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**THE IMAGE OF THE STREET SIDEWALKS AND THEIR INFLUENCE ON USER PERCEPTION**

**THE CASE OF AFRICA AVENUE, KING GEORGE VI STREET, HAILESELASIE STREET,  
AND CHURCHILL AVENUE**

**BY  
BIRUK TAMRAT HAILEMESKEL**

**ADDIS ABABA, MAY 2023**



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CHURCHILL AVENUE**

### **MASTER'S THESIS**

The Thesis was submitted to the chair of urban design and the graduate program office of the Ethiopian Institute of Architecture, Building Construction, and City Development (EiABC) of the Addis Ababa University (AAU) for the partial fulfillment of the requirement of Master of Science in Urban Design and Development

By

**BIRUK TAMRAT HAILEMESKEL**

Advisor

**DARIK ZEBENIGUS WUHIB**

Addis Ababa University, May 2023

**Addis Ababa, Ethiopia**

## **Declaration**

I declare that this thesis is prepared for the partial fulfillment of the requirement for the degree of Masters of Science in Urban Design and Development entitled *“The Image of the Street Sidewalk and its Influence on User Perception” The case of Africa Avenue, King George VI Street, Haileselasie Street, and Churchill Avenue* is my original research work prepared by my effort with the close advice and guidance of my advisor. I also declare that this thesis has not been presented at any university and all sources that I have used or quoted have been indicated and acknowledged using complete references.

**Author: Biruk Tamrat Hailemeskel**

birukthm2@gmail.com

Signature \_\_\_\_\_

Addis Ababa, May 2023

## **Declaration**

Here with I State that Biruk Tamrat Hailemeskel has carried out this research work on the topic entitled *“The Image of the Street Sidewalk and its Influence on User Perception” The case of Africa Avenue, King George VI Street, Haileselasie Street, and Churchill Avenue* under my supervision and it is sufficient for submission for the partial fulfillment for the award of Masters of Science in Urban Design and Development.

Advisor

**Darik Zebenigus Wuhib**

Signature \_\_\_\_\_

Addis Ababa, May 2023



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## ADDIS ABABA UNIVERSITY SCHOOL OF GRADUATES

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THE CASE OF AFRICA AVENUE, KING GEORGE VI STREET, HAILESELASIE  
STREET, AND CHURCHILL AVENUE

BIRUK TAMRAT HAILEMESKEL  
MAY 2023, ADDIS ABABA, ETHIOPIA

**Approved by Board of Adjudication**

Darik Zebenigus

---

**Advisor**

---

---

Nebyou Yonas (PhD.)

---

**Internal Adjudication**

---

---

Alazar Assefa (PhD.)

---

**External Adjudication**

---

---

Danagechew Adugna (PhD.)

---

**Chair Person**

---

---

Danagechew Adugna (PhD.)

---

**Post Graduate Program Director**

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## **ABSTRACT**

*Great cities begin with sidewalks. Sidewalks have been the main circulation places and center for social, cultural, and economic activities. While walking a person can understand, experience, and evaluate the streetscape and this impression creates an image of the sidewalk. And the image created might become an identity for the sidewalks. Addis Ababa city is the capital of Ethiopia and the political capital of Africa is going through different public space developments, mainly on street networks. Walking is the predominant transportation system of the city. The city sidewalks serve as a meeting, socializing, and economic space beyond movement. This paper attempts to examine the Image of the Street and its sidewalks of the city by taking case study sidewalks namely Africa Avenue, King George VI street, Haileseilase street, and Churchill Avenue which were selected based on different selection criteria. There are different subjective and objective ways of measuring the image of the street and its sidewalk. The study used two approaches site evaluation and sidewalk user interview (perception approach). The examination of the sidewalks focused on Image creating indicators like the physical layout of the sidewalks, function, and activities held on them, district function and activity, presence of landmarks, architectural style along the sidewalk, safety, place identity and meaning, sense of belonging, and other emotional factors. The finding indicated Imageable sidewalks are created with the balance between landscapes and the sensescapes. The presence of tangible features (the physical layout and functions) and intangible features (the activity and emotion) aspects are very important. The study also revealed that there is a solid connection between people and activity, people and function, people and space, and based on these people develop feelings and emotions. The research also witnessed place (sidewalk) familiarity and emotional attachments (sense of belongingness) depending on their experience of the places.*

**Keywords:** *Public Space, The Street and its Sidewalks, the Image of Street and its Sidewalks, Street Sidewalk user's perception, Addis Ababa*

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## Acronyms

AA	Addis Ababa
AAIT	Addis Ababa Institute of Technology
AAU	Addis Ababa University
AV	Avenue
B	Bad
CBE	Commercial Bank of Ethiopia
CCTV	Closed Circuit Television
CM	Centimeter
CSR	Corporate Social Responsibility
EBC	Ethiopian Broadcast service
EC	Ethiopian Calendar
EiABC	Ethiopian institute of Architecture, Building Construction, and City Development
EOTC	Ethiopian Orthodox Tewahado Church
F	Fair
Freq.	Frequency
G	Good
GC	Gregorian calendar
IDTP	Institute for Transportation and Development Policy
KM	Kilometer
LU	Land Use
M	Meter
MCC	Main City Center
MU	Mixed Use
MUD	Mixed Use Development
NGO	Non-Governmental Organization
NOC	National Oil Ethiopia
ROW	Right of Way
ST	Street
UNHABITAT	The United Nations Human Settlements Programmed.
VB	Very Bad
VG	Very Good

## **General Notes**

- All dates are in Georgian calendars unless specified.
- The questionnaire was asked in Amharic (Local Language)
- Unless specified, all the photos are taken by the researcher.
- Unless specified all tables and figures are produced by the researcher.
- Unless they are mentioned on the part of “local terms” the Amharic words are street, village, and place names.
- For this study, The Image of the street and its sidewalk is used as an interchangeable with the term The Image of a city. This is used because streets are one of the major elements of cities and the study is focused on The Image of the street and its sidewalk

# Chapter 1: The Study

*“Great Cities Begin With sidewalks” Bill Lindeke*

## 1.1 Introduction

Cities function in an efficient, equitable, and sustainable manner only when private and public spaces work in a symbiotic relationship to enhance each other. Public spaces specifically streets and public open spaces are needed to sustain the productivity of cities, their social cohesion and inclusion, their civic identity, and their quality of life. (UN Habitat, 2015) Streets make up 80% of all public spaces in cities so they should not only consider as a corridor to serve motorization. The street can also serve as a public space that brings a vibrant street life. (NACTO., 2013).

Historically, streets have played a significant role in facilitating mobility, commerce & social interaction connecting places, people, & goods. The street is the widest & most accessible public space. By examining the street, one can come to understand the city and the society in which the street is located as they form an integral part of the social & commercial fabric of the city (UN-Habitat, 2013). Streets as a public space define the character of a city (UN-Habitat, 2018).

Imageability is a quality in physical objects that evokes a strong image in the observer. The street as physical settings and activities create Imageability for its users (Lynch, 1960). The street pattern in an urban setting creates an impression about the culture and community and thus provides an identity and image to the city (Carmona, 2010). In this sense, streets are one of the major elements that manifest city Imageability.

Jacobs believes the image of the street and its sidewalk can represent city identity.

*“What comes into your mind when you think of cities? They are streets..... it is the main public places of a city and the most vital organs... If a city's street looks interesting, the city looks interesting; if they look dull, the city looks dull.” (Jacobs J, 1961).*

Cities can be manifested by their sidewalks For instance, Champs-Élysées Street & Rue Saint Louis en l'Île streets located in Paris, France, Broadway Avenue in New York, USA, and many more are good examples of Imageable streets. Their Comfort and Image make them worldwide acknowledged sidewalks and helped to promote their urban tourism.

The research topic came from a personal interest who enjoys walking on sidewalks (While walking I developed perception, preference, and image of the sidewalks) and as an urban designer believing in J. Gehl's (2010) narration that cities like books can be read. The street, the footpath, the square, and the park are the grammar of the city. These two initiations drove the study topic

## 1.2 Background and Justification

Addis Ababa (AA) is home to 25% of the urban population in Ethiopia. The city is one of the fastest-growing cities in Africa. (World bank, 2015). The city is the most active & vibrant in terms of movement compared to any urban center in Ethiopia. AA city is organically formed in 1879 EC. The first roads served to link ‘Sefers’ (villages) by non-motorized modes of transport. Since then the city is going through different urban development including streets even though, the street developments are gradually improving still, the coverage stands at 17%. (AACPPPO, 2017)

Dealing with the city streets in terms of movement channel it hosts motor vehicles on their motorways & the sidewalk for pedestrians (of the total city dwellers 15% use private vehicles, 31% of Public transport and, 54% of the city dwellers uses walking as a primary mode of transport (AANMT, 2018). In this sense, more than half of the streets dwellers walk to reach their destination this implies the city sidewalks are busy with people. There is a shortage of literature about the sidewalks of the city however, a person can observe sidewalks with pleasant physical layout, wide or narrow, sidewalks with ample street furniture or without, calm or noisy, full of street vendors, dilapidated, and full of trash.

“People have always lived on the streets.” (Donald, 1981) Similarly, AA City Street and their sidewalk served & serve as meeting places, social spaces & centers, market places, celebration spaces. While walking a person can, witness different activities & functions held on these street sidewalks. This helps a person to evaluate, perceive streets and creates his/her image. These activities & memories are resembled by different local music, books & novels.

*For evidence, Local novel books like titling “Piassa Mohamud gar Tebekgen” by Mohamed Seleman resemble the old activities and memories which used to/are practiced on the sidewalks of Piassa, 4 “kilo”, and the surrounding. (Mohamed Salman, 2011). Likewise titling “Bole Picokok gar Tebkigen” narrates activities practiced by Bole Street which is one of the modern and newly developed sidewalks. (Tadese, 2005)*

The tale of the two novels witnesses the multiple activities that were held on the sidewalks like relaxation and enjoyment with friends (meet, walk, and play), exhibiting dramas, love, romance, and being a place of joy and sorrow. For instance, the “Bole Picokok gar Tebkigen” explains the dressing of the sidewalk users, the expensive shops along the sidewalk, walking style while “Piassa Mohamud gar Tebekgen” describes the old day's activities, and the current trends like love, joy, and happiness. Both witness that people perceive and create an image of their

environments. This shows experiences and memories are the major elements that create Imageability together with its appearance. People like or do not like to go to some sidewalks whatever the reason is, it is the output of their perception about the sidewalks. Concerning this, theorists and scholars suggested different solutions to enhance the image of cities some suggested that the physical aspect mainly affects Imageability while others suggested that is mainly impacted by activities, function, and emotional factors .

There are different topics to study a street as a public space, from them this study focuses on the image of the street sidewalk of contemporary Addis Ababa city.

### **1.3 Statement of the problem**

Addis Ababa city is one of the fastest growing cities in Africa. Due to many reasons the city is becoming congested; growing horizontally & vertically most of the open and public spaces are turned into multi-story buildings due to this the public spaces are diminishing gradually, on the other hand, due to different reasons the street coverage is increasing which makes streets as the major and available public space to the city and its dwellers.

Walking is the predominant mode of transport priority and focusing on motorways over pedestrian ways is still the existing challenge in fact city has different main street sidewalks but few are lively, attractive and pleasant. On the other side, some sidewalks depleted, dormant and unpleasant due to this these sidewalks are suffering because the lack Imageability.

Image is one of the eight urban design qualities. Lacking it is costing the city sidewalk in several ways mainly on the concept of street as a public space beyond movement channel. Due to this the city dwellers quality of life are highly affected because In modern world such public spaces are commodities, social facts, manifestation of civilization, have economic benefits as they are assets to cities if they are well managed. Furthermore it have important notion in the context of urban tourism. Solving this quality will bring urban prosperity to the city as well as the nation.

The purpose of this study is to probe deep into these problems basing the Image of the street and its sidewalk the case of selected sidewalks of AA City, the paper oversees potential, and challenges, and then based on the study output it attempts to forward recommendations that enhance the overall sidewalk Imageability.

## **1.4 The Objective of the study**

### **General Objective**

To investigate the status of Image of the streets and their sidewalks, & then based on the findings to forward recommendations that can enhance the existing qualities & future developments.

### **Specific Objective**

- To measure the current status and contributions of the tangible and intangible features of the case study sidewalks concerning the Image of the street and its sidewalk.
- To explore how the case study street sidewalk users perceive the Image of the street and its sidewalk.
- Recommend possible solutions that help policymakers, urban managers, place-makers, and other stakeholders that help to enhance the Image of the street and its sidewalks.

## **1.5 Research Question**

- 1) How are the tangible and intangible features of the case study streets and their sidewalks performing concerning the Image of streets and their sidewalks measuring criteria?
- 2) How do street sidewalk users perceive the image of case study streets and their sidewalks?
- 3) What could be possible solutions to enhance the Image of street and their sidewalks?

## **1.6 Significance of the study**

The paper explains the need to evaluate the image of the street and its sidewalk concerning scientific measurements and users' perception on the context of AA. The insight gained from site evaluation & questionnaire results conducted on the case study sidewalks aims to contribute:

- The results and recommendations from the study will give some insights and input to policymakers and urban development professionals and related stakeholders.
- The study will also give some insights into the specific case study sites to improve /enhance their existing conditions concerning the image of the street and its sidewalk
- Furthermore, the study will be an input for future studies related to image of streets & its sidewalk.

## **1.7 Scope of the Study**

### **1.7.1 Spatial Scope**

Interims of geographic boundary, the study are confined to four main sidewalks of Addis Ababa namely Africa Avenue, King George VI Street, Halieselassie Street, and Churchill Avenue.

### **1.7.2 Thematic Scope**

The thematic scope had two targets one focusing on the inspection of tangible and intangible features and the second to understanding sidewalk user perception/perspective that helps to examine the image of the street and its sidewalk.

### **1.8 Limitations of the Study**

These were the main limitations faced during the study.

- Financial Constraints which had an impact on the number of case study sites.
- Shortage of local literature related to the study. ,
- The paper is limited to only Imageability parameters (inclusivity, accessibility and other parameters are not the core & also not well addressed on the study).

### **1.9 Organization of the Paper**

Chapter One: This chapter briefs about the introduction, background, and the research problem then it deals with the objective of the study and research questions. It further explains the need for the study, the study scope, and the limitations of the study.

Chapter Two: This chapter focused on the state of the art. Literature related to the study is discussed which was cited from both international & local sources. The reviews concentrated on basic ideas of the study, theoretic discourses & debates, success stories, & contextual backgrounds.

Chapter Three: This chapter focused on the methodological approaches & overall research design and procedures used to collect and analyze data as well as case study area selection procedure and introduction & description of the selected case study sites.

Chapter Four: This chapter focused on the finding & discussion of the case study areas. The chapter has two parts the first one focuses on the result of site evaluation which was conducted on-site survey. The second part deals with the result questionnaires focused on user perception, which was collected from street sidewalk users regarding Image Street & its sidewalk.

Chapter Five: This chapter deals with the study's conclusion. The conclusion is based on findings and was supported by literature reviews, theories, and success stories.

Chapter Six: This chapter focuses on recommendations of possible solutions that help to alleviate existing problems & ways to enhance potentials concerning the image of streets & their sidewalk.

## Chapter 2. Literature Review

### 2.1 Introduction

*The primary focus of this chapter is to review literature related to Public Space, Streets and their sidewalks, Image & Image of the street and its sidewalk, user perception and satisfaction related to the Image of the street and its sidewalk, and success stories. The contextual background deals with Addis Ababa city to its public space, street, and city Image development. The above key issues are described in terms of definitions & terminologies, understandings of the issues, theories & discussions, and assessment & evaluation parameters.*

### 2.2 Basic Definition, Types, and Importance of Public Space

#### 2.2.1 Defining Public Spaces

Public space is a vital element of cities. It has diverse definitions, many scholars and theorist related to the discipline defines public space in different ways but all ensures that it is the heart of cities. For instance, (Vahid Bigdel, 2014) defined Public space as a common area in which people do their practical activities & hold their bonding ceremonies. Also (MacKenzie, 2015) defined it as a common area for different activities: networks of public spaces form the basis for social, political, cultural, and economic structures.

#### 2.2.2 Types of Public Space

According to UN-Habitat 2014, publication public spaces are classified in to four categories:

Table 1: Types of Public Spaces

Categories	Descriptions	Examples
First	Public spaces often taken for granted but which is very much a part of daily life. Without them, life in cities would be impossible; they are accessible to all without any charge and at all time.	They are Boulevards, Avenues, Streets, Squares, Sidewalks, Passages & galleries, and waterfronts.
Second	The urban features that instinctively come to mind when we think of public spaces and that we use daily. These spaces are available to all without charges.	They are Parks, Gardens, and Playgrounds.
Third	These Includes specialized urban spaces, including buildings that are often accessible to users under certain conditions.	They are Sports facilities, public & privately managed Beaches, and Museums.
Fourth	Public spaces with high-maintenance facilities that are publicly owned & maintained & accessible to all	Such as Public Libraries, Civic centers.

Source: (UN-Habitat., 2014)

### 2.2.3 The Importance of Public Space

Public spaces are vital elements of a city; it has multiple benefits & importance as seen below.

Table 2: The Importance of Public Space

Author	Description
John Ruskin (Yu, 2019)	<i>“He expresses public space as a <b>measurement of a city quality</b>.....“The measure of any great civilization is its cities and a measure of a city’s greatness is to be found in the quality of its public spaces, its parks, and squares.” A well-designed public space is a <b>social place</b> that invites people to stay and catalyze various activities.</i>
SGD sections 8 and 11(P. Deore, 2019)	<i>“Public spaces go beyond the typical definition of being an open space. They reflect <b>the diversity and vibrancy</b> of the urban fabric and hold the power to create memories. Among all public spaces, streets emerge as the most public.</i>
The Journal of PS (Luisa - Bravo, 2016)	<i><b>Public space = quality of life</b>, Public space supports the economy, Public Space contributes to a sense of civic cohesion &amp; citizenship, Public space fosters social and cultural interaction, enhances safety, improves health and well-being, mobility,</i>

Source: Compiled by the Author

### 2.2.4 Activities held in public spaces

Urban space is a bed for urban activities and related necessities. Generally, People are on public spaces for three reasons (essential, optional, social). (Gehl J., 1987)

Table 1 Activities held in Public Space

<p><i>The <b>First are essential activities</b> - “When outdoor areas are of poor quality, only strictly necessary activities occur. When outdoor areas are of high quality, <b>necessary activities</b> take place with approximately the same frequency”.</i></p> <p><i><b>Optional activities</b> really on how good the place &amp; the situation is /how it invites people to stop, sit, eat, play, &amp; so on.</i></p> <p><i>“<b>Social activities</b> depend on how good the environment is in addition to its social Activity” include children at play, greetings, &amp; conversations.. that is, simply seeing and hearing other people.</i></p>	Quality of the physical environment		
	Poor	Good	
	Necessary Activities	●	●
	Optional Activities	•	●
Resultant Activities (Social Activities)	•	●	

Source: (Gehl J., 1987)

### 2.2.5 Attributes of Successful Public Space

The quality of public spaces influences how people, communities, & businesses interact in cities. Ideally, they create value by enhancing social inclusion & diversity & facilitating the exchange of goods, services, & knowledge spillovers. Successful public spaces have different attributes like being designed as human-centered places that are **attractive, comfortable, accessible, walkable, enjoyable, and safe, including the disabled & older persons.** (Jon Kher, 2020)



Figure 1: Components of Great Places according to Project for Public Space Source: (PPS, 2015)

## 2.3 Streets and their Sidewalk

### 2.3.1 Defining Streets and their sidewalks

#### Streets

Streets are the oldest part of a city. (UN-HABITAT, 2013) It has a wide range of definitions. Streets are typically **lined with buildings and public spaces**, and **movement is still a key function**. (Telford, 2007) Streets serve **many functions**, not only for the circulation of traffic but for walking, cycling, playing, and meeting people....streets are multi-functional spaces and there is always the risk of conflict between users. (Llewelyn, 2000) Streets are physical, tangible spaces comprising intangible qualities where strangers and friends meet, recreate, do business, work, wander, relax, sit, or enjoy the sights and sounds of each other.... **“Streets should be for staying in and not just for moving through, the way they are today”**. (Meeta Tendon, 2020)

#### Street Sidewalk

Sidewalks are like open veins, through which the life of a city flows. They are for everyone, democratic, making no distinction about who uses them. They serve as a foundation for the majority of the population’s daily travels & have a direct impact overall population, with an influence on the quality of life, culture, and identity of places. (Paula, 2019) Sidewalks as spaces are where people display individual and group identities and observe others (Ehrenfeucht, 2009).

### 2.3.2 Streets and their Sidewalk as a public space

Street are classified as the most abundant, accessible, & inclusive public space.(UN-Habitat., 2014), Streets have traditionally served three main purposes: **mobility, commerce, & social interaction**. The first rule is to “**think of streets as public spaces**”. Once streets are recognized as public spaces, they can be planned and designed to serve communities and continue to ease mobility to enhance economic productivity as well as social engagement. (UN-HABITAT, 2013)

Table 2 : The need to study streets and their sidewalk

<b>Author/ Ref.</b>	<b>The Need to Study Street and its Sidewalk</b>
Dover 2014	<i>To make a good city requires a good street.</i>
(Jacobs Jane, 1961 (R.Fyee, 2006)	<ul style="list-style-type: none"> <li>- <i>Streets &amp; their sidewalks, the main public places of a city, are its most vital organs.</i></li> <li>- <i>Think of a city and what comes to mind ? Its streets.....If a city’s streets look interesting, the city looks interesting; if they look dull, the city looks dull.”</i></li> <li>- <i>Streets are the terrain of social encounters &amp; political protest, sites of domination and resistance, and places of pleasure and anxiety.</i></li> </ul>
C. Moughtin,2003	<i>The street in addition to being a physical element in the city is also a social fact.</i>
Nurhikmah, 2016	<i>Streets are a city's <b>showcase where visitors put on the first impression &amp; create a perception to decide whether they will like /dislike a city or even fall in love with it.</b></i>
(Gehl, 2013)	<i>“Cities are the places where people meet to exchange ideas, trade, or simply relax and enjoy themselves. A city’s public domain its <b>streets</b>, squares, and parks are the stage and the catalyst for these activities.”.....“Cities like books can be read. <b>The street, the footpath, the square, and the park are the grammar of the city; they provide the structure that enables cities to come to life.</b></i>
(Jacobs, 1995)	<i>“The <b>street</b> is a place to be seen...The best streets encourage participation. People stop to talk or maybe they sit &amp; watch... taking in what the street has to offer.”</i>
(KIM, 2015)	<i><b>Sidewalks</b> are the most important and the most overlooked public space.</i>
(Haoying Han, 2019)	<i><b>Citizens rely on sidewalks for many activities: social, cultural,&amp; commercial purposes.</b></i>
UN-Habitat 2014	<i>Streets as Public Spaces and Drivers of Urban Prosperity”</i>

Source: Compiled by the Author

### 2.3.3 The Street and its Sidewalk Qualities, and Characters

The street qualities consist of the physical parameters and features present on the street, the design qualities at both urban and building levels, and comfort, safety, and interest levels of individuals as the urban design qualities are subjective, researchers relate them to physical features to understand and make them more objective. (Ewing R., 2009)

Table 3: Qualities of Street and its sidewalk by Ewing and Handy

Elements	Qualities
Physical Features	<i>Sidewalk &amp; street width , Height of enclosing buildings , People, Climate, Trees, Volume of Traffic</i>
Design Qualities	<i>Imageability, Legibility, Linkage, Complexity, Transparency, Human scale Enclosure, Coherence</i>
Individual Perceptions	<i>Sense of safety and comfort , Level of interest created</i>

Source: (Ewing & Handy, 2009)

Table 4: Qualities and Characteristics of Street and its Sidewalk by Metha 2013

Street Qualities	Characteristics
Physical qualities	<ol style="list-style-type: none"> <li>1. Articulated street front</li> <li>2. Public Seating</li> <li>3. Commercial Seating</li> <li>4. Sidewalk width</li> <li>5. Shade from trees and canopies</li> <li>6. Other Furniture and physical artifacts</li> </ol>
Social qualities	<ol style="list-style-type: none"> <li>1. Community places</li> </ol>
Land use qualities	<ol style="list-style-type: none"> <li>1. Variety of businesses</li> <li>2. Independent uses</li> <li>3. Permeability of storefront</li> <li>4. Personalized storefronts</li> </ol>

Source: (Meeta Tendon, 2020)

## 2. 4 Image, Imageability, Image of the city and its concepts

### 2.4.1 Urban Design Qualities

The quality of the built environment in towns and cities has a crucial impact on the way they function. Quality of design is not just about creating new developments. It is also; about how we make the best of our existing, urban environments. The urban design quality of a place is what makes it distinct, recognizable, and memorable. According to Ewing & Handy; there are **eight qualities** (Imageability, Enclosure, Human Scale, Transparency, Complexity, Coherence, Legibility, and Linkage) in urban design. Imageability is one of the eight important urban qualities that make urban spaces recognizable. (Ernawati, 2019)

### 2.4.2 Image and Imageability

#### Image

Image is defined as a representation of a thing or person's external form in art. It is also described as the general impression that a person or organization ...presents to the public. (Ernawati, 2019)

#### Imageability

Imageability is a quality of a physical environment that evokes a strong image in an observer: “It is that shape, color, or arrangement which facilitates the making of vividly identified, powerfully structured, highly useful mental images of the environment”. (Lynch (1960, p. 9) ...Where “life in the space, the climate, and the architectural quality support and complement each other to

create an unforgettable total impression”.....when all factors manage to work together to such pleasing ends, a feeling of physical and psychological well-being results: the feeling that a space is a thoroughly pleasant place in which to be. (Gehl 1987) (Ewing R., 2009)

### 2.4.3 City Imageability

According to Lynch, in an imageable city or place, people can quickly **identify and group elements** of the area to form a clear pattern. People can recognize the various aspects of the sites directly when they visit the site. When all factors are well managed, it will make sense that the place as a whole is a pleasant place.....A highly imageable city that is well formed, contains distinct parts, and is instantly recognizable to anyone who has visited or lived there. (Lynch (1960, p. 9) (Ernawati, 2019) The urban image is “a set of adjectival interpretations about a city spontaneously associated with a given stimulus (**physical and social**) that has previously unleashed in individuals a series of associations.” (Avraham, 2004)

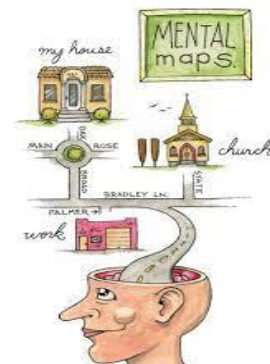


Figure 2: Illustrations that show the formation of an Image of a city  
Source: in.pinterest.com, re-thinkingthefuture.com, dsd.instructure.com

#### 2.4.3.1 Thoughts on City Imageability

##### Lynchian Thought of Imageability

Kevin Andrew Lynch was an American urban planner and author... his most influential books include *The Image of the City* (1960).

Table 5: Kevin Lynch's Concept of City Imageability

<i>Explains that people’s perception of the city is important .Going through a city from the viewer’s mind is the image of the city... Identity, Structure, Meaning: forms image of a city.</i>
<i>Each individual holds a unique image of his or her city. Researching a sample of these images can help planers describe a public image of their city</i>
<i>People perceive the city predominantly as a built image, made up of distinct paths, edges, districts, nodes, and landmarks. The highly Imageable city would be formed would contain distinct paths</i>

Source: (Rutuja Leie, 2013)

## Post Lynchian Thought on the image of a city

Table 6: Thoughts on the image of a city

Author	Descriptions	
(Lynch, 1976; Landry, 2006).	<i>The Image of the City has been criticized—in the first place by Lynch himself.</i>	<i>“...Studies have shown, for instance, that cities are not only “landscapes”, but also “sensescapes”: people’s mental maps turn out to be formed as well by the smells and sounds of a place (Lynch, 1976; Landry, 2006). (Hospers, 2010)</i>
John Cato (1989)	<i>Cato divided the city image into <b>three</b> components</i>	<i>A) <b>City Image:</b> the ability to recognize our environment depends upon reshaping our environmental surroundings through Lynchian five elements considering the exclusion of elements that cause confusion and misleading.</i>
		<i>B) <b>Narrative &amp; Story Telling:</b> the city is like a story since its sequence of events can be narrated and described by presentation, believability, color, attraction, familiarity, and so on</i>
		<i>C) <b>Interaction Design:</b> We should attempt to create an involving, attractive, &amp; enjoyable interactive environment, one that encourages us to use and delight in our use.</i>
Jonathan Raban (1975)	<i>Raban imaged the city as a living object. Divides the city into <b>soft &amp; hard</b> parts (The two are interactive and closely related</i>	<i>A) The <b>soft city</b> part is created by the minds of its inhabitants, so it is an individualized interpretation. It is concerned with the mental side, which is exercised by the imagination of city dwellers.</i>
		<i>B) The <b>hard city</b> part is the concrete ideas such as alleys and architecture. The hard one resorts to the material level observed by the sense of dwellers.</i>
		<i>The city visitor first encounters the hard city, but gradually he will feel it, and then he encounters the soft one.</i>
Donald Appleyard (1976)	<i>. He describes the city as a product of different group perceptions</i>	<i>According to the distinction of people's perceptions, there are three characteristic types of urban perception. A) <b>Operational:</b> personal movement and visibility attribute it. B) <b>Responsive :</b> when a person perceives an environment, there are Imageable Elements that catch his eye. C) <b>Inferential</b> It is attributed to socio-functional significance</i>
Nasar (1997)	<i>Physical Imageability is not enough. User’s preferences must be incorporated</i>	<i>Nasar critically pointed out that the Imageability theory needs to incorporate the residents’ preferences. (Nasar, 1990, p.42).Nasar’s study titled ‘The Evaluative Image of the City’ follows the work of Lynch &amp; further explores the role of human evaluations of the cityscape. He focuses on the <b>likability of the cityscape</b> (Nasar, 1997)</i>
Luque-Martínez (2007)	<i>Both the physical and Social are equally important</i>	<i>In the process of generating an image, <b>both physical actions (&amp; social actions</b> can be equally important. <b>Character of cities, people, and their social, economic, or cultural relations should be added to the five elements of Lynch’s city image.</b></i>

### 2.4.3.2 The need to study City Imageability

In this modern world, Cities are commodities, social facts, the manifestation of civilization, & home to residents due to these cities should be studied in all aspects including City Imageability. There are four important functions served by a clear image of a city, firstly, the mobility function, which allows people to move around easily. Secondly, image serves as a broad frame of reference to the structural knowledge of the city & the activities in it. Thirdly, there is the emotional function in which a clear image allows one to move about in the city with a sense of comfort, ease & emotional security. Finally, the urban image serves a symbolic function by providing symbols and strong associations with place. (B Jiang, 1960). The image of a place is usually very important in attracting visitors, & place imagery is a particularly important notion in the context of urban tourism. (Richards G., 2004)

### 2.4.3.3 Understanding, Perceiving & Evaluating City Imageability

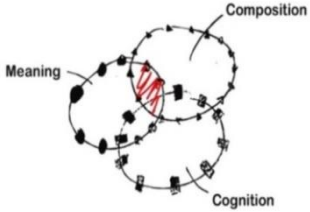
An individual's perception is the result of the interplay between one's past experiences, culture, & interpretation of the perceived. (Ewing, 2009). Perception & experience of 'place', is an essential & one of the six dimension of urban design....for this interaction to happen, we must perceive that is, be stimulated by sight, sound, smell, or touch that offers clues about the world around us. It involves gathering, organizing, & making sense of information about the environment. (Matthew Carmona, 2003). The perception of a city is influenced by **sensory images & fantasies** that add a powerful symbolic dimension to the whole perception process. Certain sensory patterns owe their impact largely to the fact that they contain a strong symbolic meaning. (Raial, 1998).

Table: Factors & variables affecting perception of people towards urban Spaces Imageability

<b>Author &amp;/Ref.</b>	<b>Description</b>
<i>(Ernawati, 2019)</i>	<i>Sense of Place, Attractiveness, and Place Identity. Pleasantness, clarity, remembrance of the past, unforgettable memory, uniqueness, distinctiveness.</i>
<i>(Lynch, 1960)</i>	<i>Being distinctive, different, unique, dominant, easily recognizable, memorable, and identifiable by the people.</i>
<i>(MacKenzie, 2015)</i>	<i><b>Emotional Attachment</b>, (loyalty, pride, &amp; love on the other hand Functional Attachment like Engagement, familiarity, dependence, satisfaction, comfort).</i>
<i>(Matthew Carmona, 2003)</i>	<i><b>Social and Cultural factors</b> (age, gender, ethnicity, lifestyle, length of residence in an area, and the physical, social and cultural environment in which a person lives and are raised.</i>

Understating City Imageability has physical and cultural components; the first one defines two attributes: **location** (a real location, spatial relationship, , scope) and **appearance** (shape, color, age, size, construction...), & the second component has two sides: **meaning** (economic, political, social, historical, religious...) & association (familiarity, affinity..) (Broadbent, et al., 1980).

Table 7 Factors that help to understand city Imageability

Author &/Reference	Description
Lynch 1960 (Mawabo, 2018)	<p>Urban Image can be <b>understood</b> by combing:  <b>Meaning</b> - (individual, culture &amp; socialization.)  <b>Composition</b> - Imageability occurs when different parts of a place are arranged harmoniously.  <b>Cognition</b> - The human mind is always looking for order and it arranges data (patterns)</p> 
(van Oers 2010: 14).	<p>“a mindset, an understanding of the city, ...as an outcome of <b>natural, cultural, and socio-economic</b> processes that construct it <b>spatially, temporally, and experientially</b>. It is as much about buildings and spaces, as about rituals and values that people bring into the city.”</p>
(Suzuki, 2018)	<p>Imageability depends on the observer's perception: The concept of Imageability <b>does not necessarily connote something fixed, limited, precise, or regularly ordered</b>, although it may sometimes have these qualities. Nor does it mean apparent at a glance, obvious, or plain.</p>
(Ewing R., 2009)	<p>Places that rate high on urban design qualities are likely to rate high on Imageability. Places that rate low on these qualities may have strong images.</p>
(Ernawati, 2019)	<p>An image of a place can be <b>a negative image or a positive image</b>. Unfavorable environmental conditions can form the image of an area. Some sites are rated as low quality in urban design but have a sharp image... City image can be <b>positive, attractive, negative, weak</b> ...mixed of one another.</p>

The image of a city is influenced by many determinants. It is grounded in cultural, social, and political contexts; it depends on promotion strategy and events; it is dependent on the trends in the market influenced by many conflicting messages sent by the city. (Anna -Adamus, 2019)

Table 8: Determinants that influence city Imageability

Attributes	Aspects	Parameters
Physical	Form	Color, texture, material, ornamentations, signage, topography
	Perceptual Access	Vistas, views, skylines (visibility, audibility)
	Use	Use intensity, use singularity, use quality
	Physical ambiance	Naturalness (vegetation, mountains...), openness (enclosure, density...), order (coherence, harmony of cues..), micro-climate
	Spatial structure	shape of the layout, architectural styles, pathways, corridors...

Social ambiance	<i>Social characteristics</i>	<i>Age, sex, language, social groups, and networks</i>
	<i>Social control</i>	<i>Territorial, defenses, safety</i>
	<i>Social mobility</i>	<i>Social composition demographic characteristics,</i>
Symbolic dimension	<i>Cultural attributes</i>	<i>Historic memories of people &amp; events, symbolic orders</i>
	<i>Affective attributes</i>	<i>Emotional memories of environmental experience</i>
	<i>Instrumental attributes</i>	<i>Perceived; physical/social affordances, factual data</i>

Source: (Silva 2004)

According to (VK Kumar, 2019) the evaluation urban spaces Imageability are based on both physical and symbolic dimensions and one of the two but he stated scenarios like one can be strong on physical dimensions weak on symbolic dimensions & vice versa, strong or weak on both dimensions. City Imageability can be evaluated by its physical (appearance) & cultural (meanings & associations like familiarity, affinity...) components. (Broadbent,1980).

#### 2.4.4 The Image of Streets and their Sidewalk

According to (Lynch, 1960) Streets are the city elements that strongly influence the formation of an image of a city...“**A pleasant street is an Imageable street**, which can represent the character of the place or even represent the character of the town as a whole...some streets are very attractive so they become famous and specifically connected to a city. Those streets had become the defining characteristic of the cities, which Alan Jacobs called great streets. (Ernawati, 2019) An Imageable street usually has perceivable qualities preferred by users. (Ewing R., 2009)

##### 2.4.4.1 Understanding & Perceiving the Image of Streets and their sidewalks

Imageability of streetscape character is concerned with the visual arrangement of elements within the street environment, and how those elements create a distinct character or perceivable differences”. (Rapport, 1987). A person who judges street sidewalks based on their four physical parts. As **Ground Plane, Roadside, Building Wall; Canopy** Judging from the pedestrian perspective, the sidewalk is conceptualized as a room with four planes. (Michael R., 2013).



Figure 3: The Four main parts of the street sidewalk by Michael R.2013

According to (Jaleh, 2017), people perceive and understand sidewalks in terms of Hard (Such rigid elements, items that are visible and easily understood by touch sense. are non-removable or removable hardly. Hard elements were divided into three categories as Surfaces, Furniture & vegetation). & Soft elements (in this cases it considers visual, auditory, and qualities and usually are not understood. Like light and shadow, color...activities and users also fall into this category.

#### 2.4.4.2 Evaluating the Image of Streets and their Sidewalk

Evaluating sidewalks are based on physical, social and symbolic dimensions. (Silva 2004). There are different evaluating criteria's parameters & indicators to evaluate the image of the streets and their sidewalks. For instance (Rapport, 1977) listed 12 quantitative and, 21 qualitative parameters that makes people choose to make a place /street more 'distinguishable' leads to strong Imageability with a strong identity and physical setting. (Ar N Jothilakshmy, 2011) Also (Ewing, 2005) indicated 8 parameters to measure Image of the sidewalks if the evaluation that the street scored above average on Imageability. The major indicators those are helpful to evaluate that the image of the streets and their sidewalks are summarized below.

Table 9 List of street & its sidewalk physical Quality Indicators related to the Image of street sidewalk

<b>Elements</b>	<b>Indicators</b>	<b>Remark</b>
<i>Street &amp; its Sidewalk Appearance</i>	<i>Width</i>	<i>The sidewalk should be generous enough to &amp; able to accommodate as a public space.</i>
	<i>Pavement</i>	<i>Choices of quality, color, pattern that can bring pleasant image.</i>
	<i>Condition</i>	<i>The wellbeing of sidewalk gives comfort &amp; pleasant image.</i>
	<i>Cleanness</i>	<i>The cleanness of the sidewalk &amp; street fronts gives pleasant image.</i>
	<i>Obstacle free Sidewalk</i>	<i>Obstacle-free sidewalks make the street more comfort to the pedestrian due to this it has a positive impact on street Imageability.</i>
	<i>Gentle Topography</i>	<i>Comfortable to walk , suitable for different age groups &amp; disables</i>
<i>Street Amenities/ Furniture</i>	<i>Street Light</i>	<i>It is a critical element to increase visibility &amp; safety at night.</i>
	<i>Street Bench</i>	<i>These are valuable element to facilitate sitting, stay &amp; watch the urban scenes &amp; also improve social interaction.</i>
	<i>Trash Can</i>	<i>Street Furniture that helps to ensure clean and pleasant street.</i>
<i>Landscape Elements</i>	<i>Trees, Canopies Planter Box</i>	<i>Help to protect from different environmental conditions such as rain, sun, helps to control air quality &amp; bring pleasant image.</i>
<i>Good Street Connectivity &amp; Connection</i>	<i>No of Street Connection</i>	<i>The level of connectivity is helpful to provide access and linkage option to streets.</i>
	<i>Street continuity</i>	<i>Provides a better transit access to the street</i>
<i>Street Safety</i>	<i>Pedestrian crossing &amp; lanes</i>	<i>Manageable lanes &amp; dedicated crossings insures confidence pedestrians to cross from one side to the other.</i>
	<i>A buffer zone for Pedestrian safety</i>	<i>Buffer should exist to avoid a direct conflict between transportation &amp; pedestrian space, this bring pedestrian confidence to walk freely.</i>

<i>Street Front Layout &amp; other urban design elements</i>	<i>Unique Architecture &amp; their articulations</i>	<i>Contributes for place identity, brings trademark development, representation &amp; attractions, and further more become landmarks</i>
	<i>Transparency &amp; Façade Articulation</i>	<i>Transparency and Interactive Façade adds aesthetics quality to the street</i>
	<i>Street scale &amp; Senses of enclosure</i>	<i>Desirable height to width ratio, Human scale buildings provides sense of enclosure and also creates a positive image to the users</i>
	<i>Plaza, Parks, Round -abouts, fountains ...</i>	<i>The presence of these urban elements brings vibrancy, aesthetics, socialization place and more helps a pull factor to the street.</i>
	<i>Landmark</i>	<i>Helpful elements to communicate/identify the place/location also unique structured land mark brings pleasant image to the street.</i>

Source: Appleyard 1972, Whyte 1980, Gehl 1996, Jacobs 1995, Shaaban 2019, Mehta 2013, UN- Habitat 2013

Table 10 : List of Activity based Indicators related to Image the of streets & their sidewalks

<b>Elements</b>	<b>Indicators</b>	<b>Remark</b>
<i>People</i>	<i>Flow of People</i>	<i>This brings life to the street and higher flows are highly favorable.</i>
	<i>Diversity of Activity</i>	<i>When there is something interesting to see, participate in....it more favorable... High diversity are highly favorable</i>
<i>Street Safety</i>	<i>Presence of Crime</i>	<i>Less presence of crime gives a positive impressions for users</i>
<i>Interaction</i>	<i>Social Interaction</i>	<i>Places for Meeting friends ,new peoples are more favored</i>
	<i>Noise Level</i>	<i>Less noises from both vehicles &amp; people are highly favored</i>

Source: Jacobs 1995, Gehl 1996, Montgomery 1998, UN-Habitat 2012 , Ewing et al., 2005

Table 11 List of Function based Indicators related to Image the of streets & their sidewalks

<b>Elements</b>	<b>Indicators</b>	<b>Remark</b>
<i>Building Use, Land Use ,</i>	<i>District Function</i>	<i>Important factor that pulls user to the place. (The presence of Mixed use is an important)</i>
	<i>Sidewalk Function</i>	<i>Variety of Choices, Presence of outdoor dining ,managed vending's</i>
	<i>Adaptive Uses</i>	<i>Older Buildings adapted for new uses in demands</i>
	<i>Unique Functions</i>	<i>These functions pull people to the sidewalk (Halls, museums...)</i>
	<i>Multiple Functions</i>	<i>These function gives people ultimate option to sidewalks (Shopping malls , office parks &amp; recreations with public services)</i>
	<i>Transport Availability</i>	<i>Public transits &amp; variety of transport options various places than Those who does not have.</i>

Source: Jacobs, 1995, Ewing et al., 2005

Table 12 List of Emotional experience Indicators related to Image the of streets & their sidewalks

<b>Elements</b>	<b>Indicators</b>	<b>Remark</b>
<i>Perception</i>	<i>Sense of Belongingness</i>	<i>A protective factor that helps to measure the likability and belongingness to the place by the user</i>
	<i>Social Interaction</i>	<i>The presence of social interaction helps to maximize the stay in the place &amp; its likability</i>
	<i>Safety &amp; Security</i>	<i>The presence of safety and security is an important factor to like/ dislike the place. The higher secured the higher likable</i>
	<i>Memorability</i>	<i>Previous experience on the places because of the physical layout, activity or Function. Memorable are highly likable</i>

Source: Jacobs, 1995, Whyte 1980, Montgomery 1998, UN-Habitat 2012, Ewing et al., 200

Table 13: Summary Measurement parameters in relation to image of the street and its sidewalk

Evaluation Parameters	Measurement Methods
<b>Physical features</b> : Sidewalk width quality & condition (Form), Public Seating, other furniture, & physical artifacts, Topography, Distinct districts, Appearance & Newness, Cleanliness, Nature of Building element, Shade from trees, Seating, nearby land use, Articulated street front, Transport and parking, proportion, Noise level, outdoor dining areas, buildings with different shapes & sizes.	The layout & structure appearance can be evaluated by <b>Observation</b>  While the satisfaction & perception of the above parameters are evaluated by the <b>User interview</b>
<b>Social Ambiance and activity</b> : social mobility safety (traffic and robbers) & comfort, defense, communal places, Pedestrian Volume, & activity.	These parameters are evaluated by <b>User interview</b> , Pedestrian Volume & activity by <b>Observation</b>
<b>Economic advantages</b> – economic affordance, level of Street vending, commercial activities that pull users	These parameters are evaluated in both <b>observation &amp; user interviews</b>
<b>Emotional, cultural, &amp; symbolic Aspect</b> : Place identities & Meaning (Memory, affection, and feeling to place), & sense of belongings, Emotional experience, ceremonial space.	These parameters are evaluated by performing <b>user interview</b>

## 2.5 Urban Plan & Design Impacts on Imageability

The physical appearance plays an important role in influencing image & the sense of place. They contribute to making places more legible & memorable to the users and which can be identified, organized & navigated by people. To improve visual image for the place, all elements should be pleasing. These include landscape elements of varied & diverse greenery, distinct districts, width, type of pavement & the location & greenery building material, facade design, playing with topography are very important. The visual image of a city is a powerful meaning to the planner as the city is known to people. It provides a visual identity for the city & creates an everlasting unforgettable experience for tourists & a sense of civic pride for residents. (Jiang, 1960).

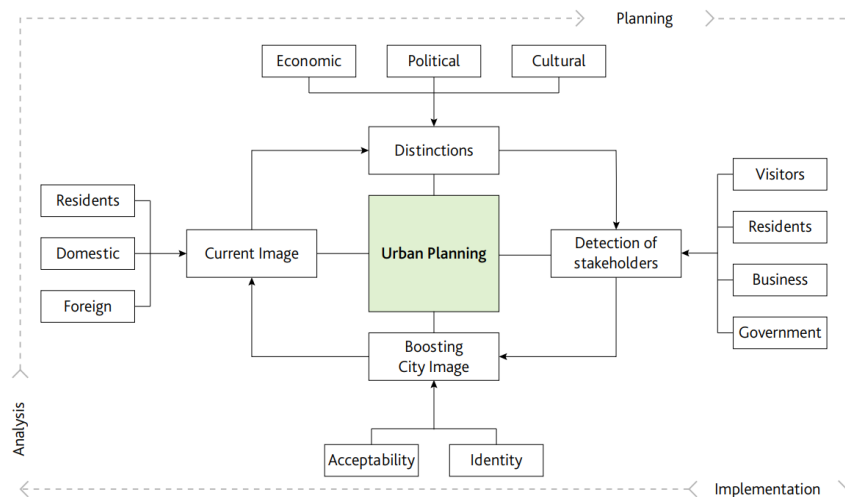


Figure 4 Importance of urban planning in boosting city image Source : (Ahmadreza, 2019)

## **2.6 Stakeholder and their roles on creating & managing Imageable City**

### **Local Administrations**

For decades, local governments tended to give low priority to the design and management of public space; other responsibilities, such as sanitation and road maintenance, took precedence (Carr et al., 1992). Local governments finance public spaces, they have to take into account transparency when contracting, the quality of materials and follow ups... Local governments are considered as architects and constructors' clients and in this regard, they should invest in guiding the implementation & design but also ensure the defense of the public interest. Local governments have a responsibility to promote the use of public spaces in an equitable way by finding the right balance between regulation and deregulation of the use of public spaces. The rules around the uses and activities on public spaces should be given particular attention to avoid negative impact on the urban life and how they might impact on vulnerable. (UCLG, 2016)

### **Private sector**

The private sector has long played a role in the design and management of public space, although the intensity of its participation has varied by place and period (Punter, 1990). Private owners may be encouraged by government incentives to provide publicly accessible space on their property or on their premises (Kayden, 2000). Since people would rather live, work or shop in pleasant surroundings than in an unattractive street or square. The private sector can presumably allocate more assets to improve the quality of public space than the local government could, given that local authorities always have to weigh such ambitions against other items on the budget. (Scruton, 1982). The primary motivation for the private sector to engage in redeveloping public space is to increase the return on their other investments. (Punter,1990; Bell, 2005).

### **Community Role**

Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody. (Jacobs Jane, 1961) To achieve the vision of a quality livable place, it is important to re-connect with the people, and understand their aspirations and expectations, and on occasions 'educate' them about characteristics of good urban places. This will ensure that the places that are created will be vibrant, that the people using them have a sense of ownership, and that both people and places will evolving over time and adapt to the changes in the world and needs of the future generations. (Walker, 2017).Planning does not need to be top-down or bottom-up process throughout. It can also become engaging and participatory.

## 2.7 Success stories of cities on the Imageability of Streets and sidewalks

Success stories are very important as they help to create visibility, credibility, and clarity of different subjects under the study. The success stories of famous, iconic Imageable streets will give insight to this study. The below success stories show how the strategies helped to create imageable and iconic street sidewalks around the globe.

### 1) *Champs-Élysées Street - Paris, France*

**Strategies:** *Outdoor cafés, Trees for shade, Wide sidewalks*

One of the most iconic streets in the world, Champs-Élysées is a beautiful tree-lined Boulevard with lovely outdoor cafés and stores on both sides of the street. A wide street, with 10 Vehicle lanes, it has wide sidewalks and active ground floors. (PPS, 2015)

*Features:* The buffer of trees makes it a great place to sit, enjoy a café au lait or glass of wine, and experience Parisian life. (PPS, 2015)



Source: Photo courtesy of Richard Boyle on Flickr

### 2) *Broadway Avenue - New York, USA*

**Strategies:** *Plazas, Rightsizing, Parking protected bike lanes, Mixed uses that encourage activity at different times of the day.*

Despite being a top tourist destination, narrow sidewalks and vehicular congestion previously made Broadway an unpleasant or unsafe place to be. (PPS, 2015)

*Features:* Minimizing traffic lanes, limiting turns, widening sidewalks, and adding separated bike lanes, pedestrian plazas and promenades.



Source: Photo courtesy of NYC DOT on Flickr

3) *Rue Saint Louis en l'Île, Paris, France*

**Strategies:** *Interesting shop window displays, Attractive and detailed building facades, Special pavement and sidewalk materials.*

It is a great place to wander and take in the lovely sights of Parisian life. The street invite visitors.

*Features:*

Quaint Parisian building facades,  
Have lovely balconies,  
Charming storefronts.  
(PPS, 2015)



Source: Photo courtesy of Richard Boyle on Flickr (PPS, 2015)

4) *Bleecker Street, New York, USA*

**Strategies:** *Interesting shop window displays, Attractive and detailed building facades, Special pavement and sidewalk materials.*

The West Village's Bleecker Street is a wonderful spot for exploring and window-shopping.

*Features:*

The street's playful store window displays and small-scale buildings offer passersby a fun and ever-changing pedestrian experience.  
(PPS, 2015)



Source: Photo courtesy of Richard Boyle on Flickr (PPS, 2015)

Table 14: Success stories and their strategies used to enhance the Image of Streets of sidewalks

<b>Street</b>	<b>City/ Country</b>	<b>Character/ Strategies</b>
Historic 25th Street	Ogden, Utah	<i>Streets with Large crowds with its outdoor dining cafés, restaurants, bars, merchant displays, amphitheater, and year-round events.</i>  <i>This street's popular weekly and annual events include bicycle races, yoga, art crawls, live theater and music, movie nights, a farmers market, and a Christmas Village.</i>
Strøget Street	Copenhagen, Denmark	<i>Strategies: Active storefronts and building edges, Clustered nodes of activity, Street markets</i>  <i>One of the oldest and longest pedestrian streets in Europe, Strøget is home to a variety of great destinations that draw thousands of pedestrians to this street every day.</i>
Church Street Marketplace	Burlington, Vermont	<i>The street is filled with fountains, public art, street entertainers, vendors, shops, restaurants, and events.</i>  <i>Church Street Marketplace occurs year-round, with events including farmer's markets, dance festivals, lighting celebrations, and winter markets.</i>
8th Street – Holland	Michigan, USA	<i>The street's sidewalks are heated to provide a snow-free experience, and there is an outdoor fireplace to keep visitors warm.</i>
Passeig de Gracia	Barcelona, Spain	<i>Strategies: Commercial Fronts and Activity, creating Wide sidewalks, Impressive Architecture along the sidewalk</i>  <i>One of the Widest Sidewalk</i>
King Street - Charleston	South Carolina	<i>This historic avenue is filled with beauty and architectural charm, as well as many unique independent shops with interesting window displays that attract residents and tourists alike.</i>  <i>The street is split into three nodes: the Design District, the Fashion District, and the Antique District.</i>
Park Avenue and Navy Street - Silent Lights	Brooklyn, New York	<i>Pedestrian scale lighting • Programming that attracts positive activity to the street uses lights to frame a pedestrian pathway at Park Ave &amp; Navy Street. It also has a wide array of bars &amp; eateries. Teanges used to skateboard, presence of subway station</i>
Carmel Street	Indiana	<i>Features: Roundabouts, Safe pedestrian crossings, Green Buffers.</i>  <i>The City began replacing signalized intersections with interestingly landscaped roundabouts to make Carmel a safer city for both drivers and pedestrians.</i>

**Source :** (PPS, 2015) and Complied by the author

## 2.8 Contextual Background

### 2.8.1 Introduction

There are very few literatures, reports, and recorded data available about Addis Ababa city the streets, and its sidewalks. This section deals with A.A city early urban development practices, street and sidewalk developments, and current practices in Image building activities of the city.

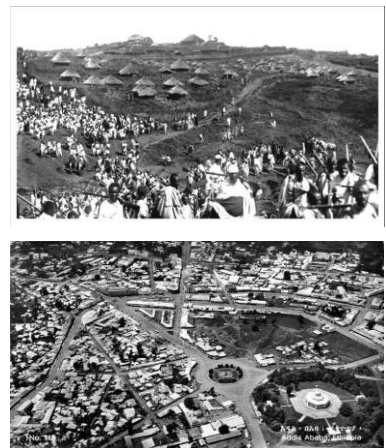
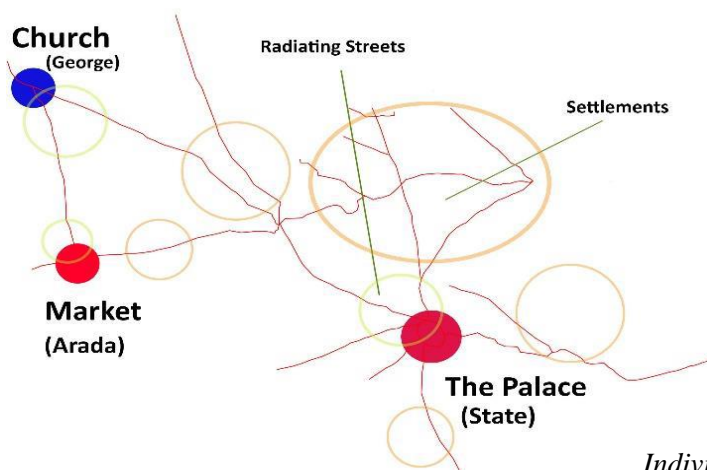
### 2.8.2 Addis Ababa City Profile

Addis Ababa is the capital city of Ethiopia with an official population of 3.28 million (ETH-Demo, 2018). Addis Ababa is home to 25% of the urban population in Ethiopia and is one of the fastest-growing cities in Africa. It is the growth engine for Ethiopia.(Worldbank, July 2015).

### 2.8.3 Early Developments of Addis Ababa and its streets

The early settlement plan of Addis Ababa followed an indigenous, spontaneous, and organic growth pattern according to a social and political hierarchy (Cheremet, 2009; Tufa, 2008). After the palace moved from “Entoto” to “Filwha” settlements started to grow surrounding the palace and the church. These settlements surrounding them were called “Sefers” (villages). (Tufa, 2008)

Settlements were shaped alongside three major institutions like primary and secondary nodes: the **palace, the market, and the church**. This settlement pattern led to the construction of a town that spread from around the palace as the primary focal node. (Giorghis & Gerard, 2007; Pankhurst, 1961. The first roads served to link “Sefers” by non-motorized modes of transport. The introduction of the railway from Djibouti to Addis Ababa and the introduction of a vehicle have played important role in the planning of the first streets. (AACPPPO, 2017)



*Individual houses in the city of Addis Ababa in 1897*

Figure 5: Roads linking the three functions of the early settlements of Addis Ababa

Source: <https://www.pinterest.com/pin/546202261049293642/>

## 2.8.4 Current Practices on Street & Image Building Developments of Addis Ababa

Ethiopia ranks the highest amongst the African countries on infrastructure expenditure (World Bank, 2016). In dealing with current practice of street & Image development of the city documents like (MUDH, 2017) that envisions smart, resilient, green, safe and comfortable streets for urban centers in Ethiopia; which aims to have adequate proportion of street share, livable, pedestrian friendly streets. (AANMT, 2018) that envisions creating walkable city for its dwellers by Improving convenience, comfort, & safety of walking. (54% of the city dwellers are pedestrians, 32% uses public transport & 14% uses private vehicles to move place to place). Also (AACPPO, 2017) AA city structural plan which aimed to increase the share of existing 17% street coverage & to allocate 30- 50 % of right-of-way to non-motorized transport can be mentioned.

Currently there are many activities, projects that are proposed and executed by different institutes. For instance IDTP is working to insure the concept complete street depending on factors such as the available right-of-way, traffic volumes, street-side activities, adjacent land uses and others there concept are based to provide walking, cycling, public transportation & land use. (ITDP, 2022). IDTP has developed (adopted) the below indicators perform Sidewalk Improvement Study in order to apply a complete street concept to improve mobility and road safety in five selected arterial corridors of A.A. (World Bank, 2022)

Table 15 : List of Indicators by ITDP to perform Sidewalk Improvement Study Project

Thematic	Parameters /Indicators
Urban Life	Presence of Commercial Stores, Bus Stops, office Jobs
Sidewalk Conditions	Narrow sidewalk detected (<1.5m) No sidewalk detected unmaintained sidewalk, presence of tactical Pavement
Urban Furniture	Trees, Benches, Street Lights, Obstacles, Dividing lanes
Pedestrian Crossing	Location of Pedestrian crossing, Universal Accessibility (ramps), Traffic Lights
Safety	Detected Jaywalking, Sense of lack of safety due to traffic, Sense of lack of safety due to urban environment, People walking on traffic lanes.

Source: (ITDP, 2018) (World Bank, 2022)

Table 16 : Streets Interventions that enabled to enhance the Image of AA City Streets

Examples	Owner /initiator	Type of intervention	Period	Partnerships	Scale
“Menged Le-Sew”/ Open street day	Civic society initiative	Once a month	2018 till know	Ongoing City Admin., WRI	Temporary corridors
A.A Non-motorized Transport Strategy	ITDP	Strategic planning document	Launched 2019	City Admin., UN-Habitat, MOT	Strategy document

Lebu-Jemo Bicycle corridor	AA City admin. (TMA, AATB)	Implementing a bicycle corridor	2020	WRI, BIGR, ITDP, TUMI	Corridor intervention
Churchill Avenue Redevelopment	Office of Prime Minister	Redesigning of a street corridor	2020 – 2021	Previous design: EiABC & NACTO	Corridor intervention

Source: (Kjellstrom, 2017)

Interims of Imageability, The modernity and walkability shifted the dwellers to use main street sidewalk for instance the redevelopment of Bole Road to today’s and Churchill Avenue shows how there has been a shifting focus towards pedestrianization and greenification and potentially away from cars in A.A. (McCann & Ward 2010).

### **Churchill Avenue Redevelopment Scheme**

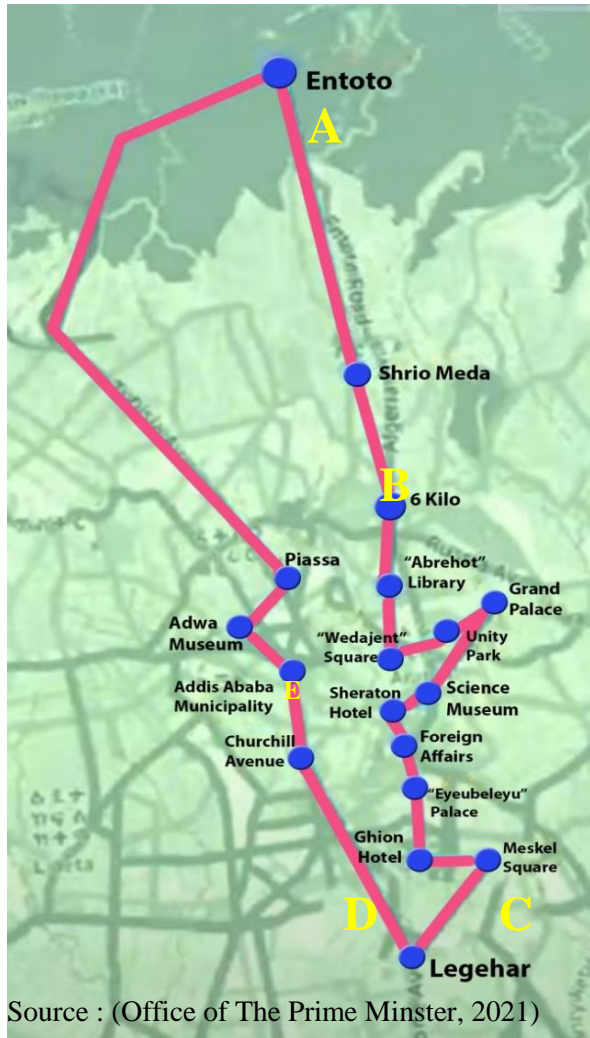
The Churchill Avenue redevelopment started in May 2020 and ended in June 2021. The project mainly contained the refurbishment of Meskel Square along with the beautification of the 3.5km Churchill Avenue that stretches from Addis Ababa City Hall to Meskel Square. (Ketema Journal, 2022) The experts tend to see this in two ways: an opportunity to create the modern African city leading the way in African city development and a gentrification process that creates a city for the elite pushing out the everyday citizen...Churchill Avenue development is motivated more by a concept: we need to beautify the city so we can **attract tourists**. (Kjellstrom, 2017) , And also the city government chooses to focus on **greenification** street projects in the center of the city & to attain the statement made in the current master plan: developing Churchill Avenue as the “**Champs Élysées’ of Addis**” (AACPPO, 2019, p. 58). The redevelopment schemes on the avenue include roadside widening pedestrian paths, Greenification, the introduction of a cycling lane, and sidewalk developments such as sitting benches and trash bins. Apart from the introduction of a wide, dedicated, and furnished pedestrian route, the project has used many techniques like blurring the boundary between public and private, by expanding the private into the public and vice versa. (Ketema Journal, 2022).

### **Public Space and Image building developments in Addis Ababa**

Addis Ababa has been going on different urban developments. Also, there are several image-building developments in the city. The city administration has recently launched different public space developments which empowered the availability and the quality of urban public spaces. For instance, City parks, plazas, streets, and sidewalk developments are the major ones.

## The scheme used to build/enhance the Image of the city (Addis Ababa)

Connecting the nodes and destination with a street connects the dots. Starting from Entoto, crossing different centers including the main city center, and these developments are connected with streets. The AA city also redeveloped of Churchill sidewalk which is part of the image building project.



### A. Entoto



### B. 6 Kilo – 4Kilo Sidewalk



### C. Meskel Square



### D. Churchill Avenue



### E. Addis Ababa Municipality



Figure 6: Picture and illustrations that shows AA City Current Projects that Enhance City Imageability

## **2.9 Summaries and lessons learned from literature review**

Public space is a domain of cities and it is also vital to the character of a city: networks of public spaces form the basis for social, political, cultural, and economic structures. Streets and their sidewalks, the main public places of a city, are the most vital organs. Streets as public spaces are drivers of urban prosperity. Citizens rely on sidewalks for many activities: social, cultural, and commercial purposes.

Image in urban design is a group of elements and identities which evoked and recognized by an observer. The image of a city or its environment is an outcome of two-way interactive processes between an observer and the environment it depends on the observer's perception. A pleasant street is an Imageable street. In dealing with the image of the sidewalks it is evaluated in terms of physical, social, economic, emotional, cultural, and symbolic parameters and also one can evaluate based on identity, structure, and meaning of place. An observer evaluates sidewalks based on the four physical parts (ground plane, roadside, Building wall & canopy) with relation to activities, memories, sense of belongingness and place meaning, and others. The result of the evaluation of the image of streets and their sidewalks can be positive, negative, strong, or weak.

Imageable Sidewalk is the result of an integrated contribution of policymakers, built environment professionals, local government, the private sector, & the community. From the success stories of Imageable Sidewalks, it can be learned that sidewalk development and their marketing strategies, also developing a theme for each sidewalk are important. The contextual review witnessed there & improvements in the street development & image-building process in the city of Addis Ababa.

Reflections on the parameters: - The mentioned universal measuring indicators and parameters are compatible to evaluate the context of Addis Ababa City but the degree of availability and understanding of features may impact the result on the Imageability score.

## Chapter 3. Research Method

### 3.1 Introduction

#### 3.1.1 Research Methodology

Research methodology is a systematic way to solve a problem. It is the science of studying how research is to be carried out. Essentially, the procedures by which researchers go about their work of describing, explaining, and predicting phenomena. (Goundar, 2012)

##### 3.1.1.1 Methodology for Assessment of public spaces

Allocation and use of public spaces is an experience, which is not equal for everyone since the factors such as age, sex, social groups, and racial minorities affect the comprehension of urban life. Recently, various methods for using urban space were the subject of most studies in different majors such as humanism, social science, and architecture. (Vahid Bigdeli Rad, 2014)

Based on different sources Imageability of urban space can be measured objectively and/or subjectively. It is evaluated objectively by measuring the physical environment's quality in association with some design criteria in shaping the image of a place. In contrast, subjective measurement uses the user's perception. The user's perception of the physical environment is a central issue in classic works in the urban design realm. (Ernawati, 2019) Also (Otto Clemente, 2018) noted that physical features are measured objectively while reactions are purely subjective.

### 3.2 Previous Studies and Methodologies Used to Study Urban Space and its Imageability

The below scholars used *direct interviews, likability questions, Draw/Sketch of city plans, Observation, and systematic measurement* techniques to study the Image of Urban Spaces.

Table 17 Previous studies and techniques used to study the Imageability of Urban Places

Author	Aim	Methods/Techniques
Kevin Lynch (1960), <i>Lynch Analysis</i>	<i>To find out the image of three cities (Boston, Jersey City, &amp; LA)</i>	<i>Used surveys (direct interviews) and illustrations (asking respondents to draw sketches of city plans or their fragments)</i>
Nasar, 1997 <i>Nasar Analysis</i>	<i>He focuses on the likability of the cityscape</i>	<i>Nasar (1997), in his work, identifies the likability levels as; most liked, liked, disliked, &amp; most disliked areas.</i>
Raiial, 1998	<i>He used the observation Method</i>	<i>Observation is a method for studying commonplace behavior.....This method does not inform about the inner feelings, images, attitudes, &amp; values of the observed.</i>
Jan Gehl, 1971	<i>Jan Gehl's method of observation</i>	<i>Gehl use to gather information about life on streets, such as tracing, tracking, mapping, counting, test walks, keeping a diary and photographs ....Jan Gehl proposes the method of observation with systematic measurement.</i>

Source (Kadriye Deniz Topcu a, 2012) , (Raiial,1998), (Westlund, 2018),(Gehl & Svarre, 2013).

### 3.2.1 Sample Selections to Study the Image of Urban Spaces

A sample is important because it is very hard to perform a census study due to constraints like finance, time, & other resources. And the sample sections should be systematic & representative.

Table 18 Sample selections to study Image of Urban Spaces

<b>Contributor</b>	<b>Aim</b>	<b>Sample population</b>
<i>Lynch (1960)</i> <i>(Bently, 1985)</i>	<i>Qualitative Study on City Imageability of Three Cities</i>	<ul style="list-style-type: none"> <li>- 100 respondents for each City.</li> <li>- The number of people interviewed is about 20- 30 for every area</li> <li>- There should be a balance in sexes, &amp; ages in the sample. , Choosing people who frequently use the site or its immediate surroundings</li> </ul>
<i>Koseoglu &amp; Odenor, 2009</i>	<i>A study for evaluating land-marks of Ayvalik City, Turkey</i>	120 Respondents
<i>Ujang, 2008</i> <i>(Usman, 2009)</i>	<i>A study of place attachment for traditional streets in Kuala Lumpur</i>	110 respondents




Table 19: Scholar’s recommendation for performing qualitative studies of Imageability in Urban Space

<b>Contributor</b>	<b>Aim /Study</b>	<b>Recommendations on sampling</b>
Creswell (1998)	<i>Qualitative</i>	<ul style="list-style-type: none"> <li>- examine three to five cases in a case study</li> <li>- Interview 15-20 people during a grounded theory study</li> </ul>
	<i>phenomenological</i>	interviews with up to 10 people
	<i>grounded theory</i>	interviews with 20-30 people
Morse (1994)	<i>Ethnographies Study</i>	30-50 interviews and/or observations

### 3.2.2 Techniques of Interview to Examine Public Space

Interviewing Methods is generally a qualitative research technique, which involves asking open-ended questions to converse with respondents and collect data about a subject. (Questionpro, 2012)

Table 20: Bently’s Interview Technique to Perform Lynch Concepts of Imageability

<b>Street Corners Interviews:</b> Done by stopping People It is preferable to the perception and opinion of the people	<b>Doorstep Interviews :</b> Done by going to people's homes: It is useful for tapping the view of residents	<b>Interviewing at Local Work Places and Cafes:</b> During a break.It is preferable to get people to draw their images.
		

Source: : (Bently, 1985)

## **Major lessons from previous studies**

The image of the sidewalk can be evaluated on both objectively and subjectively. The Technical (Physical) and User Perception (Likability) evaluations are equally important. For the subjective evaluation (interview) a sample of 30-50 interviews per each case area can be representative. The sampling should consider dispersed factors like age, sex, data collection spots & other Street corner interview techniques are favorable to perform the study of Image of the streets sidewalks.

## **3.3 Research Design Approach of the study**

Following (Martinez 2014; Pacione, 2003) this study used a case study-based explanatory research by applying both qualitative and quantitative research methods. The quantitative (objective) indicators are observable & measurable conditions used for technical evaluation for instance the presence of the sidewalk amenities, and the qualitative (subjective) method is related to the perceived experiences.

### **3.3.1 Data Sources**

The data to do this research was obtained from both primary and secondary sources. The primary data was gathered in the form of face-to-face user interviews, site investigations & evaluation (expert observation). The secondary data is collected from written materials and documentaries. The data sources are further explained in the below session.

#### **3.3.1.1 Primary Data**

##### **Site Investigation/Technical Evaluation**

The Site Investigation (Technical Evaluation) is used to attain objective one. It focused on the assessment of physical layout, activity, and functions on & surroundings of the case study sidewalks. The evaluation indicators were adopted from different sources and the classifications was done by attributing a score of 1 to 5, 1 representing Very Bad and 5 representing Very Good, the weightings of the indicators are based on international & contextual standards. The techniques used for the data collection were *Mapping* to illustrate the spatial streetscape & neighborhood. *Photography* as supportive evidence. *Pedestrian Counting's & Field Notes* (descriptive observation notes).

##### **User/Pedestrian Interview**

To attain objective **two** of the study pedestrian interviews were conducted by stationing on each case study's sidewalks. A pen-paper questionnaire was conducted in the form of **a face-to-face**

**interview** technique with structured questions. These interviews aimed to acquire the perception of sidewalks users. The questionnaire used a five-point Likert-scale ranging from 5 Strongly Agree to 1 Strongly Disagree and also open ended questions.

### **3.3.1.2 Secondary Data**

To attain the three objectives secondary data sources are important as they give several written & documented information about a specific study. This study reviewed secondary data which were cited from different books, journals, reports, maps, websites satellite images, & documentaries. AA City LDP, CAD Files, MCC Manual served as a major supportive source for objective one & also the books, journals ,websites were very important to attain objective two & objective three.

### **3.3.2 Population and Samples**

The population for this study was street sidewalk users on the selected case study sidewalks. Respondents on the four case study sites were chosen randomly in other words simple random sampling was employed and 50 interviews were conducted on each case study sidewalk and a total of 200. The sizes of interviews are based according to Creswell (1998) & Morse (1994) who suggests 30 – 50 Interviews to per case area perform qualitative study (Interview).

### **3.3.3 Data Analysis and Presentation**

#### **3.3.3.1 Data Analysis**

To attain objective one (technical examination of the case study sites) the raw data's was analyzed by MS Excel also GIS, Auto cad, Google Earth files were used to assure the collected data's align with the fact on the ground , To achieve objective two the structured questionnaire from the survey was assembled, encoded, & analyzed by SPSS statistic software (analyzed the frequencies of every preference variable in relation to the image of street sidewalk measuring parameters like personal status, favorite streets, feelings while visiting the site sidewalks, physical layout, function activity, emotions perceived while visiting the sidewalk & others ) The open-ended questionnaire's data were analyzed by translating, grouping, interpreting, & summarizing.

#### **3.3.3.2 Data Presentation**

To this descriptive study various the Data presentation methods were implemented. To meet objective one tables, maps, pictures, texts. For objective two & three Tables, maps, pictures, illustration and text are used.

### 3.4 The Research Design Flow Diagram

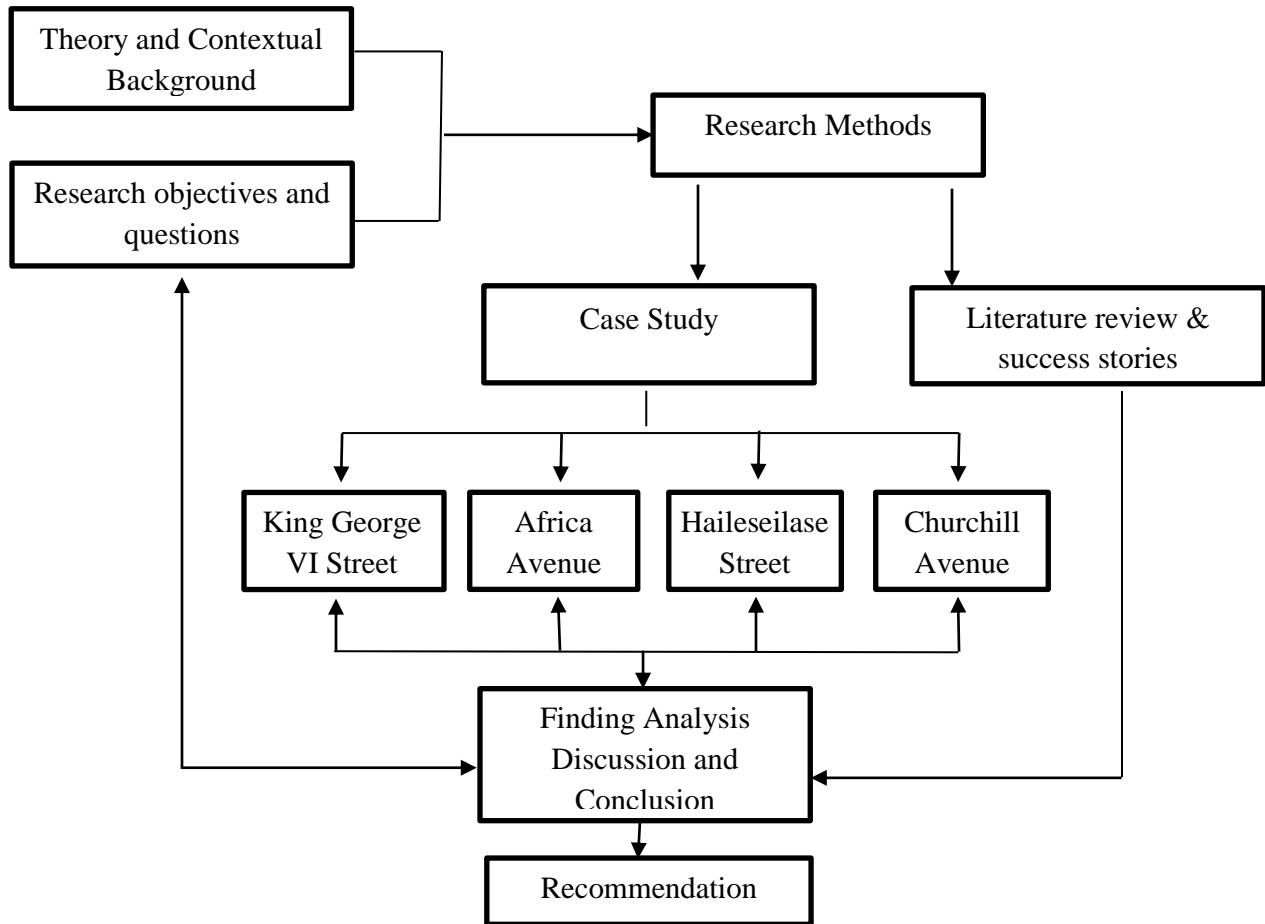


Figure 7 Flow Diagram showing the Research Design

### 3.5 Summary on the selected methodologies

In order to measure image of the street and its sidewalk there are various research tools, and techniques. To suite this research context a case study based explanatory research is selected, qualitative (User interview) and quantitative (technical/site evaluation) measurements are selected, both primary data (for the Site /Technical evaluation of the case study sites; pedestrian counting, mapping, photography, sketches and for the Pedestrian interview; pen & paper questioner with structured format is used) and Secondary data sources are (Books, Articles ,Maps , Web satellite imagery) used to attain the objectives. The data analyzed using MS Excel, SPSS & AutoCAD and presented in the form Tables, maps, pictures, illustration and texts.

### 3.6 Study Area

#### 3.6.1 Case Study Area Selection

Samples of the study were taken from different parts of the Addis Ababa street sidewalk & named case study sidewalks. These case study sidewalks were selected based on two parameters. For one, it was designed a **preference survey** for the residents of Addis Ababa. After the selection, the shortlisted street sidewalks were further evaluated with the flowing **five criteria**.

- 1) Make sure the sidewalks are part of the main street of the city.
- 2) Location of the street sidewalk in the inner city
- 3) Continuity of the street sidewalk
- 4) Connectivity of the street to each other
- 5) Having different character functions and activity

#### 3.6.2 Preference Survey

A preference survey is an important tool as it helps to understand people's attitudes toward the subject under study. For selecting case study sidewalks a preference survey was employed for the residents of Addis Ababa as one site selection technique. In this survey, sidewalk users were randomly selected, each respondent was asked to forward three preferable main streets sidewalks that they prefer to walk, relax/enjoy, socialize or in other words they were asked which sidewalks are the most favorite or Image-able to them & also these respondents were required to forward answers to which sidewalks are their least favorite. Flowing (Ernawati, 2016) 300 respondents were contacted with face-to-face questioners & from them, 56.3% were male & 43.7% were female. The age distribution was 18-24(26%), 24-45(51%), 45-65(19%), & >65 was 4%. The survey was mainly collected by stationing at “Megenagna”, “Torhayloch”, “Bole”, “Saris”, “Piassa”, “4 kilo”, “Mexico”, & “Kaliti” areas, which are among the main & sub-centers of the city. The full results of 300 respondents are attached to Annex 3 and the top 6 sidewalks a listed below.

Table 21: Result of the Top 6 selected sidewalks from respondent’s opinion poll

Main Street Sidewalk Lists	Sidewalk user respondent’s response as Favorite/Preferred Main Street Side Walk	Sidewalk user respondent’s response as Least Favorite/Preferred Main Street Side Walk	Sidewalk user respondent’s response as Favorite/Preferred Main Street Side Walk Segments/places if any
Churchill (Piassa) - Lagare	97	2	Post office, Delachin Monument, Beherawi Theater area
Bole Street (Bole Deledeye – Meskel Square)	82	17	Friendship, Around “Dembel”, Shewa Dabo, Flamingo,
4 Kilo -6 Kilo	78	11	Romina, 6 kilo

Sarbet -Mechare- Karl- Bistrate Gebriael	70	6	Bistrate Gabriel area
4 kilo- Piassa	68	10	Jewelry Shop,70 “Derja” Area
Megenagna -CMC –Ayat	56	3	Yetebaberut ,Century Mall Area

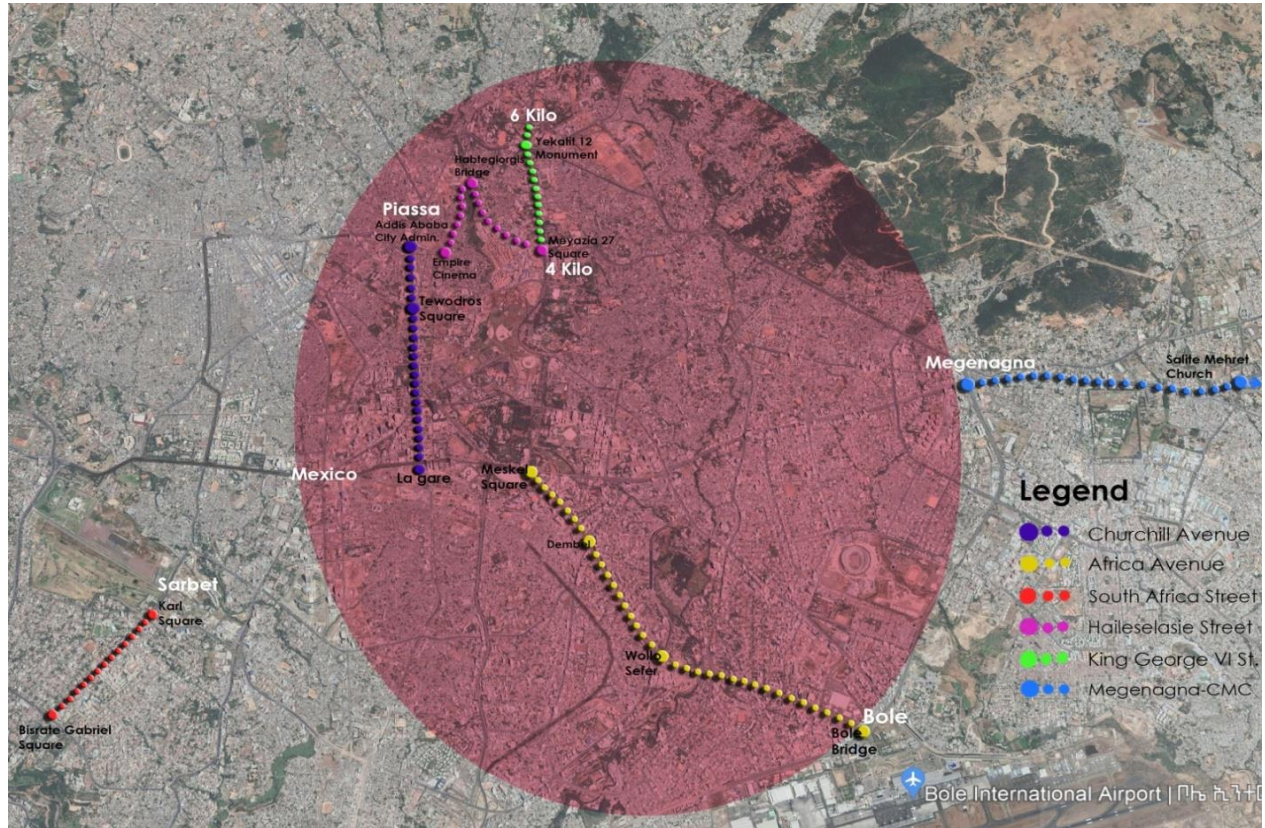


Figure 8: Top 6 selected sidewalks overview

### 3.6.3 Evaluation of the selected sidewalks based on selected parameters

The result of the preference survey was further evaluated by the following points after making sure the sidewalks are part of the main streets of the city.

- Is the case study sidewalk part of the main city center or near the main city center?
- Is the case study sidewalk the main city corridor/major transit, do the sidewalk have access and the presence of public transport?
- Are the case study sidewalks interconnected?
- Is the case study sidewalk not part of the short-term redevelopment plan?
- Sidewalk activity and character, presence of continues development, street characters. (Mixed developments with the presence of Leisure, work, and residential activities).

Table 22: Evaluation of the top 6 selected sidewalks based on 5 criteria

<b>Top 6 selected sidewalks</b>	<b>Found On the Main City Center or near MCC (10%)</b>	<b>Major corridors of the city, the Presence of public transport (10%)</b>	<b>Continuity/ Connectivity to each other (10%)</b>	<b>Not part of the short-term redevelopment plan (10%)</b>	<b>Activity/ Function/ Character/ Representative (10%)</b>	<b>Total (50%)</b>
Churchill – Lagare	Part of MCC	Major Corridor, Public Transport Available	Yes	Re-Developed	MUD (working, living, recreation)	<b>50</b>
	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	
Bole Deledeye– Meskel Square ( Bole Road)	Near to MCC	Major Corridor, Public Transport Available	Yes	Relatively New Development /Upgraded	MUD (working, living ) & more of recreation Center	<b>46</b>
	<b>8</b>	<b>8</b>	<b>10</b>	<b>10</b>	<b>10</b>	
4 kilo -6 kilo	Near to MCC	Relatively not a Major Corridor, Public Transport Available	Yes	Relatively New Development/ Upgraded	MUD (working & living), Education Center	<b>43</b>
	<b>7</b>	<b>6</b>	<b>10</b>	<b>10</b>	<b>10</b>	
Sarbet – Mechare- Karl- Bisrate Gebriael	A bit far from MCC	Relatively not a Major Corridor, Public Transport Available	No	Relatively New Development/ Upgraded	MUD (More of living & recreation) also working	<b>32</b>
	<b>6</b>	<b>7</b>	<b>0</b>	<b>10</b>	<b>9</b>	
4 kilo- Piassa	Near to MCC	Major Corridor, Public Transport Available	Yes	Historic	MUD(working, living, recreation), Historic center	<b>46</b>
	<b>8</b>	<b>8</b>	<b>10</b>	<b>10</b>	<b>10</b>	
Megenagna - CMC -Ayat	Secondary/ Sub Centers	Major Corridor, Public Transport Available	No	Relatively New Development/ Upgraded	MUD (working, living, recreation)	<b>35</b>
	<b>5</b>	<b>10</b>	<b>0</b>	<b>10</b>	<b>10</b>	

Table 23: The sum weight result based on two parameters

<b>Top 6 selected sidewalks</b>	<b>Result of preference survey (Sidewalk score/300 respondents) (50%)</b>	<b>Results of evaluation based on 5 criteria (50%)</b>	<b>Total (100%)</b>
Churchill – Lagare	32.3	50	<b>82.3</b>
Bole Deledeye– Meskel Square (Bole road)	27.3	46	<b>73.3</b>
4 kilo -6 kilo	26	43	<b>69</b>
Sarbet - Mechare- Karl - Bisrate Gabriel	23.3	32	<b>55.3</b>
4 kilo- Piassa	22.6	46	<b>68.6</b>
Megenagna -CMC –Ayat	18.6	35	<b>53.7</b>

Based on the findings and due to budget and time constraints the following four case study sidewalks were selected as case study sites *Churchill – Lagare (Churchill Avenue)*, *Bole Deledeye - Wello Sefer Square (Africa Avenue)*, *4 kilo -6 kilo (King Gorge VI Street)*, and *4 kilo- Piassa (Haileselesie Street)*.

### 3.7 Over view of Addis Ababa City Streets and there sidewalks

Since its early development, Addis Ababa city streets and its sidewalks have been a place for social spaces beyond mobility routes. Walking around Addis Ababa, a city of over 3 million inhabitants, one could immediately observe that the streets are and have been utilized for diverse sets of activities beyond mobility” ... States that most dwellings extend their household activities such as washing clothes drying spices, cooking, unmanaged commercial activities, etc. onto the streets (Baumeister & Knebel, 2010) “(Hailu, 2020).

While walking it can be observed that, the Streets and sidewalks of A.A have different characters & functions. There are several main street sidewalks in the city with well-designed physical features; on the other hand, there are several sidewalks with poor appearance and activities.

#### 3.7.1. Appearance, function, and activity held on the sidewalks of the city

The following sections show AA city's main street sidewalk's appearance, function, and activities.



Figure 9: Appearance of the Main Street Sidewalks of Addis Ababa



*Sidewalks holding objects rather than activities*



*In some areas of the city sidewalks are garbage places*



*A place for different service-giving utilities*



*Sidewalk serving as Market Place*



*A dining space*



*Pleasant well-designed sidewalks*

Figure 10: Appearance, Function, and Activities held on Main Street Sidewalks of Addis Ababa



*A place of enjoyment*



*A place for celebration*



*A place for recordings of movies, music scene*



*A place for fun and performance*



*A place to find your luck  
(A person buying lottery tickets)*



*A place to preach /perform religious activities*



*A typical movement place*

Figure 11: Function and Activities held on the Main Street Sidewalks of Addis Ababa

### 3.8 Introduction to the case study Street Sidewalk

The selected sidewalks (Churchill Avenue, Africa Avenue, King George VI Street, & Halieselassie Street) are located in the inner part of the city. Africa Avenue is located in Bole Sub city, Woreda 3. It is approximately a 20 min drive from the city center of Piassa. King Gorge VI Street is located in the Gulele sub-city, and Halieselassie Street is located at Arada & Gulele sub-city Woreda-06 & 02 respectively heading the west tip of the sidewalk is a minute away from the city center Piassa. Churchill Avenue is located at Arada, Lideta & Kirkos sub-city, Woreda 01,08 & 07 respectively the north tip of the sidewalk is a minute away from the city center Piassa.

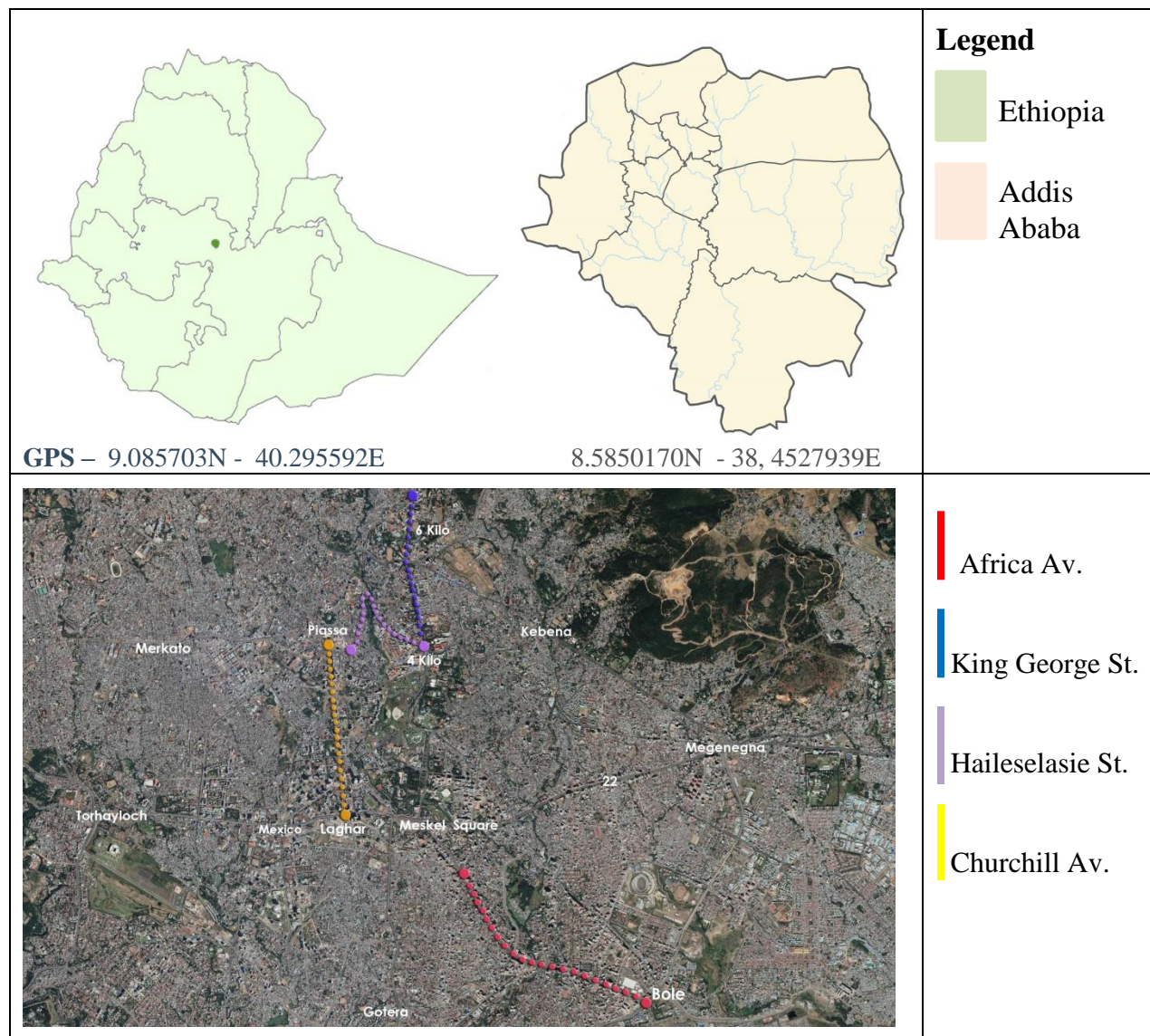


Figure 12. Location Map of the case study sidewalks

### 3.8.1 Africa Avenue

The street is located on the way from “Bole” Bridge to “Meskel” Square. It is also known as “Bole Street”. This street welcomes travelers, diplomats, and tourists who enter the city by airplane. The sidewalk is one of the major sidewalks of the city. It has a medium sidewalk width, modern architecture, a few old buildings, modern cafés, and shopping malls; hotels are present along the sidewalks. The district function is categorized as mixed.

Marc Angélil in his publication “Addis through the looking glass” styled Africa Avenue as:

*Bole Road is an important infrastructure and commercial boulevard of Addis Ababa. It connects the Bole International Airport in the southeast part of Addis to Meskel Square in the center of the city. This road is where one can experience rapid transformations of the urban fabric being derived from the country’s economic development..... The glass facades along this road are now shaping a new face of the city by Western standards. While driving along Bole Road the image of the newly developed city is very present (Marc Angélil, 2008)*

While walking on Africa Avenue a person can observe several foreigners and tourists walking around, youths with fashionable dressings, the presence of expensive branded shops, services, and hotels, there are several sales agents for selling their real estate and other products. people believe that the majority of the district dwellers are rich’s, it can be observed that even the beggars on this sidewalk demand more money than other places but there are several low-income group sidewalk users on this street for instance construction workers, shoe shiners, and others. This street is dedicated to diplomats and it can be observed that diplomats' vehicles rush on the motorway also there are several federal policies around the sidewalks to ensure the security of the district as the district is a path & home for different diplomats, government, and parliament officials.



Figure 13: Pictures showing one of the segments of the Africa Avenue sidewalks

### 3.8.1.1 Physical Layout and Appearance Information of Africa Avenue

The ROW of Africa Avenue is around 35M and the sidewalk width varies between 3-6M. The total length of the study sidewalk is about 2 KM and for the study, it was divided into 4 segments as seen in the below table and Map.

Table 24: Description of the study segments

Segments	Starting Landmark	Ending Landmark	Segment Length
Segment 1	Bole Bridge (A)	Snap Plaza (B)	500M
Segment 2	Snap Plaza (B)	Tropical Mall (C)	500M
Segment 3	Tropical Mall (C)	Bole Rwanda Overpass (D)	500M
Segment 4	Bole Rwanda Overpass (D)	“Welo Sefer” Square (E)	480M

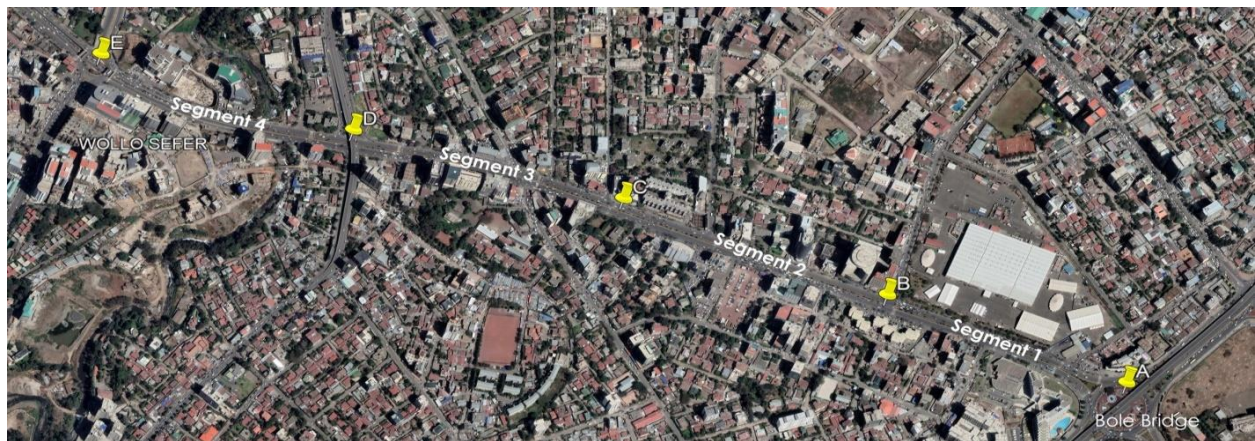


Figure 14: Map of the Study segments

As seen on the map the district land uses a Mixed-use having commercial, recreational, and residential but the presence of service buildings is less.



Figure 15: The Building Uses of Africa Avenue

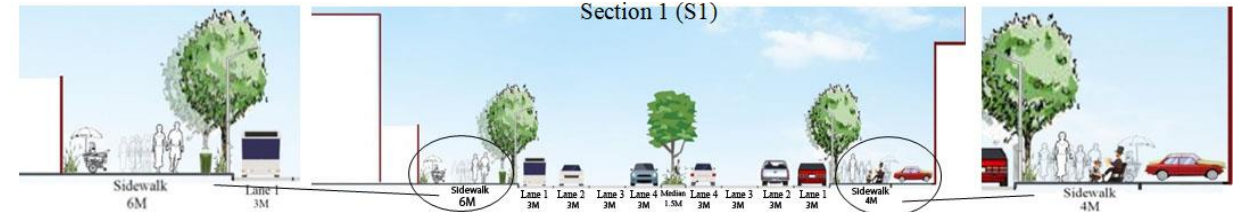
Table 25 Introduction to Segments 1 and 2 of Africa Avenue

### Introduction to Segment 1

The width of the sidewalk ranges from 3 to 6M, the right sidewalk is mainly occupied by the millennium hall and NOC petrol station. The left side holds mixed commercial, mixed residences, and a hotel. The buildings along this segment are a mix of old and new for instance skylight is modern and unique. The mixed residences are old with 6-8 stories and also they have recessed spaces used for outdoor cafes. This segment is a node and also it holds transportation stations, there is a higher presence of people, street vendors, and beggars than in the other segments. Also, a roundabout is found in this segment.



Section 1 (S1)



### Introduction to Segment 2

The width of the sidewalk ranges from 3 to 5M, the right sidewalk is mainly occupied by malls, hotels, supermarkets, traditional restaurants (Heber Ethiopia), NOC headquarters, and government official residences. The left side has malls, mixed residences, a gymnasium, a parking service, and a cinema. A few buildings along this segment are new and have a unique shape for instance NOC Head quarter, DH Geda, Friendship Mall & Momona Hotel. The buildings on this sidewalk have 8-14 stories. This segment holds many recreational centers, shops, and a few outdoor dining.



Section 2 (S2)

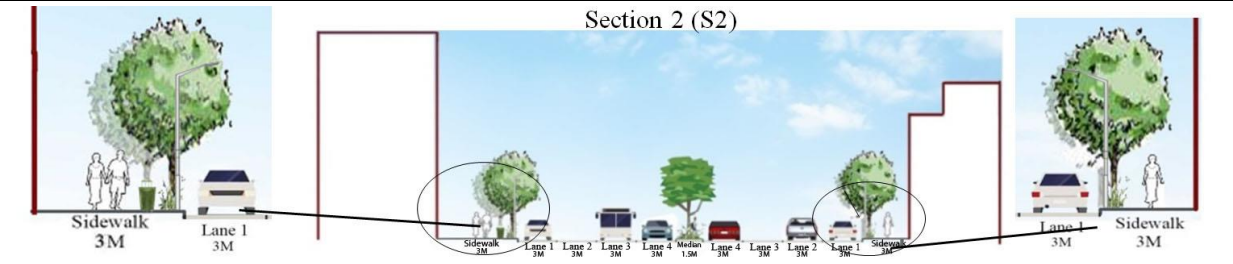
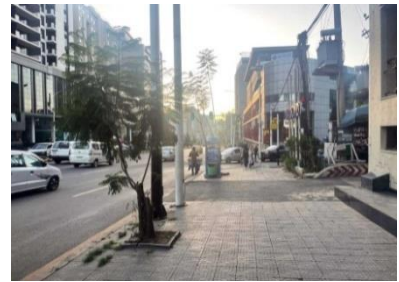


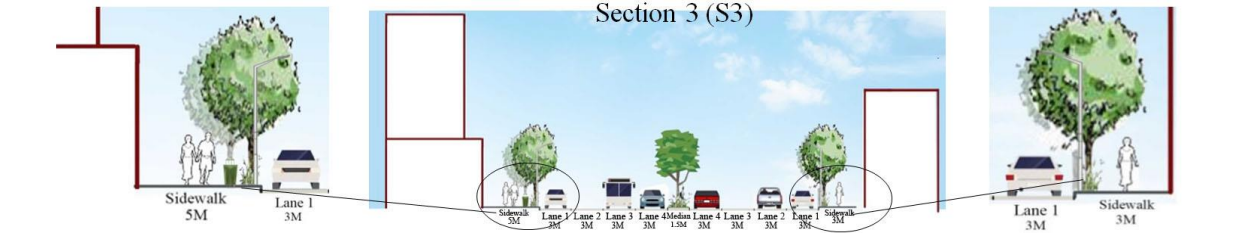
Table 26 Introduction to segments 3 and 4 of Africa Avenue

**Introduction to Segment 3**

The width of the sidewalk ranges from 3 to 6M, the right sidewalk is occupied by malls, offices, mixed residences, hotels, and public parks. The left side of the sidewalk is occupied by malls and mixed commercial buildings. The buildings along this segment are relatively new but there are a few mixed-residence old buildings. The building heights in this segment range between 4-15 stories, A public space was created under the Bole Rwanda overpass (different recreational options are available for children, youths, and elders) having a fountain and beautiful landscapes but not yet opened to the public.



Section 3 (S3)

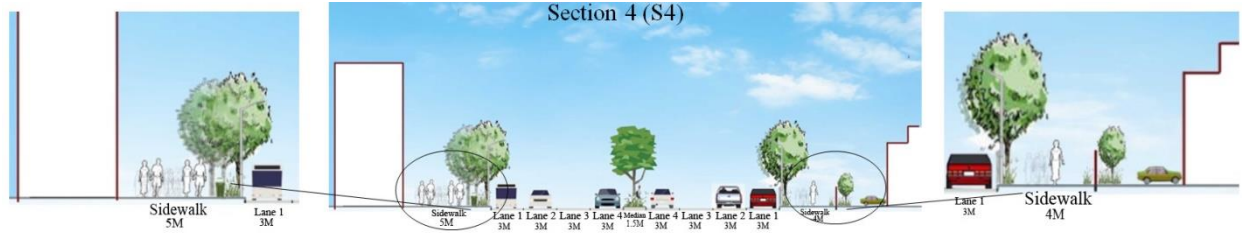


**Introduction to Segment 4**

The width of the sidewalk ranges from 4 to 6M, “Bulubla” river passes through this segment also the river has buffer zones on both sides. When dealing with building uses along the sidewalk office, headquarters of the world bank and Safari com, an embassy, and a few mixed residential buildings occupied the right side. The left side holds malls, commercial buildings, and a few mixed residences. The buildings on this sidewalk have 2-17 stories. This segment is relatively dormant especially since the right side has blind walls in addition to the river buffer zones. “Wello Sefer” roundabout is part of this segment.



Section 4 (S4)



### 3.8.2 King Gorge VI Street

The street is located on the way from “4-kilo” to “6-kilo” square. It is also known as “4 Kilo” or “6 Kilo”. 4 campuses of Addis Ababa University are found along this sidewalk which brought a special character to the site also churches, residences, government organizations, and business places are available. The street has a wide sidewalk; most of the buildings are old, have relatively similar skylines and some have fenced gates, big trees are present on the site, and in some areas, these trees give shade throw out the day.

This street usually holds different activities the students of the four campuses and high schools are the colors of the street. There are church activities around the St. Mary Orthodox Church, St. Markos church and also the chair of the “Ethiopian Orthodox Tewahodo Church” is found along this sidewalk. The street also leads to one of the main traditional cloth and wavers shops (Sheromeda).

The majority of the street users are the dwellers of the area, students, academic staff, and the people who need job adverts. This street usually exhibits rushes in the morning and afternoon. Other than the above some people come to this street to rejoice their old memories of their college life. Also, the presence of vacancy announcement pinboards pulls several people who need jobs, there are few outdoor cafes, ample book vendors and illegal street vendors are available.



Figure 16: Pictures showing one of the segments of the King Gorge VI Street sidewalk

### 3.8.2.1 Physical Layout and Appearance Information of King Gorge VI Street

The ROW of King Gorge VI Street varies between 25-35M also the sidewalk width on each side is between 3-11M. The total length of the study sidewalk is about 2 KM and for the study, it was divided into 4 segments as seen in the below table and maps.

Table 27: Description of the study segments

Segments	Starting Landmark	Ending Landmark	Segment Length
Segment 1	Miaziya 27 Memorial Square (A)	Patriarch Residence (B)	500M
Segment 2	Patriarch Residence (B)	Ministry of Finance (C)	500M
Segment 3	Ministry of Finance (C)	Yekatit 12 Memorial Square (D)	500M
Segment 4	Yekatit 12 Memorial Square (D)	Meskaye Hizunan Medhanealem School (E)	500M

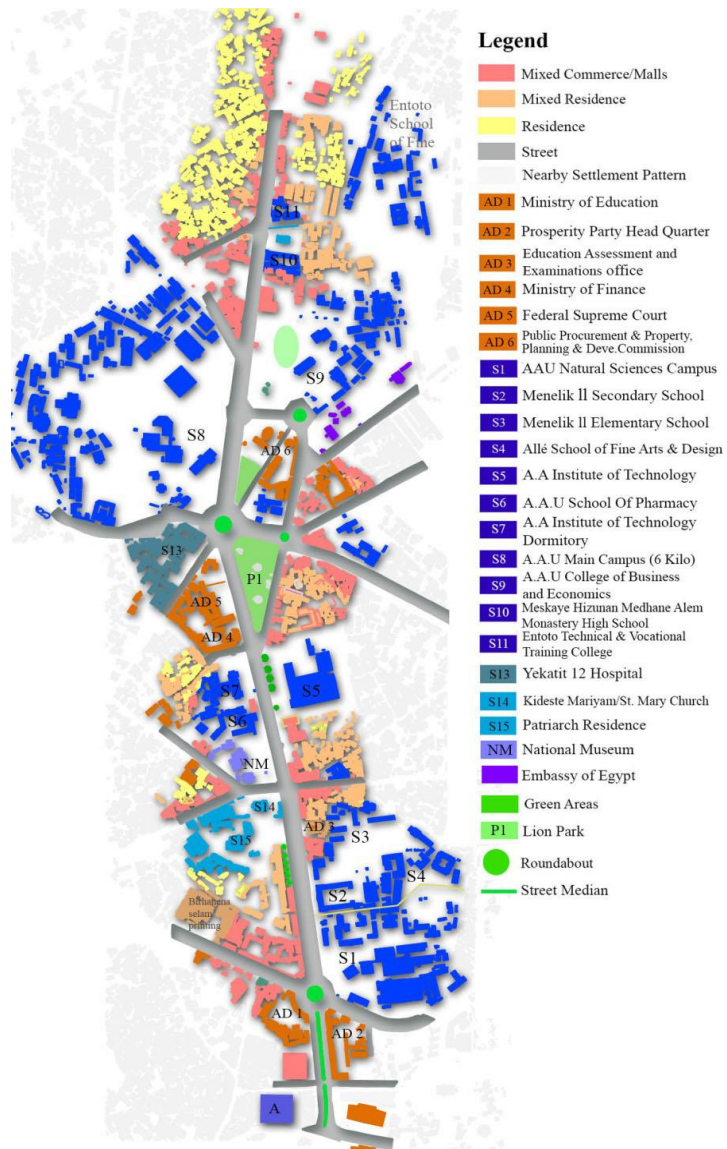


Figure 17 Map of the study segments

Figure 18 Land use of King Gorge VI Street

Table 28 Introduction to Segments 1 and 2 of King Gorge VI Street

<p><b>Introduction to Segment 1</b></p> <p>The width of the sidewalk ranges from 3 to 8M, the right side is occupied by AAU Natural Science Campus (4Kilo) and “Menelik” Secondary School. The left side has mixed commercial and mixed residential buildings. The buildings on both sides are old with 2-9 stories and few have arcades. There are few standard street benches and trashcans but structures made to hold the shrubs (greeneries) are also serving as a sit. This segment holds several outdoor cafes like “Maleda”, “Romina”, “Koba”, and game zones also in front of these spaces there is a recessed space that is usually used for parking and seasonal bazaar activities. The Job vacancy pin board is the uniqueness of this segment it pulls many people to this sidewalk. There is a roundabout with a memorial monument (Miaziya 27), a transport station is also present on both sides and also several illegal vendors are present in this segment.</p>		
		
<p>Section 1 (S1)</p> 		
<p><b>Introduction to Segment 2</b></p> <p>The width of the sidewalk ranges from 3 to 8M. The right side is composed of mixed commerce and AAIT (5 Kilo University). The left side is occupied by the EOTC patriarch's residence, “Kidste Mariyam” church, the national museum, and other service providers agencies (all are institutions). Most of the buildings are old but there are very few new buildings on the right side. The buildings have a height of 1-10 stories. It is very difficult to locate street benches and trashcans along the sidewalks. The left side has relatively a better presence of green and shades than the right side.</p>		
		
<p>Section 2 (S2)</p> 		

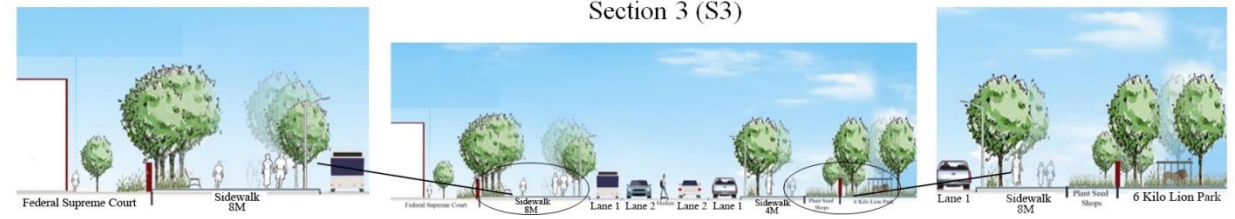
Table 29 Introduction to segments 3 and 4 of King Gorge VI Street

**Introduction to Segment 3**

The width of the sidewalk ranges from 3 to 8M. The right side holds mixed commerce, some portion of AAIT (5 Kilo University), and Lion Park. AAIT Dormitory, the Ministry of Finance, the Federal Supreme Court, and Yekatit 12 Hospital (all are institutions) occupy the left side. The buildings are a mix of old and new having 1-4 stories. There are street benches and trashcans, especially in front of “Yekatit 12” hospital (their presence is ample). The left side has relatively a better presence of green and shades than the right side. There are some outdoor cafes which are found in front of Lion Park. “Yekatit 12” roundabout is found at the end of this segment.



Section 3 (S3)

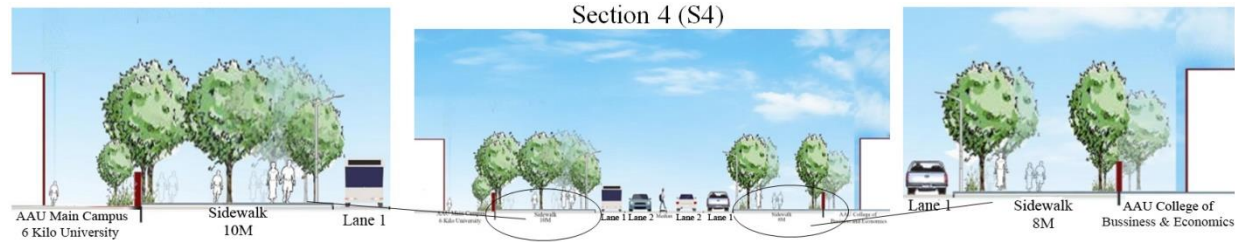


**Introduction to Segment 4**

The width of the sidewalk ranges from 3 to 10M. On the right sidewalk Debab recreational center, Public procurement agency, and very few mixed commerce are present. The left side is mainly occupied by AAU Main Campus and the rest is Mixed Commerce. The buildings are a mix of old and new with 1-9 stories. The presence of street benches in this segment is very less. This segment has more blind walls than the others. “Yekatit 12” roundabout is found at the beginning of the segment.



Section 4 (S4)



### 3.8.3 Haileselassie Street

The street is located on the way from “4 Kilo” to “Piassa” (Cinema Empire). It is also known as “Piassa” (An Italian word meaning a public square or a market place). The sidewalk as well as the settlements is old and historic with different architectural styles. The sidewalk is relatively narrow and winding, and almost all of the buildings are old and historic also the site has relatively similar skylines, there are modern cafés, shops like clothes, shoes, and mainly jewelry shops along the sidewalk. In general, the sidewalk has a mixed function. Local novels and music usually appreciate memories on this sidewalk.

*Most of the city’s jewelry shops are located in this area along with several banks, hotels, restaurants, and animated bars. It is also said to be the best area in town to savor the coffee for which Addis Ababa is rightly renowned. Espresso machines churn out endless cups of delicious makiato (macchiato) and wotet (latte) coffees. Some of the hottest cafés in Arada are the Arada Bar and Restaurant, Tomoca Coffee, and Enrico Bar. When I visited Arada, I was surprised by its relaxing atmosphere. (Marc Angélil, 2008)*

This street is one of the oldest streets in the city. This sidewalk is well to exhibit Italian, Arminian, and Indian architectures which are mainly single and double story the buildings along the sidewalk mostly have a similar skyline. This street is one of the tourist attraction sites of the city. The city dwellers especially the older generation have a lot of memories of this street because of the recreational centers along and near the street like “webe berha” people used to come to enjoy the nightlife at nightclubs and bars, cafes, hotels, cake, and sweet shops. The music recordings including “Tango” and “Mohamud Musika Bet” had been the grace of this sidewalk but now few of the above shops are available. There are recreational services around these sidewalks that can fit both the riches and the poor’s pocket who need to enjoy and hang out.



Figure 19: Pictures showing sidewalks of Haileselassie Street

### 3.8.3.1 Physical Layout and Appearance Information of Haliesselassie Street

The ROW of Haliesselassie Street varies between 17-20M also the sidewalk width on each side varies between 2.5-6M. The total length of the study sidewalk is about 2 KM and for the study, it was divided into 4 segments as seen in the below table and Maps.

Table 30: Description of the study segments

Segments	Starting Landmark	Ending Landmark	Segment Length
Segment 1	Ministry of Education (A)	Arat Kilo Public (B)	500M
Segment 2	Arat Kilo Public (B)	“100 Derja” (C)	500M
Segment 3	“100 Derja” (C)	Habesha Jewelry (D)	500M
Segment 4	Habesha Jewelry (D)	Piassa, Degol Square (E)	500M

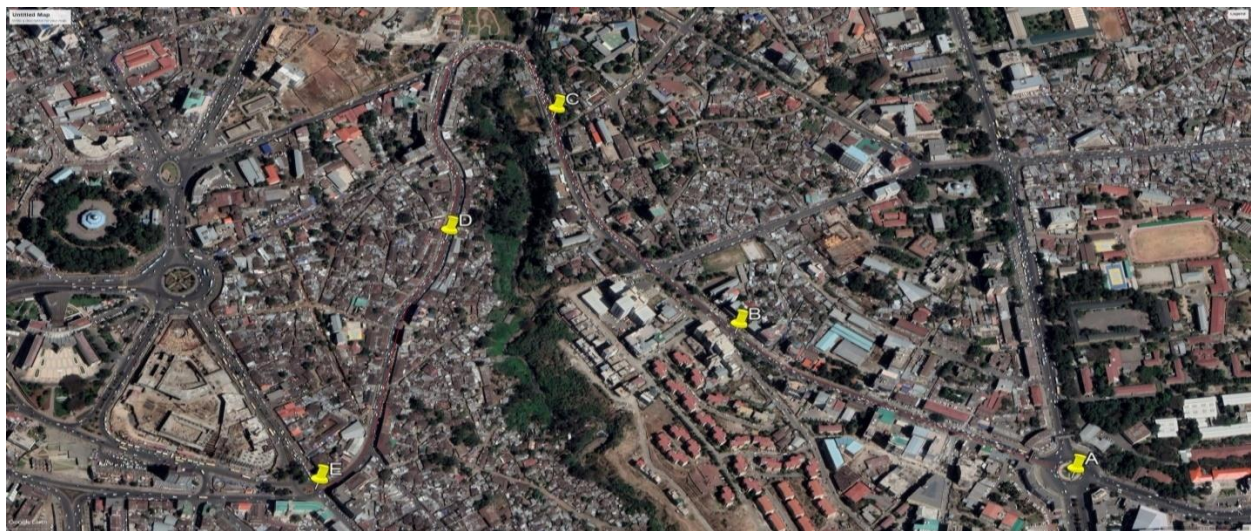


Figure 20 Map of the study segments

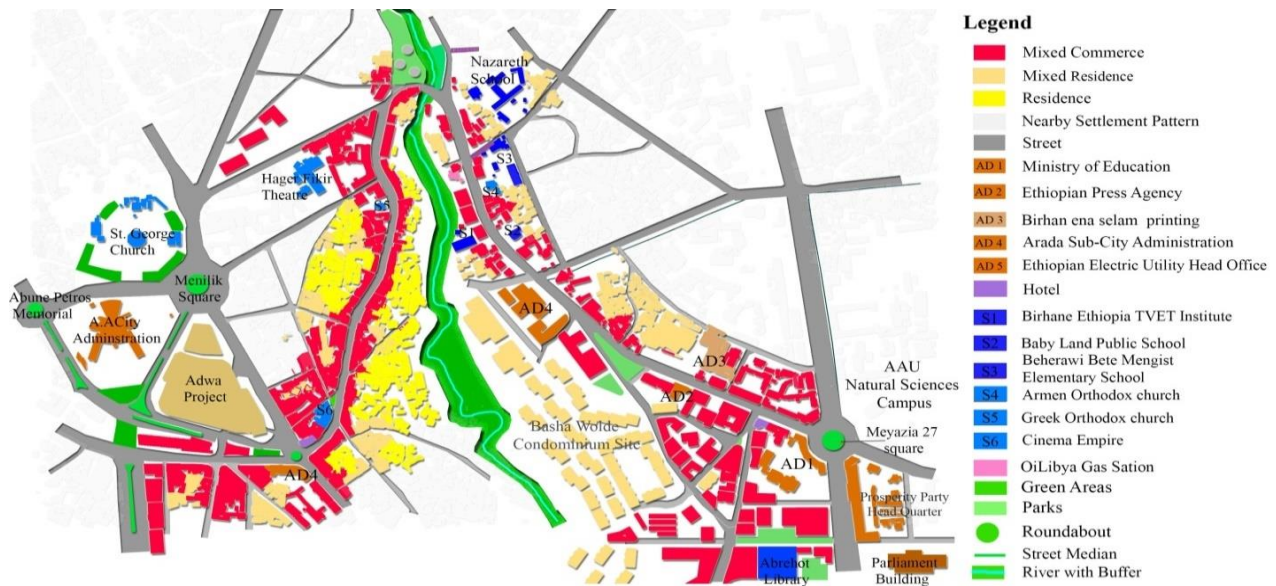


Figure 21 Land use of Haliesselassie Street

Table 31: Introduction to Segments 1 and 2 of Haileseilase Street




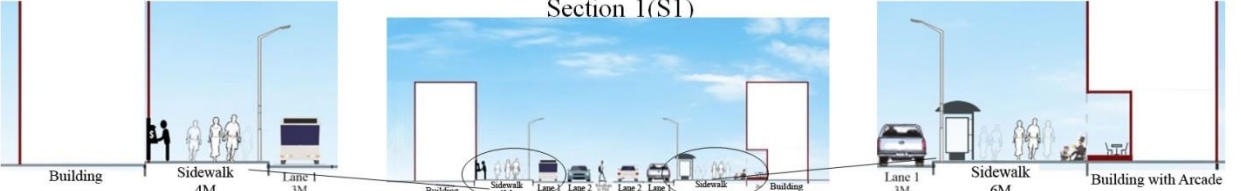
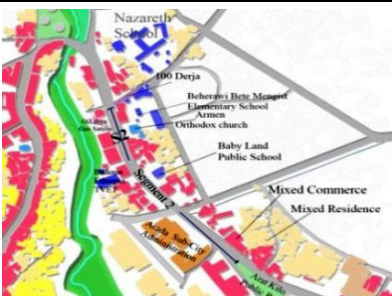



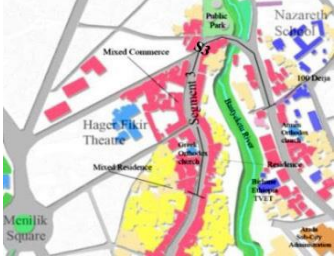


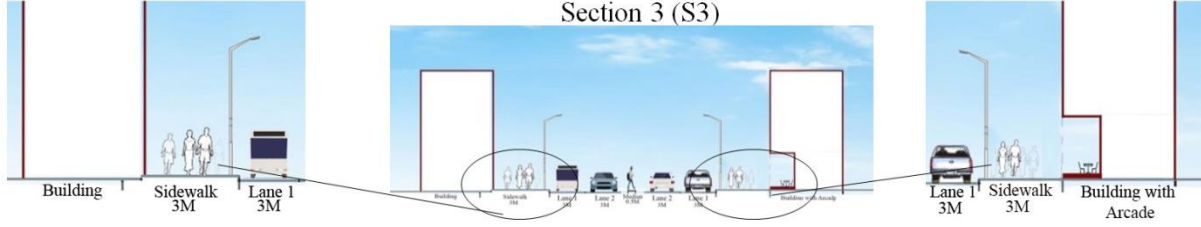


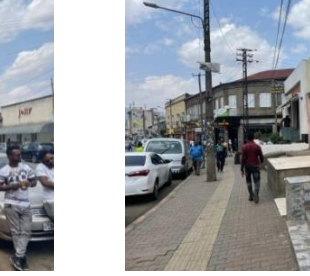
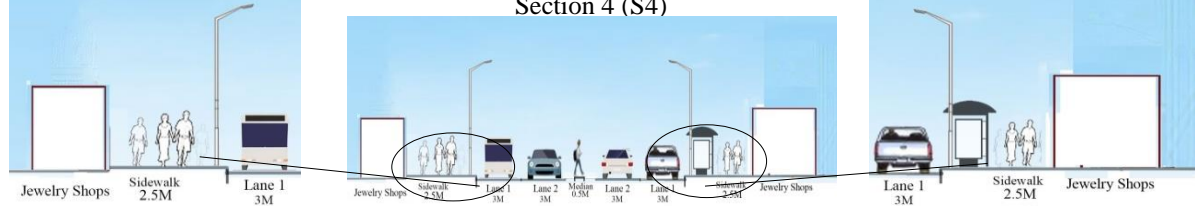
<p><b>Introduction to Segments 1</b></p> <p>The width of the sidewalk ranges from 3 to 6m and its condition is not satisfactory. The right side holds mixed commerce, and a printing press (“Birhan ena Selam”). The buildings on this side are old and few have arcades. The left side is occupied by the Ministry of Education, Tourist Hotel, Ethiopian press agency, 4 Kilo public park; Mixed Commerce and “Basha Wolde” site 40/60 house are found behind it. The buildings on both sides are a mix of old and new with 4-12 stories. There are no designated street benches and trashcans along this sidewalk except for the bus shelters. The presence of street plantations is less. This segment holds taxi stations and also few street vending are present. “Meyazia 27” roundabout is found at the start of this segment.</p>		
		
<p style="text-align: center;"><b>Section 1 (S1)</b></p> 		
<p><b>Introduction to Segment 2</b></p> <p>The width of the sidewalk ranges from 2.5 to 4M but the conditions of the sidewalk are relatively Good than segment 1. On the right side, the school, Arman orthodox church, and mixed commerce are present. The left side is occupied by Mixed Commerce and a Fuel Station. Most of the buildings are old (some are historic) but very few are new with 4-11 stories. There are no designated street benches and trashcans along this sidewalk except for the bus shelters. There are few places with blind walls. The quality of the streetlights is not satisfactory. The presence of greeneries is also less.</p>		
		
<p style="text-align: center;"><b>Section 2 (S2)</b></p> 		

Table 32 Introduction to segments 3 and 4 of Haileseilase Street

<p><b>Introduction to Segment 3</b></p> <p>The width of the sidewalk ranges from 2.5 to 4 m. The conditions of the sidewalk are good except for some parts. Mixed commerce and public parks occupied the right side. The left side is entirely occupied by Mixed Commerces. Banteyketu River pass throw this segment. Most of the buildings are old and historic with 2-8 stories There are no designated street benches and trashcans along this sidewalk except for the bus shelters. The quality of the streetlights is not satisfactory. The presence of greeneries is also less. “Hagre Fikir” Theater and Nazareth School are found nearby to this segment. The presence of 100 and 70 “Derja”, the winding street and the curved shapes of buildings following the street, the human-scaled buildings, and smooth skylights gave some beauty to this segment.</p>		
		
<p>Section 3 (S3)</p> 		
<p><b>Introduction to Segment 4</b></p> <p>The width of the sidewalk ranges from 2.5 to 4 m but the conditions of the sidewalk is relatively good when compared with segments 1 and 2. Both the right and left sides are occupied by Mixed Commerce. The majority of the shops are Jewelry shops. Most of the buildings are old and historic having 1-5 stories. There are no designated street benches and trashcans along this sidewalk except for the bus shelters. There are a few greeneries, and the presence of human-scale buildings and smooth skylights are the beauty of this segment. Degol Square (Roundabout) is found at the end of this segment. In addition, A. A City Administration, Adwa Zero KM project, and Churchill Avenue are located very near.</p>		
		
<p>Section 4 (S4)</p> 		

### 3.8.4 Churchill Avenue

*Churchill Avenue (which is named after British Prime Minister Winston Churchill) is one of the significant axis located in the central part of Addis Ababa. It is a north-south axis, where several landmarks and historical buildings are located. .... The street has been historically used for different social interactions ranging from cultural celebrations, political gatherings, and civic ceremonial to economic activities (Hass-Klaus, Crampton, Dowland, and Nold, 1999).*

This Avenue is located on the way from “Piassa” (Addis Ababa City Administration) to “Lagare”. The straight view lets a person see the destination from the start. It connects the northern and southern parts of the city and has several connections and transport access that heads to different centers and subcenters like “Merkato”, “Mengegna”, “Kaliti”, Mexico”, “Bole”, and others which makes the street to be a center.

The sidewalk is one of the major and widest sidewalks in the city. It is a renewed and well-designed sidewalk, modern and old architecture-style buildings are present aligning the sidewalk. The various types of plants and flowers gave an eye-catching look to the sidewalk. People walk, sit, and enjoy this street sidewalk.

In dealing with functions and activities the district has a mixed functions. The schools like “Lycee Guebre Mariam” & “Tikur Anbesa”, government institutions (the main office of Ethiopian telecommunication, post office, and Addis Ababa City Administration), the nearby financial centers, “Berahawi” theater, and the hotels are the beauty of the street sidewalks. It is very hard to locate residences along this sidewalk.



Figure 22: Pictures showing sidewalks of Churchill Avenue

### 3.8.4.1 Physical Layout and Appearance of **Churchill Avenue**

The sidewalk Churchill Avenue width varies between 3 -18M. (3M around “Behrawi” theater area the arcaded places and 18M in front of Ethio-Cuba Park. This case study site has two streets which are Churchill Avenue and Namibia Street (from Laghar to Behrawi) these two streets make a complete view of Piassa to Leghar (the street also known as “Churchill Godana”) and for this study, Churchill Avenue will represent the two streets. The total length of the study sidewalk is about 2 KM and for the study, it was divided into 4 segments as seen in the below table and Map.

Table 33: Description of the study segments

Segments	Starting Landmark	Ending Landmark	Segment Length
Segment 1	La-gare (A)	Beharawi Theater (B)	500M
Segment 2	Beharawi Theater (B)	Tracon Tower ( C )	460M
Segment 3	Tracon Tower ( C )	Tewdrous Square (D)	500M
Segment 4	Tewdrous Square (D)	A.A Municipality (E)	550M



Figure 23: Map of the Study segments

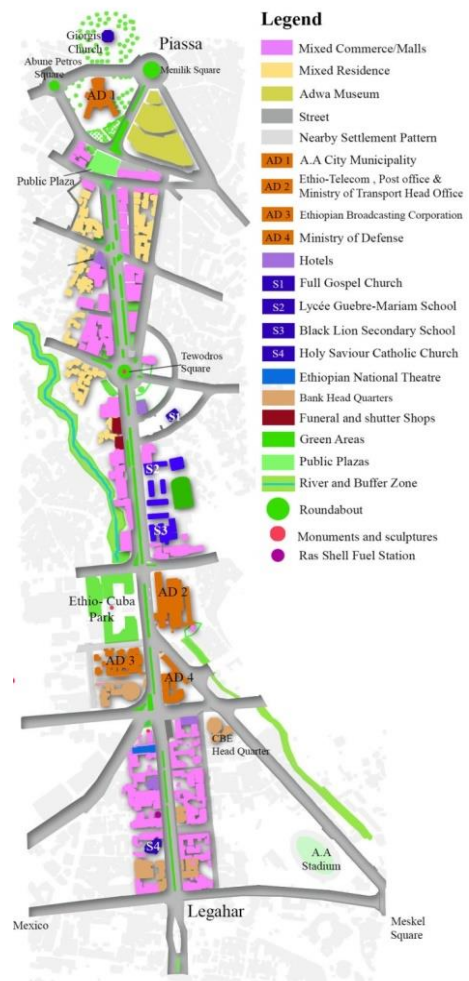


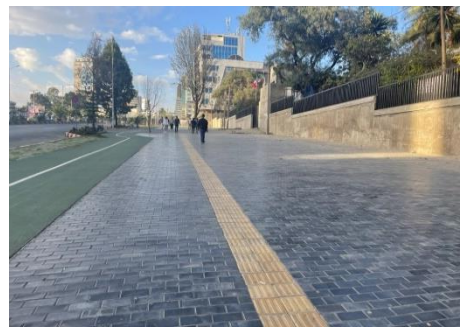
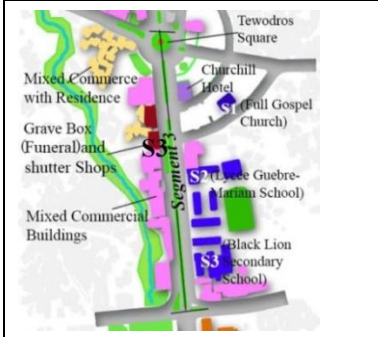
Figure 24: The Building Uses of Churchill Avenue



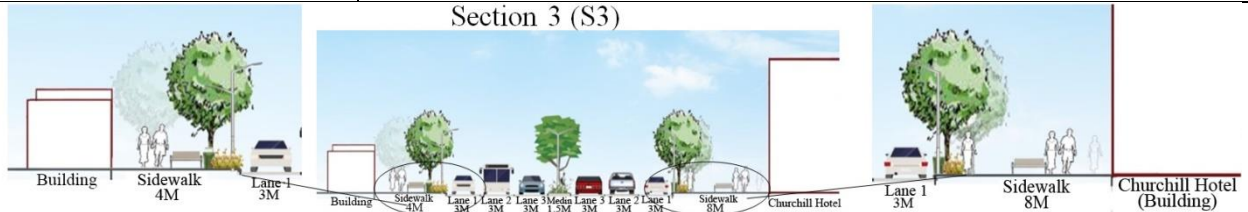
Table 35 Introduction to Segments 3 and 4 of Churchill Avenue

**Introduction to Segment 3**

The width of the sidewalk on this segment ranges between 4 to 11M. The right sidewalk is mainly occupied by schools (“Tikur anbesa” and Lyce Guebremariam) , mixed commercial buildings, a hotel, and a square. The left side is more of mixed commercial buildings, a grave box and shutter shops, mixed residences, and greenery. The buildings along this segment are a mix of old and new having 1-8 stories and few buildings have arcades. “Tewodros” square (roundabout) is part of this segment.

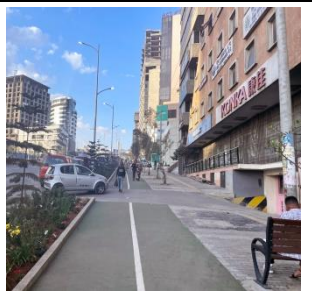


Section 3 (S3)

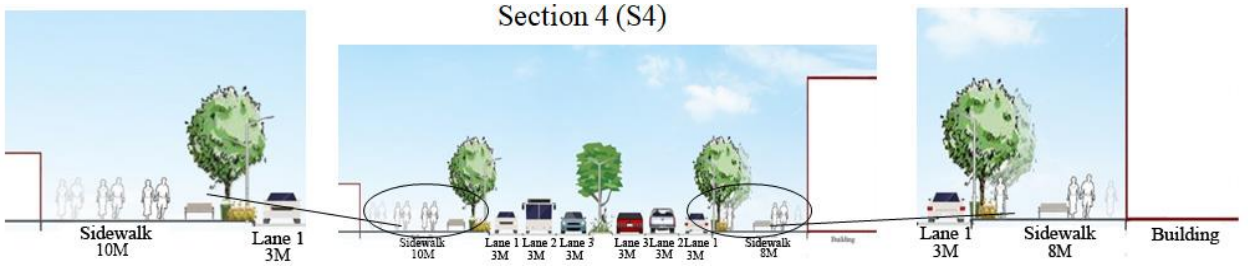


**Introduction to Segment 4**

The width of the sidewalk ranges between 4 to 12m, the right sidewalk is mainly occupied by mixed commercial buildings and malls also the left side has the same functions in addition to a transport (taxi) station. On the upper edge of this segment AA city, municipality, and Adwa Museum are present having a public plaza in front of them. “Tewodros” square (roundabout) is found on the lower edge of the sidewalk. Most of the buildings in this segment are new and few like Elaina Hotel have a unique shape. The buildings are in segments ranging from 1-13 stories.



Section 4 (S4)



## CHAPTER 4: FINDING AND DISCUSSION

### 4.1 Introduction

This chapter builds upon the result of the physical evaluation and the result of the questionnaire in sub-chapters one and two. Subchapter one mainly focused on the physical appearance of the case study site this physical evaluation aims to know status of the case study sidewalks interims of the image of the street and its sidewalk measuring parameters and indicators. Subchapter two focused on the perception of street sidewalk users concerning the image of the street and its sidewalk. It focused on how the users perceived the physical layouts, activities, functions, and emotions.

The case study evaluation has two ways of presentation. The results are presented in tables, texts, maps, sections, and photos. The evaluation used the *five-level scale* as Very Good (V.G) representing 5 Points, Good (G) - 4 Points, Fair (F) - 3 Points, Bad (B) - 2 Points, and Very Bad (B) - 1 Point. The sidewalks are evaluated by indicators which are attached to Annex E.

### 4.2 Results of Site Evaluation

This section deals with the evaluation of the street sidewalks based on the image Parameters.

#### 4.2.1 Evaluation of Africa Avenue street sidewalk

##### 4.2.1.1 Quality Measured: Physical layouts and appearance of Africa Avenue sidewalk

Table 36: Physical layouts and appearance of Africa Avenue sidewalk

Unit of Study (Physical layout)	Segment				Average
	1	2	3	4	
Sidewalk Width	F	F	F	F	F
Sidewalk Pavement Quality	G	V.G	V.G	V.G	V.G
Sidewalk Pavement Condition	F	V.G	G	G	G
Sidewalk Connectivity	G	F	G	G	G
Sidewalk Continuity	G	G	G	G	G
Absence of Obstacles / Encroachments	F	V.G	V.G	V.G	G
The slope of the sidewalk	V.G	V.G	V.G	G	V.G
Total	G	V.G	G	G	G

The *width of the sidewalk* is rated as **‘Fair’**. Most of the sidewalk width is relatively similar having a 4M width while in some areas the width is below 4M, some have around 3M and in other areas, the width exceeds more than 4M. The *pavement quality* of the sidewalk is rated as **‘Very Good’** the pavement types are a mix of 30x30 CM and 20x20 CM terrazzo tiles with patterned flooring. The *pavement condition* of the sidewalk is relatively **‘Good’**. In the case of Segment 1 it has a ‘Fair’ rating there are some cracks and holes. Segments 3 & 4 have good pavement conditions while segment 2 has a ‘Very Good’ rating.

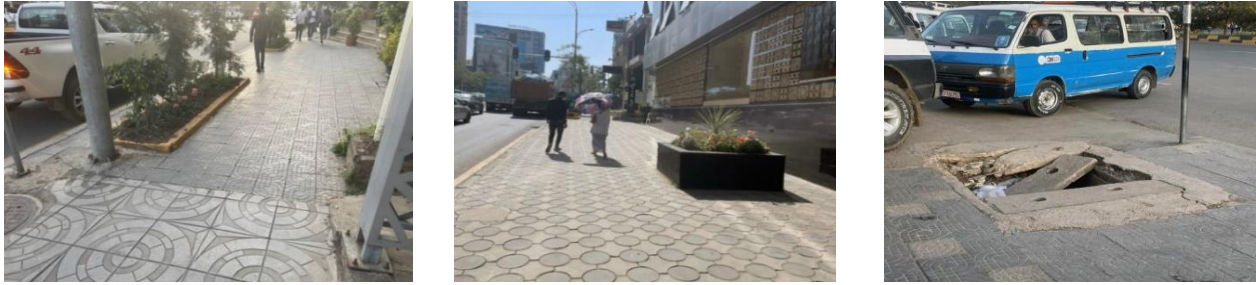


Figure 25: Width, Pavement Quality, and Condition of Africa Avenue Sidewalk

The *sidewalk connectivity* of Africa Avenue is generally rated as ‘Good’. Segments 1, 2, and 3 have a ‘Good’ rating in terms of connectivity with other street sidewalks. For instance, Segment 1 connects “Bole to Saris”, “Bole to Megenagna” and “Bole to Edna Mall” street sidewalks, and Segment 3 connects “Bole Japan to Atlas Hotel” sidewalks. The *continuity* of the sidewalk is rated as ‘Good’ there is a very rare presence of ups and downs and the sidewalk is continuous. The sidewalk can be expressed as an obstacle-free sidewalk except for segment 1, the presence of illegal street vendors, and the high activity concentration of users' several encroachments affected the freeness of the segment. The *slope* of the sidewalk can be categorized as ‘Very Good’.

**4.2.1.2 Quality Measured:** *Physical features on or along the street and its sidewalk of Africa Avenue*

Table 37: Physical features on or along the street and its sidewalk on Africa Avenue

Unit of Study (Physical features on or along the street )	Segment				Average
	1	2	3	4	
Landmarks / Point of Reference	F	F	F	B	F
Presence of Sculptures, Monuments, and fountains along or on the edge of sidewalks	F	B	F	F	F
Presence of Roundabout	V.G	V.B	V.B	G	G
Presence of Public arts	V.B	V.B	V.B	V.B	V.B
Quality of Advertisements	B	G	F	F	F
Total	F	F	F	F	F

The *presence of landmarks* (points of reference) along this sidewalk is generally ‘Fair’. The landmarks on this sidewalk have clear forms but failed to be singular because the majority of landmarks along this sidewalk are malls, hotels, and buildings generally the landmarks are names of buildings. On the other hand, *Millennium Hall and NOC petrol station* can be stated as unique landmarks due to their function some other popular landmarks along the sidewalk are Skylight, Snap Plaza, Friendship Mall, “Alem” Cinema, “.It is very hard to locate landmarks in Segment 4.



Figure 26: The Landmarks of Africa Avenue sidewalk

On Africa Avenue, it is very hard to locate *sculptures and monuments* along the sidewalk except for the Ethio-china relation monument which is found on the roundabout of Bole-Bridge square in segment 1. When dealing with the *presence of fountains* is found in two places in segments 1 and segment 4. Generally, their presence is ‘Fair’. There are no public arts along the sidewalks. There are two roundabouts on this street the first one is found in segment 1 which is gracefully having fountains, scriptures, and landscapes. On the other hand, the roundabout in segment 4 is not that graceful and eye catchy. The general rating on these units is ‘Good’. There is a ‘Fair’ presence of a *quality advertisement* on the sidewalk. Segment 1 has a weak appearance because of the unmanaged advertisements; the presence of quality advertisements in Segment 2 is good.



Figure 27: Presence of Advertisement along Africa Avenue Sidewalk

#### 4.2.1.3 Quality Measured: Presence of Street Furniture along Africa Avenue sidewalk

Table 38: Presence of Street Furniture along Africa Avenue Sidewalk

Unit of Study (Presence of Street Furniture)	Segment				Average
	1	2	3	4	
Street Benches Availability	G	B	F	B	F
Street light	V.G	V.G	V.G	V.G	V.G
Trashcans Availability	G	G	G	G	G
Bus Stop or Transit Shelters	V.G	V.G	V.G	V.G	V.G
Shade (covers) protect from sun and rain	V.B	V.B	V.B	V.B	V.B
Total	G	F	G	F	G

The *availability of street benches* along the Africa Avenue sidewalk is rated as ‘Fair’. In segments 1 & 3 there are few street benches while in segments 2 & 4 it is very hard to locate street benches. The availability of *street lights* is ‘very good’ & they provide enough light to the sidewalk at noon and evening. The *availability of trashcans* along the sidewalk is rated as ‘Good’. The *presence of transit shelters* at the bus stops can be ranked as “Very Good”.



Figure 28: Presence of Street Furniture along Africa Avenue Sidewalk

#### 4.2.1.4 Quality Measured: Green landscapes & cleanness of Africa Avenue sidewalk

Table 39: Green landscapes & cleanness of Africa Avenue sidewalk

Unit of Study (Green landscapes & cleanness)	Segment				Average
	1	2	3	4	
Shade Trees	G	G	G	G	G
Green landscapes along the sidewalk as a buffer between the motorway and sidewalk	V.G	V.G	V.G	G	V.G
Cleanness	G	V.G	V.G	V.G	G
Total	G	V.G	V.G	G	G

The *presence of shade trees* along the sidewalk is rated as ‘**Good**’ there are various trees that give shade to the sidewalk users. Interims of the presence of *green landscapes* (shrubs, flowers, plants) along the sidewalk that is used as a buffer between the motorway & sidewalk can be rated as ‘**Good**’. The *cleanness of the sidewalk* is generally ‘**Good**’. Segments 2, 3, and 4 have a very good cleanness level while segment 1 is rated as good due to the presence of informal markets & transport station-related activities somewhat impacting the cleanness of the segments.



Figure 29: Shades, Trees, and Green Landscapes along Africa Avenue Sidewalk

#### 4.2.1.5 Quality Measured: Along sidewalks Architectural styles and developments of Africa Avenue

Table 40: Architectural styles and developments along Africa Avenue sidewalk

Units of Study (Along sidewalks Architectural developments)	Segment				Average
	1	2	3	4	
Building with Recessed Entrance	V.G	F	B	B	F
Presence of Buildings with Unique shapes	V.G	V.G	G	F	G
The scale of Building the street ratio	V.G	V.G	V.G	V.G	V.G
Presence of Arcades	V.B	V.B	V.B	V.B	V.B
Presence of Old Buildings	G	G	B	F	F
Presence of Sculptures, articulations & detail as a part of the building.	F	F	F	B	F
Similar Skyline	G	G	F	F	F
Total	G	G	F	B	F

The general rating of *Buildings with a recessed entrance* is ‘**Fair**’. There are some buildings with recessed entrances in Segment 1 like the entrance of skylight hotels, wow burgers, or “Natani” café have a recessed space between the sidewalk and the building, and also in segment 2, there are few buildings with recessed entrances like NOC main office, Heber Ethiopia cultural restaurant and Tropical mall while on segments 3 and 4 have very less presence as ‘**Bad**’ level rating.



Figure 30: Buildings with a recessed entrance along Africa Avenue sidewalk

The ***Presence of Buildings with Unique shapes*** on the Africa Avenue sidewalk is ‘**Good**’ While walking a person can find buildings with unique shapes, especially in Segments 1 and 2 while in Segment 4 their presence is Fair.



Figure 31: Buildings with Unique shapes along the Africa Avenue sidewalk

The ***Scale of Building*** street ratio on all 4 segments can be rated as ‘**Very good**’. The ratio of the tall buildings to the street on average is around 1:1. There are ***no Arcades*** presented on the entire sidewalk. There are ***old buildings*** along the sidewalks, especially in Segments 1 and 2 it is rated as good, their presence in Segment 4 is fair but in Segment 3 it is bad. In general, the presence of old buildings along the sidewalk can be rated as ‘Fair’.



Figure 32: Presence of old buildings along Africa Avenue sidewalk

The ***Presence of Sculptures, Articulations & Detail as a part of a building*** along Africa Avenue can be graded as ‘**Fair**’. There are few sculptures, articulations & details of buildings.



Figure 33: Presence of Sculptures, and articulations along Africa Avenue sidewalk

The *Skyline of the buildings along the sidewalk* is ‘fairly’ similar. The buildings in segments 1 and 2 have a relatively similar skyline in segments 3 & 4 can be rated as fair.



Figure 34: Skyline of buildings along Africa Avenue sidewalk

**4.2.1.6 Quality Measured: Function & Activities held on Africa Avenue Sidewalk and Surroundings**

Table 41:Function & Activities held on Africa Avenue Sidewalk and Surroundings

Units of Study (Function & Activities along the sidewalk)	Segment				Average
	1	2	3	4	
Special / Unique Function and Activity	F	V.B	V.B	V.B	V.B
Presence of courtyards, plazas, and parks very near the sidewalk	B	B	F	F	B
Presence of Mixed-use functions and activities along the sidewalk	V.G	G	G	F	G
Presence of public, civic religious buildings	F	B	B	F	B
Presence of Transport stations	V.G	F	F	G	G
Presence of Managed street vending	V.B	V.B	V.B	V.B	V.B
Absence of unmanaged street vending	B	F	G	G	F
Presence of outdoor dining	F	F	V.B	V.B	B
Total	G	F	F	F	F

Millennium Hall can be stated as a special or unique function because it is very hard to locate a big hall in the city other than that, there are no activities that can be encountered as unique. Interims of the *Presence of courtyards, plazas, and parks along or very near to the sidewalk* are rated as ‘Bad’. There are two closed parks and recreational centers along the main street on segments 3 and 4 the first one is under the overpass which heads from Atlas to “Bole Michal” street and the other one is also in front of it. There is a Public Park (Kebele 19 recreational center) which is near segment 3.



Figure 35: Presence of public parks along Africa Avenue Sidewalk

The *Presence of Mixed-use functions and activities* along the sidewalk can be rated as ‘Good’. Segments 1,2 and 3 have a good mix of functions while Segment 4 has less mix of use. The

**Presence of public, civic religious buildings** on Africa Avenue is generally **‘Bad’** there are very few public and civic buildings along the sidewalk while there are no religious centers. In general, the area does not pull people due to the availability of public, civic, or religious activities.

The **presence of public transport and stations** on the street is rated as **‘Good’** the public transports are mainly Buses and Mini Buses which connect to different routes like “Piassa”, “4 Kilo”, “Mexico”, Mercator also in a very near station's people can get transports to “22”, “Megengna”, “Saris” and other main and sub-centers of the city.

The **presence of managed street vending** is **‘Very Bad’** or it is very hard to locate one. While dealing with the **Absence of unmanaged street vending** it can be rated as **‘Fair’**, segments 3 and 4 have relatively fewer unmanaged street vendors in segment 2 there is relatively a bit higher presence and segment 1 has many unmanaged street vendors.



Figure 36: Presence of unmanaged street vending along Africa Avenue sidewalk

The **presence of outdoor dining along the sidewalk** is **‘Bad’**. Segments 1 and 2 have few outdoor dining's for instance La Parisian, Kaldi's, Natani Cafes, and WoW Burger have outdoor dining spaces while in segments 3 and 4 it is very hard to locate outdoor dining.



Figure 37: The presence of outdoor dining along the Africa Avenue sidewalk

#### 4.2.1.7 Quality Measured: Presence of People on Africa Avenue street sidewalk

Pedestrian counting was taken to answer to what level the presence of people on the Africa Avenue sidewalk . The data was collected at different times and days including both weekdays and weekends. The data was taken when collecting user perspective questioners by stationing on 4 strategic areas on both sides of the sidewalks the 4 areas are Friendship Hypermarket as Segment 1, At “Momona” Hotel as Segment 2, At “Shoa” Super Market as Segment 3, At Africa Insurance as segment 4. Each counting was conducted for 5 min. The below table shows the details of the pedestrian counting procedure.

Table 42: Pedestrian count or Presence of people on Africa Avenue Street sidewalk

Units of Study (Pedestrian Density)	Spot				Average
	1	2	3	4	
Pedestrian count / Presence of people	168	134	138	129	142

Africa Avenue Street	Time	At Friendship Hypermarket (Spot 1)	At “Momona” Hotel (Spot 2)	At “Shoa” Super Market (Spot 3)	At Africa Insurance (Spot 4)	Daily Average
Monday	Morning	138	112	145	132	132
	Time	10:08 - 10:13AM	10:21 - 10:26AM	10:45-10:50AM	10:45-10:50AM	
	After Noon	202	167	179	156	176
	Time	04:12 - 04:17PM	04:12 - 04:17PM	04:35 -04:40PM	10:35 -10:40PM	
Average		170	140	162	144	154
Wednesday	Morning	126	113	103	98	110
	Time	09:45 -09:50AM	09:56 - 04:01AM	10:27-10:32AM	10:40-10:45AM	
	After Noon	183	128	91	110	128
	Time	04:48 - 04:53PM	04:48 - 04:53PM	04:17 -04:22PM	04:17 -04:22PM	
Average		155	120	97	104	119
Saturday	Morning	172	129	145	132	145
	Time	11:20 -11:25AM	10:18- 10:23AM	09:32-09:37AM	09:06-09:11AM	
	After Noon	234	186	204	169	198
	Time	04:22 - 04:27PM	04:34 - 04:39PM	04:03 -04:08PM	03:51 -03:56PM	
Average		203	157	175	151	172
Sunday	Morning	96	79	73	67	79
	Time	09:24 -09:29AM	10:48- 10:53AM	09:46-09:51AM	09:24 -09:29AM	
	After Noon	187	161	159	167	169
	Time	04:12 - 04:17PM	04:24 - 04:29PM	04:16 -04:21PM	03:02 -03:07PM	
Average		142	120	116	117	124
<b>Total Average</b>		<b>168</b>	<b>134</b>	<b>138</b>	<b>129</b>	<b>142</b>

The *Presence of People* on Africa Avenue is ‘Good’. Spot 1 has a higher concentration of people present while the other 3 spots have relatively similar counting. When dealing with time within a day the Afternoon had a higher number of people on all sampled days. All have average similar scores except Saturday because it had a higher presence of people.

## 4.2.2 Evaluation of King George VI Street and its Sidewalk

### 4.2.2.1 Quality Measured: *Physical layouts and appearance of King George VI street sidewalk*

The below tables deal with the physical layouts & appearance of the King George VI sidewalk.

Table 43 *Physical layouts and appearance of King George VI Street sidewalk*

Unit of Study (Physical layout)	Segment				Average
	1	2	3	4	
Sidewalk Width	G	G	G	G	G
Sidewalk Pavement Quality	G	G	V.G	G	G
Sidewalk Pavement Condition	V.G	G	V.G	V.G	V.G
Sidewalk Connectivity	V.G	F	G	B	F
Sidewalk Continuity	V.G	V.G	V.G	V.G	V.G
Absence of Obstacles / Encroachments	F	F	G	G	G
The slope of the sidewalk	F	F	G	G	G
Total	<b>G</b>	<b>G</b>	<b>G</b>	<b>G</b>	<b>G</b>

The *width of the sidewalk* is rated as ‘**Good**’. On the right side (the side where ‘Kideste Mariam’ church is located) the width ranges from 6-12M while the left side has a width ranging from 3-8M. The *pavement quality* of the sidewalk is generally classified as ‘**Good**’ the pavement types are a mix of 20x20CM Concrete RCC Dumble and terrazzo tiles with patterned flooring. The *pavement condition* of the sidewalk is ‘**Very Good**’.



Figure 38: Width, Pavement Quality, and Condition of Africa Avenue Sidewalk

The *sidewalk connectivity* of King George VI Street is generally rated as ‘**Fair**’. Segment 1 has ‘Very Good’ sidewalk connectivity it connects the sidewalk with “Piassa”, “Kazzanchis” & “Kebena” sidewalks. Also, Segment 3 has good connectivity it connects the sidewalk with “Sheromeda”, “Janmeda” & “Semen Hotel”. The other segments have less connectivity.

The *continuity* of the sidewalk is rated as ‘**Good**’ there is a very rare presence of ups and downs and the sidewalk is continuous. Segments 1 and 2 sidewalks have illegal street vendors that affected pedestrian movement. The *slope* of the sidewalk can be categorized as ‘**Good**’ with the sidewalk rising steeply while walking “4 Kilo” to “6 Kilo”.



Figure 39: Presence Encroachments /obstacles along King George VI Street sidewalk

#### 4.2.2.2 Quality Measured: Presence of Physical features on and besides 'King George VI street

Table 44: Presence of Physical Features on and besides King George VI street sidewalk

Unit of Study (Physical features on or beside the street )	Segment				Average
	1	2	3	4	
Presence of Landmarks / Points of Reference	V.G	V.G	V.G	V.G	V.G
Presence of Sculptures, Monuments, and Fountains along or on the edge of sidewalks	G	F	G	F	G
Presence of Roundabout	V.G	N.A	V.G	N.A	V.G
Presence of Public Arts along the sidewalks	V.B	V.B	V.B	V.B	V.B
Presence of Quality Advertisements	F	F	F	F	F
Total	G	F	G	F	F

There are various *landmarks (points of reference)* interims of shape, use, and singularity due to this their presence is rated as **'Very Good'**. These are monuments, Universities (4 kilo , 5 kilo, and 6 kilo) National Museum, "Menelik" Secondary School, Cafes like "Romina", "Maleda", "Koba", "Annbesa Gebi", "Kidste Mariam" Church, "Yekatit 12" hospital and others.



Figure 40: Landmarks along King George VI Street sidewalk

The sum of *the sculptures and monuments* on this sidewalk can be rated as **'Good'**. There are two memorial monuments ("Miaziya 27 and Yekait 12") which are located at the start and middle of the case sidewalk as part and articulation of roundabouts. There are also a few sculptures along the sidewalk which are placed on the fences of universities (sculptures of lions), also sculptures of pigeons are found on the fence of the Ethiopian Orthodox Church chair of the patriarch. There are no fountains along the sidewalk. There are two graceful *roundabouts* along the sidewalk placed on segments 1 and 4 that can be rated as **'Very Good'**.



Figure 41: Sculptures and monuments present along King George VI Street sidewalk

There are no public arts along the sidewalks. The quality of *advertisements* along the sidewalk is rated as ‘Fair’. There are several billboard advertisements surrounding the “Maziya 27” roundabout. There are also different types of commercial advertisements on shop fronts.



Figure 42: Advertisement presence along ‘King George VI’ Sidewalk

#### 4.2.2.3 Quality Measured: Presence of Street Furniture along King George VI Street sidewalk

Table 45: Presence of Street Furniture along King George VI Street sidewalk

Unit of Study (Presence of Street Furniture)	Segment				Average
	1	2	3	4	
Street Benches Availability	B	B	G	F	F
Street light	V.G	V.G	V.G	V.G	V.G
Trashcans Availability	G	G	G	G	G
Bus Stop or Transit Shelters	V.G	V.G	V.G	V.G	V.G
Shade covers that protect from sun and rain	V.B	V.B	V.B	V.B	V.B
Total	G	F	V.G	G	G

The *availability of street benches* along King George VI sidewalk is rated as ‘Fair’. Segment 3 has a good presence of street benches while the other segments have a less number of benches. The availability of *street lights* is ‘Very Good’ they provide enough light to the sidewalk at noon and evening. The *availability of trashcans* along the sidewalk is rated as ‘Good’. The presence of *transit shelters* at the bus stops can be ranked as ‘Very Good’. All bus stops have transit shelters. There is no shade no cover along the sidewalks.



Figure 43: Street Furniture along King George VI street sidewalk

#### 4.2.2.4 Quality Measured: Green landscapes & cleanness of King George VI Street sidewalk

Table 46: Green landscapes & cleanness of King George VI Street sidewalk

Unit of Study ( <i>Green landscapes &amp; cleanness</i> )	Segment				Average
	1	2	3	4	
Presence of Shade Trees	G	V.G	V.G	V.G	V.G
Green landscapes along the sidewalk as a buffer between the motorway and sidewalk	V.G	G	V.G	V.G	V.G
Cleanness	G	G	V.G	V.G	V.G
Total	G	G	V.G	V.G	V.G

The *presence of shade trees* along the sidewalk is rated as ‘**Very Good**’ there are various trees that give shade to the sidewalk users. The *presence of green landscapes (shrubs, flowers, plants)* is ‘**Very Good**’ these landscapes are used buffer between the nearby developments or buildings and also a buffer between the motorway and the sidewalk. The *cleanness of the sidewalk* is rated as ‘**Very Good**’. Segments 3 & 4 are relatively clean while Segments 1 and 2 have relatively less cleanness because of the high concentration of pedestrians and street vendors.



Figure 44: Green landscapes of King George VI Street sidewalk

#### 4.2.2.5 Quality Measured: Architectural styles and developments and King George VI Street

Table 47: Architectural styles and developments along King George VI Street sidewalk

Units of Study ( <i>Along sidewalks Architectural developments</i> )	Segment				Average
	1	2	3	4	
Building with Recessed Entrance	G	G	G	G	G
Presence of Buildings with Unique shapes	B	B	B	B	B
The scale of Building the street ratio	V.G	V.G	V.G	V.G	V.G
Presence of Arcades	F	V.B	V.B	V.B	B
Presence of Old Buildings	V.G	V.G	V.G	V.G	V.G
Presence of Sculptures, articulations & detail as a part of the buildings.	B	B	B	B	B
Similar Skyline	V.G	V.G	V.G	V.G	V.G
Total	G	G	G	G	G

The general rating for *Buildings with recessed entrances* is ‘**Good**’. Many buildings have a recessed entrance, especially on the right side of the sidewalk (the side where “Kideste Mariam” church is located) for instance “6 Kilo” University, the front of “Romina” café, the national museum can be mentioned. The *Presence of Buildings with Unique shapes* on King George VI Street sidewalk is rated as ‘**Bad**’. It is very hard to spot a unique-shaped building. In dealing with the *Scale of Building to the street ratio* all 4 segments can be rated as ‘**Very Good**’. The

**Presence of Arcades** along the sidewalks is found only in a few sections of segment 1 other than that there are no buildings with an arcade due to this it is rated as ‘Bad’. The **Presence old building** along the sidewalk is rated as ‘Very Good’. Most buildings are old except a few in Segment 2 (near to ‘5-kilo’ university) and also a few in Segment 4 (commercial shops) other than that all the institutional, commercial & residential buildings are old.



Figure 45: Old buildings and Buildings Arcaded along King George VI Street sidewalk

The **Presence of sculptures, articulations & detail as a part of the buildings** along King George VI street sidewalk can be rated as ‘Bad’. It is very hard to find buildings with articulations and details most buildings are not articulated or found in a fenced compound. The **Skyline of the buildings along the sidewalk** is rated as ‘Good’. As mentioned earlier most of the buildings are recessed & fenced (found in a compound) other than that, most buildings are continuous and similar except the new buildings in segment 3 which are found near 5-kilo University that are taller than the surroundings. In general, the skyline is generally similar.



Figure 46: Skyline of the buildings & presence of articulations along King George VI Street sidewalk

#### 4.2.2.6 Quality Measured: Function & Activities held on King George VI Sidewalk & Surroundings

Table 48: Function & Activities held on King George VI Sidewalk and Surroundings

Units of Study ( Function & Activities)	Segment				Average
	1	2	3	4	
Special / Unique Function and Activity	V.G	B	F	V.G	G
Presence of courtyards, plazas, and parks very near the sidewalk	B	B	V.G	F	F
Presence of Mixed-use functions	V.G	F	G	F	G
Presence of public, civic religious buildings	V.G	V.G	V.G	V.G	V.G
Presence of a Transport station	V.G	F	F	G	G
Presence of Managed street vending	N.A	N.A	F	F	F
Absence of unmanaged street vending	B	B	G	F	F
Presence of outdoor dining	G	F	F	F	F
Total	G	F	G	G	G

On King George VI Street *unique function* is found in segments 1 and 4 because of the presence of job advertisement boards which pulls many peoples who need jobs also segments 1,3 & 4 the presence of the major government universities pulls students due to these functions the presence of unique functions is rated as **‘Very Good’**. Interims of the *Presence of courtyards, plazas, and parks along for very near to the sidewalk* are rated as **‘Fair’**. In segment 3 there is a place known as ‘Anbsea Gebi’ a park where lions are found in a cage. Also in this segment, there is a recreational center (Debab) and a place for sitting which is surrounded by green landscapes.



Figure 47: Unique Function and activity (Job vacancy Boards and along sidewalk activities)

The *Presence of Mixed-use functions and activities* along the sidewalk can be rated as **‘Good’** most of the functions along the sidewalk are schools and institutions. Segment 1 has a mix of functional institutions, residences (on the old apartments), and commercial services also segment 4 is rated as “good”. While segments 2 and 3 have less mix of uses. Dealing with the *Presence of public, civic religious buildings* along or near King George VI Street is generally rated as **‘Very Good’** there are many public and civic buildings along the sidewalk religious center, Addis Ababa University (3 campuses), Primary & Secondary school, National Museum, Government offices are found along the sidewalk.

Interims of the *presence of public transport and stations* the street is rated as **‘Good’** the public transports are mainly Buses and Mini Buses which head to different routes like “Sheromeda and Entoto”, “Stadium and Mexico”, “Bole”, “Kazanchis”, “22 and Megengna” also in a very near station's people can get transports to “Kebena”, “Piassa”, and other centers of the city.

In dealing with the *presence of managed street vending* there are few in segment 3 which are bookstores. *The absence of unmanaged street vending* can be rated as **‘Fair’** in segments 3 and 4 there are relatively fewer unmanaged street vendors and in segment 2 there is relatively a bit higher presence while in segment 1 there are many unmanaged street vendors because the segment is more of active and also it is a transport hub.



Figure 48: Presence of Managed and Unmanaged Street Vending along King George VI Sidewalk

The *presence of outdoor dining along the sidewalk* is ‘Fair’. In segment 1 presence of outdoor dining is fairly presented for instance “Romina”, “Maleda” Cafes, “Koba” pastry. In segments 3 and 4, their presence is ‘Fair’ while in segment 2 it is very hard to locate outdoor dining.



Figure 49: Presence of outdoor dining on King George VI Sidewalk and Surroundings

#### 4.2.2.7 Quality Measured: Presence of Pedestrians on King George VI street sidewalk

The *Presence of People* on King George VI Street sidewalk is ‘Very Good’. Segment 1 has a higher concentration of people present while the other 3 have relatively similar counting. When dealing with time within a day Afternoon had a higher number of people on all sampled days. Weekdays have more concentration of people also Saturday has similar counting while on Sunday the presence of people on the sidewalk is less. Each counting was conducted for 5 min.

Table 49: Pedestrian count or Presence of people on King George VI Street sidewalk

Days	Time	“Romina” Cafe (Spot 1)	“Menelik” secondary school (Spot 2)	“5-kilo” University (Spot 3)	National Museum (Spot 4)	Daily Average
Monday	Morning	191	149	105	107	138
	Time	09:05 - 09:10AM	09:31 - 09:36AM	10:04 - 10:09AM	10:27 - 10:32AM	
	After Noon	263	221	185	171	210
	Time	03:06 - 03:11PM	03:52 - 03:57PM	04:08 - 04:13PM	04:47 - 04:52PM	
Average		<b>227</b>	<b>185</b>	<b>145</b>	<b>139</b>	<b>174</b>
Thursday	Morning	212	144	109	117	145
	Time	09:26 - 09:31AM	09:56 - 10:01AM	10:23 - 10:28AM	10:51 - 10:56AM	
	After Noon	296	208	197	177	219
	Time	04:03 - 04:08PM	03:44 - 03:49PM	04:27 - 04:32PM	05:11 - 05:16PM	
Average		<b>254</b>	<b>176</b>	<b>153</b>	<b>147</b>	<b>182</b>
Saturday	Morning	187	142	125	107	143
	Time	09:17 - 09:22AM	09:38 - 09:43AM	10:15 - 10:20AM	10:32 - 10:38AM	
	After Noon	293	216	189	201	225
	Time	03:00 - 03:05PM	03:34 - 03:39PM	04:03 - 04:08PM	04:42 - 04:47PM	
Average		<b>240</b>	<b>179</b>	<b>157</b>	<b>154</b>	<b>184</b>
Sunday	Morning	165	113	92	95	117
	Time	10:06 - 10:11AM	09:37 - 09:42AM	10:27 - 10:32AM	10:43 - 10:48AM	
	After Noon	241	143	134	121	161
	Time	09:07 - 09:12PM	09:33 - 09:38PM	04:05 - 04:10PM	04:53 - 04:58PM	
Average		<b>203</b>	<b>128</b>	<b>113</b>	<b>108</b>	<b>139</b>
<b>Total Average</b>		<b>231</b>	<b>167</b>	<b>142</b>	<b>137</b>	<b>170</b>

### 4.2.3 Evaluation of Halieselassie Street and its Sidewalk

#### 4.2.3.1 Quality Measured: Physical layouts and appearance of Halieselassie Street sidewalk

The below tables deal with the physical layouts & appearance of the Halieselassie Street sidewalk.

Table 50 Physical layouts and appearance of Halieselassie Street sidewalk

Unit of Study (Physical layout)	Segment				Average
	1	2	3	4	
Sidewalk Width	F	F	F	F	F
Sidewalk Pavement Quality	F	F	F	G	F
Sidewalk Pavement Condition	F	F	G	G	F
Sidewalk Connectivity	V.G	B	B	G	F
Sidewalk Continuity	V.G	V.G	V.G	V.G	V.G
Absence of Obstacles / Encroachments	F	G	G	G	G
The slope of the sidewalk	V.G	V.G	V.G	V.G	V.G
Total	G	F	F	G	G

The *width of the sidewalk* is rated as ‘Fair’. On both sides of the sidewalk, the width ranges from 3-5M. The *pavement quality* of the sidewalk is generally classified as ‘Fair’. The pavement types are a mix of 20x20CM terrazzo tiles with patterned flooring on segments 3 & 4 and asphalt flooring on segments 1 and 2. The *pavement condition* of the sidewalk is ‘Fair’. In segments 1 and 2, the condition is not satisfactory. In some areas, there are duplicated asphalts that turned to gravel but segments 3 and 4 are good in conditions.



Figure 50: The Width, Pavement Quality, and Condition of Halieselassie Street Sidewalk

The *sidewalk connectivity* of Halieselassie Street is generally rated as ‘Fair’. Segment 1 has “Very Good” sidewalk connectivity it connects with 6 Kilo, ‘Kazzanchis’, and ‘Kebena’ sidewalks. Segment 4 has a good connection (it connects the sidewalk with ‘to Merkato’ ‘Churchill’ and ‘Semen Hotel’ sidewalks). The other segments have fewer connections

The *continuity* of the sidewalk is rated as ‘Good’ there is a very rare presence of ups and downs and the sidewalk is continuous. In Segment 1 there are few illegal street vendors but generally, the sidewalk is ‘Good’ interims of the presence of fewer obstacles. The *slope* of the sidewalk can be categorized as ‘Very Good’ the sidewalk is flat and comfortable to walk.

**4.2.3.2 Quality Measured:** *Presence of Physical features on and besides the Halieselassie Street sidewalk*

Table 51: Presence of Physical features on and besides Halieselassie street sidewalk

Unit of Study ( <i>Physical features on or beside the street</i> )	Segment				Average
	1	2	3	4	
Landmarks / Point of Reference	G	G	B	G	G
Presence of Sculptures, Monuments, and fountains along or on the edge of sidewalks	G	B	F	B	F
Presence of Roundabout	V.G	N.A	N.A	G	G
Presence of public arts along the sidewalks and facades	V.B	V.B	V.B	V.B	V.B
Quality of Advertisements	F	F	G	G	G
Total	F	F	F	F	F

There are several *landmarks (points of reference)* interims of shape, use, and singularity, due to this the presence is rated as ‘**Good**’. These are the Ministry of Education, “Sebele Asa Bet”, Cinema Empire, “100 Derja”, “Razzed”, “T Room” and other cafes, Some Jewelry shops, and “Miaziya 27” monument are among the famous landmarks.

On the sidewalk of Halieselassie Street, the presence of *sculptures and monuments* can be rated as ‘**Fair**’. There is a “Miaziya 27” memorial monument located at the start of the case area as part and articulation of the roundabout. There are no fountains along the sidewalk. In dealing with *roundabouts* there are two which are located on segments 1 and 4 and rated as ‘**Good**’. There are no public arts along the sidewalks. The *quality of advertisements* along the sidewalk is rated ‘**Good**’ most of the commercial shops have similar and readable signage or shop head styles, for instance, the jewelry shops, and the boutiques have similar advertisement styles.

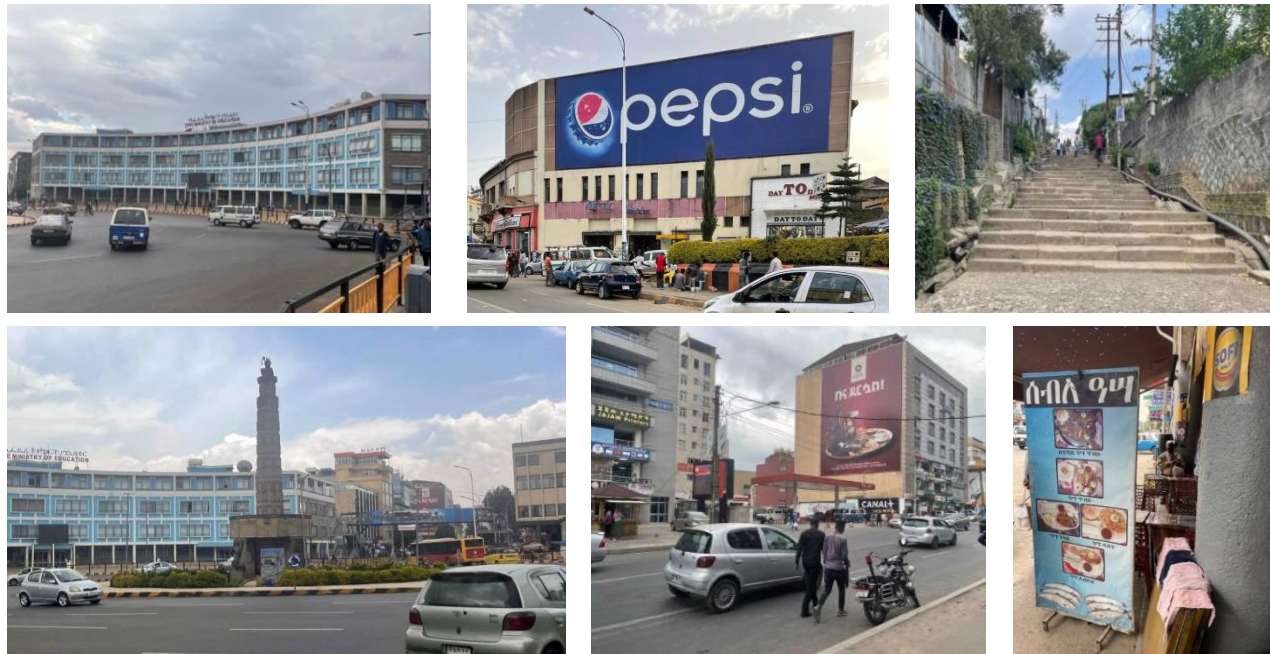


Figure 51: Presence of landmarks, Sculptures, and monuments, Advertisement the Sidewalk

#### 4.2.3.3 Quality Measured: Presence of Street Furniture along the Halieselassie Street sidewalk

Table 52: Presence of Street Furniture along Halieselassie street sidewalk

Unit of Study (Presence of Street Furniture)	Segment				Average
	1	2	3	4	
Street Benches Availability	V.B	V.B	V.B	V.B	V.B
Street light	V.G	G	G	G	G
Trashcans Availability	B	B	B	B	B
Bus Stop or Transit Shelters	V.G	V.G	V.G	V.G	V.G
Shade covers protect from sun and rain	V.B	V.B	V.B	V.B	V.B
Total	F	F	F	F	F

The *availability of street benches* along Halieselassie Street sidewalk is rated as ‘**Very Bad**’. It is very hard to spot the presence of street benches on all parts of the sidewalks. The availability of *street lights* is ‘**Good**’ they provide enough light to the sidewalk at noon and evening but in some areas have old light poles. The *availability of trashcans* along the sidewalk is rated as ‘**Bad**’ their presence is only near the transit shelters and in very few areas. The *presence of transit shelters* at the bus stops can be ranked as ‘**Very Good**’. All Bus stops have transit shelters. There is no shade and no cover along the sidewalks.



Figure 52: Presence of Street Furniture along Halieselassie Street sidewalk

#### 4.2.3.4 Quality Measured: Presence of Green landscapes & cleanness of Haileseilase Street sidewalk

Table 53: Presence of Green landscapes & cleanness along Haileseilase Street sidewalk

Unit of Study (Green landscapes & cleanness)	Segment				Average
	1	2	3	4	
Shade Trees	B	B	B	B	B
Green landscapes along the sidewalk as a buffer between the motorway and sidewalk	B	F	B	B	B
Cleanness	G	G	V.G	V.G	G
Total	F	F	F	F	F

The *presence of shade trees* along the sidewalk is rated as ‘**Bad**’ as seen in below pictures it is very hard to locate trees that give shade to the sidewalk users. Interims of the presence of green landscapes along the sidewalk are also rated as ‘**Bad**’. The *cleanness of the sidewalk* is rated as ‘**Good**’. In segments 1, 2 the cleanness is relatively less due to the high concentration of pedestrians and street vendors.



Figure 53: Presence of green landscapes along Haileseilase Street sidewalk

#### 4.2.3.5 Quality Measured: Architectural styles and developments along Haileseilase Street sidewalk

Table 54: Architectural styles and developments along Haileseilase Street sidewalk

Units of Study (Along sidewalks Architectural developments)	Segment				Average
	1	2	3	4	
Building with Recessed Entrance	B	B	B	B	B
Presence of Buildings with Unique shapes	G	B	F	B	F
The scale of Building the street ratio	V.G	V.G	V.G	V.G	V.G
Presence of Arcades	G	B	G	B	F
Presence of Old Buildings	V.G	V.G	V.G	V.G	V.G
Presence of Sculptures, articulations & detail as a part of the buildings.	F	B	F	F	F
Presence of Similar Skyline	V.G	V.G	V.G	V.G	V.G
Total	G	G	G	G	G

The general rating for a **Building with a recessed entrance** is ‘Bad’. It is very hard to find a building with a recessed entrance there are very few commercial centers with recessed entrances. The **Presence of Buildings with Unique shapes** on the Haileseilase Street sidewalk is ‘Fair’. There are few buildings with unique shapes as the street is winding some buildings have curved shapes. The **Scale of Building street ratio** on all 4 segments can be rated as ‘Very Good’. The **Presence of Arcades** along the sidewalks is rated as ‘Fair’ the arcades are found only in a few sections of segments 1 & 3. The **Presence old building** along the sidewalk is rated as ‘Very Good’. Most buildings are old, historic and resemble the early development of Addis Ababa.





Figure 54: Presences of buildings with Arcade, and old buildings along Haileseilase Street sidewalk

The *Presence of Sculptures, articulations & detail as a part of the buildings* along Halieselassie street sidewalks can be graded as ‘Fair’. Some old buildings have articulation and details. The other beauty of the sidewalk is it is connected to the settlements with stairs “100 Derja” and “70 Derja” (which is very near to the sidewalk) These stairs are unique and rarely found in the city. The *Skyline of the buildings along the sidewalk* is rated as ‘Good’. The skyline goes smoothly up while walking from Segment 4 to Segment 1.



Figure 55: Skyline of the buildings along Haileseilase street sidewalk

#### 4.2.3.6 Quality Measured: Function & Activities held on Halieselassie Street sidewalk & surroundings

Table 55: Function & Activities held on Halieselassie Street sidewalk & Surroundings

Units of Study ( Function & Activities)	Segment				Average
	1	2	3	4	
Special / Unique Function and Activity	B	B	G	G	F
Presence of courtyards, plazas, and parks very near to the sidewalk	F	B	G	B	F
Presence of Mixed-use functions and activities along the sidewalk	G	G	G	G	G
Presence of public, civic religious buildings	G	G	G	F	G
Presence of a Transport station	V.G	F	F	V.G	G
Presence of Managed street vending	V.B	V.B	V.B	V.B	V.B
Absence of unmanaged street vending	B	G	B	G	F
Presence of outdoor dining	F	B	G	B	F
Total	F	F	G	F	F

On Halieselassie Street sidewalks *unique functions* are found in Segments 3 and 4 because of the presence of Jewelry shops this segment is known for the presence of Jewelry. Interims of the *Presence of courtyards, plazas, and parks along for very near to the sidewalk* are rated as ‘Fair’. There are two parks which are located in Segment 3 and Segment 1.



Figure 56: Presence of Unique Function / Jewelry shops along Halieselassie Street sidewalk



Figure 57: Presences of public parks along Halieselassie Street sidewalk

The ***Presence of Mixed-use functions and activities*** along the sidewalk can be rated as ‘**Good**’. The functions along the sidewalks are a mix of commercial, residential, government, and private institutions. The ***Presence of public, civic religious buildings*** on or near Haileselassie Street is generally ‘**Very Good**’ there are many public and civic buildings along the sidewalk religious center (Armenian & Greek Orthodox Church), and Government offices are found along the sidewalk. The ***presence of public transport and stations*** on the street is rated as ‘**Good**’ The public transports are mainly Buses and Mini Buses which connect to different routes like, “Stadium and Mexico”, “Kazanchis”, “22 and Megengna”, “Kebena” and other places.



Figure 58: Presence of public, civic religious buildings along Halieselassie Street sidewalk

In dealing with the ***presence of managed street vending*** there are no proper street vending shades at all. The ***absence of unmanaged street vending*** can be rated as ‘**Fair**’



Figure 59: Street vending along Haileselassie Street sidewalk

The *presence of outdoor dining along the sidewalk* is ‘Fair’. In Segment 3 outdoor dining is fairly presented for instance “Pizza Corner” and In Segment 1 Sebele Bar & Restaurant, Juice shops along the arcades have outdoor dining spaces. Segments 2 and 4 have very less presence of outdoor dining and segment 1 has less outdoor dining.



Figure 60: Presence of outdoor dining along Haileselasie street sidewalk

#### 4.2.3.6 Quality Measured: Presence of People on Haileselasie street sidewalk

The *Presence of People* on the Haileselasie Street sidewalk is ‘Good’. Segment 2 has a higher concentration of people present while the other 3 have relatively similar counting. When dealing with the time higher numbers of people are presented in day time, especially in the Afternoon. And in all sampled days weekdays and Saturdays have more concentration counting while Sunday has a bit less presence of People.

Table 56: Pedestrian Count (Presence of people) on Haileselasie Street sidewalk

Days	Time	“Ministry of Education” (Spot 1)	At “ Sebele Assabet” (Spot 2)	At ““Liyu” Jewelry (Spot 3)	At Africa Jewelry (Spot 4)	Daily Average
Tuesday	Morning	102	101	95	110	102
	Time	09:45 - 09:50AM	10:21 - 10:26AM	10:48 - 11:03AM	11:07 - 11:12AM	
	After Noon	158	161	145	120	146
	Time	03:12 - 03:17PM	04:12 - 04:17PM	04:48 - 04:53PM	05:17 - 05:22PM	
Average		<b>130</b>	<b>131</b>	<b>120</b>	<b>115</b>	<b>124</b>
Thursday	Morning	105	126	97	92	110
	Time	09:32 - 09:37AM	10:06 - 10:11AM	10:27 - 10:32AM	10:40 - 10:45AM	
	After Noon	121	178	125	110	128
	Time	04:23 - 04:28PM	04:42 - 04:47PM	04:17 - 04:22PM	04:51 - 04:56PM	
Average		<b>113</b>	<b>152</b>	<b>111</b>	<b>101</b>	<b>119</b>
Saturday	Morning	108	118	113	103	111
	Time	09:21 - 09:26AM	09:58 - 10:03AM	10:27 - 10:32AM	10:53 - 10:58AM	
	After Noon	136	166	149	131	145
	Time	03:52 - 03:57PM	04:04 - 04:09PM	04:43 - 04:48PM	05:11 - 05:16PM	
Average		<b>122</b>	<b>142</b>	<b>131</b>	<b>117</b>	<b>128</b>
Sunday	Morning	69	82	85	79	79
	Time	10:12 - 10:17AM	10:46 - 10:51AM	09:46 - 09:51AM	09:14 - 09:19AM	
	After Noon	97	132	103	95	107
	Time	04:04 - 04:09PM	04:33 - 04:37PM	05:00 - 05:05PM	05:32 - 05:37PM	
Average		<b>83</b>	<b>107</b>	<b>94</b>	<b>87</b>	<b>93</b>
<b>Total Average</b>		<b>112</b>	<b>133</b>	<b>114</b>	<b>105</b>	<b>116</b>

## 4.2.4 Evaluation of Churchill Avenue Street and its Sidewalk

### 4.2.4.1 Quality Measured: *Physical layouts and appearance of Churchill Avenue sidewalk*

Table 57: Physical layouts and appearance of Churchill Avenue sidewalk

Unit of Study (Physical layout)	Segment				Average
	1	2	3	4	
Sidewalk Width	V.G	V.G	V.G	V.G	V.G
Sidewalk Pavement Quality	V.G	V.G	V.G	V.G	V.G
Sidewalk Pavement Condition	V.G	V.G	V.G	V.G	V.G
Sidewalk Connectivity	V.G	V.G	V.G	V.G	V.G
Sidewalk Continuity	V.G	V.G	V.G	V.G	V.G
Presence of Obstacles / Encroachments	V.G	V.G	V.G	V.G	V.G
The slope of the sidewalk	G	G	F	F	F
Total	V.G	V.G	V.G	V.G	V.G

The *width of the sidewalk* is rated as **‘Very Good’**. This sidewalk is the widest of all sidewalks in Addis Ababa. The average width of the sidewalk is around 8-10m in some parts the width varies between 3m -20M for instance around “Delachin” Monument and Black lion secondary school it extends up to 20M and above In a very few areas it the width counts less to 3 meters (the front of “Beharawi Theater”). The *pavement quality* of the sidewalk is rated as **‘Very Good’** the pavement types are a mix of 10x15CM Concrete Interlocking Pavers and 20x20CM terrazzo. The *pavement condition* of the sidewalk is **‘Very Good’**. The sidewalk can be an idol for other sidewalks as it holds well-dressed lanes for the disabled.

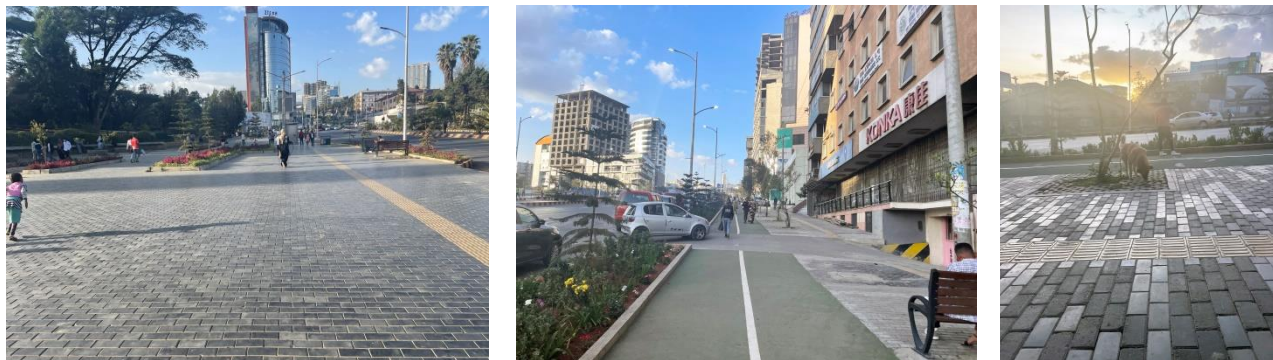


Figure 61: The Width, Pavement Quality, and Condition of Churchill Avenue Street Sidewalk

The *sidewalk connectivity* of Churchill Avenue is rated as **‘Very Good’**. All Segments have good connectivity with other street sidewalks. For instance, Segment 1 is connected to the “Stadium and Mexico” sidewalks Segment 2 is connected to “Kazanchis”, “Tikur Anbesa” sidewalks. The *continuity* of the sidewalk is rated as **‘Very Good’** there is a very rare presence of ups and downs and the sidewalk is continuous. The sidewalk can be expressed as an obstacle-free sidewalk. The *slope* of the sidewalk can be categorized as **“Fair”** Segments 1 and 2 are relatively flat and comfortable for a walk on the other hand segment 3 and 4 sidewalks rise steeply while walking towards Addis Ababa City Municipality.

**4.2.4.2 Quality Measured:** Physical features on and beside Churchill Avenue

Table 58: Presence of Physical features on and besides Churchill Avenue

Unit of Study ( <i>Physical features on or beside the street</i> )	Segment				Average
	1	2	3	4	
Presence of Landmarks / Points of Reference	V.G	V.G	G	V.G	V.G
Presence of Sculptures, Monuments, and fountains along or on the edge of sidewalks	F	V.G	V.G	F	G
Presence of Public arts	V.B	V.B	V.B	V.B	V.B
Presence of Quality Advertisements	F	F	F	F	F
Presence of Roundabout	-	V.G	V.G	G	V.G
Total	F	G	G	G	G

The *presence of landmarks* along this sidewalk is rated as ‘**Very Good**’. The landmarks on this sidewalk have clear forms and singularity. There are monuments, hotels, government offices, schools, and theater centers, the majority of landmarks along this sidewalk are malls, hotels, and buildings. For instance “Beharawi” theater and its surrounding lion statue, “Delachin” Monument, The oval building of Commercial Bank, “Tewodros” square, and Addis Ababa city Municipality are unique and singular. Also post office head office, “Seytan Bet”, Eliana Hotel, Lycée Guebre-Mariam, and Black Lion School are well-known landmarks along the sidewalks.

There are *sculptures and monuments* along the sidewalk and their presence are rated as ‘**Good**’. “Delachin” and “Sebastopol” monuments the Lion sculptures are the graces of the sidewalk. The no presence of fountains along the sidewalk but a fountain is found in Ethio-Cuba Park. There are no public arts along the sidewalks. There are two graceful roundabouts along “Tewdros” square and “Beharawi” Roundabout the street and one semi-roundabout.



Figure 62: Presence of landmarks, sculptures, and monuments along Churchill Avenue sidewalk

The *quality of advertisements* on the sidewalks can be categorized as ‘**Fair**’. Most building-mounted advertisements can be expressed as Fair and are also Billboard adverts on the sidewalks.



Figure 63: Roundabouts and Advertisements along Churchill Avenue Sidewalk

#### 4.2.4.3 Quality Measured: Presence of Street Furniture along Churchill Avenue Sidewalk

Table 59: Presence of Street Furniture along Churchill Avenue Sidewalk

Unit of Study ( <i>Presence of Street Furnitures</i> )	Segment				Average
	1	2	3	4	
Street Benches Availability	G	V.G	G	F	G
Street light	V.G	V.G	V.G	V.G	V.G
Trashcans Availability	G	V.G	G	F	G
Bus Stop or Transit Shelters	V.G	V.G	V.G	V.G	V.G
Shade covers protect from sun and rain	F	B	F	B	F
Total	G	G	G	G	G

The *availability of street benches* along Churchill Avenue sidewalk is rated as ‘**Very Good**’. Segments 1, 2, and 3 have a good presence on street benches while segment 4 is relatively fewer. The availability of *street lights* is ‘**Very Good**’ they provide enough light to the sidewalk at noon and evening. The *availability of trashcans* along the sidewalk is rated as ‘**Good**’. The presence of transit shelters at the bus stops can be ranked as ‘**Very Good**’. All Bus stops have transit shelters.

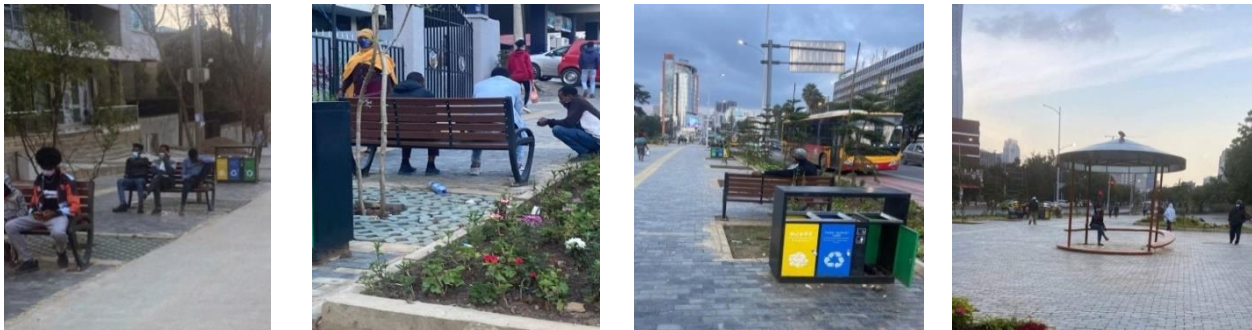


Figure 64: Presence of Street Furniture along Churchill Avenue Sidewalk

#### 4.2.4.4 Quality Measured: Green landscapes & cleanness along Churchill Avenue Sidewalk

Table 60: Presence of Green landscapes & cleanness along Churchill Avenue Sidewalk

Unit of Study ( <i>Green landscapes &amp; cleanness</i> )	Segment				Average
	1	2	3	4	
Shade Trees	G	G	G	G	G
Green landscapes along the sidewalk as a buffer between the motorway and sidewalk	V.G	V.G	V.G	V.G	V.G
Cleanness	V.G	V.G	V.G	V.G	V.G
Total	V.G	V.G	V.G	V.G	V.G

The **presence of shade trees** along the sidewalk is rated as ‘**Good**’ there are various trees planted as the sidewalk was redeveloped most of the trees are planted recently due to this they are not given enough shade but their presence is well. Interims of dealing with the presence of **green landscapes along the sidewalk which is used as a buffer between the motorway and sidewalk** are rated as ‘**Very Good**’. The **cleanness of the sidewalk** is rated as ‘**Very Good**’.



Figure 65: Presence of shade trees along Churchill Avenue Sidewalk

#### 4.2.4.5 Quality Measured: Architectural styles and developments along Churchill Avenue Sidewalk

Table 61: Presence of Architectural styles and developments along Churchill Avenue Sidewalk

Units of Study (Along sidewalks Architectural styles and developments)	Segment				Average
	1	2	3	4	
Building with Recessed Entrance	F	F	F	B	F
Presence of Buildings with Unique shape	B	G	B	G	F
The scale of Building the street ratio	G	V.G	V.G	G	G
Presence of Arcades	G	G	B	B	F
Presence of Old Buildings	G	V.G	G	F	G
Presence of Sculptures, articulations & detail as a part of the building.	F	F	F	B	F
Similar Skyline	G	G	F	F	F
Total	G	G	F	F	F

The general rating for a **building with a recessed entrance** is ‘**Fair**’. There are reassessed spaces in segment 2 which is in front of ‘Beharawi’ theater. while Segment 4 has a ‘Bad’ rating. The **Presence of Buildings with Unique shapes** on Churchill avenue street sidewalk is rated as ‘**Fair**’. There are a few buildings with unique shapes, for instance, the oval buildings of the Commercial Bank and Elaina Mall can be mentioned.



Figure 66: Presence of Buildings with Unique shape along Churchill Avenue Sidewalk

The *Scale of Building street ratio* on all 4 segments can be rated as ‘**Very Good**’. The *presence of arcades/arcaded buildings* is well presented in segments 1 and 2 but in segments 3 and 4 it is rated as “Fair”. There are *old buildings* along the sidewalks especially on segments 1, 2, and 3 in general their presence is rated as ‘**Good**’.



Figure 67: Presence of Old Building and Building with arcades along Churchill Avenue Sidewalk  
The *Presence of Sculptures, articulations & detail as a part of the building* on Churchill Avenue is rated as ‘**Fair**’. There are few articulations and details on the old buildings. The *Skyline of the buildings along the sidewalk* is ‘**Fairly**’ similar. The buildings in segments 1, 2 & 3 have relatively similar skylines while segment 4 can be rated as fair.



Figure 68: Skyline of the buildings along Churchill Avenue Sidewalk

#### 4.2.4.6 Quality Measured: Function & Activities held on Churchill Avenue Sidewalk & Surroundings

Table 62: Presence of Function & Activities held on Churchill Avenue Sidewalk and Surroundings

Units of Study (Function & Activities)	Segment				Average
	1	2	3	4	
Special / Unique Function and activity	F	F	B	B	F
Presence of courtyards, plazas, and parks very near to the sidewalk	F	G	F	B	F
Presence of Mixed-use functions and activities along the sidewalk	G	G	G	G	G
Presence of public, civic & religious buildings	V.G	V.G	V.G	G	V.G
Presence of Transport and stations	V.G	G	G	V.G	V.G
Presence of Managed street vending	V.B	V.B	V.B	V.B	V.B
Absence of unmanaged street vending	G	F	G	B	F
Presence of outdoor dining	F	F	F	B	F
Total	G	F	G	F	G

The special or unique function of the sidewalks and the surrounding whole sellers of book sales at “Beharawi”, Illegal foreign currency exchangers (Black Market), Grave boxes, and shatter sellers can be counted as unique. Interims of the *Presence of courtyards, plazas, and parks along for very near to the sidewalk* are rated as ‘**Fair**’. In Segment 1 “Beharawi” Park and Segment 2

“Ethio-Cuba” Park is located also “Ambassador” Park is near this segment while in Segment 4 the frontage of Addis Ababa city administration can be labeled as a public plaza.



Figure 69: Presence of courtyards, plazas, and parks along Churchill Avenue Sidewalk

The ***Presence of Mixed-use Functions and Activities*** along the sidewalk can be rated as ‘**Good**’ Segments 1,2, and 3 have a mix of institutional, recreational, school, and hotel functions while Segment 4 has commercial and mall, institutional functions. The ***Presence of public, civic religious buildings*** on Churchill Avenue is rated as ‘**Very Good**’ .There are various public and civic buildings along the sidewalk as a religious center (Holly Savior Catholic Church), Ethio-Telecom, Post office, and Ministry of Transport head office, Schools, Theater Center, Ethiopian Broadcast service, Immigration office, Addis Ababa city Administration, different banks head office and others are located along this sidewalks. These are strong pulling factors.

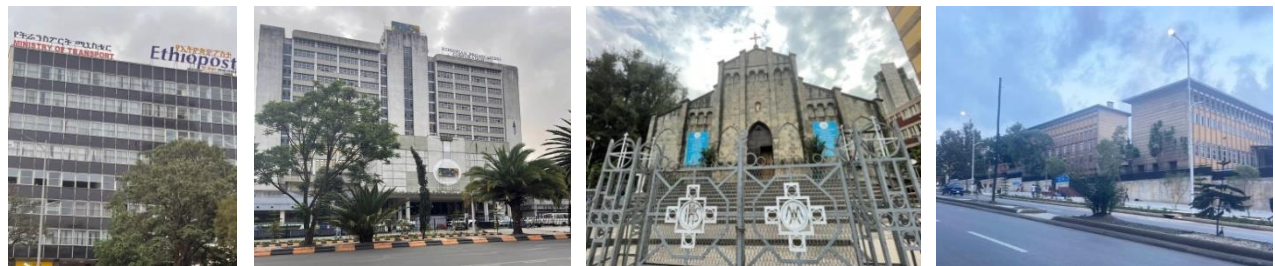


Figure 70: Presence of public, civic, and religious buildings along Churchill Avenue sidewalk

The ***presence of public transport and stations*** on the street is rated as ‘**Good**’ The public transports are mainly Buses & Mini Buses that connect different routes like Mexico, Bole, Megenagna, “22”, “Kalti”, “Asko”, “4 Kilo”, “Merkato”, “Addisu Gebya” to other main & sub-centers of the city. In dealing with the ***presence of managed street vending*** it is rarely available and rated as ‘**Very Bad**’. While dealing with the ***absence of unmanaged street vending*** it can be rated as ‘**Fair**’ in Segment 3 there are relatively higher unmanaged street vendors unmanaged vendors are mainly grave/coffin box sellers and food sellers followed by Segment 4 the other hand segment 1 and 4 have a very rare presence of unmanaged street vendors.



Figure 71: Presence of Street Vending along Churchill Avenue sidewalk

The *presence of outdoor dining along the sidewalk* is ‘Fair’. Their presence is unsatisfactory Segments 1, 2, and 3 have higher outdoor dining presence while on 4 it is very hard to locate outdoor dining.



Figure 72: Presence of outdoor dining along Churchill Avenue sidewalk

#### 4.2.4.7 Quality Measured: Pedestrian count/Presence of People on Churchill Avenue sidewalk

The *Presence of People* on Churchill Avenue's average score is ‘Very Good. Segments 1 and 4 have a higher concentration of people present while the other 2 have relatively similar counting. When dealing with time higher numbers of people are presented in the Afternoon and on all sampled days. Weekdays have a bit higher presence of people than weekends.

Table 63: Presence of Pedestrians along Churchill Avenue Sidewalk

Day	Time	“Tikur Anbesa School” (Spot 1)	In front of “Tikur Anbesa” (Spot 2)	At “Akkoo Coffee” (Spot 3)	“Eshetu Mamo Commercial Mall”(Spot 4)	Daily Average
Tuesday	Morning	157	145	143	155	150
	Time	09:17 - 09:22AM	09:40 - 09:45AM	10:01 - 10:06AM	10:27 - 10:32AM	
	After Noon	223	187	175	193	194
	Time	03:33 - 03:38PM	04:03 - 04:08PM	04:34 - 04:39PM	05:12 - 05:17PM	
Average		<b>190</b>	<b>166</b>	<b>159</b>	<b>174</b>	<b>172</b>
Thursday	Morning	165	136	157	151	152
	Time	09:41 - 09:46AM	10:09 - 10:14AM	10:39 - 10:44AM	11:08 - 11:13AM	
	After Noon	201	178	185	203	193
	Time	04:03 - 04:08PM	04:33 - 04:38PM	04:55 - 05:00PM	05:21 - 05:26PM	
Average		<b>183</b>	<b>157</b>	<b>171</b>	<b>177</b>	<b>173</b>
Saturday	Morning	156	134	139	159	147
	Time	09:02 - 09:07AM	09:40 - 09:45AM	10:07 - 10:12AM	10:33 - 10:38AM	
	After Noon	186	168	187	219	190
	Time	03:56 - 04:01PM	04:04 - 04:09PM	04:43 - 04:48PM	05:06 - 05:11PM	
Average		<b>171</b>	<b>151</b>	<b>163</b>	<b>189</b>	<b>169</b>
Sunday	Morning	99	89	90	78	89
	Time	10:19 - 10:24AM	09:56 - 10:01AM	10:37 - 10:42AM	10:57 - 11:02AM	
	After Noon	125	107	116	106	115
	Time	03:51 - 03:56PM	04:03 - 04:08PM	04:51 - 04:56PM	05:13 - 05:18PM	
Average		<b>112</b>	<b>98</b>	<b>103</b>	<b>92</b>	<b>102</b>
<b>Total Average</b>		<b>164</b>	<b>143</b>	<b>149</b>	<b>158</b>	<b>154</b>

### 4.3 Result of the Questionnaire

#### 4.3.1 Introduction

The objective of this subchapter is to understand how the street sidewalk users perceive the Image of the street and its sidewalk. In each of the four case studies, 50 respondents and in total 200 respondents were targeted and achieved. Each respondent was asked about how he/she perceived the image of street sidewalks from the perspectives of physical, social, economic, environmental, and emotional. The data was collected on the street sidewalks of the four case study sidewalks and each of the respondents was asked their opinion about that specific street sidewalk.

This sub-chapter has three parts the first one focus on the general profile of respondents, and the second part focuses on how the users of the street sidewalks perceived the image of the street sidewalks in terms of physical appearance, place function, and activities, place identities and meanings, place attachment, familiarity and sense of belongings, place safety and security. The third part focused on open-ended questions, which evaluate respondents' general understanding of the image of the street sidewalks like the strengths and weaknesses of the street sidewalks, room for improvement, and recommendations on enhancing the Imageability of the sidewalks.

#### 4.3.2 General Respondent’s Profile and Related Activities

##### 4.3.2.1 General Respondent’s Profile

###### 4.3.2.1.1 Gender Share of the Respondents

The *general share of male and female* respondents in the random sampling was **56% to 44%**. *Haileselesie Street* had a bigger share of Male respondents with **60% to 40%**, *Africa and Churchill Avenue* had a **56% to 44%** share of Male to Female respondents while *King George VI Street* had a relatively similar share of **52% to 48%** share of Male to Female Respondents.

Table 64: Gender share of the respondents

Gender	Case Study Street Sidewalks									
	Africa Av.		King George VI		Halieselassie St.		Churchill Av.		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Female	22	44	24	48	20	40	22	44	88	44
Male	28	56	26	52	30	60	28	56	112	56
Total	50	100	50	100	50	100	50	100	200	100

###### 4.3.2.1.2 Age Group of the Respondents

The majority of the respondents’ age group was between 25- 44 followed by 18 - 24, 45 - 64 and very few were >65. The youngest participant on the survey was 15 while the oldest was 74. In general, in this random sampling majority of the respondents were young adults and adults.

Table 65: Age group of the respondents

Age Category	Case Study Streets									
	Africa Av.		King Georg VI		Halieselassie St.		Churchill Av.		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Below 18	2	4	0	0	4	8	1	2	10	5
18-24	16	32	11	22	12	24	10	20	48	24
25-44	23	46	34	68	28	56	31	62	113	56.5
45-64	8	16	4	8	5	10	7	14	25	12.5
> 65	1	2	1	2	1	2	1	2	5	2
Total	50	100	50	100	50	100	50	100	200	100

#### 4.3.2.1.3 Occupations of the Respondents

This question aims to understand how different professionals perceive the image of street sidewalks the responses were summarized as *skilled, semi-skilled, and unskilled* professionals.

*Under Skilled the following were part of the survey Accountant, Admin Head, Architect, Banker, Market Consultant, Designer, Health Professional, Engineer, Lawyer, IT Professional, Manager, Purchaser, Secretary, Student, Teacher, and Trainer.*

*Under Semi-Skilled & Unskilled the following were part of the survey Barber, Bartender, Book Seller, Broker, Carpenter, Cashier, Chef, Daily Laborer, “Denbe Asekabri”, Driver, Hair Dresser, Housewife, Mechanic, Merchant, Photographer, Security, Technician and 12 Complete.*

As seen in the table below table skilled respondents were **55.5%** while the semi-skilled and unskilled professionals weighted **44.5%**.

Table 58: Occupations of the respondents

Occupation	Case Study Streets									
	Africa Av.		King George VI		Halieselassie St.		Churchill Av.		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Skilled	29	58	27	54	24	48	31	62	111	55.5
Unskilled & Semi-Skilled	21	42	23	46	26	52	19	38	89	44.5
Total	50	100	50	100	50	100	50	100	200	100

#### 4.3.2.1.4 Favorite street sidewalks of the Respondents

This question aimed to know whether respondents on the four respective case study street sidewalks consider these case study street sidewalks as their top three favorite choices to walk, sit, relax and enjoy.

*As seen below table 98% selected Churchill avenues sidewalks as one of there their top 3 streets sidewalks, 76% of respondents on Africa Avenue, 74 % of respondents on King George VI Street, and 70% of respondents on Haileselassie Street selected these streets' sidewalks as their top 3 favorite streets sidewalks. 70% is the lowest score and it can be stated that the respondents are familiar with the selected case study sidewalks.*

Table 66: Favorite street sidewalks of the respondents

Choices	Case Study Streets									
	Africa Av.		King George VI		Haliesselassie St.		Churchill Av.		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
1st Choice	25	50	17	34	15	30	34	68	91	45.5
2 <sup>nd</sup> Choice	9	18	12	24	8	16	8	16	37	18.5
3 <sup>rd</sup> Choice	4	8	8	16	12	24	7	14	31	15.5
Not my Favorite	12	24	13	26	15	30	1	2	41	20.5
Total	50	100	50	100	50	100	50	100	200	100

### 4.3.2.2 Frequency, Reason, and Time of Visit

#### 4.3.2.2.1 Frequency of Visit

This question aims to know how often the respondents visit the sidewalks. And further, it helps to know more about the attachment level of the respondents with the sidewalks.

*On the four case study sites, 52% of respondents visited the street sidewalks **daily**, 25.5% of the respondents visited their respective street sidewalks **Twice a week**, and 4.5% visited these sidewalks **once a week** the remaining 8% visited **once/twice a month** while. **In all four sites, more than 50% of the respondents visit their respective street sidewalks daily.***

Table 67: Frequency of Visit

Frequency of Visit	Case Study Streets									
	Africa Av.		King George VI		Haileselassie St.		Churchill Av.		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Daily	25	50	28	56	26	52	25	50	104	52
Twice a week	15	30	8	16	12	24	16	32	51	25.5
Once a week	1	2	4	8	1	2	3	6	9	4.5
Once/ Twice a month	9	18	10	20	11	22	6	12	36	18
Total	50	100	50	100	50	100	50	100	200	100

#### 4.3.2.2.2 Reason for Visit

The question aimed to know the reason **why** respondents visit street sidewalks.

*As seen below table 69% of the respondents visit the street sidewalks for **necessary activities** work place, homes, and school purposes are the reasons. 19% of the respondents visit for **optional purposes** (in this case 2% of the respondents visit King George VI Street because of the availability of Job/vacancy advertisement boards along the sidewalk). And the rest 12% visit these streets for **social purposes** like visiting a friend or a family.*

Table 68: Reason for Visit

Reason of Visit	Reason	Case Study Streets									
		Africa Av.		King George VI		Haileselassie St.		Churchill Av.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Necessary	It is my work Place	19	38	13	26	21	42	18	36	71	35.5
	It is my home	8	16	12	24	8	16	9	18	37	18.5
	It is my school place	3	6	11	22	12	24	4	8	30	15

Optional	Recreational	11	22	5	10	6	12	12	24	34	17
	To see vacancy pined on boards	0	0	4	8	0	0	0	0	4	2
Social Activities	Visit and enjoy with Family /Friends	9	18	5	10	3	6	7	14	24	12
Total		50	100	50	100	50	100	50	100	200	100

#### 4.3.2.2.3 Time of Visit

This question aimed to know at **what** time the respondents visit street sidewalks.

*In general, 49% of the respondents visited the sidewalks at any time during the day 20.5% visited the street sidewalks during the morning, 11.5% in the afternoon, 16.5 % visited in the late afternoon & 0.5% visited during the evening. Other than the sidewalk, users who use the street sidewalks at any time of the day King George VI Street & Churchill Avenue had more morning visitors while Africa Avenue & Haileselassie Street had after-noon & late afternoon visitors.*

Table 69: Time of Visit

Time of Visit	Activity	Case Study Streets									
		Africa Av.		King George VI		Haile Selassie St.		Churchill Av.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Morning	Necessary	0	0	11	22	2	4	14	28	27	13.5
	Optional	0	0	3	6	6	12	1	2	10	5
	Social	2	4	1	2	0	0	1	2	4	2
	Total	2	4	15	30	8	16	16	32	41	20.5
Afternoon	Necessary	0	0	0	0	1	2	2	4	3	1.5
	Optional	0	0	5	10	2	4	6	12	13	6.5
	Social	1	2	2	4	3	6	1	2	7	3.5
	Total	1	2	7	14	6	12	9	18	23	11.5
Late Afternoon	Necessary	0	0	0	0	0	0	6	12	6	4
	Optional	4	8	1	2	1	2	3	6	11	5.5
	Social	1	2	5	10	6	12	2	4	16	8
	Total	5	10	6	12	7	14	11	22	33	16.5
Evening	Necessary	0	0	2	4	0	0	0	0	2	1
	Optional	2	4	1	2	2	4	1	2	2	1
	Social	0	0	1	2	0	0	0	0	1	0.5
	Total	2	4	4	8	2	4	1	2	9	4.5
Anytime During The Day	Necessary	31	62	17	34	25	50	13	26	86	43
	Optional	8	16	0	0	1	2	0	0	9	4.5
	Social	1	2	1	2	1	2	0	0	3	1.5
	Total	40	80	18	36	27	54	13	26	98	49
Total		50	100	50	100	50	100	50	100	200	100

#### 4.3.2.2.4 Respondent's Activities on the Sidewalk

This question helps to understand the respondent's activities while visiting the sidewalks.

*Interims of respondent activities on the sidewalk 73% of the respondent's usual activity were walking, 22% were walking & sitting, the remaining 5% were stand/ sit while waiting for transport.*

Table 70: Sidewalk activities by the respondents

Activities by the Respondents	Activity	Case Study Streets									
		Africa Av.		King George VI		Haile Selassie St.		Churchill Av.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Walk	Necessary	21	42	19	38	29	58	23	46	92	46
	Optional	8	16	7	14	10	20	4	8	29	14.5
	Social	10	20	11	22	2	4	2	4	25	12.5
	Total	39	78	37	74	41	82	29	58	146	73
Walk and Sit	Necessary	3	6	4	8	3	6	7	14	17	8
	Optional	4	8	5	10	5	10	11	22	25	13
	Social	1	2	0	0	0	0	1	2	2	1
	Total	8	16	9	18	8	16	19	38	44	22
Stand/sit while waiting for transport	Necessary	2	4	4	8	1	2	1	2	8	4
	Optional	1	2	0	0	0	0	1	2	2	1
	Social	0	0	0	0	0	0	0	0	0	0
	Total	3	6	4	8	1	2	2	4	10	5
Total		50	100	50	100	50	100	50	100	200	100

#### 4.3.2.2.5 Visiting Partner/Accompanies while visiting the sidewalks

As seen below 46.5% of the respondents usually **visit the street alone**, **9%** visits with **families**, **40%** visits **with friends**, & the remaining **4.5%** usually visit the street sidewalks with **love partners**.

Table 71: Visiting Partner/Accompanies while visiting the sidewalks

With whom do you usually visit the street	Case Study Streets									
	Africa Av.		King George VI St.		Halieselassie St.		Churchill Av.		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Alone	28	56	22	44	23	46	20	40	93	46.5
With Family	4	8	3	6	5	10	6	12	18	9
Friends	16	32	24	48	19	38	21	42	80	40
Love Partners	2	4	1	2	3	6	3	6	9	4.5
Total	50	100	50	100	50	50	50	50	200	100

#### 4.3.2.2.6 Preferred Segments of the Sidewalks

Respondents were asked to name **two** preferred segments or places to walk or sit on the sidewalk. It helps to understand what tangible & intangible features impressed the respondent's.

##### *Africa Avenue*

The sum of the four mainly selected street segments or places is 71 of the total 100. Table 74 shows the share of each segment, The remaining selected segments are around Sky Light Hotel, Bole Japan, SNAP Plaza, and Around the fly-over from Atlas Hotel to Bole Rwanda/Bole Michael respectively also I do not like any of the segments is among the answer.

Table 72: The Four Preferred segments of the Africa Avenue sidewalk

Case Study Streets	Preferred segments or places on the Sidewalk									
	Friendship Mall /Kaldis Coffee		Alem Cinema		WoW Burger/ Natani Café		Fantu Super Market		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Africa Avenue	24	24	21	21	19	19	7	7	71	71
Total	100	100	100	100	100	100	100	100	100	100

**Reasons for Preference of the preferred places on Africa Avenue Street Sidewalk**

Aspect	Reasons of Preference	Preferred segment or place of the Sidewalk									
		Friendship Mall/Kaldis Coffee		Alem Cinema		WoW Burger/ Natani Café		Fantu Super Market		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Physical	Due to the sidewalk width	4	16.5	3	14.3	4	21	2	28.6	13	18
	Due to the unique Buildings	5	20.8	0	0	2	10.5	1	14.3	8	11
	Due to recessed spaces (between the buildings & the sidewalk)	3	12.8	3	14.3	3	15.8	0	0	9	13
	Due to the green / Trees shades	0	0	0	0	0	0	3	42.8	3	4
	Due to the cleanness	1	4.2	0	0	0	0	1	14.3	2	3
Function	It is the best entertainment station /events and Food place	5	20.8	7	33.3	0	0	0	0	12	17
	I like the open cafes	1	4.2	2	9.5	7	36.9	0	0	10	14
Activity	Full of People activities	4	16.5	4	19.1	2	10.5	0	0	10	14
Emotion	I is usually meet and stay with friends here/around and due to this,I do have a lot of memories	1	4.2	2	9.5	1	5.3	0	0	4	6
Total		24	100	21	100	19	100	7	100	71	100

*The combination of the physical features quality and place function were the main reasons for the selection of three segments (Friendship Mall/Kaldis Coffee, WoW Burger, and “Fantu” supermarket) while the segment around “Alem” Cinema was selected mainly due to the place function & activity*

**King George VI Street**

The sum of the four mainly selected street segments or places is 56 from the total 100. Table 75 shows the share of each segment, the remaining selected segments are around National Museum, Arc Cafe, Dondor Café, “Debabe”, Ministry of Finance, 5-kilo University, around “Anbesa Gebi”

Table 73: The Four Preferred segments of King George VI Street sidewalk

Case Study Streets	Preferred segment or place of the Sidewalk									
	Romina /Maleda Restaurant		Kidste Mariam Church		Abadir Supermarket / Jolly Bar		6 Kilo University		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
King George VI Street	21	21	14	14	13	13	8	8	56	56
Total	100	100	100	100	100	100	100	100	100	100

### ***Reasons for Preference of the preferred places on King George VI Street Sidewalk***

Aspects	Reasons of Preference	Preferred segment or place of the Sidewalk									
		6 Kilo University		Romina / Maleda		Kidste Mariam		Abadir Supermarket		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Physical	Due to the sidewalk width	0	0	0	0	3	23	4	50	7	13
	Due to the unique Buildings, Fences	7	33	0	0	0	0	0	0	7	13
	Due to recessed spaces	3	14	3	21	0	0	0	0	6	10.5
	Due to the green escapes / Big Trees	0	0	1	7	5	38.5	0	0	6	10.5
	It is historical	1	5	0	0	0	0	0	0	1	2
	It is very graceful /ionic	4	19	0	0	0	0	0	0	4	7
Function	Due to religious function	0	0	0	0	3	23	0	0	3	5
	Due to the open cafes	0	0	8	57	0	0	0	0	8	14
Activity	Due to religious activity	0	0	0	0	2	15.5	0	0	2	4
	I like all the activities, newspaper/ magazine readers...	2	10	0	0	0	0	4	50	6	10.5
Emotion	I do have a lot of memories around	4	19	2	15	0	0	0	0	6	10.5
	<b>Total</b>	<b>21</b>	<b>100</b>	<b>14</b>	<b>100</b>	<b>13</b>	<b>100</b>	<b>8</b>	<b>100</b>	<b>56</b>	<b>100</b>

*The main selection reasons for the segments of 6-kilo University and Kidste Mariam church were due to the quality of Physical features, Place activity, and Emotional attachments. The main reasons for the segment around Romina/Maleda Restaurant were Place function and Place features. And for the segment around Abadir supermarket was selected due to Physical features and Place activity. (Job seekers usually walk, sit, and read newspapers around here).*

### ***Haileselassie Street***

The sum of the four mainly selected street segments or places is 69 of the total 100. Table 66 shows the share of each segment, The remaining selected segments are around Jenva, Day to Day, Old British Council, T-Room, and “Sebele Asa Bet/Restaurant” respectively.

Table 74: The Four Preferred segments of the Halieselassie Street sidewalk

Case Study Streets	Preferred segment or place of the Sidewalk									
	Cinema Empire		“100 Derja”		Around pizza Corner		Ministry of Education		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Halieselassie Street	23	23	19	19	18	18	9	9	69	69
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

### ***Reasons for Preference of the preferred places on Haileselassie Street Sidewalk***

Aspects	Reasons of Preference	Preferred segment or place of the Sidewalk									
		Cinema Empire		“100 Derja”		Around pizza corner		Ministry of Education		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Physical	Due to the old & Historic Buildings	3	13	0	0	2	11	0	0	5	7.25
	Due to the unique buildings, fences	0	0	0	0	0	0	4	44.5	4	5.8
	The curved buildings aligning the winding street, the similar skylines	0	0	0	0	16	89	0	0	16	23
	Due to the unique and historic stair	0	0	11	58	0	0	0	0	11	16

	It is a very graceful	0	0	3	16	0	0	2	22	5	7.25
	Due to the sidewalk width	0	0	0	0	0	0	3	33.5	3	4.5
Function	Due to entertainment stations	8	35	0	0	0	0	0	0	8	11.5
Activity	I like all the activities	5	22	0	0	0	0	0	0	5	7.25
Emotion	I do have a lot of memories	6	26	4	21	0	0	0	0	10	14.5
	I just like the place	1	4	1	5	0	0	0	0	2	3
Total		23	100	19	100	18	100	9	100	69	100

The *physical features* along the sidewalks were the main selection reason for all segments (*Cinema Empire, "100 Derja", around pizza corner, and Ministry of Education*), Also the *place's function, activity, and Emotional factors* were among the reasons for preference.

### Churchill Avenue

The sum of the four majorly selected street segments or places is 72 out of 100 respondents. The remaining respondents selected segments around Elaina Hotel, "Tikur Anbesa" & Lycee School, Tewodros Square, and Churchill Hotel respectively.

Table 75: The Four Preferred segments of Churchill Avenue sidewalk

Case Study Streets	Preferred segment or place of the Sidewalk									
	Post Office		AA City Municipality		"Delachin" Monument		"Beharawi" Theater Area		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Churchill Avenue	20	20	19	19	18	18	15	15	72	72
Total	100	100	100	100	100	100	100	100	100	100

Reasons for Preference of the preferred places on Churchill Avenue Sidewalk

Aspects	Reasons of Preference	Preferred segment or place of the Sidewalk									
		"Beharawi" Theater Area		AA City Municipality		"Delachin" Monument		Post Office		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Physical	Due to the sidewalk width	0	0	0	0	8	44.5	5	33.3	13	18
	Due to the unique buildings,	4	20	8	42.1	0	0	2	13.3	14	19.5
	I like the monument /sculptures	6	30	0	0	2	11.1	0	0	8	11
	I like the arcade	5	25	0	0	0	0	5	33.3	10	13.9
	I like the open space/ Plaza in front of the municipality	0	0	3	15.8	0	0	0	0	3	4.1
	The area is very clean	0	0	0	0	1	5.5	0	0	1	1.4
	The greenery, the flowers	0	0	0	0	7	38.9	1	6.8	8	11.1
Function	Due to the place function	2	10	0	0	0	0	0	0	2	2.7
Activity	I like all the activities walk sit, taking the picture	2	10	7	36.9	0	0	0	0	9	12.5
Emotion	I do have a lot of memories	1	5	0	0	0	0	0	0	1	1.4
	I just love the segments	0	0	1	5.2	0	0	2	13.3	3	4.4
	Total	20	100	19	100	18	100	15	100	72	100

The *physical features* were the main selection reason for all segments (*"Beharawi" Theater Area, Addis Ababa Municipality, Delachin Monument, and post office*), and the *place function and activity, Emotional factors* were also among the reason for preference.

#### 4.3.2.2.7 Point of Reference (Landmarks)

##### *Africa Avenue*

Of the total of 50 respondents on Africa Avenue, 36 respondents selected Skylight, Friendship Mall, Millennium Hall & “Alem” Cinema respectively. The rest 14 respondents selected Snap Plaza, “Fantu” supermarket, and “Momona” Hotel respectively & 3 respondents answered as do not know.

*The selected landmarks were Hotels, Hall, Malls and Plazas, cinemas, Cafes, and Supermarkets.*

Table 76: Selected points of reference on Africa Avenue

Case Study Streets	Point of Reference (Landmark)									
	Skylight Hotel		Friendship Mall		Millennium Hall		“Alem” Cinema		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Africa Avenue	10	20	9	18	9	18	8	16	36	72
Total	50	100	50	100	50	100	50	100	50	100

##### *King George VI Street*

Of the total of 50 respondents on King George VI, 33 selected “Miyazia 27” Victory Monument, Romina Café & Restaurant, Kidist Mariam Church, “Yekatit 12” Monument respectively, and the other 17 respondents selected Minlik School, National Museums, “5 Kilo” University, “Abadir” Supermarket, Jolly Bar,” Anebesa Gebi” respectively.

*The landmarks selected on King George VI Street sidewalks were Monument, Bar, Café & Restaurant, Church, School and University, Museums, and Supermarkets.*

Table 77: Selected points of reference on King George VI Street

Case Study Streets	Point of Reference (Landmark)									
	“Meyazia 27” Victory Monumen		Romina Café & Restaurant		“Kidiste Mariam” Church		Yekatit 12 Memoria Monument		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
King George VI	13	26	8	16	7	14	5	10	33	66
Total	50	100	50	100	50	100	50	100	50	100

##### *Haileselesie Street*

Of the total of 50 respondents on Haileselesie Street 38 selected Cinema Empire, “100 Derja”, “Ras Mekonen” Bridge, and Ministry of Education respectively, and the remaining 12 selected Razel Café & Restaurant, T-Room, Old British Council, and Good Times respectively.

*The landmarks selected were Cinemas, Cafes and restaurants, Stairs, Bridges, and institutes.*

Table 78: Selected points of reference on Haileseilase Street

Case Study Streets	Point of Reference (Landmark)									
	Cinema Empire		“100 Derja”		“Ras Mekonen” Bridge		Ministry of Education		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
HaileSelassie St.	12	24	10	20	9	18	7	14	38	76
Total	50	100	50	100	50	100	50	100	50	100

## Churchill Avenue

Of the total of 50 respondents on Churchill Avenue, 37 respondents selected “Delachin” Monument, “Beherawi” Theater, Addis Ababa City Administration, and Post Office the remaining 13 selected Tewodros Square, Eliana Mall, Churchill Hotel, TikurAnbesa & Lycce School respectively.

*The landmarks selected were Monument, Theater Center, City Administration, government offices, Squares, Hotels, and Malls*

Table 79: Selected points of reference on Churchill Avenue

Case Study Streets	Point of Reference (Landmark)									
	Delachin Monument		Beherawi Theater		AA City Admin.		Post Office		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Churchill Av.	13	26	9	18	8	16	7	14	37	74
Total	50	100	50	100	50	100	50	100	50	100

### 4.3.2.2.8 Preferred side of the street sidewalks

Preferred side of the street Sidewalks aims to know which side (Is the right or left of the sidewalks?) the respondents prefer most to walk sit or relax and why. This question helped out to know the reason behind what made them prefer the sides. Notes;

- 1) *In the case of Africa Avenue, the right side refers to the side of Millennium Hall while the left side refers to the side of the skylight hotel.*
- 2) *In the case of King George VI Street, the right side refers to the Side of 4 Kilo University and the left side refers to the side of Romina café or Kidste Mariam church.*
- 3) *In the case of Haileseilase Street, the right side refers to the side of Cinema Empire and the left side refers to the side of the Ministry of Education.*
- 4) *In the case of Churchill Avenue, the right side refers to the Side of the Main post office and the left side refers to the Side of “Delachin”.*

Table 80: Reasons for Preference on the preferred side of the Sidewalk

Reasons of Preference	Preferred side of the Sidewalk									
	Africa Avenue		King George VI Street		Haileseilase Street		Churchill Avenue		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Reason for selecting the <b>right</b> side of the sidewalk	The Side of Millennium Hall		The Side of 4 Kilo University		The Side of Cinema Empire		The Side of Post Office			
I usually get transport by this side	2	4	2	4	1	2	1	2	6	3
I feel safe on this side	1	2	0	0	1	2	1	2	3	1.5
I have good memories with families, friends...	1	2	0	0	3	6	1	2	5	2.5
I just love the shops, cafes, ... on this side	3	6	0	0	0	0	0	0	3	1.5
I like the physical features this side	0	0	0	0	4	8	2	4	6	3
There are shades, and benches on this side	0	0	0	0	0	0	1	2	1	0.5
My School /workplace is on this side	0	0	4	8	0	0	0	0	4	2
I respect the traffic rule (walking against vehicle movement )	3	6	1	2	5	10	3	6	12	6
This side is quieter than the other side	2	4	1	2	2	4	3	6	9	4.5
Total	12	24	8	16	16	32	13	26	49	24.5

Reason for selecting the <b>left</b> side of the sidewalk	Skylight Hotel		Romania Cafe		Africa Jewelry		Delachin		Total	
I usually get transport on this side	7	14	5	10	4	8	6	12	14	7
I usually go to Kidste Mariam church by this side	0	0	1	2	0	0	0	0	1	0.5
I feel safe on this side	3	6	3	6	2	4	0	0	8	4
I have good memories with family, and friends.. by this side	2	4	2	4	0	0	0	0	4	2
I just love the shops, cafes, and activities.	5	10	4	8	3	6	3	6	15	7.5
I like the buildings and physical features.	4	8	3	6	4	8	2	4	13	6.5
I respect the traffic rule (walking against vehicle movement )	2	4	2	4	2	4	3	6	9	4.5
There are shades, benches, and flowers.	5	10	4	8	0	0	3	6	12	6
This side is quieter than the other side	1	1	0	0	2	4	1	2	4	2
It is wider than the other side	0	0	2	4	3	6	0	0	5	2.5
It is more active than the other side	3	6	4	8	3	6	11	22	20	10
<b>Total</b>	32	64	30	60	23	46	29	58	113	56.5
<b>Both</b> are Comfortable for me or I like both	6	12	12	24	11	22	8	16	37	18.5
<b>Total</b>	50	100	50	100	50	100	50	100	200	100

*In general, the presence of cafes, shops, religious places, active and vibrant frontages, greenery , cleanness, safety of the sidewalk, presence of sits & other street furniture, old memories, places where they can get transport , respecting traffic rules (walking against the vehicles moving directions) are the main reasons. And also several respondents answered they like both sides equally.*

### 4.3.3 Results of user perception related to the Physical Appearance and Settings

The physical layout is basic and a necessary aspect of dealing with the image of street sidewalks. and this section deals with the *Physical appearance and settings* of the case study sidewalks.

#### *Street Sidewalk Width*

76% of respondents on Africa Avenue agreed that the sidewalk is wide enough whereas 20% were neutral referring to it as okay and the remaining 4% disagreed about the statement. 100% of King George VI Street and Churchill Avenue agreed the street sidewalk is wide enough. 52% of Haileselassie Street respondents agreed, 24% were neutral and 24% disagreed.

*On this subjective question, all King George VI and Churchill Avenue sidewalk respondents, more than 3/4 of Africa Avenue sidewalk respondents, and half of Halieselassie street respondents agreed that their respective street sidewalks are wide enough.*

Table 81: The width of the street sidewalks

Statement	Streets /Avenue Sidewalk	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
This street sidewalk is wide enough	Africa Av.	21	42	17	34	10	20	2	4	0	0	50	100
	King George VI	28	56	22	44	0	0	0	0	0	0	50	100
	Haile Selassie St.	5	10	21	42	12	24	11	22	1	2	50	100
	Churchill Av.	38	76	12	24	0	0	0	0	0	0	50	100

### ***Pavement Materials of the Street Sidewalks***

Table 84, shows that 100% of King George VI Street and Churchill Avenue respondents agreed that the pavement material of the street sidewalk is well and comfortable to walk on, 90 % of Africa Avenue respondents agreed while 10% disagreed with the statement, 72% of Halieselassie street respondents agreed while 28 % disagreed to the statement.

*In general, around 3/4 of respondents in the four case study areas agreed that the pavement material of the street sidewalk is well and comfortable to walk.*

Table 82: Pavement materials of the street sidewalks

Statement	Streets Sidewalk	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
The pavement material of this street sidewalk is well & comfortable to walk.	Africa Av.	21	42	24	48	0	0	5	10	0	0	50	100
	King George VI	24	48	26	52	0	0	0	0	0	0	50	100
	Halieselassie St.	14	28	22	44	0	0	13	26	1	2	50	100
	Churchill Av.	33	66	17	34	0	0	0	0	0	0	50	100

### ***The Physical Condition of the Street Sidewalks***

In dealing with the physical condition of the street sidewalks Table 85 shows that 90% of respondents of Africa Avenue agreed that the sidewalk condition is well and the rest 10% disagreed with the statement. In the case of King George VI Street and Churchill Avenue, 100% of the respondents agreed. 76% of Halieselassie Street respondents agreed while 24% disagreed.

*In general, more than 3/4 of respondents in the four case study areas agreed that the sidewalk condition is good. Haileseilase Street sidewalks have a less satisfaction rate (one of the four Respondents are not satisfied with the physical condition of the street sidewalks).*

Table 83: Condition of the street sidewalks

Statement	Streets Sidewalk	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
The condition of this street sidewalk is well.	Africa Av.	32	64	13	26	0	0	5	10	0	0	50	100
	King George VI	29	58	21	42	0	0	0	0	0	0	50	100
	Haile Selassie St.	13	26	25	50	0	0	12	24	0	0	50	100
	Churchill Av.	35	70	15	30	0	0	0	0	0	0	50	100

### ***Street Sidewalk Freeness and Appearance***

As seen below in Table 86, 88% of respondents on Africa Avenue agreed that they can walk easily along the sidewalk (The sidewalk is free from obstacles and helps them to walk easily) while 32% disagreed. In the case of King George VI Street, 90% agreed while 10% disagreed. 94% of Halieselassie Street sidewalk respondents agreed and 6% disagreed. 96% of Churchill Avenue respondents agreed and 4% disagreed.

*In general respondents, a minimum of 9/10 of respondents on Halieselassie, Churchill, and King George VI Street is happy with the freeness of street sidewalks.*

Table 84: The Appearances of the Street Sidewalks

Statement	Streets Sidewalk	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
The sidewalk is free from obstacles like construction leftovers, & illegal markets so it is easy to walk.	Africa Av.	15	30	19	38	0	0	6	12	0	0	50	100
	King George VI	17	34	28	56	0	0	5	10	0	0	50	100
	Halieselassie St.	15	30	32	64	0	0	3	6	0	0	50	100
	Churchill Av.	29	58	19	38	0	0	2	4	0	0	50	100

### ***Location of the Street and its Sidewalks***

Table 87, shows that 84% of respondents on Africa Avenue agreed that the street is located at the center of the city, and the presence of public transportation and transit helped them to access different places easily due to this they have a positive image of the street sidewalk. 4% were neutral whereas 12% disagreed. In the case of King George VI Street, 84% agreed and the rest 16% disagreed. 94% of Halieselassie Street respondents agreed, 2% were neutral and 4% disagreed. In the case of Churchill Avenue, 92% of respondents agreed and 8% disagreed.

*Based on the responses on all the street sidewalks the majority have agreed that the location of the street is convenient and imposed a positive impression in terms of imageability. In this case, **convince** is the key term response shows that the connection between **comfort and Image***

Table 85: Location of the Street Sidewalks

Statement	Streets Sidewalk	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
The street is located at one of the centers of the city, also due to the presence of public transportations and transits helped you to have a positive Image to this street.	Africa Av.	24	48	18	36	2	4	5	10	1	2	50	100
	King George VI St.	22	44	20	40	8	16	0	0	0	0	50	100
	Haileseilase St.	20	40	25	50	4	8	1	2	0	0	50	100
	Churchill Av.	32	64	17	34	1	2	0	0	0	0	50	100

### ***Street Sidewalk Connectivity***

70% of respondents on Africa Avenue agreed that they can access different places and streets on foot and due to this they like the sidewalk, 8% were neutral referring they do not know about the street connections the rest 22% disagreed. In the case of King George VI Street, 82% agreed, 6% were neutral and 12% disagreed. 94% of Halieselassie Street agreed, 2% were neutral while 4% disagreed, 92% of Churchill Avenue respondents agreed and 8% disagreed.

More than 2/3 of the entire sidewalk user agreed with the statement. Churchill Avenue and Halieselassie Street Sidewalk had higher points' agreement followed by, King George VI Street, and Africa Avenue. **This attribute also links an image with access, linkage, and comfort.**

Table 86: Street Sidewalk Connectivity

Statement	Streets Sidewalk	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
The street is connected with other streets so accessing other streets & districts are possible.	Africa Av.	18	36	17	34	4	8	11	22	0	0	50	100
	King George VI St	24	48	17	34	3	6	6	12	0	0	50	100
	Halieselassie St.	12	24	35	70	1	2	2	4	0	0	50	100
	Churchill Av.	26	52	21	40	0	0	4	8	0	0	50	100

***Presence of Unique and Attractive Architectural Elements along the Street Sidewalks***

Table 89, shows that 100% of respondents on Africa Avenue agreed that the presence of unique buildings and other visual elements helped them to have a positive image of this street. In the case of King George VI Street, 84% agreed, 2% were neutrally referring to that they do not count it as a measurement while 14% disagreed with the statement. 56% of Halieselassie Street respondents agreed, 4% were neutral and 40% disagreed. In the case of Churchill Avenue, 90% of respondents agreed and 10% disagreed with the statement.

*In general respondents of Africa Avenue are highly satisfied with the statement followed by Churchill Avenue and King George Street while Halieselassie Street Sidewalks scored only 56%. Uniqueness and attractiveness vary from person to person and also depend on the person's Exposure, experience, and taste.*

Table 87: Presence of unique Architectural elements along the Street Sidewalks

Statement	Streets Sidewalk	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
The presence of unique Buildings, Architectural styles, monuments, sculptures, arcades, and other visual elements gives you a positive image of this street	Africa Av.	31	62	19	38	0	0	0	0	0	0	50	100
	King George VI	19	38	23	46	1	2	7	14	0	0	50	100
	Halieselassie St.	10	20	18	36	2	4	16	32	4	8	50	100
	Churchill Av.	31	62	14	28	0	0	5	10	0	0	50	100

***Presence of Street Furniture's***

Table 90, shows that 86% of respondents on Africa Avenue agreed that the presence of adequate street furniture such as street lights, street benches, and trashcans are help full to walk or sit and stay longer. Due to this, it gives them a positive image of the street while 14% disagreed with the statement. In the case of King George VI Street, 90% agreed, and 10% disagreed .68% of

Halieselassie Street respondents agreed, while 32% disagreed. In the case of Churchill Avenue, 92% of respondents agreed and 8% disagreed about the statement.

*In general respondents, the Churchill Avenue sidewalk gives higher points to the statement followed by King George VI Street and Africa Avenue. While 1/3 of the respondents on the Halieselassie Street sidewalk disagreed with the statement.*

Table 88: Presence of Street Furniture

Statement	Streets Sidewalk	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
The presence of adequate street furniture such as Street Benches, Trashcans & Street Lights is helpful for a walk or to stay longer.	Africa Av.	22	44	21	42	0	0	6	12	1	2	50	100
	King George VI.	26	52	19	38	0	0	5	10	0	0	50	100
	Halieselassie St	2	4	32	64	0	0	13	26	3	6	50	100
	Churchill Av.	36	72	10	20	0	0	3	6	1	2	50	100

### ***Street and its Sidewalk Topography***

Table 91, shows that 94% of respondents on Africa Avenue agreed that the topography is flat or easy to walk so it gives them a positive image of the street sidewalk while 6% disagreed with the statement. In the case of King George VI Street, 78% agreed, while 22% disagreed about the statement. 98% of Haileselassie Street respondents agreed and 2% disagreed. In the case of Churchill Avenue, 62% of respondents agreed while 38% disagreed with the statement.

*When dealing with topography and easiness to walk Halieselassie Street Sidewalks had a higher satisfaction rate followed by Africa Avenue while King George VI and Churchill Avenue had a lower satisfaction rate.*

Table 89: Topography of the Street and its Sidewalk

Statement	Streets Sidewalk	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
The topography is flat or easy to walk so it gives you a positive image of this street sidewalk	Africa Av.	31	62	16	32	0	0	3	6	0	0	50	100
	King George VI	16	32	23	46	0	0	11	22	0	0	50	100
	Halieselassie St.	25	50	24	48	0	0	1	2	0	0	50	100
	Churchill Av.	16	32	15	30	0	0	19	38	0	0	50	100

### **4.3.4 Result of Users' Perception of Place Function & Activity, Place Identity, Meaning and Experience, Place Attachment, and Sense of Belongingness**

Evaluating the Image of the street sidewalk in terms of place function and activity, place identity, place attachments, place meanings, and experiences are very important parameters because they will reveal the users' perception from a **sensescapes** perspective.

#### 4.3.4.1 District, Place Function, and Activity

##### *Presence of Commercial, Recreational, and Work Functions and Activities*

Table 92, shows 76% of respondents of Africa Avenue agreed that the district function and the nearby land use like commerce, recreational, and offices hub pull them to this street, whereas 24% disagreed with the statement. In the case of King George VI Street, 46% agreed and the rest 54% disagreed. 80% of Haileselassie Street respondents agreed, while 20% disagreed. In the case of Churchill Avenue, 62% of respondents agreed and 38% disagreed with the statement.

*The presence of mixed-function like commerce, work/office hub, and recreational uses are the main pull reason for Africa and Haileselassie street respondents (it is a pull reason for 3/4 of respondents) and also for 2/3 of Churchill Avenue respondents but this worked for below half for King George VI street. In general, the location of the sidewalks (as they are located in prime areas of the city), and the presence of these mixed functions are the reasons for the result.*

Table 90: Presence of Commercial, recreational, and Work Functions and Activities

Statement	Streets Sidewalk	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
This district function & the nearby land uses like commerce, & office hubs pull you to this street.	Africa Av.	20	40	18	36	0	0	7	14	5	10	50	100
	King George VI	9	18	14	28	0	0	19	38	8	16	50	100
	Halieselassie St.	19	38	21	42	0	0	9	18	1	2	50	100
	Churchill Av.	20	40	11	22	0	0	13	26	6	12	50	100

##### *Presence of Public and Civic Service*

Table 93, indicates that 24% of respondents of Africa Avenue agreed that the presence of public and civic services pulls them to the street, whereas 76% disagreed. In the case of King George VI Street, 58% agreed and 42% disagreed. 20% of Halieselassie Street respondents agreed, while 80% disagreed. In the case of Churchill Avenue, 40% of respondents agreed and 60% disagreed.

*The Presence of Public and Civic Services was the pulling reason mainly for King George VI street respondents. The reason behind this could be due to the presence of ample public and civic services like religious places, schools, and universities in the district. On the other hand, Halieselassie Street respondents agreed less with a rate of 1/5, and also below half of Churchill and Africa Avenue respondents agreed with the statement*

Table 91: Presence of Public and Civic Service

Statement	Streets Sidewalk	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
The presence of public, civic religious uses/ buildings pull you to this street sidewalk.	Africa Av.	3	6	9	18	0	0	26	52	12	24	50	100
	King George VI	17	34	12	24	0	0	14	28	7	14	50	100
	Haileseilase St.	7	14	3	6	0	0	32	64	8	16	50	100
	Churchill Av.	9	18	11	22	0	0	21	42	9	18	50	100

*In general, the above two questions aimed to know what type of district function are the reason for the presence of the respondents on the sidewalk. According to Lynch district function is one of the five Image creating elements.*

**Presence of Active Street Sidewalk Frontage**

Based on Table 94, it can be witnessed that 72% of respondents of Africa Avenue agreed that the presence of active street sidewalk frontages with the presence of cafes, outdoor cafes, shops, sports centers, & enjoyable foods adds a positive image to the street sidewalk 8% were neutral referring they did not notice this way whereas 20% disagreed to the statement. In the case of King George VI Street, 54% agreed and the rest 46% disagreed with the statement. 74% of Halieselassie Street respondents agreed, while 26% disagreed, and in the case of Churchill Avenue, 46% of respondents agreed and 54% disagreed with the statement.

*The result shows that 3/4 of Africa and Halieselassie Street sidewalk respondents agreed to the statement followed by King George VI Street while below half of Churchill Avenue, respondents agreed to the statement. The result depended on the nature of street sidewalk front uses activities, and appearances like the presence of glass facades, the presence of cafes & others. For instance, the main reason for the lower agreement rate on Churchill Avenue could be the presence of relatively higher blind walls and less availability of shops and active frontages.*

Table 92: Presence of Active street sidewalk frontage

Statement	Streets Sidewalk	Level of Agreement											
		Strongly A		Agree		Neutral		Disagree		Strongly D		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
The active street sidewalk frontages with the presence of cafes, outdoor cafes, shopping, window shops, sports centers, & enjoyable foods add a positive image to this street sidewalk	Africa Av.	16	32	20	40	4	8	10	20	0	0	50	100
	King George VI	5	10	22	44	0	0	19	38	4	8	50	100
	Haileseilase St.	11	22	26	52	0	0	12	24	1	2	50	100
	Churchill Av.	15	30	8	16	0	0	21	42	6	12	50	100

**The presence of different functions/uses along the street sidewalks**

14% of respondents of Africa Avenue agreed that the multiple functions held on this street sidewalk like the presence of street vending, (street foods, books, and other goods), pull them to this street, whereas 86% disagreed with the statement. In the case of King George VI Street, 34% agreed and the rest 66% disagreed .12% of Halieselassie Street respondents agreed, while 88% disagreed. In the case of Churchill Avenue, 10% of respondents agreed and 90% disagreed

*Based on the responses on the entire street sidewalks the agreement rate is below a quarter. this answer reviles On-street sidewalk functions are not well practiced also the available functions like street vending are not well managed and that need interventions.*

Table 93: The presence of different functions/uses along the street sidewalks

Statement	Streets Sidewalk	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
The multiple functions held on this sidewalk like the presence of street vending, (street foods, books .) pull you to this street.	Africa Av.	1	2	6	12	0	0	32	64	11	22	50	100
	King George VI St.	4	8	13	26	0	0	28	56	5	10	50	100
	Halieselassie St.	3	6	3	6	0	0	38	76	6	12	50	100
	Churchill Av.	1	2	4	8	0	0	36	72	9	18	50	100

***The Presence of various activities held on the street sidewalk***

Based on Table 96, only 2% of respondents of Africa Avenue agreed that the presence of different activities held on the street sidewalk pulls them to the sidewalk, and 98% disagreed with the statement. In the case of King George VI Street, 24% agreed and the rest 76% disagreed about the statement. 100% of Halieselassie Street respondents disagreed. In the case of Churchill Avenue, 12% of respondents agreed and 88% disagreed with the statement.

*The Presence of street sidewalk activities was appreciated by very few respondents on all street sidewalks which revealed that there is a need for improvement in sidewalk activities. The only appreciated activity on all the sidewalks was the holiday (seasonal) Bazaar which was held on King George VI Street sidewalk (On the space in front of Romina/Maleda Restaurant).*

Table 94: The presence of different activities held on the street sidewalk

Statement	Streets Sidewalk	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
There are activities like festivals, bazaars; street shows, and these pull you to this street.	Africa Av.	0	0	1	2	0	0	3	6	46	92	50	100
	King George VI St.	4	8	8	16	0	0	26	52	10	20	50	100
	Halieselassie St.	0	0	0	0	0	0	21	42	29	58	50	100
	Churchill Av.	2	4	4	8	0	0	27	54	17	34	50	100

***Presence of Affordable Services and Shops***

Table 97 indicates, that only 6% of respondents of Africa Avenue agreed that as one factor the presence of affordable shops and cafes pulls them to this street sidewalk 24% were neutral referring I never thought this way whereas 70% disagreed. In the case of King George VI Street, 78% agreed and the rest 22% disagreed with the statement. 74% of Halieselassie Street respondents agreed, 18% were neutral and 8% disagreed. In the case of Churchill Avenue, 66% of respondents agreed and 34% disagreed with the statement.

*Based on the finding expect Africa Avenue the presence of affordable shops, cafes, and services are acknowledged by a minimum of 2/3 respondents on the other hand most respondents in Africa Avenue did not agree with the statement.*

Table 95: Presence of Affordable Services and Shops

Statement	Streets Sidewalk	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
As one factor the presence of affordable shops & cafes pulls me to this sidewalk.	Africa Av.	2	4	12	24	7	14	20	40	13	26	50	100
	King George VI	13	26	26	52	0	0	9	18	2	4	50	100
	Halieselassie St.	9	18	28	56	9	18	4	8	0	0	50	100
	Churchill Av.	6	12	27	54	0	0	14	28	3	6	50	100

#### 4.3.4.2 Place Identities and Meaning

##### *Presence of Landmarks along the sidewalk*

Table 98, indicates that 62% of respondents of Africa Avenue agreed that the presence of physical landmarks like popular cafes, monuments, and buildings helps them easy to recognize the place, add them a sense of place and due to this they like the street sidewalk, 14% were neutral referring they did notice it that way and 24% disagreed. On King George VI Street, 80% agreed, 12% were neutral and 8% disagreed. 72% of Halieselassie Street respondents agreed, 16% were neutral & 12% disagreed. In the case of Churchill Avenue, 94% of respondents agreed, 2% were neutral and 4% disagreed.

*Based on the responses Churchill Avenue sidewalks had a more agreement rate flowed by King George VI Street, Halieselassie Street, and Africa Avenue. In general, the total agreement rate on all street sidewalks is 2/3. As seen in the result presence of landmarks is also an important attribute, Lynch also discussed Landmarks are of the 5 image-creating elements.*

Table 96: Presence of Landmarks along the sidewalks

Statement	Streets Sidewalk	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
The presence of physical landmarks like popular cafes, monuments, buildings, and malls helps me easily to recognize and like this street sidewalk.	Africa Av.	18	36	13	26	7	14	11	22	1	2	50	100
	King George VI	21	42	19	38	6	12	4	8	0	0	50	100
	Halieselassie St.	15	30	21	42	8	16	6	12	0	0	50	100
	Churchill Av.	30	60	17	34	1	2	2	4	0	0	50	100

##### *Presence of Historical Buildings and Places*

Table 99, indicates that 24% of respondents of Africa Avenue agreed that the presence of old, historical buildings and places gives them a positive image of the street, 16% were neutral referring they did not notice it that way, whereas 60% disagreed. In the case of King George VI Street, 72% agreed, 18% were neutral and the rest 10% disagreed about the statement. 80% of Halieselassie Street respondents agreed, 16% were neutral and 4% disagreed. In the case of Churchill Avenue, 78% of respondents agreed, 14% were neutral, and 8%.

*Based on the responses Halieselassie, Churchill, and King George VI Street sidewalks had more agreement rates respectively; on the other hand, Africa Avenue had a very low agreement rate. The 3 sidewalks have relatively old, historical buildings & places, relatively low-rise buildings, and relatively similar skylines aligning the sidewalk and that could be some reason.*

Table 97: Presence of Historical Buildings and Places along the sidewalks

Statement	Street Sidewalk	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
The presence of old, historical buildings & places gives me a positive image of this street.	Africa Av.	2	4	10	20	8	16	18	36	12	24	50	100
	King George VI St.	25	50	11	22	9	18	5	10	0	0	50	100
	Halieselassie St.	14	28	26	52	8	16	2	4	0	0	50	100
	Churchill Av.	17	34	22	44	7	14	3	6	1	2	50	100

### ***Presence of Squares, Public plazas, and Roundabouts***

As indicated in Table 100, 50% of respondents of Africa Avenue agreed that the presence of roundabouts, plazas, squares & open spaces as one urban design quality gives them unique images of this street, whereas 50% disagreed. In the case of King George VI Street, 62% agreed, & 38% disagreed. 24% of Halieselassie Street respondents agreed 30% were neutral and 46% disagreed. In the case of Churchill Avenue, 88% of respondents agreed that & 12% disagreed.

*Roundabouts and plazas are elements that enhance urban quality as seen in the result especially streets with Attractive roundabouts have a higher agreement rate for instance Churchill Avenue has two roundabouts and one urban plaza around the city municipality.*

Table 98 Presence of Squares, Public Plazas, and Roundabouts along the Sidewalk

Statement	Streets	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
The presence of the roundabouts, plazas, squares & open spaces as one urban quality gives you unique images of this street	Africa Av.	15	30	10	20	0	0	12	24	13	26	50	100
	King George VI St.	16	32	15	30	0	0	15	30	4	8	50	100
	Halieselassie St.	4	8	8	16	0	0	29	58	9	18	50	100
	Churchill Av.	24	48	20	40	0	0	6	12	0	0	50	100

### **4.3.4.3 Place Attachment, Social Relations, and Sense of Belongingness**

#### ***A sidewalk for relaxation***

Table 101 indicates that 66% of respondents of Africa Avenue agreed that it is a good street to sit, stay, read, relax, and watch different activities, whereas 34% disagreed with the statement. In the case of King George VI Street, 88% agreed and the rest 12% disagreed. 66% of Haileseilase Street respondents agreed, and 34% disagreed. In the case of Churchill Avenue, 96% of respondents agreed and 4% disagreed.

Based on the responses Churchill and King George VI Street sidewalks had more agreement rate while Halieselassie Street and Africa Avenue has less level agreement rate. The reasons behind the selection might be the presence of street furniture, the width of the sidewalk, the presence of trees and flowers, cleanness, outdoor cafes, and the calmness of the sidewalk.

Table 99: Sidewalk as a Place for Relaxation

Statement	Streets Sidewalk	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
It is a good sidewalk to Sit, stay, read, relax& watch different activities.	Africa Av.	18	36	15	30	0	0	13	26	4	8	50	100
	King George VI	17	34	27	54	0	0	6	12	0	0	50	100
	Halieselassie St.	13	26	20	40	0	0	16	20	7	14	50	100
	Churchill Av.	32	64	16	32	0	0	2	4	0	0	50	100

***The sidewalk serves as a meeting and socializing space with friends and families***

Table 102 shows, that 78% of respondents on Africa Avenue agreed that the sidewalk is a good place to meet with friends so they will have fun with them while walking or sitting and due to this they have a positive image of the sidewalk, 12% were neutral referring they did not practice it and 10% disagreed. In the case of King George VI Street, 72% agreed, 14% were neutral and the rest 14% disagreed. 52% of Halieselassie Street respondents agreed, 20% were neutral, and 28% disagreed. On Churchill Avenue, 74% of respondents agreed, 18% were neutral and 8% disagreed.

*Sidewalks are more than a movement channel that can serve as a meeting place. The three sidewalks except Halieselassie Street had more than 3/4 agreement rates but Halieselassie Street has a bit less agreement rate. The presence of recreational functions and activity on /and around the sidewalk could be the main reason and the presence of street furniture, shades, and cleanness could be the other reasons.*

Table 100: The sidewalk serves as a meeting and socializing space with friends and families

Statement	Streets	Level of Agreement											
		Strongly A		Agree		Neutral		Disagree		Strongly D		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
This sidewalk is a good place to meet with friends. So you have fun with them while walking and sitting due to this they have a positive image of the sidewalk.	Africa Av.	22	44	17	34	6	12	4	8	1	2	50	100
	King George VI	16	32	20	40	7	14	7	14	0	0	50	100
	Haileseilase St.	9	18	22	44	10	20	12	24	2	4	50	100
	Churchill Av.	17	34	20	40	9	18	4	8	0	0	50	100

***A Sidewalk for meeting new people***

52% of respondents of Africa Avenue agreed that it is a good street/place to meet new people, 40% were neutral referring to they did not practice it yet, while 8% disagreed. In the case of King George VI Street, 80% agreed, 14% were neutral and the rest 6% disagreed. 60% of Halieselassie Street respondents agreed, 26% were neutral and 14% disagreed. In the case of Churchill Avenue, 78% of respondents agreed, 18% were neutral and the rest 4% disagreed.

The result indicates the majority of respondents on King George VI & Churchill Avenue, sidewalks believe that it is a place to meet new people & make friends. The presence of many street benches (sitting spaces that invite people together) could be the reason for these two sidewalks.

Table 101: Preferred sidewalk to meet with new people

Statement	Streets Sidewalks	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
It is a good street/place to meet new people.	Africa Av.	15	30	11	22	20	40	4	8	0	0	50	100
	King George VI	20	50	15	30	7	14	3	6	0	0	50	100
	Halieselassie St.	18	36	12	24	13	26	6	12	1	2	50	100
	Churchill Av.	28	56	17	34	3	6	2	4	0	0	50	100

### ***Preferred sidewalk to recap old Memory***

Table 104 indicates, that 40% of respondents of Africa Avenue agreed that the street sidewalk brings them old memories also the presence of some old cafes, game zones, corner sits and shops help them to recap old memories whereas 60% disagreed with the statement. In the case of King George VI Street, 64% agreed and the rest 36% disagreed about the statement. 74% of Haileselassie Street respondents agreed, while 26% disagreed. In the case of Churchill Avenue, 52% of respondents agreed and 48% disagreed with the statement.

*Based on the responses Haileselassie Street sidewalk's higher agreement rate flowed by, King George VI Street, Churchill, and Africa Avenue have fewer agreement rates.*

Table 102: Preferred sidewalk to recap old Memory

Statement	Streets Sidewalk	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
This street sidewalk brings me old memories also the presence of some old cafes, game zones and shops help me to recap old memories	Africa Av.	9	18	11	22	0	0	30	60	0	0	50	100
	King George VI St.	22	44	10	20	0	0	18	36	0	0	50	100
	Halieselassie St.	16	32	17	33	0	0	17	34	0	0	50	100
	Churchill Av.	13	26	13	26	0	0	22	44	2	4	50	100

### ***Reasons to recap old memory***

This question aims to know the reason why they have special memories and attachments. The reason was collected who answered yes in the above table (from 40% of Africa Avenue, 64% of King Gorge, 66% of Halieselassie, and 52% of Churchill Avenue respondents).

*Apart from the below-selected reasons few have answered that they used to come here to see a job vacancy on the pin board and newspapers and they around King George VI sidewalk and few took it as good luck, I used to play Jotieni, my favorite café is on/near to this sidewalk, The church I used to go was near to this street, I used to come here when I am board are some of the reasons.*

Do you have a special attachment and/or memory to this street? Like What?

Statement	Streets	Level of Agreement													
		I usually/used to walk with Friends and/or Families		I usually /used to walk with my Boy/Girl Friend		I Meet My life Partner On this street		My old Village, school/ College was here		I was robbed on this street		Other		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Do you have a special attachment and / memory to this street If so like What?	Africa Av.	2	4	4	8	0	0	1	2	1	2	2	4	20	100
	King George VI	8	16	6	12	1	2	8	16	2	4	5	10	32	100
	Halieselassie St.	14	28	10	20	2	4	3	6	1	2	3	6	33	100
	Churchill Av.	10	20	8	16	0	0	2	4	1	2	5	10	26	100

***Sense of Belongings and Place familiarity with the sidewalks***

Table 105 shows, that 36% of respondents on Africa Avenue agreed that they know most of this area and it adds feeling and belongingness to this street. 10% were neutral referring I did not notice it this way, whereas 54% disagreed. In the case of King George VI Street, 48% agreed, 6% were neutral and 56% disagreed. 42% of Halieselassie Street respondents agreed, 12% were neutral and 46% disagreed. 50% of Churchill respondents agreed that 8% were neutral and 42% disagreed.

*Nearly half of the respondents on all the sidewalks agreed with the statement. And this shows a sense of belongingness and place familiarities are important attributes. The users like their Environment because their living, school, work, enjoyment, religious place, are the main forces to have a strong place familiarity.*

Table 103: Sense of Belongings and Place Familiarity with the Sidewalks

Statement	Streets Sidewalk	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
I know most of this area as well as this street and it adds feeling and belongingness to this street.	Africa Av.	7	14	11	22	5	10	9	18	18	36	50	100
	King George VI	11	22	13	26	3	6	15	30	8	16	50	100
	Haileseilase St.	8	16	13	26	6	12	16	32	7	14	50	100
	Churchill Av.	9	18	16	32	4	8	11	22	10	20	50	100

**4.3.5 Results of user perception of the Street Sidewalk Shades and Cleanness**

***Presence of Street Sidewalk Shades***

Table 106 indicates, that 72% of respondents on Africa Avenue agreed that the shades and cool environment presences are fair. (The presence of trees, arcades, and canopies helped them to walk, stay, and relax at any time during the day.), whereas 28% disagreed. For King George VI Street, 82% agreed and for the rest, 18% disagreed. 46% of Halieselassie Street respondents agreed, while 54% disagreed. And on Churchill Avenue, 78% of respondents agreed while 22% disagreed.

*It is evident that the presence of green infrastructure is a key element for sidewalks and their need is undeniable, their presence is important to walk, sit and stay throw out the day. Based on the responses King George VI Street sidewalks have a higher satisfaction rate with 4/5 ratio and Halieselassie Street has less satisfaction rate of 1/2 ratio.*

Table 104: Presence of Street Sidewalk Shades

Statement	Streets Sidewalk	Level of Agreement											
		Strongly A		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
The shades and cool environment presence is fair. (The presence of trees, arcades.... helped you to walk, stay, and relax at any time.)	Africa Av.	24	48	12	24	0	0	13	26	1	2	50	100
	King George VI	23	46	18	36	0	0	7	14	2	4	50	100
	Halieselassie St.	8	16	15	30	0	0	24	48	3	6	50	100
	Churchill Av.	20	40	19	38	0	0	9	18	2	4	50	100

### ***Street Sidewalk Cleanness***

Table 107 indicates, that 86 % of respondents of Africa Avenue agreed that the street is clean and due to this they have a positive image of the street sidewalk, whereas 14% disagreed. In the case of King George VI Street 82% agreed and the rest 18% disagreed. 90% of Halieselassie Street respondents agreed while the rest 10% disagreed. In the case of Churchill Avenue, 92% of respondents agreed and 8% disagreed.

*In general, based on the responses on all the street sidewalks more than 4/5 have agreed that the street sidewalk is clean due to this they have a positive image of the street. This is a good result and the responsible stakeholders should be appreciated for the result.*

Table 105: Street Sidewalk Cleanness

Statement	Streets	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
The street sidewalk is clean due to this you have a positive image of the street.	Africa Av.	32	64	11	22	0	0	7	14	0	0	50	100
	King Georg VI	19	38	22	44	0	0	8	16	1	2	50	100
	Halieselassie St.	18	36	27	54	0	0	4	8	1	2	50	100
	Churchill Av.	36	72	10	20	0	0	4	8	0	0	50	100

### ***Noise level near or on the Street Sidewalk***

Table 108 shows, 88% of respondents of Africa Avenue agreed that the level of noise extracted from traffic noises, sounds from religious places, and others are low, whereas 12% disagreed. On King George VI Street 76% agreed and 24% disagreed. 80% of Halieselassie Street agreed, while 20% disagreed. 86% of respondents agreed and 14% disagreed on Churchill Avenue.

*In general, based on the responses on all the street sidewalks, more than 3/4 of the respondents have agreed that the level of noise is low. But few answered there are noises at the edge(nodes) & transport stations which are the result of crowdedness, market activities, begging with speakers for the needy, along sidewalk religious activities & perching are among the reasons.*

Table 106: Noise level near or on the street sidewalk

Statement	Streets	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
The level of noise is low. eg traffic noises, crowds, sounds from religious places.	Africa Av.	19	38	25	50	0	0	4	8	2	4	50	100
	King George VI	18	36	20	40	0	0	9	18	3	6	50	100
	Halieselassie St.	11	22	29	58	0	0	8	16	2	4	50	100
	Churchill Av.	30	60	13	26	0	0	6	12	1	2	50	100

### 4.3.6 Street Sidewalk Safety

#### *Presence of Street Sidewalk Crime*

Table 109 indicates that 86% of respondents on Africa Avenue agreed that whether the street sidewalk is free from theft or even though the street is not free from theft you prefer this street, 14% disagreed. In the cases of King George VI Street and Churchill Avenue, 82% agreed and the rest 18% disagreed. 88% of Haileselassie Street respondents agreed, while 12% disagreed.

*In general, based on the responses on the entire street sidewalk, the majority have agreed that the street sidewalk is free from theft / even though the street is not free from theft they prefer this street. As noted in the literature Image can be positive or negative. People may get robbed by force and have a negative image when reaching the spot in other cases they may be robbed but may still like the sidewalk.*

Table 107: Presence of Street Sidewalk Crime

Statement	Streets	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Whether the street sidewalk is free from theft or Even-though the street is not free from theft, you prefer this street	Africa Av.	22	44	21	42	0	0	7	14	0	0	50	100
	King George VI	18	36	23	46	0	0	9	18	0	0	50	100
	Haileselassie St	34	68	10	20	0	0	8	16	0	0	50	100
	Churchill Av.	26	52	15	30	0	0	7	14	2	4	50	100

#### *Street sidewalk safeness from potential traffic accidents*

Table 110 Shows, 94% of respondents of Africa Avenue agreed that the street has a clear distinction between the motorway and the sidewalk due to this waking freely as possible, while 6% disagreed with the statement. In the case of King George VI and Churchill Avenue, 100% agreed and 76% of Halieselassie Street respondents agreed with the statement.

*In general, based on the responses on the entire street sidewalk, more than 3/4 of the respondents have agreed the street has a clear distinction between the motorway and the sidewalk, and due to this, the respondents feel safe. This shows the presence of street-side plantations like shrubs and flowers in addition to sidewalk/street curb has a positive impact on sidewalk users' interims safety.*

Table 108 Street sidewalk safeness from potential traffic accidents

Statement	Streets Sidewalk	Level of Agreement											
		Strongly A		Agree		Neutral		Disagree		Strongly D		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
The street has a clear distinction between the motorway and the sidewalk due to this waking as freely as possible.	Africa Av.	27	54	20	40	0	0	2	4	1	2	50	100
	King George VI	18	36	32	64	0	0	0	0	0	0	50	100
	Haileselasie St.	15	30	23	46	0	0	12	24	0	0	50	100
	Churchill Av.	43	86	7	14	0	0	0	0	0	0	50	100

**Presence of Street Crossings and Traffic Lights**

Table 111 indicates, 82% of respondents of Africa Avenue agreed on the adequate presence of traffic lights, and pedestrian crossings which let them easily cross from one side to the other, whereas 18% disagreed. In the case of King George VI Street, 76% agreed, and 24% disagreed. 72% of Haileselasie Street respondents agreed, and 28% disagreed. In the case of Churchill Avenue, 90% agreed and 10% disagreed.

*In terms of the presence of pedestrian crossing and traffic 2/3 of the respondents agreed that their need is very helpful and due to their presence they feel safe.*

Table 109: Presence of Street Crossing and Traffic Light

Statement	Streets	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
The presence of traffic lights and pedestrian crossings, let you easily cross from one side to the other.	Africa Av.	23	46	18	36	0	0	6	12	3	6	50	100
	King George VI	20	40	18	36	0	0	12	24	0	0	50	100
	Halieselassie St.	19	38	17	34	0	0	14	28	0	0	50	100
	Churchill Av.	38	76	7	14	4	8	5	10	0	0	50	100

**Presence of manageable motorways to cross from one side to the other**

As seen in Table 112 only, 2% of respondents of Africa Avenue agreed that the number of vehicular lanes on this street is manageable to cross from one side to the other due to this they prefer the street while 98% disagreed. 88% of King George VI Street agreed and 12% disagreed. 100% of respondents of Halieselassie Street and 86% of Churchill Avenue respondents, agreed.

*According to the responses, streets with fewer lanes have a high agreement rate showing that manageable lanes are important. For instance; Africa Avenue has 4 vehicular lanes on each side and while crossing on this street a person will be challenged to manage the vehicular speed.*

Table 110: Presence of manageable street crossing lanes

Statement	Streets	Level of Agreement											
		Strongly A.		Agree		Neutral		Disagree		Strongly D.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
The number of vehicular lanes of this street is manageable to cross from one side to the other due to this you prefer this street.	Africa Av.	0	0	1	2	0	0	23	46	26	52	50	100
	King George VI.	24	48	20	40	0	0	6	12	0	0	50	100
	Halieselassie St.	29	58	21	42	0	0	0	0	0	0	50	100
	Churchill Av.	31	62	12	24	0	0	4	8	3	6	50	100

### 4.3.7 General User Perceptions, thoughts, and Recommendations

#### 4.3.7.1 People’s perception of Defining the Image of the Street and its sidewalk

An open-ended question was asked to the street sidewalk users on how they define the image of the street or asked “*What is Street Sidewalk Imageability for you ?*” And each of the 200 respondents was able to answer the following.



In general, 72% of the responses were in terms of **physical layout**, 5.5% answered from the perspective of **function**, 17.5% answered the perspective of **activity** held on the sidewalk and 5% answered as **enjoyable** and **modern**. According to the survey, most of the respondents were able to define the image of street sidewalks from the perspectives of their physical layout and appearance.

Table 111: Answers on defining the Image of street sidewalk

Aspects	What is Street Imageability for you? Answer	Magnitude		Total	
		Freq.	%	Freq.	%
Physical	Attractive	25	12.5	144	72
	Wide	48	24		
	Clean & Pleasant	43	21.5		
	Full of Shades (Trees)	18	9		
	Comfortable to walk or sit	6	3		
	Flat ( Topography Suitable )	4	2		
Function	Multi-Functional Street	2	1	11	5.5
	Social Street /Full of Social Activity	5	2.5		
	Full of Commercial Activity	4	2		
Activity	Full of Activities like events & Festivals	6	3	35	17.5
	Crowd (Full of People)	15	7.5		
	Calm /Decent	14	7		
General	Enjoyable	8	4	10	5
	Modern	2	1		
Total		200	100	200	100

### 4.3.7.2 People’s thoughts when thinking about the Image of the Street its sidewalk

An open-ended question was asked to the street sidewalk users about how they define an Imageable street sidewalk or asked as “*What comes to your mind when you think about the image of the street sidewalk?*” And each of the 200 respondents was able to answer the following.



*In general, 13% of the responses were in terms of physical layout, 35% answered from the perspective of function, 42.5% answered from the perspective of Activity held on the sidewalk and 1.5% answered as nothing. According to survey activities held on the street sidewalks are valued more while thinking about the image of street sidewalks.*

Table 112: People’s Understanding of the Image of the Street Sidewalk

Aspects	Answer	Magnitude		Total	
		Freq.	%	Freq.	%
Physical	Transport Station	11	5.5	26	13
	Big Trees	15	7.5		
Function	Street Vending	14	7	70	35
	Place of Relax	27	13.5		
	Socialization Place	21	10.5		
	Enjoyable Foods	8	4		
Activity	Holiday Celebration	7	3.5	101	50.5
	Walk / Sit / Stand	44	22		
	Theft / Robbery	9	4.5		
	Full of Beggars	5	2.5		
	Couples waking	13	6.5		
	Walking with friends / Family	15	7.5		
	Crowd (People moving here and there)	8	4		
General	Nothing	3	1.5	3	1.5
Total		200	100	200	100

### 4.3.7.3 Positive Aspects and Weaknesses of the street sidewalks

An open-ended question was asked to the street sidewalk users to mention the positive aspect of the most interesting thing about street sidewalks and their weakness of the street sidewalks. And the responses were from the perspective of **Physical, Activity, Function, and Management**.

*84% of respondents on Africa Avenue responded from the perspective of physical aspects, 16% answered from Activity and no answers were gained functional perspective, In the case of King George VI Street, 78% of respondents answered from the physical aspect, 14% answered from the activity and 8% were from a functional aspect. On Haileseilase Street, 74% responded from the perspective of physical aspects, 20 % answered from Activity and 6% answered in terms of function. 90 % of Respondents on Churchill Avenue responded from the physical aspects, 10% answered from the activity and no answers gained functional perspective.*

In general, 75% of respondents on the four case study sites answered the physical aspects as the most interesting or positive aspects while nearly 20% believe the activity held on the sidewalks is the most interesting part. Very few around 5% mentioned functions held on the sidewalk are the most interesting part of the sidewalks but no one has appreciated it on Africa and Churchill Avenues.

Table 113: Positive Aspects rose among the respondents

Aspects	Positive Aspect	Streets									
		Africa Av.		King George VI St.		Halieselassie St.		Churchill Av.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Physical	This sidewalk is wide	7	14	8	16	0	0	11	22	26	13
	This sidewalk is clean	7	14	6	12	4	8	8	16	24	12
	This sidewalk is comfortable	16	32	15	30	12	24	13	26	57	28.5
	There are beautiful buildings near this sidewalk	4	8	1	2	8	16	0	0	13	6.5
	This sidewalk has enough shades	4	8	5	10	0	0	3	6	12	6
	This sidewalk is narrow	0	0	0	0	2	4	0	0	2	1
	This sidewalk is located at the center of the city and I can easily access different destinations.	2	4	1	2	9	18	3	6	15	7.5
	This sidewalk is winding, I can easily reach My distinction without being tried.	0	0	0	0	2	2	0	0	2	1
	The street sidewalk is straight.I can See “Leghar”from“Mezegaga”	0	0	0	0	0	0	1	2	1	0.5
	I like all the amenities and street furniture	2	4	3	6	0	0	6	12	11	5.5
<b>Total</b>	<b>42</b>	<b>84</b>	<b>39</b>	<b>78</b>	<b>37</b>	<b>74</b>	<b>45</b>	<b>90</b>	<b>163</b>	<b>81.5</b>	
Function	This street holds a notice board for jobless people to see new vacancy	0	0	3	6	0	0	0	0	3	1.5
	The services near this sidewalk are affordable	0	0	1	2	3	6	0	0	4	2
	<b>Total</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>8</b>	<b>3</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>3.5</b>
Activity	I like the crowd on this sidewalk	0	0	7	14	0	0	0	0	7	3.5
	This sidewalk is less crowded/calm	8	16	0	0	5	10	4	8	17	8.5
	This sidewalk is Friendly	0	0	0	0	5	10	1	2	6	3
	<b>Total</b>	<b>8</b>	<b>16</b>	<b>7</b>	<b>14</b>	<b>10</b>	<b>20</b>	<b>5</b>	<b>10</b>	<b>30</b>	<b>15</b>
<b>Total</b>	<b>50</b>	<b>100</b>	<b>50</b>	<b>100</b>	<b>50</b>	<b>100</b>	<b>50</b>	<b>100</b>	<b>200</b>	<b>100</b>	

#### 4.3.7.4 Responses of the street sidewalk users on the weakness of the four case study sidewalks

42% of respondents on **Africa Avenue** responded from the perspective of physical aspects, 44% answered from function, 8% answered from Activity, 4% were from Management and 2% were from an emotional perspective, In the case of **King George VI Street**, 44 % of respondents answered from the physical aspect, 10% answered from Activity and 46 % were from the functional aspect. From Respondents on **Haileseilase Street**, 72% responded from the perspective of physical aspects, 18% answered in terms of function, and 10% answered from Activity. 38% of Respondents on **Churchill Avenue** responded from the perspective of physical aspects, and 40% of answers were from the perspective of function. 22% answered from the perspective of Activity.

In general majority of respondents on Haileseilase Street stressed that weakness is more physical while on the sidewalks of King George VI, Africa, and Churchill Avenue respondents mainly focused on function and activity as a weakness also several respondents of these mentioned problems in terms of the physical layout.

Table 114: Weaknesses rose by the respondents

Aspects	Negative Aspect	Street									
		Africa Av.		King George		Halieselassie		Churchill		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Physical	This street sidewalk is not wide enough	1	2	0	0	11	22	0	0	12	6
	This street sidewalk has fewer shades and plantation	1	2	2	4	9	18	5	10	17	8.5
	This street sidewalk is not clean	0	0	3	6	3	6	0	0	6	3
	The Street sidewalk rarely leads to different Neighborhood.	4	8	3	6	0	0	2	4	9	4.5
	The drainage is not that good	1	2	4	8	0	0	0	0	5	2.5
	There are fewer seats	14	28	10	20	13	26	12	24	49	24.5
	Total	21	42	22	44	36	72	19	38	98	49
Function	There are illegal street vendors	5	10	9	18	2	4	5	10	21	10.5
	There are lots of street children	2	4	0	0	2	4	1	2	4	2
	It does not have entertaining games and activities	5	10	14	28	5	10	12	24	37	18.5
	Most of the things here are Expensive	10	20	0	0	0	0	2	4	12	6
	Total	22	44	23	46	9	18	20	40	74	37
Activity	I do not like the crowd.	0	0	2	4	0	0	0	0	2	1
	There are thieves on this street sidewalk	3	6	1	2	3	6	8	16	15	7.5
	It is decent so there must be the crowd	1	2	2	4	2	4	3	6	8	4
	Total	4	8	5	10	5	10	11	22	25	12.5
Management /Function	There are Management Problems like people park on the sidewalks	2	4	0	0	0	0	0	0	2	1
	Total	2	4	0	0	0	0	0	0	2	1
Emotional/ Moral	The altitude of the people in low class is very poor. It belongs to the rich's.	1	2	0	0	0	0	0	0	1	0.5
	Total	1	2	0	0	0	0	0	0	1	0.5
Total		50	100	50	100	50	100	50	100	200	100

#### 4.3.7.5 Recommendations rose from respondents to enhance the image of street sidewalks

An open-ended question was asked to the street sidewalk users to *forward a recommendation or idea to enhance the imageability of the respective street sidewalks*. The Respondents forwarded more than answers a total of 317 recommendations were raised and these recommendations were summarized within 25 subjects that targeted to enhance the social, economic, management, and physical structures.

*51.1% of Respondents on Africa Avenue responded from the perspective of physical aspects, 24.4% answered from Activity and functional, 21.3% responses were from a management perspective while 3.2 % responded as the sidewalk is good as it is. In the case of King George VI Street 47.23% of respondents answered from the physical aspect, 33.34% answered from the Activity and functional aspect, 18.06% responses were from the management perspective while 1.4% responded the sidewalk is good as it is. Of the Respondents of Haileseilase Street, 71.4% responded from the perspective of physical aspects, 19.5% answered from Activity and functional, and 9.1% responded from the management perspective. 42% of Respondents on Churchill Avenue responded from the perspective of physical aspects, 49.5% answered from Activity and functional & 1.5% responded from management perspectives. While 7% responded the sidewalk is good as it is.*

In general respondents on all four case studies' street sidewalks forwarded recommendations that help to enhance the image of street sidewalks. Most respondents of *Haileseilase Street, Africa Avenue, and King George VI* highly emphasized the *physical aspect* while respondents from *Churchill Avenue* emphasized the *activity and function* perspectives.

Table 115: Recommendations rose among respondents

Aspects	Recommendations	Street Sidewalks									
		Africa Av.		King George VI St.		Haileseilasse St.		Churchill Av.		Total	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Physical	It is better to add more street benches	9	9.6	13	18.06	16	20.78	18	24.33	56	17.67
	It is better to add more trees, flowers and greeneries.	11	11.7	8	11.12	13	16.89	4	5.41	36	11.37
	It is better to add Public Arts	2	2.13	0	0	4	5.2	2	2.71	8	2.53
	It is better to widen the street sidewalk	1	1.07	0	0	3	3.9	0	0	4	1.27
	It is better to replace the old poles	0	0	0	0	1	1.3	0	0	1	0.32
	It is better to have a mini police station & security cameras to control theft	5	5.32	2	2.78	3	3.9	2	2.71	12	3.79
	It is better to prepare parking lots for cars and motors	4	4.26	0	0	0	0	1	1.36	5	1.58
	It is better to add more trash cans	6	6.39	7	9.73	6	7.8	2	2.71	21	6.63
	There must be enough bus/taxi station shades in different parts of sidewalks	0	0	1	1.39	3	3.9	0	0	4	1.24
	It is better to have affordable shops & entertainment in the surroundings.	8	8.51	0	0	0	0	0	0	8	2.53

Physical	Timely maintenance of the buildings located along the street sidewalk.	0	0	0	0	6	7.8	0	0	6	1.9
	It is better to add bike lanes	0	0	0	0	0	0	2	2.71	2	0.63
	It is better to change the taxi station to some other suitable places	2	2.13	3	4.17	0	0	0	0	5	1.54
	<b>Total</b>	<b>48</b>	<b>51.11</b>	<b>34</b>	<b>47.23</b>	<b>55</b>	<b>71.43</b>	<b>31</b>	<b>41.9</b>	<b>168</b>	<b>53</b>
Function and/ Activity	It is better to add or add more street foods	4	4.2	11	15.28	3	3.9	11	14.87	29	9.15
	It is better to add a screen that transmits Football, Sports, and other events.	2	2.13	0	0	0	0	3	4.06	5	1.58
	It is better to add or add more book stores along the street sidewalks.	3	3.2	3	4.17	1	1.3	5	6.76	12	3.79
	It is better to add game zones like Jotines , Pool, other game zones and entertainments (street Musics)	12	12.8	9	12.5	8	10.39	14	18.92	43	13.57
	It is better to add a public toilet in some corners of the street sidewalks.	2	2.13	1	1.39	3	3.9	3	4.06	9	2.84
	<b>Total</b>	<b>23</b>	<b>24.4</b>	<b>24</b>	<b>33.34</b>	<b>15</b>	<b>19.48</b>	<b>36</b>	<b>49.65</b>	<b>98</b>	<b>32.83</b>
Manage-ment	The sidewalks must be clean	1	1.07	4	5.56	4	5.2	0	0	9	2.84
	It is better to clean the drainage timely	2	2.13	3	4.17	0	0	0	0	5	1.58
	It is better to remove the construction leftovers.	3	3.2	0	0	0	0	0	0	3	0.95
	It is better to prohibit the illegal street vendors	8	8.51	6	8.34	3	3.9	1	1.36	18	5.68
	It is better to formulate a solution to discourage street children.	6	6.4	0	0	0	0	0	0	6	1.9
	<b>Total</b>	<b>20</b>	<b>21.3</b>	<b>13</b>	<b>18.06</b>	<b>7</b>	<b>9.09</b>	<b>1</b>	<b>1.36</b>	<b>41</b>	<b>12.93</b>
General	It is good as it is / It is very nice, There is nothing to add	3	3.2	1	1.39	0	0	5	6.76	10	3.16
	<b>Total</b>	<b>3</b>	<b>3.2</b>	<b>1</b>	<b>1.39</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>6.76</b>	<b>10</b>	<b>3.16</b>
	<b>Total</b>	<b>94</b>	<b>100</b>	<b>72</b>	<b>100</b>	<b>77</b>	<b>100</b>	<b>74</b>	<b>100</b>	<b>317</b>	<b>100</b>

#### 4.3.7.6 Feelings while visiting the street sidewalks

An open-ended question was asked to the street sidewalk users ‘what do they feel while visiting their respective street sidewalks?’ The Respondents answered their feelings from different perspectives as listed below.

These mojos and illustrations express the feelings that are mostly answered by the respondents.



Table 116: Feelings of the respondents while visiting the street sidewalks

Feelings	Streets									
	Africa Avenue		King George VI Street		Haile Selassie Street		Churchill Avenue		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Refreshment	7	14	3	6	4	8	8	16	22	11
Happiness	12	24	13	26	10	20	7	14	42	21
Relaxation	10	20	8	16	7	14	12	24	37	18.5
Enjoyment	3	6	5	10	11	22	7	14	26	13
Energetic	4	8	7	14	2	4	7	14	20	10
Student	1	2	3	6	0	0	0	0	4	2
Being Young	1	2	0	0	1	2	1	2	3	1.5
Being Free	2	4	0	0	2	4	1	2	5	2.5
“Memest”	0	0	0	0	0	0	1	2	1	0.5
“Arada”	0	0	0	0	7	14	0	0	7	3.5
Hope	1	2	0	0	0	0	1	2	2	1
Board	1	2	0	0	0	0	0	0	1	0.5
Jobless	0	0	5	10	0	0	0	0	5	2.5
Calm	0	0	0	0	0	0	1	2	1	0.5
Diaspora	2	4	0	0	0	0	0	0	2	1
Modern	1	2	0	0	0	0	2	4	3	1.5
Rich	1	2	0	0	0	0	0	0	1	0.5
Oldies	0	0	0	0	4	8	0	0	4	2
Peace	1	2	0	0	0	0	1	2	2	1
Nothing	3	6	6	12	2	4	1	2	12	6
Total	50	100	50	100	50	100	50	100	200	100

#### 4.3.7.7 Naming of street sidewalks based on User's Perception

An open-ended question was asked to the street sidewalk users “If you are required to give a motto or name to this street, what it will be?” The respondents were guided not to pick a person, area, city name, or related names. The Respondents answered there from different perspectives which were both positive and negative.

Table 117: Naming of street sidewalks based on user's Perception\

Motto	Street									
	Africa Avenue		King George VI Street		Haileselassie Street		Churchill Avenue		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Street of Fun	0	0	3	6	8	16	4	8	15	7.5
Street of Happiness	5	10	6	12	9	18	12	24	32	16
Street of Relaxation	6	12	5	10	6	12	16	32	33	16.5
Street of Scholars/ Students	0	0	17	34	0	0	0	0	17	8.5
Street of Love	5	10	3	6	4	8	3	6	15	7.5

Street of Romance	4	8	1	2	3	6	2	4	10	5
Street of Jobless	0	0	7	14	0	0	0	0	7	3.5
Street of Beautiful	4	8	0	0	0	0	1	2	5	2.5
Street of Youths	3	6	0	0	1	2	0	0	5	2.5
Street of Riches	7	14	0	0	0	0	0	0	5	2.5
Timeless Street	0	0	1	2	3	6	0	0	4	2
Street of Demonstration	0	0	1	2	0	0	0	0	1	0.5
“Ye Molkakochu Menged”	6	12	0	0	0	0	0	0	7	3.5
“Ye Aradochu Menged “ (Street of “Arada’s”)	0	0	0	0	11	22	0	0	11	5.5
Street of Diplomats	3	6	0	0	0	0	0	0	3	1.5
Street of Tourists	5	10	0	0	2	4	3	6	10	5
Street of Thieves	2	4	0	0	0	0	1	2	3	1.5
Street of Flowers	0	0	0	0	0	0	4	8	4	2
Street of All	0	0	2	4	2	4	4	8	8	4
Busy Street	0	0	4	8	1	2	0	0	5	2.5
Total	50	100	50	100	50	100	50	100	200	100

### 4.3.8 Summary of the research findings

This research focused on the concept of image of the streets and their sidewalks, particularly four major sidewalks of Addis Ababa city. This has been achieved by performing Interviews (qualified) and site evaluation (quantified) methods using different parameters. This research aimed to improve the image of streets and their sidewalk by setting three objectives; In dealing with the first objective (quantified) **Site evaluations** are summarized below;

Table 118 Summary of the Site Evaluations

<b>Quality Measured: Physical layouts &amp; appearance of Sidewalks</b>				
<b>Evaluation Parameters</b>	<b>Africa Av.</b>	<b>King George St.</b>	<b>Haileselesie St.</b>	<b>Churchill Av.</b>
Sidewalk Width	F	G	F	V.G
Sidewalk Pavement Quality	V.G	G	F	V.G
Sidewalk Pavement Condition	G	V.G	F	V.G
Sidewalk Connectivity	G	F	F	V.G
Sidewalk Continuity	G	V.G	V.G	V.G
Absence of Obstacles	G	G	G	V.G
The slope of the sidewalk	V.G	G	V.G	F
<b>Average</b>	<b>G</b>	<b>G</b>	<b>G</b>	<b>V.G</b>
The result shows all four sidewalks are relatively <b>GOOD</b> . <b>Churchill Avenue</b> has a very positive result while <b>Haileselesie</b> Street has a relatively lower result.				
<b>Quality Measured: Physical features on/along the street</b>				
Landmarks / Point of Reference	F	V.G	G	V.G
Presence of Sculptures, Monuments..., & along/on Sidewalk	F	G	F	G
Presence of Roundabout	G	V.G	G	V.G
Presence of Public arts	<b>B</b>	<b>V.B</b>	<b>V.B</b>	<b>V.B</b>
Quality of Advertisements	F	F	G	F
<b>Average</b>	<b>F</b>	<b>F</b>	<b>F</b>	<b>G</b>
The result shows the sidewalks are <b>Fair</b> . Relatively <b>Churchill Avenue</b> has a positive result while the rest had a lower result.				
<b>Quality Measured: Presence of Street Furniture along the Sidewalks</b>				
Street Benches Availability	F	F	<b>V.B</b>	G
Street light	V.G	V.G	G	V.G
Trashcans Availability	G	G	B	G
Bus Stop / Transit Shelters	V.G	V.G	<b>V.G</b>	V.G
<b>Average</b>	<b>G</b>	<b>G</b>	<b>F</b>	<b>G</b>
The Availability of Street Furniture along the sidewalks Evaluation parameters is relatively Good but <b>Haileselesie</b> Street has relatively lower result, especially on the presence of Street Bench &, trash can be enhanced in-fact the width of the sidewalk somehow have impacted it.				

<b>Quality Measured: Presence of greeneries &amp; cleanness of the Sidewalks</b>				
<b>Evaluation Parameters</b>	<b>Africa Av.</b>	<b>King George St.</b>	<b>Haileselasie St.</b>	<b>Churchill Av.</b>
Shade Trees & Green escapes	<b>G</b>	<b>V.G</b>	<b>B</b>	<b>G</b>
A green strip along the sidewalk that also serves as a buffer b/n the motorway & the sidewalk	<b>V.G</b>	<b>V.G</b>	<b>B</b>	<b>V.G</b>
Cleanness of the sidewalk	<b>G</b>	<b>V.G</b>	<b>G</b>	<b>V.G</b>
<b>Average</b>	<b>G</b>	<b>V.G</b>	<b>F</b>	<b>V.G</b>
The result shows the sidewalks are <b>Good</b> . Especially <b>King George</b> Avenue has a very positive result while <b>Haileselasie</b> Street had a lower result				
<b>Quality Measured: Architectural styles &amp; developments along/near to the sidewalks</b>				
Building with Recessed Entrance	<b>F</b>	<b>G</b>	<b>B</b>	<b>F</b>
Buildings with Unique shapes	<b>G</b>	<b>B</b>	<b>F</b>	<b>F</b>
Scale of Building to street ratio	<b>V.G</b>	<b>V.G</b>	<b>V.G</b>	<b>V.G</b>
Presence of Arcades	<b>V.B</b>	<b>B</b>	<b>F</b>	<b>F</b>
Presence of Old Buildings	<b>F</b>	<b>V.G</b>	<b>V.G</b>	<b>G</b>
Sculptures, articulations & detail as a part of the building.	<b>F</b>	<b>F</b>	<b>F</b>	<b>F</b>
Similar Skyline	<b>F</b>	<b>V.G</b>	<b>V.G</b>	<b>F</b>
<b>Average</b>	<b>F</b>	<b>G</b>	<b>G</b>	<b>F</b>
The result shows that <b>Haileselasie &amp; King George</b> Street sidewalks had Good results and the other two had Fair results.				
<b>Quality Measured: Function &amp; Activities held on the Sidewalks &amp; Surroundings</b>				
Unique Function & Activity	<b>V.B</b>	<b>G</b>	<b>F</b>	<b>F</b>
Presence of courtyards, plazas,& parks near the sidewalk	<b>B</b>	<b>F</b>	<b>F</b>	<b>F</b>
Presence of Mixed-use functions & activities along the sidewalk	<b>G</b>	<b>G</b>	<b>G</b>	<b>G</b>
Presence of public, civic buildings	<b>B</b>	<b>V.G</b>	<b>G</b>	<b>V.G</b>
Presence of Transport stations	<b>G</b>	<b>G</b>	<b>G</b>	<b>V.G</b>
Presence of Managed street vending	<b>V.B</b>	<b>B</b>	<b>V.B</b>	<b>V.B</b>
Presence of outdoor dining	<b>B</b>	<b>F</b>	<b>F</b>	<b>F</b>
<b>Average</b>	<b>F</b>	<b>G</b>	<b>F</b>	<b>G</b>
Dealing with Function & Activities of the Sidewalks & Surroundings Evaluation parameters The result shows <b>King George VI &amp; Churchill Avenue</b> sidewalks had better results.				

Based on the site evaluation of the six thematic categories and thirty-three Imageability measurement indicators Churchill Avenue had a higher result on all 6 thematic categories in fact there are a few indicators with a lower result like the presence of managed street vending and public arts Likewise King George VI and Africa Avenue had good results respectively. But Haileselasie Street had less result than the others, especially on sidewalk width and condition, the presence of street furniture and Greeneries, the presence of public arts, there was a positive result like the presence of similar skyline, old buildings, mixed function, Slope & sidewalk continuity.

In dealing with the second objective (qualified) user satisfaction rates are summarized below;

Table 119 Summary of Interview (User Perception) Result

<b>Quality Measured: Physical Appearances &amp; their Impact on User's Interims of its Imageability</b>				
<b>Evaluation Parameters</b>	<b>Africa Av.</b>	<b>King George St.</b>	<b>Haileselesie St.</b>	<b>Churchill Av.</b>
Width of the sidewalk	76%	<b>100%</b>	52%	<b>100%</b>
Street Sidewalk Pavement Material	90%	<b>100%</b>	72%	<b>100%</b>
Street Sidewalk Connectivity	72%	82%	<b>94%</b>	92%
Sidewalk Freeness from obstacles	86%	90%	94%	96%
Presence of Attractive Architecture	<b>100%</b>	84%	66%	90%
Presence of Street Furniture's	86%	90%	68%	<b>92%</b>
Street & its Sidewalk Topography	94%	78%	<b>98%</b>	62%
<b>Average Score</b>	<b>86%</b>	<b>89%</b>	<b>79%</b>	<b>90%</b>
The results on all case study sites show a positive response a minimum of 4 of every 5 respondents are satisfied with the physical appearance parameters of the sidewalks				
<b>Quality Measured: Presence of Various land uses &amp; Services &amp; their impact on sidewalk users</b>				
Presence of Commercial, Recreational, and Work Services	76%	<b>40%</b>	80%	72%
Presence of Public & Civic Service	<b>24%</b>	82%	<b>30%</b>	52%
Active Street Sidewalk Frontage	72%	54%	79%	<b>46%</b>
<b>Average Score</b>	<b>57%</b>	<b>59%</b>	<b>62%</b>	<b>56%</b>
As seen on the table Africa Avenue & Haileseilase Street has less satisfaction rate on the presence of public & civic service, Churchill Avenue on the presence of Active frontage & King George VI Street on the presence of commercial, recreational & work services.				
<b>Quality Measured: Presence of Sidewalk Function, Activity &amp; their impact on sidewalk users</b>				
Presence of different functions on the sidewalks (like street foods ....)	<b>14%</b>	<b>34%</b>	<b>12%</b>	<b>10%</b>
Presence of various activities held on the sidewalks (Performances ...)	<b>2%</b>	<b>24%</b>	<b>0%</b>	<b>12%</b>
<b>Average Score</b>	<b>8%</b>	<b>29%</b>	<b>6%</b>	<b>11%</b>
The results on all case study sites show the result of sidewalk <b>Functions &amp; Activities</b> held along the sidewalks is very low.				
<b>Quality Measured: Presence of Place Identity elements &amp; their impact on the sidewalk users</b>				
Presence of Unique Landmarks	66%	80%	72%	<b>94%</b>
Presence of Historical Buildings	<b>34%</b>	72%	82%	78%
Presence of Squares, Plazas....	50%	62%	<b>44%</b>	88%
<b>Average Score</b>	<b>50%</b>	<b>71%</b>	<b>66%</b>	<b>87%</b>
The finding shows a <b>positive</b> result but it shows the presence of squares, plazas, and roundabouts on Haileseilase Street & Africa Avenue is low.				
<b>Quality Measured: The Presence of Place Meaning, Experience &amp; their Impact on the Users</b>				
A Sidewalk for Relaxation	66%	88%	66%	96%
Sidewalk as a Meeting Place	71%	72%	52%	79%
A Sidewalk for meeting new people	52%	80%	60%	78%
Sidewalk to recap old Memory	<b>40%</b>	64%	74%	68%
<b>Average Score</b>	<b>58%</b>	<b>76%</b>	<b>63%</b>	<b>79%</b>

Place Meaning & Attachment highly depends on User Experience (Subjective) & the result shows more than a quarter of respondents claim that there must be improvements				
<b>Quality Measured: The Presence of Street Sidewalk Shades, Cleanness, Noise Level</b>				
Presence of Greeneries, Trees	72%	82%	46%	78%
Street Sidewalk Cleanness	86%	82%	90%	92%
Presence of Less Noise Level	88%	76%	80%	86%
<b>Average Score</b>	<b>82%</b>	<b>80%</b>	<b>72%</b>	<b>90%</b>
The finding shows positive results but Haileselesie Street needs improvement in the presence of greeneries, shades along the sidewalk				
<b>Quality Measured: The Presence of Safety and Security &amp; their Impact on the Users</b>				
Less Presence of Crime	86%	82%	88%	82%
Sidewalk safeness from potential traffic accidents	94%	100%	76%	100%
Presence of Street Cross, Traffic Signs, and signals	82%	76%	72%	90%
Presence of manageable motorway lanes to cross from one to the other	2%	88%	100%	86%
<b>Average Score</b>	<b>66%</b>	<b>87%</b>	<b>84%</b>	<b>90%</b>
The finding shows positive results but Africa Avenue Needs Improvement on managed street crossings and lanes ( It has 4 lanes on each side which makes crossing difficult)				
<b>Presence Affordable service</b>	<b>28%</b>	<b>78%</b>	<b>74%</b>	<b>66%</b>
The Presence of Affordable services on the three sidewalks except Africa Avenue have been appreciated by the sidewalk users.				

As indicated in the above user perception-based interview results of the seven thematic categories and with twenty-six Imageability measurement indicators. Churchill Avenue respondents were satisfied in most categories especially that are related to the physical appearance and street amenities provision but yet dissatisfied with the less presence of sidewalk activities and functions. Likewise, King George VI Avenue respondents were happy with the physical appearance, service affordability, and public and unique services yet unhappy with the less presence of sidewalk activities and functions in addition to the less presence of active frontage, commercial and recreational services, squares, and plazas. In dealing with Africa Avenue also the users appreciated the physical appearance like the unique buildings but were unhappy with less presence of sidewalk activities & functions, the pedestrian safety especially related to managed street crossings and lanes, and service affordability. Haileseilase Street respondents were 50-50 about the impact of sidewalk width on them (interims of Imageability), admired the unique landmarks, old, historic, and human-scaled buildings, the place meaning and identity, the managed street crossing, the affordability of services but unhappy with the less presence of Sidewalk greeneries, pavement conditions, street furniture's, presence of public & civic services.

## CHAPTER 5: CONCLUSION

This study witnessed that all the four case study streets and their sidewalks have their unique qualities as a reason for their Imageability. In the case of Churchill Avenue its physical appearance and qualities including the furniture, greeneries roundabouts, and some interactive places like “Behrawi” theater, “Delachin” and the post office area, are the most distinctive elements that brought a positive image to the sidewalk. One of the major reasons for its Imageability is the investment made and the attention given by the city administration on redevelopment of its physical appearance .In addition the location, its connectivity, the district function, and historic meaning played a great role. In Dealing with King George VI street the district function (especially the presence of multiple public services like the university facilities, schools, church also the job vacancy pin boards used as a pull factor) also the sidewalk width and its condition, the shades and greeneries, presence of affordable services, including the street foods, pedestrian safety along the sidewalk are the main reasons of the sidewalk Imageability.

The presence of old and human-scaled buildings, the winding character & cleanness of the street, the active frontage (the presence of more doors and commercial shops), the presence of affordable services, the emotional attachments (memory including the told stories), its location the presence of mixed functions, are the main components of the Imageability of the Haileseilase sidewalk. In fact, the lack of a proper maintenance scheme (maintenance of the sidewalks and electric poles) affected its Imageability. Regarding Africa Avenue the modernity of the district, the recreational facilities, the presence of unique buildings, the location of the street, the building setbacks and rescissions, , the greeneries and flowers are the main reason for its Imageability. On the other hand, the expansiveness of goods and services, and perception of the places (perceived place identity; thinking the places are youths or riches) hindered its Imageability.

On reflecting on the indicators the universal parameters used to evaluate image of the street and its sidewalk was easy for the respondents it is interesting that these parameters work in the context of Ethiopia. Based on this study the major influencing factors that boosts the image of streets & their sidewalks are sidewalk condition & cleanness (Visual Appeal), district functions (diversity of uses creates urban identity by being the major pull factors), street fronts ( less blind walls, transparency and attractiveness of facades), presence of popular landmarks (as the point of

reference and as a place meaning), the presence of street furniture (which make the street a place to meet and stay), the presence of human-scaled buildings (Enclosure), street connectivity (Ease of Access), presence of green escapes (that gives shades & beauty), Pedestrian safety (pedestrian crossings, motor lanes) Sidewalk and Activities (street performance, sports, and gathering).

The presence of old & historical buildings likewise the presence of a combination of the old & new buildings (Place identity), the presence of affordable shops & services, (of the many reasons the affordability of services are connected to ownership; The availability of “Keary Betch or Kebele” houses, are the main reason for the affordable services of the sidewalks expect Africa avenue & for Africa avenue the developments are new with expensive construction costs and technologies & in addition most of the developments are owned privately), low noise levels (The presence of illegal vending’s, noises is related to the management issues.), also influence image of the street & sidewalks. On the other hand, sidewalk wideness may not impact or express Imageability level some respondents might like wide sidewalks while others like narrow sidewalks, or they may not be much concerned about the width also, presence of people (some liked the crowdedness others liked the calmness).

The research also witnessed sidewalk familiarity & emotional attachments (sense of belongingness) depend on the experience & history of the place, memory, & character of a place, for instance, the name “Street of Theft” (from personal experience) “Street of Arada” (form told story), Street of Student (place identity), Street of Rich’s (perceived experience & service affordability) also as discussed on the literature review (Image of the street sidewalk might be positive or negative) the feelings like “Happiness”, “Relaxation” while “Board”, “Jobless” witnessed the negative one. The agreed naming & feeling encountered can also be an input when sidewalk themes & concepts are developed.

In conclusion, the presence and consideration of tangible features (the physical layout and functions) and intangible features (activity and emotion) are important. The study also revealed that there is a solid connection between people and activity, people and function, and people and space, and based on these people develop feelings and emotions.

## **CHAPTER 6: RECOMMENDATION**

### **6.1 Introduction**

The following recommendations are based on the result of site evaluation & user interview, success stories, theories related to enhancing the image of street and its sidewalk. The recommendations are divided into two categories as *general & specific site recommendations*.

### **6.2 General Recommendation**

#### **1) For Policymakers, Strategy, Standard and Manual Developers**

Policy is a general long-term framework of nations which is a key for every development to this purpose of study the urban development policy document is the main target: to reflect on this the urban development policies it shall consider the wider angle of image building (know days modern cities/ urban centers are commodities and products that can be solid and becoming element of income for cities) as one of the major parameters. For instance, the paradigm shift in urban development schemes is benefiting cities like Dubai and New York by developing successful city Imageability developments also policy makers should focus on the promotion of sustainable transport, promote local business, promotion of other types of public spaces. When reflecting on strategies on the developers shall consider Citywide Strategies that help transform into successful public spaces and shift in mobility habits (public transit) on one hand and image-building strategies on the other hand. As noble local Strategies like AANMT, 2018 (It is a strategy developed to support alternative mobility means, such as public transit and non-motorized transport) and also the activity “menged le sew” which was inspired by the Ministry of Transport and the city administrations shall be acknowledged. Using Customized manuals like the Street Design Standards for Urban Ethiopia manual by MUDH, 2017 (a tool kit that ensures Smart, Resilient, Green, Safe and Comfortable Streets) and addition comprehensive urban design guidelines shall also be addressed.

#### **2) For City & Local Administrators**

The management of the streets and their sidewalks is a prevalent responsibility of local authorities (creating, maintaining, and managing including budget allocations) and they are also core bodies that interconnect professionals, the private sector & citizens. City Administrations should take strategic leadership they are responsible for the creation and provide budget especially for the

main street developments, Ensure quality street development with its fixture in addition to that it should focus on the integrated management of utility service; promote public transport, biking and walking, Involve on the creation and improvement public spaces such as plazas, parks and outdoor dining, promote the public safety and local economic developments. The local authorities are mainly responsible for maintaining and managing: regular cleaning, proactive maintenance, & community development (Education, & awareness creation campaigns). The local administrations shall consider these in their day-to-day executions like the well-being of street conditions, greeneries, cleanness, street furniture, and street front structures (Invest on streetscape improvements).Mange Street vending & related commercial activities, Ensuring pedestrian/public safety, and noise level. Ensure Social equity (the absence of religious, political, activities and statements), Organize public meeting, conducting survives and work closely with other stakeholders. Furthermore Manage/take part in organizing mass activities, sports, events, street fairs and related sidewalk activities that promote social interactions.

### **3) For Private Sector**

The private sectors like developers and investors play an important role on enhancing the streets and their sidewalks. They can contribute on the improvements like co- investing on public spaces such us parks and plazas, public transports, invest on economic development partnering with local and city governments . Private sector can help on the creation of sense of vibrancy, activity and functionality which makes the area more attractive and welcoming to visitors. The private developers should also incorporate visually appealing designs, Develop like malls, entertainment stations, residential and others that are helpful to increase place attractiveness and pull factor to the users.

Sidewalk spaces can be showcases and advertisement places. It can be done throw public-private partnerships or these private companies can do it as part of their corporate social responsibilities (CSR). Private sectors and investors should take sidewalk spaces as advert places; for instance, companies like Coca-Cola, Pepsi, Malt drinks, Entertainment companies, Banks, Telecoms, and others should take this advantage to activate their products, like sponsorships on street furniture, articulating greeneries, advertisement boards, sponsoring corner shops, and managed street vending's and events.

*Notes for policymakers the sponsorships and advertisement shall not be for the short term because temporal advertisement will diminish the sense of permanence and it affects the image of the street and its sidewalk, the advertisements should not overload the public spaces. In the case of Roundabouts, they usually hold place identity elements like monuments, and to avoid domination of advertisement on these places the public body shall manage should have a close follow-up with the sponsors/partners to create a win-win solution. In addition, the advertisers and sponsors shall ensure the use of ambient techniques of adverting.*



*Illustration A: Sponsorships and Advertisements of Coca-Cola on Bus shelters. Source: <https://grandvisual.com/the-campaign-that-shares-more-than-a-coke>, Illustration B: Sponsorships and Advertisements of Malta Guinness on Bus shelters. Illustration C: Advertisements of Kit Kat on Street Furniture. Source <https://medium.com/@hafismkareem/ambient-advertising-d189a9363f00>*

- *Building owners along the sidewalk shall articulate their buildings, manage the shop front advertisements, and the building ground floors shall be visually permeable and commercial because it helps the shops to sell the product easily, increase the value and revenue of the buildings, and make the urban space interesting and responsive.*
- *Entertainment companies and event planners should think of sidewalks as a stage for performances, for instance, Churchill Avenue sidewalks could be a good space for different street performances, sports, shows, and other related activities these activities can be communicated by websites, social and other media (many cities have websites related to sidewalk festivals, art, and performance, for instance, <https://www.sidewalkfestival.com/>, <https://www.sidewalkfest.com/>, and <https://www.sidewalkdetroit.com/sidewalk-festival> are among them)*

#### **4) For Users / Community**

The participation of community is very important because the community is the source of local knowledge, local identity, owners of local business and owners of the public based on this Users shall protect the well-being and cleanliness of the street sidewalks and surroundings, Insure social equality and inclusiveness (believing in Public space is for all and everyone has the right to use it equally), Promote public safety. Develop group and individual activities; also socialize with

different groups of people, develop events, street fairs and games, organize and involve on public meetings and more over involve on local business and take a major share to create and enhance local (place identity). Participate and taking a voluntary role in the developments and operations of Sidewalk. Also work closely with local government on the development and managements of the street and other public spaces.

##### **5) For Urban Planners, Designers, and Place making Professionals**

Urban planners, designers, and place-making professionals are key stakeholders in the creation of image development to enhance the image of the streets and their sidewalks. They should work from the general district function to detail-level designs like street furniture placements. The professionals design should encourage mixed development, walkability (prioritize pedestrians), public transport, attractive landscapes, and a wider sidewalk share; address equity (inclusivity); ensure accessibility (continuity and connectivity); and furthermore, the below-detailed recommendations are suggested to these professionals.

***With regard to urban plan and Design Concepts:*** Urban Design and Planning is a wide range discipline of all streets and their Imageability is crucial so Integrating urban planning and design techniques such as **Tactical Urbanism** ( that inspires people to collectively re-imagine and re-invent public spaces and strengthens the connection between people and places, that pays attention to physical, cultural, and social identities. by a collaboration of governments, businesses and nonprofits, and citizen groups). Likewise, **Creative place-making** ( which builds on distinctive local character and story, art and culture work, engages community participation and catalyst) and to attain physical pleasantness using guidelines such as **Complete Street** design standard (to be planned, designed, operated, and maintained to enable safe, convenient, and comfortable travel and access for users of all ages and ensure sustainability & vitality) are important because these three approaches can ensure pleasant physical appearance, improve on sidewalk activity and function by reclaiming sidewalks to the community. in addition to these approaches, urban planners and designers should consider the concept of **Successful public spaces:** Access and linkage of streets (Improve Main and Arterial Corridor to attain about half a share of sidewalks also their connectivity with others), promote walkability and public transit, Use and Activity; Develop mixed land and building uses, furthermore ensure zoning flexibility on

the main street sidewalk (The public-private relations like arcades as part of sidewalk room) , Comfort and Image ( Insure Safety, Greeneries, cleanness, consideration of place history), Sociability (Insure Diversity, Friendliness, welcoming and invitingness) are vital to increasing the image of streets and their sidewalks.

***Concerning Physical Appearance and visual Connections of sidewalk Imageability;*** Physical Appearance and Visual connection are the core elements that one can like or dislike about the sidewalk, the pleasantness of the physical settings should collaborate with the on-street, street front (Built-Environment) as well as the surrounding (district) developments and appearance. On the streets, their sidewalks provision of adequate street furniture and green escapes considering their arrangements & repetitions, ensure barrier-free access that helps to reduce the conflict between mobility & livability, and Improve way finding to advance legibility (sign boards, floor signage's) To attain visual connection ensuring Transparency (Glass façade , street/ storefront, appropriate lighting systems that provide a great ambiance), Articulating old buildings, provision of unique buildings, monuments, sculptures, and roundabouts (that evokes visual likability), Development consideration of (unity & symmetry of coloring, ornaments, signage, & wall details), Smooth skylines & building height, views & vistas, & mainly consider green escape provisions.

***Concerning Functional and Emotional Aspects of sidewalk Imageability:*** These aspects could not be achieved without a pleasant physical appearance because of this on one hand, ensuring physical qualities that enhance emotional connection like human-scale buildings, the width of streets, building details & ornamentation (Interactive facades), spacing of windows and doors, pavement texture, unique landmarks, street furniture, outdoor dining spaces, articulating old buildings and also design consideration of social inclusiveness and public safety on the other hand design spaces that attract to sidewalk activities like small performance paces, elements for sport activities, promote local identity by involving local communities. Interims of functionality consideration of district, Street front, and Sidewalk functions are very important these functions shall ensure mixed-use developments and service affordability.

### 6.3 Specific Recommendations for the Case Study Sidewalks

#### 1) Recommendation to Enhance the Image of Africa Avenue Sidewalk

Based on the observation, site analyses, and user survey this sidewalk has its strength that should be enhanced and weakness that needs improvement concerning image of the street & its sidewalk.

##### *The strengths of the sidewalk that must be maintained and enhanced*

- A) *The sidewalk width is fair, the pavement quality and its conditions are good, also, the sidewalk is free from obstacles/construction leftovers, and it is clean.*
- B) *The presence of unique buildings (attractive architectural styles), and the ground floor uses (the presence of glass façades which are mostly shops), is the strength of the sidewalk that helped to increase its Imageability of the sidewalk. Building-mounted advertisement styles are good but street advertisements especially billboards should be reconsidered.*
- C) *There is a fair presence of sidewalk shades, flowers, and shrubs that must be enhanced, especially the shade trees. Also, the park which is found in the underpass around Bole-Japan is a good example for others on how to use leftover spaces, the articulation roundabout in front of Skylight hotel, and the flowers on the street median are the strength.*

Table 120: The weakness of Africa Avenue Street Sidewalk that shall be improved

<b>No</b>	<b>Weakness</b>	<b>Recommendation</b>
<b>1</b>	<i>District Function</i>	<i>The district function is more of mixed commerce and recreation, there is less presence of public and civic buildings and residences. These functions are important to pull users to the sidewalks and to enhance this future development shall include these activities.</i>
<b>2</b>	<i>Sidewalk Function and Activity</i>	<i>The sidewalk activity and function should include managed street foods and shops, corner sits and stores, street games, entertainment &amp; others.</i>
<b>3</b>	<i>Presence of some blind walls</i>	<i>There are some blind walls like the front of the millennium hall, residences, and institutions near “Wollo Sefer” square those institutions shall develop their plots side to the street front to ensure vibrant function and activity.</i>
<b>4</b>	<i>Street Furniture (Street benches)</i>	<i>The general presence of street furniture (street light, trashcan, bus shelter) is good but the presence of street benches shall be reconsidered well.</i>
<b>5</b>	<i>Presence of less affordable services</i>	<i>The reasons could be the high rentals as most of the street fronts are private malls and hotels, unlike the other sidewalks. For example, most of the buildings along Churchill/Haileseilase are owned by the government “kiray betoch” which helped the rented shops to pay lees rentals. To ensure affordable services promoting street shops, food, and coroner cafes is important.</i>
<b>6</b>	<i>Presence of illegal street vendors and street children’s</i>	<i>The local administrators should control the illegal vending activities and the noise level but managed street vending should be enhanced. Also, the presence of street children along the sidewalk shall be managed.</i>

7	Safety Issues and concerns	To reduce theft issues occurring along the sidewalk all responsible bodies should be taken other than that Designers should create vibrant, active, and mixed sidewalk spaces, attention to ground use of street front uses, create more doors, also enhance CCTV (there are few along this sidewalk). In dealing with traffic safety this street has 4 vehicular lanes on each side which are difficult to cross to alleviate this it is better to purpose the coroner lane for car parking, dedicate the Bus Rapid Transit lane, or widen the median and use it for different activities.
8	General Perception	Some users believe that this street is for the rich's, youngsters, & "molkaka". It might be the outcome of different factors but providing affordable and all-inclusive recreational centers, and services are helpful.
9	General Recommendations	This sidewalk can manifest the modern days of the city-built environment & developments also future developments shall respond to this theme and they shall contribute their share to enhancing the imageability of the sidewalk.

## 2) Recommendation to enhance the Imageability of King George VI Street Sidewalk

Like Africa Avenue, this sidewalk has its strength that should be enhanced and weakness that needs improvement to improve the image of the sidewalk.

### *These strengths of the sidewalk must be maintained and enhanced*

- A) *The sidewalk is wide, the pavement pattern and condition are good, and the sidewalk is fairly clean and has different types of shade trees which could be exemplary for many sidewalks. The sidewalk has rare obstacles (construction debris) but it needs improvement on the street vending.*
- B) *The district function mixed (Residence, work, service, and recreational) which is good, and also this sidewalk proved the presence of the public, religious, school functions, and the presence Job notification pin boards, newspapers reading stations served as pulls factors to attract people to the sidewalks. Enhancing the district function by creating more pull elements is very important.*
- C) *The presence of different forms and varieties of landmarks (monuments, universities, schools museums, churches, cafes, and others) are good also the presence of old buildings and sculptures on the fences of institutes, roundabouts contributed as an attribute to the sidewalk imageability.*
- D) *The presence of street furniture (Street lights and Bus shelters) is good but many areas of the sidewalk lack street benches and Trash canes. The provision of these elements is very important.*
- E) *The presence of outdoor cafes in a few areas is good and it should be promoted to other areas of the street. The book vending along the sidewalk is very good but the vending shall be managed. Also, the presence of affordable services should be maintained. The seasonal function and activities like bazaars along the sidewalks shall also be kept.*
- F) *As seen in the results while visiting users many respondents perceived many students along the sidewalk and named the sidewalk as a street of the scholars. These feelings are derived from the*

user's observation. Also, the job vacancy pin boards invited many people who need jobs to respond to this activity, and to satisfy them there shall be a provision of affordable services like provision On-street fast food, Book stores, affordable recreational centers, street sits, street entertainment, and on-sidewalk mindset and development programs.

Table 121: The weakness of King George VI Street Sidewalk that shall be improved

No	Weakness	Recommendation
1	Sidewalk Function and Activity	Inject more recreational centers, More street food stores (affordability of services is crucial to the sidewalk.
2	Street Front Appearance and Functions	Most of the street-front built environments is institutions that are mostly fenced which brought blind walls. This killed the street front activity and the institutes should develop these strips into mixed functions with interactive façade & articulation that responds to the public realm.
3	Illegal vending and unmanaged noises	The local administrators should control the illegal vending activities and the noise level.
4	Street Plantation	There are ample shade trees also planting flowers is very important along the sidewalk because it fetches attractive views as seen on Churchill Avenue.

### 3) Recommendations to enhance the Imageability of Haileseilase Street Sidewalk

This street sidewalk is narrow, it holds historic and old buildings, and the sidewalk has more shops along the sidewalk. It is found in the primary location of the city.

#### *The strengths of the sidewalk that must be maintained and enhanced*

- A) *The mixed district functions (commerce, work, residence, and recreational) are good to pull users but especially near the sidewalk the presence of public and civic buildings are less to enhance this future development & function changes shall focus on these function & activities.*
- B) *The street front holds old and historic buildings which are one of the attributes of its imageability. Keeping and enhancing this advantage is important timely maintenance and articulations with the help of historians and related professional guidance are needed.*
- C) *The buildings along the sidewalks are human-scaled most buildings are one or two stories some are four and a few exceed and it helped this narrow street to be more Imageable.*
- D) *Most of the Streets fronts are active and vibrant, it is hard to find blind walls, and most of the storefronts are shops, especially jewelry, clothes, goods, and services this is the strength of the sidewalk, most of the shops have a glass façade interface which promoted window shopping.*
- E) *There are several historic places like the cinema empire, old landmarks like the late old Tango and Mohamud Musika bet, old cafes, public stairs, and others. To restore and enhance these old activities and functions it shall be redesigned to resemble old did and to attract people to the sidewalk. No sidewalk is better than this sidewalk to resemble past activities.*

F) The other strength of this sidewalk is the presence of affordable shops and services.

Table 122: The weaknesses of the Haileseilase sidewalk that shall be improved

No	Weakness	Recommendation
1	Street sidewalk condition	The street condition on segments 3 and 4 is good but the condition and the pavement material of segments 1 and 2 shall be maintained and changed.
2	Sidewalk furniture's - Bus Shelters - Street Light - Street Benches - Trashcans	The presence of bus station shelters is very good. The presence of street lights along the sidewalk is good but some of the street light's appearances should be reconsidered. The presence of street benches is very rare and to enhance this providing a street bench is very important as the sidewalk is narrow the use of movable benches and stairs along the sidewalk can be used as a sit (In a managed way). The presence of trash cans should also be enhanced.
2	Sidewalk Function and Activity	Inject more recreational centers, street foods, outdoor, cafes street games, and entertainment can enhance the activities
3	Illegal vending and unmanaged noises	The local administrators should control the illegal vending activities and the noise level. But managed street vending should be enhanced.
4	Street Plantation	Their less presence of trees and greeneries along the sidewalk alleviate there must be a street tree plantation to provide shade, shrubs & flower strips to enhance imageability and safety.

Table 123: Success stories that could be adopted to enhance Haileseilase Street sidewalk

<p>For instance, From success, Rue Saint Louis en l'Île, Paris, France has also narrow sidewalks, and active street fronts the strategy to enhance the imageability of the sidewalk can be a good input (Interesting shop window displays, Attractive and detailed building facades)</p>	
<ul style="list-style-type: none"> <li>✓ Promote temporal furniture</li> <li>✓ Special pavement</li> <li>✓ Playful store window</li> <li>✓ Façade articulation</li> <li>✓ Movable flower pots</li> <li>✓ Corner shops and cafes</li> </ul>	 <p>Source: (PPS, 2015)</p>
<p>The Cascade Project transforms neglected public staircases into citizen-centric urban spaces by providing a welcoming and sociable environment for Hong Kong Residents. The asymmetric mesh sculpture offers individual and adjoining seating areas surrounded by Bauhinia trees and assorted plants. In the evening, a strategic lighting system creates an inviting atmosphere.</p>	
<ul style="list-style-type: none"> <li>✓ For instance, Articulating and using 70 “Derja” and 100 “Derja”(stairs) could be a stage for performing musicians, and poems.....</li> <li>✓ Sports activities along these stairs are practiced well.</li> </ul>	 <p>Source: <a href="https://inhabitat.com/the-cascade-project-transforms-disused-staircase-into-inspiring-urban-space-for-hong-kong-residents/">https://inhabitat.com/the-cascade-project-transforms-disused-staircase-into-inspiring-urban-space-for-hong-kong-residents/</a></p>

**4) Recommendations to enhance the Imageability of Churchill Avenue Sidewalk**

Based on the observation, site analyses, and user survey this sidewalk has its strength that should be enhanced and weakness that needs improvement to improve the image of the sidewalk.

***These strengths of the sidewalk must be maintained and enhanced***

- A) The street sidewalk is redeveloped recently. It is wide and attractive, the pavement materials, patterns, and condition are very good, and it includes well-managed lanes for the disabled which is the strongest part of the sidewalk. Also, the sidewalk is fairly clean and has different types of shade trees, greeneries, and flowers which could be exemplary for many sidewalks. Protection and management of the existing physical appearance and cleanness shall be given attention.*
- B) The district function is mixed with more public and private institutions, hotels, schools, residences, and a few recreation centers also the sidewalk is found in the primary location of the city and also connects major city centers and functions. Maintaining the existing functions is very important and also injecting more services, especially recreational service is very important.*
- C) There are several landmarks and roundabouts along the sidewalk the presence of different forms and varieties of landmarks (monuments, schools, government institutions, theater centers, banks, hotels, and others), and the presence of a roundabout is very good, the site holds both old and new buildings and these attributes have a positive contribution to the sidewalk's imageability.*
- D) The presence of street furniture is very good. People can sit enjoy, play, and read. The management and enhancement of these elements are very important.*
- E) The presence of affordable services around the district is good but should be enhanced.*

Table 124: The weaknesses of the Churchill Avenue sidewalk that shall be improved

<b>No</b>	<b>Weakness</b>	<b>Recommendation</b>
1	<i>The street front uses and function</i>	<ul style="list-style-type: none"> <li><i>- Most of the buildings along the sidewalk are service giving especially on segments 1 and 3 to bring vibrancy. The institute shall activate their street front (they have long blind walls and it shall be active).</i></li> <li><i>- The fronts of the black lion and Lycee Guebre Mariam schools have a blind wall. To alleviate this, the schools shall develop the school's fronts with a compatible commercial use which must not affect the teaching and learning activity or these fences of the schools can be a good spot for public arts.</i></li> <li><i>- There must be more shops and cafes, and the ground floors shall have interactive façades and play full store windows. Articulation of the street front is very necessary and should respond to the public realm.</i></li> </ul>
		<ul style="list-style-type: none"> <li><i>- The presence of grave box, window, and door shutter shops along the sidewalk has been for years and their presence as one service is good, but the shops should only use the shops as display areas and should not mix it with their store (they have to consider the space as display and create welcoming interfaces).Also, they should avoid using sidewalk spaces.</i></li> </ul>

		- <i>There are few un-built/developed plots (spaces) along the sidewalk these spaces can be an advantage if the development of the places is subjected to missing services that pull people to the sidewalk. (Recreational centers, youth centers, malls, shops, libraries, and residential apartments).</i>
2	<i>Sidewalk Function and Activity</i>	<p><i>The sidewalk has a pleasant physical appearance but when it comes to sidewalk function and activity it is not well part iced to alleviate this :\</i></p> <ul style="list-style-type: none"> <li>- <i>Promote street foods, corner shops, and outdoor cafes.</i></li> <li>- <i>Street Games, Outdoor cafes, Street Music, entertainment, and cinemas.</i></li> <li>- <i>Seasonal functions and activities like bazaars and festivals along the sidewalks should be practiced.</i></li> <li>- <i>The local administrators should control the illegal vending activities and the noise level. Also, Managed Street vending should be enhanced</i></li> </ul>

### **General Recommendation**

This sidewalk has a big potential to market the city in terms of urban tourism. As discussed “*The Street is a Place to be Seen.*” (Jacobs, 1995) & “*streets are Showcases of a City*” (Nurhikmah, 2016) assume sidewalks as tourist attractions are very important. For instance, Champs-Élysées Street-Paris, France is a good example. A.A city is the capital of Ethiopia as well as Africa, and hosts different conferences & events this created a huge opportunity to promote urban & conference tourism. Churchill Avenue sidewalk can contribute its share of the city's urban tourism. Of the reasons, the street connects the major tourist attraction areas of the city: “Piazza” (the historic areas, jewelry, & other shops), it holds the “Beherawi” area (entertainment), the post office area (arts, crafts, & jewelry shops), very near to “Meskel Square” (the largest & major public plaza) very near to stadium (leather shops), surrounded by Hotels and malls. The other main advantage is the physical appearance of the sidewalk.

Based on these advantages different stakeholders should work together to ensure the sidewalk is a tourist attraction site. For instance, the shops and the managed street vending should consider how to market their products. When dealing with services a good example could be (Champs-Élysées Street-Paris, France) the services provider along this famous sidewalk promote their food drinks, and way of life as “enjoy a café au lait or glass of wine, and experience Parisian life.” along the sidewalks. So we have different local foods and drinks like “Tela”, “Tej” and others.

In addition, as indicated in the results respondents named the sidewalk the Street of “Relaxation” & “Happiness”, and felt happiness, & joy while visiting the sidewalk. These themes can be good inputs to develop festival street activities. (Enhancing regularly scheduled, seasonal activities like sports, music, poem, street sidewalk program, & mindset programs. For instance, the sidewalk in front of “Dilachen” monument could be a good stage for different performances. Promote Outdoor cafés.

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## ANNEX A

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### Exploring the Image of the Street and its Sidewalks in the Case of Addis Ababa: A User Perception-Based Approach

#### Abstract

##### Keywords

Public Space

Street and its Sidewalks

The Image of Street and its Sidewalks

User Perception

Addis Ababa

:

Great streets begin with sidewalks. Sidewalks have been the main circulation for social, cultural, and economic activities. While walking a person can understand, experience, and evaluate streetscape and this impression creates an image of the sidewalk. The image created by users will become an identity to the sidewalks. To evaluate the image of the street sidewalk a perception approach is used as each individual has his/her perception which will be derived from different aspects. The city of Addis Ababa is going through different public space developments, mainly on street networks. Walking is the predominant transportation system of the city and its sidewalks are serving as a meeting, socializing and economic space other than movement channels as discussed in different studies the street and its sidewalks are the most abundant public space. Based on this understanding and examination of the user's perception of the Image of sidewalks is vital to enhance the sidewalk's Imageability, capacity, and function as a public space. This paper attempts to explore user perception about the Image of the Street Sidewalks in the case of Addis Ababa by examining Image creating indicators like the physical layout of sidewalks, function, and activities held on them, place identity and meaning, sense of belonging, and emotional factors, safety, environmental aspects. The conducted survey indicates that emotional factor and physical layout have a major influence on the Imageability of the sidewalks while activities held on the sidewalks gives identities to the sidewalks.

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#### 1 INTRODUCTION

Streets as public spaces define the character of a city. From squares and boulevards to neighborhood gardens and children's playgrounds, public space frames the city image. (UN-Habitat, 2018). Streets are the heart and showcase of cities Jacobs stress their importance as:

*“What comes into your mind when you think of cities? They are streets.... it is the main public places of a city and the most vital organs... If a city's street looks interesting, the city looks interesting; if they look dull, the city looks dull.” (Jacobs J, 1961)*

Historically, streets have played a significant role in facilitating mobility, commerce & social interaction, by connecting places, people & goods. The street the widest & most accessible public space network has always played a major role in providing public space in cities. By examining the street, one can come to understand the city & the society in which the street is located as they form an integral part of the social & commercial fabric of the city (UN-Habitat, 2013).

Addis Ababa city is the capital of Ethiopia and the political capital of Africa home to 25% of the urban dwellers of the country. (World bank, 2015) The city is one of the fast-growing cities performing different urban development

projects. The city was organically formed but with the help of different master and structural plans the city is gradually becoming a planned city but still, a lot is left to be done. Addis Ababa city has been going through different public space projects, especially on developments of the street network. Currently, there are some measures taken by the city administration on considering the streets and their sidewalks as public spaces for instance the reconstruction of Churchill Avenue can be a good example.

The Street and its sidewalks of Addis Ababa city have been serving movement lanes, meeting, and socializing spaces, and places for selling and buying goods. Residents of Addis Ababa city have a lot of activities and memories on the street sidewalks due to this these spaces are beyond a movement channel. For evidence, different music and local novels like “Piassa Mohamud gar Tebekgen “ & “Bole Picokok gar Tebkigen” a tale of these two novels discuss two main street sidewalks relating to Fun, love, joy, sorrow, and other activities memories, and dramas happened on the sidewalks. Also, a person can witness how the city sidewalks are versatile. The image of sidewalks becomes the focus of the study because the sidewalk is the main and vital part of the public spaces of the city.

The paper discusses the image of the street and its sidewalk perception by interviewing street sidewalk users who were chosen from selected street sidewalks of Addis Ababa city. The Image experience helps the city to improve the quality of public space especially sidewalk development as a public space. The paper is organized into 5 sections; Section 1 is about the introduction, Section 2 deals with keynotes from the literature review, materials, and methods are also discussed here Section 3 deals introduction to case study sites, and Section 4 deals with findings and discussion which are extracted from the survey, and the last Section 5 deals with the conclusion.

#### 4 CONCEPT OF PUBLIC SPACE, IMAGE OF THE STREET AND ITS SIDEWALK

*“Public spaces are the measurement of a city quality”*  
John Ruskin

Public space is where people, after leaving their private environments and at no direct cost to them, perform several functions that are shared with all: moving from place to place; enjoying public recreational and cultural opportunities; visiting other parts of the city or other private locations shopping; meeting or simply strolling. (UN-Habitat., 2014)

*Successful public spaces, share many attributes—including being designed as human-centered places that are attractive, comfortable, accessible, walkable, enjoyable, and safe for all users, including the disabled and older persons. Such spaces create a sense of place, enhance the surrounding built environment, and connect a variety of neighborhoods.* (Jon Kher, 2020)

#### 2.1 Defining Street and its sidewalks as a public space

Streets are the most “public”: they are responsive, accessible, diverse, democratic, & multi-purpose (Carr, 1992) . Streets are the most public and useful urban space “Streets have traditionally served three main purposes: *mobility, commerce, & social interaction* (UN-HABITAT, 2013).

Streets are physical and tangible spaces comprising intangible qualities where strangers and *friends meet, recreate, do business, work, wander, relax, sit, or enjoy sights & sounds of each other.* As Alexander et al. (1977) “Streets should be for staying in and not just for moving through, the way they are today”. (Meeta Tendon, 2020).

Sidewalks as public spaces are where people display individual and group identities and observe others (Ehrenfeucht, 2009). Sidewalks are the most important and most overlooked public space. (KIM, 2015). Citizens rely on sidewalks for many activities: *social, cultural, and commercial* purposes. (Haoying Han, 2019).

#### 2.2 Concepts of the Image of the Street and its Sidewalk

Image is defined as a representation of a thing or person's external form in art. It is also described as the general impression that a person or product presents to the public. According to Lynch, in an Imageable city or place, people can quickly identify and group elements of the area to form a clear pattern. People can recognize the various aspects of the sites directly when they visit the site. When all factors are well managed, it will make sense that the place as a whole is a pleasant place. (Ernawati, 2019)

An Imageable street is a pleasant street, which can represent the character of the place or even represent the character of the town as a whole...some streets are very attractive so they become famous and specifically connected to a city. Those streets had become the defining characteristic of the cities, which Alan Jacobs called great streets. (Ernawati, 2019)

#### 2.2.1 Variables of the Street and its Sidewalk

The street qualities consist of the physical parameters and features present on the street, the design qualities at both urban and building levels, and comfort, safety, and interest levels of individuals as the urban design qualities are subjective, researchers relate them to physical features to understand & make them more objective. (Ewing R., 2009)

The Imageability of the street depends on factors like *the people of the street, courtyards, parks, and plazas on both sides of the street, outdoor dining areas, buildings with different colors, shapes, and sizes, the plantation in and around the buildings along the street, and noise levels.* It is evident from the evaluation that the street scored above average on Imageability, the location of the street and its orientation make the street Imageable. (V K Kumar, 2019)

Table 1: Parameters for measuring street and its sidewalk quality

Aspects	Parameters
Physical	
Form	Color, texture, material, signage ornamentations, topography
Perceptual Access	Vistas, views, skylines (visibility, audibility)
Use	Use intensity, use singularity, use quality
Physical ambiance	Naturalness (vegetation, mountains, water, and scenery), Openness (enclosure, tightness, density, etc.), Order (continuity, harmony), Micro-climate
Spatial structure	The shape of the layout, architectural styles, pathways, visual accessibility of inside-outside
Social ambiance	
Social characteristics	Age, sex, language, social groups, and networks
Social control	Territorial, defenses, safety
Social mobility	Social composition demographic characteristics,

Symbolic dimension	
Cultural attributes	Historic memories of people & events, symbolic orders
Affective attributes	Emotional memories of environmental experience, preference, and the like are associated with places
Instrumental attributes	Perceived/ utilized functional opportunities; physical/social affordances, factual data

Source: (Silva 2004).

### 2.3 CONCEPT OF PERCEPTION AND IMAGE OF THE STREET AND ITS SIDEWALK

Ewing and Handy defined perception as:

*“The process of attaining awareness or understanding of sensory information”. An individual’s perception is the result of the interplay between one’s past experiences, culture, and interpretation of the perceived.” (Ewing, 2009)*

User perception of public space is mainly based on physical, socio-economic, and emotional attachment and they are developed as a result of meaning to the place which is usually called Place identity. Place identity is an integral part of human place experience therefore it influences place attachment and place attachment dimensions are expressed through the interplay of effects and emotions, knowledge and beliefs, behaviors, and action (Altman and Low, 1992).

Perception & experience of ‘place’ is essential dimensions of urban design. The interest in environmental perception has also been reinforced by a body of work focusing on the experiential ‘sense of place’ & ‘lived-in’ experiences associated with urban environments. Exploring how people perceive environments & experience places, we affect the environment & are affected by it. (Matthew Carmona, 2003)

#### 2.3.1 Perceiving the Street and Its Sidewalk

Streets are a city’s showcase where visitors put on the first impression and create a perception to decide whether they will like or dislike a city or even fall in love with it. (Nurhikmah, 2016)

According to Michael R. a person judges street sidewalks based on their four physical parts.

*Streets sidewalks have four main parts **Ground Plane, Roadside, Building Wall, Canopy** Judging from the pedestrian perspective, the sidewalk is conceptualized as a room with four planes. (Michael R., 2013)*

Figure 1 Four main parts street sidewalk by Michael R.



Source: (Michael R. Bloomberg, 2013)

#### 2.3.2 Factors Affecting people's perception towards Urban Spaces

Each individual creates and bears his image, but there seems to be substantial agreement among members of the same group.” (Lynch, 1960, p.7)

*There are three factors underlying people’s perception of urban spaces. **Sense of Place, Attractiveness, & Place Identity.** Attractiveness affects people’s likability the most, followed by Sense of Place & then Place Identity. (Ernawati, 2019)*

### 4.3 MATERIALS AND METHODS

#### 2.4.1 Measuring of the Image of Street and its Sidewalks

Imageability can be measured objectively or subjectively, Measurement is carried out objectively by measuring the physical environment quality in association with some design criteria in shaping the image of a place. In contrast, subjective measurement uses the user’s perception. The user perception of the physical environment is a central issue in a classic in the urban design realm (Ewing R., 2009)

***Physical features** can be measured **objectively**. Perceptions may be assessed with a degree of objectivity by outside observers (though not with the objectivity of physical features). **Reactions** are purely **subjective**. (Otto Clemente, 2018)*

#### 2.4.2 Case study area selection (Site Selection)

Samples of the study were taken from different parts of Addis Ababa street sidewalks and named as the case study area. The case study areas were selected based on two parameters. For one, it was designed a preference survey for the residents of Addis Ababa and each respondent was asked to forward three preferable main streets sidewalks that they prefer to Walk, Relax, and Socialize. 300 random respondents were contacted with face-to-face questioners and the survey was mainly collected by stationing at “Megenagna”, “Torhayloch”, “Bole”, “Saris”, “Piassa”, “4 kilos”, “Mexico”, and “Kaliti” areas which are among the main and sub-centers of the city. Then, the result was further evaluated by the following points first making sure the sidewalks are part of the Main streets of the city, continuity of the street sidewalk, connectivity of the street to each other, their characters, function, and activity.

### 2.4.3 Population, Samples, Collecting, and Analyzing Data

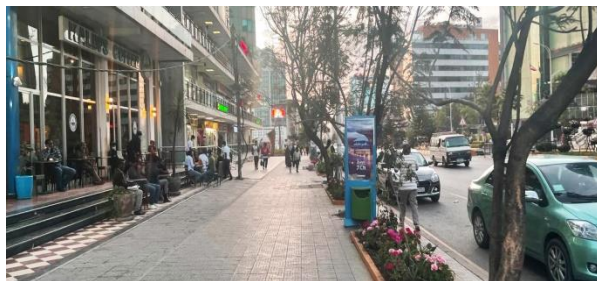
The study employed a place-based approach in examining the perception of urban space which is the Image of selected street sidewalks. The data collection was designed as a face-to-face questionnaire distributed randomly to the selected street sidewalk users. The on-street interview technique was employed by segmenting the selected street sidewalks. There were a total of 200 respondents in all four case areas each having 50 samples. The population of the study was street sidewalk users while the respondents who participated in the study were specific street sidewalk users, the data from secondary data's helped to point out what are the possible interventions that help to increase the Imageability of the selected sidewalks. The questionnaire employed consisted five-level Likert scale and open-ended questions which were asked in the local language. After translation, coding, and grouping the data was punched and analyzed by IBM SPSS software.

### 3 INTRODUCTION TO THE CASE STUDY STREETS AND THEIR SIDEWALKS

#### 1. Africa Avenue

The street is located on the way from “Bole” bridge to “Dembel” square. It is also known as “Bole Street”. This street usually welcomes travelers, diplomats, and tourists who enter the city by airplane. The sidewalk is one of the major sidewalks of the city. It has a relatively wide sidewalk, more modern architecture buildings, a few old buildings, modern cafés, shops, and shopping malls, It has a mixed function, people usually believe the majority of the street users for social and recreational purposes are the rich's, youngest and modern people.

Figure 2: Pictures showing sidewalks of Africa Avenue



#### 2. King George VI Street

The street is located on the way from “4-kilos” to “6-kilo” square. It is also known as “4 kilo” or “6kilo”. Four campuses of Addis Ababa University are found along this sidewalk which is the site's special character also churches, residences, government organizations, and business places are also available. It has a wide sidewalk, most of the buildings are old and have relatively similar

skylines. The presence of a vacancy announcement pin boarded pulled a lot of people who need jobs Also few outdoor cafes, ample on-sidewalk book stores & Illegal street vendors are available. The majority of the street users are the dwellers of the area, students and academic staff, and the people who need job adverts.

Figure 3: Pictures showing sidewalk of King George VI Street



#### 3. Halesclassie Street

The street is located on the way from “Habtegiorgies” bridge to “Piassa” (Cinema Empire). It is also known as “Piassa”. The sidewalk as well as the settlements are old and historic with different architectural styles. The sidewalk is relatively narrow and winding, almost all of the buildings are old and historic and also have relatively similar skylines, There are modern cafés, shops especially clothes, shoes, and mainly jewelry shops along the sidewalk, In general, the sidewalk has a mixed-function, many people especially old peoples have memories on this sidewalk. Local Novels and music usually appreciate memories on this sidewalk.

Figure 4: Pictures showing the sidewalk of Haileseilase Street



#### 4. Churchill Avenue

The street is located on the way from “Piassa” (Addis Ababa City Administration) to “Lagare”. The sidewalk is one of the major and widest sidewalks of the city. It is a new well-designed sidewalk, modern & old architecture style buildings are present aligning the sidewalk, hotels, schools, government institutions, modern cafés, shops, and theater center found on the street. People walk, sit & enjoy this street sidewalk. The straight view lets a person see the destination from the start.

Figure 5: Pictures showing sidewalk of Churchill Avenue



## 4. FINDING AND DISCUSSION

### 4.1 Profile of Respondents

#### Gender Share

The general share of male & female respondents in the random sampling was 56% to 44%. Haliessellie Street had a bigger share of male-to-female respondents 60% to 40%, Africa and Churchill Avenue had 56% to 44% share of male-to-female respondents while King George Street had a similar share 52% male to 48% female respondents.

#### The Age Group of Respondents

The majority of the respondent's age groups were between 25- 44 (56.5%) followed by 18- 24 (24%), 45- 64 (12.5%) and very few were >65 (2%). The youngest age participant on the survey was 15 while the eldest was 74. In general, on this random sampling technique, the majority of the respondents were young and young adults.

#### Occupation of Respondents

The general share of skilled occupation respondents was **55.5 %** while the semi-skilled and unskilled occupations weighted **44.5%**.

*Under Skilled occupation Accountant, Admin Head, Banker, Market Consultant, Designer, Engineer, Lawyer, Health Professional, Manager, Student, Teacher, Trainer. And Under Semi-Skilled & Unskilled occupations Barber, Bartender, Book Seller, Broker, Carpenter, Cashier, Chef, Daily Laborer, Driver, Hair Dresser, House Wife, Mechanic, Merchant, Security, Store Keeper, Technician, and 12 Complete were part of the survey.*

### 4.2 Favorite street sidewalks of the respondents

This question aimed to know whether respondents on the four respective case study street sidewalks consider these case study street sidewalks as their top 3 favorite choices.

*On the street of Churchill Avenue, 98% selected the street sidewalk as one of the top 3 favorite streets sidewalks, 76% of respondents on Africa Avenue, 74% of respondents on King George VI Street, and 70% of respondents on Haile Selassie Street selected as their top 3 streets sidewalks.*

### 4.3 The Reasons and Propose for Visiting the Streets and their Sidewalks

This question aimed to know the reason behind **why** the respondents visit street sidewalks.

*In this case, 69 % of the respondents visit the street sidewalks for **necessary activities** for instance it is their workplace, home, or school place. 17% of the respondents visit for recreational purposes and from this, 2% at King George VI Street visit the street to see Job/vacancy advertisements pinned on a notice board which is placed on the edge of the street sidewalk for **optional purposes**. A total of 12% visit these streets for **social purposes** like visiting friends or family.*

### 4.4 The most interesting part of the sidewalks/ Preferred segments of the sidewalks

#### Africa Avenue

The result indicates that 72% of the respondents selected *Friendship Mall/Kaldis Coffee, WOW Burger/ Natani Café, and Alem Building/Cinema* segments respectively. *Friendship Mall/Kaldis Coffee* has a character like the presence of an outdoor café a bit of recessed space between the sidewalks & the buildings, on-sidewalk booksellers & shoe shiners *WOW Burger/ Natani Café* area has recessed space between the building and the sidewalk also the buildings are relatively old, usually full of parked cars & well-known branded cafes in town present, *Fantu Supermarket* has a character greeneries around the supermarket, decent activities, *Alem Building* has activity & recessed spaces.

#### King George VI Street

The result indicates that 66% of the respondents selected *Romina / "Maleda" Restaurants, "Kidste Mariam" Church, Abadir Supermarket / Jolly Bar, and 6 Kilo University* segments respectively. *Romina /Maleda café & Restaurants* (Have outdoor dining, recessed space between the building & the sidewalk, and events like bazaars held seasonally on the space, green places with tall trees, also the buildings are old), *Kidste Mariam Church* (An orthodox church with different church-related activities), *Abadir Supermarket/ Jolly Bar* (Full of pedestrian activity, presence of street-side book & newspaper vendors), *6 Kilo University* (The main the biggest and historic campus of Addis Ababa University, it have a recessed space around the gate, welcoming and Imageable gate) are respectively.

#### Haliessellie Street

The result indicates that 76% of the respondents selected *Cinema Empire, "100 Derja", around pizza corner, and Ministry of Education* segments respectively. *Cinema Empire* (One of the first and most Historic cinema) **"100**

*Derja*” (the Famous 100 pieces of outdoor stairs which helps to connect the steep slope settlements and the sidewalk), Around pizza corner (winding street, curved buildings aligning the street), Ministry of Education (curved building, in front of there, is a graceful round about, wider sidewalk) respectively. All are historic buildings & stairs.

#### **Churchill Avenue**

The result indicates 74% of the respondents selected Post Office, “Delachin” Monument, “Beharawi” Theater area, and around Addis Ababa City Municipality segments respectively. *Post Office* (Old and Historic building, High activity, Building with Arcade), *“Delachin” Monument* (Historic monument, Wide sidewalk with gloomy flowers, It is placed inside Ethio- Cuba park), *“Beharawi” Theater Center* ( High Activity, A very fine huge scripture of Lion, Presence of Building with arcade, One of the best and historic theater area, *Addis Ababa City Municipality* ( It has ionic Architecture, & the building is historic).

*In general, as seen on the above four case study sidewalks most of the preferred segments have a character of recessed spaces, Historic buildings, and government institutions memorial monuments, cafes with outdoor dining, church, cinema centers, & popular shops.*

#### **4.5 Point of Reference (Landmarks) of the street Sidewalks**

##### **Africa Avenue**

70% of respondents on Africa Avenue selected Skylight, Friendship Mall, Millennium Hall & “Alem” cinema respectively the other 28% selected segments are Snap Plaza, “Fantu” supermarket, “Momona” Hotel, respectively and 3 respondents answered do not know.

*The landmarks selected were Hotels, Hall, Malls and Plazas, Cinemas, Cafes, and Supermarkets.*

##### **King George VI Street**

66% of respondents on King George VI Street selected “Miyazya 27” Victory Monument, “Romina” Café & Restaurant, “Kidist Mariam” Church, “Yekatit12” Memorial monument respectively, and the other 34% selected segments “Menelik” School, National museum, 5 Kilo University, “Abadir” Supermarket and Jolly Bar.

*The landmarks selected on King George VI Street sidewalks were Monument, Café & Restaurant, Church, School and University, Museums, and Supermarkets.*

##### **Halieselassie Street**

76% of respondents on Halieselassie Street respondents selected Cinema Empire, “100 Derja”, “Ras Mekonen” Bridge, And “Razel” Café & Restaurant respectively, and the other 22% selected Africa Jewelry, T-Room, and Good Times.

*The landmarks selected were Cinemas, Cafes, Restaurant, Stairs and Bridges, Jewelry Shops*

#### **Churchill Avenue**

74% of respondents on Churchill Avenue selected “Delachin” Monument, “Beharawi” Theater, Addis Ababa City Administration, and Post Office the remaining 24% selected segments are “Tewodros” Square, Elaina Mall, Churchill Hotel, “Tikur-Anbesa” and “Lycee” School.

*The landmarks selected were Theaters, Schools, Hotels, Square monuments, and government institutions.*

#### **4.6 Perception of the Image of the street sidewalks from Physical Layout Aspect**

##### **4.6.1 Street Sidewalk Width**

In general, more than 75% of Africa Avenue (4m to 6m width on each side) respondents, 100% of King George VI Street (4m -12m width on each side), and Churchill Avenue (2.5m to 18m width on each side) respondents and more than 50% of Halieselassie street (2.5m-7m width on each side of the sidewalk) respondents agreed that the street sidewalk is wide enough.”

##### **4.6.2 Pavement Materials of the Street Sidewalks**

In this case, more than 85% of respondents on the four case study sidewalks agreed that the pavement material of the street sidewalk is well and comfortable to walk. The pavement materials are different types of terrazzo.

##### **4.6.3 Presence of Street Furniture on the Street Sidewalks**

86% of respondents of Africa Avenue, 90% of respondents of King George VI Street, 68% of Halieselassie Street respondents, and 92% of Churchill Avenue respondents are happy with the presence of adequate street furniture such as streetlights, street benches, trashcans which are helpful to walk or stay longer and due to this it gives them a positive image of the street.

#### **4.7 Perception of the Image of the street sidewalks from Activity and Function Aspects**

##### **4.7.1 Functions of the District**

In this case, 82 % of respondents of Africa Avenue (It has a mixed district function more of mixed commerce, residence, and recreation), 84% of respondents of King George VI Street (It is also categorized as mixed district function more of mixed commerce, mixed Residences, ample social services and public institutes like Universities, schools, churches, and government organizations), 94% respondents of Halieselassie street respondents (It has mixed commerce and residence, recreational function, social and governmental functions) and 92% of Churchill Avenue (It is also as mixed district function more of mixed

commerce, residences, Social services like schools, government organizations, and recreational centers) respondents agreed that the district function and the nearby land uses like commerce, recreational office hubs, social services pull them to the sidewalks.

#### **4.7.2 Sidewalk frontage functions**

The sidewalk frontage functions (the presence of cafes, also outdoor cafes, shops, sports, and recreational centers) were appreciated by 56% of respondents of Africa Avenue, 66% of respondents of King George VI Street, 70% of Haliesselassie Street respondents, and by 40% of Churchill Avenue respondents meaning this parameter helped them to have a positive image about these street sidewalks.

#### **4.7.3 Sidewalk Function**

On-sidewalk, functions were appreciated by 10% of Respondents of Africa Avenue, 30% of respondents of King George VI Street, 12% of Haliesselassie Street respondents, and 8% of Churchill Avenue respondents agreed on the presence of adequate and multiple functions held on these street sidewalks like the presence of street vending, street foods helped them to have a positive image about these street sidewalks.

#### **4.7.4 Sidewalk Activity**

On-sidewalk activities are appreciated by 6% of respondents of Africa Avenue, 24% of respondents of King George VI Street, none of Haliesselassie Streets respondents, and 16% of Churchill Avenue respondents agreed with the presence of adequate and multiple activities held on the sidewalks like festivals, bazaars; street shows, and others helped them to have a positive image about these street sidewalks.

#### **4.8 Perception of the Image of the Street and its Sidewalk from the Point of Familiarity & Sense of Belongingness**

##### **4.8.1 Familiarity with the street sidewalks and places**

The result from familiarity parameters indicates 86% of respondents of Africa Avenue, 88% of respondents of King George VI Street, 82% of Haliesselassie Street respondents, and 90% of Churchill Avenue respondents agreed that they usually visit the street also the know most of the area and it adds them familiarity to the street sidewalks.

##### **4.8.2 Sense of Belongingness to the street sidewalks**

Sense of belongingness is mainly attached with an emotional attachment from this point of view 40% of respondents of Africa Avenue, 64% of respondents of King George VI Street, 76% of Haliesselassie Streets respondents, and 52 % of Churchill Avenue respondents agreed that this street sidewalk brings them old and unforgettable memories

also like the presence of cafes, shops, festivals add them a sense of belongingness to the sidewalks.

#### **4.9 Perception of the Image of the street sidewalks in terms of Place Identity & Attachment**

##### **4.9.1 The Presence of popular landmarks and Activities**

From the aspect of place identity 62% of respondents of Africa Avenue, 80% of respondents of King George VI Street, 72% of Haliesselassie Street respondents, and 94% of Churchill Avenue respondents agreed that the presence of physical landmarks like popular cafes, statues, monuments, towers, trees and also activities on the sidewalk helps them easy to recognize and it helps them to like the sidewalks.

##### **4.9.2 The Presence of Historical Buildings**

The presence of historical buildings and their Imageability was supported by 24% of respondents of Africa Avenue, 72% of respondents of King George VI Street, 90% of Haliesselassie Street respondents, and 78% of Churchill Avenue respondents agreed that the presence of historical buildings and places gives them a positive image to the sidewalks.

##### **4.9.3 The Presence of Affordable Shops and Services**

Interims on the presence of affordable Shops and Services and their Imageability 22% of respondents of Africa Avenue, 78% of respondents of King George VI Street, 74% of Haliesselassie Street respondents, and 56% of Churchill Avenue respondents agreed that the presence of affordable shops and cafes pulls them to these street sidewalks or the prices of the goods, services, and items are affordable and due to this, they have a positive image about the sidewalk.

#### **4.10 Perception of Respondents on the Image of the Street and its sidewalks Interims of Shades**

##### **4.10.1 Presence of Shades**

The result indicates that 70% of respondents of Africa Avenue, 72% of respondents of King George VI Street, 62 % of Haliesselassie Street respondents, and 66% of Churchill Avenue respondents agreed that the shades and cool environment presence provide comfort. (The presence of trees, arcades, and canopies helped them to walk, stay, and relax at any time).

#### **4.11 Perception of Respondents on the Image of the Street Sidewalks Interims of Safety**

##### **4.11.1 Presence of Safety**

66% of respondents of Africa Avenue, 50% of respondents of King George VI Street, 78% of Haliesselassie Street respondents, and 72 % of Churchill Avenue respondents

agreed on even though the street is not free from theft they prefer these street sidewalks.

**4.11.2 The Presence of clear and safe distinction between the motorways and the sidewalks**

Interims on the presence of distinction between the motorway and sidewalk 94% of respondents of Africa Avenue, 98% of respondents of King George VI Street, 94% of Halieselassie Streets respondents, & 100% of Churchill Avenue respondents agreed that the street has a clear distinction between the motorway and the sidewalk so waking freely is possible and it helps them to feel safe and also to have a positive image about the sidewalk

**4.11.3 The number of vehicular lanes and their influence on Imageability**

Large vehicle lanes affect pedestrians to cross from one side to the other. 2% of respondents of Africa Avenue (The street have 4 vehicular lanes on each side with a single median), 88% of respondents of King George VI Street (The street have 2 vehicular lanes on each side with a single median which is a painted line), 100% of Halieselassie streets respondents (This street also have 2 vehicular lanes on each side with a single median which is a painted line) and 88% of Churchill Avenue respondents (The street have 3 vehicular lanes on each side with a single median)agreed that the number of vehicular lanes on the street is manageable to cross from one side to the other and they admire it as a positive aspect to the street.

**4.12 Defining Street Sidewalk Imageability and Perception about the image of the Street sidewalk**

**4.12.1 Defining Street Sidewalk Imageability**

In terms of defining street sidewalk Imageability, 72% of the responses were in terms of physical layout, 5.5% answered from the perspective of function, 17.5% answered from the perspective of activity held on the sidewalk and 5% answered from the aspect of emotion as enjoyable and modern.



**4.12.2 Perception of the image of street sidewalks**

The Result indicates that 6 % of the responses were in terms of physical layout, 11% answered from the perspective of function, 79% answered from the perspective of activity

held on the sidewalk and 4% has answered from the aspect of emotion as it brings them old memories.



**4.13 Feelings while visiting the street sidewalks**

*“There is no instinct like that of the heart/feeling”*  
Lord Byron

**What do the respondents feel while visiting their respective street sidewalks?**

Interims of feeling 24% of **Africa Avenue** respondents feel *Happiness* while visiting the sidewalk, 20% feel *Relaxation*, and 14% feel *Refreshment* respectively. In the case of **King George VI Street** of 26% *Happiness*, while visiting the sidewalk, 16% feel *Relaxation*, 10% feels *Jobless*, 6% feels being *a student*. Responses from **Halieselassie Street** 22% feel *Enjoyment*, 20% feel *Happiness*, and 14% feel being *“Arada” (smart)*. 24% of **Churchill Avenue** respondents feel *Relaxation*, 16% feel *Refreshment*, and 14% feel *Happiness* and *Enjoyment*.

These mojos and illustrations express the feelings that are mostly answered by the respondents.



*Happy*

Africa Avenue



*Happy*

King George VI Street



**ENJOYMENT**

Halieselassie Street



Churchill Avenue

**4.16 Naming the street sidewalks**

“If you are required to give a motto or name to this street sidewalk, what it will be?”

Interims of naming the sidewalks 24% of **Africa Avenue** respondents named the sidewalk as *“Street of Richs”*, 14% named it as *“Street of Relaxation”*, 12% named it as *“Ye*

*Molkakochu Menged*” (street of moderns) , 10% named it as “ *Street of lovers/Romance*” respectively. In the case of **King George VI Street** 34% of respondents named it as “*Street of Students /Scholars*”,14% named it as “*Street of Jobless*”, 12% named it as “*Street of Happiness*”, 10% named it as “*Street of Relaxation*”. 22% of **Haileseilase Street** named the sidewalk “*Ye Aradochu Menged*” (*Street of Smarts*), 18% named it “*Street of Happiness*”, 16% named it “*Street of Fun*”. 32% of **Churchill Avenue** respondents named it as “*Street of Relaxation*”,24% named it as “*Street of Happiness*”, 8% named it as “*Street of Fun*” also other 8% named it as “*Street of Flowers*” respectively.

## 5 CONCLUDING REMARKS

The research clearly illustrated Imageable sidewalks are created with a balance between the landscapes and sensescapes. The study shows a good presence and consideration of tangible features (the physical layout and functions) and intangible features (activity and emotion) are very important. The study also revealed that there is a solid connection between people and activity, people and function, people and space, and based on these people develop feelings and emotions.

Based on the site survey and questionnaire it can be witnessed that all the four case study sidewalks have their unique qualities in terms of Imageability, most of the sidewalks were appreciated by their physical appearance and district function, but almost all respondents claimed that they are not satisfied with functions and activities held along the sidewalk. The finding shows the satisfaction scores in both sidewalk activity and function were way below 50%. On the other hand, the sidewalk's physical appearance has scored more than 75%.

The study showed sidewalk condition and cleanness, district functions, street front activity and function, presence of outdoor dining, presence of recessed entrance /space, presence of popular landmarks, presence of street furniture, and presence of green escapes are the major influencing factors to boost the image of the street and its sidewalks. Also the presence of old and historical buildings likewise the presence of a combination of the old and new buildings, the presence of affordable shops and services, low noise levels, and safety impact the image of sidewalks.

On the other hand, the result indicates street sidewalk wideness may not impact or express imageability level some respondents might like wide sidewalks while others

like narrow sidewalks, or they may not be much concerned about the width. Also, some liked the sidewalk crowdedness while others liked the calmness. The research also witnessed place (sidewalk) familiarity and emotional attachments (sense of belongingness) depending on their experience of the places. Also, the findings witnessed perception of the Image of the street sidewalk might not be positive also it might be negative for instance the motto “street of theft” and feeling’s “Board”, “Jobless” are some of the evidence.

Finally as seen in the study the respondents were able to read the sidewalks and expressed their imagination, perception, and feeling about the image of the sidewalk which helps to understand how Sidewalk Users (main stakeholders) understand and points of view. Furthermore as seen in the recommendation part the respondents forwarded ideas and suggestions. The agreed naming and feeling encountered can also be an input to development of the sidewalk themes and enhancement concept and plans.

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**ANNEX B:**

**QUESTIONER FOR CASE STUDY SIDEWALK SELECTION OPINION POLL**

Street/Area of Data Collection \_\_\_\_\_ Respondent Number \_\_\_\_\_

Respondents Residence area \_\_\_\_\_ Gender \_\_\_\_\_ Age \_\_\_\_\_

Which are your Preferred/ Favorite main street sidewalk/sidewalk segment of Addis Ababa city when want to walk/sit/Relax/Socialize	Which are your least main street sidewalk/sidewalk segment of Addis Ababa city when want to walk/sit/Relax/Socialize

Street/Area of Data Collection \_\_\_\_\_ Respondent Number \_\_\_\_\_

Respondents Residence area \_\_\_\_\_ Gender \_\_\_\_\_ Age \_\_\_\_\_

Which are your Preferred/ Favorite main street sidewalk / sidewalk segment of Addis Ababa city when want to walk/sit/Relax/Socialize	Which are your least main street sidewalk / sidewalk segment of Addis Ababa city when want to walk/sit/Relax/Socialize

Street/Area of Data Collection \_\_\_\_\_ Respondent Number \_\_\_\_\_

Respondents Residence area \_\_\_\_\_ Gender \_\_\_\_\_ Age \_\_\_\_\_

Which are your Preferred/ Favorite main street sidewalk / sidewalk segment of Addis Ababa city when want to walk/sit/Relax/Socialize	Which are your least main street sidewalk / sidewalk segment of Addis Ababa city when want to walk/sit/Relax/Socialize

## ANNEX C

### RESULT OF RESPONDENT'S OPINION ABOUT THEIR PREFERABLE & LIST PREFERABLE SIDEWALKS

Main Street Sidewalk Lists	Sidewalk user respondent's response as Favorite/ Preferred Main Street Side Walk	Sidewalk user respondent's response as Least Favorite/ Preferred Main Street Side Walk	Sidewalk user respondent's response as Favorite/Preferred Main Street Side Walk Segments/places if any
Churchill (Piassa) - Lagare	97	2	Post office, Delachin Monument, Beherawi Theater area
Bole Street (Bole Deledeye – Meskel Square)	82	17	Friendship, Around “Dembel”, Shewa dabo, Flamingo,
4 Kilo -6 Kilo	78	11	Romina Area , Kidst Mariyam
Sarbet - Karl- Bisrate Gebriael	70	6	Bisrate Gabriel area
4 kilo- Piassa	68	10	Jewelry Shop,70 “Derja” Area
Megenagna -CMC –Ayat	56	3	Around Yetebaberut , Century Mall
Meskel Square – Hilton - 4kilo Palace	54		Hilton area
Sheraton- Filwoha –Zewditu Behrawi	48		Behrawi Area, Sheraton Area
4 Kilo - Ras Amba- Kebena square	45	3	Ras Amba Hotel Area
Bole Bridge- Edna Mall- Atlas Hotel	43	15	Around Edna Mall , Sheger building area
Mexico-Behrawi	17	3	Behrawi Area
6 kilo -Sheromeda- Entoto	16		6 kilo- Sheromeda
Sarbet - Adams-Mekanisa	14		
4 kilo- 4 kilo Palace	13	4	Around Ministry of Education
Meskel Flower – “Dembel”	9	3	Around Dreamliner hotel
Bole Bridge-Edna mall-22	8	21	Edna Mall Area
Megenagna - 22- Ureal	7	18	Capital Hotel ,Lem Hotel area
CMC –Semit Condominium	7	2	
Mexico – Germen Square	7	2	
Mexico – Torhayloch	6	35	BGI – Balcha Area
Mexico - Megenagna	6	39	Around Capital Hotel ,22 –lem hotel
Imperial -Gergi roba- Jacros	6	14	Around Jacros homes
6 Kilo - Minilik Square	5	3	
4 kilo- Ferensay	5	3	
Urael –Estifanos	4	9	
Torhayloch-Total- Zenebework	4	8	
Kazzanchis – Bambis	4	3	
Kera –Agona	4	9	
Lafto –Lebu	4	2	
Kera -Welo Sefer	4	4	
Mexico –Kera	3	18	
Bole –Saris	3	23	
Megenagna –Bole	3	7	
Beherawi- Kazanchis	3	8	Beherawi Theater area
Estifanos – Kazanchis	3		
Wello Sefer – Gotera	3		
Megengena -Sholla – Kebena	2	25	Around British Embassy
Kaliti- Akaki – Gelan	2	13	
Mexico- Stadium	2	11	
Kera –Gofa	2	4	
Mexico-Moha-Merkato	2	4	
Tor Hayloch- Bethel	2	3	
Jemo – Micheal	2	3	
Addisu Gebeya – Giyorgis	2	1	
4 kilo-Erebekentu-Piassa	2		

Bisrate Gebriel-Addis Depo-Zenebework	2		
Stadium - 6kilo	2		
Megenagna- Kotebe -Kara –Yeka abdo	1	34	
Stadium – Saris	1	23	
Stadium- Kality	1	12	
Saris – Agona	1	12	
Ayertena – Torhayloch	1	29	
Abent- Autobus Tera	1	10	
Stadium –Megenagna	1	10	
18 Mazoriya–Torhayloch, 22– Signal, Piassa-Yohanes.	1	7	Each Route has 1 like and 3 dislikes a total of 3 likes and 21 dislikes
Mexico –Jemo	1	6	
Atlas Hotel - Weha lemat	1	5	
Piassa- Tewdros Square	1	5	
Atlas - Wello Sefer	1	4	
Jacros - Sailte Mehret	1	4	Around Jacros
Kolfe- Atana Tera- Philpous, Lideta- Abenet , Saris - Hana Mariam	1	3	Each Route has 1 like and 3 dislikes a total of 3 likes and 9 dislikes
Kera- Bulegera, Kera-Gotera Kera- Sarbe ,Kolfe -Autobus tera, Jemo – Hailegarmen	1	2	Each Route has one like and 2 dislikes a total of 5 likes and 10 dislikes for five routes.
Kazanchis-4 kilo Palace	1	2	
Kotebe - Yeka Abdo	1	2	
Mexico – Piassa	1	1	
Mexico –Mekanisa	1	1	
Wingate – Addisu Gebeya	1	1	
4kilo –Aware , 4 kilo- Shi-semna , Bethel - Ayertena , Bole - 4kilo, Gelan –Jemo , Lideta - Bisrate Gebriel , Sheraton -4kilo , Stadium – Semit	1		Each Route has 1 like and a total of 7 likes for the seven routes.
Merkato - Teklehaymanot –Abnet		26	
Merkato - Autobus Tera		21	
Piassa – Abenet		15	
Ayer Tena - Zenbework		20	
Ayre Tena - Alembank		16	
Merkato – Giorigies		9	
18 Mazoriya - Wingate		12	
Sebtgena – Amanueal , Wingate – Asko		8	Each Route has 8 dislikes a total of 16 dislikes for the two routes.
Kaliti- Megenagna, Megenagna- Signal, Piassa - Tikur Anbesa ,		7	Each Route has 7 dislikes a total of 28 dislikes for the four routes.
18 Mazoriya -Lukanda -Kolfe		6	
6 kilo-Minlik Hospital-Kebena, Kazzanch Aware , Piassa- Pawlous		5	Each Route has 5 dislikes a total of 15 dislike for the three routes.
Mesalemya- AutobusTera , Tor Hayloch – Asko, Tore Hayloch-Kolefe		4	Each Route has 4 dislikes a totalof 12 dislike for the three routes
4kilo- Kotebe , Fersensay – Bella Kaliti- Sarbet , Holand Emabacy- Yeshi Debele		3	Each Route has 3 dislikes a total of 21 dislikes for the seven routes.
6 kilo – Eyesus , Abent– Torhayloch , Hai Garment-German Square , Tor Hayloch – AU , Zenebework-Kore		2	Each Route has 2 dislikes a total of 10 dislikes for the seven routes.
Piassa- Asko , Piassa -Ateklet Tera , Wosen- Kara		1	Each Route has 1 dislikes a total of 3 dislikes for the three routes
Total Answered Responses	<b>867</b>	<b>798</b>	
Total Expected Responses	<b>900</b>	<b>900</b>	

## ANNEX D

### PHYSICAL LAYOUT CHECKLIST/ INDICATOR EVALUATION FORMAT

*Physical layout evaluation to attain an Image of the street sidewalk of the case study sites*

Evaluated Street sidewalk ..... Evaluated Street Segment ..... Date .....

**1.1 Quality Measured:** *Physical layouts and appearance of the sidewalk*

Unit of Study/Parameters	Very Bad (1)	Bad (2)	Fair (3)	Good (4)	Very Good (5)
Sidewalk Width					
Sidewalk Pavement Quality					
Sidewalk Pavement Condition					
Sidewalk Connectivity					
Sidewalk Continuity					
Presence of Obstacles / Encroachments					
The slope of the sidewalk					

**1.2 Quality Measured:** *Physical features on or beside the street*

Unit of Study/Parameters	Very Bad (1)	Bad (2)	Fair (3)	Good (4)	Very Good (5)
Landmarks / Point of Reference					
Presence of Sculptures, Monuments, fountains along or at the edge of sidewalks					
Presence of Public arts					
Quality of Advertisements					
Presence of Roundabout					

**1.3 Quality Measured:** *Presence of Street Furniture*

Unit of Study/Parameters	Very Bad (1)	Bad (2)	Fair (3)	Good (4)	Very Good (5)
Street Benches Availability					
Street light					
Trashcans Availability					
Bus Stop or Transit Shelters					
Shade covers from sun and rain					

**1.4 Quality Measured:** *Green landscapes & cleanness*

Unit of Study/Parameters	Very Bad (1)	Bad (2)	Fair (3)	Good (4)	Very Good (5)
Shade Trees					
Green landscapes along the sidewalk as a buffer between the motorway and sidewalk					
Cleanness					

**1.5 Quality Measured:** *Along sidewalks Architectural styles and developments*

<b>Unit of Study/Parameters</b>	<b>Very Bad (1)</b>	<b>Bad (2)</b>	<b>Fair (3)</b>	<b>Good (4)</b>	<b>Very Good (5)</b>
Building with Recessed Entrance					
Building with Podium and tower					
Presence of Buildings with Unique shape					
The scale of Building to the street ratio					
Presence of Arcades					
Presence of Old Buildings					
Presence of Sculptures, articulations & detail as a part of the Building.					
Similar Skyline					

**1.6 Quality Measured:** *Function & Activities*

<b>Unit of Study/Parameters</b>	<b>Very Bad (1)</b>	<b>Bad (2)</b>	<b>Fair (3)</b>	<b>Good (4)</b>	<b>Very Good (5)</b>
Special / Unique Function and activity					
Presence of Mixed-use activity along the sidewalk					
Presence of public, civic religious buildings					
Presence of Transport station					
Presence of Managed street vending					
Presence of unmanaged street vending					
Presence of outdoor dining					

**1.7 Quality Measured:** *Pedestrian count*

<b>Unit of Study/Parameters</b>	<b>Very Bad (1)</b>	<b>Bad (2)</b>	<b>Fair (3)</b>	<b>Good (4)</b>	<b>Very Good (5)</b>
Pedestrian count /congestion average					

## ANNEX E

### EXPERT EVALUATIONS ABOUT IMAGE OF THE STREET GRADING CHECKLIST

#### 1.1 Quality Measured: *Physical layouts and appearance of the sidewalk*

Unit of Study	Scale				
	Very Good (5)	Good (4)	Fair (3)	Bad (2)	Very Bad (1)
Sidewalk Width	> 7.5M	7.5- 5.1M	5-3.1M	3>2M	< 2M
	The figures are for each side of the sidewalk Also, the proportion of carriageway and sidewalk is accounted				
Sidewalk Pavement Quality	Terrazzo/ Precast ,well-placed, two or more designs	Terrazzo/precast ,well placed	Dressed stone, one design type	Non - dressed stone	Week, rugged, gravel ,Non - dressed stone
Sidewalk Pavement Condition	No cracks	Very rare cracks	Fewer cracks	Some cracks	Many cracks
Sidewalk Continuity	No Ups and Downs/ Continuous /straight /winding	A rare presence of ups & downs and continues straight/winding	Somewhat have ups & downs/ continuous straight/ winding	A high presence of ups & downs and continues straight/winding	Full of Ups and Downs & continuous straight/winding
Sidewalk Connectivity	Connected to 4 or more main or local street sidewalks	Connected to 3 main or local street sidewalks	Connected to 2 main or local street sidewalks	Connected to 1 main or local street sidewalks	Not Connected to any main or local street
Presence of Obstacles / Encroachments	Free from Encroachments	A very rare presence of Encroachments	Somewhat free presence of Encroachments	A high presence of Encroachments	Full of Encroachments
	Encroachments (Vehicles Parked, restaurant tables, advert signs, bushes, garbage bins)				
Slope of the sidewalk	0-2% /Very comfortable to walk	2.1-4% /comfortable to walk	4.1-5% / somewhat comfortable to walk	5.1-8%/ very less comfortable to walk	8.1< / Not

#### 1.2 Quality Measured: *Physical features on or beside the street*

Unit of Study	Scale				
	Very Good (5)	Good (4)	Fair (3)	Bad (2)	Very Bad (1)
Landmarks / Point of Reference	Clear form uniqueness, singularity ,view from different place, found on prominent area, known by people	Clear form, view from different place singularity, known by people	Clear form, and have a view from different places	Clear form but lacks view from different places	No clear form /no permanent landmark at all
Presence of Fountains Sculptures, Monuments	A good presence one/two/ all of the three	A good presence one/two of the three	Somewhat presence one of the three	Very rare public art	No presence of all the three
Presence of Public arts along the sidewalk	Full of public arts	A good presence of public arts	Somewhat present	Very rare public art	No public art at all
Quality of Advertisements	Managed/ Attractive/ , High Quality	Fully Managed	Somewhat managed	Somewhat Dilapidated and unmanaged	Dilapidated and unmanaged
Presence of Roundabout	Attractive Round about presence at the begging & ending	Roundabout presence at the begging and ending of street	Roundabout presence at least on one end the of street	Round about present but unmanaged like full of billboard	No presence of Roundabout at all

### 1.3 Quality Measured: *Presence of Street Furniture*

Unit of Study	Scale				
	Very Good (5)	Good (4)	Fair (3)	Bad (2)	Very Bad (1)
Street Benches Availability	Every 150 m or less	At every 151-200m	At every 200-300m	At every 300-500m	No Benches
Street light	At every 15m	At every 15-30m	At every 30-50m	At every 50m<	No light at all
Trashcans Availability	Fixed / Every 150m	Fixed / At every 151-300m	Somewhat Present	Very less trash-can availability	No Trashcans at all
Bus Stop with Transit Shelters	Transit shelters at every stop	A good number of presences of transit shelters.	Some presence of transit shelters	Very rare transit shelters	No Transit shelter at all
Shade covers from sun and rain	Most areas covered with shade	A good presence of shade covers	Some presence of shade covers	Very rare shade covers	No shades at all

### 1.4 Quality Measured: *Green landscapes & cleanness*

Unit of Study	Scale				
	Very Good (5)	Good (4)	Fair (3)	Bad (2)	Very Bad (1)
Shade Trees	Fully covering the sidewalk with shades	Many Trees/shades	Somewhat giving the sidewalks a shade	Very few Trees	No shades/trees at all
Green landscapes along the sidewalk as a buffer between the motorway and sidewalk	Fully of Greens along the sidewalk in addition serving as border between the motor lane and Sidewalk.	Many of Greens strips along the sidewalk	A good presence of green along the sidewalk	Presence in very rare areas of the sidewalk	No Greens along the sidewalk
Cleanness	Net /Pleasant	Clean	So what Clean	Somewhat Dirty	Dirty

### 1.5 Quality Measured: *Along sidewalks Architectural styles and developments*

Unit of Study	Scale				
	Very Good (5)	Good (4)	Fair (3)	Bad (2)	Very Bad (1)
Building with Recessed Entrance	Full of buildings with recessed spaces	Several buildings with recessed spaces	Somewhat buildings with recessed spaces	Very few buildings with recessed spaces	No recessed space at all
Presence of Buildings with Unique shape	Full of Unique shape of buildings at all	Presence of Several unique buildings	Somewhat Presence of unique buildings	Very few Presence of unique buildings	No Unique shape of buildings at all
Scale of Building to street ratio	1:1	1:2	1:3	1:6 -1:5	1:6 and above
Presence of Arcade	Full of Arcaded spaces	A good number of Arcaded spaces	Somewhat presence of Arcaded spaces	Very few presences of Arcaded spaces	No Arcaded spaces at all
Presence of Old Buildings along the sidewalk	76% -100%/ Full of Old Building	51%-75% presence of old buildings	26% -50 % presence of old buildings	1%-25% presence of old buildings	No old buildings at all

Presence of Sculptures, articulations & detail as a part of the building.	Full of sculptures, articulations & details	A good presence sculptures, articulations & details	Somewhat present sculptures, articulations & details	Very rare sculptures, articulations & details	No sculptures, articulations & details on the buildings at all
Building Skyline	Very Smooth Skyline	Mostly similar Skylines	So what Similar Skylines	Uneven Skylines	High jumps and drops between the buildings

### 1.6 Quality Measured: *Function & Activities*

Unit of Study	Scale				
	Very Good (5)	Good (4)	Fair (3)	Bad (2)	Very Bad (1)
Special / Unique Function and activity	Presence of function which is rarely found in other places	A good number of unique function or activity	Somewhat presence of unique function or activity	A rare presence of unique function or activity	No presence of unique function or activity
Presence of Mixed-use Function and activity along the sidewalk	Full of Multifunction, and activities	Several mixes of activities and functions	Somewhat mix of activities and functions	Very few mix of activities and functions	Singular activity
Presence of public, civic religious buildings	It is a district for such function	Present in good numbers	Somewhat present	Very rarely present	None
Presence of outdoor dining along the sidewalk	Mostly presented	Present in good numbers	Somewhat present	Very rare presence	No outdoor dining at all
Presence of Transport Route /station ,start /end	A transportation start/end ,with 6 or more route	A transportation start/end , with 3-5 routes	Transportation start/end , to 2 routes	Transportation start/end, to 1 route.	No Transportation route present at all
Presence of Managed street vending	A high number of Stationed street vending /with good looks (Shelter with sponsors)	A high number of Stationed street vending	Somewhat presence of Stationed street vending	Very few presences of Stationed street vending	No managed street vending
Presence of unmanaged street vending	No Unmanaged street vending	Very Few unmanaged street vending	Somewhat unmanaged street vending	A high number of street vending	Full of unmanaged street vending

### 1.7 Quality Measured: *Pedestrian count*

Unit of Study	Scale				
	Very Good (5)	Good (4)	Fair (3)	Bad (2)	Very Bad (1)
Pedestrian count	Full of Traffic (more than 150 people /5 min)	Heavy Traffic (101-150 people /5 min)	Some traffic present(51-100 people /5 min)	Light traffic (21-50 people /5 min)	Very light traffic (up to 20 people /5 min)

## ANNEX F

### Post Graduate Program: Questionnaire on the streets of Addis Ababa the case of Africa Avenue, King George VI Street, Haile Selassie Street, and Churchill Avenue.

My Name is Biruk Tamrat. I am studying for my post-graduate at Addis Ababa University in the program of urban design. Currently, I am working on my Thesis research on How do the users of street sidewalks perceive street Imageability. First, I would like to say thank you for your interest in providing information for my research. The information will be confidential and guaranteed. I will read and describe the question carefully. If there is any unclear question will describe it to you further. There is no right and wrong answer. I appreciate your openness and honesty in answering the question.

Name of the Street sidewalk \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_  
Place of Interview \_\_\_\_\_ Name of the data collector \_\_\_\_\_ Questioner no \_\_\_\_\_

#### Personal Information

- 1) Name of the Participant \_\_\_\_\_ 2) Gender: Female  Male
- 3) Age Range: Below 17  18-24  25-44  45-64  65+
- 4) Occupation \_\_\_\_\_

#### Screening Questions

Name three street sidewalks in Addis Ababa that you like most for walking, sit, enjoy, relax.....

Where? \_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_

- 1) Do you frequently visit this Street? Yes  No
- 1.1) Frequency: Daily  Twice a week  Once a week  Once a Month
- 2) Do you live or work around this place? Live  Work  Other
- 3) Purpose of visit: \_\_\_\_\_ Necessary  Optional  Social Activity
- 4) What are your usual activity on this street \_\_\_\_\_ (Walking , Sit and enjoy ...)
- 5) Frequent time of visit: Morning  After noon  Late Afternoon  Evening
- 6) With whom do you usually visit? Alone, with Family, Friends, Partner \_\_\_\_\_
- 7) From this street Name two street sidewalk spots you like most. \_\_\_\_\_ , \_\_\_\_\_
- 8) Which Part of the street sidewalk you enjoy the most? Right  Left  \_\_\_\_\_  
Begging \_\_\_\_\_ Why? \_\_\_\_\_

**Part 1: Perception of the users on the Imageability of \_\_\_\_\_ Avenue/ Street Sidewalks**

To what extent do you agree with the following statements?

No	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
<b>To what extent do you agree about these Physical Settings aspects of this street sidewalk</b>						
1	The street sidewalk is wide enough	5	4	3	2	1
2	The pavement material of the street sidewalk is well and comfortable	5	4	3	2	1
3	The condition of the street sidewalk is well	5	4	3	2	1
4	The street is free from obstacles like construction debris /leftovers, illegal markets so it is easy to walk.	5	4	3	2	1
5	The street is located at one of the centers of the city, also due to the presence of public transportations & transits helped you to have a positive image about this street.	5	4	3	2	1
6	The street is connected with other streets so accessing other places, streets & districts are possible.	5	4	3	2	1
7	The presence of unique Buildings, architectural styles, monuments, sculptures, arcades, and other visual elements gives you a positive image for this street.	5	4	3	2	1
8	The presence of adequate street furniture such as Street Benches, Trashcans & Street lights is help full to walk or stay longer.	5	4	3	2	1
9	The topography is easy to walk so it gives you a positive image for this street sidewalk	5	4	3	2	1
<b>To what extent do you agree about these Function, Activity, and Sense of Belongingness Parameters</b>						
1	In this district I function and the nearby land uses like commerce, office hubs pull you to this street	5	4	3	2	1
2	The presence of public, civic and religious buildings pulls you to this street.	5	4	3	2	1
3	The active street sidewalk frontages with the presence of cafes, outdoor cafes, shops, window shops, sport centers, & enjoyable foods adds you a positive image to this street sidewalk	5	4	3	2	1
4	The multiple activities held on this street sidewalk like the presence of street vending, street foods which pull you to this street	5	4	3	2	1
5	There are activities like festivals, bazaars; street shows and these pulls you to this street.	5	4	3	2	1
6	I know every part of this area as well as this street and it adds the feeling to this street	5	4	3	2	1
7	As one factor the presence of affordable shops & cafes pulls me to this street sidewalk.	5	4	3	2	1

N	To what extent do you agree about these <b>Place identities and Meaning</b> aspects of this street sidewalk.					
1	The presence of physical landmarks like popular cafes, statues, monuments, towers ,malls and buildings helps me easily to recognize and like this street sidewalk	5	4	3	2	1
2	The presence of historical buildings and places gives me a positive image to this street	5	4	3	2	1
3	The presence of the roundabouts, plazas, squares and open spaces as urban quality gives you unique images of this street	5	4	3	2	1
N	To what extent do you agree about these <b>Social and Place Attachment</b> aspects of this street sidewalk.					
o						
1	It is a good street to Sit, stay, read, relax, and watch different activities.	5	4	3	2	1
2	The sidewalk is a good place to meet with friends. So you have fun with them while walking and sitting due to this they have a positive image of the sidewalk	5	4	3	2	1
3	It is a good street/place to meet new peoples.	5	4	3	2	1
4	This street sidewalk brings me old memories also the presence of some old cafes, game zones ,corner sits, and shops help me to recap old memories	5	4	3	2	1
N	To what extent do you agree about these <b>Street Sidewalk Shades and Cleanness</b> aspects of this street sidewalk.					
o						
1	The shades and cool environment presence is fair. (the presence of trees, arcades, and canopies helped you to walk, stay, and relax at any time.)	5	4	3	2	1
2	The street side-walk is clean and pleasant. Due to this you have a positive image of the street.	5	4	3	2	1
3	The level of noise is low. eg traffic noises, crowds, sounds from religious places surrounding activities	5	4	3	2	1
N	To what extent do you agree in terms of the street sidewalk <b>Safety</b>					
o						
1	Weather the street sidewalk is free from theft or Even though the street is not free from theft you prefer this street.	5	4	3	2	1
2	The street has a clear distinction between the motorway and the sidewalk due to this waking freely as possible	5	4	3	2	1
3	The presence of traffic lights, pedestrian crossings, lets you easily cross from one side to the other.	5	4	3	2	1
4	The number of lanes of this street is manageable to cross from one side to the other due to this you prefer this street	5	4	3	2	1

**Part 2: Open-ended Question**

1) How do you define the Image of the street sidewalk? / What is the Image of the Street sidewalk for you?

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2) What comes to your mind when you think about the image of the street sidewalk?

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3) Do you have a special attachment to this street? Like What? E.g. Friends, Meeting life partner

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4) What is the most positive aspect and also the weakness of the street?

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5) If people ask, you to indicate some features or identify a point of reference about this street what will be your answer.

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6) What do you feel about visiting this street? Energy, Happiness, Relaxation, Coolness ..... Why?

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7) What do you recommend to enhance the Imageability of this street?

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8) If you are required to give a motto to this street, what it will be? For example, Street of Happiness, The Street of Fun .....

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*Thank you for your time and kindly cooperation*

## ANNEX G

### HELPFUL EQUIPMENT AND MATERIALS THAT CAN ENHANCE THE IMAGE OF STREET SIDEWALKS

Units / Materials	Possible intervention illustrations
<p><b>A) Sidewalk Pavements</b> Use environmentally friendly, different patterned, decorative pavings.</p> <p><b>Possible pavers Types</b></p> <ul style="list-style-type: none"> <li>A) Cement Interlocking Tiles</li> <li>A) Stone brick pattern</li> <li>B) Patterned Trazo pavers</li> <li>C) Grey Cement Rectangular Interlocking Tile</li> <li>D) Concrete pavers</li> <li>E) Gray Square Pavement</li> </ul>	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%; text-align: center;"> <p>A</p>  </div> <div style="width: 33%; text-align: center;"> <p>B</p>  </div> <div style="width: 33%; text-align: center;"> <p>C</p>  </div> <div style="width: 33%; text-align: center;"> <p>D</p>  </div> <div style="width: 33%; text-align: center;"> <p>E</p>  </div> <div style="width: 33%; text-align: center;"> <p>F</p>  </div> </div> <p>Sources:            A) <a href="https://www.dreamstime.com/texture-concrete-pavement-sidewalk-paving-slabs">https://www.dreamstime.com/texture-concrete-pavement-sidewalk-paving-slabs</a>            D) <a href="https://www.pinterest.com/pin/textures-texture-seamle_44402746307696918">https://www.pinterest.com/pin/textures-texture-seamle_44402746307696918</a>            B,C E,F) <a href="https://unsplash.com/s/photos/pavement-texture">https://unsplash.com/s/photos/pavement-texture</a></p>
<p><b>Sidewalk Sits / Benches</b> Sidewalks are different some are narrow others are wide, and the financing is different but in any case, sidewalk sits that are multi-purpose, space-saving permanent or movable, &amp; attractive shall be available.</p> <p><b>Possible Permanent sit Types</b></p> <ul style="list-style-type: none"> <li>A) Standard Sits</li> </ul> <p><b>Another Permanent sits types</b></p> <p><b>B,C,D)</b> Sidewalk sits made of Bricks and tiles that are used for Multi-Purpose.</p> <p><b>G,H,I)</b> Urban elements that can be used as sidewalk sits</p> <p><b>Movable sits types</b></p> <p><b>J,K,L)</b> Movable sits</p> <p>These can be used for events, temporal activities, and multi-functional sidewalks with fewer sidewalks also temporal chairs can be applied.</p>	<div style="display: grid; grid-template-columns: repeat(3, 1fr); gap: 5px;"> <div style="text-align: center;"> <p>A</p>  </div> <div style="text-align: center;"> <p>B</p>  </div> <div style="text-align: center;"> <p>C</p>  </div> <div style="text-align: center;"> <p>D</p>  </div> <div style="text-align: center;"> <p>E</p>  </div> <div style="text-align: center;"> <p>F</p>  </div> <div style="text-align: center;"> <p>G</p>  </div> <div style="text-align: center;"> <p>H</p>  </div> <div style="text-align: center;"> <p>I</p>  </div> <div style="text-align: center;"> <p>J</p>  </div> <div style="text-align: center;"> <p>K</p>  </div> <div style="text-align: center;"> <p>L</p>  </div> </div> <p>Sources: A) (Burnside Streetscape, 2018) E, F, H ) photo by the researcher taken at Churchill Avenue            B, I ) photo by the researcher taken at King George street C, D) photo by the researcher taken at Ahrhot Library (4 kilo)            J) <a href="https://www.flickr.com/photos/ttraum/">https://www.flickr.com/photos/ttraum/</a> K L ) <a href="https://inhabitat.com/re-imagining-a-city-temporary-exhibits-take-over-san-francisco-streets/dsc_0195-2/">https://inhabitat.com/re-imagining-a-city-temporary-exhibits-take-over-san-francisco-streets/dsc_0195-2/</a></p>

### Sidewalk corner shops and Outdoor Cafes

Their placement shall be based on space availability and their needs. And also should be attractive and innovative.

These services will help users to get affordable service along sidewalks.

Use of Simple structures

- A) Small kiosks
- B) Container shops
- C) Aluminum with glass Facade
- D) Branded Shops/ Kiosks



Source : A) <https://www.pinterest.com/pin/332633122464287763/> B) <https://www.pinterest.com/pin/10639760991749438> C) <https://www.pinterest.com/pin/26740191525667719/> D) <https://www.alamyimages.fr/photos-images/coca-cola-kiosk.html>

### Advertisements Placement on Sidewalks and street Fronts

To enhance the image of sidewalks advertisements should have the appropriate size, un-excessive, inspiring, creative & iconic.

- A) On Billboard Adverts
- B) Street Front Adverts
- C) Standalone Adverts
- D) Advrts on Street Furtinture
- E) Movable Adverts
- F) Adverts painted on the street



Sources: Illustration A & B) <https://www.behance.net/gallery/29663241/COCA-COLA-The-irresistible-billboard> Illustration C & D) <https://www.alamy.com/stock-photo-bus-stop-fashion-advertising-billboard-on-the-street-3d-rendering-173050562.html> Illustration F) <https://portcitysigns.com/banners-temporary-signs/a-frame-sidewalk-signs>

### Street Sidewalk Plantation

The plantation and plant selection should base on climate conditions, soil types, need/purpose, and space available. The plants can be trees, lowers, Shrubs, and Grass based on demands and there must be close follow-up & protection

#### Planting Options

- A) On-ground (conventional)
- B) Using Peramant Flowerpots
- C) Movable Pots (Planters) (For Narrow sidewalks, for event purposes)
- D) A mix of Permanent Flowerpots, Movable pots and Sits ( Multi-Purpose)



Source: Illustration A : Illustration B & D: Permanent flower pots( source : <https://www.nycstreetdesign.info/landscape/permanent-planter>) Illustration C & E: Movable Pots ( source : <https://www.nycstreetdesign.info/landscape/permanent-planter>)

### Street Sidewalk Vending Services Recommendation

Organized space saving , Sationed and Temporal structures.

#### Street Shops

- A) Push Cart Shops
- B) Street Food Vending Shops
- C) Food Truck

#### Services held on Sidewalks

- D) Shoe Shiners Shops
- E) Sationed Book vending store
- F ) Book Vending Cornores
- G) Mobile Book Shops
- I) Organized Tents and Temporal Structures
- J) Organized Tents and Temporal Structures in the case of events, Holydays and Bazares.



Source : **Illustration A** - <https://www.dreamstime.com/illustration/street-food-vendor.html> **Illustration B** - <https://www.dreamstime.com/photos-images/tempoal-sidewalk-shops.html> **Illustration C**- Food truck (<https://www.vectorstock.com/royalty-free-vector/food-truck-flat-design-style-vector-32306793>) **Illustration D**- <https://www.wiego.org/blog/mexico-citys-shoe-shiners-are-not-visual-contamination-design-solutions-traditional-occupatio> **Illustration E**- <https://www.pinterest.com/pin/12-amazing-bookmobiles-for-national-bookmobile-day--556687203916134044/> **Illustration F** - <https://theculturetrip.com/south-america/chile/articles/a-book-lovers-guide-to-santiago-de-chile/> **Illustration G** : <https://www.pinterest.com/pin/10-must-see-mobile-libraries-tinyme-blog--454371049885839517/> **Illustration H** : Photo by researcher **Illustration I** : <https://www.wiego.org/sites/default/files/2009-12/soutouras-Mexico-SV.jpg>

### Provision of Sidewalk Decorating Elements

These elements shall base on their necessity and the space available. Their qualities must be up to standard.

#### Fountains

- A) Multi-functional fountain with sits
- B) Fountain under the pedestrian sidewalk
- C) Designated Fountain spaces On sidewalk

#### Ionic Sculptures that are interactive & Symblomblic

- D) Educational
- E) Fun
- F) Cultural touch

#### Public Arts

- G) Street front Public Art
- H) Public Arts on Sidewalk
- I) On Street crossings



Sources: **Illustration A**: By the researchers @ in front of Abrhot library **Illustration B**) <https://www.shutterstock.com/image-photo/fountain-under-pedestrian-sidewalk>, **Illustration D**) <https://www.alamy.com/stock-photo/children-posing.html>, **Illustration E**) <https://www.dreamstime.com/old-man-read-book-child-old-man-read-book-to-child-tell-him-stories-life-image117963> **Illustration F & J** : <https://travelpolandtours.com/best-street-art-wroclaw> **Illustration G** - <https://www.dreamstime.com/photos-images/graffiti-walls-york-city.html>

## ANNEX H

### RECOMMENDATIONS ON ACTIVITIES THAT COULD BE ADOPTED BY ALL ROLE PLAYERS

#### Possible Sidewalk Actives, Programs, and Functions

**Promote Street Performances  
(Using Sidewalk as an  
Entertainment stages/places)**

- Street Music's, "Azamari"  
shows, Dances .....
- Poems, Book Reviews
- Mindset programs
- Gymnastic & other sport shows
- Street Art and shows
- Movie Nights
- Meeting stage with the famous

**Promote Sport Activites on Streets  
(That welcomes Direct Patcaption )**

- Mass Sports needs picture
- Yoga ,Aerobics
- Gymnastics

**Promote Managed Street Vending's**

- Book and store
- Shoe Shiners ,
- Push Carts.
- Street foods Fast Food Carts
- Food carts

**Promote Special Vending  
programs**

- Bazars and Festivals
- Book Fair
- Holiday trolley
- Product Marketing

**Promote on street Fund Rasing  
Programs**



**Figure A** : Poster of Sidewalk festival anocecent **Figure B** : A person palying masinko Source : [https://www.mintzola.eus/en/kulturartea/mapa/adierazpidea/56?set\\_language=en](https://www.mintzola.eus/en/kulturartea/mapa/adierazpidea/56?set_language=en) **Figure C** : Childern palying along sidewalk **Figure D** : Street guitar Performace **Figure E** : TradionalMusics and Dances Source : Fendika Azemari bet (globalvoices.org/2020,12/21fendika-cultural-hub) **Figure F an G** : People playing on the street Source Figure F: <https://semonegna.com/street-children-addis-ababa-ethiopia/> **Figure I** : A person showing a dance show Source <https://www.sidewalkfestival.com/> [https://inhabitat.com/re-imagining-a-city-temporary-exhibits-take-over-san-francisco-streets/dsc\\_0138-2/](https://inhabitat.com/re-imagining-a-city-temporary-exhibits-take-over-san-francisco-streets/dsc_0138-2/) Source for Figure A, C,D ,G <https://www.sidewalkfestival.com/>

**Promote and Street games  
(Direct Participation )**

- Old games like jotiens, Pool ,3D/7D games
- Interactive plays like solitaire ,Chasse ,” Dama” (that could target the old people)
- Chalking Sidewalk chalk Games.
- Child hood games, like, bubble , ropes....
- Promote also innovative ideas like
- Story telling sessions and hearing story from the elders. As shown on picture I
- Street And Wall Art Illusions

**Promote income generating Ideas  
(This can target foreigners as city marketing strategy)**

- Traditional clothes
- Sketch lesson,
- Selling Jewelry ,Teaching local language
- Cultural Dance lessons also lessons of local instruments like kirar , Washent
- Incorporate also outdoor cafes and street front restaurants to promote local foods,And beverages like tella , teje , traditional foods.



**Figure A :** Sketching people @ meslek square Addis Ababa- photo by author , **Figure B :** Sidewalk Chalking Games **Figure C :** Sport Games ( Tabel Tennis) @ meslek square Addis Ababa- photo by author **Figure D :** Art , Paint and Craft Shows/Exhibition.. source : <https://sbparksandrec.santabarbaraca.gov/activities/community-events/santa-barbara-arts-crafts-show> **Figure E,G:** Inovative Games by Nu-chika-ena-buka Game Center Source : <https://www.nuchikaenabuka.com> **Figure F:** Street Games (Joteni ) Source ([https://www.younglives.org.uk/multimedia\\_/tufas-story](https://www.younglives.org.uk/multimedia_/tufas-story)), **Figure H** Street Performance Source: ([https://inhabitat.com/re-imagining-a-city-temporary-exhibits-take-over-san-francisco-streets/dsc\\_0195-2/](https://inhabitat.com/re-imagining-a-city-temporary-exhibits-take-over-san-francisco-streets/dsc_0195-2/)) **Figure I** Interactive play (Story telling) between the elders and youths Source: <https://www.alamy.com/stock-photo-elderly-man-telling-stories-to-children-in-a-village-in-tanzania-15825536.html> **Figure J** Intactive street art game : Sourc [https://www.reddit.com/r/confusing\\_perspective/comments/ah9xi9/hole\\_in\\_the\\_ground\\_street\\_art/](https://www.reddit.com/r/confusing_perspective/comments/ah9xi9/hole_in_the_ground_street_art/) **Figure K :** Story reading source : <https://sbparksandrec.santabarbaraca.gov/activities/community-eci..>

**Notes:** These functions and can be injected on permanent or temporal bases. Propose a space for regular and seasonal events for urban designers. A mix of these every activity important inclusive.