largely been provided for through solutions that segregate them, such as residential institutions and special schools (Parmenter 2008). Policy has now shifted towards community and educational inclusion, and medically focused solutions have given way to more interactive approaches recognizing that people are disabled by environmental factors as well as by their bodies.

National and international initiatives – such as the United Nations *Standard Rules on the Equalization of Opportunities of Persons with Disabilities* (United Nations 2003) – have incorporated the human rights of people with disabilities, culminating in 2006 with the adoption of the United Nations *Convention on the Rights of Persons with Disabilities* (CRPD).

Disability is a human rights issue (Quinn 2002) because:

1. People with disabilities experience inequalities – for example, when they are denied equal access to health care, employment, education, or political participation because of their disability.
2. People with disabilities are subject to violations of dignity – for example, when they are subjected to violence, abuse, prejudice, or disrespect because of their disability.
3. Some people with disability are denied autonomy – for example, when they are subjected to involuntary sterilization, or when they are confined in institutions against their will, or when they are regarded as legally incompetent because of their disability.

A range of international documents have highlighted that disability is a human rights issue, including the *World Programme of Action Concerning Disabled People* (1982), the *Convention on the Rights of the Child* (1989), and the *Standard Rules on the Equalization Of Opportunities for People with Disabilities* (1993). More than 40 nations adopted disability discrimination legislation during the 1990s. The CRPD – the most recent and the most extensive recognition of the human rights of persons with disabilities – outlines the civil, cultural, political, social, and economic rights of persons with disabilities. Its purpose is to “promote, protect, and ensure the full and equal enjoyment of all human rights and fundamental freedoms by people with disabilities and to promote respect for their inherent dignity”.

The CRPD applies human rights to disability, thus making general human rights specific to persons with disabilities, and clarifying existing international law regarding disability. Even if a state does not ratify the CRPD, it helps interpret other human rights conventions to which the state is party.

## 2.2 What is disability?

Disability is complex, dynamic, multidimensional, and contested. Over recent decades, the disabled people's movement (Charlton 1998, Driedger 1989) – together with numerous researchers from the social and health sciences have identified the role of social and physical barriers in disability. The transition from an individual, medical perspective to a structural, social perspective has been described as the shift from a “medical model” to a “social model” in which people are viewed as being disabled by society rather than by their bodies (Oliver 1990).

The medical model and the social model are often presented as dichotomous, but disability should be viewed neither as purely medical nor as purely social: persons with disabilities can often experience problems arising from their health condition (Thomas 1999). A balanced approach is needed, giving appropriate weight to the different aspects of disability (Shakespeare 2006, Forsyth 2007). The social model of disability sees "disability" as a socially created problem and a matter of the full integration of individuals into society. In this model, disability is not an attribute of an individual, but rather a complex collection of conditions, created by the social environment. The management of the problem requires social action and it is the collective responsibility of society to create a society in which limitations for people with disabilities are minimal. Disability is both cultural and ideological in creation. According to the social model, equal access for someone with an impairment/disability is a human rights concern (Shakespeare 2001).

The ICF, adopted as the conceptual framework for this *World report on disability*, understands functioning and disability as a dynamic interaction between health conditions and contextual factors, both personal and environmental) (WHO 2001). Promoted as a “bio-psycho-social model”, it represents a workable compromise between medical and social models. Disability is the umbrella term for impairments, activity limitations and participation restrictions, referring to the negative aspects of the interaction between an individual (with a health condition) and that individual's contextual factors (environmental and personal factors) (Leonardi 2006)

### **2.3 UN Convention on the Rights of Person with Disabilities**

Laws and regulations are enacted under various constitutions. There is no specific statement or article on disabilities in these constitutions. However, there are some proclamations to protect and secure the rights of citizens with disabilities.

The Convention on the Rights of Persons with Disabilities is not the first human rights instrument to deal with disability concerns. However, unlike its predecessors, it offers persons with disabilities an unprecedented level of protection. The Convention details the rights that all persons with disabilities should enjoy, and the obligations of States and other actors to ensure they are respected. The Preamble to the CRPD acknowledges that disability is “an evolving concept”, but also stresses that “disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinder their full and effective participation in society on an equal basis with others”. Defining disability as an interaction means that “disability” is not an attribute of the person. Progress on improving social participation can be made by addressing the barriers which hinder persons with disabilities in their day to day lives.

The Convention does not explicitly define the word “disability”; indeed, the Preamble to the Convention acknowledges that “disability” is an evolving concept (subpar, nor does the Convention define the term “persons with disability”. However, the treaty does state that the term includes persons who have long-term physical, mental, intellectual or sensory impairments that, in the face of various negative attitudes or physical obstacles, may fully in society (article 1).

The recognition that “disability” is an evolving concept acknowledges the fact that society and opinions within society are not static. Consequently, the Convention does not impose a rigid view of “disability”, but rather assumes a dynamic approach that allows for adaptations over time and within different socioeconomic settings.

## **2.4 Disabilities in Ethiopia**

### **2.4.1 Disability in Ethiopian Context**

#### ***Definition of Disability in Ethiopia***

Following the World Health Organization (WHO 1976, Helander, 1993) and International Labor Organization (ILO 1991) definitions on disability, “Disability” is defined as follows in Ethiopia, “A disabled person is any person unable to ensure by himself or herself a normal life, as a result of deficiency in his or her physical or mental capabilities”. It is any restriction or lack (resulting from impairment) of ability to perform an activity in the manner or within the range considered normal for human beings.

According to the newspaper “NagaritGazeta”, the Emperor Haile Selassie I, in the Order No. 70 of 1970, described the “disabled” as people who, because of limitations of normal physical or mental health, is unable to earn their livelihood and do not have anyone to support them; and shall include any persons who is unable to earn their livelihood because they are too young or too old.

In “NegaritGazeta” the Transitional Government of Ethiopia, Proclamation No. 101 of 1994 referred to “a disabled person” as a person who is unable to see, hear or speak or is suffering from mental retardation or from injuries that limit him or her due to natural or manmade causes; provided, however, that the term does not include persons who are alcoholic, drug addicts and those with psychological problems due to socially deviant behaviors.

Persons with disabilities in accordance with Article 1 of the UNCRPD, ratified by Ethiopia in June 2010, states that Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others. The terms “handicap” and “impairment” are used according to international standards.

### **2.4.2 Problems of Disability in Ethiopia**

According to the International Rehabilitation Review, nearly 10% of the world's population has disabilities, of which 80% live in developing countries. Most of those in developing countries do not have access to rehabilitation services due to a lack of resources and other various factors (UNICEF (1988)). The state of persons with disabilities in Ethiopia is even more tragic and severe due to the presence of diversified pre and post-natal disabling factors (like infectious diseases, difficulties contingent to delivery, under-nutrition, malnutrition, harmful cultural practices, lack of proper child care and management, civil war and periodic drought and famine) and the absence of early primary and secondary preventive actions.

The Major current problems concerning disability are:

- Lack of public understanding
- Lack of information on the number and status of disabilities
- Shortage of basic needs, such as vocational training placement, health facilities etc.
- Inaccessibility to assistive devices (Tirussaw 1998)

In Ethiopia, some associate disability (handicap) with spiritual evil and do not let disabled persons to go out in public. This leads to families hiding disabled family members which lead to inaccurate information and statistics on disabilities.

To alleviate the problems of disability the Ethiopian Federal Democratic Government has organized a Rehabilitation Department under the Ministry of Labor and Social Affairs (MOLSA). The main activities of the department are to realize rehabilitation, capacity building, and awareness rising. Government administration has been decentralized from the central to regional levels with structures extending from the zones to the "Woreda" districts. With respect to organizations, persons with disabilities have formed five associations and one federation to advocate their rights.

### **2.4.3 Ethiopian Constitution and Law in Disability**

The Convention on the Rights of Persons with Disabilities is not the first human rights instrument to deal with disability concerns. However, unlike its predecessors, it offers persons with disabilities an unprecedented level of protection. The Convention details the rights that all persons with disabilities should enjoy, and the obligations of States and other actors to ensure they are respected. Laws and regulations are enacted under various

constitutions. There is no specific statement or article on disabilities in these constitutions. However, there are some proclamations to protect and secure the rights of citizens with disabilities

The Government of Ethiopia has adopted and implemented a number of laws, policies and standards pertaining to people with disabilities, including their right to productive and decent work. The main ones are:

Constitution of the Federal Democratic Republic of Ethiopia, adopted in 1995.

Article 41(5) of the Constitution sets out the State's responsibility for the provision of necessary rehabilitation and support services for people with disabilities

Proclamation concerning the Rights to Employment for Persons with Disabilities, No. 568/2008, makes null and void any law, practice, custom, attitude and other discriminatory situations that limit equal opportunities for persons with disabilities. It also requires employers to provide appropriate working and training conditions; take all reasonable accommodation measures and affirm active actions, particularly when employing women with disabilities; and assign an assistant to enable a person with disability to perform their work or follow training.

The Federal Civil Servant Proclamation No. 515/2007 provides for special preference in the recruitment, promotion, and deployment, among others, of qualified candidates with disabilities. This provision is applicable to government offices only.

Labour Proclamation, No. 377/2003, amended by Labour Proclamation No. 494/2006, makes it unlawful for an employer to discriminate against workers on the basis of nationality, sex, religion, political outlook or on any other conditions.

Proclamation on Definition of Powers of Duties of the Executive Organs of the Federal Democratic Republic of Ethiopia, No. 691/2010, provides for conditions of equal opportunities and full participation of persons with disabilities and those living with HIV/AIDS.

Building Proclamation, No. 624/2009, provides for accessibility in the design and construction of any building to ensure suitability for physically impaired persons.

Proclamation No. 676/2010 on the Ratification of the “UN Convention on the Rights of Persons with Disabilities” (UN CRPD) by Ethiopia

Framework Document 2009 provides for Special Needs Education (SNE) in Technical and Vocational Education and Training (TVET).

Growth and Transformation Plan (GTP) 2010-2015, establishes disability as a cross cutting sector of development where focus is given to preventing disability and to providing education and training, rehabilitation and equal access and opportunities to persons with disabilities.

National Plan of Action of Persons with Disabilities (2012-2021) aims at making Ethiopia an inclusive society. It addresses the needs of persons with disabilities in Ethiopia for comprehensive rehabilitation services, equal opportunities for education, skills training and work, as well as full participation in the life of their families, communities and the nation. © ILO Photo3

International Labour Organization (ILO) Convention concerning Discrimination in Respect of Employment and Occupation, 1958, (No. 111). Status: ratified, 11 June 1966

ILO Convention concerning Vocational Rehabilitation and Employment (Disabled Persons), 1983, (No. 159). Status: ratified, 28 January 1991

United Nations Convention on the Rights of Persons with Disabilities (2006) and Optional Protocol. Status: ratified, 7 July 2010.

The Ethiopian government is moving forward to address the issues of persons with disabilities. Proclamation targeted to protect and secure the rights of citizens with disabilities include; proclamation No 101, 1994 which focuses on the elimination of discrimination and protects the right of PWD to compete for and obtain employment based on their qualifications and proclamation No 1, 1995 which enacts the constitution

of the government of Ethiopia on the democratic of right of every citizens including PWD to be protected under articles 11,16,18,20, 25, 28, 31, The Education and Training policy (TGE 1994) and the developmental social welfare policy (FDRE, 1996) do attend the importance of education, development and participation of PWDs in the political, economic and social spheres of Ethiopia.

The two sources of legal definition related to disabilities that Ethiopia has adopted are found in the Imperial Order provide for the Establishment of Rehabilitation Agency for the disabled, NO. 70/1971 and proclamation No. 101 /1994. Both proclamations were lacking international standards definition of person with Disabilities.

There are Key ministries responsible for people with disabilities at the federal level, the Ministry of Labour and Social Affairs (MoLSA) is the main governmental organ - disabilities. Operating within MoLSA is the Social Welfare Development Promotion Directorate which coordinates disability issues at the federal level as part of its wider mandate to deal with employment and social issues. In the eleven regional states in Ethiopia, there are regional Bureaus for Labour and Social Affairs (BoLSAs).

BoLSAs handle all social matters, including disability-related issues, under the policy framework established by MoLSA. Other ministries are expected to take responsibility for mainstreaming disability into their respective areas of work as stated under Proclamation No. 691/2010 on “Definitions of Power of the Executive Organs of the Federal Democratic Republic of Ethiopia.”

#### **2.4.4 Current Situation**

Approximately 10 per cent of the world’s population lives with a disability —the world’s largest minority. This number is increasing because of population growth, and the ageing process. It is estimated that 20 per cent of the world’s poorest people have a disability and tend to be regarded in their own communities as the most disadvantaged (World Bank 2010). Around 650 million people or nearly 10 per cent of the world population is believed to live with a mental, sensorial or physical disability of some sort. Statistics indicate that approximately one in five are born with some kind of disability, while most acquire disability after age 16 mainly during their working lives and the vast majority of

the world's People with disabilities, that is, about 80 per cent, live in developing countries and about 470 million of there of working age (CSR Disability 2016).

When we look at the Ethiopian situation, figures indicate that the problem is very serious. Due to the presence of diversified pre and post-natal disabling factors like infectious diseases, under nutrition, mal-nutrition, famine, harmful cultural practices , and intermittent conflicts the number of disabled peoples is assumed to be larger than the case of other countries. Based on this, it is estimated that there are five to eight million disabled people in Ethiopia. This implies that some 7-10 percent of the population lives with a certain type of disability (UNICEF2006). Sixty percent of the disabled people of working age are unemployed.(ILO, 2004). Hence, disabled people as a group do face disproportionate and severe unemployment. And even when employed they are more likely to be underemployed, to earn less.

Moreover, adding to that their extended families, and a staggering two billion of *people* daily live with disabilities. In every region in the world, in very country in the world, persons with disabilities often live on the margins of society, deprived of some of life's fundamental experiences. They have little hope of going to school, getting a job, having their own home, creating a family and raising their children, enjoying a social life or voting. For the vast majority of the world's persons with disabilities, shops, public facilities and transport, and even information are largely out of reach (WHO 2010).

The CSA (2007) Report estimated that the prevalence of disability in Ethiopia was 1.09%).However, this result is widely believed to significantly underestimate the true figure. The census excluded homeless people (an estimated one-in three street children have a disability), while social stigmas and ignorance often prevent disabled people and their families from self-identifying. The 2007 census also excluded Leprosy, epilepsy and intellectual or learning disabilities (with the exception of severe mental impairment). (Feleke T2009).

A vast majority of people with disabilities live in rural areas where access to basic services is limited. In Ethiopia, 95 per cent of all persons with disabilities are estimated to

live in poverty. Many depend on family support and begging for their livelihoods. (Feleke T2009).

Persons with disabilities make up the world's largest and most disadvantaged minority. The numbers are damning: an estimated 20 per cent of the world's poorest persons are those with disabilities; 98 per cent of children with disabilities in developing countries do not attend school; an estimated 30 per cent of the world's street children live with disabilities; and the literacy rate for adults with disabilities is as low as 3 per cent—and, in some countries, down to 1 and unhealthy and dangerous working conditions (World Report on Disability 2010). As the world's population grows, so does the number of persons with disabilities.

In developing countries, poor medical conditions during pregnancy and at birth, the prevalence of infectious diseases, natural disasters, armed conflict, landmines and small-arms proliferation cause injuries, impairment and lasting trauma on a large scale.

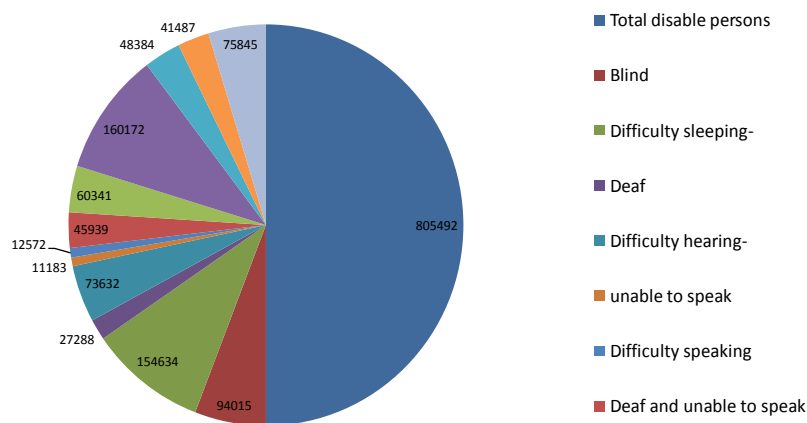
Traffic accidents, alone, result in millions of injuries and disabilities each year among young people. In developed countries, those born after the Second World War are living longer, which means that many of them will eventually live with a disability later in life. The fact that persons with disabilities are more likely to live in poverty is often the result of ignorance and neglect that is reinforced in Government and development policies and programs that ignore, exclude, are not accessible to or do not support the rights of persons with disabilities to be included in the socio-economic life of the country.

In Ethiopia the prevalence of disability was 1.9% (CSA 2011). The prevalence of disability shows that 1.5% of the male population and 1.03% percent of PWD was female which was a slightly higher in males. The younger, reproductive and working age group is more affected than other groups. On the other hand a 1.15 % of the urban population and 1.08% Of the rural population were disabled respectively and of course as the age increase the rate of disability shows a decrease pattern (CSA 2011).

In another country level survey done for the institution of Educational Research shows that the prevalence of disability in Ethiopia is 2.95% ,of whom two-third were self-employed in rural areas such as agriculture ( Tirusew 1995 Feruz 2006). Compared to the

world wide percentage of the disabled , the proportion of the disabled in Ethiopia is significantly lower ,and one of the reasons for this could be due to successive revision of the disability of which is controversial hence every country counts disabled population differently due to difference in culture and method of data collection. That in many cases estimates is significantly lower than ILO estimates.

**Figure 1 The stae of Disabilities in Ethiopia**



Sources: CSA ( 2015)

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**Figure:1 The state of Disability in Ethiopia**

## 2.5 Disability and Transport

Transportation systems serve their communities by providing accessibility (the ability to reach valued destinations) and mobility (the ability to move on the network) (Handy & Niemeier, 1997; Hansen, 1959). Limitation in mobility occurs when a person cannot move between an origin and desired destination because of external or individual factors. People with limited mobility include but are not limited to the elderly, poor, children, persons who do not speak English, the physically disabled, and people with

developmental disabilities. Limitations in mobility may affect physical, social, and psychological well-being. Community transportation agencies aim to help these populations overcome their limitations and increase their level of mobility, and provide them with the ability to access desired destinations. There is growing direction in the fields of disability services, rehabilitation, education, and psychology of the need to promote independence for individuals with people with disabilities.

People with Disabilities have both met and unmet transportation needs. It is important to note that PDD as a population in general can include both transportation disadvantaged and transportation advantaged people depending on the degree of disability and training. The transportation disadvantaged cannot meet all their transportation needs independently and require some special attention from the community to help meet those needs. In contrast, the transportation advantaged can independently meet all their needs through the existing system. PDD can be trained to certain levels to partially overcome their disability and use public transit for meeting their transportation needs. Listening to the concerns of both the advantaged and disadvantaged is important to help better serve their special needs. Understanding these needs can be done through two main procedures. The first is to measure existing travel behavior patterns for the People with Disabilities population. The second is to determine the unmet needs and wants of the relevant groups—e.g., what services they want but are not presently being provided. These provide a baseline of information to proceed with subsequent planning and decision making. The perspective of the users of the services (and their caregivers) is critical to ensure an accurate measurement of both behaviors and desires.

In spite of being numerically a significant portion of the Ethiopian society, People with Disabilities are the most poverty stricken. There are many factors that directly or indirectly contribute toward this state of affairs. But one factor that stands out, above all the others is their lack of equal transport opportunities. It is evident that, employment empowers individuals economically, so as transport, gives them the mandate to define their own course of life, enhance their sense of self-worth and gives them the chance to

contribute to the society and the country. Accessible transport enables disabled people to live independent lives and means.

### **2.5.1 Transport disability**

Defining disability in the context of travel behavior research is somewhat tenuous. Operational definitions are frequently used: In a study conducted using data from the London Area Travel Survey, disability was defined as “a longstanding health problem that affects participant’s ability to travel or get about” (Schmöcker et al. 2004).

Another definition included “individuals of all ages who are unable to transport themselves without special equipment or outside assistance due to a physical, cognitive, or psychiatric impairment” (ODOT 1999).

This review is informed by the social model of disability, the view that society disables people with impairments through the construction of social and environmental barriers (Barnes and Mercer, 2003). Heiser (1995) defines “*transport disability as ‘the unnecessary exclusion of disabled people from current forms of transport’*”. Transport includes both public transport (buses, trains, taxis, aircraft and ferries) and private individual transport (cars and bicycles), as well as walking (Mitchell, 1997) and community transport (e g dial-a-ride).

Research suggests that 12-13% of the disabled population in the world is transport disabled in some way, that is they experience problems in accessing some or all modes of transport (Henderson 1999, Jensen 2002, Mitchell 1997).

### **2.7 Importance of transport**

Transport issues are important to disabled peoples’ lives, being the single most prominent concern at local level (DPTAC, 2002a). Accessible transport enables disabled people to live independent lives and means: “...having transport services going where and when one wants to travel; being informed about the services; knowing how to use them; being able to use them; and having the means to pay for them”.

Education and business are the greatest reasons for using public transport in Ethiopia. if disabled people are to access employment, education and services they need access to transport. Porter (2002) suggests that ‘those involved in policy and research into transport disability always have to place transport in the bigger picture’. Experience of transport disability is shaped by expectations and experiences as well as the services available.

## **2.8 Transport use**

Disabled people in developed countries travel a third less often than the general public. Disabled people drive cars less and are less likely to have one in the household, but nonetheless the most common mode of transport for disabled people is a car driven by someone else (67% of disabled people) (DfT, 2002a, DPTAC 2002a).

While disabled people drive far less (47% less often), they use taxis minicabs (67% more frequently) and buses (20% more frequently) more often. 60% of disabled people have no car in the household, compared with just 27% of the general population (DPTAC, 2002a). In Scotland, approximately 12% of the population are estimated to have some form of impairment, and 5% are likely to have significant difficulty in using public transport (Henderson, 1999).

## **2.9 The impact of inaccessible transport**

Transport disability has a major impact on the lives and life choices of many disabled people. Transport is essential for disabled people to access education, employment, health services, social events and leisure pursuits. A lack of accessible means of independent travel creates social exclusion for many disabled people (Hesier, 1995, Alsnih and SEU, 2003). 41% of disabled people in developed countries said they experience difficulty with travelling, 25% experience difficulty travelling to/from the doctor or hospital, 23% have experienced problems visiting friends or relatives and 18% visiting leisure facilities. 23% of disabled workers say they find travelling to and from their place of work difficult (DPTAC, 2002a).

A recent research study (Campion et al, 2003) in England for Leonard Cheshire found that: “23% of respondents that were actively seeking employment have had to turn down a job offer and a further 23% a job interview, because of inaccessible transport. Almost half (48%) said that inaccessible transport had restricted their choice of jobs, rising to 62% of wheelchair users and 86% of those with a visual impairment”

The study also found that 20% of respondents had faced difficult or impossible to get the healthcare they needed, and that 1 in 7 respondents (1 in 5 of those without access to a car) were unable to collect prescriptions as a result of inaccessible transport. 50% (67%

without access to a car) of those who did not see their family or friends as often as they would like stated that this was because of inaccessible transport. Respondents had missed special events including weddings and funerals, and 27% (43% without a car) said that inaccessible transport had restricted their leisure pursuits. (Sandra 2010).

In addition to excluding disabled people from full participation in society, it has also been argued that the annual cost of excluding disabled people from public transport in the UK could be as high as one billion pounds per year (Carr et al, 1994). This figure is based on additional costs to the economy of providing health care services at home (special transport to health and social care services and loss of tax revenue from people who are unable to access employment.

Unpublished data in Ethiopia found that most of disabled people surveyed said they had experienced problems in using public transport for a reason relating to their impairment. This figure was higher for young disabled people who were neither employed, in full-time education or actively seeking employment, of which almost all had experienced problems using public transport as opposed to the employed respondents.

It is also found that lack of appropriate support (including accessible public transport) ‘forced young disabled people into dependency’ and created barriers to full community inclusion and participation.

Among those that had experienced problems using public transport, most of them said they were unable to use buses, trains and were unable to travel on coaches and forced to use the alternatives they use to travel such as driven by someone else like taxi and this made it difficult for them to participate in activities .

## **2.10 Transport needs**

Recent research suggests that “the difficulties caused by inaccessible transport are exacerbated for those respondents with visual impairments and disabled people without access to a car” (Broach et al, 2003) found that a lack of accessible transport options meant that some people with autistic spectrum disorders were confined to their homes, and that ‘less visible access issues are being ignored as providers focus on making

transport accessible for people with physical disabilities'. People with learning difficulties also face barriers to accessing public transport and travelling independently, and (Lavery et al (1997) felt that 'accessibility' generally meant 'accessible to people with mobility impairments' and did not consider the needs of people with learning difficulties.

Although both the Leonard Cheshire and DPTAC studies included people with physical and sensory impairments and learning difficulties, neither included mental health service users or survivors or other impairment groups. Further research is required into the transport barriers faced by different impairment groups (DETR, 2000d, Gallon, 2000).

Evidence suggests that many older people will experience difficulties with transport, both in terms of the pedestrian environment and accessing public transport (DTLR 2001a). Fourteen per cent of people aged sixteen and over in England and Wales report some mobility difficulty (DTLR 2001c). These difficulties increased with age and 72% of people aged over 85 reported some difficulty.

The OPCS survey of disability in Great Britain found that two fifths of disabled people living in 'communal establishments' never went out, compared with 10% of those living independently (Martin 1990).

Unfortunately subsequent surveys of disability (Grundy 1999) have only included people living in private households, so we do not know the current extent of transport disability for disabled people in residential care.

Morris (2002) found that young disabled people with 'high levels of support needs' were very reliant on parents or carers to provide transport, and that this severely limited their opportunities and independence. Many parents of disabled children find that transport is a major barrier to accessing education, leisure and healthcare (Sharma 2002).

Transport of disabled children is an area that is complex and under-researched, and there is a lack of data on the extent and nature of travel by disabled children (Falkmer 2001). Henderson found that Scottish disabled people's transport needs fell into the following key areas "that overall policy must take account of their needs, with services co-ordinated

in a way which allows them to travel independently; that the built environment, vehicles and buildings should be accessible; that staff employed by transport providers should be adequately trained; that information should be available on a multi-modal basis, in appropriate forms, and covering all aspects of accessibility; and that transport providers and local authorities should consult regularly with disabled people”.

Research for the Joseph Rowntree Foundation found that transport was a major issue for disabled women as, in addition to the general problems of getting around faced by disabled people; they have a particular concern with personal safety. Lack of reliable, accessible transport meant they were isolated in their homes, unable to pursue employment, education or leisure activities (JRF, 1995).

### **2.11 Barriers to travel**

Survey found that 4 out of 5 disabled people had problems with transport and two-thirds said that difficulty with using public transport was one reason for not going out more and travelling further afield (Consumers Association, 1990). The DPTAC (2002a) research found that:- Local rail services were perceived to be the most difficult to use (by 38% of respondents), followed by bus services (33%).

Bus drivers were rated as the most unhelpful of transport staff (by 20% of respondents). 47% of disabled people said they would travel by public transport more if staff were better trained to deal with their needs, and this rose to 66% of those aged 16-44 and 67% of wheelchair users surveyed. 40% of disabled people said that they are fearful travelling by public transport. Overall, there is a higher fear of personal safety among disabled people when travelling than the general public, only 22% of whom say they are fearful of travelling by public transport. There is more social exclusion where public transport services are considered poor.(Sandra 2012)The DWP ‘Disabled for Life’ research (Grewal 2002) found that the difficulties most commonly mentioned by disabled people in Great Britain were getting to and from bus stops or stations (22%), or on and off buses and trains(24%).

## **2.12 Legislation and Policy**

Key legislation and public policy, and related research and other literatures were viewed from experiences of the developed countries.

## **2.13 The Disability Discrimination Act and DPTAC**

The Disability Discrimination Act (DDA) places legal duties on service providers and other persons not to discriminate against disabled people in certain circumstances and authorizes the establishment of regulations relating to enforceable standards for accessible public transport vehicles. Much of the writing on transport and the DDA has focused on the scope and limitations of the current provisions (Henderson 1999; Matthews 2002, Williams 2003)

The Act allows the government to regulate on access to all types of land-based public Authority have published a Code of Practice on train and station services for disabled transport vehicle across a range of modes of public transport, and the Strategic Rail people (SRA 2002).

The Government's in Europe and other developed countries 'Ten-Year Transport plan' builds on the Integrated Transport White Paper (DETR, 1998b) and sets out the government's long-term strategy for delivering 'a quicker, safer, more punctual and environmentally friendly transport system' through investment, modernisation and developing integrated transport systems.

Key issues in relation to transport and disabled people are:

The Government is committed to public transport that is accessible to disabled people. The rate and level of new investment in this Plan will ensure that improvements in the accessibility of public transport are brought forward more quickly. Building in accessibility for disabled people in all new investment is a condition of public money being spent.

Local authorities and transport operators should ensure that the transport needs of disabled people are factored into their plans and that the full benefits of improved public transport are accessible to all.

Should developed measures for evaluating accessibility in transport systems, and in streets and public spaces, to heck that investment is delivering real improvements in the day-to-day mobility of disabled people.

Setting targets for improvements in the quality of service delivery to disabled people. Improving public transport is also vital to reducing social exclusion, particularly for people who have less access to a car including disabled people.

Disability and the government expect 'a significant proportion of clear understanding amongst local authorities of how best to deliver accessibility for disabled people, and plans which demonstrate that they are delivering'. New targets have been agreed with the bus industry. Many countries, including Canada, the US, Japan, and Western European countries now have or are moving towards legislation, regulations, standards or codes of practice that require accessible transport (Ling and Mitchell 1998a; Mitchell, 1997). Almost all countries in the European Union now have transport policies and legislation based on principles of inclusion and accessibility for disabled people (Short 2002).

But as Ling Suen and Mitchell (1998a) point out, accessible transport options are not enough, and what is required is a totally integrated accessible transport system encompassing public transport services; intercity, regional, national and international transport, intermodal linkages, personal vehicles and the pedestrian infrastructure. Oxley and Short (1995) contrast the Swedish approach of staged development of an accessible, flexible public transport system and infrastructure with the British approach where legislation was felt to be mode-specific and restricted. They suggest that governments should realise that better mobility has tangible benefits, and that those benefits should be used to provide financial assistance to transport operators.

There are many aspects of travel, in urban, rural, inter-urban and international travel which makes it difficult or impossible for disabled people to travel independently. Although there are many feasible solutions to these problems, many operators will not provide solutions without guidance from the government (Bellerby 2000). In order for governments to develop fully accessible transport systems it is also necessary for 'the general public to be convinced of the accessibility case (Tyler 2002). Mitchell (1997) suggests that governments should 'realise that better mobility has tangible benefits at the general as well as the individual level.

The Disability Rights Task Force, in its report 'From Exclusion to Inclusion' said that: "Accessible transport is fundamental to delivering the aim of comprehensive civil rights. The partial exclusion of transport should have an 'end date' by which all transportation disability shall comply with transport accessibility regulations in all transport industry. This review shows that empirical evidences concerning the transportation patterns and problems of people with disabilities and its policies issues in Ethiopia and to bring together the empirical evidence on the nature and type of the problem and patterns of the transportation of People with Disabilities and develop policy-relevant data on disability and yet, to the pool of data available to policymakers for use in designing transportation systems that serve everyone equally appears to be limited. As per the researchers level of understanding there is no any research study conducted in the topic with similar targets by taking as a case study. Hence this is excellent time to undertake such study in this area.

## **CHAPTER THREE**

### **METHODOLOGY**

This chapter provides an overview of the study area and institution, research design and the method that will be used to conduct this study. The content addressed includes the research method, research approach, data gathering and tools, the sampling method and sample selection technique, and data analysis techniques and tools.

#### **3.1. DESCRIPTION OF THE STUDY AREA AND INSTITUTION**

##### **3.1.1 The study area**

The study was conducted in Addis Ababa. According to the 2007 national census, the population of Ethiopia has reached 73,909,355 of which urban population was 11,956,170 accounting for 16.1% of the total population. Having a growth rate of 2.1%, the population of Addis Ababa was 2,738,248 which accounted for 32.27% of the total urban population of the country (Central Statistics Agency, 2010). The expansion of the city, increasing population size coupled with the economic growth has required respective transport service supply for the increasing mobility needs of the People.

Urban transport serves as veins to accelerate developments in Industry, trade, education, health and other services. However, there is no compatible urban transport supply and effective management to meet the increasing trip frequency and mobility needs of the people and goods which resulted in the seriousness of the issue.

Cities are places of opportunities and growing urban challenges where the prioritization of appropriate transport technologies and infrastructure is crucial to respond to the growing challenges of rapid urbanization, high level of congestion, urban sprawl, climate change and energy issues. Transport technology plays a major role in defining urban form and determining the spatial arrangement of activities and hence the extent to which important destinations is accessible.

The city of Addis Ababa is striving to address the pressing transport problems and growing urban challenges through the implementation of transport master plans and high profile road projects. In light of this, the contemporary urban development and transport planning practices are researched from the perspective of providing sustainable

accessibility, complete street design, place making, compatibility to public transport network and competency of new road infrastructure to current and future challenges of the city.

Addis Ababa, with an area of 540 km<sup>2</sup> is divided into 10 sub-cities and 116 woredas. The city is the country's political and economic centre, the seat of Head Offices of African Union and United Nations Economic commission for Africa. The city's population is estimated to be 3 million. With the current population growth rate of 2.1% the city population is estimated to reach 5 million after 10 years. Addis Ababa is exhibiting high social, economic, structural change that makes to be the fastest growing city. More than 70% of registered vehicles in the country are found in Addis Ababa.

### **3.2. Research Method**

The research methods adopted both qualitative and quantitative methods. The researcher expect that, the mixture of this two approaches is advisable as it gives a more multifaceted picture by drawing on the individual strength and weakness of each methods; as well as enabling discovery and verification; understanding and prediction; validity and reliability within the research design .

### **3.3. Research Design**

The study had a cross sectional design in which data were collected and employed quantitative and qualitative methods.

### **3.4 Data Gathering tools and procedures**

Both quantitative and qualitative data were collected using different instruments methods. For qualitative such as structured and unstructured interview, Focus Group Discussion (FGD), systematic visiting, desk study as primary data and journals, magazines, proclamation and newspapers were used as a secondary data. For quantitative such as questionnaires were used.

The structured interview contained the demographic variables, types and nature of the respondent's socio-economic conditions regarding the Transportation Problems of People with Disabilities, scope and diversity and other relevant information for the study. The primary data collection method was Focus-group-discussion and unstructured interview

with key informants through close ended questionnaires to both the institution and the study population. Questionnaires were prepared in English, and translated into Amharic.

In addition to this method, unstructured interviews and observation were used in order to gather additional information, for crosschecking the opinions given by the clients. The study also employed the use of secondary data and review of various documents, journals, bulletins, proclamations, reports and other sources relevant to the research problem. Questionnaires were first administered to few respondents from the clients as pre-test and appropriate adjustments were made.

The closed ended questions were collected from the respondents' background information covering demographic and economic variables (e.g., age, sex, marital status, family size, educational background, occupation, of the respondent). Sources of the secondary data were official records that were obtained from the various governmental and non-governmental organizations, published material for the study purpose and Desk study was conducted using the existing literatures based on an assessment of articles, books, and reports.

Data were also generated through bibliography searches and survey of internet sources. Much of key works on people with disabilities and policy issues that focuses on Ethiopia were reviewed for the present study as understanding the Transportation Patterns and Problems of People with Disabilities Systematic visiting and observation were used for data gathering as an additional means of data collection that were considered in addition to the intimate engagement in the process of interviews during the data collection procedures.

### **3.5. Sampling Method and Sample Selection**

#### **3.5.1 Sampling Procedures and Sample size**

The study used a multistage sampling. First, the study population were selected purposively from the People with Disabilities (PWD) living in Addis Ababa in Rehabilitation centres and centre of disabilities and development and working in different areas.

The interviews were administered on simple random sampling of respondents from the study population.

As sample size depends on the total number of population, the level of confidence and the maximum deviation from true population that can be tolerated in the study. Depending on this, there are various sample size estimation methods. Among these the method that were used to determine the desired sample size with the population of above 10,000 and Sample size of above 30 is formulated as:-

$$N = Z^2 \frac{PQ}{d^2}$$

$$N = \frac{(1.96)^2 \times (0.01)(0.99)}{(0.01)^2} = 380$$

Where:

n =sample size (when population is greater than 10,000)

z =the standard normal deviation usually set at 1.96 .This corresponds to the 95 percent confidence interval

p =proportion in the target population estimated to have a Particular characteristics

q =1-p

d =degree of accuracy usually set at 0.05 or occasionally at 0.01.

Thus, the total sample size of the study will be **380**

### **3.6. Data Analysis Techniques**

Data were analyzed both quantitatively and qualitatively by making use of collected data and comparison is made on outcome variables. Quantitative data was also analyzed by using frequencies, percentage (by using tables, graphs and chart). Qualitative data was analyzed by using document analysis, case stories and synthesis of FGD and interview result.

Data collected through survey questionnaire, document analysis, key informant interview, FGD and observation were systematically presented, analyzed and discussed in line with addressing the specific objectives.

### **3.7 Research quality issues**

Various techniques were employed to ensure data reliability and validity. In order to collect reliable data, the researcher designed the key informant interview guides, FGD guides and questionnaires through an elaborated procedure which involves a series of revisions under the guidance of the research supervisor/advisor to enhance data quality.

Also quotes from interview and statement from questionnaires also used as references to ensure reliability. The researcher employed checklist of questions when making personal interviews with respondents so as to achieve data consistency and completeness.

Furthermore, research assistants/enumerators were trained on administering the questionnaire, interview and discussion guides on recording of any other useful information that come across within in the field. Field notes were made and edited immediately after data collection on a daily basis.

The study applied the triangulation technique by using questionnaire, key informant interviews, FGDs and secondary data sources concurrently. In addition, data collection instruments were presented and refined to ensure lucidity of contents in context of aim of each question.

Whereas the quantitative data collection instruments focus on objective responses, qualitative data collection instruments were designed in such a way that they can measure attitudes and opinions of respondents to the maximum degree of possibility. Before data entry into computer a series of pre-test was conducted.

The data scanning and scrutiny technique were also employed from available questionnaires from respondents to examine and validate the survey instrument so as to ensure the clarity and quality of data.

### **3.8 Ethical considerations**

The researcher considered the research values of voluntary participation, confidentiality, anonymity to ensure protection of respondents from any possible harm that could arise from participating in the study. Thus, the researcher clearly introduced the purpose of the study as a partial fulfilment of a Masters Study programs in Public Management and

Policy and requests the respondents to participate in the study on a voluntary basis such that refusal or abstaining from participating will be permitted.

The researcher was also assured the respondents confidentiality of the information given and protection from any possible harm that could arise from the study since the findings would be used for the intended purposes only. The respondents will promised to be provided with feedback about the findings of the study.

## CHAPTER FOUR

### 4. DATA, ANALYSIS AND DISCUSSION

#### 4.1 Introduction

In this study the researcher tried to better understand the transport disability as '*the unnecessary exclusion of disabled people from current forms of transport*'. Transport includes both public transport (buses, trains, taxis,) and private individual transport (cars and bicycles), as well as walking and other community transport of people with disabilities residing or working in the capital of Addis Ababa.

Diversity in the transportation needs and levels of independence are common in the studied population. The first step towards understanding the needs of this diverse population is to demonstrate the general characteristics of the sample. It is important to note that the findings of this study only represent the characteristics of the people who received the surveys and responded to it.

The majority of the returned surveys were filled out by the PWD themselves and the rest were filled out by the guardian, relative, staff member, or volunteer. 380 surveys were sent out through four selected organization namely ECDD (Ethiopian center for Disabilities and Development, ENAB (Ethiopian National Association of the Blind, and The Cheshire Service Ethiopia, A 75 percent response rate were observed which were 280 respondents.

#### 4.2 General Profile of the Respondents

People with disabilities are a unique and diverse population, so that the type of disability was used as the main factor for classifying the results and the data (chart one). Two questions were used to determine the type of disability. The first question asked if the participant had some kind of disability, and if the answer was yes, then the participant was asked to define the type of disability.

The answers of these questions were analyzed and filtered to determine six main categories of disabilities. Even though several community partners serve different types of disabilities, the researcher was clear that these surveys be directed only to PWD.

#### **4.2.1 Community Partners**

Finding appropriate community partners that were willing to help in finding PWD participants and distributing the surveys was the key in this research. Community partners play a very important role in connecting the researcher to the PWD they serve in PWD centres, programs, community services that supervise PWD centres and transportation programs located in the study area that serve PWD were chosen to be the community partners that helped us conduct this study.

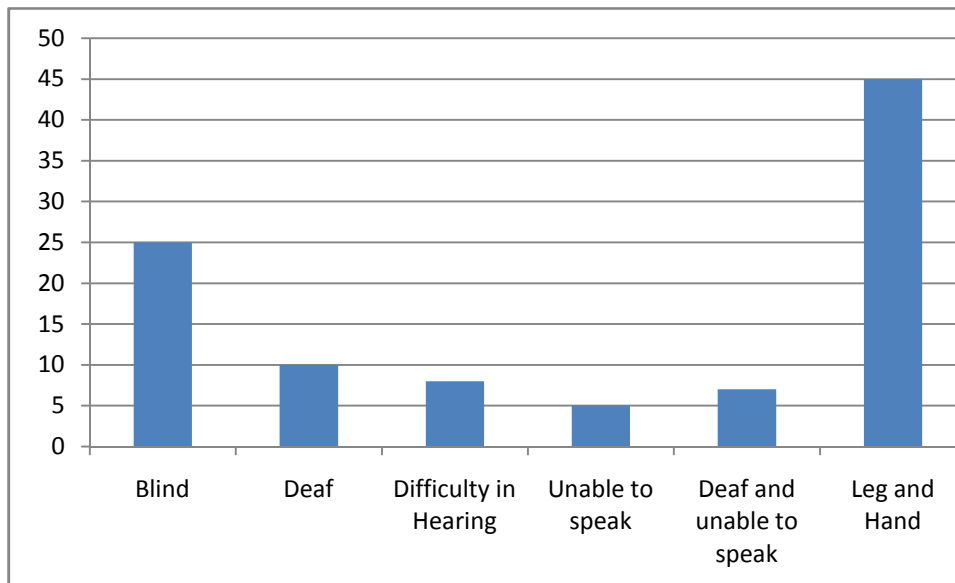
The researcher contacted around six centres serving people with disabilities in the study area. Not all contacted groups agreed to help the researcher to conduct the survey. Only four partners agreed to help the research team in the study. The level of willingness to help in the data collection process varied among partners from introducing the study to a sample of people with disabilities for pilot testing, distributing surveys at sites to sending the surveys to people with disabilities.

Table 4 shows a list of community partners that agreed to help in recruiting People with disabilities (PWD) Participants and their affiliation

**Table 4 Community partners (people with disabilities)**

| Community partners                                       | Main Location |
|----------------------------------------------------------|---------------|
| ECDD ( Ethiopian center for Disabilities and Development | Bole Road     |
| ENAB( Ethiopian National Association of the Blind )      | Sidist Kilo   |
| The Cheshire Service Ethiopia                            | CMC           |
| MOLSA ( Ministry of Labour and Social Affair )           | Kazanzchis    |

Accordingly, the community partners directed the surveys only to the PWD population. All the responses in the others category were reviewed based on the definition of disability on WHO to make sure that they were part of the desired population.



**Figure:2 Response rate based on the state of disability**

Observing Figure 2, it is clear that the majority of the responses state of disabilities came from leg and hands (45 percent), blind (25 percent) and others from deaf and unable to speak (10 and 7 percent). A sample of 280 of responses from 380 respondents as of a statistical standpoint is considered a small sample, yet when observing the type of population being studied ( representing 1 percent of the population of the country ; such a sample can be considered good enough to raise issues related to the needs of this small and disadvantaged population. The above mentioned percentage shows that the affected parts of the disabled persons which was calculated out of 280 respondents.

#### **4.2.1 Age and Gender**

Table 1 shows the distribution of the people with disabilities who responded to the survey by age and sex group. The majority of the age groups are represented in the sample is at the age of 18 to 35 years (45percent), between 36 to 55 of years (38 percent), above 55 years (15 percent) and less than 18 years of age (2 percent).

As Observed the gender for the studied categories in table167.8 percent of the responses came from males, while around 22.4 percent came from females. The male to Female ratio is 2:1

This indicated that people with disabilities is higher in male than female and the younger, reproductive and working age group is more affected than other groups.

**Table 2 Distribution of the sample respondents by Age and Sex Group**

| Sr. No   |     | Description   | N          | %            |
|----------|-----|---------------|------------|--------------|
| <b>1</b> | Sex | Male          | 190        | 67.8         |
|          |     | Female        | 90         | 32.2         |
|          |     | <b>Total</b>  | 280        | <b>100</b>   |
|          |     |               |            |              |
| <b>2</b> | Age | < 18 years    | 6          | 2            |
|          |     | 18-35 ears    | 126        | 45           |
|          |     | 36-55 years   | 106        | 38           |
|          |     | Above 55years | 42         | 15           |
|          |     | <b>Total</b>  | <b>280</b> | <b>100.0</b> |
|          |     |               |            |              |

#### 4.2.2 Education

Level of education and household income are two factors that tend to be highly correlated. Yet in this section we concentrated only on the level of education that people with disabilities have received to use as a proxy to understand their level of independency. Around 40 percent of the people with disabilities who answered this question reported that they had education at the level of high school. Meanwhile, only 15percent had an education at the less-than-high school level. Only few percent reported any college education. This is clearly different from the general population.

Regarding the employment status of the respondents 55 percent were full time employee, 25 percent were self-employed and 20 percent were unemployed (Table 2).

One can conclude that majority of the respondents were at high school and full time employee and can understand and comprehend problems of the transportation and policy related issues in the country.

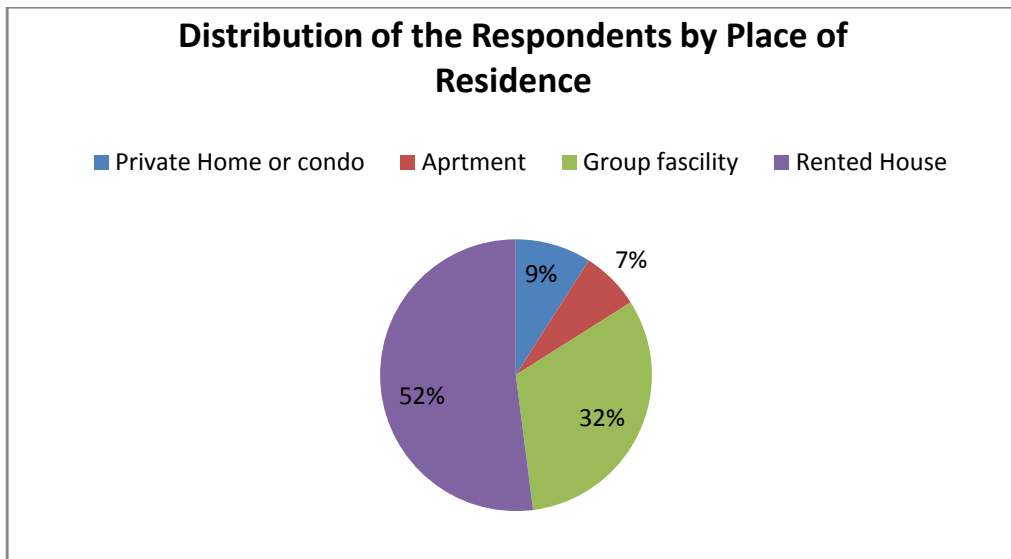
**Table 2 Distribution of the sample respondents by level of Education, and Employment profile**

| <b>Sr. No</b> | <b>Description</b>        | <b>N</b>   | <b>%</b>   |
|---------------|---------------------------|------------|------------|
| <b>1</b>      | <b>Level of Education</b> |            |            |
|               | Elementary                | 100        | 35.7       |
|               | High school               | 90         | 32.2       |
|               | TVET                      | 50         | 17.8       |
|               | College /University       | 40         | 14.3       |
|               | <b>Total</b>              | <b>280</b> | <b>100</b> |
| <b>2</b>      | <b>Employment Status</b>  | 56         | 20         |
|               | <b>Unemployed</b>         | 70         | 25         |
|               | <b>Self Employed</b>      | 154        | 55         |
|               | <b>Full-time Employee</b> | -          | -          |
|               | <b>Retired</b>            | <b>280</b> | <b>100</b> |
|               |                           |            |            |

#### **4.2.3 Place of Residence**

The place where people with disabilities live can be used as an indicator for the level of independence. In the survey, two questions were directed towards understanding where people with disabilities reside and if they live with a relative or a non-relative.

Figure 2 shows where the surveyed PWD in the study live. Around 52 percent of the total surveyed sample indicated that they live in a group facility. Meanwhile, around 9 percent of the surveyed sample lives in private homes or condos, while 7percent reside in apartments. And 32 percent live in rented private house. Combining this question with the question asked with whom you live can help in better understanding the surroundings related to this type of special population.



**Figure:3 Distributions of the Respondents by place of Residence**

Table 3 shows that the distributions of the respondents by place of Residence, whether they live by themselves or with other people in the household in relation to the type of facility they reside in. As observed in table 3 below, it is clear that the majority of PWD reside with both relatives and non-relatives (32percent), while 31 percent of people live with relatives mainly in group facilities and rented houses. Around 25 percent of the surveyed sample resides by themselves mainly in rented houses while 12 percent live with others in group facilities and rented houses.

The five people who indicated they reside by themselves in a group facility might be referring to their personal rooms in the facility where they do not share bedrooms with others. As expected, it is clear that the level of independence in living arrangements tends to be low.

**Table 3 Distribution of the Respondents by place of residence and with whom the Respondents Live**

| Place of Residence   | With whom the Respondents Live (%) |                |                                       |             |
|----------------------|------------------------------------|----------------|---------------------------------------|-------------|
|                      | Yourself                           | With Relatives | Both with relatives and Non Relatives | With Others |
| Private Home/condo   | 3                                  | 6              |                                       |             |
| Apartment            | 2                                  | 5              |                                       |             |
| Group facilities     | 5                                  |                | 20                                    | 7           |
| Others (Rented House | 15                                 | 20             | 12                                    | 5           |
| <b>Total</b>         | <b>25</b>                          | <b>31</b>      | <b>32</b>                             | <b>12</b>   |

### 4.3 Transportation Patterns and Problems

This section concentrates on displaying the major findings of the survey. In order to better understand the transportation needs patterns and problems of the surveyed sample. Data obtained from travel diaries and observation combined with data obtained from surveys to direct the analysis. First observation and the available travel diaries is presented to obtain general trends in terms of trip purposes, and then use this information in analyzing frequency of engaging in these trips through data obtained from the survey.

#### 4.3.1 Trip diaries and Trip Purpose

The researcher tried to check and see whether the respondents had had a diary. It is only less than 10 percent who had had a diary and only 6 percent were tried to include or kept their travel diaries and reported that making only two trips through the week and the trip was hectic, awkward and time consuming.

As each trip a PWD is engaged should have a purpose. The researcher tried to look the respondents are keep recording and analyze the purpose of the trips people with disabilities reported in their travel diaries. Observing the purpose of the trip in the travel diaries, people with disabilities were recorded their trips purpose mainly for work, home, social and recreations. Trip chaining is part of their travel pattern among the respondents as observed from their travel diaries.

This indicates that a fair amount of people with disabilities engage in various activities after leaving their place of origin. Accordingly, the purpose of leaving their homes is not just to conduct one activity but to conduct various activities.

#### **4.3.2 Frequency of Trips**

Observing the frequency of being engaged in their trips in the survey as shown in table 5 below around 154 participants responded that they usually engage in such activities such as work and at least five to seven days per week; school 198 participants. 133 participants indicated they engage in religious trips weekly and 94 and 125 participants were for shopping and business affairs every two weeks interval.

The majority of the respondents were usually engaged in such activities such as work, school, shopping, and religious affairs from 2 days to two weeks interval. Yet work and school is the most frequent trip purposes.

**Table 5 Distribution of the frequency of trips by purpose in the study population**

| <b>Purpose</b>                                           | <b>Days Per week</b> |                     |               |                                 |                                   |              |              |
|----------------------------------------------------------|----------------------|---------------------|---------------|---------------------------------|-----------------------------------|--------------|--------------|
|                                                          | <b>2-5<br/>days</b>  | <b>5-7<br/>days</b> | <b>Weekly</b> | <b>every<br/>other<br/>week</b> | <b>&gt; 2 weeks<br/>intervals</b> | <b>Never</b> | <b>Total</b> |
| Work                                                     | 154                  | 86                  |               |                                 |                                   |              | 240          |
| Shopping                                                 | 60                   | 25                  | 120           |                                 |                                   |              | 205          |
| Recreation (Leisure)                                     |                      |                     |               |                                 | 70                                | 10           | 80           |
| Social trips e.g.<br>(visiting friends and<br>family)    |                      |                     |               | 85                              | 94                                | 30           | 209          |
| Religious (e.g. church,<br>temple)                       |                      |                     | 133           | 50                              | 18                                |              | 201          |
| School                                                   | 98                   |                     |               |                                 |                                   |              | 98           |
| Medical                                                  |                      |                     |               |                                 | 78                                |              | 78           |
| Agency support<br>services                               |                      |                     |               |                                 |                                   | 65           | 65           |
| Business (bank, legal,<br>accounting, financial,<br>etc) |                      |                     |               |                                 | 125                               |              | 125          |

Table 6 shows the distribution of the transport mode. As it has been revealed in the table below the majority of the PWD groups used taxis and local bus for the purpose of work, school and shopping trips.

**Table 6 Distribution of Response of transportation mode by purpose of the trips**

| <b>Purpose</b>                                           | <b>Transportation Mode</b> |             |                         |                    |             |              | <b>Total</b> |
|----------------------------------------------------------|----------------------------|-------------|-------------------------|--------------------|-------------|--------------|--------------|
|                                                          | <b>Local Bus</b>           | <b>Taxi</b> | <b>Public transport</b> | <b>Friends Car</b> | <b>Walk</b> | <b>Other</b> |              |
| Work                                                     | 70                         | 129         | 62                      | 6                  | 15          |              | 282          |
| Shopping                                                 | 85                         | 111         | 52                      | 21                 | 6           |              | 275          |
| Recreation (Leisure)                                     | 39                         |             |                         | 62                 | 32          |              | 133          |
| Social trips e.g.<br>(visiting friends and family)       |                            |             |                         | 85                 | 94          | 30           | 209          |
| Religious (e.g.<br>church, temple)                       | 90                         |             | 19                      | 31                 | 108         |              | 248          |
| School                                                   | 69                         | 152         |                         | 10                 | 42          |              | 273          |
| Medical                                                  |                            | 49          |                         | 52                 | 78          |              | 179          |
| Business (bank, legal,<br>accounting, financial,<br>etc) |                            | 179         | -                       |                    | 125         |              | 304          |

### 4.3.3 Travel Needs

Two questions were used to measure if the transportation needs of the surveyed PWD are being met. The survey asked the participants if there were times they could not make trips they needed to make and if there were times they could not make trips they wanted to make. Need represents their travel purpose that is not compromised such as work, education and health services while want represents the purpose of the trips such as recreation and visiting, and social issues

As shown in Table 7, 95 percent of the respondents reported that they are facing problems in making trips in general. The responses of participants to the question asked if they could not make the trips they want to make, 75 percent of the participants had trips they want to do but could not do. Similarly, around 82 percent of the participants responded that there are trips they need to make but cannot make.

**Table 7 Distribution of responses on Trips Needs and problems facing on making**

| Sr No | Description                                                         | N   | %   |
|-------|---------------------------------------------------------------------|-----|-----|
| 1     | Facing problems in making the trips                                 |     |     |
|       | Yes                                                                 | 266 | 95  |
|       | No                                                                  | 14  | 5   |
|       | Total                                                               | 280 | 100 |
| 2     | Are there times when you are unable to make trips you need to make? |     |     |
|       | Yes                                                                 | 230 | 82  |
|       | No                                                                  | 50  | 18  |
|       | Total                                                               | 280 | 100 |

#### 4.4 Travel Mode and Assistance

Since work, school and shopping are the main purposes for trips that PWD tend to take, this section concentrates on the mode of transportation PWD uses for work , schools and shopping and whether they need assistance in conducting these trips or not.

As shown in table 8 below 68,75 and 52 percent of the surveyed respondents reported that they need assistance for work shopping and schools respectively and they were replied that they are assisted by their children (34%) , mother and father(26%) neighbours (20%) , hired assistances (12%) and other relatives 8%.

**Table 8 Distribution of Needs and List of Assistance to make the trips**

| Sr No | Description         | N   | %    |
|-------|---------------------|-----|------|
| 1     | Needs Assistance?   |     |      |
|       | For Work            |     |      |
|       | Yes                 | 190 | 68   |
|       | No                  | 90  | 32   |
|       | Total               | 280 | 100  |
|       | For shopping        |     |      |
|       | Yes                 | 144 | 51.4 |
|       | No                  | 136 | 48.6 |
| 2     | Total               | 280 | 100  |
|       | Lists of Assistance |     |      |
|       | Mother or Father    | 72  | 26   |
|       | Children            | 95  | 34   |
|       | Neighbours          | 56  | 20   |
|       | Hired Assistance    | 34  | 12   |
|       | Other relatives     | 23  | 8    |
|       | Total               | 280 | 100  |

#### 4.4.1 Difficulties

Table 9 Summarized the most frequently mentioned response of the participants of PWD for the question raised on commonly found difficulties that are facing and the opportunities and privilege lost due to transportation issues.

Physical problems, lack of personal vehicles, availability of public transport and transportation cost, and not wanting to ask other to help and depend on someone else were among the difficulties mentioned as difficulties and employment, education Income generating activities. Health care, community life, housing and were most frequently mentioned opportunities and privilege lost due to transportation issues as it has putted in ranking.

**Table 9 List of Difficulties occurring and privilege/opportunities lost by the PWD group**

| <b><u>Most frequently mentioned</u></b>    |                              |
|--------------------------------------------|------------------------------|
| Difficulties                               | Privilege/Opportunities Lost |
| Lack of personal vehicles                  | Employment                   |
| Availability of public transport           | Education                    |
| Transportation cost                        | Income generating activities |
| Physical problems                          | Health care                  |
| Personal preference                        | Housing                      |
| Not wanting to ask other to help           | Community life               |
| Not wanting to depend on someone else      |                              |
| Discrimination from the transport services |                              |

Table 10 below shows the distribution of the response of the participants on the problem facing when using transportation facilities. A question in the survey was concentrated on the difficulties participants face when using transport facilities. These questions

concentrated mainly on physical difficulties concerning asking about moving, standing, walking to the bus stop, climbing stairs, and reading the route numbers.

As expected among the PWD group, 46 percent have problems on standing ( such as difficulty in walking to curb to meet transit vehicle and in climbing stairs (need assistance) , while 22 percent of the PWD group face the same difficulty reading and understanding schedule 15 percent (such as cannot read transit schedules and understand transit schedules, have difficulty in reading signs or vehicle route numbers, and have difficulty in understanding signs or vehicle route numbers ) and 17 percent face the problem of understanding announcements( such as cannot hear announcements over the public address system and having difficulty understanding the announcements

Transit schedules in general are written to time points. A user of the service not using a time point interpretation must determine the arrival and departure time.

This way of writing schedules is difficult for even the general population to understand. Thus, it is expected that PWD might face such issues. Among the PWD groups who tend to have the highest level of transit usage of the four groups, more than 50 percent did report difficulty in reading and understanding transit schedules. Similarities do exist even when trying to understand the announcements being made on board

**Table10: List of problems in transportation and transit issues**

|  | Description                     | Percentage<br>Distribution<br><b>YES</b> Response |
|--|---------------------------------|---------------------------------------------------|
|  | <b>Problems</b>                 |                                                   |
|  | Standing                        | 46                                                |
|  | Reading transit schedules       | 22                                                |
|  | Understanding transit schedules | 15                                                |
|  | Understanding announcements     | 17                                                |

#### **4.4.2 Concerns of Transit /Transportation Users**

Taxi and Public transit/transport were the -most-used mode of transportation for PWD. In this section the researcher concentrated on the concerns of participants when using these transports mode.

As shown in table 11, around 85 and 15 percent of the surveyed sample reported that they were either very concerned or concerned that the bus service might not serve their destinations at their desired time. The PWD population is also concerned with being a victim of a crime while using this transport mode (92 %). Around 72 percent of the surveyed sample reported such concern on finding parking for PWD, affordability of the car (65%), and almost all the respondents were very concerned on the transfer/ making connection between various transportation systems during their trips.

**Table 11 Distribution of the respondents to the concern on transport related Issues**

| <b>Statement</b>                                                      | <b>Very Concerned</b> | <b>concerned</b> | <b>Not concerned</b> |
|-----------------------------------------------------------------------|-----------------------|------------------|----------------------|
| Victim of crime                                                       | 92                    | 8                |                      |
| Affordability of driving a car                                        | 65                    | 20               | 15                   |
| Travel time                                                           | 85                    | 15               |                      |
| Finding parking for PWD                                               | 72                    | 24               | 4                    |
| Not-driving reduces (would reduce) my independence.                   | 76                    | 19               | 5                    |
| Using public transit increases (would increase) my independence       | 90                    | 10               |                      |
| Transfer between /making connections to other transportation systems? | 100                   |                  |                      |

#### **4.4.3 Familiarity with Services and Independence**

In this section the researcher carried out a focus group discussion and wanted to learn to what extent the participant understands its transportation options as PWD and measure its familiarity with the various services available and also tried to understand to what extent the surveyed sample consider themselves independent citizens in term of their transportation needs. Independence was measured through asking direct questions related to what extent people with disabilities considered themselves independent travellers.

As revealed from the discussion, 100 percent of the participants indicated being familiar with the services presented but not offered to people with disabilities such a dial-a-Ride

or fully equipped buses or light-rail and public transport and taxi services and they are not satisfied by the existing services offered to people with disabilities.

This indicates that more work may be needed in promoting services to people with disabilities.

Similarly, one to three of the participants in the survey reported that they are independent travellers. The researcher noticed that the Blind and physical disabilities group felt least independent compared to the other people with disabilities groups.

The levels of independence of the people with disabilities groups tend to be higher for the Taxi, and surprisingly, majority of the participants indicated that ***SHEGER*** transport is their choice for which mode of transportation they use from public transport.

#### **4.4.4 Travel Barriers**

During the focus group discussions, questions were raised on what reasons and barriers are faced that PWD could not make trips, most of the participants reported that lack of accessibility, built environments, transport systems and information are often inaccessible.

A lack of access to transport is a frequent reason for a person with a disability being discouraged from seeking work or prevented from accessing health care.

The communication needs of people with disabilities are often not met. Information is frequently unavailable in accessible formats, and some people with disabilities are unable to access basic information and communication technologies such as telephones and television. Lack of consultation and involvement, often, people with disabilities are excluded from decision-making in matters directly affecting their lives.

Lack of data and evidence, such as rigorous and comparable data on disability and evidence on programs that work often impedes understanding and action. People with disabilities should not depend on favors, and have indeed their rights clearly stated in conventions, legal frameworks, and agreements which governments have signed up to.

These (avoidable) barriers contribute to the disadvantages experienced by people with disabilities, such as poor health outcomes and depending on the group and setting, people with disabilities may experience greater vulnerability to preventable secondary conditions and co-morbidities, untreated mental health conditions, poor oral health, higher rates of obesity.

As it is noted in the FGD Participants also raised lower educational achievements especially children with disabilities are less likely to start school than their peers without disabilities and also have lower school , besides negative attitudes, Beliefs and prejudices constitute barriers when health care workers cannot see beyond the disability, teachers do not see the value of teaching children with disabilities, employers discriminate against people with disabilities, and family members have low expectations of their relatives with disabilities .

Despite the magnitude of the issue, both awareness and scientific information on disability issues are lacking.

## **4.5 Policy Issues**

Transportation is an extremely important policy issue for those with disabilities. People with disabilities have consistently described how transportation barriers affect their lives in important ways.

However, the policy debates over the local transportation needs of these travelers often revolve around the bush that may be misleading often the focus on some topics at the expense of other equally important issues. For example, there is a legitimate concern about ensuring that people with disabilities receive the services mandated by the UNCR, but most of the transportation needs of these travellers are not addressed at all.

Colored by this perspective, many policy analyses ignore the fact that most travelers with disabilities, as is true for travellers in the world at large, make the majority of their trips in private vehicles and rely heavily on walking to facilitate their use of all modes of travel.

Laws and regulations are enacted under various constitutions. There is no specific statement or article on disabilities in these constitutions. However, there are some proclamations to protect and secure the rights of citizens with disabilities.

As revealed from the desk study and secondary data during the survey the government of Ethiopia has adopted and implemented a number of laws, policies and standards pertaining to people with disabilities, including their right to productive and decent work. These include:

1. An order announced during Emperor Haile Selassie's the Order No. 70 of 1970; reign established a rehabilitation agency for persons with disabilities. The rehabilitation agency is to give assistance to those in need of social, physical, and mental rehabilitation. Moreover, it was to maintain the long-standing tradition among the people to render assistance whenever the well-being of certain groups or individuals was threatened or affected.
2. Constitution of the Federal Democratic Republic of Ethiopia, adopted in 1995. Article 41(5) of the Constitution sets out the State's responsibility for the provision of necessary rehabilitation and support services for people with disabilities.
3. Proclamation concerning the Rights to Employment for Persons with Disabilities, No. 568/2008, makes null and void any law, practice, custom, attitude and other discriminatory situations that limit equal opportunities for persons with disabilities. It also requires employers to provide appropriate working and training conditions; take all reasonable accommodation measures and affirm active actions, particularly when employing women with disabilities; and assign an assistant to enable a person with disability to perform their work or follow training.
4. The Federal Civil Servant Proclamation No. 515/2007, provides for special preference in the recruitment, promotion, and deployment, among others, of qualified candidates with disabilities. This provision is applicable to government offices only.

5. Labor Proclamation, No. 377/2003, amended by Labor Proclamation No. 494/2006, makes it unlawful for an employer to discriminate against workers on the basis of nationality, sex, religion, political outlook or on any other conditions.
6. Proclamation on Definition of Powers of Duties of the Executive Organs of the Federal Democratic Republic of Ethiopia, No. 691/2010, provides for conditions of equal opportunities and full participation of persons with disabilities and those living with HIV/AIDS.
7. Building Proclamation, No. 624/2009, provides for accessibility in the design and construction of any building to ensure suitability for physically impaired persons.
8. Proclamation No. 676/2010 on the Ratification of the “UN Convention on the Rights of Persons with Disabilities” (UN CRPD) by Ethiopia.
9. Framework Document 2009 provides for Special Needs Education (SNE) in Technical and Vocational Education and Training (TVET).
10. Growth and Transformation Plan (GTP) 2016-2021, establishes disability as a cross cutting sector of development where focus is given to preventing disability and to providing education and training, rehabilitation and equal access and opportunities to persons with disabilities.
11. National Plan of Action of Persons with Disabilities (2012-2021) aims at making Ethiopia an inclusive society. It addresses the needs of persons with disabilities in Ethiopia for comprehensive rehabilitation services, equal opportunities for education, skills training and work, as well as full participation in the life of their families, communities and the nation. © ILO Photo3
12. International Labor Organization (ILO) Convention concerning Discrimination in Respect of Employment and Occupation, 1958, (No. 111). Status: ratified, 11 June 1966
13. ILO Convention concerning Vocational Rehabilitation and Employment (Disabled Persons), 1983, (No. 159). Status: ratified, 28 January 1991.

14. United Nations Convention on the Rights of Persons with Disabilities (2006) and Optional Protocol. Status: ratified, 7 July 2010.
15. The Ethiopian government is moving forward to address the issues of persons with disabilities. Proclamation targets to protect and secure the rights of citizens with disabilities include ; proclamation No 101, 194 which focuses on the elimination of discrimination and protects the right of PWD to compete for and obtain employment based on their qualifications and proclamation No 1, 1995 which enacts the constitution of the government of Ethiopia on the democratic of right of every citizens including PWD to be protected under articles 11,16,18,20, 25, 28, 31,
16. The Education and Training policy (TGE 1994) and the developmental social welfare policy (FDRE, 1996) do attend the importance of education, development and participation of PWDs in the political, economic and social spheres of Ethiopia

Laws and regulations are enacted under various constitutions. There is no specific statement or article on disabilities in these constitutions and proclamation especially in transportation disabilities. However, there are some proclamations to protect and secure the rights of citizens with disabilities. Inadequate policies and standards, Policy design does not always take into account the needs of people with disabilities, or existing policies and standards are not enforced.

Education and business are the main reasons for using public transport in Ethiopia. If disabled people are to access employment, education and services they need access to transport. Porter (2002) suggests that ‘those involved in policy and research into transport disability always have to place transport in the bigger picture’. Experience of transport disability is shaped by expectations and experiences as well as the services available.

As it has been revealed in focus group discussion for the question raised on the presence of clear policies on transportation for people with disabilities in the country all the participants respond that no clear, specific and full spectrum of policies enacted on transportation disabilities specially enforced on *accessibility*.

The major policy components should include all the current mode of transportation and infrastructure, the responsibility of the governments, the stakeholders and citizens that will come to effect and enable the equity and accessibility of the transportation system for PWDs.

A narrow policy focus tends to limit discussions of the barriers on a single pedestrian travel while slighting the connection between transportation programs and other important policy initiatives, from land use planning to human and medical service delivery.

Safe and accessible rights-of-way are essential elements of community life. Rights-of-way include streets, sidewalks, and crosswalks, curb ramps, crossing signals, street parking, and other public infrastructure, and are crucial to viable transportation for people with disabilities. Though people with disabilities live in every community but our transportation policy has undermined them. The CRPD promises of equal opportunity in transportation for people with disabilities, resulting in isolation from jobs, housing, health care, and education.

Policymakers when discuss such important issues as how best to rebuild and repair our nation's roads, bridges, railways, and ports, and where and how to prioritize investments in public transportation it is also vital that they take into consideration the needs of people with disabilities

,

## **4.6 Comments in Survey and FGD**

The comments section was one of the richest parts of this survey. Participants wrote an abundance of details regarding their transportation needs and concerns and policies issues. Several reported their personal experiences and frustrations when using transportation modes. The most frequent comment was similar to the following:

#### **4.6.1 Sidewalks**

*“There is a lacking of sidewalks.”*

*“ ... I have forced to quit my wheel chair because of the problem in the side walk of Addis*

*“....Accessibility... Accessibility,, Accessibility.....our main problems for PWD”*

*..”Several times became a victim of crime when using local bus and taxi, because of unavailability of transport...’*

*“I (mother) filled the survey for him. I take my son almost everywhere he needs or wants to go. Once a week he goes off for hours with someone for mostly a walk. Very seldom he goes anywhere without me, and if he does, it's with another relative.*

*”big uncovered holes, new and old electric poles, rough cobble stones as well as muddy and slippery roads.*

#### **4.6.2 Personal Issues**

*“Transport is hard to get rides unless you get up early and take a taxi. They fill up fast. Then you have to wait for a stand-by ride. “Biggest, most irritating problem is dependability of transportation. From the time my son started school at age 4, we've experienced problems vehicle trouble, accident, lost, whatever). “Being on time is my main concern. But not unthinkable”*

*“The high cost of a wheel chair and private car to use our own Private transportation vehicle is a big concern. The government has given a privilege to import with waived taxes ...that was good.. but the worst scenario is the inclusion criteria ...it is only limited to those who have 80,000 birr in Bank account and working for two years ...and only for 1.6 cc of capacity ...who ??? PWD. Fulfil this criteria!?!?”*

*"I think the travel is too long to the PWD. I am up to 12:30 am. At work by 9 am, If God with me! It makes it a long day I don't have much of a social life. I am saving up for trips, things for the house. My transportation is minimal.*

*"We are so thankful for SHEGER and their drivers, aides&*

*Staff they always help us,,, compare to other ,,,, it is convenient to easily enter into...*

### **4.6.3 Independence**

*"I would like to take the bus and go around to somewhere and be more independent."*

*"I am totally dependent on my husband /family and the community for transportation."*

*"..The problem in road and other infrastructure.... Takes away my independence to travel to where I need and want..."*

### **4.6.4 Transit**

*"I hope local bus could be lower in price but difficult to manage"*

*"Changing buses or taxis all the roads do not allowed to me to do so without contacting sister/guardian -transition is difficult."*

*"No connecting route, none. If there is it's not easy for me."*

*"Keep the price of transportation low for people with disabilities! When the prices go up, many people can't afford to go where they want. Keep multiple locations to buy tickets/bus passes."*

### **4.6.5 Safety**

*"I have a friend of PWD that is independent, and able to go and come to the working hours at a time. She was attacked leaving the working place back to home around saris. There needs to be transportation available for higher functioning vulnerable adults as well, due to the fact that they still need assistance so things like this won't happen to*

*them. I believe if you are a vulnerable adult you cannot be expected to know certain things. We need more transportation for individuals with PWD*

*“We are vulnerable to Robbery...in some part of the City...because of transportation problem for PWD...”*

#### **4.6.6 Policies Issues**

*“... the existing policies do not include the disabilities issues it need to be revised as per the rights of PWD in UNCRPDs., there is a need of Disabilities of inclusive policy ”*

*“... The transportation policy should include an appropriate and update issues that address the current mode of transports in the country ... In addition the strategy used to implement should incorporate the responsibilities of different and concerned bodies to address the PWD especially in the transportation sector...”*

*“ .. Frankly speaking.. The cultural assets, norms and values with respect of PWD in different mode of transport though the entire transport mode are totally not comfortable...not only for PWD but also to the community at large.”*

*“....Policy that gives due attention for accessibility.....accessibility and accessibility..”*

*“... The problem is not to the transportation policy issues but to the implementation and availabilities of infrastructure.. Policy alone is a one hand clamp... for PWD”*

## **CHAPTER FIVE**

### **5. FINDINGS, CONCLUSION AND RECOMMENDATIONS**

This chapter presents the findings conclusion and recommendations of the research.

#### **5.1 Findings**

The study showed that majority of PWD is higher in male than female and the younger, reproductive and working age group is more affected than other groups, and they were at high school and full time employee respectively by level of education and employment status. The major finding of the paper is that lack of accessible of transportation for PWD, less acceptance from families and societies, lack of independently dwelling and marginalization as well as, lack of clear specific and full spectrum of policies enacted on transportation disabilities.

The place where PWD live can be used as an indicator for the level of independence. Majority of the respondents were live in a group facility, apartments and rented private house. With non-relatives and with relatives, it is clear that the level of independence in living arrangements tends to be low.

Fair amounts of PWD engage in various activities after leaving their place of origin. Accordingly, the purpose of leaving their homes is not just to conduct one activity but to conduct various activities. They were usually engaged in such activities such as work, school, shopping, and religious affairs from 2 days to two weeks interval. Yet work and school is the most frequent trip purposes using taxis and local bus for the purpose of work, school and shopping trips.

Majority of the respondents are facing problems in making trips in general. And had trips they want to do but could not do and also had there are trips they need to make but cannot make and reported that they need assistance to go to work, shopping and schools respectively and assisted by their children, mother and father and neighbours.

Physical problems, lack of personal vehicles, unavailability of public transport and transportation cost, and Not wanting to ask other to help and depend on someone else are among the difficulties that was mentioned as difficulties and employment, Education

Income generating activities community life, housing and were most frequently Mentioned opportunities and privilege lost due to transportation issues.

Majority of the respondents have problems on standing (such as difficulty in walking to curb to meet transit vehicle and in climbing stairs (need assistance), difficulty reading and understanding schedule (such as cannot read transit schedules and understand transit schedules, have difficulty in reading signs or vehicle route numbers, and have difficulty in understanding signs or vehicle route numbers) and the problem of understanding announcements.

Taxi and Public transit/transport were the -most-used mode of transportation for PWD. In this section the researcher concentrated on the concerns of participants when using these transports mode. And they were either very concerned or concerned that the bus service might not serve their destinations at their desired time. with being a victim of a crime while using these transport mode on finding parking for PWD affordability of the car and almost all the respondents were very concerned on the transfer/ making connection between various transportation systems during their trips.

Majority of respondents are facing problems in making trips in general. The responses of participants to the question asking if they could not make the trips they want to make and also had trips they want to do but could not do.

Majority of the respondents reported that they need assistance for work shopping and schools respectively and assisted by their children, mother and father, neighbours.

Physical problems Lack of personal vehicles, Availability of public transport and Transportation cost, and Not wanting to ask other to help and depend on someone else were among the difficulties that was mentioned as difficulties and employment, Education Income generating activities community life, housing and were most frequently mentioned opportunities and privilege lost due to transportation issues

Majority of the have problems standing (such as difficulty in walking to curb to meet transit vehicle and in climbing stairs (need assistance), while 35 percent of the PWD

group face the same difficulty reading and understanding schedule (such as cannot read transit schedules and understand transit schedules, have difficulty in reading signs or vehicle route numbers, and have difficulty in understanding signs or vehicle route numbers) and face the problem of understanding announcements( such as cannot hear announcements over the public address system and having difficulty understanding the announcements

Most of the surveyed sample reported that they were either very concerned or concerned that the bus service might not serve their destinations at their desired time. The PWD population is also concerned with being a victim of a crime while using these transport mode n on finding parking for PWD, affordability of the car, and almost all the respondents were very concerned on the transfer/ making connection between various transportation systems during their trips.

Most of the respondents are familiar with the services presented and but not offered to PWD such a dial-a-Ride or fully equipped buses or light-rail and public transport and taxi services and they are not satisfied by the existing services offered to PWD indicating that more work may be needed in promoting services to PWD.

Most of the participants reported that Lack of accessibility, built environments, transport systems and information are often inaccessible and major barrier.

A lack of access to transport is a frequent reason for a person with a disability being discouraged from seeking work or prevented from accessing health care. Information is frequently unavailable in accessible formats, and some people with disabilities are unable to access basic information and communication technologies such as telephones and television. Lack of consultation and involvement and lack of data and evidence, such as rigorous and comparable data on disability and evidence often, people with disabilities are excluded from decision-making in matters directly affecting their lives.

Despite the magnitude of the issues, both awareness of and scientific information on disability issues are lacking.

Though Laws and regulations are enacted under various constitutions, there is no specific statement or article on disabilities in these constitutions and proclamation especially in transportation disabilities. However, there are some proclamations to protect and secure the rights of citizens with disabilities.

Majority of the respondents respond that no clear, specific and full spectrum of policies enacted on transportation disabilities specially enforced on accessibility in the country.

## **5.2 Conclusion**

Transport disability has a major impact on the lives and life choices of any disabled people. Transport is essential for disabled people to access education, employment, health services, social events and leisure pursuits. A lack of accessible means of independent travel creates social exclusion for many disabled people.

Transportation plays an important role in enabling people with disabilities to travel and live independently. Without access to transportation, people with disabilities will not be part of society's economic environment and will continue to be alienated from the economic mainstream, thus causing a myriad of other problems, like homelessness and institutionalization.

Transportation is an extremely important policy issue for those with disabilities. People with disabilities have consistently described how transportation barriers affect their lives in important ways. This study reported that inadequate transportation was a problem for PWD. Of course, transportation problems are an important barrier to the mobility and access of those with disabilities. People who are willing and able to work cannot do so because of inadequate transportation. Others cannot shop, socialize, enjoy recreational or spiritual activities, or even leave their homes. And some individuals with disabilities who need medical services must live in institutions due solely to the lack of safe, reliable transportation to needed medical services

Lack of accessible transportation may create barriers to employment; but the failure to obtain a meaningful job may also be the result of inadequate education and training, lack of experience, discrimination in the job market, or inadequate knowledge by employers

about the kinds of reasonable accommodations that potential workers with disabilities require.

### **5.3 Recommendations**

People with disabilities experience transportation disparities and greater unmet needs in comparison to the general population.

This study reflected the above mentioned facts in transportation disabilities.

Therefore, the researcher is recommended that

1. Those involved in developing policy and research on transport disability need to place transport in the bigger picture of disabled people's participation in society.
2. The transport needs and particular barriers faced by different PWD, of different ages, in urban and rural areas throughout the country
3. The 'transport' chain is a key issue, and transport needs to be considered as an interlinked system, each element of which - including information, the pedestrian environment and transport interchanges - needs to be user-friendly and accessible.
4. Disabled people need to be consulted in the design, delivery and implementation of accessible transport systems, as well as development of policy, research and legislation.
5. Improving disability awareness and attitudes amongst transport providers is essential to ensuring accessible transport.
6. Disability organization needs to work closely with industry in order to develop consistent strategies which support good practice.
7. The implementation of taxi regulations needs to be carefully monitored to ensure that disabled people get a consistent level of service, and that drivers are trained in disability awareness.
8. Include people with disabilities in research on general transport services and surveillance by using disability identifiers

And further research should be conducted on:

- i. The barriers to disabled people's confidence in public transport, and ways to overcome these;

- ii. People across and within countries and modes of transport, the implementation and evaluation of accessible travel information systems; - The use, and potential use, of information and communication technologies as a means of providing disabled people with travel information;
- iii. Barriers in the pedestrian environment and at transport interchanges and their impact on disabled people; variations in the service offered to disabled people by taxis and minicabs and the potential use of taxis and other public transport.
- iv. Supplement other public transport;- Identification of gaps in the development of integrated accessible transport networks in the country and future trends in car ownership and driving for disabled people and the barriers faced by disabled drivers and ways of overcoming these problems.

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# Questionnaires

## Addis Ababa University

Department of Public Administration and Development Management

Master's Program in Public Management and Policy

### Data Collection Form

This questionnaire is prepared for my thesis entitled 'The Transportation Patterns and Problems of People with Disabilities and its Policies issues in Ethiopia **for Masters Program in Public Management and Policy, Addis Ababa University, Department of Administration and Development Management.**

The Results of this study is expected to provide pertinent information to policy makers and transport development planners and interested groups in the country to measure the actual and unmet transportation needs of PDD and challenges related with it.

All the information you provide is totally sought for academic purposes and shall be kept strictly confidential. Your answers will be combined anonymously with other participants. Please kindly give your genuine response and share your experiences regarding the information requested on the following information.

## PART ONE

### 1. Background Information

**1.1 What is the highest level of education you have obtained? ( Tick one )**

- |                                                |                                                     |
|------------------------------------------------|-----------------------------------------------------|
| <input type="checkbox"/> Less than high school | <input type="checkbox"/> Junior (community) college |
| <input type="checkbox"/> High school           | <input type="checkbox"/> Post graduate              |
| <input type="checkbox"/> college/university    |                                                     |

**1.2 What is your age?**

- |                                       |                                |                                  |
|---------------------------------------|--------------------------------|----------------------------------|
| <input type="checkbox"/> Less than 18 | <input type="checkbox"/> 36-40 | <input type="checkbox"/> 56-60   |
| <input type="checkbox"/> 18- 25       | <input type="checkbox"/> 41-45 | <input type="checkbox"/> 60 plus |
| <input type="checkbox"/> 26-30        | <input type="checkbox"/> 46-50 | <input type="checkbox"/> 51-55   |
| <input type="checkbox"/> 31-35        |                                |                                  |

**1.3 Are you male or female?**

Male

Female

**1.4 What is your monthly household income level from all sources?**

- |                                               |                                                     |
|-----------------------------------------------|-----------------------------------------------------|
| <input type="checkbox"/> Less than 1,000 Birr | <input type="checkbox"/> from 1,000 to 5, 0000 Birr |
|-----------------------------------------------|-----------------------------------------------------|

☐ Above 5,000 Birr

**1.5 Do you live in a:**

☐ Private home or Condo

☐ Group facility

☐ Apartment

☐ Other \_\_\_\_\_

**1.6 If you live in a Group facility what kind?** (e.g group home, assisted living facility, nursing home.)

---

**1.7 Do you live by:**

☐ Yourself

☐ With relatives

☐ With non-relatives

☐ Others please specify \_\_\_\_\_

**1.8 How many people live in your household?**\_\_\_\_\_

**1.10 In order to help us better understand your transportation needs, can you please tell us the following information**

**1.10.1 Do you have any diagnosed medical condition?**

Yes No

**If yes, what is your diagnosed medical condition?**

---

**1, 10.2 Do you have a disability?**

Yes No

**If Yes, what is your disability?**

---

**1.10.3 Disabled Since, \_\_\_\_\_Birth \_\_\_\_\_ Years ago**

**PART TWO – Transportation Patterns**

|  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|

### PART THREE

**3. Transportation Mode** (Please fill in with the transportation mode from the box below)

#### **PurposeMode you use**

**Most often**

**Next most often**

Work

\_\_\_\_\_

\_\_\_\_\_

Shopping

\_\_\_\_\_

\_\_\_\_\_

Recreation/leisure

\_\_\_\_\_

\_\_\_\_\_

Social trip (e.g. (visiting friends and family)

\_\_\_\_\_

\_\_\_\_\_

Religious (e.g. church, temple)

\_\_\_\_\_

\_\_\_\_\_

School

\_\_\_\_\_

\_\_\_\_\_

Medical (hospital, doctor, dentist)

\_\_\_\_\_

\_\_\_\_\_

Agency support services (e.g. meeting with  
Service agencies)

\_\_\_\_\_

\_\_\_\_\_

Business (bank, legal, accounting, financial, etc)

\_\_\_\_\_

\_\_\_\_\_

Any other trips

\_\_\_\_\_

\_\_\_\_\_

**Modes include:** **1)** Local bus service **2)** Express bus service **3)** Mini-bus **4)** Private car **5)** Social service **6)** Taxi service **7)** Hired driver for private car **8)** Friend's car **9)** Motorcycle **10)** Bicycle/tricycle **11)** Walk (with cane/walker) **12)** Walk (without cane/walker) **13)** Lift Van **14)** Volunteer driver

**4. Assistance Needs**(Please mark your answer in the table below if your answer is yes; please specify who assists you from the box below)

**Purpose Need assistance**

**If yes, who assists you?**

Yes No

Work

☐
☐

\_\_\_\_\_

Shopping

☐
☐

\_\_\_\_\_

Recreation/leisure

☐
☐

\_\_\_\_\_

Social trip (e.g. (visiting friends and family)

☐
☐

\_\_\_\_\_

Religious (e.g. church, temple)

☐
☐

\_\_\_\_\_

School

☐
☐

\_\_\_\_\_

Medical (hospital, doctor, dentist)

☐
☐

\_\_\_\_\_

Agency support services e.g. meeting with service agencies)

☐
☐

\_\_\_\_\_

Business (bank, legal, accounting, financial, etc)

☐
☐

\_\_\_\_\_

Any other trips

☐
☐

\_\_\_\_\_

**Assistants include:** 1) Spouse/significant other 2) Mother or Father, 3) Child) 4) Other relative 5) Roommate/neighbor6) Friend 7) Hired assistant 8) Volunteer assistant 9) Co-worker 10) Other please specify\_\_\_\_\_

**5. Delay in a Trip**(Please mark your answer to the questions in the table below)

**Purpose**can you make this trip If no,  
**When you wan ?how often are you delayed?**  
**Yes No**

Work ☐ ☐ \_\_\_\_\_

Shopping ☐ ☐ \_\_\_\_\_

Recreation/leisure ☐ ☐ \_\_\_\_\_

Social trip (e.g. (visiting friends and family)

☐ ☐ \_\_\_\_\_

Religious (e.g. church, temple)

☐ ☐ \_\_\_\_\_

School ☐ ☐ \_\_\_\_\_

Medical (hospital, doctor, dentist)

☐ ☐ \_\_\_\_\_

Agency support services (e.g. meeting with service agencies)

☐ ☐ \_\_\_\_\_

Business (bank, legal, accounting, financial, etc)

☐ ☐ \_\_\_\_\_

Any other trips ☐ ☐ \_\_\_\_\_

**Delayed time 1=More than once a week 2= Once a week 3=Twice a month  
 4=Once a month 5= Less than once a month 6= Other mention\_\_\_\_\_**

**6. Are there times when you are unable to make trips you need to make?**

Yes

No

**7. What kind of difficulties that make your travel outside your home impossible?**

|                                            |     |    |
|--------------------------------------------|-----|----|
| Lack of personal vehicles                  | Yes | No |
| Availability of public transport           | Yes | No |
| Transportation cost                        | Yes | No |
| Physical problems                          | Yes | No |
| Personal preference                        | Yes | No |
| Not wanting to ask other to help           | Yes | No |
| Not wanting to depend on someone else      | Yes | No |
| Discrimination from the transport services | Yes | No |
| Other (mention) _____                      |     |    |

**8. What privilege/ opportunities you lost due to access to transportation?**

|                              |     |    |
|------------------------------|-----|----|
| Employment                   | Yes | No |
| Education                    | Yes | No |
| Income generating activities | Yes | No |
| Health care                  | Yes | No |
| Housing                      | Yes | No |
| Community life               | Yes | No |
| Other (mention) _____        |     |    |

**9. Do you own a motor vehicle?**

Yes

No

**10. Do you ever use dial-a-ride, lift Van, or Metro Mobility?**

Yes

No

**11. Do you ever use public transport, buses or light rail?**

Yes

No

**12. If no, would you like to be able to use public transport?**

Yes

No

**13. Do any of the following difficulties with using public transit apply to you? (You can check more than one answer if needed.)**

Need special aid in order to move around

Difficulty in standing

Difficulty in walking to curb to meet transit vehicle

Some difficulty in climbing stairs (need assistance)

Cannot read transit schedules

Cannot understand transit schedules

Have difficulty in reading signs or vehicle route numbers

Have difficulty in understanding signs or vehicle route numbers

Cannot hear announcements over the public address system

Having difficulty understanding the announcements

Other What?) \_\_\_\_\_

**14. We would like to find more out about your concerns with respect to your travel. Use the categories “Very concerned, Concerned, Not very concerned, Unconcerned” to indicate your concerns. (Please mark one box for each question in the Table below)**

|                                   | Statement                |                          |                          |                          |
|-----------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                                   | Very concerned           | Concerned                | Not very concerned       | Unconcerned              |
| Becoming a victim of crime        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Having to wait for transportation | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The travel time is long           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Crowding ☐ ☐ ☐ ☐

Other people are not kind to me

☐ ☐ ☐ ☐

Not being sure of arrival time at places I want to go to

☐ ☐ ☐ ☐

Making connections to other transportation systems

☐ ☐ ☐ ☐

Being unfamiliar with going to new places

☐ ☐ ☐ ☐

Having to cross streets for places I want to go.

☐ ☐ ☐ ☐

Difficulty finding the bus stop or entrance for transit (like bus or train)

☐ ☐ ☐ ☐

Having to deal with narrow doors to enter a bus or train

☐ ☐ ☐ ☐

Having to deal with steps to enter a bus or train

☐ ☐ ☐ ☐

Having people with no disabilities occupy seats in locations reserved for people with disabilities

☐ ☐ ☐ ☐

Bus drivers are not aware of my needs

☐ ☐ ☐ ☐

Bus stops are not located within a walking distance from my home

☐ ☐ ☐ ☐

Scheduled buses do not serve where I need to go

☐ ☐ ☐ ☐

**15. Considering using an automobile, how concerned are you with:**

**Statement**

VeryNot very

concernedConcernedconcernedUnconcerned

Travel time ☐ ☐ ☐ ☐

Safety driving ☐ ☐ ☐ ☐

Finding parking for PWD ☐ ☐ ☐ ☐

Affordability of driving a car ☐ ☐ ☐ ☐

There is no disadvantage to being a non driver.

☐ ☐ ☐ ☐

Not-driving limits (would limit) my freedom to choose where I live

☐ ☐ ☐ ☐

Not-driving reduces (would reduce) my independence.

☐ ☐ ☐ ☐

Using public transit increases (would increase) my independence

☐ ☐ ☐ ☐

It is my choice what mode of transportation I use

☐ ☐ ☐ ☐

**17. Policy issues**

**17.1 Do you believe that our country has clear and districted policies on transportation with People with disabilities?**

Yes

No

**17.2 If NO, What major policy components should be included (Please mention)**

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**18. Other Problems and challenges that you face in using transportation and related services**

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**19 Any other comments or suggestions that you want to add in terms of transportation limitations you are facing?**

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**Thank you for your cooperation**

