A PERCEPTION OF ARCHITECTS' & URBAN DESIGNERS' ON IMPACT OF OUTDOOR ADVERTISEMENT ON VISUAL POLLUTION; AN EVIDENCE FROM NUGEGODA, SRI LANKA.

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Dissertation submitted in partial fulfillment of the requirements for the

Master of Urban Design

Department of Architecture

University of Moratuwa

Sri Lanka

February 2022

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Abstract

Today, Sri Lanka is moving towards developments of high urbanization this also leads to highly commercialized streetscape. In further Nugegoda, Sri Lanka is one of the envisioned Major Urban Centre within the Colombo Metropolitan Area for 2035. The rapid haphazard commercial development also leads to question the impact of Outdoor Advertisements on Visual Pollution within this context. However, Architects and Urban Designers are the professionals who define the streetscape and the image of the city. Therefore, this study focused on finding the impact of Outdoor Advertisements on Visual Pollution from the perceptions of Architects' and Urban Designers'.

The study area divided in to 44 surveyed points and photo-based web survey conducted to check the perception of the convenience population sample of 100 numbers of a mixture of Architects and Urban Designers on; appearance of the street (as), number of Outdoor Advertisements in the street (na) and appearance of the Outdoor Advertisements in the street (aa) based on these independent variables the dependent variable of Surveyed Visual Pollution Score constructed with Statistical Package of Social Sciences (SPSS 26). The Surveyed Visual Pollution Score measured for each 44 points and Surveyed Visual Pollution Map was produced using ArcGIS Geostatistical Analyst to make kernel interpolation.

The study findings show that; the area near the main node of the study area becomes the highest visually polluted area and pollution are decreasing with the distance away from the main node. Additionally, the Surveyed Visual Pollution Map shows that there is positive relationship with Surveyed Visual Pollution Score and the hierarchy of the roads. A higher number of 38 out of 100 respondents strongly agree to place OAs in the Streetscape. A higher percentage of 46.7% respondents perceive OAs as means of Visual Pollution. The second highest percentage of 24.1% respondents perceive OAs effects the Image of the City. A higher percentage of 34.9% respondents prefers to have virtual and social media advertising rather OAs. The highest number of respondents (30 out of 100 respondents recommended) recommended to premise the area ratio of OAs to building façade of 1/8 : 1. Moreover, another 25 out of 100 respondents recommended to premise the area ratio of OAs to building façade of 1/16 : 1.

Keywords:

Visual Pollution, Visibility Analysis, Outdoor Advertising, Billboards, Visual Pollution Assessment, ArcGIS Mapping and Environment Psychology.

Acknowledgements

There are many who helped me along the way on this journey. I want to take a moment to thank them.

First, I wish to thank my dissertation supervisor Archt. Janaka Dharmasena without his guidance and continuous feedbacks, I would not have made it. Secondly, Dr. Janaka Wijesundara who always been as my mentor and structured me over the years during my Bachelor's and my Masters. I'm really thankful that they went above and beyond to help me reach my goal.

To my friends and my parents: you put up with me being distracted and missing many events. I am forever grateful for your patience and understanding. I hope to have time now to reconnect with each of you.

Finally, to my wife, Nisansala: your love, support and understanding helped me through the dark times. Without you believing in me, I never would have made it this far.

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List of Abbreviations

AVP – Assessed Visual Pollution

AVPS – Assessed Visual Pollution Score

OAs – Outdoor Advertisements

SVP – Surveyed Visual Pollution

SVPS – Surveyed Visual Pollution Score

VP – Visual Pollution

VPO – Visual Pollution Objects

VQ – Visual Quality

as – Appearance of the Street

na – Number of Outdoor Advertisements in the Street

aa – Appearance of the Outdoor Advertisements in the Street

INTRODUCTION

Background to the study

Nowadays, the issue of pollution has become a concern because many different types of pollution have been identified, all of which have harmful effects on our daily lives. (Manisalidis et al., 2020). Aside from water, land, and air pollution, there are several more types of pollution that have an impact on our life. One of these categories is visual pollution, which is relatively recent and has a considerable impact on our lives. (Manisalidis et al., 2020). Visual graphics (Billboards) are the prominent features in the wrong places of the urban cities completely blocking the roads, thereby obstructing the traffic as well as pedestrians view (Bankole, 2013).

Visual quality is considered a premium item in poor countries such as Ethiopia. Most individuals, even government officials, are unaware of the phrase "visual pollution" or its existence (Natnael,2018). Wakil et al. estimate that outdoor advertisements and billboards contribute to 20.6% of the spatial visual pollution in a typical urban setting of a developing country. Locally, visual pollution in Sri Lankan towns can be seen and heard in plenty. Particularly during election season, social visual and noise balance is viewed with suspicion. This prompted many government environmental agencies to file an appeal with the Court of Law to enact a regulation prohibiting the use of banners during election times (Sahana & Karthigayini, 2020).

Architects and Urban Designers perceive the built environment and the public realm differently compared with the general public (Devlin & Nasar, 1989). Both Architects and Urban Designers are groups of professionals who have possessed the ability to define and structure the streetscape as suitable to the local context.

Therefore, it is very important to identify the impact of outdoor advertisements (OAs) on visual pollution from the perception of architects & urban designers. This study is focused within the context of Nugegoda, Sri Lanka.

Research Gap

The literature review endorsed that environmental pollution is the biggest crisis in the today's world and there are types of environmental pollutions. The Visual Pollution is one of the emerging pollutions within the environmental pollutions in the developing countries. Within the visual pollution outdoor advertisements slowly making the entrance.

By profession Architects & Urban Designers are professionals who are trained to define streetscapes; So, the contribution from this study is that to identify how these above-mentioned professionals perceive the impact level of the OAs on visual pollutions within the local context of Nugegoda, Sri Lanka. In further, this study helps to identify the pollution scores and pollutions zones. The Figure 01 in the next page explain the narrow down path of the research gap.

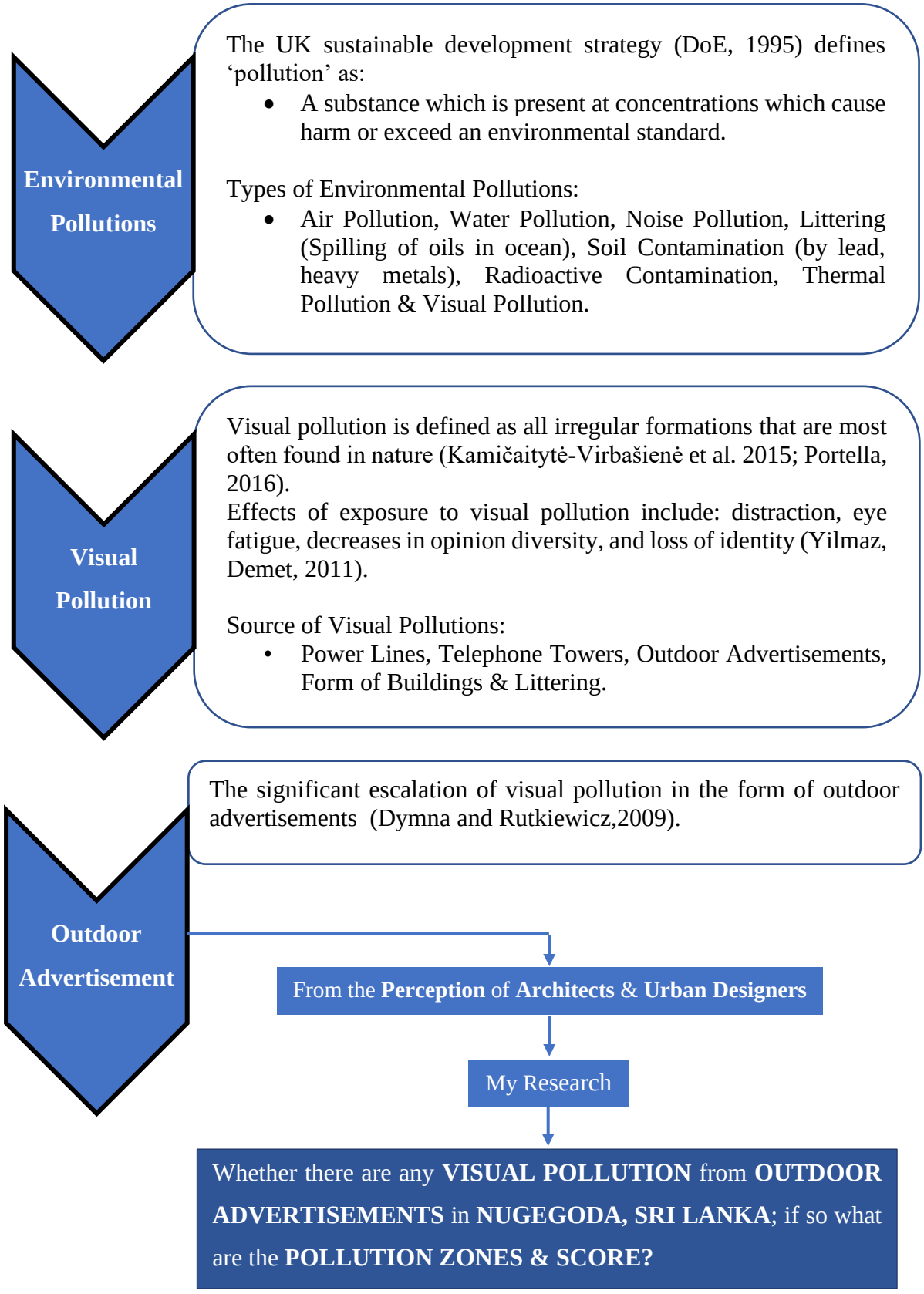


Figure 1: Research Gap; Source: Author

Research Questions and Research Objectives

OAs are slowly emerging to make an impact in the visual pollutions on the streetscape with the competitive marketing world's trends.

In education and practice, architects, urban designers spend a greater amount of time studying the physical environment, observing architecture, public realm. This experience may make architects more sensitive to and aware of the physical environment (or buildings) (Devlin & Nasar, 1989), and the urban design interventions from the Urban Designers

Architects & Urban Designers are the professionals who define and control the expression and the view of the public realm in the form of building forms, envelopes, and urban designs interventions. Therefore, this study focused on the following research questions.

Research Questions

R1 - Does Outdoor Advertisements contribute to visual pollution in the perception of Architects and Urban Designers within the context of Nugegoda, Sri Lanka?

R2 - What is the range of pollution score of Outdoor Advertisements on visual pollution in the perception of Architects and Urban Designers within the context of Nugegoda, Sri Lanka?

R3 - What are the identified visual pollution zones in Nugegoda, Sri Lanka in the perceptions of Architects and Urban Designers?

R4 - What are the perceived solutions to mitigate the impact of Outdoor Advertisements on visual pollution by the Architects and Urban Designers within the context of Nugegoda, Sri Lanka?

Research Objectives

Based on the above-discussed research questions, this study intends to achieve four main objectives as follows:

1. To identify whether Outdoor Advertisements contribute to visual pollution in the perception of Architects and Urban Designers within the context of Nugegoda, Sri Lanka.
2. To identify the range of pollution scores of Outdoor Advertisements on visual pollution in the perception of Architects and Urban Designers within the context of Nugegoda, Sri Lanka.
3. To identify visual pollution zones in the perception of Architects and Urban Designers within the context of Nugegoda, Sri Lanka.
4. To identify the perceived solutions to mitigate the impact of Outdoor Advertisements on visual pollution by the Architects and Urban Designers within the context of Nugegoda, Sri Lanka.

Methodology

The intent of the study is to identify pollution scores and pollution zones of Outdoor Advertisements on Visual pollution within the context of Nugegoda, Sri Lanka. According to the developed objectives, the study needs to be conducted with a large number of samples, and the study is focused on Architects and Urban Designers, also this study analyzes the demographic variables such as age, gender, educational level, and industrial experiences. Therefore, the most applicable method was the quantitative research approach. The population of this study was mixture of Chartered Architects and Urban Designers, and the sample size is mixture of one hundred (100) Chartered Architects and Urban Designers. The sample was based on the availability and uncertainty of the sample. Therefore, the convenience sample method is used as one type of non-probability sampling method. Initially a pilot survey is conducted with the 10 number of same spectrum of respondents to confirm that there is visual pollution from OAs. The data for this main study was gathered from a site measurement which later transformed into photo-based web survey questionnaire. The gathered data was analyzed with the Statistical Package of Social Sciences (SPSS 26). The gathered data is used to calculate the pollution score and by using ArcGIS Geostatistical Analyst to make kernel interpolation to produce polluted zones. Based on the collected data and recommendations from the respondents and perceived solutions are identified.

Limitations and the Scope of the Study

Limitations of the Study

Hence, this study is focused on whether OAs contribute to the visual pollutions within the context of Nugegoda, Sri Lanka; there could be a probability that respondents could manipulate the results if the particular building in the study area is designed by the Architect. Further, this limitation could be controlled by adding a question in the questionnaire of "is there any built mass / design intervention within this study area that you designed?" anyhow again there could be a chance of lying to that question. Therefore, it is still a limitation to this study.

The second limitation of the study was limiting the samples within the qualified Chartered Architects and Urban Designers. This excludes the people who have sound knowledge in architecture and urban planning with having bachelor degrees in the respective fields but not having professional qualifications.

The Third limitation of the study is Architects' and Urban Designers' perception also carry intangible components.

The fourth limitation to study is conducted during the COVID 19 Pandemic while the government enforces sudden lockdowns, restrictions in movements, transportations. Due to this, there is a change in the mode of advertisements. Where social media like Facebook, Instagram, WhatsApp, YouTube taking a hike compared to OAs. This leads to a loss of interest in the OAs. However, this condition gets recovered very soon after the post-pandemic and restrictions.

The fifth limitation to the study is, COVID 19 Pandemic also impacts data collection since the announcement of the lockdown is unpredictable.

Scope of the Study

The scope of this study is categorized into two parts as follows.

Empirical Significance

According to literature, there is a dearth of studies that examined the OAs contributions to Visual pollution in the western context. The term 'visual pollution' has gained popularity around the world, having been accepted by many experts who had previously expressed worries about the creeping commercialization of public places and urban landscapes that are unattractive (Baker 2007; Koeck & Warnaby, 2014). However, there are very little researches done related to the local context that was conducted on the impact of Outdoor Advertising on Visual Pollution. Therefore, this is a pioneering effort and this might be viewed as a study opportunity for more empirical data collection. This study intends to contribute to the current body of knowledge about the aforementioned link. especially to a developing country like Sri Lanka, and also to assess the impacts of such a relationship on Sri Lankan streetscape. This study will provide a pathway for future researchers to study in and apply to different contexts.

Practical Significance

When emphasizing practical significance, initially it is a positive relationship existing between the perception of the Architects & Urban Designers on the impact of OAs on Visual pollutions and there is a direct link between the scale of OAs and Visual pollutions. Therefore, this will help to develop a legal background and guidelines; the findings attempt to help national, regional, and local authorities to design and implement regulations on OAs controls.

Chaptalization

The study is started with a brief introduction to the study and is developed with 4 Chapters. Chapter 1 extracts the broad theories and literature to date regarding the topic. Chapter 2 covers the research design and research methodology. Data Analysis, Findings and Recommendations of the case study are pointed out in Chapter 3 and the final Chapter is the Conclusion of the study.

1.0 CHAPTER - 01 – IMPACT OF OUTDOOR ADVERTISEMENTS ON VISUAL POLLUTION IN THE PERCEPTION OF ARCHITECTS & URBAN DESIGNERS

1.1 Introduction

Urban design defined as any design interventions that exists in the urban fabric. According to (Carmona et al., 2010) many scholars identified that there are six different dimensions in the urban design. Those are morphological dimension, social dimension, functional dimension, temporal dimension, visual dimension & perceptual dimension. This chapter focused and elaborated on the negative effect of the VP (Visual Pollution) on the visual dimension and the perception dimension.

1.2 The Concepts and Definition of Terms

1.2.1 Definition of Pollution

According to United Kingdom sustainable development strategy produced by the Department of Environment in the year of 1995, defines 'pollution' as a substance which is present at concentrations which cause harm or exceed an environmental standard. The European Environment Agency identifies those pollutions transform a medium such as air, water, soil and neighborhood in a way that make it harmful to people or nature. However, the concept of contamination is not restricted to physical particles; additionally, intangible aspects like as light, temperature, and sound can be taken into account. environmental contaminants also, the types of the environmental pollutions are categorized as follow; Air Pollution, Water Pollution, Noise Pollution, Littering (Spilling of oils in ocean), Soil Contamination (by lead, heavy metals), Radioactive Contamination, Thermal Pollution & Visual Pollution.

1.2.2 Visual Pollution

Visual pollution is one of the environmental pollutions which effects the visual dimension of the urban design. Amber Pariona (2018) defines the VP as anything that obstructs or otherwise disturb the vision of a certain location or item. It can relate to

the visibility of a distant object, to visibility in general, or to clutter inside a particular perspective.

Parisa Nami et al., (2016) defined Visual pollution as "*an out-of-control and uncoordinated diversity of color, form, light, and materials, as well as the accumulation of heterogeneous visual elements, unsightly, unattractive, and man-made space and urban landscape, and is an aesthetic issue that impairs one's ability to enjoy the sights or disrupts the view*".

Furthermore, Yilmaz & Sagsoz, (2011) identified that with the Visual Pollution exposure can result in attention, eye fatigue, a decline in viewpoint variety, and a loss of identity.

1.2.3 Outdoor Advertisement

Shankar & Horton, (1999) mentioned that the advertisers and their agencies used to be controlled by the main five media outlets: television, press, posters, movie, and radio. However, in recent decades, new forms of advertising such as Internet advertising and outdoor advertising have evolved. Harada et al., (2009) noted that Internet advertising has emerged as a new communication medium. However, Yamakawa & Akaoka (2013) identified that recently outdoor advertising also has received a lot of attention. Koeck & Warnaby, (2014) defined Outdoor advertising is a broad term that refers to the different types of advertising that occur in and around the urban environment.

1.3 Historical Background of Visual Pollution

Khydija Wakil et al., (2019) mentioned that in 19th century only pollutions that were affected to the wellbeing of the human were air pollution and water pollution. Anyhow, the articulation of noise pollution in the late 1970s produces a knowledge that there are other sorts of pollutions.

Amber Pariona (2018) mentioned that the first notification of visual pollution and Bird Johnson, the former First Lady of the United States, reportedly described billboards along freeways as an unsightly accumulation to the metropolitan scene in 1965. She then supported the Highway Beautification Act of 1965, which restricted some types of

advertising on government financed roads and interstates. Furthermore, the rule encouraged using more picturesque enhancements when screening less desirable places such as junkyards or waste dumps.

Although this field of study has just recently established, the majority of studies and regulations pertaining to beautification have been conducted in developed countries. However, in recent years, visual pollution has been taken into account in those developing countries too.

1.4 Visual Pollution

1.4.1 Definition of Visual Pollution

Furze (2002), (Jensen , Panduro, & Lundhede, 2014) were defined VP is a phrase that refers to the cumulative impact of disarray, excess, and muddle in the landscape created by varied objects and graphics.

1.4.2 Types of Visual Pollution

1.4.2.1 Light Pollution

Light pollution is a term that refers to the altering of natural light levels in the night environment as a result of the introduction of artificial light. Due to the continuous expansion of nighttime artificial lighting, this problem has become contentious, and some towns have enacted legislation to curb the wasteful loss of light into the sky and environment. (Falchi, Cinzano et al., 2019).

1.4.2.2 Colour Pollution

Nami et al., (2016) defined the color pollution as inappropriate usage or application of colors in urban fabric that causes an unsatisfied and unpleasant experience for the viewer. Color theory is used in designs ranging from urban to graphical design (advertisement) to create a pleasant environment. However, designs that do not include color theory or a cluster of designs will produce an unsettling environment.

1.4.2.3 Symbol Pollution

Nami et al., (2016) defined Symbol Pollution as the absence of any symbolic illustration of society or any unwelcome inappropriate image of inhabitants in any urban designs or features.

Nami et al., (2016) also elaborated that A city's character must be reflected in its citizens. This means that every design will influence the social, political, and economic conditions of the social order. Any symbolic monuments, sign, or structure that does not strike a chord with society will have a negative effect.

1.5 Sources of Visual Pollution (Visual Polluting Object)

Anything that has a detrimental influence on visual perception is referred to as a Visual Polluting Object (VPO) Visually damaging things range in size from graffiti on a wall to monuments and telecommunications towers. Sudeepta Banerjee, (2017) listed the following VPOs as a source of visual pollution. “Advertisements that are excessively cluttered, Wires and poles for telecommunications and electric power, Mobile towers, billboards, posters, and hoardings, as well as idle land and deforestation Buildings of poor design and massive constructions, Factory chimneys spouting smoke, Graffiti, Trash cans in open storage”.

1.6 Outdoor Advertisement as a Visual Polluting Object

1.6.1 Definition of Outdoor Advertisement

Fantaye (2013) defined that the phrase 'Outdoor Advertisement' refers to a variety of marketing and promotional activities that will be shown or constructed in an outdoor environment. From painted signs on a roadside herbal shop to the spectacular display in Times Square, this kind of advertising is nearly limitless in its variety. In recent years, it has evolved to encompass a variety of modes of travel, including taxis (which are not truly transportation modes like railways and subways), parking meters, and gas pump handles.

1.6.2 Historical Background of Outdoor Advertisement

Outdoor advertising is the world's oldest form of advertising, dating back at least 5,000 years. The first documented use was in Egypt, where advertising offering rewards for apprehending fugitive slaves were printed on papyrus and displayed. (Agnew, 1932). Among other early adopters of the OAs were the ancient Babylonians, Greeks, and Romans (Presbrey, 1929; Tocker, 1969). According to Presbrey (1929); Tocker (1969), the usage of OAs in Europe dates all the way back to the Middle Ages.

In the 17th century, moveable type technology was used to outdoor signs (Schuwer, 1966), resulting in an explosion of signs and posters, and by the late 16th century, "London was literally darkened by gigantic swinging sign boards of every sort" (Tocker, 1969). Posting methods were also frequently used in Britain's American colonies. Certain individuals ultimately concluded that outdoor advertising had been excessively warmly adopted.

Soon after the Great Revolutionary War, local ordinances restricting the size of signs resulted in a decline in the usage of signboards as a medium of advertising (Presbrey, 1929), However, the usage of posters rose progressively. In the 18th century, England allowed the ownership of bill posting facilities. This facilitated the establishment of structures for advertising in high-traffic locations with huge audiences by a group of billposters (Taylor et al., nd). By 1850, the outdoor media had evolved significantly in the United States. Advertisements for agricultural and stock gears, as well as advertising for county and state fairs, theaters, and horse races, were displayed during this time period. For example, Clothing Bazaar painted signs advertising its products for sale on every road within 50 miles of its Boston location. (Presbrey, 1929).

P.T. Barnum, an early pioneer in the art of advertising, contributed to circuses being the largest users of outdoor advertising (Agnew, 1932). Despite the gradual proliferation of OAs in the United States throughout the first half of the 1900s, this was a pretty tranquil era in terms of regulation. Their diversity increased in proportion to their numbers (and the sorts of places in which they performed). However, billboards quickly became a source of contention due to visual pollution. (Taylor, Chang, 1995)

1.6.3 Types of Outdoor Advertisement

1.6.3.1 Posters

Taylor et al. (1995) defined that ‘Posters’ are often pieces of paper with a statement that are adhered to the buildings' exterior surfaces or other widely visible spots. These posters are put in public areas, heavily trafficked streets, and on main thoroughfares to ensure that they are viewed by a vast number of individuals.

Figure 2: Advertising Posters in Sri Lanka; Source: Google

1.6.3.2 Painted Displays

Sahu et al., (2004) mentioned that Painted bulletins serve as inspiration for painted displays. Painted bulletins are typically built at a height and consist of rectangular metal or wooden sheets. Their dimensions are not stated; however, those are frequently bigger than poster sizes.

Figure 3: Painted Advertising; Source: Google

1.6.3.3 Street Furnitures

OAs on street furniture are excellent for increasing awareness in high-traffic regions. These advertisements are prominently displayed at bus stops, park benches, telephone kiosks, and newsstands.

Figure 4: Advertising Street Furnitures in Sri Lanka; Source: Author

1.6.3.4 Billboards

A billboard is a huge OAs structure that is often located in high-traffic locations, such as along major highways. Billboards serve as big billboards for passing pedestrians and motorists. Billboards are typically used by companies to establish their identities or to promote new products.

Figure 5: Advertising Billboards in Sri Lanka; Source: Google

1.6.3.5 Digital Displays

Taylor et al. (1995) said that electrical boards and neon signs are examples of digital display mediums. This form of advertising has grown in popularity over the last few years. This mode of marketing is more prevalent through the late evening and night hours.

Figure 6: Advertising Digital Displays in Sri Lanka; Source: Google

1.6.3.6 Mobile Displays

Sahu et al., (2004) stated that the mobile displays, often recognized as Transit Advertising, are painted on some metallic sheets known as vehicle boards. Typically, these automobile boards are affixed on the cars. buses, taxis, trams, and trains are all used to attract people.

Figure 7: Advertising Mobile Displays in Sri Lanka; Source: Google

1.6.3.7 Sky Advertising

Sahu et al., (2004) mentioned that the sky advertising is a contemporary kind of OAs. This may available in many forms. Messages / Signs can be inscribed on or affixed to balloons that float in the sky, and banners can be dropped from airplanes when it flying.

Figure 8: Sky Advertising in Sri Lanka; Source: Google

1.6.3.8 Sandwich Board Men

Sahu et al., (2004) also stated that, sandwich board men are among the earliest forms of outdoor advertising. Sandwich guys are paid individuals who stroll up and down the streets with two boards. These sandwich guys occasionally don amusing costumes and yell slogans in support of the company's products. Men-on are still used in a similar manner to attract passersby's attention.

Figure 9: Advertising Sandwich Board Men; Source: Google

1.6.4 The effect of outdoor advertisement on the society

1.6.4.1 Overstimulation or information overload

Toffler (1973) identified that Environmental overstimulation may cause behavior breakdown, resulting in bewilderment, disorientation, weariness, and excessive irritation, additionally to indifference and emotional exhaustion in the last stage. This phenomenon has the potential to result in a decrease in productivity, aggression, and criminal activity.

1.6.4.2 Impacts related to placeness

Natneal (2018) argued that Outdoor information conveyance, particularly commercial advertisements, may be viewed as a significant contributor to the creation of increasingly homogeneous visual settings in conformity with a global economy and culture. This effect extends beyond advertising content and infrastructure. These multinational corporations have established a worldwide identity through the notion of franchising and are frequently criticized for their excessive advertising.

1.6.4.3 Spatial impact

In comparison to several other kinds of advertising, outdoor advertising cannot be shut downed. Cronin, (2006) stated that OAs definitely have a spatial component that has an effect on the distinctive nature of the surrounding area, and residents are powerless to avoid them.

1.6.4.4 The ethical or moral impact

Natneal (2018) argued that even before residents are impacted by what they view, they cannot unsee what they have seen. Women's rights advocates have expressed alarm in recent years over the OAs' depiction of females as sexual objects.

This questions about the disrespectful nature of outdoor advertising extends to delicate subjects such as religion. Also, most the advertisements feature the models from overseas this feeds the local habitants of the idea of feeling less of themselves with

comparing to the pictured model’s beauty and complexion and make them purchase the products to look alike them.

1.6.4.5 Impact on Tourism Industry

The tourism industry is critical to the city's image. If the city is connected with ads that are developed and erected in a haphazard and illegal manner, the city will develop an unattractive image, which will have a direct effect on the tourist industry. Cronin, (2006) highlighted that the unexpected and unauthorized ads may act as a catalyst or cause of violence and destruction, instilling terror in tourists.

1.6.5 The effect of outdoor advertisement on the society

Visual pollution has a negative impact on human well-being regardless of whether it occurs in the conscious or unconscious mind. Our perceptions of this world through eyes, shape precisely whom we are. Sudeepta Banerjee, (2017) mentioned that visual pollution, the effects of visual pollution on the human mind and on mental health are as follows. Distraction, eye fatigue, and a decline in the range of opinions Identity loss, Accidents wreak havoc on psychological health: Unpleasant images can contribute to exhaustion, depression, stress, and anxiety. Rheumatoid arthritis, Negative and disorganized pictures might impair the human mind's decision-making capacity, particularly in children. Dark, perilous color combinations have the ability to alter human vision, psychological state, and behavior. The below list explains how visual pollution wreaks havoc on our daily lives by inflicting suffering. A billboard might cause a car on the highway to get distracted, leading in an accident. A neighborhood with inconsistent statistics may strain the eyes of anybody passing by.

These effects are exacerbated in emerging nations, where the case matter is viewed as a luxury rather than a necessity, and hence no regulation pointed at limiting VP exists. As an outcome, the repercussions are severe.

1.7 Factors affecting Visual Quality of Outdoor Advertisement

According to research conducted by the Jacksonville Community Council, the factors discovered to affect the VQ of the city were; Inadequate sign control, Inadequate implementation of existing legislation, insufficient long-term plans for open space preservation, a lack of obligation to streetscaping, and ugly jumble of overhead wires (Jacksonville Community Council,1985). In this regard, the public can notice that the government's unwillingness to enact new rules and enforce existing ones is a major element contributing to the deterioration of urban visual quality.

1.8 Outdoor Advertisement control in other countries

1.8.1 Brazil

The greatest pioneer example OAs control is from the Sao Paulo, Brazil; it banned all the OAs from 1st of January 2007, V.A. Gokhale et al. (2010). Not only did the

Figure 10: Before and After the ban of OAs in São Paulo, Brazil; Source: Kohlstedt, K. (2020, December 2)

legislation make Sao Paulo a more pleasing place to live, but it also highlighted how seemingly innocuous acts, when well designed and performed, may have an effect on the environment. The Clean City law was primarily concerned with two objectives:

public awareness and commerce. This helps the country in cleansing the built environment of unwelcome marketing. According to Kohlstedt, K. (2020, December 2) the Commercial accessibility and aesthetic comfort were included into urban planning to address both publicity and commerce.

1.8.2 Greek

Gudis et al. (2003) mentioned that in 2000, Athens launched a successive 4-year campaign to remove the bulk of rooftop advertisements in order to enrich the city for the Summer Olympics 2004 visitors, despite objections from marketers and owners of the buildings.

Although Greece is regarded for having outstanding tourist attractions, outdoor marketing has had a negative impact on them. The government attempts to eliminate advertisements during the 2004 Olympic Games in order to reduce the damaging influence of advertisements on the Athens cityscape. This will have an indirect impact on the tourism industry by connecting Athens' image with poor visual quality. Smith, H. (2017, November 27)

1.8.3 Australia

Due to OAs on busy highways distracting drivers, the council has made visual pollution a law. Even when a vehicle is parked in a shopping mall parking lot with a for sale sign on the back, it is still illegal. Residents are not permitted to advertise on our land, and if we do, we will be fined $1000 per hour. The visual pollution legislation applies to plants, sheds, buildings, fences, signs, landscaping, machineries, and graffiti, among other things and etc. (Ewen, 1976)

The Australian government is aiming to mitigate OAs' effect on the visual quality of metropolitan areas by adopting a strict penalty system. This enabled the authorities to ban unwanted advertising from being displayed on the cityscape. The strategy taken by the Australian government is preferable since it attempts to reduce visual pollution by preventing OAs prior to installation.

1.8.4 Japan

The Japanese government adopted the Outdoor Advertising Act in 1949 to preserve scenic beauty and social stability and to protect the public from damage. Prefectural governors were tasked with the obligation of developing laws for outdoor advertising under the legislation. Outdoor advertising ordinances were enforced by prefectures, ordinance-designated cities, and significant cities. The legislation has been revised numerous times over the years to add provisions allowing for accelerated sign removal, registration of outdoor advertising enterprises, and the application of fines against billboard corporations that fail to register as a business. (*Outdoor Advertising Control Practices in Australia, Europe, and Japan*, n.d.)

In 2003, as part of a Japanese government initiative to boost tourism, the Ministry of Land, Infrastructure, Transport, and Tourism launched 15 strategies, among which are the following:

- Establish a need for landscape evaluation before to and following the construction of a regional public project.
- Establish guidelines for public projects' landscape design.
- Encourage the development of extensive woodland areas at the outskirts of major cities by promoting a green corridor plan.
- Conduct a concentrated, short-term effort to remove illegal outdoor advertising materials, particularly in tourist locations, and to enhance outdoor advertising materials.
- Underground utilities in chosen districts within five years, in conjunction with stakeholders.
- Establish a legislative framework for protecting and improving the landscape fully and methodically.

Three pertinent legislations were enacted in 2004: the Landscape Statute, a new Outdoor Advertising Act, and a law protecting urban green space. These rules and the aforementioned initiatives, when combined with additional street improvements and

events, are attributed with a ninefold increase in tourist. (*Outdoor Advertising Control Practices in Australia, Europe, and Japan*, n.d.)

The Landscape Law identified four stakeholder responsibilities:

- **Residents**—Contribute actively to the enhancement of landscapes in collaboration with the federal government and municipal governments. A community may submit landscape planning zones to the municipality under the new law.
- **Businesses**—Create landscapes that are in harmony with nature, the region's history, culture, people's lives, and economic activity; collaborate with national and local government agencies.
- **Local public agencies**—Establish and execute ways to enhance landscapes that are compatible with the area's human and environmental circumstances.
- **National government**—Establish and implement comprehensive steps to improve landscapes and foster a greater sense of community among citizens through information and other activities.

The modified Outdoor Advertising Act developed a comprehensive framework capable of altering the urban landscape and the relationship among communities and authorities. The main goal was to allow local authorities to set streetscape criteria for their respective areas and to evaluate the depth of control required to construct, protect & conserve treasured local streetscapes. (*Outdoor Advertising Control Practices in Australia, Europe, and Japan*, n.d.)

The prefecture must expressly approve to the installation of advertising signage. Outdoor advertising is prohibited in specific places under the new regulation, including the following:

- Residential districts with low- to medium-rise buildings, residential districts with medium- to high-rise buildings, landscape zones, and scenic areas and places designated for the protection of cultural property.
- Under the provisions of the Act on the Protection of Cultural Properties, significant cultural properties, including buildings, have been designated.

- Conservation woods (scenic forests) are included in certain areas to help maintain scenic beauty and historical significance.
- Prefecture-designated areas of excellent landscapes and scenic beauty that are accessible by road and rail.
- Parks, green spaces, ancient tombs, and cemeteries.
- Other designated areas specified by the prefectures.

Figure 12: Permissible election campaign in Japan; Source: Osaki, T. (2019, July 19)

Figure 11: Election Campaign in Sri Lanka; Source: Gunatilleke (2009)

Figure 11 & 12 shows the comparison between the permissible amount of election campaign existing in both Japan and Sri Lanka.

1.8.5 Vienna, Austria

In the summer of 2005, for a two-week period a residential street in Vienna's 7th district, all advertising messages, slogans, pictograms, corporate image and logos vanished. The urban fabric of signs and advertisements, which ordinarily fills the gap between architectural buildings and urban circulation patterns, is erased, and the public area is 'delettered.' The Delete! art piece effectively silences the commercial street: the unambiguous, biunique signals are eliminated to make way for an uncertain openness, a perplexing virtuality. This project was produced by St. Balbach Art Production, supported by Wiener Wirtschaftkammer, BMUKK, MA7 and the cooperation partner was Kunsthalle Wien. Delete! (2017, June 29)

Figure 13: Project Delete! intervention; Source: Delete! (2017, June29)

Delete! – eliminates all textual signals intended to capture the pedestrian's attention: a phenomenon recognizable from two-dimensional representations and photomontage works was transformed into 3D, into the here and now realism of Vienna's Neubaugasse, for the first time. Delete!'s approach was 'wallpapering,' which was simple and inexpensive: all written signs (save those required for road safety) were coated in monochromatic, fluorescent foils, and individual 3D letters were contained in plastic. Delete! (2017, June 29)

Figure 14: Project Delete! intervention; Source: Delete! (2017, June29)

Deleting aspect – The street space's lettered, indented, grid-iron order has been turned into a ‘smooth', order less place that elicits something like to true potential. Insofar as 'city' and 'desert' symbolize diametrically opposed principles, a 'desert-like' effect infiltrates the surrounded area of an urban streetscape: the absence of signifiers initially induces disorientation, a sort of "existential horror vacui" (Lutz Musner); concurrently, a way of letting go happens, or – to have it more positively correlated with Taoist principles – a vacuum. Delete! (2017, June 29)

Figure 16: Project Delete! intervention; Source: Delete! (2017, June29)

Sculptural aspect - Due to the monochromatic homogeneity of the signs, which ordinarily elude conscious observation as bearers of textual signals, the square, horizontally or vertically organized, hexagonal, or circular shaped volumes become plainly apparent and make touch with one another. Depending on the lighting circumstances (natural/artificial) and the perceiver's angle of vision, various streetscapes develop, consisting of shapes clustered behind or on top of one another that merger into the existing architecture and buildings' façade, much like 3D abstract paintings. Delete! (2017, June 29)

Figure 15: Project Delete! intervention; Source: Delete! (2017, June29)

Discursive aspect – Delete! – it also be seen as a creative comment on the perennial debate over advertising in public area: to what degree can marketing places and signaling tactics affect an urban aesthetic? How much do they impact citizens' quality of living? "white noise of obsolete media" generates a more profound anxiety, namely "fear of the space without labeling and belonging, and of the form without sign or function"? Delete! does not strive to response to these problems through view formation, but rather by an examination of the world of current spatial awareness as seen by the senses. Delete! (2017, June 29)

Figure 17: Project Delete! intervention; Source: Delete! (2017, June29)

Realization – The implementation of the project Delete! has elicited a strong response both in Austria and internationally. This dramatic intervention in the urban fabric employs the modest of ways, producing an immense amount of integrative energy even prior to the project's commencement. Similarly, the curiosity of companies and store owners, who become players in the art project by their involvement, was surprisingly significant. Delete! transformed Vienna's Neubaugasse into a field of force of social and cultural interchange in the summer of 2005. Delete! (2017, June 29)

Figure 18: Project Delete! intervention; Source: Delete! (2017, June29)

1.8.6 City Wipeout – An Awareness Project

Pasi Kolhonen, an architect and researcher, intended to demonstrate through his City Wipeout exhibit exactly how many pictures, messages, and signals we encounter in our daily lives. The exhibit consists of photographs that depict an everyday aspect of the city center. On the wall, the images are mirrored one by one. The user interface enables spectators to clear the view of all but adverts, signs, and logos. All that remains is the city's blanket of advertising. Although it is continually present in our everyday lives, that blanket is not often seen. This was a highly commented public awareness project.

Figure 19: Occupancy of OAs in Public Realm; Source: Pasi Kolhonen (2000)

1.9 Urban Aesthetics vs Visual Pollution

Rezafar & Turk, (2018) argued that Visual pollution can refer to the perceptibility of a distant subject, vision in general, or clutter within a specific view. Teymur (1991) concluded that minimizing visual pollution's influence on the urban visual sphere is beneficial, and having a pleasant urban senary is beneficial for psychological and intellectual ability.

1.10 Theories in Perception

1.10.1 Gestalt Theory

Gestalt Theory's principles concern the psychological structure of visual compositions. These are the seven Gestalt principles that effect human perception of form: proximity, similarity, closure, good continuance, closeness, area, and symmetry. These principles explain why, despite the complexity of stimuli, a certain location is seen as ordered, pleasant, and fascinating by users from various backgrounds. These concepts show how humans tend to structure their perceptions in order to favor more regular patterns. (Weber, 1995).

“Shapes may be evaluated in depth by characterizing their geometry, size, number, and placement; also, there are visual factors that expand and contract, push and pull, rise

and fall, advance and retreat - all of which contribute to the meaning and expression of art ” (Arnheim, 1977, p.10),(Portella, 2014).

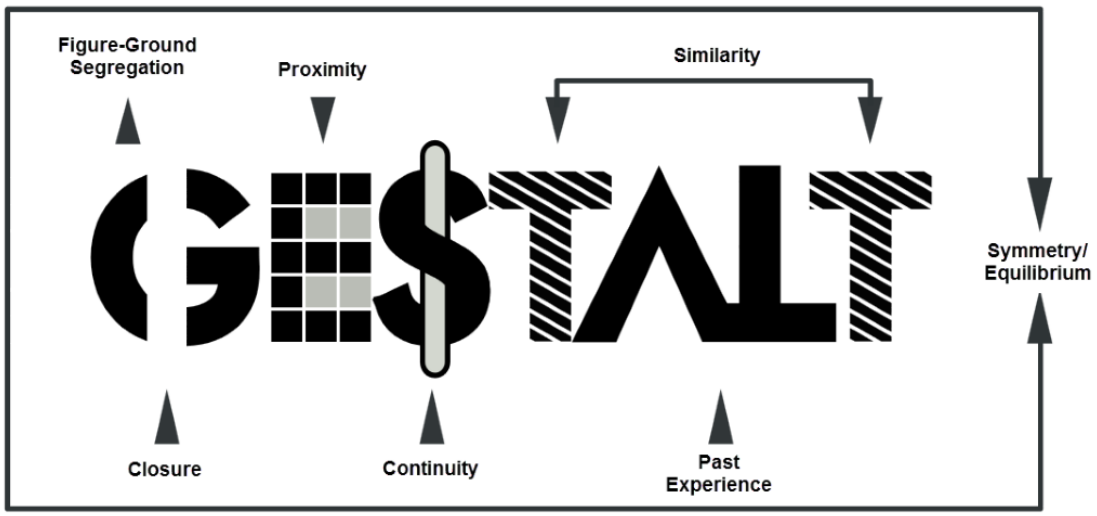


Figure 20: Explanation of Gestalt Principles; Source: Kreiman Lab

1.10.2 Theory of Richard Gregory

Psychologist Richard Gregory (1970) mentioned that perception is a productive process that is based on top-down information processing. The stimuli in our environment are typically abstruse (may hold many meanings), necessitating interpretation; also, To make judgements about what they view, individuals require higher cognitive data, either from prior stored knowledge or personal experiences.

(Cagli, n.d.) mentioned that Helmholtz used the term 'likelihood principle' to refer to this concept. Perception, according to Gregory, is a hypothesis based on past information and experience. In this sense, individuals actively create their perceptions of reality from their environment and stored data.

While the eye receives a tremendous lot of information, much of it is lost before it reaches the mind (Gregory guesses about 90 percent is lost). As a consequence of earlier experiences, the brain must make informed judgments about what a person perceives. The user's perspective on reality is something that the user creates intentionally. Perception, according to Richard Gregory, needs extensive hypothesis testing in order to make sense of the data presented to the sense body parts. Users' perceptions of their surroundings are influenced by previous experiences and stored data. Sensory receptors

collect data from the environment and combine it with previously gathered knowledge about the world gained through experience. Establishing erroneous assumptions will result in perceptual errors (e.g., visual illusions like the Necker cube). (Cagli, n.d., 2018)

1.11 Process of the Perception and Cognition

Portella, (2014) elaborated that the process of evaluating the visual quality of public areas by users is based on two principles: perception and cognition. The perception is concerned with the mechanism through which people obtain visual information about locations through stimuli. These stimuli are physical aspects of public places in city centers, such as commercial signage, building shapes and colors, street furniture, and so on. The latter principle does not have to be explicitly related to visual stimuli associated with physical aspects of places.

The cognitive process is influenced by the user's urban environment, values, culture, and personal experiences. This final description is consistent with what Nicholas Meader, David Uzzell, and Birgitta Gatersleben write in their article 'Cultural Theory and Life Quality.' (2006,p.61): “Individuals do not observe their surroundings objectively, but rather via perceptual glasses colored by their worldview”.

Maria Elaine Kohlsdorf, n.d., (1996), a Brazilian behavior researcher, identifies Human cognitive development is divided into four stages. Further Maria Elaine Kohlsdorf contends that when people reach the age of 11, their cognitive skills, which influence aesthetic judgements, also it is fully developed.

1.12 Perception of Architects and Urban Designers

Scholars acknowledged in several publications that measuring visual pollution is challenging due to its subjectivity. It is practically impossible to assess and quantify visual pollution since What one individual perceives as a disruption in the visual dimension of urban space may not be the same as what another experiences. (Amber Pariona,2018).

However, Architects and urban designers spend more time researching the physical environment, examining architecture, and the public realm as a result of their education and practice. This experience may increase an architect's sensitivity to and awareness of his or her environment (or buildings) Kimberly Devlin, Jack L. Nasar (1989), and the urban design interventions from the Urban Designers. Research done by Hershberger (1980), Groat, (1982) have validated this notion by observing disparities in how design experts and laypeople see structures.

In the architectural approach, formal factors refer to the physical characteristics of the elements that comprise the streetscape; they concern appreciation of sequences of the visual world, complexities, rhythms and shapes and with the knowledge of Gestalt Principles; however, they can also be expanded to an acoustic, olfactory, and haptic dimension. Jon Lang (2005), (Peker, n.d., 2005) and Raymond Curran (1983) defended that, the visual quality of a city is strongly impacted by formal factors such as building setbacks, building entry frequency, heights, cross sections, block lengths, roadbed, widths of sidewalk also the presence or absence of store windows and shopfronts. .

1.12 Summary of Chapter One

This chapter summarizes the literature review of this study. According to the literature review the visual pollution was and is considered a luxury in developing countries, but it is not; It has an effect on people in some way. It is engaged in automobile accidents in the urban regions of those nations. Additionally, it affects citizen productivity through effecting their attitudes and performance. (Sudeepta Banerjee, 2017). Thus, in order to create an urban fabric that represents its residents and it is visually pleasing, local regulators and governing agencies should design and develop legislation aimed at reducing visual pollution and its impacts.

2.0 CHAPTER- 2.0 - THEORETICAL FRAMEWORK AND RESEARCH METHODOLOGY

2.1 Theoretical Framework

2.1.1 Approach to Visual Pollution Assessment

Though visual pollution is acknowledged as a kind of pollution, most city councils struggle to control it due to a lack of a systematic technique for assessing its prevalence and severity in relation to its local effects. (Chmielewski et al., 2016). Numerous academics have employed a variety of methodologies to quantify visual pollution in their individual settings and at a range of scales, from a single street to an entire metropolis. Table 1 summarizes pertinent research and emphasizes their various scales, Visual Pollution Objects (VPO) coverage and methods. Wakil, Naeem, Anjum, Waheed, et al., (2019) have endorsed this finding.

Table 1: List of studies containing components similar to visual pollution assessment; Source:(Wakil, Naeem, Anjum, Waheed, et al., 2019)

No	Study	Scale	VPOs Coverage	Applied Methods
01	Visual Preferences in Urban Signscapes (Nasar & Hong, 1999)	City	Single VPO; Signs	Color Photograph
02	Evaluating Commercial Signs in Historic Streetscapes: The Effects of the Control of Advertising and Signage on User's Sense of Environmental Quality (Portella, 2007)	Street	Single VPO; Commercial signs, (outdoor advertisements)	Opinion survey
03	Evaluation of visual pollution in urban squares, using SWOT, AHP, and QSPM techniques (Allahyari et al., 2017)	Neighborhood	Multiple VPOs; Outdoor advertisements, Garbage, Congestion, Graffiti, Absence of green spaces, Building heights	AHP, QSPM, and SWOT (Strengths, Weaknesses, Opportunities, Threats)

04	Measuring visual pollution by outdoor advertisements in an urban street using inter-visibility analysis and public surveys (Chmielewski et al., 2016)	Street	Single VPO; Outdoor advertisements	Inter-visibility analysis Public survey
05	Introduction to a quantitative method for assessment of visual impacts of Tehran Towers (Karimipour et al., n.d.)	City	Single VPO; Cell Towers	Quantitative, Visibility Analysis using GIS
06	Visual pollution can have a deep degrading effect on urban and suburban community: a study in a few places of Bengal, India, with special reference to unorganized Billboards (Jana, 2015)	District	Single VPO; Billboards	Visual comparisons
07	Citizen science and WebGIS for outdoor advertisement visual pollution assessment (Chmielewski et al., 2018)	City	Single VPO; Outdoor advertisements	Opinion survey Visual pollution score Spatial mapping
08	Urban Environmental Graphics: Impact, Problems and Visual Pollution of Signs and Billboards in Nigerian Cities (Bankole, 2013)	City	Single VPO; Billboards	Color photos
09	Examining Impact of Visual Pollution on City Environment: Case Study of Pune, India (Gokhale, 2011)	City	Multiple VPOs; Hoardings, Billboards, Dustbins, Utility Wires, Light Poles, Parking	Public Opinion Survey
10	Free Standing Billboards in a Road Landscape: Their Visual Impact and Its Regulation Possibilities (Lithuanian Case) (Kamičaitytė-	State road	Single VPO; Free Standing Boards (FSB)	Orthophoto Maps, Field Survey

	Virbašienė & Samuchovienė, 2014)			
11	Visual pollution and statistical determination in some of Karrada district main streets, Baghdad (Atta, 2013)	Street	Multiple VPOs; Garbage, electric wires, military weapons, demolished buildings, excavation works and rubbles, billboards, etc.	Public Opinion, Statistical Analysis
12	Regulating outdoor advertisement boards; employing spatial decision support system to control urban visual Pollution (Wakil et al., 2016)	Primary road	Single VPO; outdoor advertisement	GIS

2.1.2 Challenges of Measuring Visual Pollution

According to the study, measuring visual pollution has historically been challenging due to its subjective order (Portella, 2007), and there does not appear to be a standard set of standards for systematic assessment of visual pollution (Nami et al., 2016). This highlights the critical need of creating a uniform quantitative evaluation methodology. While scholars from across the world have worked to find the assessment method of visual pollution, their efforts have been constrained by a number of factors, which are explained below:

- **Micro vs. Macro-level research**: Prior research on visual pollution may be divided into two broad categories: micro and macro. Numerous preceding studies have focused only on a single case-study location, such as a commercialized street, public buildings within a residential neighborhood, or a town with possibly one or two VPOs (billboards, commercial signs). By contrast, other study areas employed a massive operating area, such as a city with several VPOs. As a result, the literature identifies two (nearly diametrically opposed) techniques for measuring visual pollution in each place, employing both narrow and broad classes of indicators.

- **Lack of quantification**: Due to the inherent sensitivity, subjective nature, and complexity of visual pollution, no single method or instrument exists to quantify the magnitude of visual pollution at every node. (Nasar & Hong, 1999)
- **Dependency on subjective variables**: The majority of preceding studies have used a combination of objective and subjective measures, with an unusually high proportion of subjective indicators. As a result, the results may be influenced by either the respondent's interpretation or the researchers' competence, interest, and understanding of popular literary issues. As a result, they may be incompatible with agreement or acceptance in another situation.
- **Narrow coverage of VPOs**: Visual pollution is a vast field of study that encompasses all aspects of physical and aesthetic settings that contain many items. However, the majority of prior work has concentrated on measuring visual pollution using single VPOs, resulting in single-subject assessment methodologies.
- **The absence of structured tools**: Contrasting to other forms of pollution, the visual pollution cannot be quantified using organized equipment and procedures. Additionally, in some situations, an amalgamation of various methodologies such as public surveys (Ogunbodede et al., 2014), (Nami et al., 2016), inter-visibility analysis, triangulation method, focus group discussions, photo comparisons (Portella, 2007), (Voronych, 2013), visual comparisons and experimentation, and so on (Jana, 2015) has been used to assess a few (or frequently a single) VPO, indicating the need for a collective VPA tool. In the majority of situations, the statistical validity or reliability of the methodology has not been properly evaluated and explained.

Expert evaluation is best when it comes to weighting and subjective ranking since it enables specialists to compare things or phenomena under inquiry using their expertise and experience. (Ginevi, 2005), (Saaty, 2000), (Maggino & Ruviglioni, n.d.). The pertinent literature provides a variety of weighing procedures and strategies (e.g., Delphie method, ordering method (Hsu & Sandford, n.d.), (Bramley, n.d.), (Linstone, 1975) that all rely on expert judgement but each has distinct advantages and disadvantages.

By comparison, an Analytical Hierarchy Process (AHP) is considered as complex, since it is a multi-criteria decision-making technique for resolving subjective and contradicting criteria. The AHP approach is unique in that it allows for the comparison of both qualitative and quantitative elements (verbal, graphical, or numerical) on the similar preference scale (Franek & Kresta, 2014). Psychologically, evaluating two alternatives concurrently is also more efficient and consistent than comparing them all at once. Unlike prior approaches, it is ratio-based rather than interval-based (Sampson, 2009), (Franek & Kresta, 2014), (Saaty, 1987), (Forman et al., 2001). Psychologically, evaluating two alternatives concurrently is also more efficient and consistent than comparing them all at once. Unlike prior approaches, it is ratio-based rather than interval-based. (Belton, 1986).

A relatively similar study was done by Chmielewski et al., 2016 in that study Chmielewski has adopted the questions to questionnaire survey by Portella, 2014. Which was a closed-ended questionnaire, the only one released to date particularly on visual pollution, 3 questions pertaining to OAs were carefully structured. Respondents were asked to answer questions based on a single point of observation. The following are the questions used for that particular study and this study also adopt those questions;

- How do you like the appearance of this street? (1 – really like, 2 – like, 3 – neutral, 4 – don't like, 5 – really don't like)
- The number of advertisement signs (billboards and banners) on this street are: (1 – very few, 2 – few, 3 – moderate, 4 – many, 5 – too many)
- The advertisement signs make the appearance of this street: (1 – very beautiful, 2 – beautiful, 3 – they do not matter, 4 – ugly, 5 – very ugly)

Based on the responses Interpolated Surface of the public survey maps were produced to analyze the perception; this recommended method is used to analyze this this study too. The following Figure shows the study done by Chmielewski. Theoretical

Framework and Research Methodology for this study was developed based on this pioneer study developed by Chmielewski.

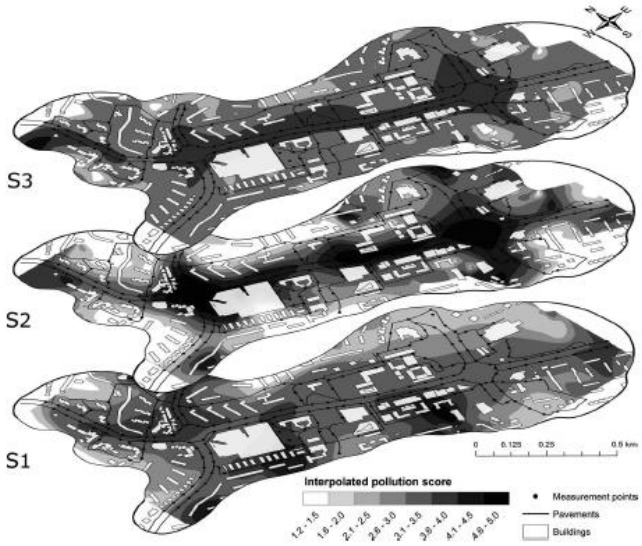


Figure 21: Interpolated surface of public survey results: S1 – interpolation of Q1, overall appearance, S2 – interpolation of Q2, number of OAs, S3 – interpolation of Q3, number of OAs on Appearance; Source: Chmielewski et al., 2016

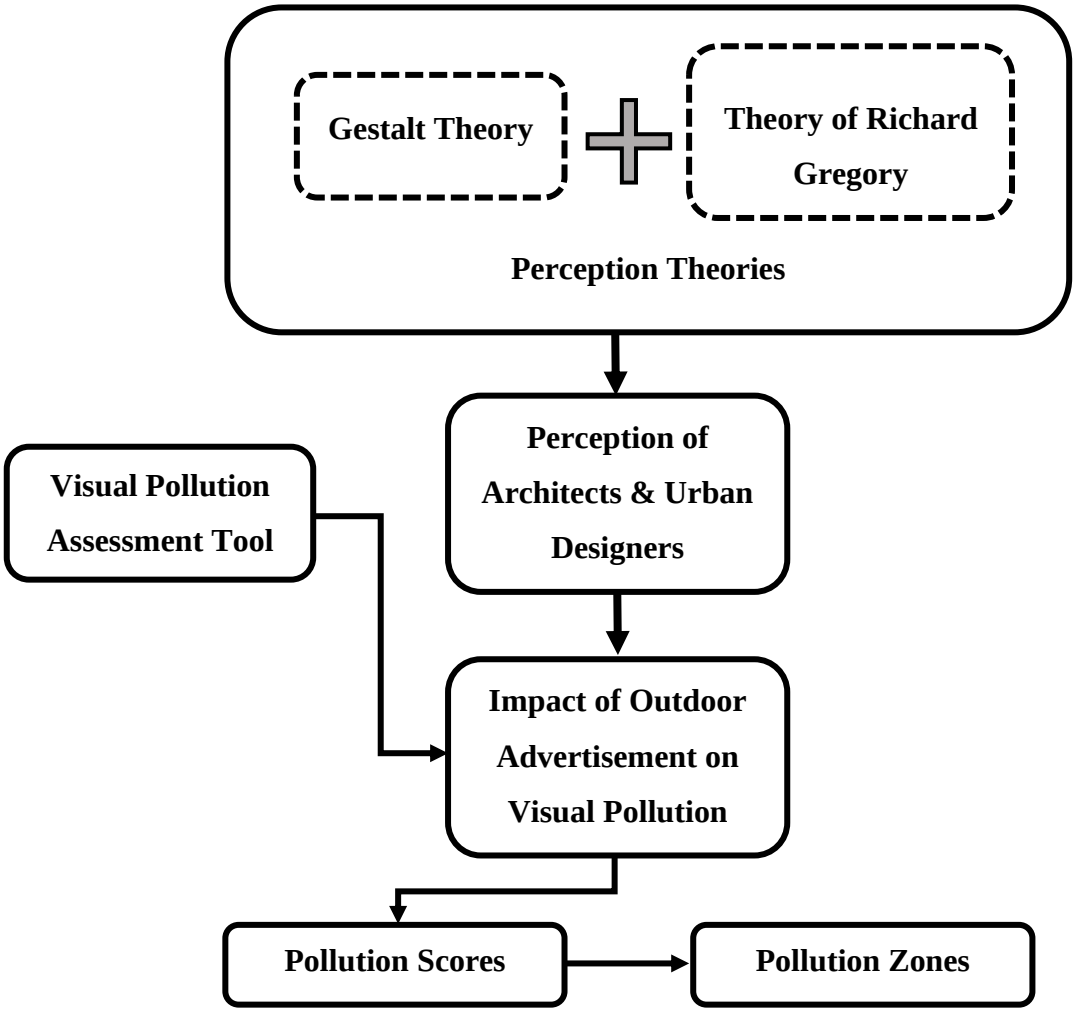


Figure 22: Theoretical Framework for this study; Source: Author

2.2 Research Methodology

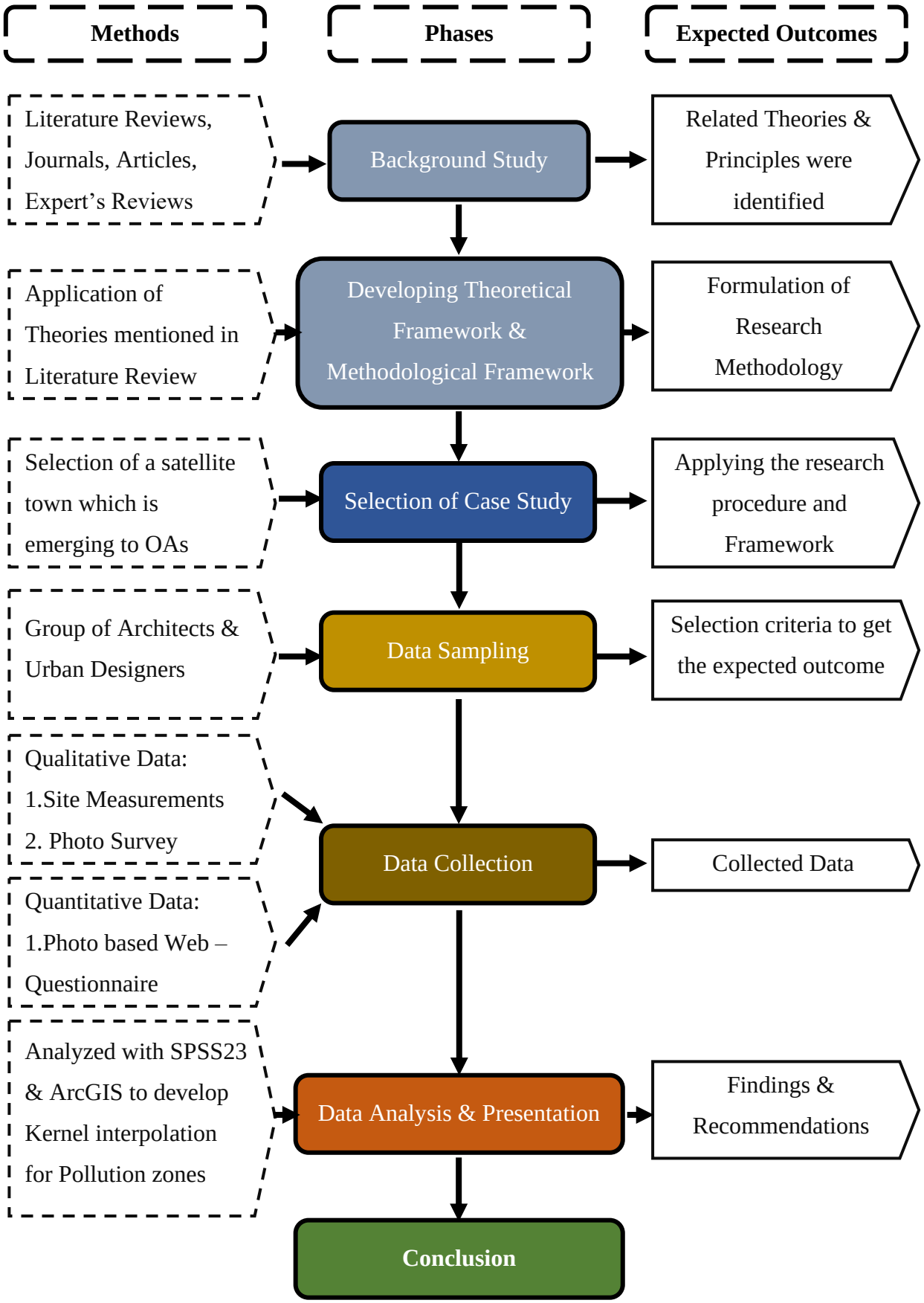


Figure 23: Research Methodology; Source: Author

2.2.1 Description of Research Method and Design

2.2.1.1 Conceptual Framework

Based on the literature review the following conceptual framework has been developed by the researcher.

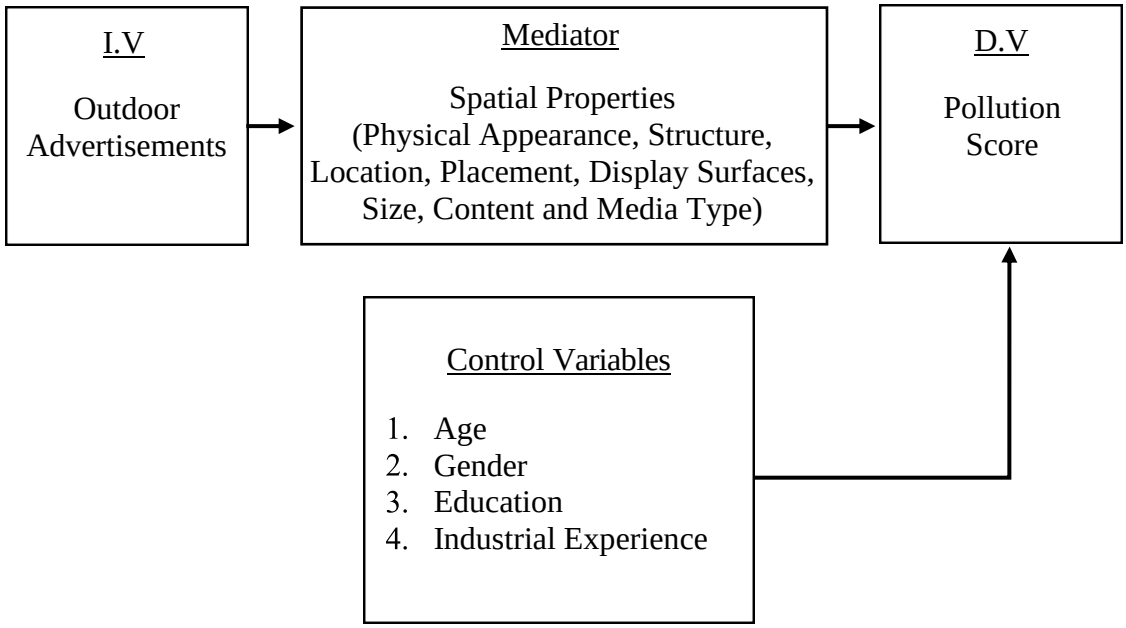


Figure 24: Conceptual Framework; Source: Author

In this study the Visual Pollution Score is defined by two parts; the first part is Assessed Visual Pollution Score (AVPS), which is based on the computation of site measurements and documentations done by the researcher. The measurements of AVPS are considering following factors; Physical Appearance, Structure, Location, Placement, Display Surfaces, Size, Content and Media Type. The second part is Surveyed Visual Pollution Score (SVPS), which is from the surveyed expert's opinion on visual pollution. The SVPS are influenced by the following control variable; Age, Gender, Education, Industrial Experience. The Figure 24 explains the passage above briefly.

2.2.1.2 Pilot Study

Initially a pilot survey was developed by the researcher and conducted among the 10 number of random sample of Architects and Urban Designers to confirm that whether there is impact from OAs on visual pollutions in Sri Lanka. the results from 9 out of 10 respondents reveals that there is impact from OAs on visual pollution.

Based on the literature reviews and the results from the pilot study the hypothesizes were developed.

2.2.1.3 Hypothesis

H1 – There is a Positive relationship between Outdoor Advertisements and Pollution scores.

H2 – There is a Positive mediating effect of Spatial Properties in the relationship between Outdoor Advertisements and Pollution Score.

2.2.2 Source of Data

Both Primary and Secondary data sources were used for this research study. The Primary data source include site observation, site measurements and photographic documentations. The researcher gathered secondary data from local authority's regulations and guidelines, as well as online articles, journals, and other publications relevant to this study.

2.2.2 Sampling Technique

Specifically for this study the sample was based on the availability and uncertainty of the sample. Therefore, the convenience sampling (is used it is a type of nonprobability or nonrandom sampling where respondents of the target population who fulfill specific practical requirements, such as ease of access, geographic proximity, availability at a certain time, or desire to participate, are included in the research. Dörnyei (2007) also recommend this technique for a similar study.

2.2.3 Target Population

The targeted population of this study was mixture of Professionally qualified Chartered Architects and Urban Designers in Sri Lanka. As a result of their education and work, architects and urban designers spend more time exploring the physical environment, evaluating architecture, and examining the public sphere. This exposure may increase architects' sensitivity to and awareness of their environment, appropriate streetscape, and built mass (Kimberly Devlin, Jack L. Nasar, 1989). Therefore, this particular group of professionals were targeted for this study.

2.2.4 Sample Size

This study focused on the population sample of randomly selected one hundred and twenty (120) professionally qualified Chartered Architects and Urban Designers in Sri Lanka. The prepared questionnaire was sent to them via email and modes of social medias. However, only 108 respondents were responded for the survey and 8 data were not structured and incomplete. Therefore, the sample size of the study is one hundred (100) respondents.

2.2.5 Study Area – Nugegoda, Colombo District, Western Province, Sri Lanka

The study area was narrowed down by considering emerging one of major urban Centre which filled with commercial activities and infrastructure. The following Figure 25 explains the envisioned Urban Structure of Colombo Metropolitan Area for 2035 and it explains Nugegoda is envisioned to be one of the Major Urban Centre.

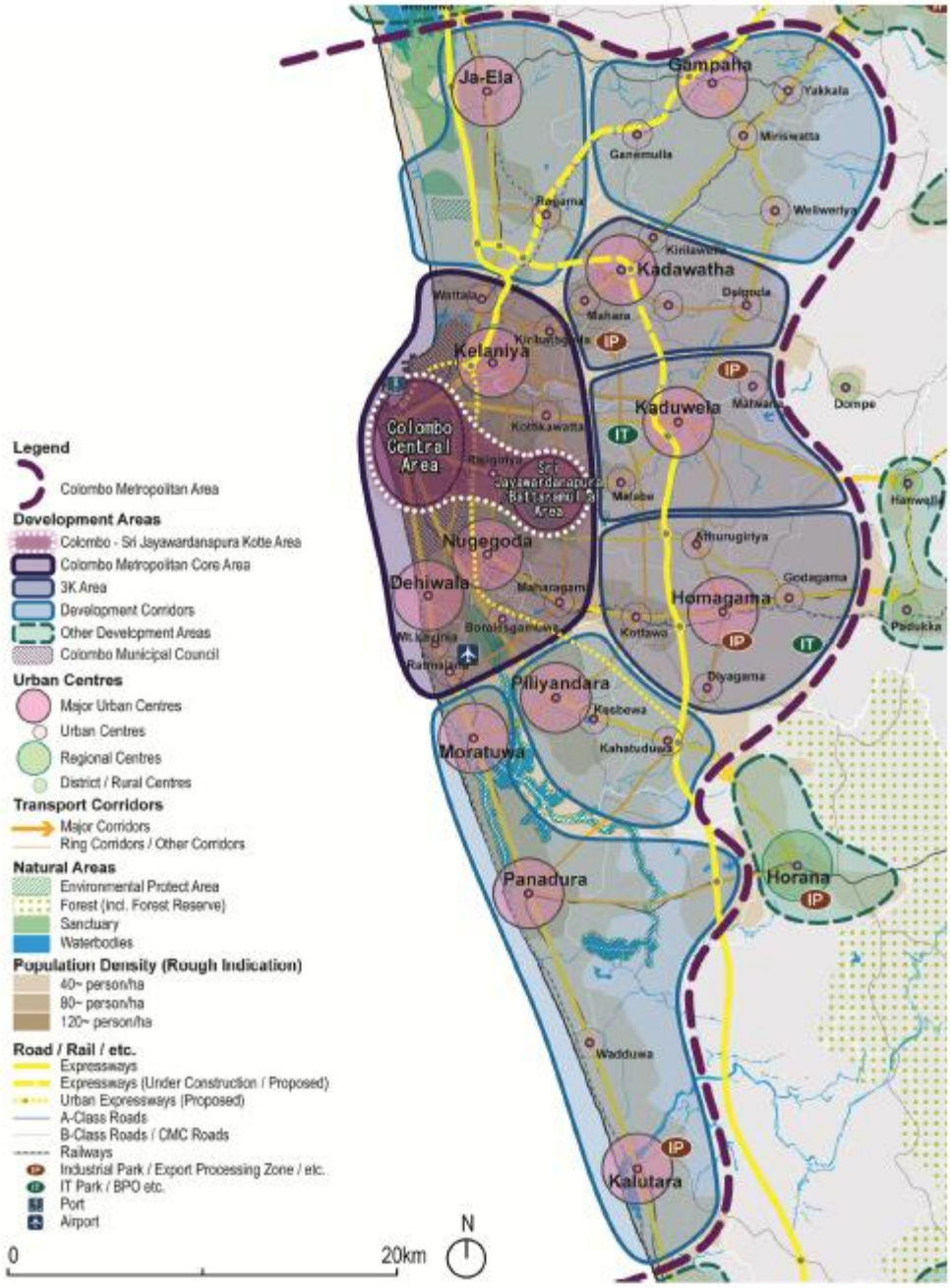


Figure 25: Envisioned Urban Structure of CMA for 2035; Source: ComTrans Urban Transport Master Plan, Final Report, 2014, 183pp.

Considering all three Kelaniya, Dehiwala and Nugegoda which are upcoming Major Urban Centre within Colombo Metropolitan Core Area, Nugegoda is highly consisted with commercial activities so, it stands out among the rest. Therefore, the study area is focused on one of the most active nodes of Nugegoda with the limits of 250m radius. The following Figure 26 shows the Land Use Map of selected study area.

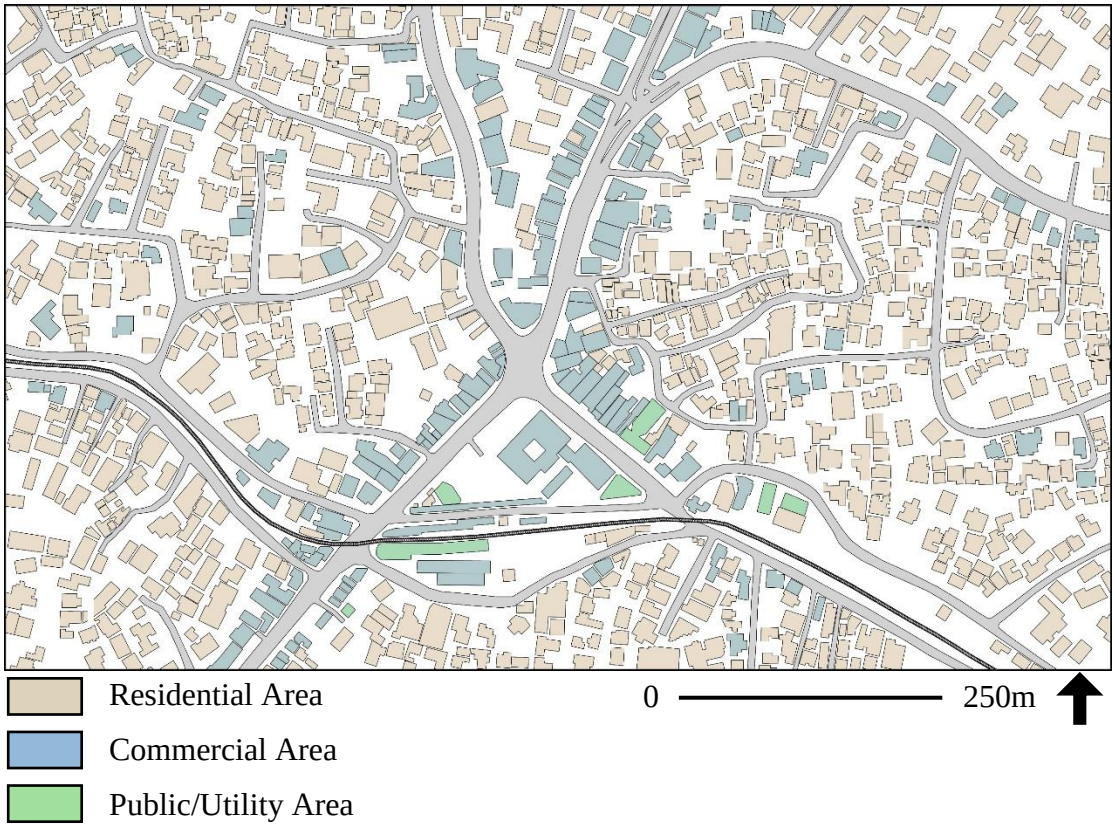


Figure 26: Land Use Map of Nugegoda; Source: Author

The above Land Use Map shows that there is higher density of commercial activity orientated towards the main node.

2.2.5 Data Collection Technique

2.2.5.1 Quantitative Research Approach

This study is orientated with controlled variables of the respondents such as age, gender, educational experience, industrial experience. Therefore, the most suitable research approach according to the literature review is quantitative research approach Dörnyei (2007).

2.2.5.1.1 Photographic Documentation

The study area is divided in to gird of 50 m along the road and photographic documentation is conducted. This method is adopted by a study done by Stamp and Miller (1993) examined if the choices elicited by this type of photo survey are comparable to those elicited by photo survey based on two-point viewpoints collected in natural situations. The findings of their study established that both of these media representations are legitimate for determining user preferences, and that users are more interested in the physical aspects of the streetscapes than in the photomontages' realism.

This study is also adapting the same method developed by Stamps (1993). Each commercialized street facade was characterized by the entire row of buildings was photographed from a single station point.

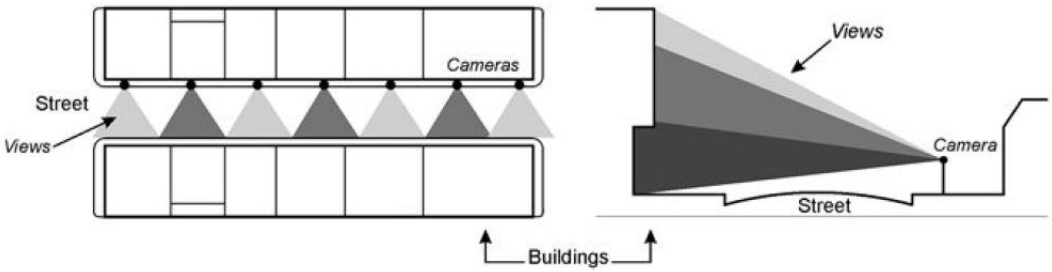


Figure 27:How Photographs should be taken; Source: Portella (2014)

The photo-based study were conducted using an 18 mm lens to shoot the business street facades. The photographs taken with this lens are the most realistic that a photographic camera can create in comparison to photos taken with the naked eye. (Objectives lenses, 1998, Thiel, 1997, Portella, 2014). In addition, parallax distortion was corrected. This method is adopted to this study and photos were taken at each 44 surveyed points.

2.2.5.1.2 Site Measurements

The following map shows the surveyed 44 points in the interval of every 50m. Moreover, this study considered that the road Y is Stanley Tilakaratne Mawatha and Road X is Old Kesbewa Road and Nawala Road. The following map marks the 44 surveyed points.

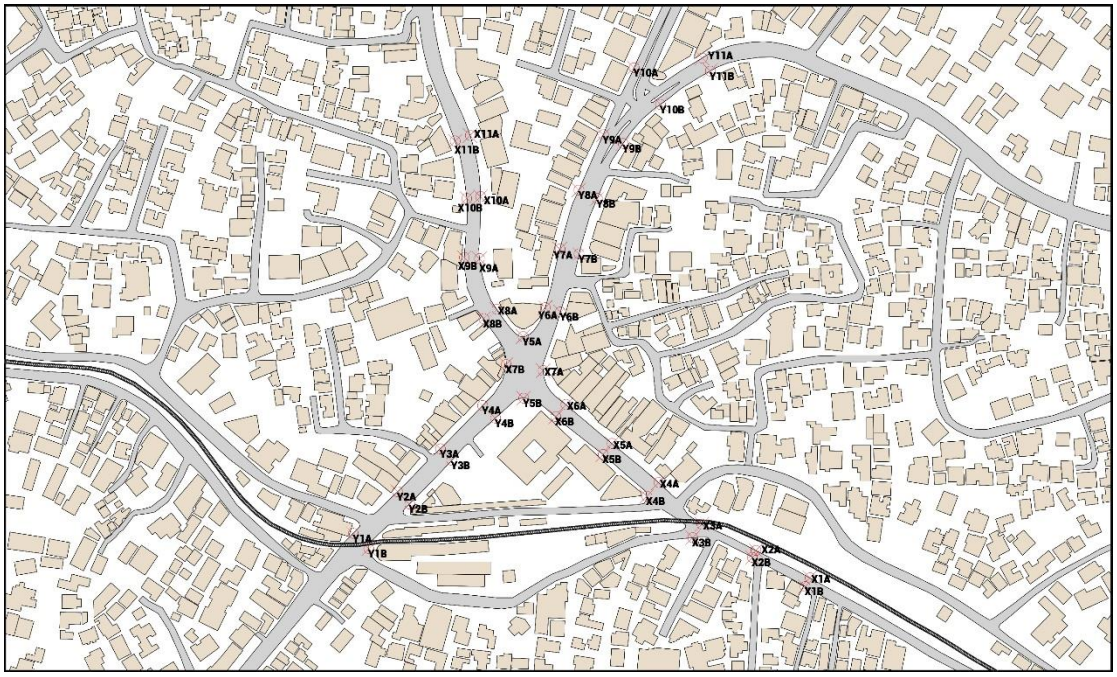


Figure 28: Surveyed points of this study; Source: Author

2.2.5.1.3 Photo-Based Web Questionnaire Survey

The Questionnaire was prepared as a google form photo-based web survey (Appendix -B). The questionnaire was prepared to cover 3 sections; the first section covers the basic information, which covers age, gender, educational qualification and professional qualifications. The second section covers the perception of the respondents in 44 surveyed points based on appearance of the street, number of OAs in the street and appearance of the OAs in the street. The final section covers the recommendations of the respondents regarding the OAs in the streetscape. The prepared questionnaire was sent to the respondents via email and means of social media to collect the data.

2.2.6 Data Analysis Techniques

The surveyed data analyzed in different stages with the data analysis techniques. The following Figure explain the different stages of data with the relevant analyzing tools.

SPSS	Descriptive Analysis of the Responsdents Demographic Data.
SPSS	Analysis of the Surveyed 44 Points
ArcGIS	Production of Surveyed Maps
SPSS	Recommendations
ArcGIS	Experimented Proposal from Recommendations

Figure 29: Data Analysis technique with different stages of data; Source: Author

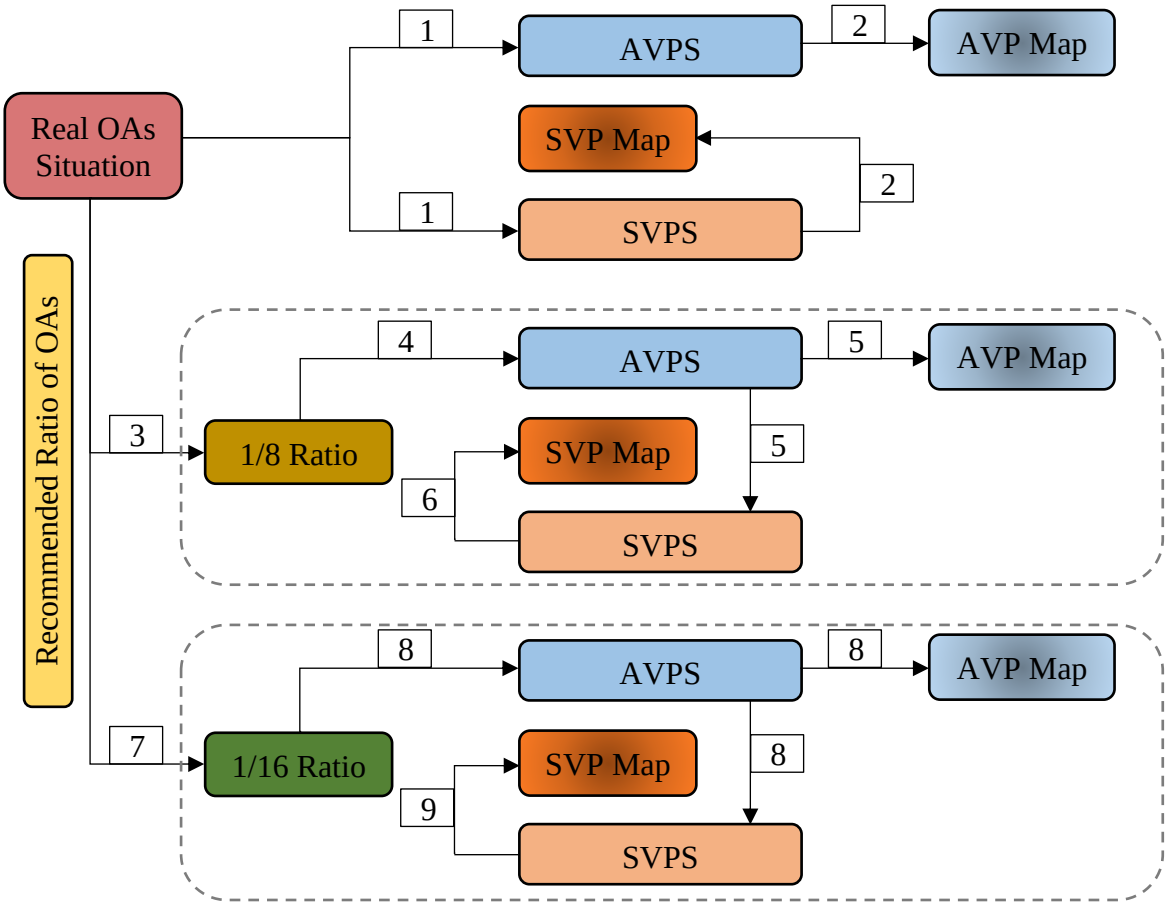


Figure 30: Data Analysis flowchart of OAs for recommendations; Source: Author

The Figure above explains the flowchart of the data analysis for the recommendations of OAs by the respondents. The process starts with the documentation of the real OAs situation based on that both SVPS and AVPS created with the acquired scores the following respective maps were created; SVP Map and AVP Map.

The following part will be discussed detailed in Chapter 3.6. Hence, based on the recommendation of the respondents as recommended ratio of OAs (which were 1/8 : 1 and 1/16 : 1) further study were developed. The top most recommended permissible size is 1/8 : 1 and it starts with defining the value of this for AVPS from the generated value AVP Map created for this situation meanwhile with the generated value of AVPS the respective SVPS value is calculated from this calculated value the SVP Map is produced for this situation. The second most recommended permissible size is 1/16 : 1 and it starts with defining the value of this for AVPS from the generated value AVP Map created for this situation meanwhile with the generated value of AVPS the respective SVPS value is calculated from this calculated value the SVP Map is produced for this situation.

2.3 Summary of Chapter Two

This chapter summarizes the theoretical framework and research methodology. The sampling technique was used nonprobability or nonrandom sampling method. The target population of this study was mixture of Professionally qualified Chartered Architects and Urban Designers in Sri Lanka. The data collection technique was quantitative research approach. The study area is Nugegoda, Colombo District, Sri Lanka. The study area was divided into 44 surveyed points with the interval of 50 m point to point and photography documentations were made at the surveyed points. The recorded data were made into photo-based web questionnaire survey. It was 100 Professionally qualified Chartered Architects and Urban Designers in Sri Lanka were successfully responded to the prepared questionnaire. The responses were collected within 4 calendar days from the date of issue of the questionnaire. The collected data were analyzed with the Statistical Package of Social Sciences (SPSS) version 26 and ArcGIS version 10.7.1.

3.0 CHAPTER - 3.0 – AN EVIDENCE FROM NUGEGODA, SRI LANKA – DATA ANALYSIS AND FINDINGS

3.1 Descriptive Statistics

This part shows the Descriptive Statistics of the collected data of the study. Hence, 100 respondents were responded for this study. The data is categorized in to following groups and analyzed; Age, Gender, Highest Educational Qualification and Post-Industrial Experience.

3.1.1 Age

Following Table explains the Age classification of the respondents. It shows that most of the respondents are from the 20 – 39 age margins. Also, the following Figure 31 shows the Pie chart of the Age Classification of the Respondents.

Table 2: Age Group of the Respondents; Source: Author

Age Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-29	43	43.0	43.0	43.0
	30-39	46	46.0	46.0	89.0
	40-49	10	10.0	10.0	99.0
	50-59	1	1.0	1.0	100.0
	Total	100	100.0	100.0	

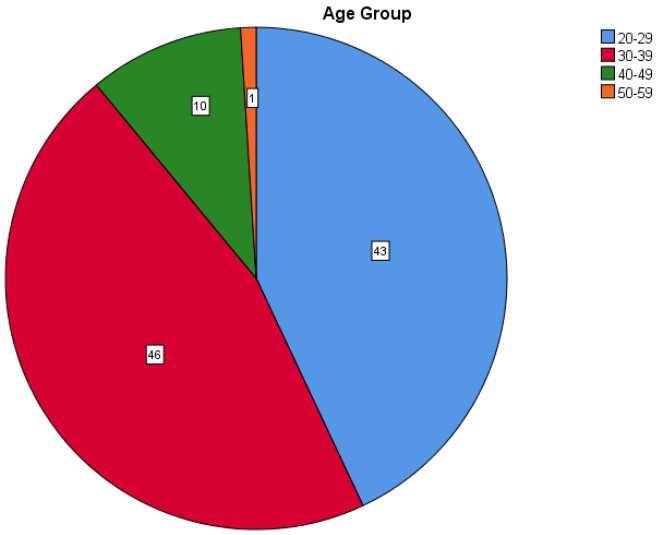


Figure 31: Pie Chart of Age Classification of the Respondents; Source: Author

3.1.2 Gender

Following Table explains the Gender classification of the respondents. It shows that there are 55 Males, 43 Female and 2 Respondents who are prefer not to say took part in the survey. Also, the following Figure 32 shows the Pie chart of the Gender Classification of the Respondents.

Table 3: Gender Classification of the Respondents; Source: Author

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	55	55.0	55.0	55.0
	Female	43	43.0	43.0	98.0
	Prefer not to say	2	2.0	2.0	100.0
	Total	100	100.0	100.0	

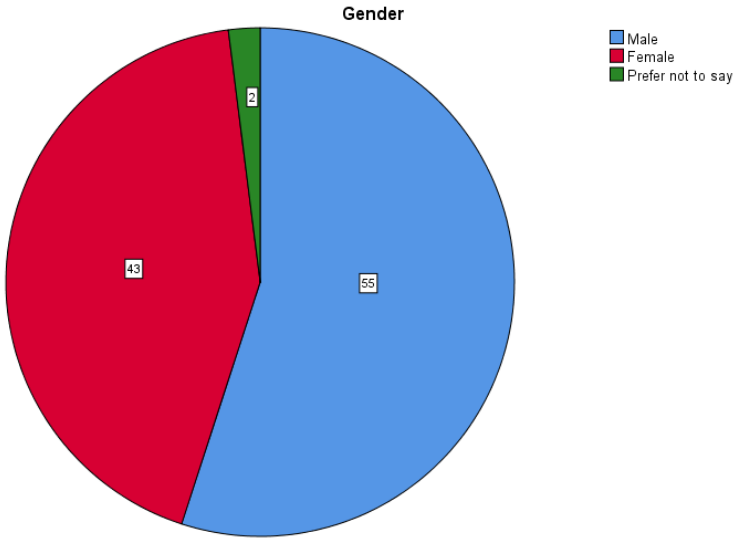


Figure 32: Pie Chart of Gender Classification of the Respondents; Source: Author

3.1.3 Highest Educational Qualification

Following Table explains the Highest Educational Qualification classification of the respondents. It shows that most of the respondents are with Bachelor's degree which is 73 in numbers and the second highest respondents are with Master's degree which is 24 in numbers. However, there were 2 respondents with PhD and one respondent with MPhil qualifications. Also, the following Figure 33 shows the Pie chart of Highest Education Qualification of the Respondents.

Table 4: Highest Education Qualification of the Respondents; Source: Author

Highest Education Qualification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelors	73	73.0	73.0	73.0
	Masters	24	24.0	24.0	97.0
	MPhil	1	1.0	1.0	98.0
	PhD	2	2.0	2.0	100.0
	Total	100	100.0	100.0	

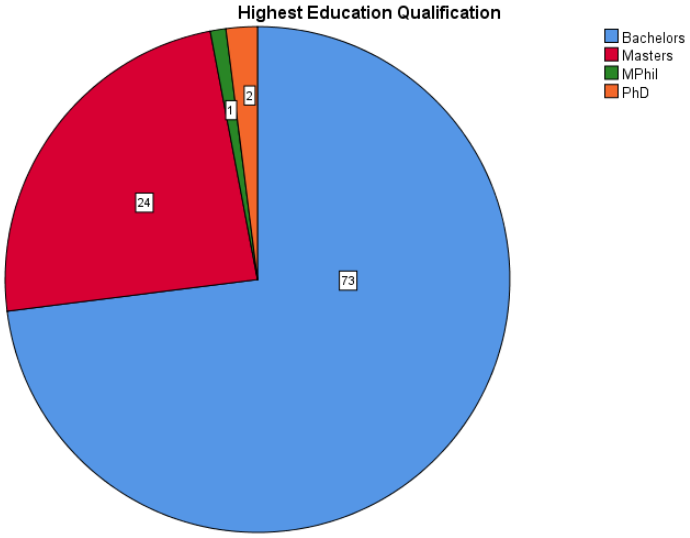


Figure 33: Pie Chart of Highest Education Qualification of the Respondents; Source: Author

3.1.4 Post Credential Industrial Experience

Following Table explains the Post Credential Industrial Experience of the respondents. It shows that most of the respondents are from 2 – 5 years industrial experience, which is 74 in numbers and the second highest respondents from 6 – 10 years industrial experience, which is 10 in numbers. However, there were 6 respondents who has more than 15 years industrial experience also taken part in the survey. Also, the following Figure 34 shows the Pie chart of Post Credential Industrial Experience of the Respondents.

Table 5: Post Credential Industrial Experience of the Respondents; Source: Author

Post Credential Industrial Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 Year	5	5.0	5.0	5.0
	2 - 5 Years	74	74.0	74.0	79.0
	6 -10 Years	10	10.0	10.0	89.0
	11 - 15 Years	5	5.0	5.0	94.0
	More than 15 Years	6	6.0	6.0	100.0
	Total	100	100.0	100.0	

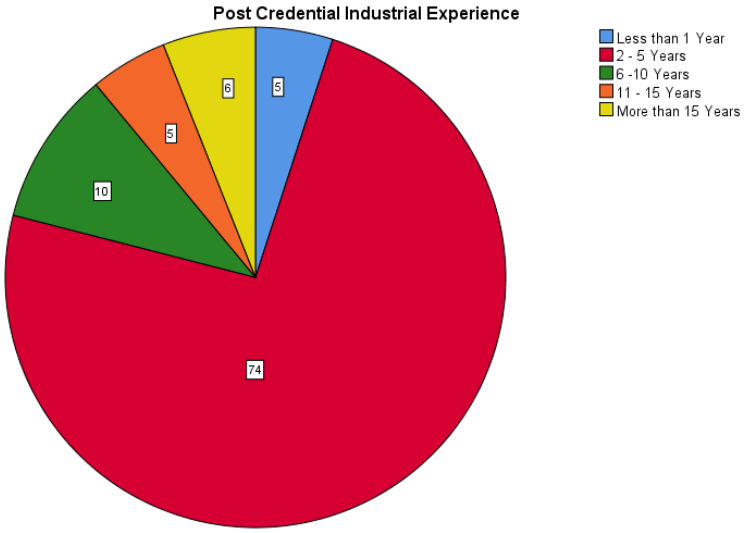


Figure 34: Pie Chart of Post Credential Industrial Experience of the Respondents; Source: Author

This descriptive statistics data set concludes the respondents' characteristics and defines what sort of a population sample giving the responses on impacts on OAs in Visual Pollution.

3.2 Study of the Surveyed Points

3.2.1 X1A

The following Figure shows the photograph of the surveyed point of X1A and the Location of the surveyed point.

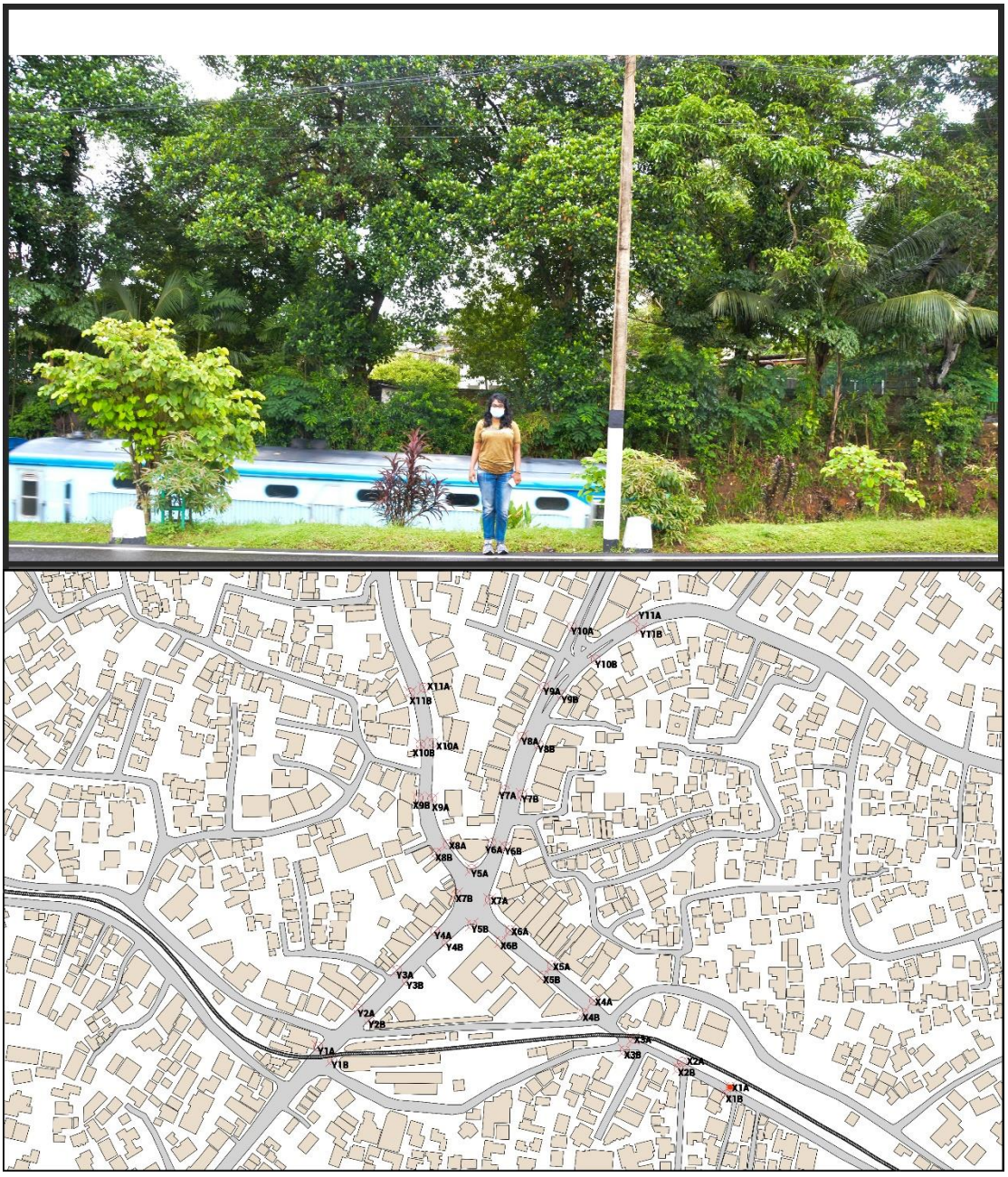


Figure 35: Photograph and Location of surveyed point X1A; Source: Author

3.2.1.1 Surveyed Data of X1A

The following Table shows the descriptives of Surveyed Point X1A.

Descriptives of Surveyed Point X1A

	Age			Gender		Highest Education Qualification			Industrial Experience		
		N	Mean		N	Mean		N	Mean		N	Mean
X1Aas	20-29	43	2.58	Male	55	2.78	Bachelors	73	2.59	Less than 1 Year	5	3.00
	30-39	46	2.76	Female	43	2.60	Masters	24	3.08	2 - 5 Years	74	2.64
	40-49	10	2.90	Prefer not to say	2	2.50	MPhil	1	2.00	6 -10 Years	10	3.00
	50-59	1	3.00				PhD	2	2.50	11 - 15 Years	5	2.20
										More than 15 Years	6	3.17
	Total	100	2.70	Total	100	2.70	Total	100	2.70	Total	100	2.70
X1Ana	20-29	43	1.51	Male	55	1.55	Bachelors	73	1.51	Less than 1 Year	5	1.20
	30-39	46	1.43	Female	43	1.40	Masters	24	1.42	2 - 5 Years	74	1.49
	40-49	10	1.60	Prefer not to say	2	1.50	MPhil	1	2.00	6 -10 Years	10	1.30
	50-59	1	1.00				PhD	2	1.00	11 - 15 Years	5	2.00
										More than 15 Years	6	1.50
	Total	100	1.48	Total	100	1.48	Total	100	1.48	Total	100	1.48
X1Aaa	20-29	43	3.47	Male	55	3.75	Bachelors	73	3.48	Less than 1 Year	5	3.40
	30-39	46	3.63	Female	43	3.44	Masters	24	4.04	2 - 5 Years	74	3.51
	40-49	10	4.10	Prefer not to say	2	4.00	MPhil	1	3.00	6 -10 Years	10	4.00
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	3.40
										More than 15 Years	6	4.67
	Total	100	3.62	Total	100	3.62	Total	100	3.62	Total	100	3.62

Figure 36: Descriptives of Surveyed Point X1A; Source: Author

Considering the appearance of the street at point X1A the mean value of the responses is 2.7, which means the perception of respondents in terms of appearance of the street at point X1A is neutral.

Considering the number of OAs in the street at point X1A the mean value of the responses is 1.48, which means the perception of respondents in terms of number of OAs in the street at point X1A is very few.

Considering the appearance of OAs in the street at point X1A the mean value of the responses is 3.62, which means the perception of respondents in terms of appearance of the street at point X1A is ugly.

3.2.2 X1B

The following Figure shows the photograph of the surveyed point of X1B and the Location of the surveyed point.

Figure 37:Figure 23: Photograph and Location of surveyed point X1B; Source: Author

3.2.2.1 Surveyed Data of X1B

The following Table shows the descriptives of Surveyed Point X1B.

Descriptives of Surveyed Point X1B

		Age		Gender		Highest Education Qualification		Industrial Experience	
		N	Mean	N	Mean		N	Mean		N	Mean
X1Bas	20-29	43	3.23	Male	55	3.27	Bachelors	73	3.21	Less than 1 Year	5	2.80
	30-39	46	3.11	Female	43	3.21	Masters	24	3.46	2 - 5 Years	74	3.23
	40-49	10	3.70	Prefer not to say	2	3.00	MPhil	1	3.00	6 -10 Years	10	3.10
	50-59	1	5.00				PhD	2	2.00	11 - 15 Years	5	3.40
										More than 15 Years	6	3.83
	Total	100	3.24	Total	100	3.24	Total	100	3.24	Total	100	3.24
X1Bna	20-29	43	2.72	Male	55	2.82	Bachelors	73	2.71	Less than 1 Year	5	2.80
	30-39	46	2.67	Female	43	2.63	Masters	24	2.83	2 - 5 Years	74	2.66
	40-49	10	2.90	Prefer not to say	2	2.00	MPhil	1	2.00	6 -10 Years	10	2.80
	50-59	1	3.00				PhD	2	2.00	11 - 15 Years	5	3.80
										More than 15 Years	6	2.33
	Total	100	2.72	Total	100	2.72	Total	100	2.72	Total	100	2.72
X1Baa	20-29	43	4.44	Male	55	4.49	Bachelors	73	4.45	Less than 1 Year	5	5.00
	30-39	46	4.39	Female	43	4.35	Masters	24	4.42	2 - 5 Years	74	4.41
	40-49	10	4.60	Prefer not to say	2	5.00	MPhil	1	3.00	6 -10 Years	10	4.20
	50-59	1	5.00				PhD	2	5.00	11 - 15 Years	5	4.60
										More than 15 Years	6	4.67
	Total	100	4.44	Total	100	4.44	Total	100	4.44	Total	100	4.44

Figure 38: Descriptives of Surveyed Point X1B; Source: Author

Considering the appearance of the street at point X1B the mean value of the responses is 3.24, which means the perception of respondents in terms of appearance of the street at point X1B is neutral.

Considering the number of OAs in the street at point X1B the mean value of the responses is 2.72, which means the perception of respondents in terms of number of OAs in the street at point X1B is moderate.

Considering the appearance of OAs in the street at point X1B the mean value of the responses is 4.44, which means the perception of respondents in terms of appearance of the street at point X1B is ugly.

3.2.3 X2A

The following Figure shows the photograph of the surveyed point of X2A and the Location of the surveyed point.

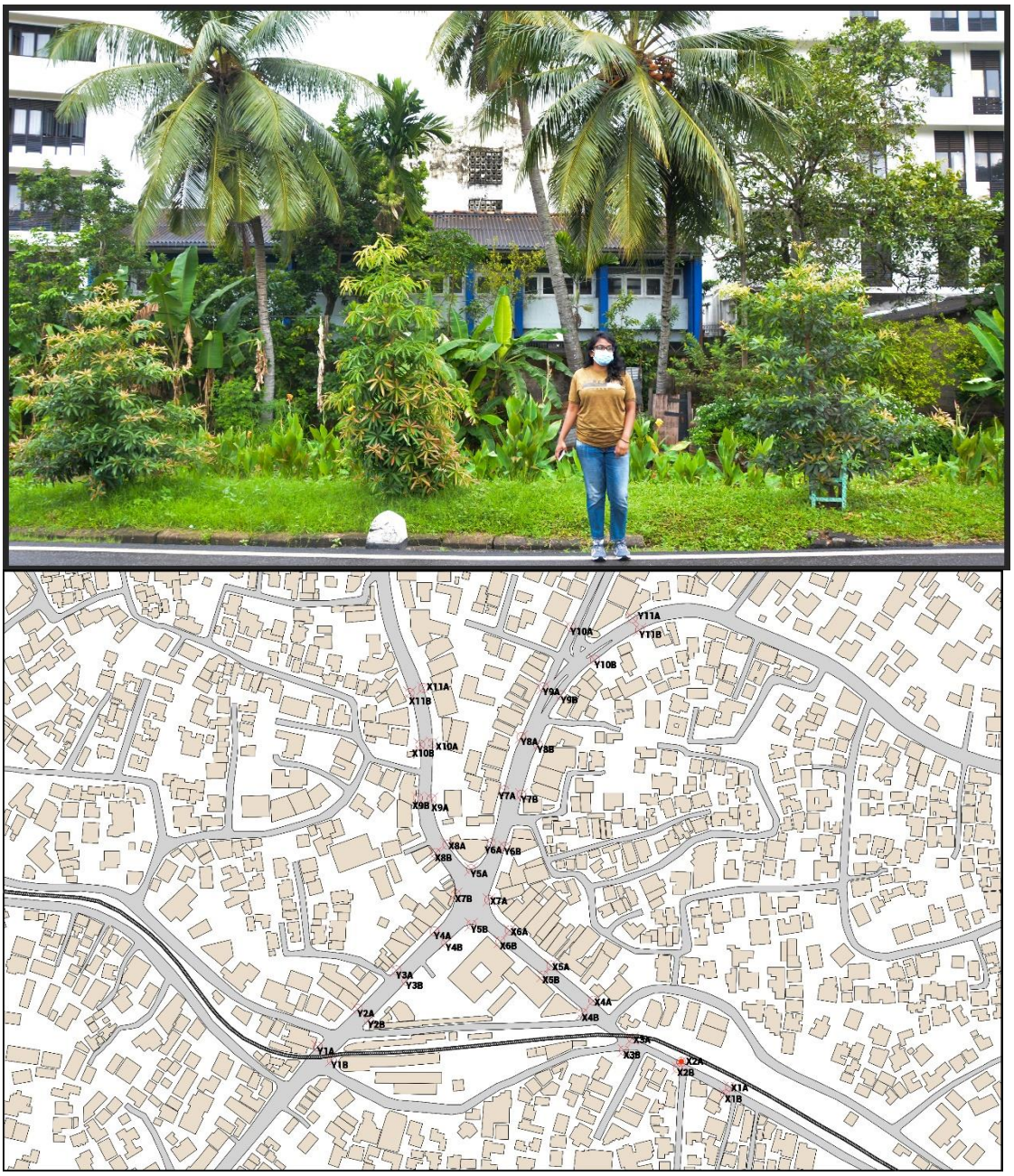


Figure 39: Photograph and Location of surveyed point X2A; Source: Author

3.2.3.1 Surveyed Data of X2A

The following Table shows the descriptives of Surveyed Point X2A.

Descriptives of Surveyed Point X2A

		Age		Gender		Highest Education Qualification		Industrial Experience	
		N	Mean	N	Mean		N	Mean		N	Mean
X2Aas	20-29	43	2.07	Male	55	2.33	Bachelors	73	2.16	Less than 1 Year	5	2.00
	30-39	46	2.37	Female	43	2.14	Masters	24	2.46	2 - 5 Years	74	2.22
	40-49	10	2.30	Prefer not to say	2	1.50	MPhil	1	2.00	6 -10 Years	10	2.40
	50-59	1	2.00				PhD	2	2.00	11 - 15 Years	5	1.60
										More than 15 Years	6	2.83
	Total	100	2.23	Total	100	2.23	Total	100	2.23	Total	100	2.23
X2Ana	20-29	43	1.37	Male	55	1.42	Bachelors	73	1.37	Less than 1 Year	5	1.20
	30-39	46	1.37	Female	43	1.28	Masters	24	1.29	2 - 5 Years	74	1.34
	40-49	10	1.20	Prefer not to say	2	1.00	MPhil	1	1.00	6 -10 Years	10	1.50
	50-59	1	1.00				PhD	2	1.50	11 - 15 Years	5	1.60
										More than 15 Years	6	1.17
	Total	100	1.35	Total	100	1.35	Total	100	1.35	Total	100	1.35
X2Aaa	20-29	43	3.40	Male	55	3.49	Bachelors	73	3.32	Less than 1 Year	5	3.40
	30-39	46	3.50	Female	43	3.42	Masters	24	3.96	2 - 5 Years	74	3.45
	40-49	10	3.50	Prefer not to say	2	4.00	MPhil	1	2.00	6 -10 Years	10	3.50
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	3.20
										More than 15 Years	6	4.00
	Total	100	3.47	Total	100	3.47	Total	100	3.47	Total	100	3.47

Figure 40: Descriptives of Surveyed Point X2A; Source: Author

Considering the appearance of the street at point X2A the mean value of the responses is 2.23, which means the perception of respondents in terms of appearance of the street at point X1A is like.

Considering the number of OAs in the street at point X2A the mean value of the responses is 1.35, which means the perception of respondents in terms of number of OAs in the street at point X2A is very few.

Considering the appearance of OAs in the street at point X2A the mean value of the responses is 3.47, which means the perception of respondents in terms of appearance of the street at point X2A is do not matter.

3.2.4 X2B

The following Figure shows the photograph of the surveyed point of X2B and the Location of the surveyed point.

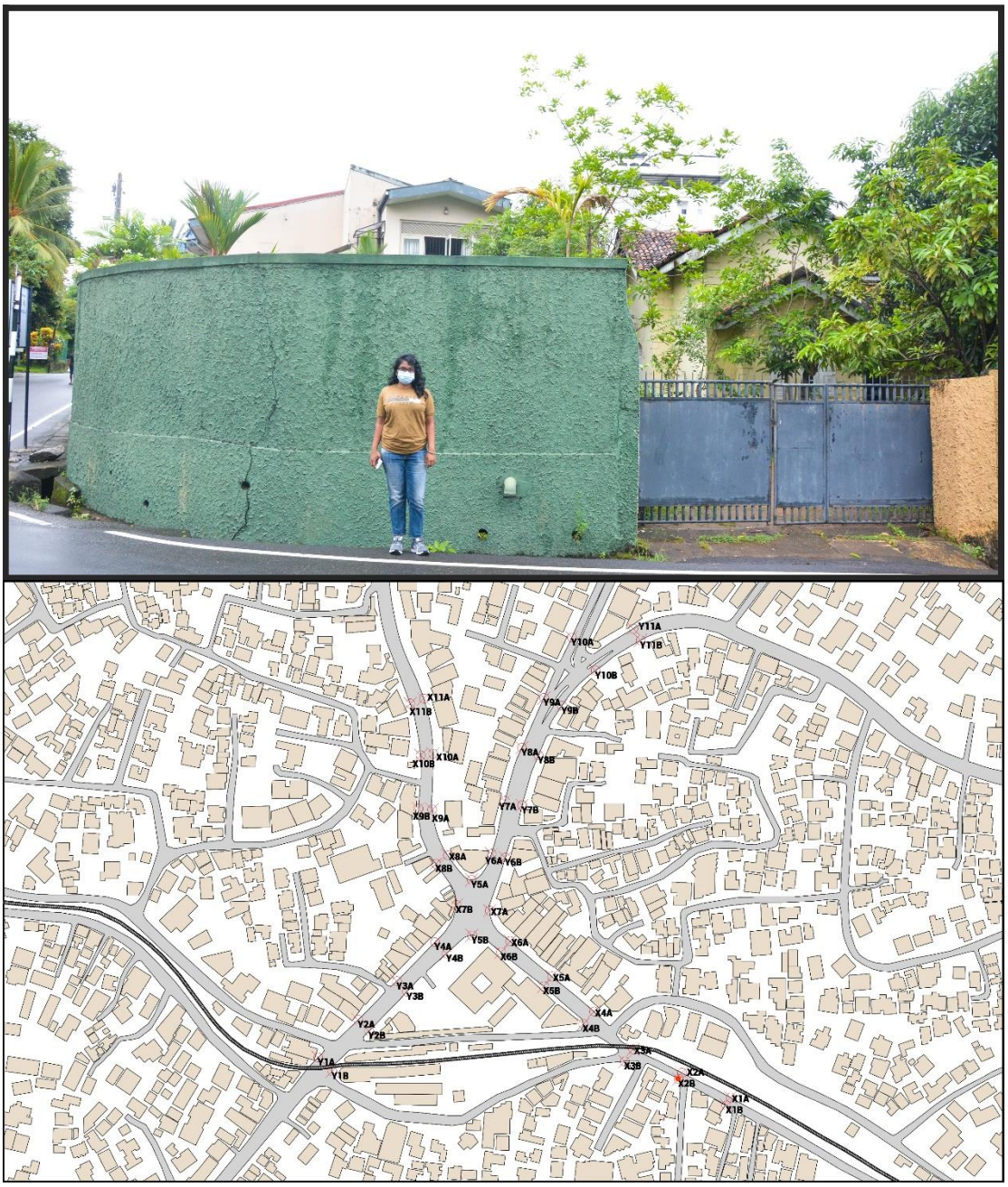


Figure 41:Figure 23: Photograph and Location of surveyed point X2B; Source: Author

3.2.4.1 Surveyed Data of X2B

The following Table shows the descriptives of Surveyed Point X2B.

Descriptives of Surveyed Point X2B

		Age			Gender		Highest Education Qualification			Industrial Experience	
		N	Mean		N	Mean		N	Mean		N	Mean
X2Bas	20-29	43	3.42	Male	55	3.40	Bachelors	73	3.26	Less than 1 Year	5	3.20
	30-39	46	3.22	Female	43	3.33	Masters	24	3.67	2 - 5 Years	74	3.31
	40-49	10	3.60	Prefer not to say	2	3.00	MPhil	1	4.00	6 -10 Years	10	3.50
	50-59	1	5.00				PhD	2	3.00	11 - 15 Years	5	3.80
										More than 15 Years	6	3.50
	Total	100	3.36	Total	100	3.36	Total	100	3.36	Total	100	3.36
X2Bna	20-29	43	1.47	Male	55	1.49	Bachelors	73	1.41	Less than 1 Year	5	1.60
	30-39	46	1.33	Female	43	1.33	Masters	24	1.42	2 - 5 Years	74	1.34
	40-49	10	1.50	Prefer not to say	2	1.00	MPhil	1	1.00	6 -10 Years	10	1.60
	50-59	1	2.00				PhD	2	1.50	11 - 15 Years	5	2.00
										More than 15 Years	6	1.33
	Total	100	1.41	Total	100	1.41	Total	100	1.41	Total	100	1.41
X2Baa	20-29	43	3.42	Male	55	3.53	Bachelors	73	3.33	Less than 1 Year	5	3.40
	30-39	46	3.46	Female	43	3.33	Masters	24	3.79	2 - 5 Years	74	3.45
	40-49	10	3.60	Prefer not to say	2	4.00	MPhil	1	3.00	6 -10 Years	10	3.50
	50-59	1	3.00				PhD	2	4.00	11 - 15 Years	5	3.60
										More than 15 Years	6	3.33
	Total	100	3.45	Total	100	3.45	Total	100	3.45	Total	100	3.45

Figure 42: Descriptives of Surveyed Point X2B; Source: Author

Considering the appearance of the street at point X2B the mean value of the responses is 3.36, which means the perception of respondents in terms of appearance of the street at point X2B is neutral.

Considering the number of OAs in the street at point X2B the mean value of the responses is 1.41, which means the perception of respondents in terms of number of OAs in the street at point X2B is very few.

Considering the appearance of OAs in the street at point X2B the mean value of the responses is 3.45, which means the perception of respondents in terms of appearance of the street at point X2B is do not matter.

3.2.5 X3A

The following Figure shows the photograph of the surveyed point of X3A and the Location of the surveyed point.

Figure 43: Photograph and Location of surveyed point X3A; Source: Author

3.2.5.1 Surveyed Data of X3A

The following Table shows the descriptives of Surveyed Point X3A.

Descriptives of Surveyed Point X3A

		Age			Gender		Highest Education Qualification			Industrial Experience	
		N	Mean		N	Mean		N	Mean		N	Mean
X3Aas	20-29	43	3.51	Male	55	3.42	Bachelors	73	3.42	Less than 1 Year	5	3.40
	30-39	46	3.35	Female	43	3.49	Masters	24	3.58	2 - 5 Years	74	3.43
	40-49	10	3.60	Prefer not to say	2	3.50	MPhil	1	4.00	6 -10 Years	10	3.50
	50-59	1	4.00				PhD	2	2.50	11 - 15 Years	5	3.40
										More than 15 Years	6	3.67
	Total	100	3.45	Total	100	3.45	Total	100	3.45	Total	100	3.45
X3Ana	20-29	43	3.40	Male	55	3.04	Bachelors	73	3.33	Less than 1 Year	5	3.40
	30-39	46	3.22	Female	43	3.65	Masters	24	3.42	2 - 5 Years	74	3.35
	40-49	10	3.20	Prefer not to say	2	3.50	MPhil	1	2.00	6 -10 Years	10	2.80
	50-59	1	5.00				PhD	2	2.00	11 - 15 Years	5	4.20
										More than 15 Years	6	2.83
	Total	100	3.31	Total	100	3.31	Total	100	3.31	Total	100	3.31
X3Aaa	20-29	43	4.05	Male	55	3.91	Bachelors	73	4.05	Less than 1 Year	5	4.60
	30-39	46	4.00	Female	43	4.16	Masters	24	3.92	2 - 5 Years	74	4.04
	40-49	10	3.80	Prefer not to say	2	3.50	MPhil	1	3.00	6 -10 Years	10	3.70
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	3.60
										More than 15 Years	6	4.00
	Total	100	4.01	Total	100	4.01	Total	100	4.01	Total	100	4.01

Figure 44: Descriptives of Surveyed Point X3A; Source: Author

Considering the appearance of the street at point X3A the mean value of the responses is 2.23, which means the perception of respondents in terms of appearance of the street at point X3A is like.

Considering the number of OAs in the street at point X3A the mean value of the responses is 1.35, which means the perception of respondents in terms of number of OAs in the street at point X3A is very few.

Considering the appearance of OAs in the street at point X3A the mean value of the responses is 3.47, which means the perception of respondents in terms of appearance of the street at point X3A is do not matter.

3.2.6 X3B

The following Figure shows the photograph of the surveyed point of X3B and the Location of the surveyed point.

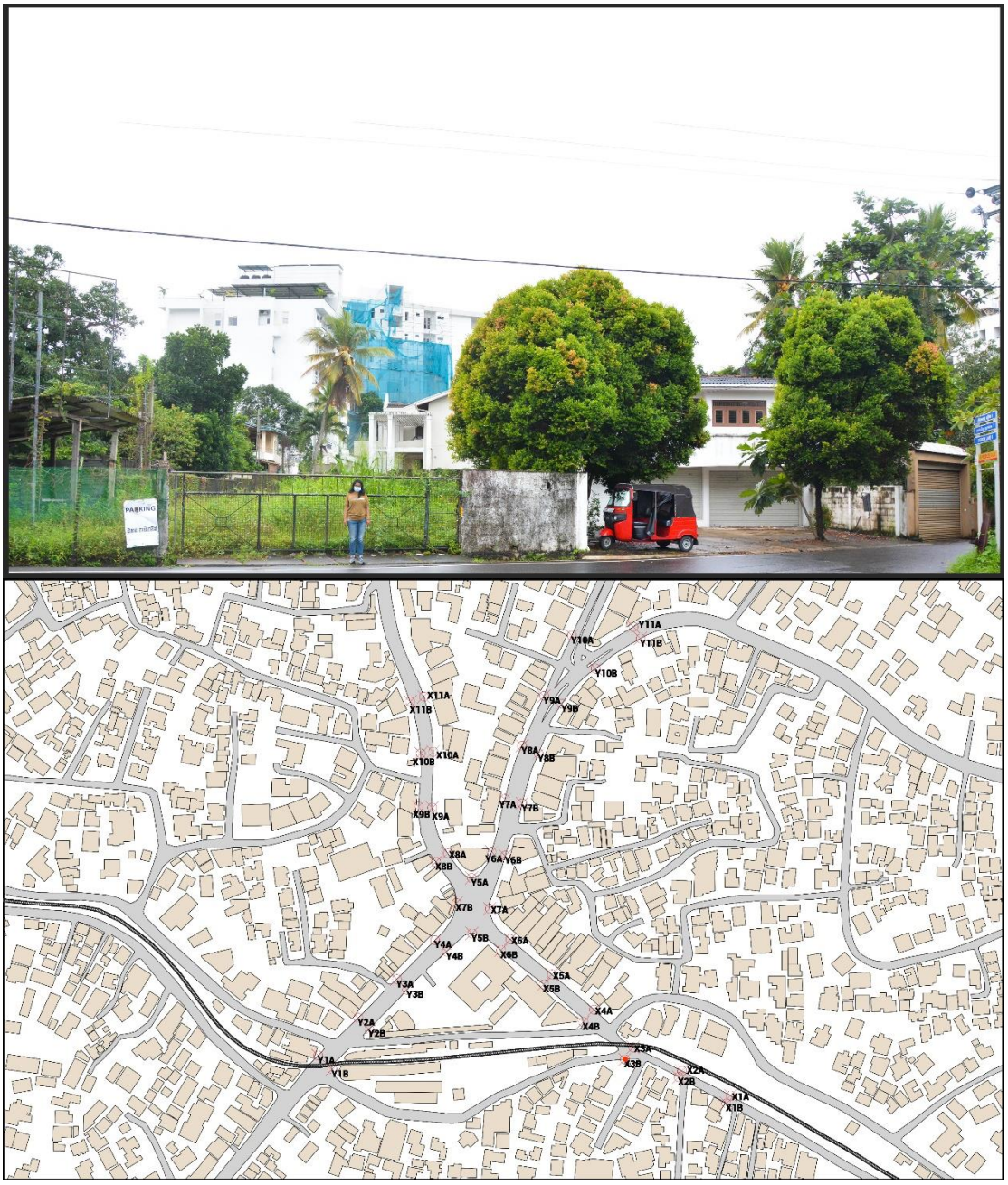


Figure 45: Photograph and Location of surveyed point X3B; Source: Author

3.2.6.1 Surveyed Data of X3B

The following Table shows the descriptives of Surveyed Point X3B.

Descriptives of Surveyed Point X3B

	Age			Gender		Highest Education Qualification			Industrial Experience	
		N	Mean		N	Mean		N	Mean		N	Mean
X3Bas	20-29	43	2.49	Male	55	2.80	Bachelors	73	2.64	Less than 1 Year	5	2.60
	30-39	46	2.89	Female	43	2.67	Masters	24	3.00	2 - 5 Years	74	2.65
	40-49	10	2.90	Prefer not to say	2	2.00	MPhil	1	3.00	6 -10 Years	10	3.20
	50-59	1	4.00				PhD	2	2.50	11 - 15 Years	5	2.00
										More than 15 Years	6	3.67
	Total	100	2.73	Total	100	2.73	Total	100	2.73	Total	100	2.73
X3Bna	20-29	43	1.84	Male	55	2.04	Bachelors	73	1.93	Less than 1 Year	5	2.00
	30-39	46	2.09	Female	43	1.88	Masters	24	2.08	2 - 5 Years	74	1.86
	40-49	10	1.60	Prefer not to say	2	1.00	MPhil	1	1.00	6 -10 Years	10	2.60
	50-59	1	4.00				PhD	2	1.50	11 - 15 Years	5	2.00
										More than 15 Years	6	1.83
	Total	100	1.95	Total	100	1.95	Total	100	1.95	Total	100	1.95
X3Baa	20-29	43	3.23	Male	55	3.49	Bachelors	73	3.32	Less than 1 Year	5	3.40
	30-39	46	3.52	Female	43	3.40	Masters	24	3.79	2 - 5 Years	74	3.35
	40-49	10	3.80	Prefer not to say	2	3.00	MPhil	1	3.00	6 -10 Years	10	3.70
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	3.20
										More than 15 Years	6	4.33
	Total	100	3.44	Total	100	3.44	Total	100	3.44	Total	100	3.44

Figure 46: Descriptives of Surveyed Point X3B; Source: Author

Considering the appearance of the street at point X3B the mean value of the responses is 2.73, which means the perception of respondents in terms of appearance of the street at point X3B is neutral.

Considering the number of OAs in the street at point X3B the mean value of the responses is 1.95, which means the perception of respondents in terms of number of OAs in the street at point X3B is few.

Considering the appearance of OAs in the street at point X3B the mean value of the responses is 3.44, which means the perception of respondents in terms of appearance of the street at point X3B is do not matter.

3.2.7 X4A

The following Figure shows the photograph of the surveyed point of X4A and the Location of the surveyed point.

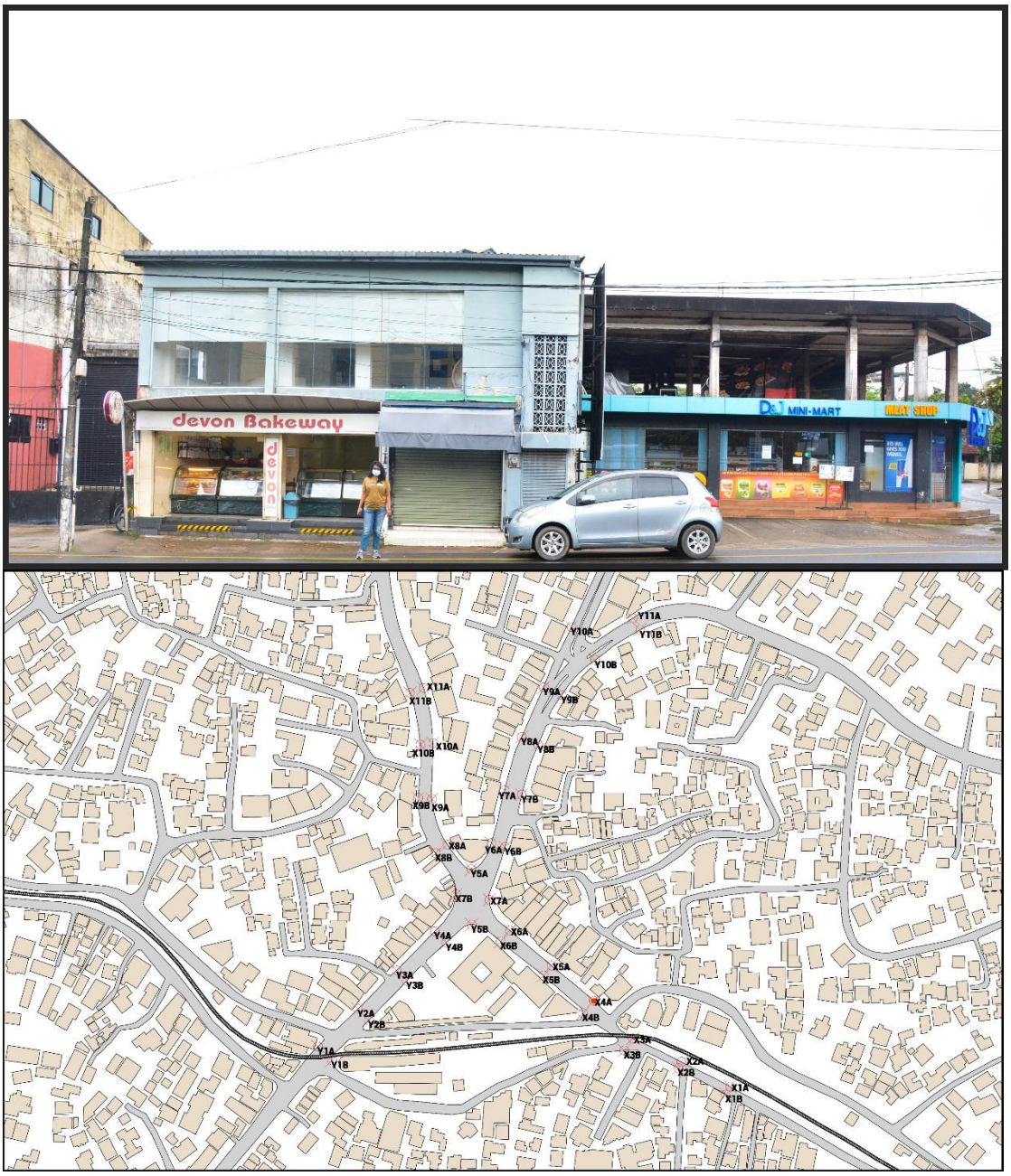


Figure 47: Photograph and Location of surveyed point X4A; Source: Author

3.2.7.1 Surveyed Data of X4A

The following Table shows the descriptives of Surveyed Point X4A.

Descriptives of Surveyed Point X4A

	Age			Gender		Highest Education Qualification		Industrial Experience		
		N	Mean		N	Mean		N	Mean		N	Mean
X4Aas	20-29	43	3.65	Male	55	3.80	Bachelors	73	3.71	Less than 1 Year	5	3.80
	30-39	46	3.83	Female	43	3.74	Masters	24	4.00	2 - 5 Years	74	3.76
	40-49	10	3.90	Prefer not to say	2	3.50	MPhil	1	3.00	6 -10 Years	10	3.70
	50-59	1	5.00				PhD	2	3.50	11 - 15 Years	5	3.80
										More than 15 Years	6	4.00
	Total	100	3.77	Total	100	3.77	Total	100	3.77	Total	100	3.77
X4Ana	20-29	43	3.00	Male	55	2.95	Bachelors	73	2.93	Less than 1 Year	5	2.80
	30-39	46	2.91	Female	43	2.93	Masters	24	3.08	2 - 5 Years	74	2.96
	40-49	10	2.60	Prefer not to say	2	3.00	MPhil	1	2.00	6 -10 Years	10	3.10
	50-59	1	5.00				PhD	2	2.00	11 - 15 Years	5	3.00
										More than 15 Years	6	2.50
	Total	100	2.94	Total	100	2.94	Total	100	2.94	Total	100	2.94
X4Aaa	20-29	43	4.26	Male	55	4.15	Bachelors	73	4.11	Less than 1 Year	5	4.20
	30-39	46	4.02	Female	43	4.12	Masters	24	4.25	2 - 5 Years	74	4.16
	40-49	10	4.00	Prefer not to say	2	4.00	MPhil	1	3.00	6 -10 Years	10	4.00
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	3.60
										More than 15 Years	6	4.33
	Total	100	4.13	Total	100	4.13	Total	100	4.13	Total	100	4.13

Figure 48: Descriptives of Surveyed Point X4A; Source: Author

Considering the appearance of the street at point X4A the mean value of the responses is 3.77, which means the perception of respondents in terms of appearance of the street at point X4A is do not like.

Considering the number of OAs in the street at point X4A the mean value of the responses is 2.94, which means the perception of respondents in terms of number of OAs in the street at point X4A is moderate.

Considering the appearance of OAs in the street at point X4A the mean value of the responses is 4.13, which means the perception of respondents in terms of appearance of the street at point X4A is ugly.

3.2.8 X4B

The following Figure shows the photograph of the surveyed point of X4B and the Location of the surveyed point.

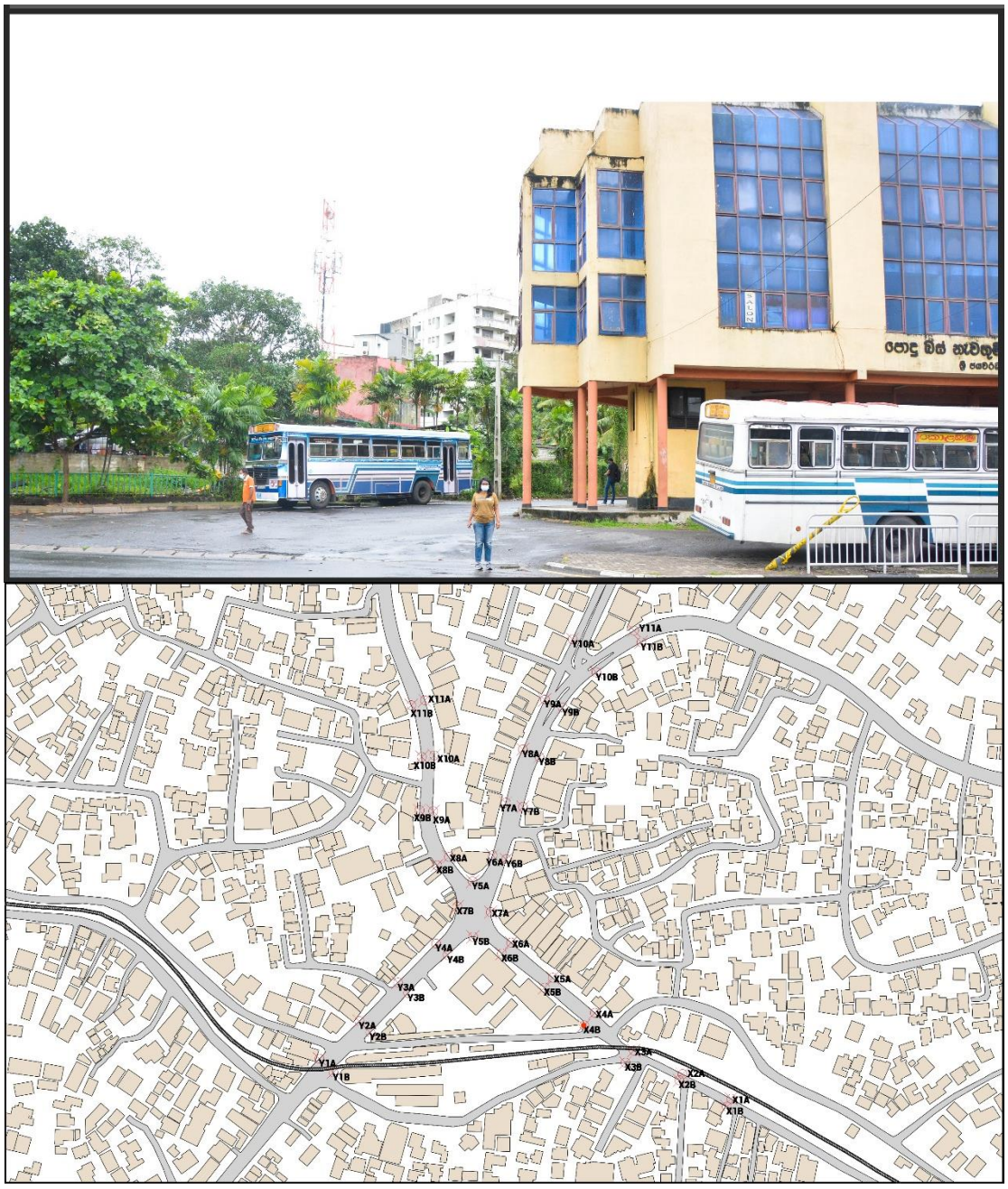


Figure 49: Photograph and Location of surveyed point X4B; Source: Author

3.2.8.1 Surveyed Data of X4B

The following Table shows the descriptives of Surveyed Point X4B.

Descriptives of Surveyed Point X4B

	Age			Gender		Highest Education Qualification		Industrial Experience		
		N	Mean		N	Mean		N	Mean		N	Mean
X4Bas	20-29	43	3.40	Male	55	3.80	Bachelors	73	3.53	Less than 1 Year	5	3.40
	30-39	46	3.72	Female	43	3.49	Masters	24	4.00	2 - 5 Years	74	3.58
	40-49	10	4.30	Prefer not to say	2	2.50	MPhil	1	3.00	6 -10 Years	10	3.70
	50-59	1	4.00				PhD	2	3.50	11 - 15 Years	5	4.00
										More than 15 Years	6	4.17
	Total	100	3.64	Total	100	3.64	Total	100	3.64	Total	100	3.64
X4Bna	20-29	43	2.09	Male	55	2.13	Bachelors	73	2.04	Less than 1 Year	5	1.80
	30-39	46	2.09	Female	43	1.95	Masters	24	2.13	2 - 5 Years	74	2.04
	40-49	10	1.80	Prefer not to say	2	2.00	MPhil	1	2.00	6 -10 Years	10	2.60
	50-59	1	1.00				PhD	2	1.50	11 - 15 Years	5	1.80
										More than 15 Years	6	1.67
	Total	100	2.05	Total	100	2.05	Total	100	2.05	Total	100	2.05
X4Baa	20-29	43	3.84	Male	55	3.98	Bachelors	73	3.60	Less than 1 Year	5	3.80
	30-39	46	3.61	Female	43	3.35	Masters	24	4.04	2 - 5 Years	74	3.68
	40-49	10	3.70	Prefer not to say	2	4.00	MPhil	1	3.00	6 -10 Years	10	4.00
	50-59	1	3.00				PhD	2	4.00	11 - 15 Years	5	3.20
										More than 15 Years	6	4.00
	Total	100	3.71	Total	100	3.71	Total	100	3.71	Total	100	3.71

Figure 50: Descriptives of Surveyed Point X4B; Source: Author

Considering the appearance of the street at point X4B the mean value of the responses is 3.64, which means the perception of respondents in terms of appearance of the street at point X3B is do not like.

Considering the number of OAs in the street at point X4B the mean value of the responses is 2.05, which means the perception of respondents in terms of number of OAs in the street at point X4B is few.

Considering the appearance of OAs in the street at point X4B the mean value of the responses is 3.71, which means the perception of respondents in terms of appearance of the street at point X4B is many.

3.2.9 X5A

The following Figure shows the photograph of the surveyed point of X5A and the Location of the surveyed point.

Figure 51: Photograph and Location of surveyed point X5A; Source: Author

3.2.9.1 Surveyed Data of X5A

The following Table shows the descriptives of Surveyed Point X5A.

Descriptives of Surveyed Point X5A

		Age		Gender		Highest Education Qualification		Industrial Experience	
		N	Mean	N	Mean		N	Mean		N	Mean
X5Aas	20-29	43	3.51	Male	55	3.58	Bachelors	73	3.59	Less than 1 Year	5	3.40
	30-39	46	3.74	Female	43	3.70	Masters	24	3.63	2 - 5 Years	74	3.64
	40-49	10	3.30	Prefer not to say	2	2.00	MPhil	1	4.00	6 -10 Years	10	3.80
	50-59	1	4.00				PhD	2	3.50	11 - 15 Years	5	2.80
										More than 15 Years	6	3.67
	Total	100	3.60	Total	100	3.60	Total	100	3.60	Total	100	3.60
X5Ana	20-29	43	2.60	Male	55	2.55	Bachelors	73	2.58	Less than 1 Year	5	3.00
	30-39	46	2.63	Female	43	2.77	Masters	24	2.75	2 - 5 Years	74	2.54
	40-49	10	2.40	Prefer not to say	2	1.50	MPhil	1	3.00	6 -10 Years	10	3.10
	50-59	1	5.00				PhD	2	2.50	11 - 15 Years	5	2.40
										More than 15 Years	6	2.67
	Total	100	2.62	Total	100	2.62	Total	100	2.62	Total	100	2.62
X5Aaa	20-29	43	4.30	Male	55	4.07	Bachelors	73	4.04	Less than 1 Year	5	3.40
	30-39	46	3.74	Female	43	3.91	Masters	24	3.75	2 - 5 Years	74	4.04
	40-49	10	3.60	Prefer not to say	2	3.00	MPhil	1	5.00	6 -10 Years	10	4.20
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	3.20
										More than 15 Years	6	4.00
	Total	100	3.98	Total	100	3.98	Total	100	3.98	Total	100	3.98

Figure 52: Descriptives of Surveyed Point X5A; Source: Author

Considering the appearance of the street at point X5A the mean value of the responses is 3.6, which means the perception of respondents in terms of appearance of the street at point X5A is do not like.

Considering the number of OAs in the street at point X5A the mean value of the responses is 2.62, which means the perception of respondents in terms of number of OAs in the street at point X5A is moderate.

Considering the appearance of OAs in the street at point X5A the mean value of the responses is 3.98, which means the perception of respondents in terms of appearance of the street at point X5A is ugly.

3.2.10 X5B

The following Figure shows the photograph of the surveyed point of X5B and the Location of the surveyed point.

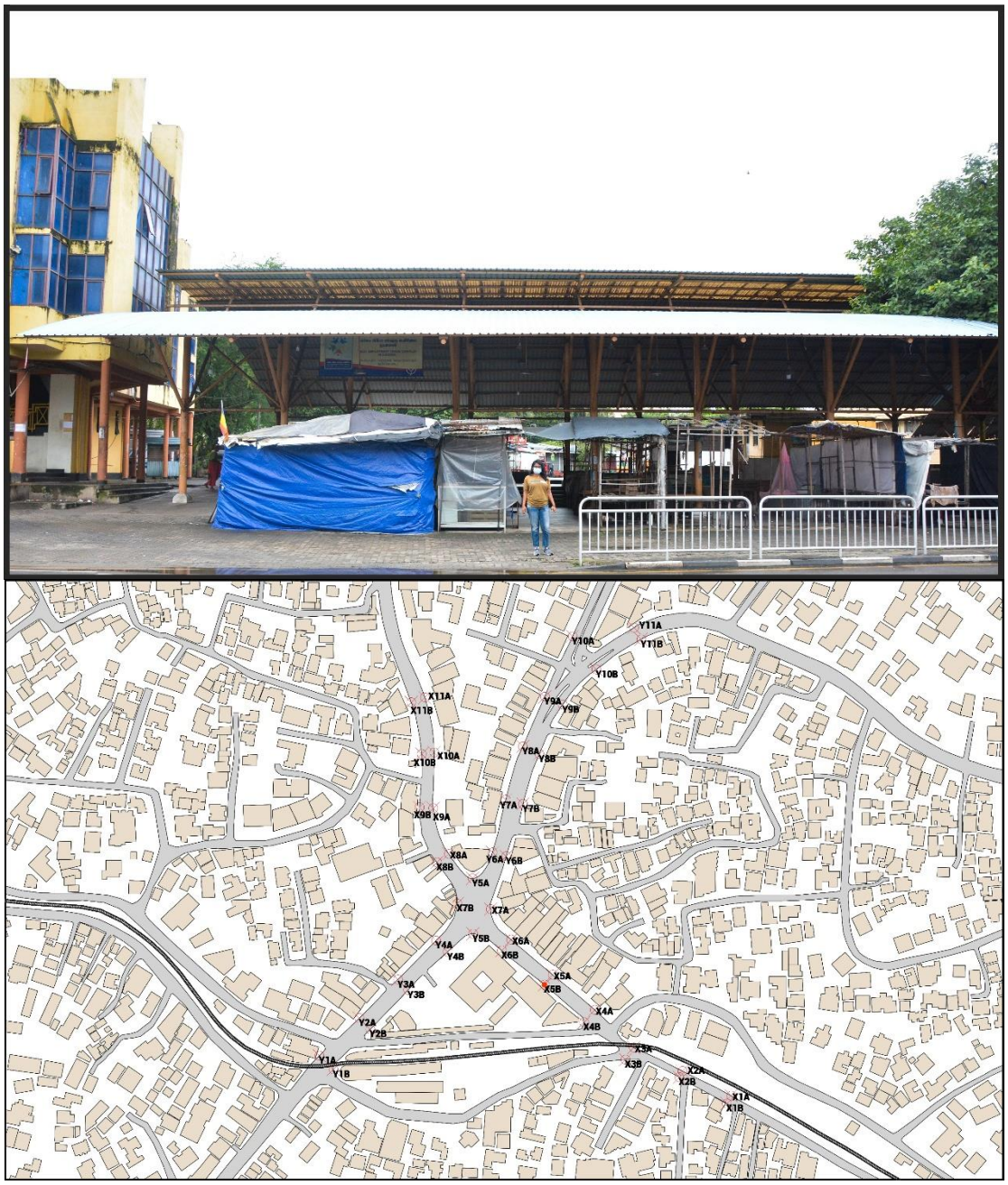


Figure 53: Photograph and Location of surveyed point X5B; Source: Author

3.2.10.1 Surveyed Data of X5B

The following Table shows the descriptives of Surveyed Point X5B.

Descriptives of Surveyed Point X5B

		Age			Gender		Highest Education Qualification			Industrial Experience	
		N	Mean		N	Mean		N	Mean		N	Mean
X5Bas	20-29	43	3.56	Male	55	3.60	Bachelors	73	3.62	Less than 1 Year	5	4.20
	30-39	46	3.80	Female	43	3.77	Masters	24	3.92	2 - 5 Years	74	3.68
	40-49	10	3.50	Prefer not to say	2	4.00	MPhil	1	4.00	6 -10 Years	10	3.70
	50-59	1	5.00				PhD	2	3.00	11 - 15 Years	5	3.00
										More than 15 Years	6	3.83
	Total	100	3.68	Total	100	3.68	Total	100	3.68	Total	100	3.68
X5Bna	20-29	43	2.30	Male	55	2.15	Bachelors	73	2.16	Less than 1 Year	5	2.40
	30-39	46	2.26	Female	43	2.40	Masters	24	2.50	2 - 5 Years	74	2.22
	40-49	10	2.00	Prefer not to say	2	2.50	MPhil	1	3.00	6 -10 Years	10	2.70
	50-59	1	3.00				PhD	2	2.50	11 - 15 Years	5	2.20
										More than 15 Years	6	2.00
	Total	100	2.26	Total	100	2.26	Total	100	2.26	Total	100	2.26
X5Baa	20-29	43	3.98	Male	55	3.95	Bachelors	73	3.90	Less than 1 Year	5	4.20
	30-39	46	3.91	Female	43	3.91	Masters	24	3.96	2 - 5 Years	74	3.92
	40-49	10	3.70	Prefer not to say	2	4.00	MPhil	1	5.00	6 -10 Years	10	4.00
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	3.60
										More than 15 Years	6	4.00
	Total	100	3.93	Total	100	3.93	Total	100	3.93	Total	100	3.93

Figure 54: Descriptives of Surveyed Point X5B; Source: Author

Considering the appearance of the street at point X5B the mean value of the responses is 3.68, which means the perception of respondents in terms of appearance of the street at point X5B is do not like.

Considering the number of OAs in the street at point X5B the mean value of the responses is 2.26, which means the perception of respondents in terms of number of OAs in the street at point X5B is few.

Considering the appearance of OAs in the street at point X5B the mean value of the responses is 3.93, which means the perception of respondents in terms of appearance of the street at point X5B is ugly.

3.2.11 X6A

The following Figure shows the photograph of the surveyed point of X6A and the Location of the surveyed point.

Figure 55: Photograph and Location of surveyed point X6A; Source: Author

3.2.11.1 Surveyed Data of X6A

The following Table shows the descriptives of Surveyed Point X6A.

Descriptives of Surveyed Point X6A

	Age			Gender		Highest Education Qualification			Industrial Experience		
		N	Mean		N	Mean		N	Mean		N	Mean
X6Aas	20-29	43	4.35	Male	55	4.27	Bachelors	73	4.25	Less than 1 Year	5	4.20
	30-39	46	4.24	Female	43	4.42	Masters	24	4.71	2 - 5 Years	74	4.30
	40-49	10	4.70	Prefer not to say	2	4.50	MPhil	1	4.00	6 -10 Years	10	4.40
	50-59	1	5.00				PhD	2	3.50	11 - 15 Years	5	4.40
										More than 15 Years	6	4.83
	Total	100	4.34	Total	100	4.34	Total	100	4.34	Total	100	4.34
X6Ana	20-29	43	4.65	Male	55	4.56	Bachelors	73	4.56	Less than 1 Year	5	4.60
	30-39	46	4.52	Female	43	4.63	Masters	24	4.71	2 - 5 Years	74	4.58
	40-49	10	4.60	Prefer not to say	2	4.50	MPhil	1	4.00	6 -10 Years	10	4.60
	50-59	1	5.00				PhD	2	4.50	11 - 15 Years	5	4.80
										More than 15 Years	6	4.50
	Total	100	4.59	Total	100	4.59	Total	100	4.59	Total	100	4.59
X6Aaa	20-29	43	4.91	Male	55	4.78	Bachelors	73	4.79	Less than 1 Year	5	5.00
	30-39	46	4.72	Female	43	4.84	Masters	24	4.83	2 - 5 Years	74	4.84
	40-49	10	4.80	Prefer not to say	2	5.00	MPhil	1	5.00	6 -10 Years	10	4.80
	50-59	1	5.00				PhD	2	5.00	11 - 15 Years	5	4.40
										More than 15 Years	6	4.67
	Total	100	4.81	Total	100	4.81	Total	100	4.81	Total	100	4.81

Figure 56: Descriptives of Surveyed Point X6A; Source: Author

Considering the appearance of the street at point X6A the mean value of the responses is 4.34, which means the perception of respondents in terms of appearance of the street at point X6A is do not like.

Considering the number of OAs in the street at point X6A the mean value of the responses is 4.59, which means the perception of respondents in terms of number of OAs in the street at point X6A is too many.

Considering the appearance of OAs in the street at point X6A the mean value of the responses is 4.81, which means the perception of respondents in terms of appearance of the street at point X6A is very ugly.

3.2.12 X6B

The following Figure shows the photograph of the surveyed point of X6B and the Location of the surveyed point.

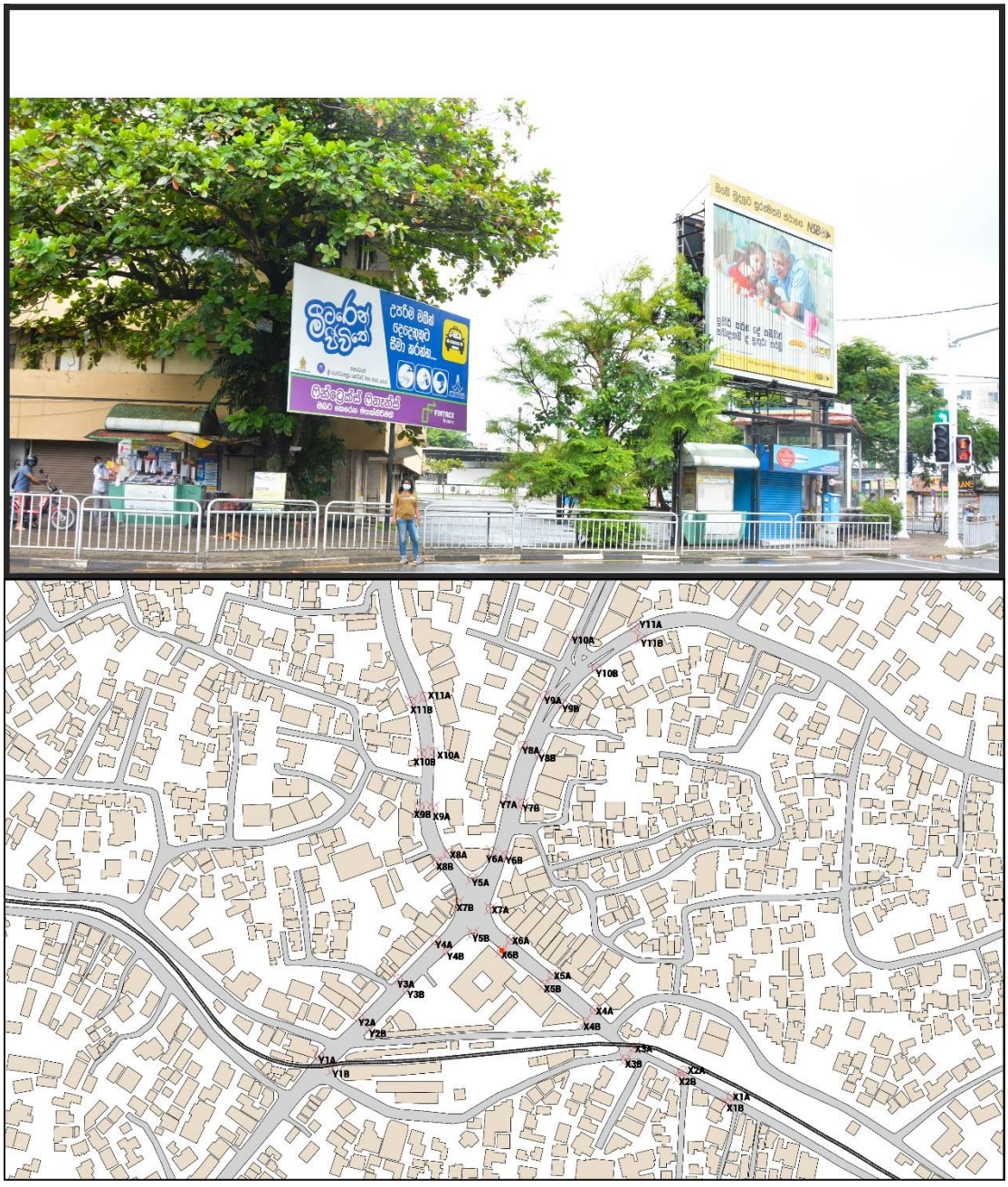


Figure 57: Photograph and Location of surveyed point X6B; Source: Author

3.2.12.1 Surveyed Data of X6B

The following Table shows the descriptives of Surveyed Point X6B.

Descriptives of Surveyed Point X6B

		Age			Gender		Highest Education Qualification			Industrial Experience	
		N	Mean		N	Mean		N	Mean		N	Mean
X6Bas	20-29	43	3.65	Male	55	3.76	Bachelors	73	3.60	Less than 1 Year	5	3.60
	30-39	46	3.83	Female	43	3.77	Masters	24	4.33	2 - 5 Years	74	3.70
	40-49	10	4.00	Prefer not to say	2	4.50	MPhil	1	4.00	6 -10 Years	10	4.30
	50-59	1	5.00				PhD	2	3.50	11 - 15 Years	5	3.20
										More than 15 Years	6	4.50
	Total	100	3.78	Total	100	3.78	Total	100	3.78	Total	100	3.78
X6Bna	20-29	43	4.09	Male	55	3.98	Bachelors	73	3.95	Less than 1 Year	5	3.40
	30-39	46	3.93	Female	43	4.05	Masters	24	4.25	2 - 5 Years	74	3.99
	40-49	10	4.00	Prefer not to say	2	4.50	MPhil	1	3.00	6 -10 Years	10	4.40
	50-59	1	5.00				PhD	2	4.50	11 - 15 Years	5	4.00
										More than 15 Years	6	4.33
	Total	100	4.02	Total	100	4.02	Total	100	4.02	Total	100	4.02
X6Baa	20-29	43	4.74	Male	55	4.65	Bachelors	73	4.67	Less than 1 Year	5	3.60
	30-39	46	4.72	Female	43	4.88	Masters	24	5.00	2 - 5 Years	74	4.77
	40-49	10	5.00	Prefer not to say	2	5.00	MPhil	1	5.00	6 -10 Years	10	5.00
	50-59	1	5.00				PhD	2	5.00	11 - 15 Years	5	5.00
										More than 15 Years	6	5.00
	Total	100	4.76	Total	100	4.76	Total	100	4.76	Total	100	4.76

Figure 58: Descriptives of Surveyed Point X6B; Source: Author

Considering the appearance of the street at point X6B the mean value of the responses is 3.78, which means the perception of respondents in terms of appearance of the street at point X6B is do not like.

Considering the number of OAs in the street at point X6B the mean value of the responses is 4.02, which means the perception of respondents in terms of number of OAs in the street at point X6B is many.

Considering the appearance of OAs in the street at point X6B the mean value of the responses is 4.76, which means the perception of respondents in terms of appearance of the street at point X6B is very ugly.

3.2.13 X7A

The following Figure shows the photograph of the surveyed point of X7A and the Location of the surveyed point.

Figure 59: Photograph and Location of surveyed point X7A; Source: Author

3.2.13.1 Surveyed Data of X7A

The following Table shows the descriptives of Surveyed Point X7A.

Descriptives of Surveyed Point X7A

		Age		Gender		Highest Education Qualification		Industrial Experience	
		N	Mean	N	Mean		N	Mean		N	Mean
X7Aas	20-29	43	4.30	Male	55	4.20	Bachelors	73	4.25	Less than 1 Year	5	4.20
	30-39	46	4.20	Female	43	4.44	Masters	24	4.58	2 - 5 Years	74	4.24
	40-49	10	4.80	Prefer not to say	2	4.50	MPhil	1	5.00	6 -10 Years	10	4.50
	50-59	1	5.00				PhD	2	3.00	11 - 15 Years	5	4.40
										More than 15 Years	6	4.83
	Total	100	4.31	Total	100	4.31	Total	100	4.31	Total	100	4.31
X7Ana	20-29	43	4.53	Male	55	4.44	Bachelors	73	4.52	Less than 1 Year	5	4.40
	30-39	46	4.57	Female	43	4.72	Masters	24	4.75	2 - 5 Years	74	4.55
	40-49	10	4.70	Prefer not to say	2	5.00	MPhil	1	4.00	6 -10 Years	10	4.80
	50-59	1	5.00				PhD	2	4.50	11 - 15 Years	5	4.60
										More than 15 Years	6	4.50
	Total	100	4.57	Total	100	4.57	Total	100	4.57	Total	100	4.57
X7Aaa	20-29	43	4.67	Male	55	4.51	Bachelors	73	4.63	Less than 1 Year	5	5.00
	30-39	46	4.63	Female	43	4.86	Masters	24	4.83	2 - 5 Years	74	4.64
	40-49	10	4.80	Prefer not to say	2	5.00	MPhil	1	5.00	6 -10 Years	10	4.60
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	5.00
										More than 15 Years	6	4.67
	Total	100	4.67	Total	100	4.67	Total	100	4.67	Total	100	4.67

Figure 60: Descriptives of Surveyed Point X7A; Source: Author

Considering the appearance of the street at point X7A the mean value of the responses is 4.31, which means the perception of respondents in terms of appearance of the street at point X7A is do not like.

Considering the number of OAs in the street at point X7A the mean value of the responses is 4.57, which means the perception of respondents in terms of number of OAs in the street at point X7A is too many.

Considering the appearance of OAs in the street at point X7A the mean value of the responses is 4.67, which means the perception of respondents in terms of appearance of the street at point X7A is very ugly.

3.2.14 X7B

The following Figure shows the photograph of the surveyed point of X7B and the Location of the surveyed point.

Figure 61: Photograph and Location of surveyed point X7B; Source: Author

3.2.14.1 Surveyed Data of X7B

The following Table shows the descriptives of Surveyed Point X7B.

Descriptives of Surveyed Point X7B

		Age		Gender		Highest Education Qualification		Industrial Experience	
		N	Mean	N	Mean		N	Mean		N	Mean
X7Bas	20-29	43	4.42	Male	55	4.36	Bachelors	73	4.38	Less than 1 Year	5	4.20
	30-39	46	4.35	Female	43	4.51	Masters	24	4.67	2 - 5 Years	74	4.38
	40-49	10	4.80	Prefer not to say	2	4.50	MPhil	1	5.00	6 -10 Years	10	4.60
	50-59	1	5.00				PhD	2	3.00	11 - 15 Years	5	4.60
										More than 15 Years	6	4.83
	Total	100	4.43	Total	100	4.43	Total	100	4.43	Total	100	4.43
X7Bna	20-29	43	4.58	Male	55	4.49	Bachelors	73	4.58	Less than 1 Year	5	4.40
	30-39	46	4.63	Female	43	4.77	Masters	24	4.79	2 - 5 Years	74	4.59
	40-49	10	4.70	Prefer not to say	2	5.00	MPhil	1	4.00	6 -10 Years	10	4.80
	50-59	1	5.00				PhD	2	4.50	11 - 15 Years	5	5.00
										More than 15 Years	6	4.50
	Total	100	4.62	Total	100	4.62	Total	100	4.62	Total	100	4.62
X7Baa	20-29	43	4.70	Male	55	4.53	Bachelors	73	4.62	Less than 1 Year	5	5.00
	30-39	46	4.59	Female	43	4.81	Masters	24	4.83	2 - 5 Years	74	4.65
	40-49	10	4.80	Prefer not to say	2	5.00	MPhil	1	5.00	6 -10 Years	10	4.60
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	4.60
										More than 15 Years	6	4.67
	Total	100	4.66	Total	100	4.66	Total	100	4.66	Total	100	4.66

Figure 62: Descriptives of Surveyed Point X7B; Source: Author

Considering the appearance of the street at point X7B the mean value of the responses is 4.43, which means the perception of respondents in terms of appearance of the street at point X7B is do not like.

Considering the number of OAs in the street at point X7B the mean value of the responses is 4.62, which means the perception of respondents in terms of number of OAs in the street at point X7B is too many.

Considering the appearance of OAs in the street at point X7B the mean value of the responses is 4.66, which means the perception of respondents in terms of appearance of the street at point X7B is very ugly.

3.2.15 X8A

The following Figure shows the photograph of the surveyed point of X8A and the Location of the surveyed point.

Figure 63: Photograph and Location of surveyed point X8A; Source: Author

3.2.15.1 Surveyed Data of X8A

The following Table shows the descriptives of Surveyed Point X8A.

Descriptives of Surveyed Point X8A

		Age			Gender		Highest Education Qualification			Industrial Experience	
		N	Mean		N	Mean		N	Mean		N	Mean
X8Aas	20-29	43	4.09	Male	55	4.13	Bachelors	73	4.01	Less than 1 Year	5	3.80
	30-39	46	4.02	Female	43	4.14	Masters	24	4.63	2 - 5 Years	74	4.03
	40-49	10	4.80	Prefer not to say	2	4.50	MPhil	1	4.00	6 -10 Years	10	4.50
	50-59	1	5.00				PhD	2	3.00	11 - 15 Years	5	4.60
										More than 15 Years	6	4.83
	Total	100	4.14	Total	100	4.14	Total	100	4.14	Total	100	4.14
X8Ana	20-29	43	4.26	Male	55	4.16	Bachelors	73	4.18	Less than 1 Year	5	4.20
	30-39	46	4.17	Female	43	4.35	Masters	24	4.50	2 - 5 Years	74	4.19
	40-49	10	4.50	Prefer not to say	2	4.50	MPhil	1	3.00	6 -10 Years	10	4.40
	50-59	1	5.00				PhD	2	4.50	11 - 15 Years	5	4.60
										More than 15 Years	6	4.50
	Total	100	4.25	Total	100	4.25	Total	100	4.25	Total	100	4.25
X8Aaa	20-29	43	4.86	Male	55	4.60	Bachelors	73	4.67	Less than 1 Year	5	4.60
	30-39	46	4.52	Female	43	4.81	Masters	24	4.83	2 - 5 Years	74	4.70
	40-49	10	4.80	Prefer not to say	2	5.00	MPhil	1	3.00	6 -10 Years	10	4.60
	50-59	1	5.00				PhD	2	5.00	11 - 15 Years	5	5.00
										More than 15 Years	6	4.67
	Total	100	4.70	Total	100	4.70	Total	100	4.70	Total	100	4.70

Figure 64: Descriptives of Surveyed Point X8A; Source: Author

Considering the appearance of the street at point X8A the mean value of the responses is 4.14, which means the perception of respondents in terms of appearance of the street at point X8A is do not like.

Considering the number of OAs in the street at point X8A the mean value of the responses is 4.25, which means the perception of respondents in terms of number of OAs in the street at point X8A is many.

Considering the appearance of OAs in the street at point X8A the mean value of the responses is 4.70, which means the perception of respondents in terms of appearance of the street at point X8A is very ugly.

3.2.16 X8B

The following Figure shows the photograph of the surveyed point of X8B and the Location of the surveyed point.

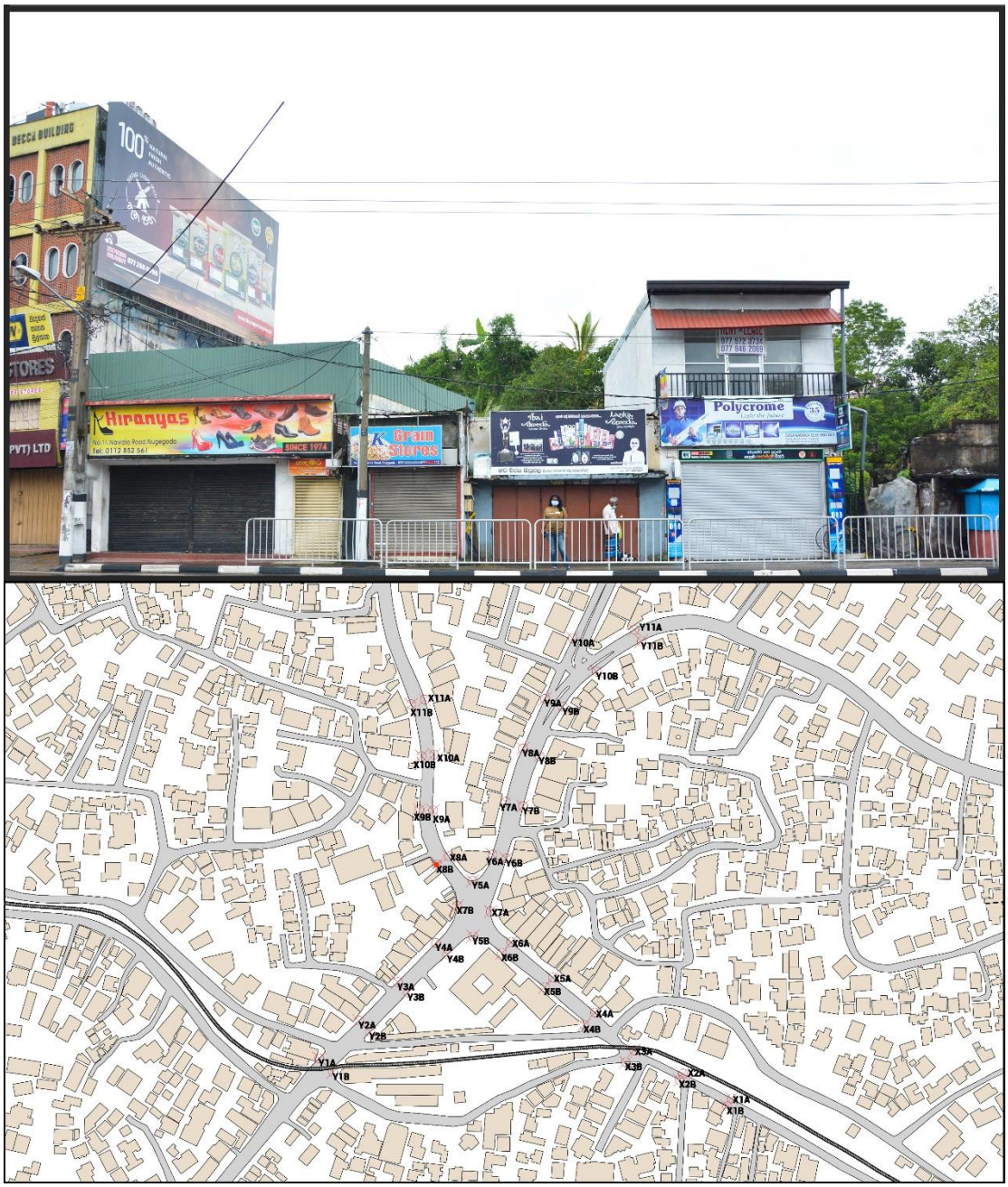


Figure 65: Photograph and Location of surveyed point X8B; Source: Author

3.2.16.1 Surveyed Data of X8B

The following Table shows the descriptives of Surveyed Point X8B.

Descriptives of Surveyed Point X8B

		Age		Gender		Highest Education Qualification		Industrial Experience	
		N	Mean	N	Mean		N	Mean		N	Mean
X8Bas	20-29	43	4.07	Male	55	4.20	Bachelors	73	4.04	Less than 1 Year	5	4.20
	30-39	46	4.09	Female	43	4.09	Masters	24	4.63	2 - 5 Years	74	4.04
	40-49	10	4.80	Prefer not to say	2	4.50	MPhil	1	4.00	6 -10 Years	10	4.50
	50-59	1	5.00				PhD	2	3.00	11 - 15 Years	5	4.40
										More than 15 Years	6	4.83
	Total	100	4.16	Total	100	4.16	Total	100	4.16	Total	100	4.16
X8Bna	20-29	43	4.23	Male	55	4.25	Bachelors	73	4.21	Less than 1 Year	5	4.20
	30-39	46	4.26	Female	43	4.33	Masters	24	4.58	2 - 5 Years	74	4.24
	40-49	10	4.60	Prefer not to say	2	4.50	MPhil	1	3.00	6 -10 Years	10	4.40
	50-59	1	5.00				PhD	2	4.50	11 - 15 Years	5	4.60
										More than 15 Years	6	4.50
	Total	100	4.29	Total	100	4.29	Total	100	4.29	Total	100	4.29
X8Baa	20-29	43	4.81	Male	55	4.69	Bachelors	73	4.68	Less than 1 Year	5	5.00
	30-39	46	4.59	Female	43	4.72	Masters	24	4.83	2 - 5 Years	74	4.72
	40-49	10	4.80	Prefer not to say	2	5.00	MPhil	1	3.00	6 -10 Years	10	4.60
	50-59	1	5.00				PhD	2	5.00	11 - 15 Years	5	4.60
										More than 15 Years	6	4.67
	Total	100	4.71	Total	100	4.71	Total	100	4.71	Total	100	4.71

Figure 66: Descriptives of Surveyed Point X8B; Source: Author

Considering the appearance of the street at point X8B the mean value of the responses is 4.16, which means the perception of respondents in terms of appearance of the street at point X8B is do not like.

Considering the number of OAs in the street at point X8B the mean value of the responses is 4.29, which means the perception of respondents in terms of number of OAs in the street at point X8B is many.

Considering the appearance of OAs in the street at point X8B the mean value of the responses is 4.71, which means the perception of respondents in terms of appearance of the street at point X8B is very ugly.

3.2.17 X9A

The following Figure shows the photograph of the surveyed point of X9A and the Location of the surveyed point.

Figure 67: Photograph and Location of surveyed point X9A; Source: Author

3.2.17.1 Surveyed Data of X9A

The following Table shows the descriptives of Surveyed Point X9A.

Descriptives of Surveyed Point X9A

		Age		Gender		Highest Education Qualification		Industrial Experience	
		N	Mean	N	Mean		N	Mean		N	Mean
X9Aas	20-29	43	3.58	Male	55	3.67	Bachelors	73	3.51	Less than 1 Year	5	3.60
	30-39	46	3.70	Female	43	3.74	Masters	24	4.33	2 - 5 Years	74	3.59
	40-49	10	4.30	Prefer not to say	2	4.00	MPhil	1	3.00	6 -10 Years	10	4.20
	50-59	1	4.00				PhD	2	4.00	11 - 15 Years	5	3.80
										More than 15 Years	6	4.33
	Total	100	3.71	Total	100	3.71	Total	100	3.71	Total	100	3.71
X9Ana	20-29	43	3.47	Male	55	3.51	Bachelors	73	3.44	Less than 1 Year	5	3.60
	30-39	46	3.59	Female	43	3.72	Masters	24	4.17	2 - 5 Years	74	3.45
	40-49	10	4.20	Prefer not to say	2	4.00	MPhil	1	3.00	6 -10 Years	10	4.10
	50-59	1	5.00				PhD	2	3.50	11 - 15 Years	5	4.60
										More than 15 Years	6	4.00
	Total	100	3.61	Total	100	3.61	Total	100	3.61	Total	100	3.61
X9Aaa	20-29	43	4.02	Male	55	4.05	Bachelors	73	3.97	Less than 1 Year	5	3.60
	30-39	46	4.15	Female	43	4.19	Masters	24	4.67	2 - 5 Years	74	4.05
	40-49	10	4.40	Prefer not to say	2	5.00	MPhil	1	3.00	6 -10 Years	10	4.80
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	4.20
										More than 15 Years	6	4.33
	Total	100	4.13	Total	100	4.13	Total	100	4.13	Total	100	4.13

Figure 68: Descriptives of Surveyed Point X9A; Source: Author

Considering the appearance of the street at point X9A the mean value of the responses is 3.71, which means the perception of respondents in terms of appearance of the street at point X9A is do not like.

Considering the number of OAs in the street at point X9A the mean value of the responses is 3.61, which means the perception of respondents in terms of number of OAs in the street at point X9A is many.

Considering the appearance of OAs in the street at point X9A the mean value of the responses is 4.13, which means the perception of respondents in terms of appearance of the street at point X9A is ugly.

3.2.18 X9B

The following Figure shows the photograph of the surveyed point of X9B and the Location of the surveyed point.

Figure 69: Photograph and Location of surveyed point X9B; Source: Author

3.2.18.1 Surveyed Data of X9B

The following Table shows the descriptives of Surveyed Point X9B.

Descriptives of Surveyed Point X9B

		Age			Gender		Highest Education Qualification			Industrial Experience	
		N	Mean		N	Mean		N	Mean		N	Mean
X9Bas	20-29	43	4.05	Male	55	3.96	Bachelors	73	3.99	Less than 1 Year	5	4.20
	30-39	46	4.04	Female	43	4.26	Masters	24	4.46	2 - 5 Years	74	4.00
	40-49	10	4.50	Prefer not to say	2	4.50	MPhil	1	4.00	6 -10 Years	10	4.40
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	4.40
										More than 15 Years	6	4.50
	Total	100	4.10	Total	100	4.10	Total	100	4.10	Total	100	4.10
X9Bna	20-29	43	4.02	Male	55	3.95	Bachelors	73	4.01	Less than 1 Year	5	4.40
	30-39	46	4.11	Female	43	4.16	Masters	24	4.17	2 - 5 Years	74	4.01
	40-49	10	3.80	Prefer not to say	2	4.50	MPhil	1	4.00	6 -10 Years	10	4.40
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	4.00
										More than 15 Years	6	3.67
	Total	100	4.05	Total	100	4.05	Total	100	4.05	Total	100	4.05
X9Baa	20-29	43	4.67	Male	55	4.55	Bachelors	73	4.58	Less than 1 Year	5	4.60
	30-39	46	4.63	Female	43	4.77	Masters	24	4.83	2 - 5 Years	74	4.64
	40-49	10	4.60	Prefer not to say	2	5.00	MPhil	1	5.00	6 -10 Years	10	5.00
	50-59	1	5.00				PhD	2	5.00	11 - 15 Years	5	4.60
										More than 15 Years	6	4.33
	Total	100	4.65	Total	100	4.65	Total	100	4.65	Total	100	4.65

Figure 70: Descriptives of Surveyed Point X9B; Source: Author

Considering the appearance of the street at point X9B the mean value of the responses is 4.10, which means the perception of respondents in terms of appearance of the street at point X9B is do not like.

Considering the number of OAs in the street at point X9B the mean value of the responses is 4.05, which means the perception of respondents in terms of number of OAs in the street at point X9B is many.

Considering the appearance of OAs in the street at point X9B the mean value of the responses is 4.65, which means the perception of respondents in terms of appearance of the street at point X9B is very ugly.

3.2.19 X10A

The following Figure shows the photograph of the surveyed point of X10A and the Location of the surveyed point.

Figure 71: Photograph and Location of surveyed point X10A; Source: Author

3.2.19.1 Surveyed Data of X10A

The following Table shows the descriptives of Surveyed Point X10A.

Descriptives of Surveyed Point X10A

		Age		Gender		Highest Education Qualification		Industrial Experience	
		N	Mean	N	Mean		N	Mean		N	Mean
X10Aas	20-29	43	3.86	Male	55	3.84	Bachelors	73	3.85	Less than 1 Year	5	4.00
	30-39	46	3.93	Female	43	4.05	Masters	24	4.21	2 - 5 Years	74	3.88
	40-49	10	4.20	Prefer not to say	2	4.00	MPhil	1	4.00	6 -10 Years	10	4.00
	50-59	1	4.00				PhD	2	3.50	11 - 15 Years	5	4.40
										More than 15 Years	6	4.00
	Total	100	3.93	Total	100	3.93	Total	100	3.93	Total	100	3.93
X10Ana	20-29	43	3.56	Male	55	3.45	Bachelors	73	3.51	Less than 1 Year	5	4.00
	30-39	46	3.57	Female	43	3.72	Masters	24	3.88	2 - 5 Years	74	3.49
	40-49	10	3.60	Prefer not to say	2	4.00	MPhil	1	3.00	6 -10 Years	10	3.90
	50-59	1	5.00				PhD	2	3.00	11 - 15 Years	5	4.40
										More than 15 Years	6	3.17
	Total	100	3.58	Total	100	3.58	Total	100	3.58	Total	100	3.58
X10Aaa	20-29	43	4.33	Male	55	4.38	Bachelors	73	4.38	Less than 1 Year	5	4.20
	30-39	46	4.48	Female	43	4.49	Masters	24	4.63	2 - 5 Years	74	4.39
	40-49	10	4.50	Prefer not to say	2	4.00	MPhil	1	5.00	6 -10 Years	10	4.60
	50-59	1	5.00				PhD	2	3.00	11 - 15 Years	5	5.00
										More than 15 Years	6	4.17
	Total	100	4.42	Total	100	4.42	Total	100	4.42	Total	100	4.42

Figure 72: Descriptives of Surveyed Point X10A; Source: Author

Considering the appearance of the street at point X10A the mean value of the responses is 3.93, which means the perception of respondents in terms of appearance of the street at point X10A is do not like.

Considering the number of OAs in the street at point X10A the mean value of the responses is 3.58, which means the perception of respondents in terms of number of OAs in the street at point X10A is many.

Considering the appearance of OAs in the street at point X10A the mean value of the responses is 4.42, which means the perception of respondents in terms of appearance of the street at point X10A is ugly.

3.2.20 X10B

The following Figure shows the photograph of the surveyed point of X10B and the Location of the surveyed point.

Figure 73: Photograph and Location of surveyed point X10B; Source: Author

3.2.20.1 Surveyed Data of X10B

The following Table shows the descriptives of Surveyed Point X10B.

Descriptives of Surveyed Point X10B

		Age		Gender		Highest Education Qualification		Industrial Experience	
		N	Mean	N	Mean		N	Mean		N	Mean
X10Bas	20-29	43	2.98	Male	55	2.98	Bachelors	73	2.97	Less than 1 Year	5	3.20
	30-39	46	3.04	Female	43	3.05	Masters	24	3.25	2 - 5 Years	74	2.99
	40-49	10	3.20	Prefer not to say	2	3.50	MPhil	1	2.00	6 -10 Years	10	3.30
	50-59	1	2.00				PhD	2	2.50	11 - 15 Years	5	3.00
										More than 15 Years	6	2.83
	Total	100	3.02	Total	100	3.02	Total	100	3.02	Total	100	3.02
X10Bna	20-29	43	2.95	Male	55	2.96	Bachelors	73	2.88	Less than 1 Year	5	3.00
	30-39	46	2.98	Female	43	2.95	Masters	24	3.21	2 - 5 Years	74	2.91
	40-49	10	3.00	Prefer not to say	2	3.00	MPhil	1	3.00	6 -10 Years	10	3.50
	50-59	1	2.00				PhD	2	3.00	11 - 15 Years	5	3.20
										More than 15 Years	6	2.50
	Total	100	2.96	Total	100	2.96	Total	100	2.96	Total	100	2.96
X10Baa	20-29	43	3.33	Male	55	3.47	Bachelors	73	3.27	Less than 1 Year	5	3.20
	30-39	46	3.41	Female	43	3.35	Masters	24	3.96	2 - 5 Years	74	3.35
	40-49	10	4.00	Prefer not to say	2	4.00	MPhil	1	3.00	6 -10 Years	10	3.80
	50-59	1	3.00				PhD	2	3.00	11 - 15 Years	5	3.80
										More than 15 Years	6	3.67
	Total	100	3.43	Total	100	3.43	Total	100	3.43	Total	100	3.43

Figure 74: Descriptives of Surveyed Point X10B; Source: Author

Considering the appearance of the street at point X9B the mean value of the responses is 4.10, which means the perception of respondents in terms of appearance of the street at point X9B is do not like.

Considering the number of OAs in the street at point X9B the mean value of the responses is 4.05, which means the perception of respondents in terms of number of OAs in the street at point X9B is many.

Considering the appearance of OAs in the street at point X9B the mean value of the responses is 4.65, which means the perception of respondents in terms of appearance of the street at point X9B is very ugly.

3.2.21 X11A

The following Figure shows the photograph of the surveyed point of X11A and the Location of the surveyed point.

Figure 75: Photograph and Location of surveyed point X11A; Source: Author

3.2.21.1 Surveyed Data of X11A

The following Table shows the descriptives of Surveyed Point X11A.

Descriptives of Surveyed Point X11A

		Age		Gender		Highest Education Qualification		Industrial Experience	
		N	Mean	N	Mean	N	Mean	N	Mean
X11Aas	20-29	43	3.77	Male 55	3.84	Bachelors 73	3.64	Less than 1 Year 5	3.60
	30-39	46	3.78	Female 43	3.79	Masters 24	4.38	2 - 5 Years 74	3.73
	40-49	10	4.20	Prefer not to say 2	4.50	MPhil 1	4.00	6 -10 Years 10	4.40
	50-59	1	5.00			PhD 2	4.00	11 - 15 Years 5	3.80
								More than 15 Years 6	4.33
	Total	100	3.83	Total 100	3.83	Total 100	3.83	Total 100	3.83
X11Ana	20-29	43	3.98	Male 55	3.89	Bachelors 73	3.89	Less than 1 Year 5	4.00
	30-39	46	3.96	Female 43	4.14	Masters 24	4.38	2 - 5 Years 74	3.91
	40-49	10	4.30	Prefer not to say 2	4.50	MPhil 1	4.00	6 -10 Years 10	4.50
	50-59	1	5.00			PhD 2	4.00	11 - 15 Years 5	4.40
								More than 15 Years 6	4.17
	Total	100	4.01	Total 100	4.01	Total 100	4.01	Total 100	4.01
X11Aaa	20-29	43	4.35	Male 55	4.44	Bachelors 73	4.29	Less than 1 Year 5	4.40
	30-39	46	4.48	Female 43	4.42	Masters 24	4.83	2 - 5 Years 74	4.36
	40-49	10	4.60	Prefer not to say 2	5.00	MPhil 1	5.00	6 -10 Years 10	5.00
	50-59	1	5.00			PhD 2	5.00	11 - 15 Years 5	4.60
								More than 15 Years 6	4.33
	Total	100	4.44	Total 100	4.44	Total 100	4.44	Total 100	4.44

Figure 76: Descriptives of Surveyed Point X11A; Source: Author

Considering the appearance of the street at point X11A the mean value of the responses is 3.83, which means the perception of respondents in terms of appearance of the street at point X11A is do not like.

Considering the number of OAs in the street at point X11A the mean value of the responses is 4.01, which means the perception of respondents in terms of number of OAs in the street at point X11A is many.

Considering the appearance of OAs in the street at point X11A the mean value of the responses is 4.44, which means the perception of respondents in terms of appearance of the street at point X11A is ugly.

3.2.22 X11B

The following Figure shows the photograph of the surveyed point of X11B and the Location of the surveyed point.

Figure 77: Photograph and Location of surveyed point X11B; Source: Author

3.2.22.1 Surveyed Data of X11B

The following Table shows the descriptives of Surveyed Point X11B.

Descriptives of Surveyed Point X11B

		Age			Gender		Highest Education Qualification			Industrial Experience	
		N	Mean		N	Mean		N	Mean		N	Mean
X11Bas	20-29	43	4.02	Male	55	4.07	Bachelors	73	4.00	Less than 1 Year	5	4.20
	30-39	46	4.15	Female	43	4.19	Masters	24	4.54	2 - 5 Years	74	4.05
	40-49	10	4.40	Prefer not to say	2	4.50	MPhil	1	4.00	6 -10 Years	10	4.40
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	4.20
										More than 15 Years	6	4.50
	Total	100	4.13	Total	100	4.13	Total	100	4.13	Total	100	4.13
X11Bna	20-29	43	3.88	Male	55	3.87	Bachelors	73	3.77	Less than 1 Year	5	3.80
	30-39	46	3.80	Female	43	3.91	Masters	24	4.33	2 - 5 Years	74	3.78
	40-49	10	4.30	Prefer not to say	2	4.50	MPhil	1	4.00	6 -10 Years	10	4.30
	50-59	1	5.00				PhD	2	3.50	11 - 15 Years	5	4.40
										More than 15 Years	6	4.33
	Total	100	3.90	Total	100	3.90	Total	100	3.90	Total	100	3.90
X11Baa	20-29	43	4.77	Male	55	4.78	Bachelors	73	4.75	Less than 1 Year	5	5.00
	30-39	46	4.83	Female	43	4.81	Masters	24	4.92	2 - 5 Years	74	4.76
	40-49	10	4.80	Prefer not to say	2	5.00	MPhil	1	5.00	6 -10 Years	10	5.00
	50-59	1	5.00				PhD	2	5.00	11 - 15 Years	5	5.00
										More than 15 Years	6	4.67
	Total	100	4.80	Total	100	4.80	Total	100	4.80	Total	100	4.80

Figure 78: Descriptives of Surveyed Point X11B; Source: Author

Considering the appearance of the street at point X11B the mean value of the responses is 4.13, which means the perception of respondents in terms of appearance of the street at point X11B is do not like.

Considering the number of OAs in the street at point X11B the mean value of the responses is 3.90, which means the perception of respondents in terms of number of OAs in the street at point X11B is many.

Considering the appearance of OAs in the street at point X11B the mean value of the responses is 4.80, which means the perception of respondents in terms of appearance of the street at point X11B is very ugly.

3.2.23 Y1A

The following Figure shows the photograph of the surveyed point of Y1A and the Location of the surveyed point.

Figure 79: Photograph and Location of surveyed point Y1A; Source: Author

3.2.23.1 Surveyed Data of Y1A

The following Table shows the descriptives of Surveyed Point Y1A.

Descriptives of Surveyed Point Y1A

		Age		Gender		Highest Education Qualification		Industrial Experience	
		N	Mean	N	Mean		N	Mean		N	Mean
Y1Aas	20-29	43	4.23	Male	55	4.11	Bachelors	73	4.19	Less than 1 Year	5	4.00
	30-39	46	4.22	Female	43	4.37	Masters	24	4.46	2 - 5 Years	74	4.23
	40-49	10	4.30	Prefer not to say	2	5.00	MPhil	1	4.00	6 -10 Years	10	4.30
	50-59	1	5.00				PhD	2	3.50	11 - 15 Years	5	4.40
										More than 15 Years	6	4.33
	Total	100	4.24	Total	100	4.24	Total	100	4.24	Total	100	4.24
Y1Ana	20-29	43	4.09	Male	55	3.93	Bachelors	73	4.00	Less than 1 Year	5	4.20
	30-39	46	3.98	Female	43	4.16	Masters	24	4.25	2 - 5 Years	74	3.99
	40-49	10	4.00	Prefer not to say	2	4.50	MPhil	1	4.00	6 -10 Years	10	4.30
	50-59	1	5.00				PhD	2	3.00	11 - 15 Years	5	4.40
										More than 15 Years	6	3.83
	Total	100	4.04	Total	100	4.04	Total	100	4.04	Total	100	4.04
Y1Aaa	20-29	43	4.81	Male	55	4.67	Bachelors	73	4.75	Less than 1 Year	5	5.00
	30-39	46	4.70	Female	43	4.86	Masters	24	4.75	2 - 5 Years	74	4.73
	40-49	10	4.80	Prefer not to say	2	5.00	MPhil	1	5.00	6 -10 Years	10	4.80
	50-59	1	5.00				PhD	2	5.00	11 - 15 Years	5	5.00
										More than 15 Years	6	4.67
	Total	100	4.76	Total	100	4.76	Total	100	4.76	Total	100	4.76

Figure 80: Descriptives of Surveyed Point Y1A; Source: Author

Considering the appearance of the street at point Y1A the mean value of the responses is 4.24, which means the perception of respondents in terms of appearance of the street at point Y1A is do not like.

Considering the number of OAs in the street at point Y1A the mean value of the responses is 4.04, which means the perception of respondents in terms of number of OAs in the street at point Y1A is many.

Considering the appearance of OAs in the street at point Y1A the mean value of the responses is 4.76, which means the perception of respondents in terms of appearance of the street at point Y1A is ugly.

3.2.24 Y1B

The following Figure shows the photograph of the surveyed point of Y1B and the Location of the surveyed point.

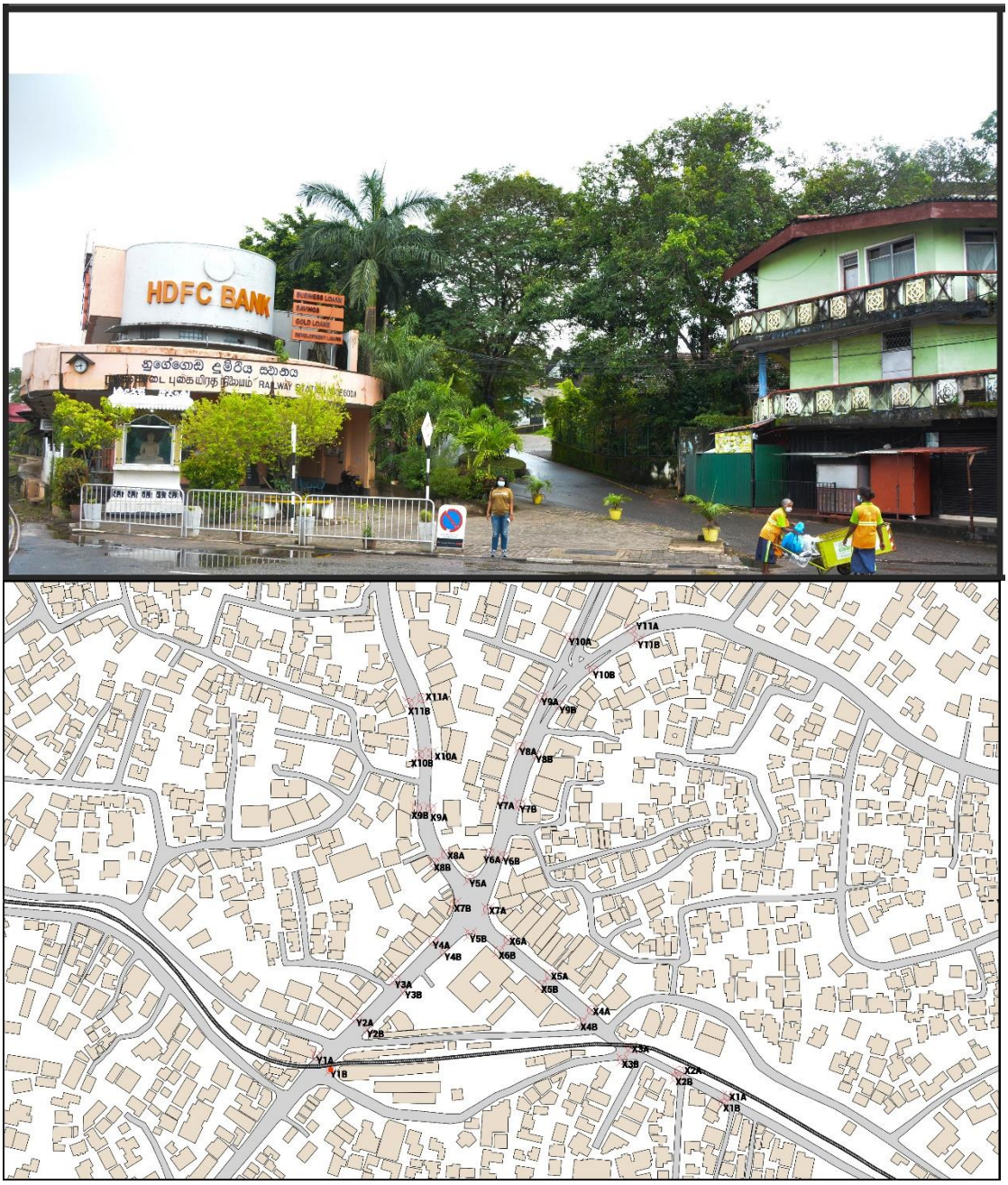


Figure 81: Photograph and Location of surveyed point Y1B; Source: Author

3.2.24.1 Surveyed Data of Y1B

The following Table shows the descriptives of Surveyed Point Y1B.

Descriptives of Surveyed Point Y1B

	Age			Gender		Highest Education Qualification			Industrial Experience		
		N	Mean		N	Mean		N	Mean		N	Mean
Y1Bas	20-29	43	3.30	Male	55	3.42	Bachelors	73	3.32	Less than 1 Year	5	3.80
	30-39	46	3.57	Female	43	3.49	Masters	24	4.00	2 - 5 Years	74	3.36
	40-49	10	3.70	Prefer not to say	2	4.50	MPhil	1	3.00	6 -10 Years	10	3.90
	50-59	1	4.00				PhD	2	3.00	11 - 15 Years	5	3.60
										More than 15 Years	6	3.67
	Total	100	3.47	Total	100	3.47	Total	100	3.47	Total	100	3.47
Y1Bna	20-29	43	3.00	Male	55	3.16	Bachelors	73	3.11	Less than 1 Year	5	3.40
	30-39	46	3.30	Female	43	3.19	Masters	24	3.54	2 - 5 Years	74	3.09
	40-49	10	3.30	Prefer not to say	2	3.50	MPhil	1	3.00	6 -10 Years	10	3.60
	50-59	1	4.00				PhD	2	1.50	11 - 15 Years	5	3.60
										More than 15 Years	6	3.00
	Total	100	3.18	Total	100	3.18	Total	100	3.18	Total	100	3.18
Y1Baa	20-29	43	3.79	Male	55	4.02	Bachelors	73	3.78	Less than 1 Year	5	4.60
	30-39	46	4.02	Female	43	3.77	Masters	24	4.50	2 - 5 Years	74	3.82
	40-49	10	4.00	Prefer not to say	2	5.00	MPhil	1	3.00	6 -10 Years	10	4.40
	50-59	1	5.00				PhD	2	3.00	11 - 15 Years	5	3.80
										More than 15 Years	6	4.00
	Total	100	3.93	Total	100	3.93	Total	100	3.93	Total	100	3.93

Figure 82: Descriptives of Surveyed Point Y1B; Source: Author

Considering the appearance of the street at point Y1B the mean value of the responses is 3.47, which means the perception of respondents in terms of appearance of the street at point Y1B is neutral.

Considering the number of OAs in the street at point Y1B the mean value of the responses is 3.18, which means the perception of respondents in terms of number of OAs in the street at point Y1B is moderate.

Considering the appearance of OAs in the street at point Y1B the mean value of the responses is 3.93, which means the perception of respondents in terms of appearance of the street at point Y1B is ugly.

3.2.25 Y2A

The following Figure shows the photograph of the surveyed point of Y2A and the Location of the surveyed point.

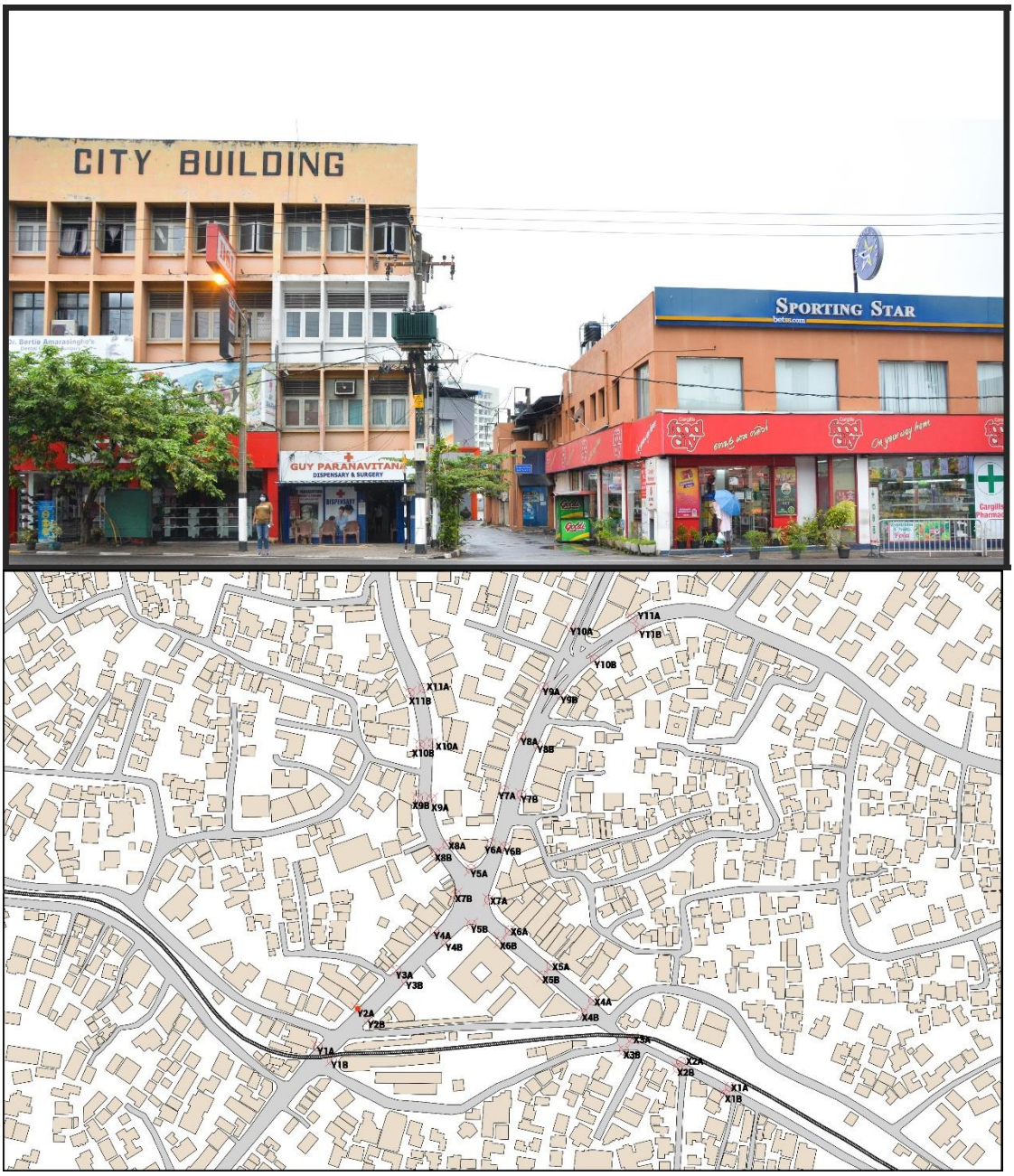


Figure 83: Photograph and Location of surveyed point Y2A; Source: Author

3.2.25.1 Surveyed Data of Y2A

The following Table shows the descriptives of Surveyed Point Y2A.

Descriptives of Surveyed Point Y2A

	Age			Gender		Highest Education Qualification			Industrial Experience		
		N	Mean		N	Mean		N	Mean		N	Mean
Y2Aas	20-29	43	3.42	Male	55	3.58	Bachelors	73	3.48	Less than 1 Year	5	3.60
	30-39	46	3.61	Female	43	3.56	Masters	24	3.92	2 - 5 Years	74	3.51
	40-49	10	3.90	Prefer not to say	2	3.00	MPhil	1	3.00	6 -10 Years	10	3.60
	50-59	1	4.00				PhD	2	2.50	11 - 15 Years	5	3.60
										More than 15 Years	6	4.00
	Total	100	3.56	Total	100	3.56	Total	100	3.56	Total	100	3.56
Y2Ana	20-29	43	3.63	Male	55	3.62	Bachelors	73	3.58	Less than 1 Year	5	3.80
	30-39	46	3.65	Female	43	3.70	Masters	24	3.88	2 - 5 Years	74	3.62
	40-49	10	3.60	Prefer not to say	2	3.50	MPhil	1	4.00	6 -10 Years	10	3.80
	50-59	1	5.00				PhD	2	3.50	11 - 15 Years	5	3.40
										More than 15 Years	6	3.83
	Total	100	3.65	Total	100	3.65	Total	100	3.65	Total	100	3.65
Y2Aaa	20-29	43	4.09	Male	55	4.15	Bachelors	73	4.05	Less than 1 Year	5	4.00
	30-39	46	4.04	Female	43	3.98	Masters	24	4.17	2 - 5 Years	74	4.08
	40-49	10	4.00	Prefer not to say	2	4.00	MPhil	1	3.00	6 -10 Years	10	4.20
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	3.80
										More than 15 Years	6	4.00
	Total	100	4.07	Total	100	4.07	Total	100	4.07	Total	100	4.07

Figure 84: Descriptives of Surveyed Point Y2A; Source: Author

Considering the appearance of the street at point Y2A the mean value of the responses is 3.56, which means the perception of respondents in terms of appearance of the street at point Y2A is do not like.

Considering the number of OAs in the street at point Y2A the mean value of the responses is 3.65, which means the perception of respondents in terms of number of OAs in the street at point Y2A is many.

Considering the appearance of OAs in the street at point Y2A the mean value of the responses is 4.07, which means the perception of respondents in terms of appearance of the street at point Y2A is ugly.

3.2.26 Y2B

The following Figure shows the photograph of the surveyed point of Y2B and the Location of the surveyed point.

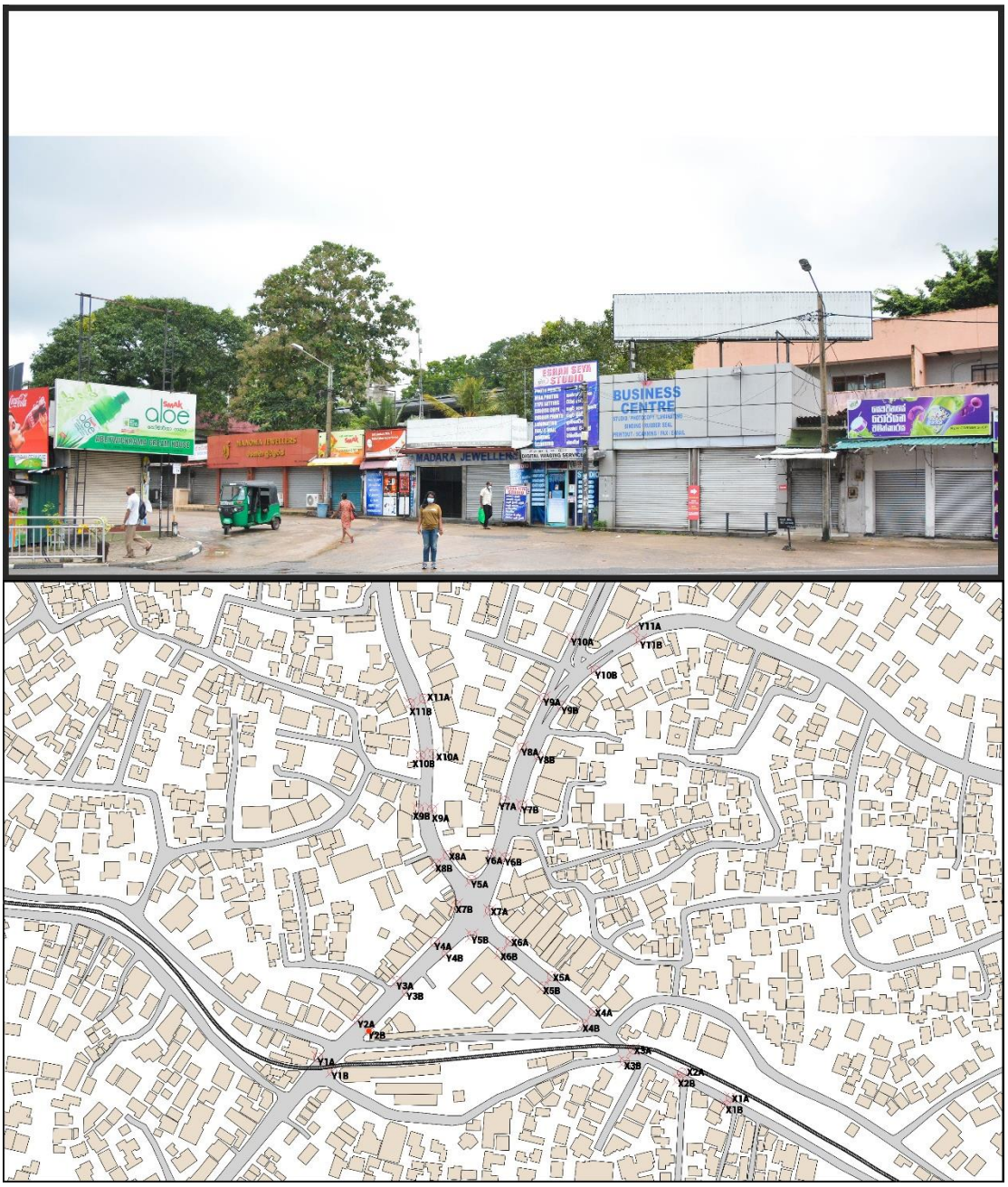


Figure 85:Figure 23: Photograph and Location of surveyed point Y2B; Source: Author

3.2.26.1 Surveyed Data of Y2B

The following Table shows the descriptives of Surveyed Point Y2B.

Descriptives of Surveyed Point Y2B

		Age		Gender		Highest Education Qualification		Industrial Experience	
		N	Mean	N	Mean	N	Mean	N	Mean
Y2Bas	20-29	43	3.84	Male 55	3.95	Bachelors 73	3.86	Less than 1 Year 5	4.20
	30-39	46	3.96	Female 43	3.95	Masters 24	4.33	2 - 5 Years 74	3.88
	40-49	10	4.30	Prefer not to say 2	4.00	MPhil 1	4.00	6 -10 Years 10	3.90
	50-59	1	5.00			PhD 2	2.50	11 - 15 Years 5	4.20
								More than 15 Years 6	4.50
	Total	100	3.95	Total 100	3.95	Total 100	3.95	Total 100	3.95
Y2Bna	20-29	43	4.00	Male 55	3.98	Bachelors 73	3.95	Less than 1 Year 5	4.40
	30-39	46	4.02	Female 43	4.07	Masters 24	4.29	2 - 5 Years 74	3.97
	40-49	10	4.10	Prefer not to say 2	4.50	MPhil 1	4.00	6 -10 Years 10	4.10
	50-59	1	5.00			PhD 2	4.00	11 - 15 Years 5	4.20
								More than 15 Years 6	4.17
	Total	100	4.03	Total 100	4.03	Total 100	4.03	Total 100	4.03
Y2Baa	20-29	43	4.56	Male 55	4.49	Bachelors 73	4.55	Less than 1 Year 5	4.60
	30-39	46	4.54	Female 43	4.67	Masters 24	4.63	2 - 5 Years 74	4.54
	40-49	10	4.60	Prefer not to say 2	4.00	MPhil 1	5.00	6 -10 Years 10	4.60
	50-59	1	5.00			PhD 2	4.00	11 - 15 Years 5	5.00
								More than 15 Years 6	4.33
	Total	100	4.56	Total 100	4.56	Total 100	4.56	Total 100	4.56

Figure 86: Descriptives of Surveyed Point Y2B; Source: Author

Considering the appearance of the street at point Y2B the mean value of the responses is 3.95, which means the perception of respondents in terms of appearance of the street at point Y2B is do not like.

Considering the number of OAs in the street at point Y2B the mean value of the responses is 4.03, which means the perception of respondents in terms of number of OAs in the street at point Y2B is many.

Considering the appearance of OAs in the street at point Y2B the mean value of the responses is 4.56, which means the perception of respondents in terms of appearance of the street at point Y2B is very ugly.

3.2.27 Y3A

The following Figure shows the photograph of the surveyed point of Y3A and the Location of the surveyed point.

Figure 87: Photograph and Location of surveyed point Y3A; Source: Author

3.2.27.1 Surveyed Data of Y3A

The following Table shows the descriptives of Surveyed Point Y3A.

Descriptives of Surveyed Point Y3A

	Age			Gender		Highest Education Qualification			Industrial Experience		
		N	Mean		N	Mean		N	Mean		N	Mean
Y3Aas	20-29	43	4.14	Male	55	4.15	Bachelors	73	4.08	Less than 1 Year	5	4.20
	30-39	46	4.15	Female	43	4.21	Masters	24	4.46	2 - 5 Years	74	4.14
	40-49	10	4.40	Prefer not to say	2	4.50	MPhil	1	4.00	6 -10 Years	10	4.30
	50-59	1	5.00				PhD	2	4.50	11 - 15 Years	5	4.00
										More than 15 Years	6	4.67
	Total	100	4.18	Total	100	4.18	Total	100	4.18	Total	100	4.18
Y3Ana	20-29	43	4.00	Male	55	3.91	Bachelors	73	3.86	Less than 1 Year	5	4.20
	30-39	46	3.96	Female	43	4.09	Masters	24	4.38	2 - 5 Years	74	3.91
	40-49	10	4.10	Prefer not to say	2	4.50	MPhil	1	4.00	6 -10 Years	10	4.50
	50-59	1	5.00				PhD	2	4.50	11 - 15 Years	5	4.20
										More than 15 Years	6	4.00
	Total	100	4.00	Total	100	4.00	Total	100	4.00	Total	100	4.00
Y3Aaa	20-29	43	4.74	Male	55	4.69	Bachelors	73	4.68	Less than 1 Year	5	5.00
	30-39	46	4.65	Female	43	4.72	Masters	24	4.83	2 - 5 Years	74	4.69
	40-49	10	4.80	Prefer not to say	2	5.00	MPhil	1	5.00	6 -10 Years	10	4.80
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	4.60
										More than 15 Years	6	4.67
	Total	100	4.71	Total	100	4.71	Total	100	4.71	Total	100	4.71

Figure 88: Descriptives of Surveyed Point Y3A; Source: Author

Considering the appearance of the street at point Y3A the mean value of the responses is 4.18, which means the perception of respondents in terms of appearance of the street at point Y3A is do not like.

Considering the number of OAs in the street at point Y3A the mean value of the responses is 4.0, which means the perception of respondents in terms of number of OAs in the street at point Y3A is many.

Considering the appearance of OAs in the street at point Y3A the mean value of the responses is 4.71, which means the perception of respondents in terms of appearance of the street at point Y3A is very ugly.

3.2.28 Y3B

The following Figure shows the photograph of the surveyed point of Y3B and the Location of the surveyed point.

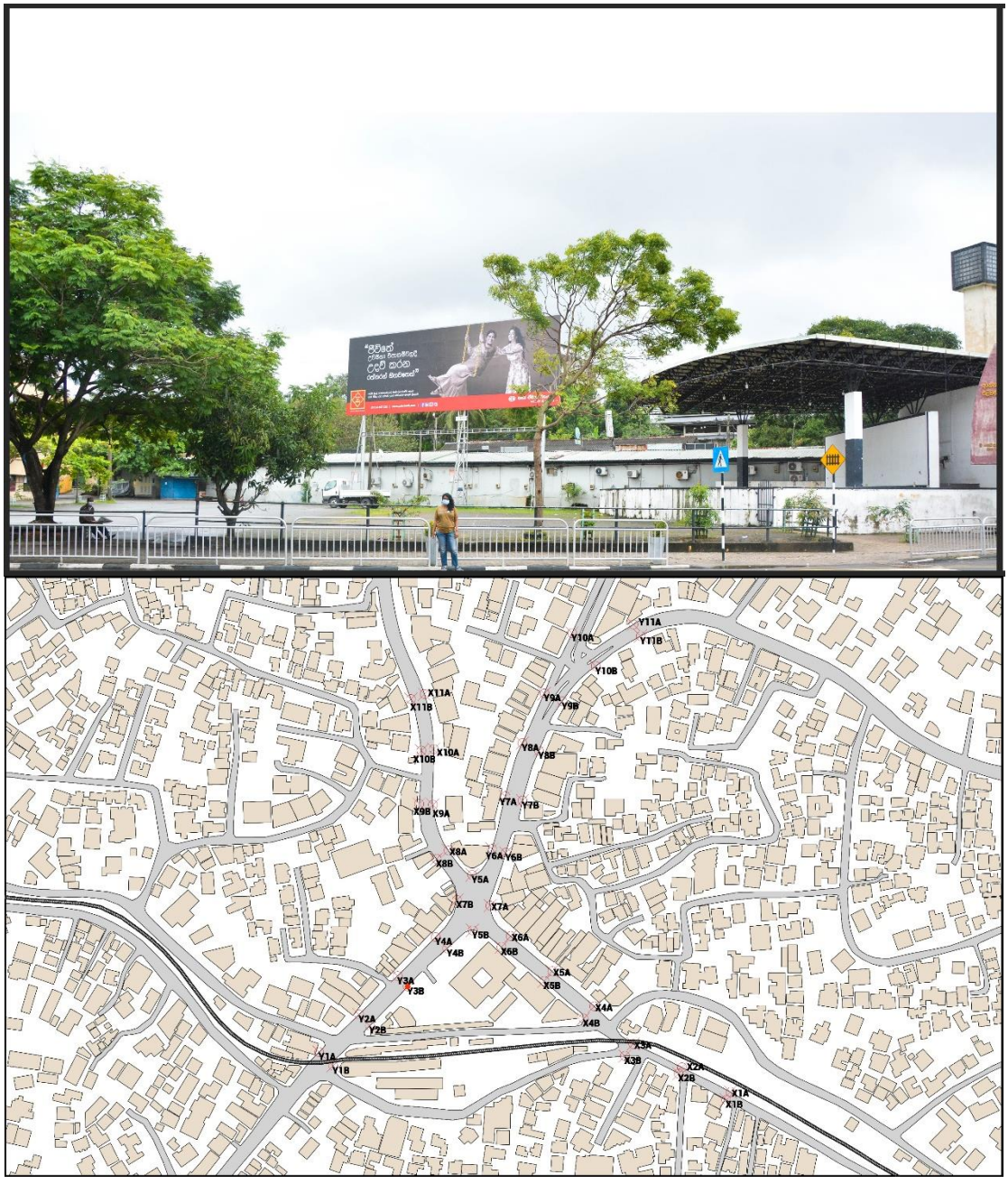


Figure 89: Photograph and Location of surveyed point Y3B; Source: Author

3.2.28.1 Surveyed Data of Y3B

The following Table shows the descriptives of Surveyed Point Y3B.

Descriptives of Surveyed Point Y3B

		Age		Gender		Highest Education Qualification		Industrial Experience	
		N	Mean	N	Mean		N	Mean		N	Mean
Y3Bas	20-29	43	2.60	Male	55	2.75	Bachelors	73	2.52	Less than 1 Year	5	3.00
	30-39	46	2.63	Female	43	2.53	Masters	24	3.25	2 - 5 Years	74	2.55
	40-49	10	3.30	Prefer not to say	2	4.00	MPhil	1	1.00	6 -10 Years	10	3.10
	50-59	1	2.00				PhD	2	2.50	11 - 15 Years	5	3.00
										More than 15 Years	6	3.00
	Total	100	2.68	Total	100	2.68	Total	100	2.68	Total	100	2.68
Y3Bna	20-29	43	2.56	Male	55	2.53	Bachelors	73	2.42	Less than 1 Year	5	2.60
	30-39	46	2.43	Female	43	2.42	Masters	24	2.79	2 - 5 Years	74	2.43
	40-49	10	2.60	Prefer not to say	2	3.00	MPhil	1	2.00	6 -10 Years	10	2.90
	50-59	1	1.00				PhD	2	1.50	11 - 15 Years	5	3.00
										More than 15 Years	6	2.00
	Total	100	2.49	Total	100	2.49	Total	100	2.49	Total	100	2.49
Y3Baa	20-29	43	3.35	Male	55	3.44	Bachelors	73	3.23	Less than 1 Year	5	3.40
	30-39	46	3.33	Female	43	3.26	Masters	24	3.92	2 - 5 Years	74	3.27
	40-49	10	3.90	Prefer not to say	2	5.00	MPhil	1	1.00	6 -10 Years	10	4.00
	50-59	1	3.00				PhD	2	4.00	11 - 15 Years	5	3.60
										More than 15 Years	6	3.67
	Total	100	3.39	Total	100	3.39	Total	100	3.39	Total	100	3.39

Figure 90: Descriptives of Surveyed Point Y3B; Source: Author

Considering the appearance of the street at point Y3B the mean value of the responses is 2.68, which means the perception of respondents in terms of appearance of the street at point Y3B is neutral.

Considering the number of OAs in the street at point Y3B the mean value of the responses is 2.49, which means the perception of respondents in terms of number of OAs in the street at point Y3B is few.

Considering the appearance of OAs in the street at point Y3B the mean value of the responses is 3.39, which means the perception of respondents in terms of appearance of the street at point Y3B is do not matter.

3.2.29 Y4A

The following Figure shows the photograph of the surveyed point of Y4A and the Location of the surveyed point.

Figure 91: Photograph and Location of surveyed point Y4A; Source: Author

3.2.29.1 Surveyed Data of Y4A

The following Table shows the descriptives of Surveyed Point Y4A.

Descriptives of Surveyed Point Y4A

	Age			Gender		Highest Education Qualification		Industrial Experience		
		N	Mean		N	Mean		N	Mean		N	Mean
Y4Aas	20-29	43	4.28	Male	55	4.18	Bachelors	73	4.27	Less than 1 Year	5	4.40
	30-39	46	4.28	Female	43	4.37	Masters	24	4.29	2 - 5 Years	74	4.26
	40-49	10	4.10	Prefer not to say	2	4.50	MPhil	1	4.00	6 -10 Years	10	4.40
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	4.00
										More than 15 Years	6	4.33
	Total	100	4.27	Total	100	4.27	Total	100	4.27	Total	100	4.27
Y4Ana	20-29	43	4.14	Male	55	4.04	Bachelors	73	4.04	Less than 1 Year	5	4.20
	30-39	46	4.11	Female	43	4.26	Masters	24	4.42	2 - 5 Years	74	4.07
	40-49	10	4.20	Prefer not to say	2	4.50	MPhil	1	4.00	6 -10 Years	10	4.50
	50-59	1	5.00				PhD	2	4.50	11 - 15 Years	5	4.60
										More than 15 Years	6	4.00
	Total	100	4.14	Total	100	4.14	Total	100	4.14	Total	100	4.14
Y4Aaa	20-29	43	4.77	Male	55	4.64	Bachelors	73	4.81	Less than 1 Year	5	5.00
	30-39	46	4.74	Female	43	4.86	Masters	24	4.58	2 - 5 Years	74	4.73
	40-49	10	4.60	Prefer not to say	2	5.00	MPhil	1	5.00	6 -10 Years	10	4.80
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	5.00
										More than 15 Years	6	4.33
	Total	100	4.74	Total	100	4.74	Total	100	4.74	Total	100	4.74

Figure 92: Descriptives of Surveyed Point Y4A; Source: Author

Considering the appearance of the street at point Y4A the mean value of the responses is 4.27, which means the perception of respondents in terms of appearance of the street at point Y4A is do not like.

Considering the number of OAs in the street at point Y4A the mean value of the responses is 4.14, which means the perception of respondents in terms of number of OAs in the street at point Y4A is many.

Considering the appearance of OAs in the street at point Y4A the mean value of the responses is 4.74, which means the perception of respondents in terms of appearance of the street at point Y4A is very ugly.

3.2.30 Y4B

The following Figure shows the photograph of the surveyed point of Y4B and the Location of the surveyed point.

Figure 93: Photograph and Location of surveyed point Y4B; Source: Author

3.2.30.1 Surveyed Data of Y4B

The following Table shows the descriptives of Surveyed Point Y4B.

Descriptives of Surveyed Point Y4B

		Age		Gender		Highest Education Qualification		Industrial Experience	
		N	Mean	N	Mean		N	Mean		N	Mean
Y4Bas	20-29	43	2.44	Male	55	2.62	Bachelors	73	2.41	Less than 1 Year	5	3.40
	30-39	46	2.70	Female	43	2.56	Masters	24	3.29	2 - 5 Years	74	2.45
	40-49	10	2.80	Prefer not to say	2	3.50	MPhil	1	2.00	6 -10 Years	10	3.30
	50-59	1	4.00				PhD	2	2.00	11 - 15 Years	5	2.20
										More than 15 Years	6	3.17
	Total	100	2.61	Total	100	2.61	Total	100	2.61	Total	100	2.61
Y4Bna	20-29	43	3.00	Male	55	2.82	Bachelors	73	2.81	Less than 1 Year	5	2.80
	30-39	46	2.91	Female	43	3.02	Masters	24	3.17	2 - 5 Years	74	2.89
	40-49	10	2.50	Prefer not to say	2	3.50	MPhil	1	3.00	6 -10 Years	10	3.70
	50-59	1	4.00				PhD	2	4.00	11 - 15 Years	5	2.00
										More than 15 Years	6	2.83
	Total	100	2.92	Total	100	2.92	Total	100	2.92	Total	100	2.92
Y4Baa	20-29	43	3.44	Male	55	3.64	Bachelors	73	3.37	Less than 1 Year	5	4.00
	30-39	46	3.57	Female	43	3.35	Masters	24	4.00	2 - 5 Years	74	3.43
	40-49	10	3.50	Prefer not to say	2	4.00	MPhil	1	2.00	6 -10 Years	10	4.10
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	2.40
										More than 15 Years	6	4.17
	Total	100	3.52	Total	100	3.52	Total	100	3.52	Total	100	3.52

Figure 94: Descriptives of Surveyed Point Y4B; Source: Author

Considering the appearance of the street at point Y4B the mean value of the responses is 2.61, which means the perception of respondents in terms of appearance of the street at point Y4B is neutral.

Considering the number of OAs in the street at point Y4B the mean value of the responses is 2.92, which means the perception of respondents in terms of number of OAs in the street at point Y4B is moderate.

Considering the appearance of OAs in the street at point Y4B the mean value of the responses is 3.52, which means the perception of respondents in terms of appearance of the street at point Y4B is very ugly.

3.2.31 Y5A

The following Figure shows the photograph of the surveyed point of Y5A and the Location of the surveyed point.

Figure 95: Photograph and Location of surveyed point Y5A; Source: Author

3.2.31.1 Surveyed Data of Y5A

The following Table shows the descriptives of Surveyed Point Y5A.

Descriptives of Surveyed Point Y5A

		Age		Gender		Highest Education Qualification		Industrial Experience	
		N	Mean	N	Mean		N	Mean		N	Mean
Y5Aas	20-29	43	4.02	Male	55	3.78	Bachelors	73	3.84	Less than 1 Year	5	3.80
	30-39	46	3.85	Female	43	4.14	Masters	24	4.21	2 - 5 Years	74	3.91
	40-49	10	4.00	Prefer not to say	2	4.50	MPhil	1	5.00	6 -10 Years	10	4.40
	50-59	1	5.00				PhD	2	4.50	11 - 15 Years	5	3.20
										More than 15 Years	6	4.50
	Total	100	3.95	Total	100	3.95	Total	100	3.95	Total	100	3.95
Y5Ana	20-29	43	4.30	Male	55	4.07	Bachelors	73	4.16	Less than 1 Year	5	4.20
	30-39	46	4.20	Female	43	4.42	Masters	24	4.38	2 - 5 Years	74	4.20
	40-49	10	4.00	Prefer not to say	2	4.50	MPhil	1	5.00	6 -10 Years	10	4.60
	50-59	1	5.00				PhD	2	4.50	11 - 15 Years	5	3.80
										More than 15 Years	6	4.33
	Total	100	4.23	Total	100	4.23	Total	100	4.23	Total	100	4.23
Y5Aaa	20-29	43	4.67	Male	55	4.53	Bachelors	73	4.56	Less than 1 Year	5	4.60
	30-39	46	4.52	Female	43	4.63	Masters	24	4.58	2 - 5 Years	74	4.59
	40-49	10	4.40	Prefer not to say	2	5.00	MPhil	1	5.00	6 -10 Years	10	4.80
	50-59	1	5.00				PhD	2	5.00	11 - 15 Years	5	3.80
										More than 15 Years	6	4.67
	Total	100	4.58	Total	100	4.58	Total	100	4.58	Total	100	4.58

Figure 96: Descriptives of Surveyed Point Y5A; Source: Author

Considering the appearance of the street at point Y5A the mean value of the responses is 3.95, which means the perception of respondents in terms of appearance of the street at point Y5A is do not like.

Considering the number of OAs in the street at point Y5A the mean value of the responses is 4.23, which means the perception of respondents in terms of number of OAs in the street at point Y5A is many.

Considering the appearance of OAs in the street at point Y5A the mean value of the responses is 4.58, which means the perception of respondents in terms of appearance of the street at point Y5A is very ugly.

3.2.32 Y5B

The following Figure shows the photograph of the surveyed point of Y5B and the Location of the surveyed point.

Figure 97: Photograph and Location of surveyed point Y5B; Source: Author

3.2.32.1 Surveyed Data of Y5B

The following Table shows the descriptives of Surveyed Point Y5B.

Descriptives of Surveyed Point Y5B

	Age			Gender		Highest Education Qualification			Industrial Experience	
		N	Mean		N	Mean		N	Mean		N	Mean
Y5Bas	20-29	43	4.02	Male	55	3.91	Bachelors	73	3.86	Less than 1 Year	5	4.00
	30-39	46	3.96	Female	43	4.12	Masters	24	4.38	2 - 5 Years	74	3.95
	40-49	10	4.10	Prefer not to say	2	4.50	MPhil	1	5.00	6 -10 Years	10	4.40
	50-59	1	5.00				PhD	2	4.50	11 - 15 Years	5	3.80
										More than 15 Years	6	4.33
	Total	100	4.01	Total	100	4.01	Total	100	4.01	Total	100	4.01
Y5Bna	20-29	43	4.33	Male	55	4.15	Bachelors	73	4.25	Less than 1 Year	5	4.40
	30-39	46	4.33	Female	43	4.49	Masters	24	4.42	2 - 5 Years	74	4.28
	40-49	10	4.00	Prefer not to say	2	4.50	MPhil	1	5.00	6 -10 Years	10	4.60
	50-59	1	5.00				PhD	2	4.50	11 - 15 Years	5	3.80
										More than 15 Years	6	4.33
	Total	100	4.30	Total	100	4.30	Total	100	4.30	Total	100	4.30
Y5Baa	20-29	43	4.65	Male	55	4.71	Bachelors	73	4.68	Less than 1 Year	5	4.60
	30-39	46	4.78	Female	43	4.70	Masters	24	4.75	2 - 5 Years	74	4.74
	40-49	10	4.60	Prefer not to say	2	5.00	MPhil	1	5.00	6 -10 Years	10	4.80
	50-59	1	5.00				PhD	2	5.00	11 - 15 Years	5	3.80
										More than 15 Years	6	5.00
	Total	100	4.71	Total	100	4.71	Total	100	4.71	Total	100	4.71

Figure 98: Descriptives of Surveyed Point Y5B; Source: Author

Considering the appearance of the street at point Y5B the mean value of the responses is 4.01, which means the perception of respondents in terms of appearance of the street at point Y5B is do not like.

Considering the number of OAs in the street at point Y5B the mean value of the responses is 4.30, which means the perception of respondents in terms of number of OAs in the street at point Y5B is many.

Considering the appearance of OAs in the street at point Y5B the mean value of the responses is 4.71, which means the perception of respondents in terms of appearance of the street at point Y5B is very ugly.

3.2.33 Y6A

The following Figure shows the photograph of the surveyed point of Y6A and the Location of the surveyed point.

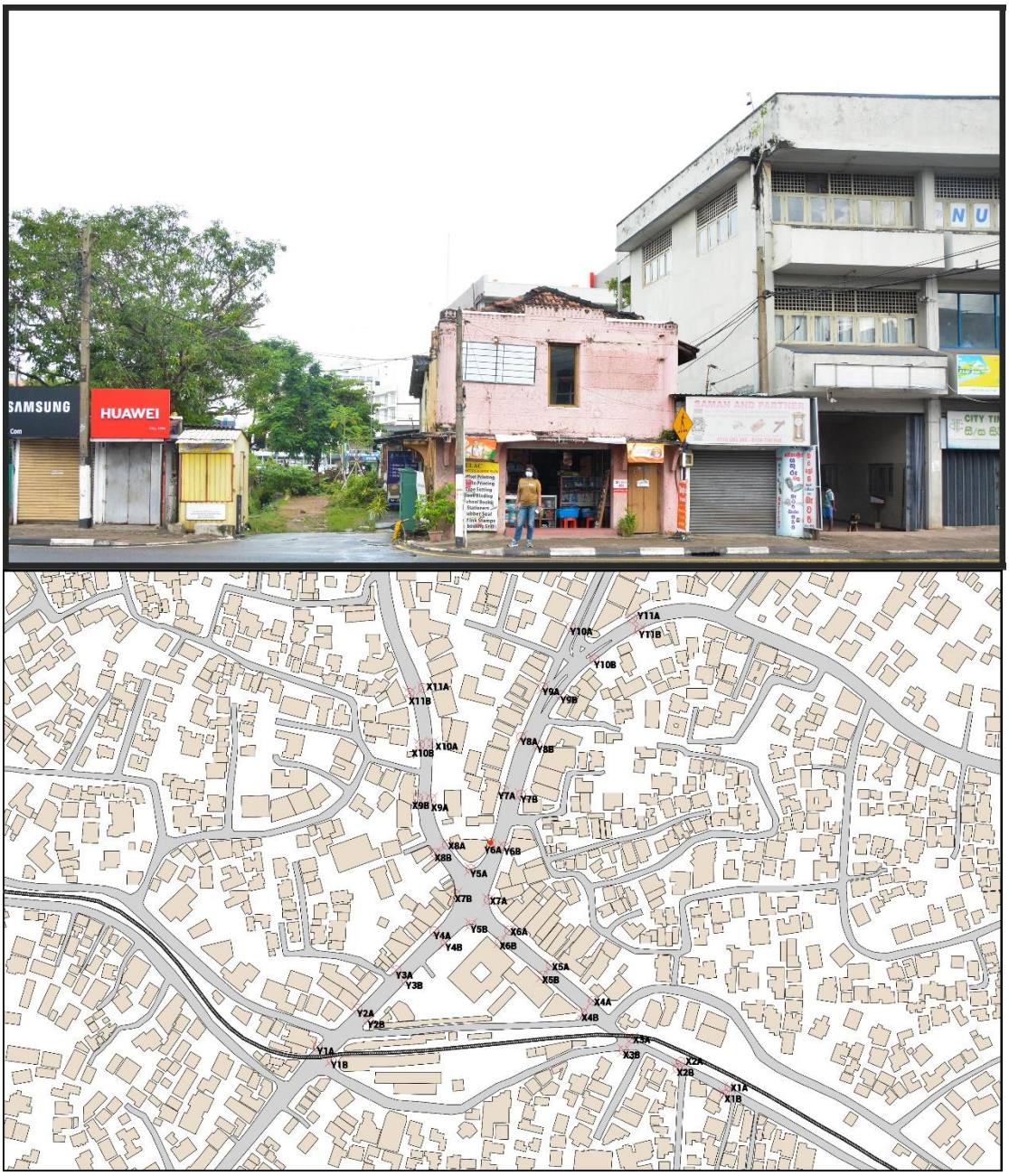


Figure 99: Photograph and Location of surveyed point Y6A; Source: Author

3.2.33.1 Surveyed Data of Y6A

The following Table shows the descriptives of Surveyed Point Y6A.

Descriptives of Surveyed Point Y6A

	Age			Gender		Highest Education Qualification			Industrial Experience	
		N	Mean		N	Mean		N	Mean		N	Mean
Y6Aas	20-29	43	4.12	Male	55	4.11	Bachelors	73	4.10	Less than 1 Year	5	4.20
	30-39	46	4.24	Female	43	4.26	Masters	24	4.46	2 - 5 Years	74	4.16
	40-49	10	4.20	Prefer not to say	2	5.00	MPhil	1	4.00	6 -10 Years	10	4.30
	50-59	1	5.00				PhD	2	4.50	11 - 15 Years	5	4.40
										More than 15 Years	6	4.17
	Total	100	4.19	Total	100	4.19	Total	100	4.19	Total	100	4.19
Y6Ana	20-29	43	3.72	Male	55	3.55	Bachelors	73	3.52	Less than 1 Year	5	3.20
	30-39	46	3.52	Female	43	3.72	Masters	24	3.96	2 - 5 Years	74	3.61
	40-49	10	3.80	Prefer not to say	2	5.00	MPhil	1	4.00	6 -10 Years	10	4.00
	50-59	1	5.00				PhD	2	4.50	11 - 15 Years	5	4.00
										More than 15 Years	6	3.67
	Total	100	3.65	Total	100	3.65	Total	100	3.65	Total	100	3.65
Y6Aaa	20-29	43	4.67	Male	55	4.55	Bachelors	73	4.55	Less than 1 Year	5	4.60
	30-39	46	4.41	Female	43	4.53	Masters	24	4.58	2 - 5 Years	74	4.58
	40-49	10	4.60	Prefer not to say	2	5.00	MPhil	1	3.00	6 -10 Years	10	4.20
	50-59	1	5.00				PhD	2	5.00	11 - 15 Years	5	5.00
										More than 15 Years	6	4.33
	Total	100	4.55	Total	100	4.55	Total	100	4.55	Total	100	4.55

Figure 100: Descriptives of Surveyed Point Y6A; Source: Author

Considering the appearance of the street at point Y6A the mean value of the responses is 4.19, which means the perception of respondents in terms of appearance of the street at point Y6A is do not like.

Considering the number of OAs in the street at point Y6A the mean value of the responses is 3.65, which means the perception of respondents in terms of number of OAs in the street at point Y6A is many.

Considering the appearance of OAs in the street at point Y6A the mean value of the responses is 4.55, which means the perception of respondents in terms of appearance of the street at point Y6A is very ugly.

3.2.34 Y6B

The following Figure shows the photograph of the surveyed point of Y6B and the Location of the surveyed point.

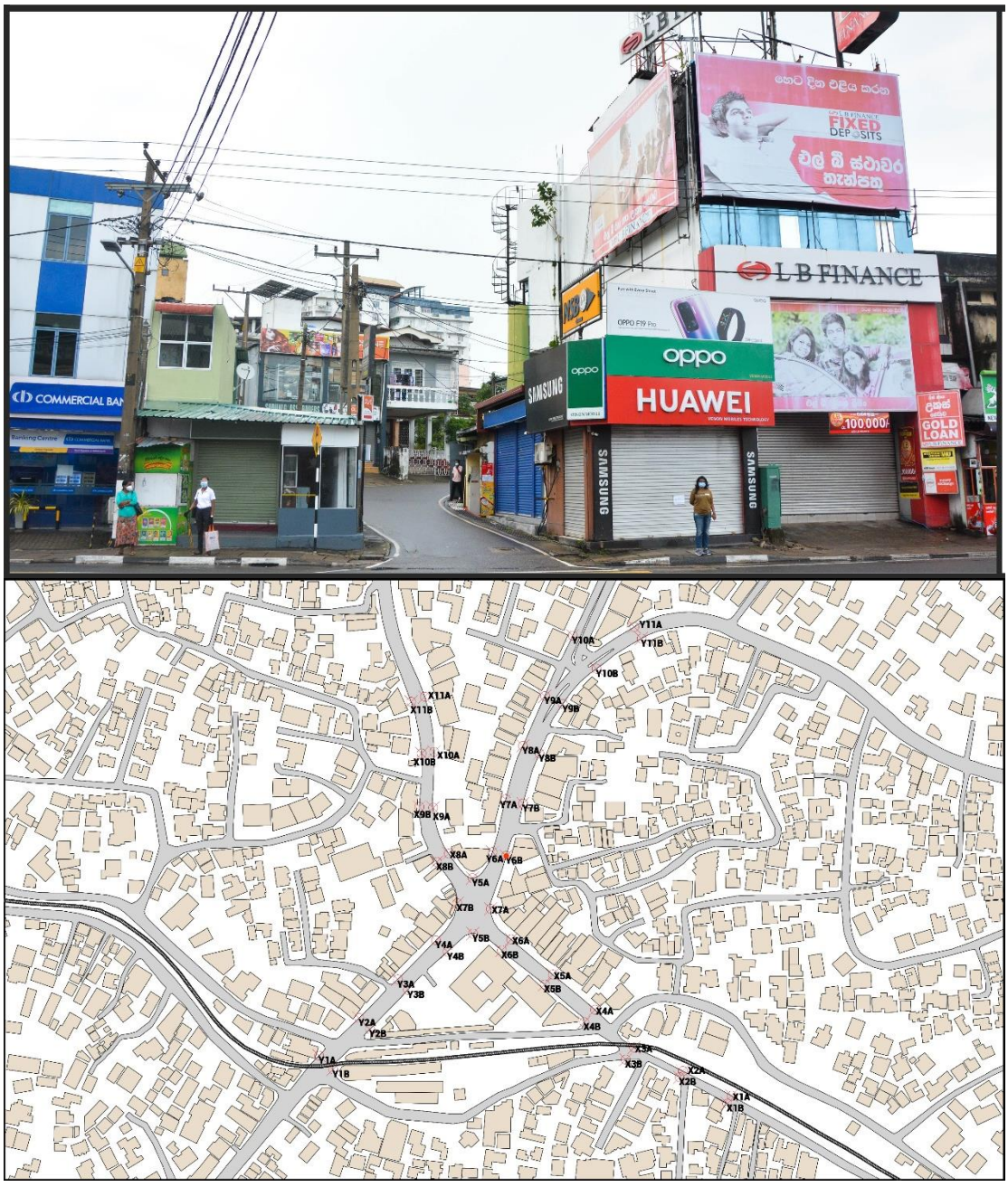


Figure 101: Photograph and Location of surveyed point Y6B; Source: Author

3.2.34.1 Surveyed Data of Y6B

The following Table shows the descriptives of Surveyed Point Y6B.

Descriptives of Surveyed Point Y6B

		Age		Gender		Highest Education Qualification		Industrial Experience	
		N	Mean	N	Mean		N	Mean		N	Mean
Y6Bas	20-29	43	4.12	Male	55	4.13	Bachelors	73	4.14	Less than 1 Year	5	4.00
	30-39	46	4.22	Female	43	4.33	Masters	24	4.54	2 - 5 Years	74	4.14
	40-49	10	4.70	Prefer not to say	2	5.00	MPhil	1	5.00	6 -10 Years	10	4.60
	50-59	1	5.00				PhD	2	3.50	11 - 15 Years	5	4.60
										More than 15 Years	6	4.67
	Total	100	4.23	Total	100	4.23	Total	100	4.23	Total	100	4.23
Y6Bna	20-29	43	4.40	Male	55	4.40	Bachelors	73	4.37	Less than 1 Year	5	4.00
	30-39	46	4.48	Female	43	4.51	Masters	24	4.71	2 - 5 Years	74	4.43
	40-49	10	4.60	Prefer not to say	2	5.00	MPhil	1	5.00	6 -10 Years	10	4.70
	50-59	1	5.00				PhD	2	4.50	11 - 15 Years	5	4.80
										More than 15 Years	6	4.50
	Total	100	4.46	Total	100	4.46	Total	100	4.46	Total	100	4.46
Y6Baa	20-29	43	4.91	Male	55	4.78	Bachelors	73	4.81	Less than 1 Year	5	4.60
	30-39	46	4.78	Female	43	4.91	Masters	24	4.92	2 - 5 Years	74	4.86
	40-49	10	4.80	Prefer not to say	2	5.00	MPhil	1	5.00	6 -10 Years	10	5.00
	50-59	1	5.00				PhD	2	5.00	11 - 15 Years	5	4.60
										More than 15 Years	6	4.67
	Total	100	4.84	Total	100	4.84	Total	100	4.84	Total	100	4.84

Figure 102: Descriptives of Surveyed Point Y6B; Source: Author

Considering the appearance of the street at point Y6B the mean value of the responses is 4.23, which means the perception of respondents in terms of appearance of the street at point Y6B is do not like.

Considering the number of OAs in the street at point Y6B the mean value of the responses is 4.46, which means the perception of respondents in terms of number of OAs in the street at point Y6B is many.

Considering the appearance of OAs in the street at point Y6B the mean value of the responses is 4.84, which means the perception of respondents in terms of appearance of the street at point Y6B is very ugly.

3.2.35 Y7A

The following Figure shows the photograph of the surveyed point of Y7A and the Location of the surveyed point.

Figure 103: Photograph and Location of surveyed point Y7A; Source: Author

3.2.35.1 Surveyed Data of Y7A

The following Table shows the descriptives of Surveyed Point Y7A.

Descriptives of Surveyed Point Y7A

	Age			Gender		Highest Education Qualification		Industrial Experience		
		N	Mean		N	Mean		N	Mean		N	Mean
Y7Aas	20-29	43	3.91	Male	55	3.87	Bachelors	73	3.92	Less than 1 Year	5	3.80
	30-39	46	3.98	Female	43	4.09	Masters	24	4.25	2 - 5 Years	74	3.95
	40-49	10	4.10	Prefer not to say	2	4.00	MPhil	1	4.00	6 -10 Years	10	4.00
	50-59	1	5.00				PhD	2	2.50	11 - 15 Years	5	3.60
										More than 15 Years	6	4.67
	Total	100	3.97	Total	100	3.97	Total	100	3.97	Total	100	3.97
Y7Ana	20-29	43	4.16	Male	55	3.98	Bachelors	73	4.10	Less than 1 Year	5	4.00
	30-39	46	4.13	Female	43	4.28	Masters	24	4.17	2 - 5 Years	74	4.16
	40-49	10	3.70	Prefer not to say	2	4.00	MPhil	1	4.00	6 -10 Years	10	4.10
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	3.80
										More than 15 Years	6	3.83
	Total	100	4.11	Total	100	4.11	Total	100	4.11	Total	100	4.11
Y7Aaa	20-29	43	4.74	Male	55	4.69	Bachelors	73	4.70	Less than 1 Year	5	5.00
	30-39	46	4.65	Female	43	4.77	Masters	24	4.79	2 - 5 Years	74	4.69
	40-49	10	4.80	Prefer not to say	2	4.00	MPhil	1	5.00	6 -10 Years	10	4.60
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	4.60
										More than 15 Years	6	5.00
	Total	100	4.71	Total	100	4.71	Total	100	4.71	Total	100	4.71

Figure 104: Descriptives of Surveyed Point Y7A; Source: Author

Considering the appearance of the street at point Y7A the mean value of the responses is 3.97, which means the perception of respondents in terms of appearance of the street at point Y7A is do not like.

Considering the number of OAs in the street at point Y7A the mean value of the responses is 4.11, which means the perception of respondents in terms of number of OAs in the street at point Y7A is many.

Considering the appearance of OAs in the street at point Y7A the mean value of the responses is 4.71, which means the perception of respondents in terms of appearance of the street at point Y7A is very ugly.

3.2.36 Y7B

The following Figure shows the photograph of the surveyed point of Y7B and the Location of the surveyed point.

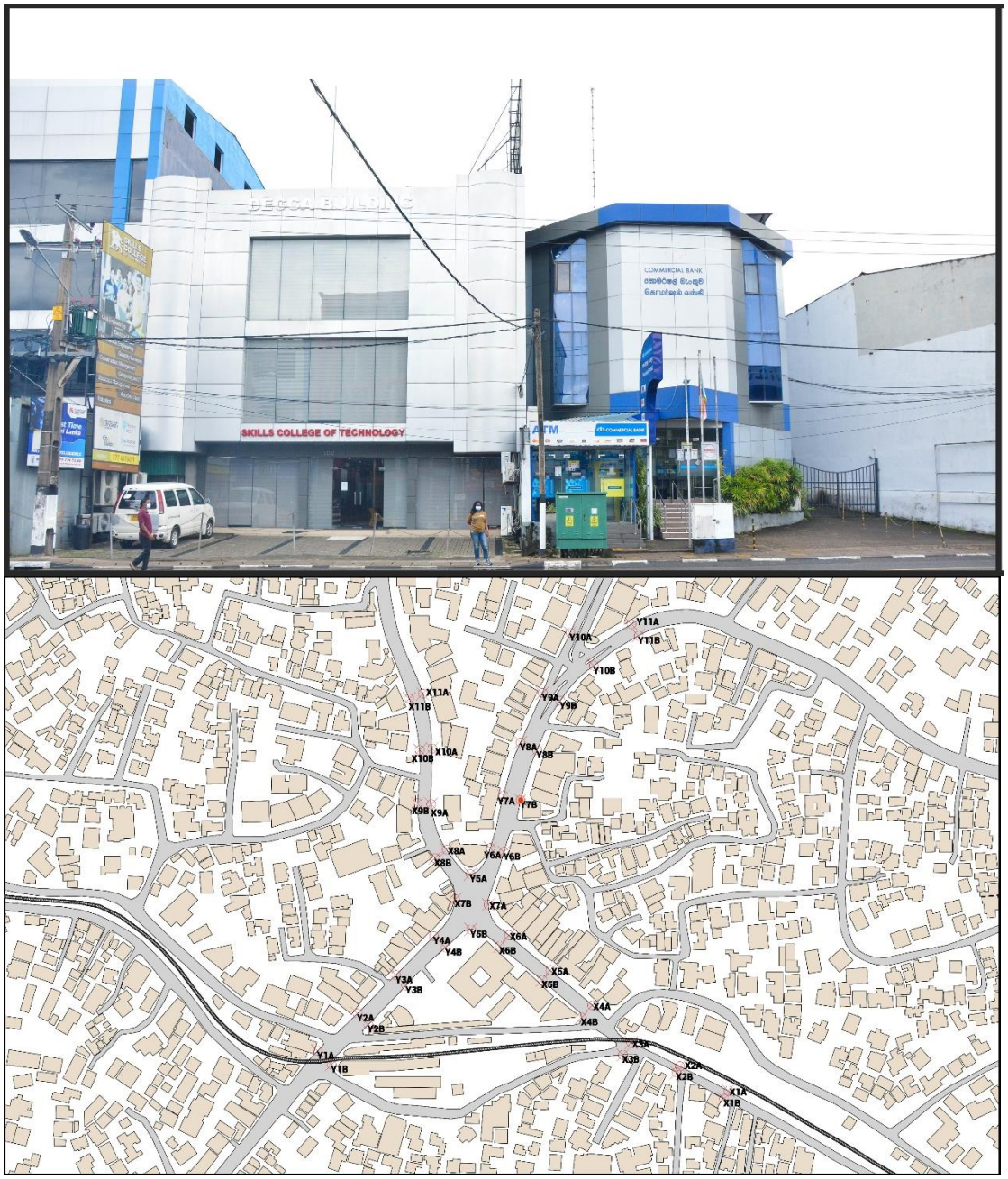


Figure 105: Photograph and Location of surveyed point Y7B; Source: Author

3.2.36.1 Surveyed Data of Y7B

The following Table shows the descriptives of Surveyed Point Y7B.

Descriptives of Surveyed Point Y7B

	Age			Gender		Highest Education Qualification			Industrial Experience	
		N	Mean		N	Mean		N	Mean		N	Mean
Y7Bas	20-29	43	3.33	Male	55	3.45	Bachelors	73	3.32	Less than 1 Year	5	3.20
	30-39	46	3.48	Female	43	3.44	Masters	24	3.88	2 - 5 Years	74	3.42
	40-49	10	3.90	Prefer not to say	2	4.00	MPhil	1	4.00	6 -10 Years	10	3.60
	50-59	1	4.00				PhD	2	3.50	11 - 15 Years	5	3.60
										More than 15 Years	6	3.83
	Total	100	3.46	Total	100	3.46	Total	100	3.46	Total	100	3.46
Y7Bna	20-29	43	3.21	Male	55	3.02	Bachelors	73	3.12	Less than 1 Year	5	2.60
	30-39	46	3.07	Female	43	3.23	Masters	24	3.13	2 - 5 Years	74	3.12
	40-49	10	2.90	Prefer not to say	2	4.00	MPhil	1	3.00	6 -10 Years	10	3.60
	50-59	1	5.00				PhD	2	3.50	11 - 15 Years	5	3.20
										More than 15 Years	6	2.83
	Total	100	3.13	Total	100	3.13	Total	100	3.13	Total	100	3.13
Y7Baa	20-29	43	3.77	Male	55	3.89	Bachelors	73	3.73	Less than 1 Year	5	3.20
	30-39	46	3.78	Female	43	3.72	Masters	24	4.04	2 - 5 Years	74	3.80
	40-49	10	4.10	Prefer not to say	2	4.00	MPhil	1	5.00	6 -10 Years	10	4.20
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	4.00
										More than 15 Years	6	3.83
	Total	100	3.82	Total	100	3.82	Total	100	3.82	Total	100	3.82

Figure 106: Descriptives of Surveyed Point Y7B; Source: Author

Considering the appearance of the street at point Y7B the mean value of the responses is 3.46, which means the perception of respondents in terms of appearance of the street at point Y7B is neutral.

Considering the number of OAs in the street at point Y7B the mean value of the responses is 3.13, which means the perception of respondents in terms of number of OAs in the street at point Y7B is moderate.

Considering the appearance of OAs in the street at point Y7B the mean value of the responses is 3.82, which means the perception of respondents in terms of appearance of the street at point Y7B is ugly.

3.2.37 Y8A

The following Figure shows the photograph of the surveyed point of Y8A and the Location of the surveyed point.

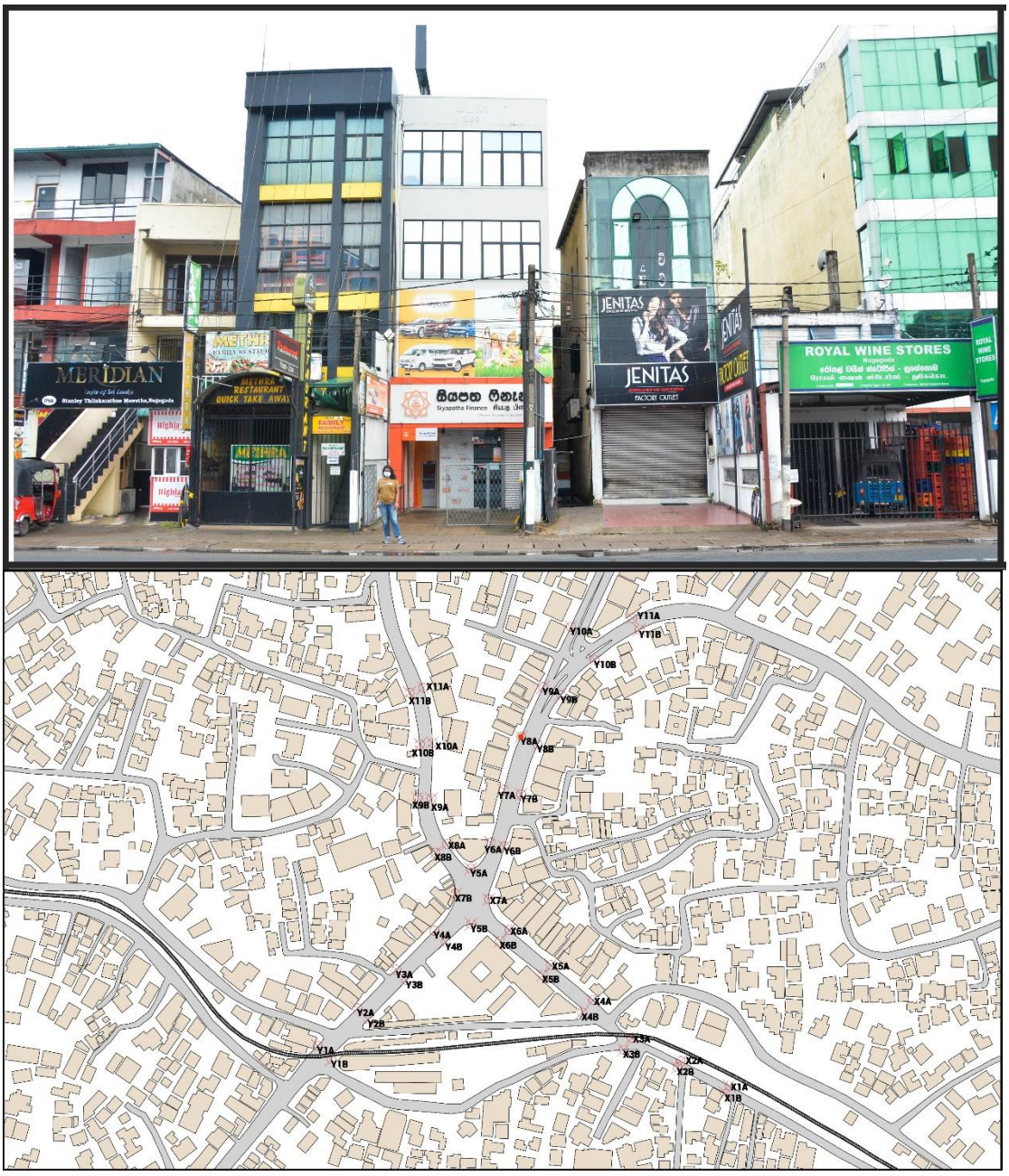


Figure 107: Photograph and Location of surveyed point Y8A; Source: Author

3.2.37.1 Surveyed Data of Y8A

The following Table shows the descriptives of Surveyed Point Y8A.

Descriptives of Surveyed Point Y8A

		Age		Gender		Highest Education Qualification		Industrial Experience	
		N	Mean	N	Mean		N	Mean		N	Mean
Y8Aas	20-29	43	4.07	Male	55	4.16	Bachelors	73	4.11	Less than 1 Year	5	4.20
	30-39	46	4.26	Female	43	4.19	Masters	24	4.42	2 - 5 Years	74	4.15
	40-49	10	4.20	Prefer not to say	2	4.50	MPhil	1	5.00	6 -10 Years	10	4.40
	50-59	1	5.00				PhD	2	3.50	11 - 15 Years	5	3.80
										More than 15 Years	6	4.50
	Total	100	4.18	Total	100	4.18	Total	100	4.18	Total	100	4.18
Y8Ana	20-29	43	4.37	Male	55	4.22	Bachelors	73	4.26	Less than 1 Year	5	4.20
	30-39	46	4.17	Female	43	4.28	Masters	24	4.17	2 - 5 Years	74	4.26
	40-49	10	4.00	Prefer not to say	2	4.50	MPhil	1	5.00	6 -10 Years	10	4.40
	50-59	1	5.00				PhD	2	4.50	11 - 15 Years	5	4.20
										More than 15 Years	6	4.00
	Total	100	4.25	Total	100	4.25	Total	100	4.25	Total	100	4.25
Y8Aaa	20-29	43	4.77	Male	55	4.64	Bachelors	73	4.70	Less than 1 Year	5	5.00
	30-39	46	4.65	Female	43	4.77	Masters	24	4.75	2 - 5 Years	74	4.65
	40-49	10	4.60	Prefer not to say	2	5.00	MPhil	1	5.00	6 -10 Years	10	5.00
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	5.00
										More than 15 Years	6	4.33
	Total	100	4.70	Total	100	4.70	Total	100	4.70	Total	100	4.70

Figure 108: Descriptives of Surveyed Point Y8A; Source: Author

Considering the appearance of the street at point Y8A the mean value of the responses is 4.18, which means the perception of respondents in terms of appearance of the street at point Y8A is do not like.

Considering the number of OAs in the street at point Y8A the mean value of the responses is 4.25, which means the perception of respondents in terms of number of OAs in the street at point Y8A is many.

Considering the appearance of OAs in the street at point Y8A the mean value of the responses is 4.70, which means the perception of respondents in terms of appearance of the street at point Y8A is very ugly.

3.2.38 Y8B

The following Figure shows the photograph of the surveyed point of Y8B and the Location of the surveyed point.

Figure 109: Photograph and Location of surveyed point Y8B; Source: Author

3.2.38.1 Surveyed Data of Y8B

The following Table shows the descriptives of Surveyed Point Y8B.

Descriptives of Surveyed Point Y8B

		Age		Gender		Highest Education Qualification		Industrial Experience	
		N	Mean	N	Mean		N	Mean		N	Mean
Y8Bas	20-29	43	3.81	Male	55	3.95	Bachelors	73	3.77	Less than 1 Year	5	4.20
	30-39	46	3.93	Female	43	3.86	Masters	24	4.42	2 - 5 Years	74	3.86
	40-49	10	4.20	Prefer not to say	2	4.50	MPhil	1	4.00	6 -10 Years	10	4.00
	50-59	1	5.00				PhD	2	3.50	11 - 15 Years	5	3.60
										More than 15 Years	6	4.50
	Total	100	3.92	Total	100	3.92	Total	100	3.92	Total	100	3.92
Y8Bna	20-29	43	4.05	Male	55	3.95	Bachelors	73	3.89	Less than 1 Year	5	3.80
	30-39	46	3.80	Female	43	3.91	Masters	24	4.04	2 - 5 Years	74	3.93
	40-49	10	4.00	Prefer not to say	2	4.50	MPhil	1	4.00	6 -10 Years	10	4.10
	50-59	1	5.00				PhD	2	4.50	11 - 15 Years	5	3.80
										More than 15 Years	6	4.00
	Total	100	3.94	Total	100	3.94	Total	100	3.94	Total	100	3.94
Y8Baa	20-29	43	4.49	Male	55	4.42	Bachelors	73	4.30	Less than 1 Year	5	5.00
	30-39	46	4.33	Female	43	4.42	Masters	24	4.83	2 - 5 Years	74	4.35
	40-49	10	4.60	Prefer not to say	2	5.00	MPhil	1	5.00	6 -10 Years	10	4.80
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	4.40
										More than 15 Years	6	4.33
	Total	100	4.43	Total	100	4.43	Total	100	4.43			

Figure 110: Descriptives of Surveyed Point Y8B; Source: Author

Considering the appearance of the street at point Y8B the mean value of the responses is 3.92, which means the perception of respondents in terms of appearance of the street at point Y8B is do not like.

Considering the number of OAs in the street at point Y8B the mean value of the responses is 3.94, which means the perception of respondents in terms of number of OAs in the street at point Y8B is many.

Considering the appearance of OAs in the street at point Y8B the mean value of the responses is 4.43, which means the perception of respondents in terms of appearance of the street at point Y8B is ugly.

3.2.39 Y9A

The following Figure shows the photograph of the surveyed point of Y9A and the Location of the surveyed point.

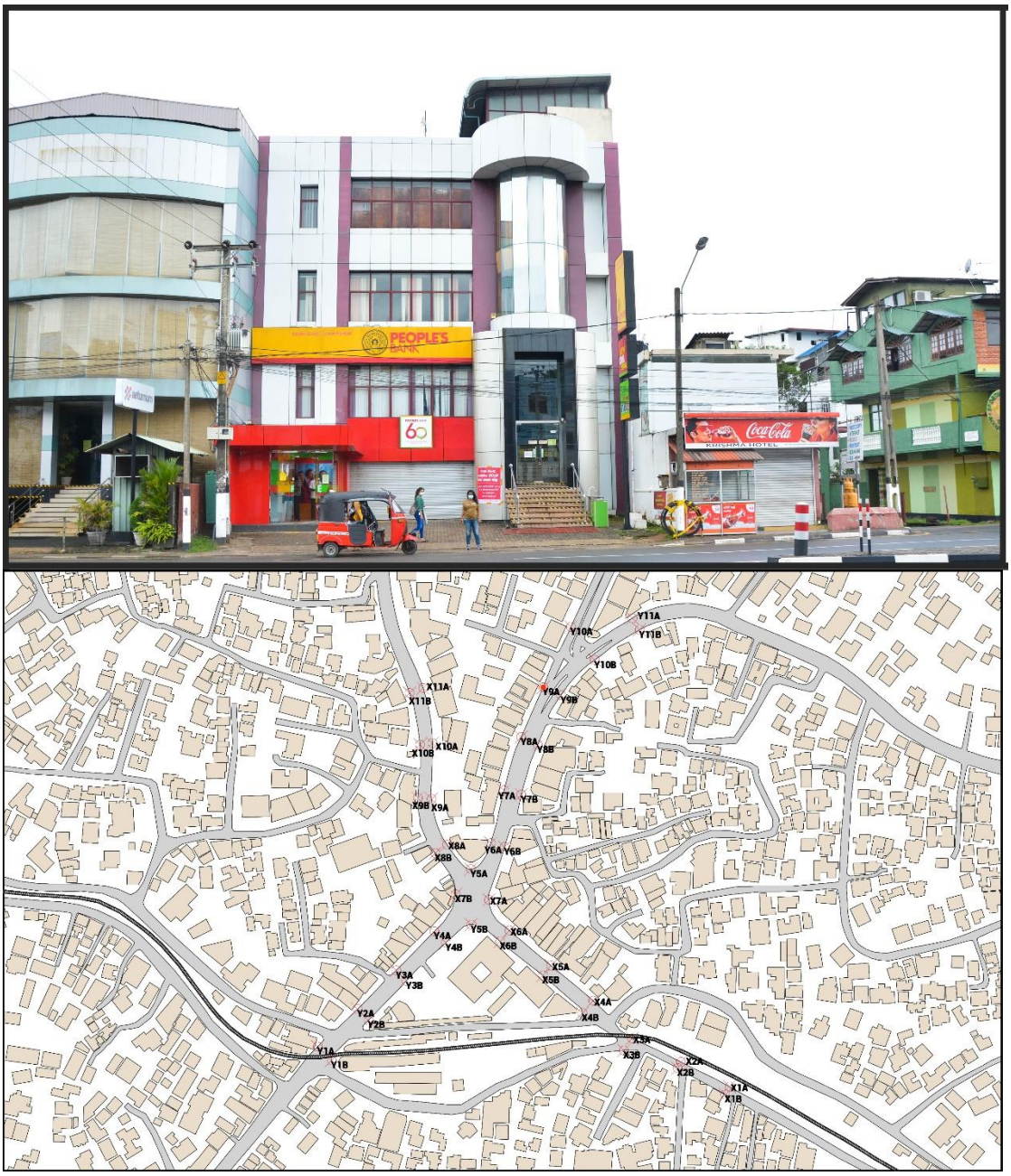


Figure 111: Photograph and Location of surveyed point Y9A; Source: Author

3.2.39.1 Surveyed Data of Y9A

The following Table shows the descriptives of Surveyed Point Y9A.

Descriptives of Surveyed Point Y9A

		Age			Gender		Highest Education Qualification			Industrial Experience	
		N	Mean		N	Mean		N	Mean		N	Mean
Y9Aas	20-29	43	3.79	Male	55	3.93	Bachelors	73	3.74	Less than 1 Year	5	3.80
	30-39	46	3.83	Female	43	3.72	Masters	24	4.13	2 - 5 Years	74	3.84
	40-49	10	4.10	Prefer not to say	2	4.00	MPhil	1	4.00	6 -10 Years	10	3.70
	50-59	1	4.00				PhD	2	4.00	11 - 15 Years	5	3.60
										More than 15 Years	6	4.33
	Total	100	3.84	Total	100	3.84	Total	100	3.84	Total	100	3.84
Y9Ana	20-29	43	3.74	Male	55	3.64	Bachelors	73	3.55	Less than 1 Year	5	4.20
	30-39	46	3.54	Female	43	3.63	Masters	24	3.96	2 - 5 Years	74	3.58
	40-49	10	3.50	Prefer not to say	2	4.00	MPhil	1	3.00	6 -10 Years	10	3.80
	50-59	1	5.00				PhD	2	3.50	11 - 15 Years	5	3.60
										More than 15 Years	6	3.67
	Total	100	3.64	Total	100	3.64	Total	100	3.64	Total	100	3.64
Y9Aaa	20-29	43	4.30	Male	55	4.36	Bachelors	73	4.23	Less than 1 Year	5	5.00
	30-39	46	4.26	Female	43	4.23	Masters	24	4.58	2 - 5 Years	74	4.27
	40-49	10	4.40	Prefer not to say	2	4.00	MPhil	1	3.00	6 -10 Years	10	4.20
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	4.20
										More than 15 Years	6	4.33
	Total	100	4.30	Total	100	4.30	Total	100	4.30	Total	100	4.30

Figure 112: Descriptives of Surveyed Point Y9A; Source: Author

Considering the appearance of the street at point Y9A the mean value of the responses is 3.84, which means the perception of respondents in terms of appearance of the street at point Y9A is do not like.

Considering the number of OAs in the street at point Y9A the mean value of the responses is 3.64, which means the perception of respondents in terms of number of OAs in the street at point Y9A is many.

Considering the appearance of OAs in the street at point Y9A the mean value of the responses is 4.30, which means the perception of respondents in terms of appearance of the street at point Y9A is ugly.

3.2.40 Y9B

The following Figure shows the photograph of the surveyed point of Y9B and the Location of the surveyed point.

Figure 113: Photograph and Location of surveyed point Y9B; Source: Author

3.2.40.1 Surveyed Data of Y9B

The following Table shows the descriptives of Surveyed Point Y9B.

Descriptives of Surveyed Point Y9B

		Age		Gender		Highest Education Qualification		Industrial Experience	
		N	Mean	N	Mean		N	Mean		N	Mean
Y9Bas	20-29	43	3.72	Male	55	3.65	Bachelors	73	3.53	Less than 1 Year	5	3.80
	30-39	46	3.54	Female	43	3.70	Masters	24	4.08	2 - 5 Years	74	3.65
	40-49	10	4.00	Prefer not to say	2	4.00	MPhil	1	4.00	6 -10 Years	10	3.60
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	3.20
										More than 15 Years	6	4.50
	Total	100	3.68	Total	100	3.68	Total	100	3.68	Total	100	3.68
Y9Bna	20-29	43	3.77	Male	55	3.62	Bachelors	73	3.55	Less than 1 Year	5	4.20
	30-39	46	3.52	Female	43	3.67	Masters	24	4.00	2 - 5 Years	74	3.59
	40-49	10	3.60	Prefer not to say	2	4.00	MPhil	1	3.00	6 -10 Years	10	3.80
	50-59	1	5.00				PhD	2	3.50	11 - 15 Years	5	3.40
										More than 15 Years	6	3.83
	Total	100	3.65	Total	100	3.65	Total	100	3.65	Total	100	3.65
Y9Baa	20-29	43	4.12	Male	55	4.07	Bachelors	73	3.97	Less than 1 Year	5	5.00
	30-39	46	4.02	Female	43	4.16	Masters	24	4.58	2 - 5 Years	74	4.00
	40-49	10	4.40	Prefer not to say	2	4.00	MPhil	1	3.00	6 -10 Years	10	4.40
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	3.60
										More than 15 Years	6	4.67
	Total	100	4.11	Total	100	4.11	Total	100	4.11	Total	100	4.11

Figure 114: Descriptives of Surveyed Point Y9B; Source: Author

Considering the appearance of the street at point Y9B the mean value of the responses is 3.68, which means the perception of respondents in terms of appearance of the street at point Y9B is do not like.

Considering the number of OAs in the street at point Y9B the mean value of the responses is 3.65, which means the perception of respondents in terms of number of OAs in the street at point Y9B is many.

Considering the appearance of OAs in the street at point Y9B the mean value of the responses is 4.11, which means the perception of respondents in terms of appearance of the street at point Y9B is ugly.

3.2.41 Y10A

The following Figure shows the photograph of the surveyed point of Y10A and the Location of the surveyed point.

Figure 115: Photograph and Location of surveyed point Y10A; Source: Author

3.2.41.1 Surveyed Data of Y10A

The following Table shows the descriptives of Surveyed Point Y10A.

Descriptives of Surveyed Point Y10A

		Age		Gender		Highest Education Qualification		Industrial Experience	
		N	Mean	N	Mean	N	Mean	N	Mean
Y10Aas	20-29	43	3.65	Male 55	3.78	Bachelors 73	3.62	Less than 1 Year 5	4.00
	30-39	46	3.72	Female 43	3.72	Masters 24	4.29	2 - 5 Years 74	3.70
	40-49	10	4.30	Prefer not to say 2	4.00	MPhil 1	2.00	6 -10 Years 10	3.60
	50-59	1	5.00			PhD 2	3.50	11 - 15 Years 5	3.80
								More than 15 Years 6	4.50
	Total	100	3.76	Total 100	3.76	Total 100	3.76	Total 100	3.76
Y10Ana	20-29	43	3.47	Male 55	3.40	Bachelors 73	3.27	Less than 1 Year 5	3.20
	30-39	46	3.24	Female 43	3.30	Masters 24	3.75	2 - 5 Years 74	3.34
	40-49	10	3.60	Prefer not to say 2	4.50	MPhil 1	3.00	6 -10 Years 10	3.50
	50-59	1	4.00			PhD 2	3.00	11 - 15 Years 5	3.60
								More than 15 Years 6	3.67
	Total	100	3.38	Total 100	3.38	Total 100	3.38	Total 100	3.38
Y10Aaa	20-29	43	4.14	Male 55	4.36	Bachelors 73	4.16	Less than 1 Year 5	5.00
	30-39	46	4.28	Female 43	4.05	Masters 24	4.58	2 - 5 Years 74	4.20
	40-49	10	4.40	Prefer not to say 2	5.00	MPhil 1	2.00	6 -10 Years 10	4.10
	50-59	1	5.00			PhD 2	4.00	11 - 15 Years 5	4.20
								More than 15 Years 6	4.33
	Total	100	4.24	Total 100	4.24	Total 100	4.24	Total 100	4.24

Figure 116: Descriptives of Surveyed Point Y10A; Source: Author

Considering the appearance of the street at point Y10A the mean value of the responses is 3.76, which means the perception of respondents in terms of appearance of the street at point Y10A is do not like.

Considering the number of OAs in the street at point Y10A the mean value of the responses is 3.38, which means the perception of respondents in terms of number of OAs in the street at point Y10A is moderate.

Considering the appearance of OAs in the street at point Y10A the mean value of the responses is 4.24, which means the perception of respondents in terms of appearance of the street at point Y10A is ugly.

3.2.42 Y10B

The following Figure shows the photograph of the surveyed point of Y10B and the Location of the surveyed point.

Figure 117: Photograph and Location of surveyed point Y10B; Source: Author

3.2.42.1 Surveyed Data of Y10B

The following Table shows the descriptives of Surveyed Point Y10B.

Descriptives of Surveyed Point Y10B

		Age		Gender		Highest Education Qualification		Industrial Experience	
		N	Mean	N	Mean	N	Mean	N	Mean
Y10Bas	20-29	43	3.40	Male 55	3.45	Bachelors 73	3.30	Less than 1 Year 5	3.80
	30-39	46	3.39	Female 43	3.37	Masters 24	3.92	2 - 5 Years 74	3.35
	40-49	10	3.70	Prefer not to say 2	4.50	MPhil 1	2.00	6 -10 Years 10	3.60
	50-59	1	5.00			PhD 2	3.50	11 - 15 Years 5	3.20
								More than 15 Years 6	4.17
	Total	100	3.44	Total 100	3.44	Total 100	3.44	Total 100	3.44
Y10Bna	20-29	43	3.05	Male 55	3.07	Bachelors 73	2.97	Less than 1 Year 5	2.80
	30-39	46	3.00	Female 43	2.95	Masters 24	3.25	2 - 5 Years 74	2.99
	40-49	10	3.10	Prefer not to say 2	4.00	MPhil 1	3.00	6 -10 Years 10	3.40
	50-59	1	4.00			PhD 2	3.00	11 - 15 Years 5	3.00
								More than 15 Years 6	3.33
	Total	100	3.04	Total 100	3.04	Total 100	3.04	Total 100	3.04
Y10Baa	20-29	43	4.00	Male 55	4.11	Bachelors 73	3.96	Less than 1 Year 5	3.80
	30-39	46	4.00	Female 43	3.88	Masters 24	4.33	2 - 5 Years 74	4.03
	40-49	10	4.20	Prefer not to say 2	5.00	MPhil 1	2.00	6 -10 Years 10	4.10
	50-59	1	5.00			PhD 2	4.00	11 - 15 Years 5	3.80
								More than 15 Years 6	4.33
	Total	100	4.03	Total 100	4.03	Total 100	4.03	Total 100	4.03

Figure 118: Descriptives of Surveyed Point Y10B; Source: Author

Considering the appearance of the street at point Y10B the mean value of the responses is 3.44, which means the perception of respondents in terms of appearance of the street at point Y10B is neutral.

Considering the number of OAs in the street at point Y10B the mean value of the responses is 3.04, which means the perception of respondents in terms of number of OAs in the street at point Y10B is moderate.

Considering the appearance of OAs in the street at point Y10B the mean value of the responses is 4.03, which means the perception of respondents in terms of appearance of the street at point Y10B is ugly.

3.2.43 Y11A

The following Figure shows the photograph of the surveyed point of Y11A and the Location of the surveyed point.

Figure 119: Photograph and Location of surveyed point Y11A; Source: Author

3.2.43.1 Surveyed Data of Y11A

The following Table shows the descriptives of Surveyed Point Y11A.

Descriptives of Surveyed Point Y11A

	Age			Gender		Highest Education Qualification			Industrial Experience		
		N	Mean		N	Mean		N	Mean		N	Mean
Y11Aas	20-29	43	4.05	Male	55	3.98	Bachelors	73	3.93	Less than 1 Year	5	3.60
	30-39	46	3.89	Female	43	4.00	Masters	24	4.38	2 - 5 Years	74	4.03
	40-49	10	4.30	Prefer not to say	2	4.50	MPhil	1	4.00	6 -10 Years	10	3.80
	50-59	1	4.00				PhD	2	2.00	11 - 15 Years	5	3.60
										More than 15 Years	6	4.67
	Total	100	4.00	Total	100	4.00	Total	100	4.00	Total	100	4.00
Y11Ana	20-29	43	4.14	Male	55	4.05	Bachelors	73	4.03	Less than 1 Year	5	4.00
	30-39	46	3.93	Female	43	3.93	Masters	24	4.00	2 - 5 Years	74	4.07
	40-49	10	3.70	Prefer not to say	2	4.50	MPhil	1	4.00	6 -10 Years	10	3.90
	50-59	1	5.00				PhD	2	3.50	11 - 15 Years	5	3.20
										More than 15 Years	6	4.17
	Total	100	4.01	Total	100	4.01	Total	100	4.01	Total	100	4.01
Y11Aaa	20-29	43	4.72	Male	55	4.42	Bachelors	73	4.47	Less than 1 Year	5	4.00
	30-39	46	4.24	Female	43	4.56	Masters	24	4.67	2 - 5 Years	74	4.49
	40-49	10	4.60	Prefer not to say	2	5.00	MPhil	1	5.00	6 -10 Years	10	4.60
	50-59	1	5.00				PhD	2	3.00	11 - 15 Years	5	4.60
										More than 15 Years	6	4.67
	Total	100	4.49	Total	100	4.49	Total	100	4.49	Total	100	4.49

Figure 120: Descriptives of Surveyed Point Y11A; Source: Author

Considering the appearance of the street at point Y11A the mean value of the responses is 4.0, which means the perception of respondents in terms of appearance of the street at point Y11A is do not like.

Considering the number of OAs in the street at point Y11A the mean value of the responses is 4.01, which means the perception of respondents in terms of number of OAs in the street at point Y11A is many.

Considering the appearance of OAs in the street at point Y11A the mean value of the responses is 4.49, which means the perception of respondents in terms of appearance of the street at point Y11A is ugly.

3.2.44 Y11B

The following Figure shows the photograph of the surveyed point of Y11B and the Location of the surveyed point.

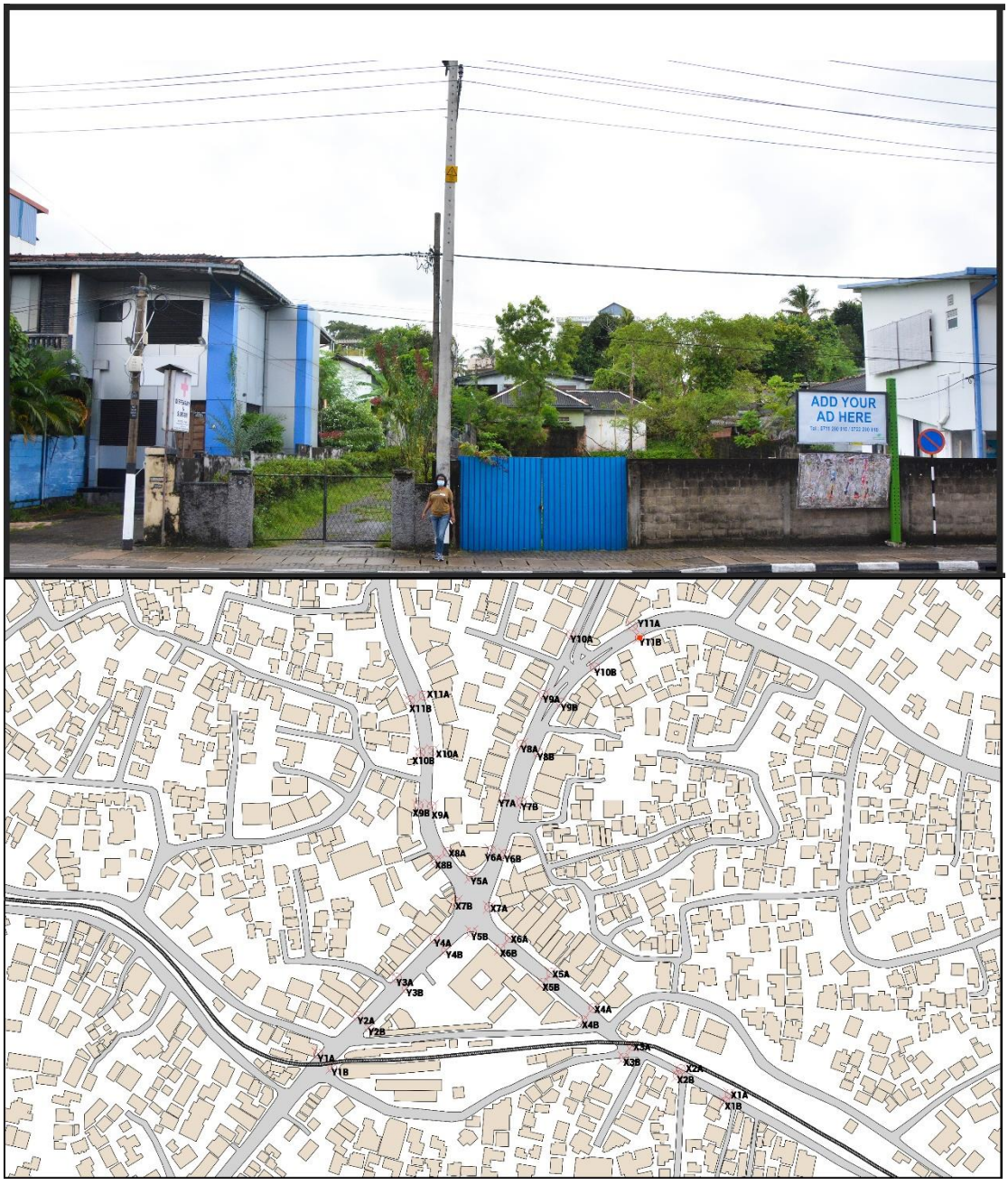


Figure 121: Photograph and Location of surveyed point Y11B; Source: Author

3.2.44.1 Surveyed Data of Y11B

The following Table shows the descriptives of Surveyed Point Y11B.

Descriptives of Surveyed Point Y11B

		Age		Gender		Highest Education Qualification		Industrial Experience	
		N	Mean	N	Mean		N	Mean		N	Mean
Y11Bas	20-29	43	3.35	Male	55	3.35	Bachelors	73	3.33	Less than 1 Year	5	3.60
	30-39	46	3.37	Female	43	3.37	Masters	24	3.58	2 - 5 Years	74	3.39
	40-49	10	3.40	Prefer not to say	2	4.00	MPhil	1	2.00	6 -10 Years	10	3.00
	50-59	1	4.00				PhD	2	3.00	11 - 15 Years	5	3.40
										More than 15 Years	6	3.50
	Total	100	3.37	Total	100	3.37	Total	100	3.37	Total	100	3.37
Y11Bna	20-29	43	2.65	Male	55	2.55	Bachelors	73	2.59	Less than 1 Year	5	2.60
	30-39	46	2.54	Female	43	2.53	Masters	24	2.50	2 - 5 Years	74	2.53
	40-49	10	2.20	Prefer not to say	2	3.00	MPhil	1	2.00	6 -10 Years	10	2.90
	50-59	1	2.00				PhD	2	2.00	11 - 15 Years	5	2.60
										More than 15 Years	6	2.17
	Total	100	2.55	Total	100	2.55	Total	100	2.55	Total	100	2.55
Y11Baa	20-29	43	3.84	Male	55	3.82	Bachelors	73	3.74	Less than 1 Year	5	3.80
	30-39	46	3.70	Female	43	3.63	Masters	24	3.88	2 - 5 Years	74	3.77
	40-49	10	3.60	Prefer not to say	2	5.00	MPhil	1	2.00	6 -10 Years	10	3.70
	50-59	1	5.00				PhD	2	4.00	11 - 15 Years	5	3.80
										More than 15 Years	6	3.67
	Total	100	3.76	Total	100	3.76	Total	100	3.76	Total	100	3.76

Figure 122: Descriptives of Surveyed Point Y11B; Source: Author

Considering the appearance of the street at point Y11B the mean value of the responses is 3.37, which means the perception of respondents in terms of appearance of the street at point Y11B is neutral.

Considering the number of OAs in the street at point Y11B the mean value of the responses is 2.55, which means the perception of respondents in terms of number of OAs in the street at point Y11B is moderate.

Considering the appearance of OAs in the street at point Y11B the mean value of the responses is 3.76, which means the perception of respondents in terms of appearance of the street at point Y11B is ugly.

3.3 Diagnostic Tests

This study found that the independent variables of Appearance of the Street (as), Number of OAs in the Street (na) and Appearance of OAs in the Street (aa) are identical variable and those independent variables (as, na, aa) construct the dependent variable of Surveyed Visual Pollution Score (SVPS). The following Reliability Test and Construct Validity with Factor Analysis proves the above statement.

3.3.1 Reliability Test

The Reliability Test is checking the reliability of sets of questions using Cronbach's alpha. In this study the internal consistency of the independent variables of as, na and aa was estimated using Cronbach's alpha (α value) and deemed to acceptable for values greater than 0.7. Internal consistency as measured by Cronbach's alpha is impacted by the degree of covariation between items and the scales' item count.

The following Table 6 shows the summary of case processing of this study and reveals that there are no data excluded.

Table 6: Case Processing Summary of the Study; Source: Author

Case Processing Summary

		N	%
Cases	Valid	100	100.0
	Excluded[a]	0	.0
	Total	100	100.0

a. Listwise deletion based on all variables in the procedure.

The following Table 7 shows the summary of the Reliability Statistics and it reveals that the Cronbach's Alpha is 0.976 which is $\alpha \geq 0.7$. Therefore, Reliability Statistics shows that all three independent variables (as, na, aa) are explaining one entity.

Table 7: Reliability Statistics of the Study; Source: Author

Reliability Statistics

Cronbach's Alpha	N of Items
.976	132

The Following Table 8 shows the Item-Total Statistics of this study and all the variables shows identical Cronbach's Alpha if Item Deleted. Therefore, it further strengthens the reliability of the variables (as, na, aa).

Table 8: Item-Total Statistics of the Study; Source: Author

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
X1Aas	499.18	3295.846	.212	.976
X1Ana	500.40	3308.182	.120	.976
X1Aaa	498.26	3277.972	.309	.976
X1Bas	498.64	3307.122	.104	.976
X1Bna	499.16	3289.469	.234	.976
X1Baa	497.44	3288.148	.270	.976
X2Aas	499.65	3313.321	.057	.976
X2Ana	500.53	3309.545	.120	.976
X2Aaa	498.41	3285.699	.250	.976
X2Bas	498.52	3288.454	.310	.976
X2Bna	500.47	3302.070	.206	.976
X2Baa	498.43	3292.227	.217	.976
X3Aas	498.43	3280.773	.399	.976
X3Ana	498.57	3273.015	.368	.976
X3Aaa	497.87	3270.821	.348	.976
X3Bas	499.15	3285.543	.334	.976
X3Bna	499.93	3280.571	.357	.976
X3Baa	498.44	3277.845	.332	.976
X4Aas	498.11	3292.826	.290	.976
X4Ana	498.94	3252.643	.519	.976
X4Aaa	497.75	3258.371	.482	.976
X4Bas	498.24	3289.861	.286	.976
X4Bna	499.83	3265.981	.450	.976
X4Baa	498.17	3267.779	.413	.976
X5Aas	498.28	3274.385	.355	.976
X5Ana	499.26	3247.649	.570	.976
X5Aaa	497.90	3261.525	.408	.976
X5Bas	498.20	3281.818	.347	.976
X5Bna	499.62	3247.834	.527	.976
X5Baa	497.95	3271.644	.392	.976
X6Aas	497.54	3266.372	.618	.976

X6Ana	497.29	3291.380	.407	.976
X6Aaa	497.07	3288.813	.414	.976
X6Bas	498.10	3250.576	.585	.976
X6Bna	497.86	3269.718	.522	.976
X6Baa	497.12	3286.975	.386	.976
X7Aas	497.57	3264.328	.584	.976
X7Ana	497.31	3282.317	.513	.976
X7Aaa	497.21	3282.551	.401	.976
X7Bas	497.45	3273.038	.537	.976
X7Bna	497.26	3291.083	.430	.976
X7Baa	497.22	3283.305	.378	.976
X8Aas	497.74	3254.922	.684	.976
X8Ana	497.63	3264.599	.694	.976
X8Aaa	497.18	3275.826	.483	.976
X8Bas	497.72	3253.941	.710	.976
X8Bna	497.59	3262.507	.678	.976
X8Baa	497.17	3277.254	.486	.976
X9Aas	498.17	3252.102	.628	.976
X9Ana	498.27	3242.179	.694	.976
X9Aaa	497.75	3239.199	.641	.976
X9Bas	497.78	3259.426	.713	.976
X9Bna	497.83	3251.839	.673	.976
X9Baa	497.23	3268.866	.546	.976
X10Aas	497.95	3260.371	.654	.976
X10Ana	498.30	3229.848	.742	.976
X10Aaa	497.46	3262.493	.509	.976
X10Bas	498.86	3248.829	.654	.976
X10Bna	498.92	3252.377	.613	.976
X10Baa	498.45	3250.412	.565	.976
X11Aas	498.05	3244.472	.687	.976
X11Ana	497.87	3255.064	.648	.976
X11Aaa	497.44	3256.491	.552	.976
X11Bas	497.75	3270.816	.638	.976
X11Bna	497.98	3253.858	.680	.976
X11Baa	497.08	3288.135	.432	.976
Y1Aas	497.64	3282.920	.537	.976
Y1Ana	497.84	3260.984	.538	.976
Y1Aaa	497.12	3291.036	.359	.976
Y1Bas	498.41	3260.042	.572	.976
Y1Bna	498.70	3246.313	.600	.976
Y1Baa	497.95	3262.028	.449	.976

Y2Aas	498.32	3260.341	.548	.976
Y2Ana	498.23	3256.462	.634	.976
Y2Aaa	497.81	3255.691	.501	.976
Y2Bas	497.93	3271.803	.496	.976
Y2Bna	497.85	3275.361	.517	.976
Y2Baa	497.32	3276.038	.418	.976
Y3Aas	497.70	3275.061	.615	.976
Y3Ana	497.88	3255.662	.619	.976
Y3Aaa	497.17	3283.476	.411	.976
Y3Bas	499.20	3263.495	.496	.976
Y3Bna	499.39	3249.331	.568	.976
Y3Baa	498.49	3273.606	.319	.976
Y4Aas	497.61	3286.705	.454	.976
Y4Ana	497.74	3274.093	.549	.976
Y4Aaa	497.14	3288.526	.379	.976
Y4Bas	499.27	3263.674	.463	.976
Y4Bna	498.96	3260.867	.504	.976
Y4Baa	498.36	3271.889	.325	.976
Y5Aas	497.93	3258.793	.585	.976
Y5Ana	497.65	3278.028	.463	.976
Y5Aaa	497.30	3268.737	.500	.976
Y5Bas	497.87	3271.387	.508	.976
Y5Bna	497.58	3284.488	.432	.976
Y5Baa	497.17	3289.233	.342	.976
Y6Aas	497.69	3280.357	.495	.976
Y6Ana	498.23	3248.037	.622	.976
Y6Aaa	497.33	3267.799	.508	.976
Y6Bas	497.65	3264.997	.584	.976
Y6Bna	497.42	3282.468	.449	.976
Y6Baa	497.04	3290.241	.445	.976
Y7Aas	497.91	3265.113	.559	.976
Y7Ana	497.77	3266.522	.567	.976
Y7Aaa	497.17	3292.223	.306	.976
Y7Bas	498.42	3256.488	.545	.976
Y7Bna	498.75	3239.442	.633	.976
Y7Baa	498.06	3252.461	.509	.976
Y8Aas	497.70	3275.505	.479	.976
Y8Ana	497.63	3280.215	.450	.976
Y8Aaa	497.18	3278.614	.477	.976
Y8Bas	497.96	3262.746	.601	.976
Y8Bna	497.94	3259.633	.656	.976

Y8Baa	497.45	3262.189	.524	.976
Y9Aas	498.04	3260.665	.614	.976
Y9Ana	498.24	3237.982	.705	.976
Y9Aaa	497.58	3258.307	.523	.976
Y9Bas	498.20	3245.313	.689	.976
Y9Bna	498.23	3244.421	.677	.976
Y9Baa	497.77	3245.613	.566	.976
Y10Aas	498.12	3244.652	.702	.976
Y10Ana	498.50	3227.606	.717	.976
Y10Aaa	497.64	3254.758	.529	.976
Y10Bas	498.44	3267.683	.510	.976
Y10Bna	498.84	3251.186	.590	.976
Y10Baa	497.85	3253.765	.516	.976
Y11Aas	497.88	3264.834	.558	.976
Y11Ana	497.87	3267.811	.507	.976
Y11Aaa	497.39	3265.998	.486	.976
Y11Bas	498.51	3281.869	.368	.976
Y11Bna	499.33	3269.375	.407	.976
Y11Baa	498.12	3280.733	.299	.976

3.3.2 Construct Validity (Factor Analysis)

Factor Analysis is a test to check whether the selected elements (as, na, aa) constructing one factor (SVPS). In other words, all these 3 independent variables (as, na, aa) are questioning the same dependent variable (SVPS). In this study the considered factor loading is 0.5. The following Scree Plot shows that only one component detected.

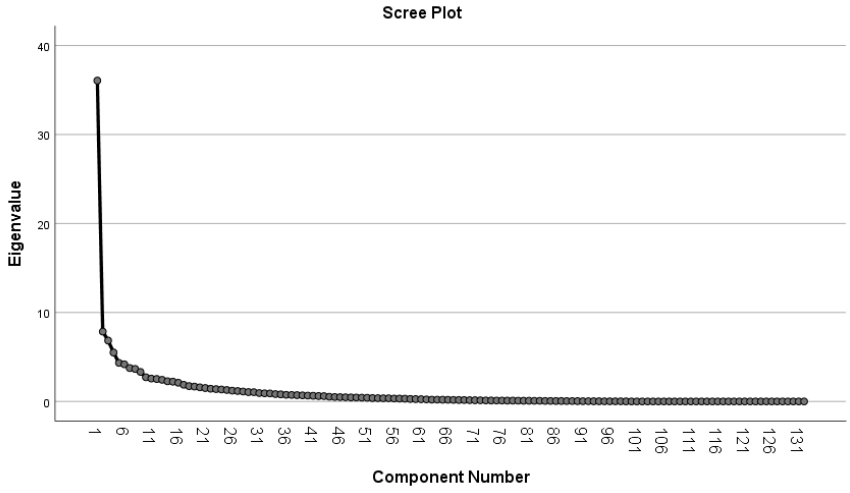


Figure 123: Scree Plot of each element of the Study; Source: Author

The following Table explains the KMO and Bartlett's Test out comes and the findings shows that Kaiser-Meyer-Olkin Measure of Sampling Adequacy is 0.611 (whereas KMO varied from -1.0 to +1.0) so the value of Kaiser-Meyer-Olkin Measure of Sampling Adequacy (+0.611) is closer to +1.0 therefore, it shows that there are positive correlations among the independent variables (as, na, aa). In further the Sig value (P Value) is 0.00 which is $P \leq 0.05$ therefore, all the three independent variables (as, na, aa) are highly corelated.

Table 9: KMO and Bartlett's Test of the Study; Source: Author

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.611
Bartlett's Test of Sphericity	Approx. Chi-Square	71.828
	df	3
	Sig.	.000

The following Table 10 shows that there is only one component was extracted, so the solution cannot be rotated. This further strengthen that all these 3 independent variables (as, na, aa) are questioning the same dependent variable (SVPS).

Table 10: Rotated Component Matrix of the Study; Source: Author

Rotated Component Matrix[a]

a. Only one component was extracted. The solution cannot be rotated.

3.4 Production of Surveyed Visual Pollution Score (SVPS)

Following the Reliability and Construct Validity Tests results, SVPS for all (44) measured points were individually constructed with the mean value of Appearance of the Street (as), Number of OAs in the Street (na) and Appearance of OAs in the Street (aa). The following Table summarizes the SVPS values, where 1 being Lowest Pollution and 5 being Highest Pollution. This concludes the Research Objective 2 (O2).

Table 11: Constructed Surveyed Visual Pollution Score; Source: Author

Constructed Surveyed Visual Pollution Score

Measured Points	Mean of Appearance of the Street	Mean of Number of OAs in the Street	Mean of Appearance of OAs in the Street	Surveyed Visual Pollution Score
X1A	2.70	1.48	3.62	2.60
X1B	3.24	2.72	4.44	3.47
X2A	2.23	1.35	3.47	2.35
X2B	3.36	1.41	3.45	2.74
X3A	3.45	3.31	4.01	3.59
X3B	2.73	1.95	3.44	2.71
X4A	3.77	2.94	4.13	3.61
X4B	3.64	2.05	3.71	3.13
X5A	3.60	2.62	3.98	3.40
X5B	3.68	2.26	3.93	3.29
X6A	4.34	4.59	4.81	4.58
X6B	3.78	4.02	4.76	4.19
X7A	4.31	4.57	4.67	4.52
X7B	4.43	4.62	4.66	4.57
X8A	4.14	4.25	4.70	4.36
X8B	4.16	4.29	4.71	4.39
X9A	3.71	3.61	4.13	3.82
X9B	4.10	4.05	4.65	4.27
X10A	3.93	3.58	4.42	3.98
X10B	3.02	2.96	3.43	3.14
X11A	3.83	4.01	4.44	4.09
X11B	4.13	3.90	4.80	4.28
Y1A	4.24	4.04	4.76	4.35
Y1B	3.47	3.18	3.93	3.53
Y2A	3.56	3.65	4.07	3.76
Y2B	3.95	4.03	4.56	4.18
Y3A	4.18	4.00	4.71	4.30
Y3B	2.68	2.49	3.39	2.85
Y4A	4.27	4.14	4.74	4.38
Y4B	2.61	2.92	3.52	3.02
Y5A	3.95	4.23	4.58	4.25
Y5B	4.01	4.30	4.71	4.34
Y6A	4.19	3.65	4.55	4.13
Y6B	4.23	4.46	4.84	4.51
Y7A	3.97	4.11	4.71	4.26
Y7B	3.46	3.13	3.82	3.47
Y8A	4.18	4.25	4.70	4.38
Y8B	3.92	3.94	4.43	4.10
Y9A	3.84	3.64	4.30	3.93
Y9B	3.68	3.65	4.11	3.81
Y10A	3.76	3.38	4.24	3.79
Y10B	3.44	3.04	4.03	3.50
Y11A	4.00	4.01	4.49	4.17
Y11B	3.37	2.55	3.76	3.23

Table 12: One Way ANOVA Test Based on Demographic Variables; Source: Author

ONE ANOVA Test based on Demographic Variables of SVPS

		Age Group Sig.	Gender Group Sig.	Education Group Sig.	Industrial Experience Group Sig.
Pol_X1A	Between Groups	0.373	0.232	0.145	0.217
Pol_X1B	Between Groups	0.202	0.547	0.313	0.437
Pol_X2A	Between Groups	0.640	0.433	0.076	0.443
Pol_X2B	Between Groups	0.385	0.401	0.144	0.456
Pol_X3A	Between Groups	0.485	0.153	0.487	0.803
Pol_X3B	Between Groups	0.014*	0.234	0.224	0.027*
Pol_X4A	Between Groups	0.301	0.955	0.323	0.995
Pol_X4B	Between Groups	0.830	0.021*	0.193	0.609
Pol_X5A	Between Groups	0.292	0.115	0.917	0.441
Pol_X5B	Between Groups	0.434	0.676	0.481	0.662
Pol_X6A	Between Groups	0.365	0.669	0.252	0.992
Pol_X6B	Between Groups	0.517	0.421	0.022*	0.015*
Pol_X7A	Between Groups	0.417	0.036*	0.099	0.843
Pol_X7B	Between Groups	0.518	0.078	0.061	0.883
Pol_X8A	Between Groups	0.114	0.444	0.025*	0.335
Pol_X8B	Between Groups	0.177	0.811	0.017*	0.646
Pol_X9A	Between Groups	0.147	0.493	0.001*	0.069
Pol_X9B	Between Groups	0.750	0.146	0.331	0.531
Pol_X10A	Between Groups	0.744	0.494	0.168	0.355
Pol_X10B	Between Groups	0.577	0.826	0.157	0.582
Pol_X11A	Between Groups	0.423	0.545	0.014*	0.171
Pol_X11B	Between Groups	0.281	0.519	0.010*	0.164
Pol_Y1A	Between Groups	0.626	0.071	0.364	0.789
Pol_Y1B	Between Groups	0.347	0.395	0.005*	0.309
Pol_Y2A	Between Groups	0.703	0.883	0.402	0.951
Pol_Y2B	Between Groups	0.521	0.792	0.119	0.703
Pol_Y3A	Between Groups	0.540	0.504	0.102	0.565
Pol_Y3B	Between Groups	0.357	0.121	0.010*	0.318
Pol_Y4A	Between Groups	0.607	0.079	0.892	0.528
Pol_Y4B	Between Groups	0.507	0.589	0.027	0.015*
Pol_Y5A	Between Groups	0.503	0.120	0.341	0.104
Pol_Y5B	Between Groups	0.665	0.243	0.164	0.137
Pol_Y6A	Between Groups	0.502	0.145	0.195	0.829
Pol_Y6B	Between Groups	0.467	0.149	0.079	0.254
Pol_Y7A	Between Groups	0.693	0.257	0.239	0.790
Pol_Y7B	Between Groups	0.546	0.711	0.517	0.598
Pol_Y8A	Between Groups	0.672	0.660	0.513	0.766
Pol_Y8B	Between Groups	0.428	0.494	0.058	0.668
Pol_Y9A	Between Groups	0.771	0.774	0.193	0.768
Pol_Y9B	Between Groups	0.344	0.897	0.062	0.223
Pol_Y10A	Between Groups	0.460	0.325	0.015*	0.746
Pol_Y10B	Between Groups	0.448	0.139	0.063	0.575
Pol_Y11A	Between Groups	0.282	0.619	0.036*	0.472
Pol_Y11B	Between Groups	0.820	0.360	0.415	0.994

*Shows values which are statistically significant, whereas $P \leq 0.05$

The Table above explains the summary of One-way ANOVA analysis which is done to examine statistically significant difference among the points of Age classifications, Gender classifications, Highest Education Qualifications and Post Credential Industrial Experiences for each surveyed point. Hence, the study found that most of the points are statistically not significant, which means there is no difference in the response between each individual classification groups. In other words, each individual classification group is responding in the similar manner. However, the study finds the following points are statistically significant among these classifications.

3.4.1 Age Classification

Considering the classification of 5 Age groups (20-29 years; 30-39 years; 40-49 years; 50-59 years; and above 60 years) there is only one point, where it is statistically significant with the P value of 0.014 (where is $P \leq 0.05$), which SVPS of point X3B (Pol_X3B). It means only that point's, the responses were different between the 5 age groups. Whereas, all other points are statistically not significant. Which means there is no difference in the response between the 5 age groups in all other points.

3.4.2 Gender Classification

Considering the classification of 3 Gender groups (Male; Female; and Prefer not to say) there is only two points, where those are statistically significant with 0.021 and 0.036 (where is $P \leq 0.05$), which SVPS of points of X4B (Pol_X4B) and X7A (Pol_X7A) respectively. It means only those two points of the responses were different between the 3 gender groups. Whereas, all other points are statistically not significant. Which means there is no difference in the response between the 3 gender groups in all other points.

3.4.3 Highest Education Attained Classification

Considering the classification of 5 Educational Groups (Bachelor's; Masters; M.Phil.; and Ph.D.) there are 10 points out of 44 points are statistically significant with 0.022, 0.025, 0.017, 0.001, 0.014, 0.010, 0.005, 0.010, 0.015 and 0.036 (where is $P \leq 0.05$), which SVPS of points of X6B (Pol_X6B), X8A (Pol_X8A), X8B (Pol_X8B), X9A

(Pol_X9A), X11A (Pol_X11A), X11B (Pol_X11B), Y1B (Pol_Y1B), Y3B (Pol_Y3B), Y10A (Pol_Y10A) and Y11A (Pol_Y11A) respectively. It means only those ten points' of the responses were different between the 5 Educational groups. Whereas, all other points are statistically not significant. Which means there is no difference in the response between the 5 educational groups in all other points.

3.4.4 Post Credential Industrial Experience Classification

Considering the classification of 5 Post Credential Industrial Experience groups (Less than 1 year; 2-5 years; 6-10 years; 11-15 years and More than 15 years) there is only three points, where those are statistically significant with 0.027, 0.018 and 0.015 (where is $P \leq 0.05$), which SVPS of points of X3B (Pol_X3B), X6B (Pol_X6B) and Y4B (Pol_Y4B) respectively. It means only those three points of the responses were different between the 5 Post Credential Industrial Experience groups. Whereas, all other points are statistically not significant. Which means there is no difference in the response between the 5-post credential industrial experience groups in all other points.

3.5 Surveyed Maps

3.5.1 Surveyed Map for Appearance of the Street

The following Surveyed Map for Appearance of the Street is created with using ArcGIS inverse distance weighted (IDW) Interpolation mapping technique.

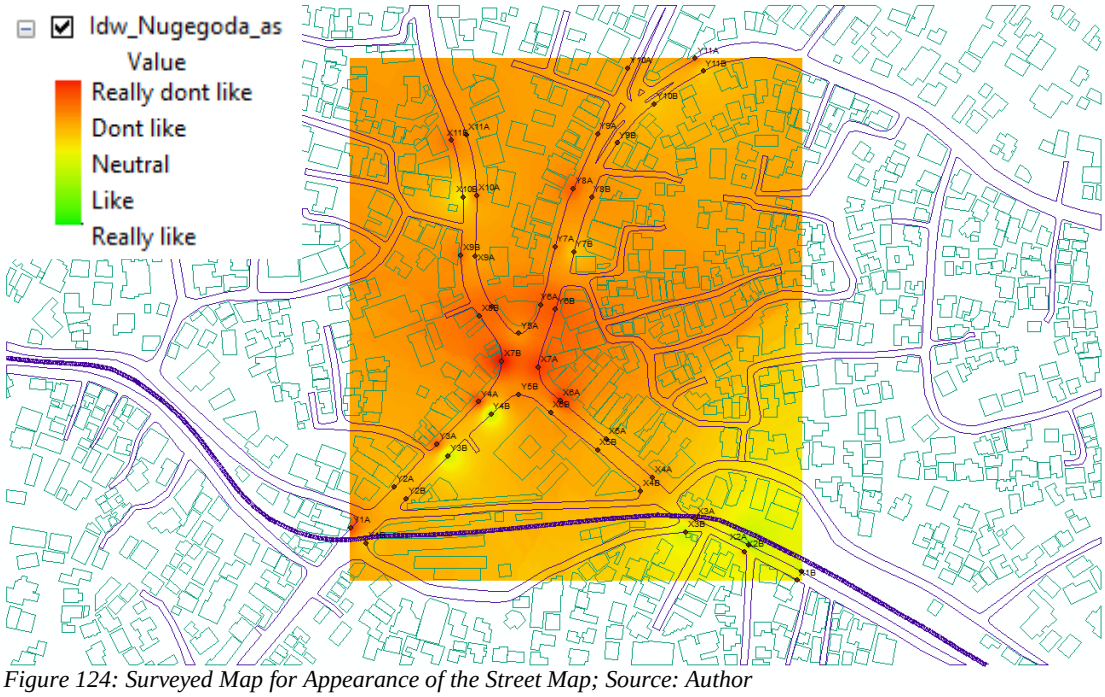


Figure 124: Surveyed Map for Appearance of the Street Map; Source: Author

This map is produced based on the surveyed data of Appearance of the Street; and this map shows that the haterade towards the main node which is also consisting with dense built volumes and it is gradually decreasing with the distance away from the main node.

3.5.2 Surveyed Map for Number of OAs in the Street

The following Surveyed Map for Number of OAs in the Street is created with using ArcGIS inverse distance weighted (IDW) Interpolation mapping technique.

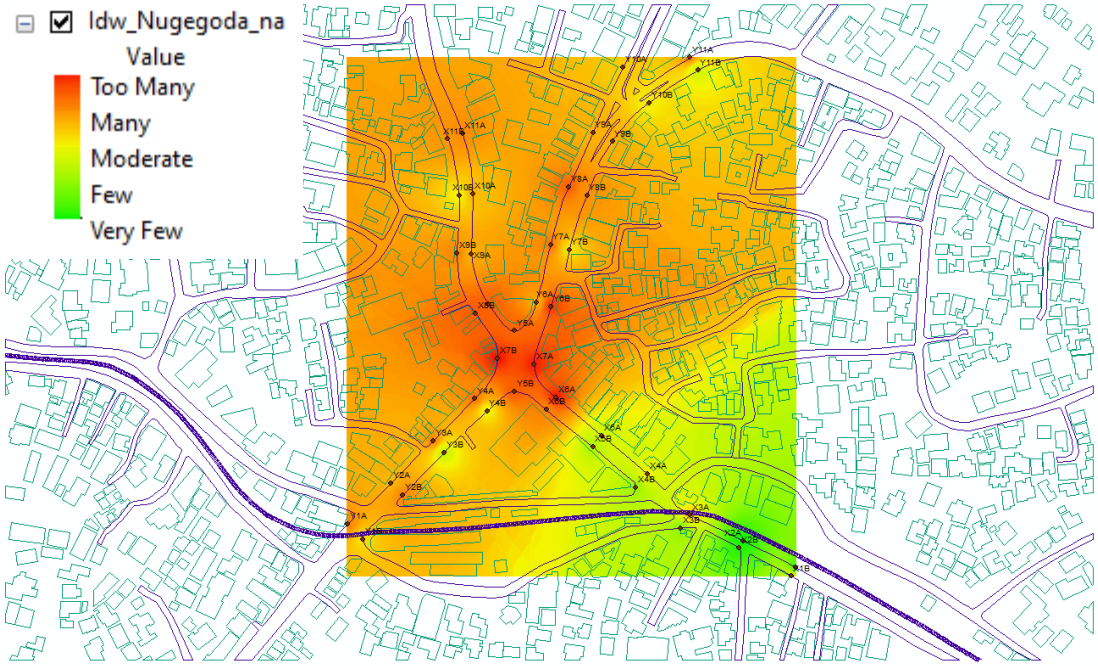


Figure 125: Surveyed Map for Number of OAs in the Street; Source: Author

This map is produced based on the Surveyed Map for Number of OAs in the Street; and this map shows that the highest number of OAs are located towards the main node and it is gradually decreasing with the distance away from the main node. Hence, this map shows relatively Very Few and Few OAs are located respectively X1A, X1B, X2A, X2B, X3A, X3B, X4A, X4B, X5A and X5B then suddenly increased after that points.

3.5.3 Surveyed Map for Appearance of OAs in the Street

The following Surveyed Map for Appearance of OAs in the Street is created with using ArcGIS inverse distance weighted (IDW) Interpolation mapping technique.

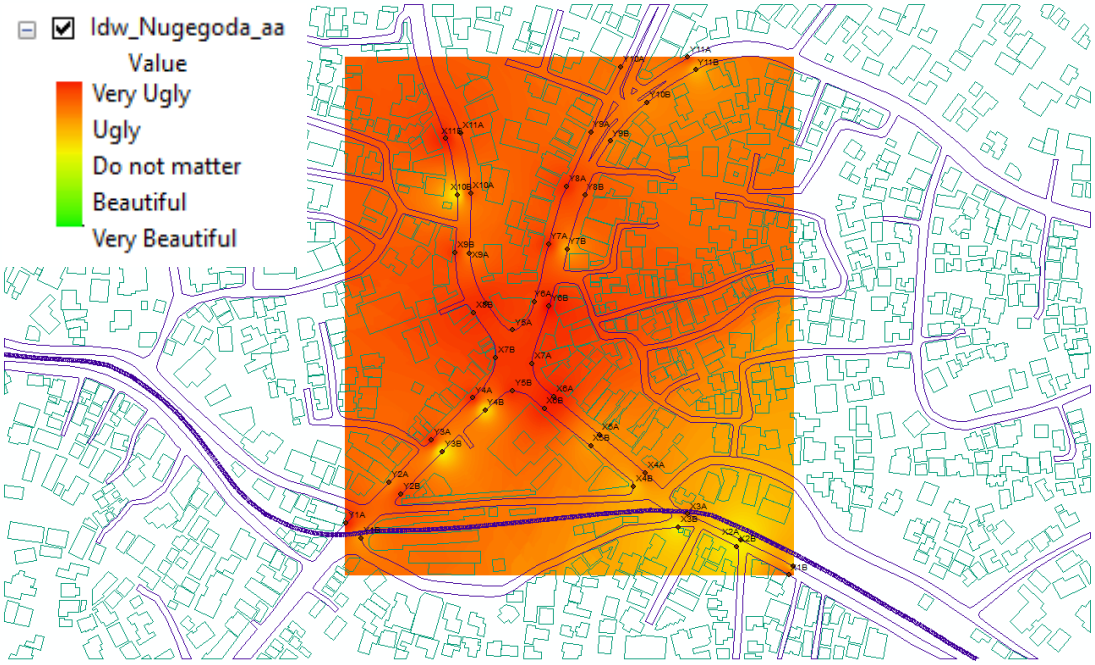


Figure 126: Surveyed Map for Appearance of OAs in the Street; Source: Author

This map is produced based on the Surveyed Map for Appearance of OAs in the Street; and this map shows that the highest haterade of OAs are located towards the main node and it is gradually decreasing with the distance away from the main node. Overall, the surveyed responses shows that appearance of OAs are mostly towards the Very Ugly and Ugly ranges.

3.5.4 Surveyed Visual Pollution Zone Map

The following Surveyed Visual Pollution Zone map is created with using ArcGIS inverse distance weighted (IDW) Interpolation mapping technique.

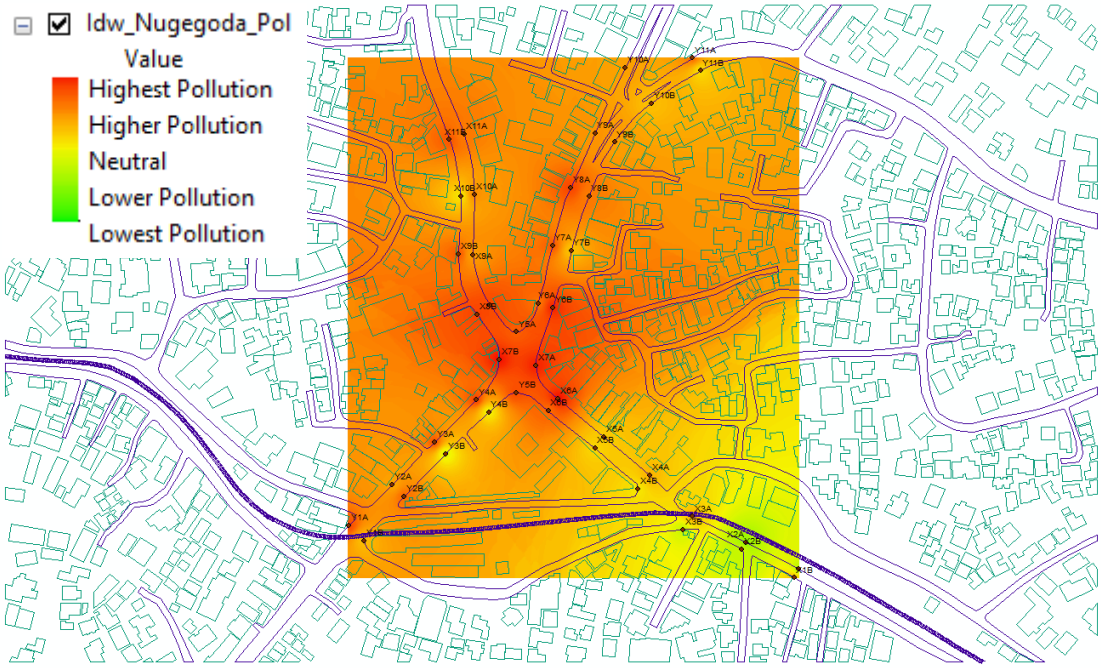


Figure 127: Surveyed Visual Pollution Zone Map; Source: Author

This map is produced based on the surveyed data (SVPS) and this map shows that the Visual Pollution towards the main node. According to the data analysis area near the main node becomes the highest polluted area and pollution are decreasing with the distance away from the main node. Additionally, this map reveals that there is positive relationship with SVPS and the hierarchy of the roads (SVPS is more in 4 lane road compared to 2 lane road). Therefore, these findings validate the H1, H2 are correct. This concludes the Research Objective 3 (O3).

3.5 Recommendations from the Survey

3.5.1 Acceptance of placement of OAs in the Streetscape

The study found whether, do Architects and Urban Designers accept to have OAs placed in the Streetscape and the following diagram summarizes the findings and the results shows that there are 38 positive responses, 35 negative responses and 27 neutral responses out of 100 responses were collected.

However, statistically results shows that respondents are agreed to place OAs in the Streetscape with just 3 more responses. The following Figure shows the above statement in summary.

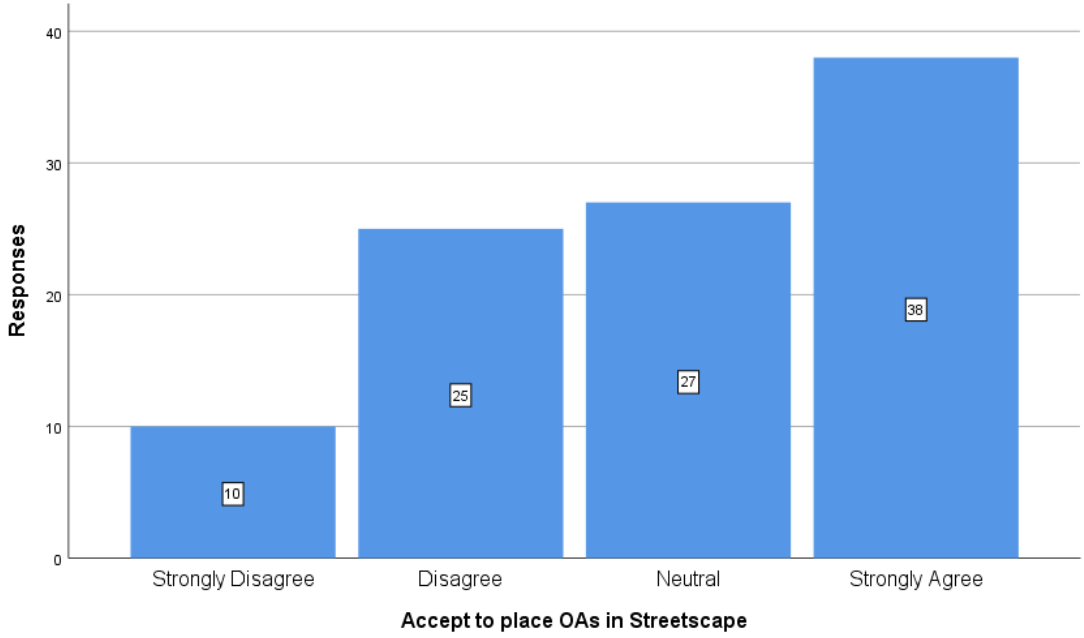


Figure 128: Acceptance to place OAs in the Streetscape; Source: Author

3.5.2 Perception of OAs

The following table shows the summary of perception of the OAs of the respondents. Hence, 46.7% responses were defined OAs as means of visual pollution. Whereas, 22.7% of the responses were defined OAs as informative. This concludes the Research Objective 1 (O1) of the study.

Table 13: Perceptions of OAs of the respondents

Perception_OAs Frequencies

		Responses		Percent of Cases
		N	Percent	
Perception of OAs[a]	Perception of OAs as Informative	34	22.7%	34.0%
	Perception of OAs as Means of Visual Pollution	70	46.7%	70.0%
	Perception of OAs as Political Statement	15	10.0%	15.0%
	Perception of OAs as Mafia	20	13.3%	20.0%
	Other Perception of OAs	11	7.3%	11.0%
Total		150	100.0%	150.0%

a. Dichotomy group tabulated at value 1.

3.5.3 Factors effecting Image of the City

The following table shows the summary of the factors affecting image of the city. statistically the data shows that the highest percentage of 29.3% Built form effects the Image of the city. The second factor effects the most in the Image of the City is OAs with the percentage of 24.1%.

Table 14: Factors effecting Image of the City; Source: Author

Img_City Frequencies

		Responses		Percent of Cases
		N	Percent	
Factors effecting the Image of the City[a]	Other Perception of OAs	11	3.6%	11.0%
	Over Population effects the Image of the City	65	21.2%	65.0%
	Traffic Congestion effects the Image of the City	67	21.8%	67.0%
	Built Form effects the Image of the City	90	29.3%	90.0%
	OAs effects the Image of the City	74	24.1%	74.0%
Total		307	100.0%	307.0%

a. Dichotomy group tabulated at value 1.

3.5.4 Suitable Placement for OAs

The following table shows the summary of the suitable placement for OAs. Hence, most of the respondents recommended to have advertisements with Virtual & Social-Media with higher percentage of 34.9% of the responses.

Table 15: Recommended Suitable Placement for OAs by the respondents; Source: Author

OAs_Plc Frequencies

		Responses		Percent of Cases
		N	Percent	
Suitable placement for OAs[a]	Near Nodes are appropriate place for advertisements	19	11.0%	19.0%
	Parallel to Road is appropriate place for advertisements	29	16.9%	29.0%
	Roof Top is appropriate place for advertisements	16	9.3%	16.0%
	Virtual & Social-Media is appropriate place for advertisements	60	34.9%	60.0%
	Indoor Advertising is appropriate place for advertisements	32	18.6%	32.0%
	Roof Top is appropriate place for advertisements	16	9.3%	16.0%
Total		172	100.0%	172.0%

a. Dichotomy group tabulated at value 1.

3.5.5 Ways to mitigate Visual Pollution of OAs

The following table shows the summary of the factors affecting image of the city. most of the respondents recommended to implement suitable guidelines & regulations with the highest percentage of 70.01%. This concludes the Research Objective 4 (O4).

Table 16: Recommended ways of mitigation of Visual Pollution of OAs by the respondents; Source: Author

Mit_OAs Frequencies

		Responses		Percent of Cases
		N	Percent	
Ways of mitigation of Visual Pollution of OAs[a]	Imposing tax can mitigate Visual Pollution from OAs	29	21.6%	29.0%
	Implementing suitable guidelines & regulations can mitigate Visual Pollution from OAs	94	70.1%	94.0%
	Banding OAs	11	8.2%	11.0%
Total		134	100.0%	134.0%

a. Dichotomy group tabulated at value 1.

3.5.6 Adoption of oversea precedents to develop regulations & guidelines for OAs in Sri Lanka

The following table shows the recommendations of adopting guidelines and regulations of precedents from overseas to mitigate visual pollution in Sri Lanka. However, the results shows that 50 out of 100 respondents agreed to adopting the guidelines and regulations of precedents from overseas to mitigate visual pollution in Sri Lanka. whereas, only 30 out of 100 respondents recommended to develop a specific legal system to control Visual Pollution of OAs for Sri Lanka.

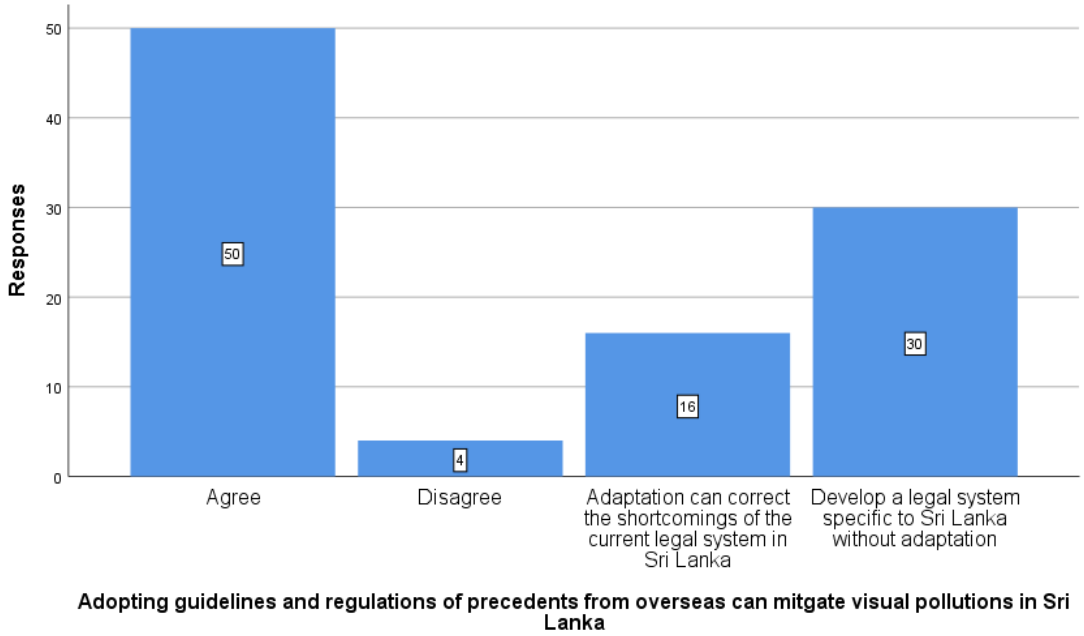


Figure 129: Adoption of oversea precedents to develop regulations & guidelines for OAs in Sri Lanka; Source: Author

3.5.6 Recommended Permissible size of OAs compared to area of the building façade

The following table shows the recommended permissible size of OAs compared to the area of the building façade by the respondents. The statistical data finding shows that the highest number of respondents (30 out of 100 respondents recommended) recommended to premise the area ratio of OAs to building façade of 1/8 : 1. Moreover, another 25 out of 100 respondents recommended to premise the area ratio of OAs to building façade of 1/16 : 1. However, 14 out of 100 respondents recommended some other options.

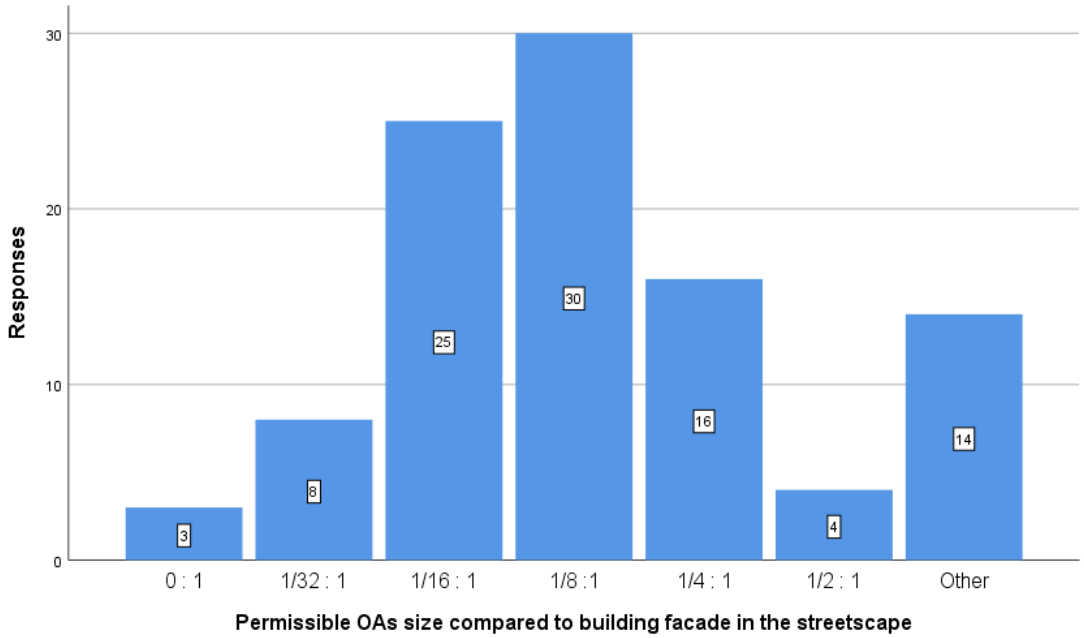


Figure 130: Permissible OAs size compared to building facade in the Streetscape by the respondents; Source: Author

3.6 Experimented Proposal from Recommendation

According to the professional's recommendation in the above section regarding the permissible size of the OAs the following analysis was performed to determine how that proposal will affect the SVPS. In order to execute the analysis, firstly there is a requirement to find what is the Assessed Pollution Score of the surveyed points, which is based on the following factors Physical Appearance, Structure, Location, Placement, Display Surfaces, Size, Content and Media Type. According to the literature review the appropriate Visual Pollution Assessment Tool was found with the weightings of the factors (Wakil, Naeem, Anjum, Waheed, et al., 2019). However, this tool was modified to suits to this particular study because this study is focused only on impacts of OAs on Visual Pollution, whereas the tool above in the literature survey focused on every other factor including OAs which are impacting on Visual Pollution (OAs, Open dumps of solid waste, Hanging and cluttered wires, Dilapidated buildings, Overflown sewerage/drainage, Graffiti/wall chalking, Various poles and transformers, Encroachments (temp and permanent), Broken roads/footpaths/street furniture, Architecturally poor structures). The following table is an example of Assessed Visual Pollution Score for a worst-case scenario; where Visual Pollution score is 100.

Table 17: Modified Visual Pollution Assessment Tool for OAs

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	CH
1.3	Nature of activity	Residential						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	6.12						
1.6	Average distance between facing building lines	26						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location
Lat: 6.87190 Lng: 79.89357

1.10 Node Address
Old Kesbawa Road,
Nugegoda.

1.11 Node ID: X1A

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Presentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	20.00	5	4	3	5	5	5	5	20.00	100.00	12.50	37.50	6.25	18.75
2.1.2	**Sign Boards**	1	40.00	5	4	3	5	5	5	5	40.00		12.50		6.25	
2.1.3	**Banners / Steamers / Posters**	1	40.00	5	4	3	5	5	5	5	40.00		12.50		6.25	

In this example it shows the maximum weighed scenario where Area covered by OAs, Physical appearance, Structure, Placement, Display Surfaces, Size, Content and Media Type all these factors weighed to the maximum and the produced Total Assessed Pollution Score is 100. In further this tool consist the details of number of road lanes, dominant land use, Nature of activity, building height, road width, distance between building lines, area type, socio economic status, location, address, node ID of each surveyed points. Appendix A shows the prepared AVPS tables for all 44 surveyed points.

In further, the table explains the **Area covered by OAs** is 100% where the area of the building surface is fully covered with OAs. **Physical appearance of the OAs** is weighted on a 5-point Likert scale; where Very well shaped – 1, Normal – 2, Torn off – 3, Leaning – 4 and the Broken structure -5. Considering the **Structure of the OAs**, it is weighted on a 4-point Likert scale; where Wooden structure – 1, Steel structure – 2, Monopole – 3 and Multi Poles – 4. Considering the **Placement of the OAs**, it is weighted on a 3-point Likert scale; where Standalone – 1, On wall – 2 and On rooftops – 3. Considering the **Displayed surfaces of the OAs**, it is weighted on a 5-point Likert scale; where Single facing – 1, Double facing (back-to-back) – 3 and V facing Triangle – 5. Considering the **Size of the OAs**, it is weighted on a 5-point scale Likert scale; where Small – 1, 3x6m – 2, 6x9m – 3, 9x12m – 4 and Larger – 5. Considering the Content of OAs, it is weighted on a 5-point Likert scale; Public service message – 1, Movie – 2, Religious – 3, Commercial – 4 and Harsh religious / Political Statement / undecent postures – 5. Considering the **Media type of OAs**; it is weighted on a 5-point Likert scale; where Poster – 1, Mobile – 2, Painted – 3, Mechanical – 4 and Digital – 5. Therefore, site measurements were taken at each surveyed points to compare the impact of OAs on Visual Pollution. The following is an example of practical application of this Visual Pollution Assessment Tool.

Figure 131: Existing condition of OAs at surveyed point X11A; Source: Author

The Figure above shows the existing condition of OAs at surveyed point X11A.

Figure 132: Total Area of the Building Facade; Source: Author

The figure above highlights the total area of the building façade (Highlighted **Gray** Area). Hence, the following figure shows the conditions of OAs; whereas, highlighted **Blue** area shows area of Billboards, highlighted **Green** area shows the area of Signboards, highlighted **Yellow** area shows the area of Banners, Steamers and Posters. According to this data the occupancy ratio of OAs to Building façade is produced.

According to this site measurements and analysis of the condition of the OAs the following data set is produced to find the Assessed Visual Pollution scores for each surveyed point and assessed the Visual Pollution for the recommendations to premise the area ratio of OAs to building façade of 1/8 : 1 and 1/16 : 1.

Figure 133: Measured Area Occupancy of OAs; Source: Author

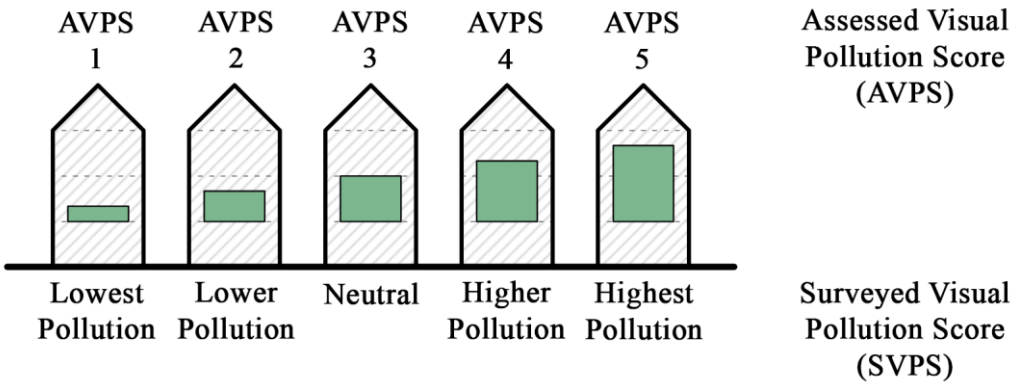


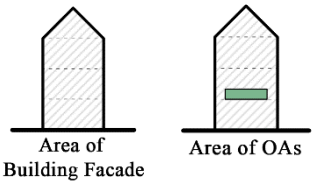
Figure 134: How AVPS related to SVPS; Source: Author

The Figure above shows the relationship between AVPS (Measured) and SVPS (Surveyed). Moreover, table below shows the SVPS and AVPS for different scenarios.

Table 18: Summary table of Constructed Surveyed Visual Pollution Score & Assessed Visual Pollution Score; Source: Author

Constructed Surveyed Visual Pollution Score & Assessed Visual Pollution Score

					Case If every OAs kept to following ratio in the street		Case only the Bigger OAs reduced to following ratio in the street			Case If every OAs kept to following ratio in the street		Case only the Bigger OAs reduced to following ratio in the street	
Measured Points	Mean of Appearance of the Street	Mean of Number of OAs in the Street	Mean of Appearance of OAs in the Street	Surveyed Visual Pollution Score	Surveyed Pollution Score; If OAs reduced to 1/8	Surveyed Pollution Score; If OAs reduced to 1/16	Surveyed Pollution Score; If OAs reduced to 1/8	Surveyed Pollution Score; If OAs reduced to 1/16	Assessed Pollution Score	Assessed Pollution Score; If OAs reduced to 1/8	Assessed Pollution Score; If OAs reduced to 1/16	Assessed Pollution Score; If OAs reduced to 1/8	Assessed Pollution Score; If OAs reduced to 1/16
X1A	2.70	1.48	3.62	2.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
X1B	3.24	2.72	4.44	3.47	10.27	5.13	3.47	3.47	1.85	5.47	2.73	1.85	1.85
X2A	2.23	1.35	3.47	2.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
X2B	3.36	1.41	3.45	2.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
X3A	3.45	3.31	4.01	3.59	4.00	2.00	3.59	3.59	6.32	7.03	3.52	6.32	6.32
X3B	2.73	1.95	3.44	2.71	14.10	7.05	2.73	2.73	0.68	3.52	1.76	0.68	0.68
X4A	3.77	2.94	4.13	3.61	10.07	5.03	3.61	3.61	3.22	8.98	4.49	3.22	3.22
X4B	3.64	2.05	3.71	3.13	15.48	7.74	3.15	3.15	1.27	6.25	3.13	1.27	1.27
X5A	3.60	2.62	3.98	3.40	3.88	1.94	3.40	3.40	14.02	16.02	8.01	14.02	14.02
X5B	3.68	2.26	3.93	3.29	20.56	10.28	3.29	3.29	0.75	4.69	2.34	0.75	0.75
X6A	4.34	4.59	4.81	4.58	4.18	2.09	4.18	2.09	20.56	18.75	9.38	18.75	9.38
X6B	3.78	4.02	4.76	4.19	3.10	1.55	3.10	1.55	18.48	13.67	6.84	13.67	6.84
X7A	4.31	4.57	4.67	4.52	3.57	1.79	3.57	1.79	28.64	22.66	11.33	22.66	11.33
X7B	4.43	4.62	4.66	4.57	2.56	1.28	2.56	1.28	42.59	23.83	11.91	23.83	11.91
X8A	4.14	4.25	4.70	4.36	2.32	1.16	2.32	1.16	23.55	12.50	6.25	12.50	6.25
X8B	4.16	4.29	4.71	4.39	3.25	1.63	3.25	1.63	18.96	14.06	7.03	14.06	7.03
X9A	3.71	3.61	4.13	3.82	3.00	1.50	3.00	1.50	18.40	14.45	7.23	14.45	7.23
X9B	4.10	4.05	4.65	4.27	3.06	1.53	3.06	1.53	20.69	14.84	7.42	14.84	7.42
X10A	3.93	3.58	4.42	3.98	6.14	3.07	3.98	3.98	7.84	12.11	6.05	7.84	7.84
X10B	3.02	2.96	3.43	3.14	2.07	1.03	2.07	1.03	18.95	12.50	6.25	12.50	6.25
X11A	3.83	4.01	4.44	4.09	3.59	1.80	3.59	1.80	21.36	18.75	9.38	18.75	9.38
X11B	4.13	3.90	4.80	4.28	4.74	2.37	4.28	4.28	11.62	12.89	6.45	11.62	11.62
Y1A	4.24	4.04	4.76	4.35	2.28	1.14	2.28	1.14	13.43	7.03	3.52	7.03	3.52
Y1B	3.47	3.18	3.93	3.53	2.53	1.26	2.53	1.26	8.17	5.86	2.93	5.86	2.93
Y2A	3.56	3.65	4.07	3.76	2.28	1.14	2.28	1.14	21.24	12.89	6.45	12.89	6.45
Y2B	3.95	4.03	4.56	4.18	2.83	1.42	2.83	1.42	30.54	20.70	10.35	20.70	10.35
Y3A	4.18	4.00	4.71	4.30	7.50	3.75	4.30	4.30	11.86	20.70	10.35	11.86	11.86
Y3B	2.68	2.49	3.39	2.85	1.69	0.84	1.69	0.84	13.23	7.81	3.91	7.81	3.91
Y4A	4.27	4.14	4.74	4.38	6.17	3.09	4.38	4.38	13.87	19.53	9.77	13.87	13.87
Y4B	2.61	2.92	3.52	3.02	1.68	0.84	1.68	0.84	26.03	14.45	7.23	14.45	7.23
Y5A	3.95	4.23	4.58	4.25	2.17	1.08	2.17	1.08	42.89	21.88	10.94	21.88	10.94
Y5B	4.01	4.30	4.71	4.34	1.83	0.91	1.83	0.91	39.93	16.80	8.40	16.80	8.40
Y6A	4.19	3.65	4.55	4.13	5.08	2.54	4.13	4.13	11.11	13.67	6.84	11.11	11.11
Y6B	4.23	4.46	4.84	4.51	3.34	1.67	3.34	1.67	30.06	22.27	11.13	22.27	11.13
Y7A	3.97	4.11	4.71	4.26	3.83	1.91	3.83	1.91	23.07	20.70	10.35	20.70	10.35
Y7B	3.46	3.13	3.82	3.47	6.86	3.43	3.47	3.47	7.11	14.06	7.03	7.11	7.11
Y8A	4.18	4.25	4.70	4.38	6.96	3.48	4.38	4.38	12.28	19.53	9.77	12.28	12.28
Y8B	3.92	3.94	4.43	4.10	4.65	2.33	4.10	4.10	19.60	22.27	11.13	19.60	19.60
Y9A	3.84	3.64	4.30	3.93	10.53	5.27	3.92	3.92	4.80	12.89	6.45	4.80	4.80
Y9B	3.68	3.65	4.11	3.81	5.55	2.77	3.81	3.81	13.97	20.31	10.16	13.97	13.97
Y10A	3.76	3.38	4.24	3.79	4.15	2.08	3.79	3.79	19.99	21.88	10.94	19.99	19.99
Y10B	3.44	3.04	4.03	3.50	2.16	1.08	2.16	1.08	10.76	6.64	3.32	6.64	3.32
Y11A	4.00	4.01	4.49	4.17	3.08	1.54	3.08	1.54	17.45	12.89	6.45	12.89	6.45
Y11B	3.37	2.55	3.76	3.23	2.18	1.09	2.18	1.09	8.65	5.86	2.93	5.86	2.93



$$\text{OAs Area Ratio} = \frac{Area\ of\ OAs}{Area\ of\ Building\ Facade}$$

Figure 135: Illustration of OAs Area Ratio; Source: Author

3.6.1 Assessed Visual Pollution Maps

Assessed Visual Pollution (AVP) Maps are created with the Assessed Visual Pollution Score (AVPS) for each (44) measured point. The AVP Map is created with using ArcGIS inverse distance weighted (IDW) Interpolation mapping technique.

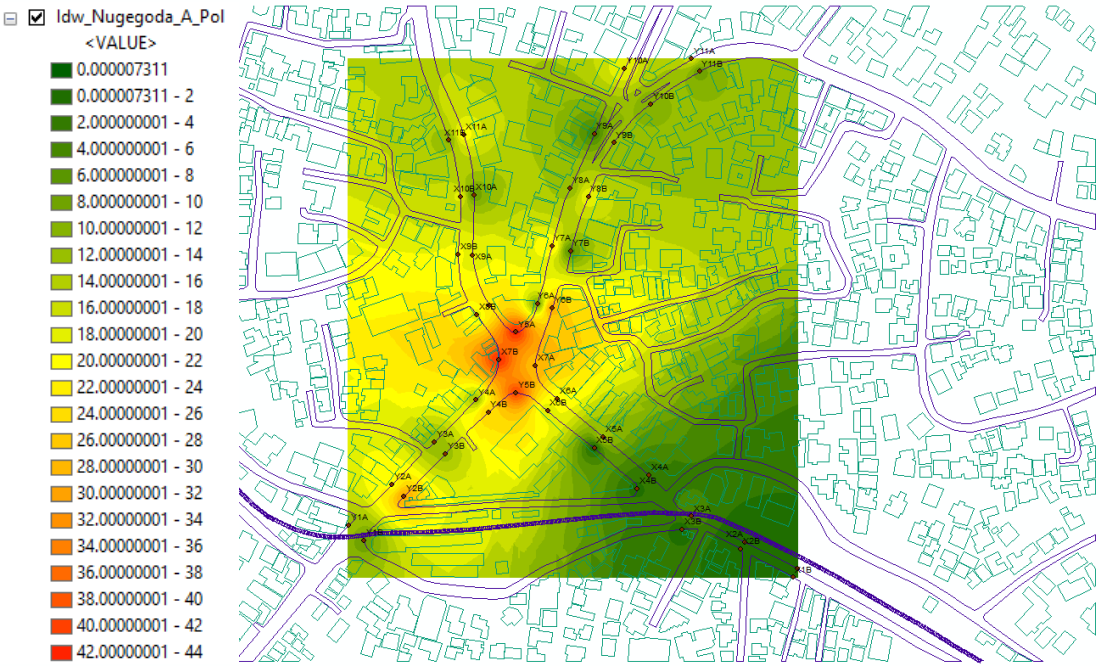


Figure 136: Assessed Visual Pollution Map; Source: Author

The Assessed Visual Pollution Map above shows that higher assessed pollution recorded near the main node and gradual decreasing distance away from the main node. Moreover, this map reveals that the road Y (Stanley Tilakaratne Mawatha) relatively higher recorded points compared to Road X (Old Kesbewa Road and Nawala Road).

Hence, this map is produced for two different scenarios. Firstly, in the case where if all OAs kept to the recommended ratios by the respondents. Secondly, in the case where only bigger OAs than the recommended ratios reduced to be recommended ratios where smaller OAs are kept in same way.

3.6.1.1 Case where all OAs kept to the recommended ratios

This is the first scenario; in case where all OAs kept to the recommended to the area of OAs to Building façade ratios. The following Figure shows an example of this scenario. The following diagram explains the scenario further.

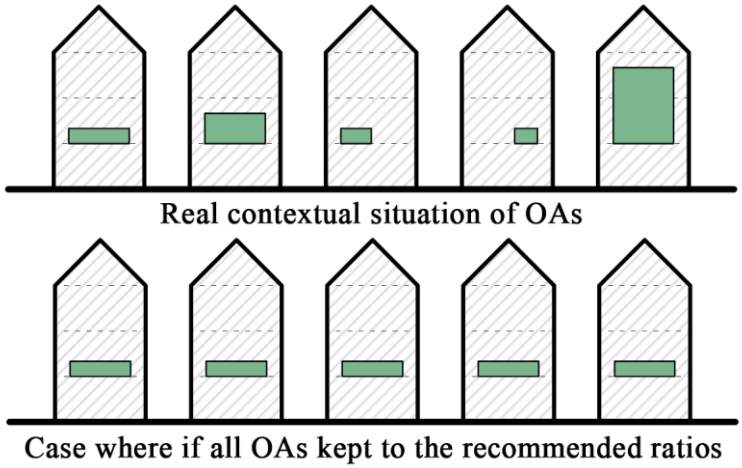


Figure 137: Proposed recommendation for OAs Scenario 1; Source: Author

Figure 138: Street view of South Molton Street, London, England; Source: Google

The Figure above explains the practical application of this situation with the view of South Molton Street, London, England.

3.6.1.1.1 Reduced to 1/8 : 1

This section explains where all the OAs are kept in 1/8 : 1 ratio of to the area of OAs to Building façade. The following map elaborate this scenario further.

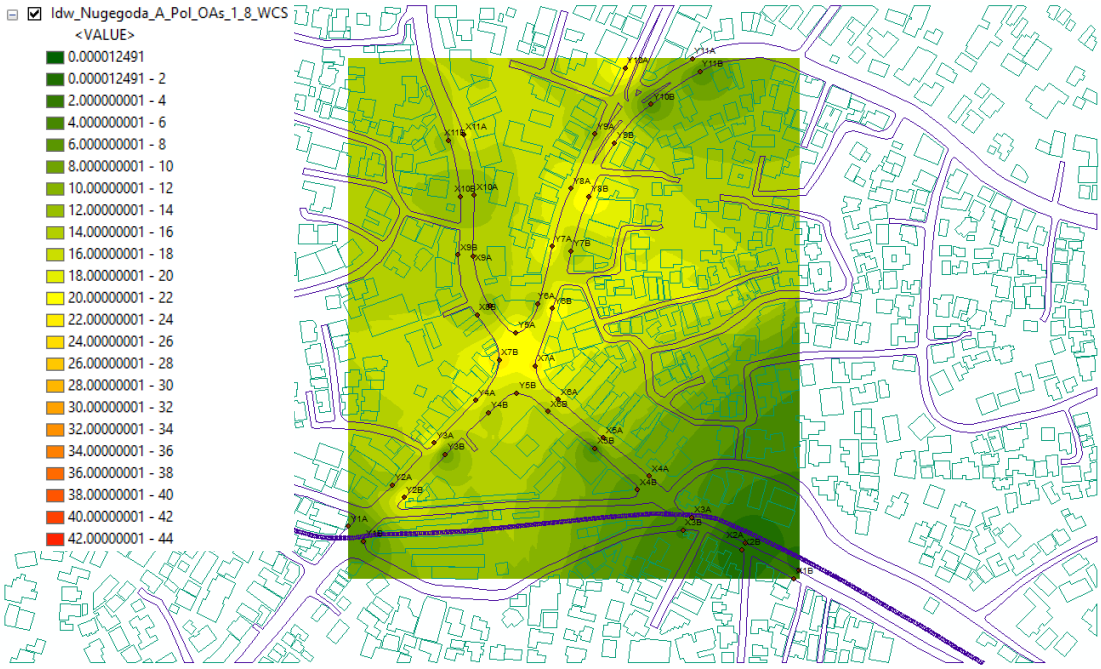


Figure 139: AVP Map of 1/8 : 1 at WCS; Source: Author

This map shows the case where bigger OAs reduced and increase smaller OAs to the topset recommended ratio of OAs to Building façade area (1/8 : 1). The assessed pollution has decreased from the Figure 136. However, due to variation of the built volume and condition of the OAs the map above shows in variation of pollution level. Moreover, the area near main node still revealing as relatively higher moderate pollution compared to other areas.

3.6.1.1.2 Reduced to 1/16 : 1

This section explains where all the OAs are kept in 1/16 :1 ratio of to the area of OAs to Building façade. The following map elaborate this scenario further.

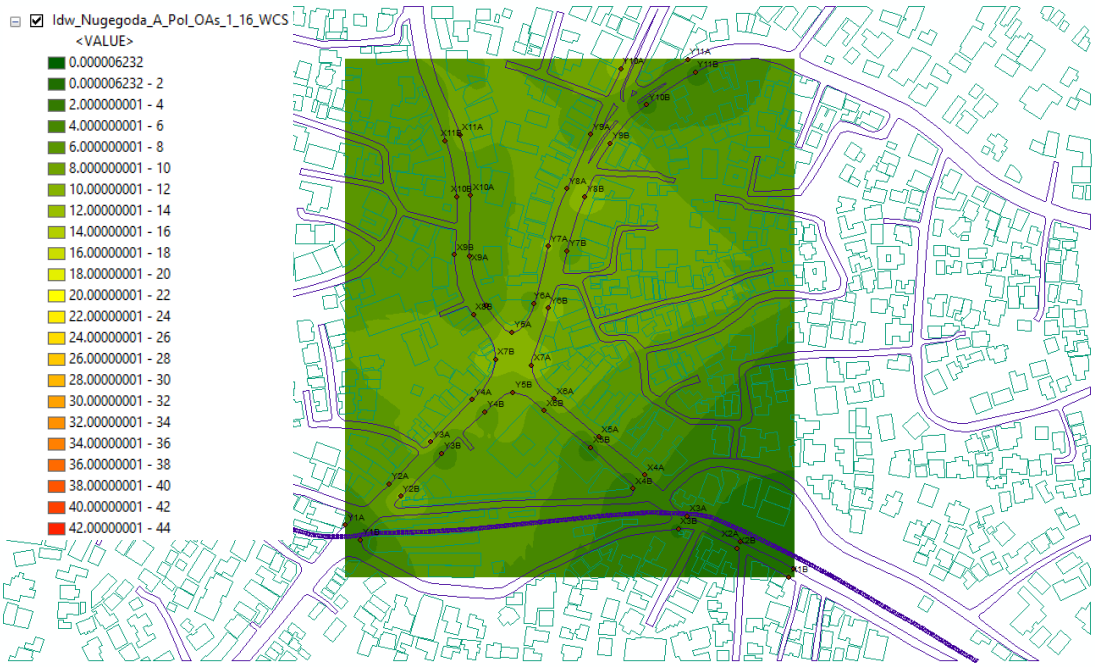


Figure 140: AVP Map of 1/16 : 1 at WCS; Source: Author

This map shows the case where bigger OAs reduced and increase smaller OAs to the topset recommended ratio of OAs to Building façade area (1/16 : 1). The assessed pollution has decreased vastly from the Figure 136 and reduced further compared to Figure 139. However, due to variation of the built volume and condition of the OAs the map above shows in variation of pollution level. Moreover, the area near main node still revealing as relatively higher moderate pollution compared to other areas.

3.6.1.2 Case where only bigger OAs reduced to the recommended ratios

This is the second scenario; in case where only bigger OAs are reduced the recommended ratios by the respondents and all the other small OAs are kept as it is. The following diagram explains the scenario further.

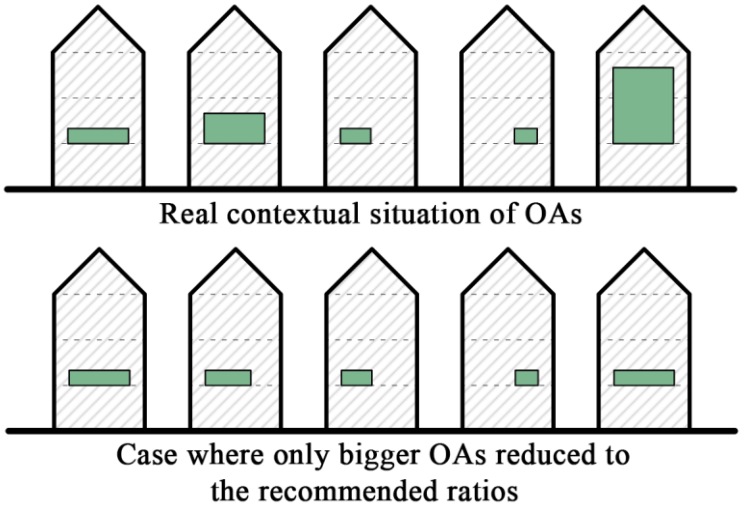


Figure 142: Proposed recommendation for OAs Scenario 2; Source: Author

Figure 141: View of Oxford Street, London, England; Source: Google

The Figure above explains the practical application of this situation with the view of Oxford Street, London, England.

3.6.1.2.1 Reduced to 1/8 : 1

This section explains where all the OAs are kept in 1/8 :1 ratio of to the area of OAs to Building façade. The following map elaborate this scenario further.

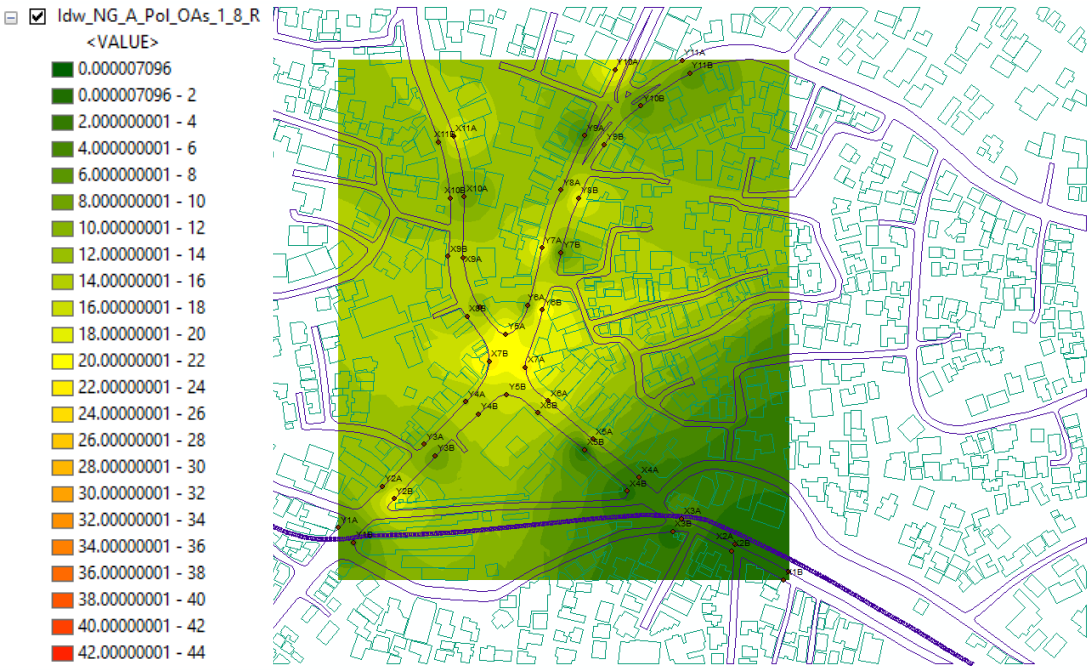


Figure 143: AVP Map of 1/8 : 1 at R; Source: Author

This map shows the case where bigger OAs reduced to the topset recommended ratio of OAs to Building façade area (1/8 : 1), whereas smaller OAs kept in the same size compared to the recommended ratio. The assessed pollution has decreased from the Figure 136. However, due to variation of the built volume and condition of the OAs the map above shows in variation of pollution level. Moreover, the area near main node still revealing as relatively higher moderate pollution compared to other areas.

3.6.1.2.2 Reduced to 1/16 : 1

This section explains where all the OAs are kept in 1/16 :1 ratio of to the area of OAs to Building façade. The following map elaborate this scenario further.

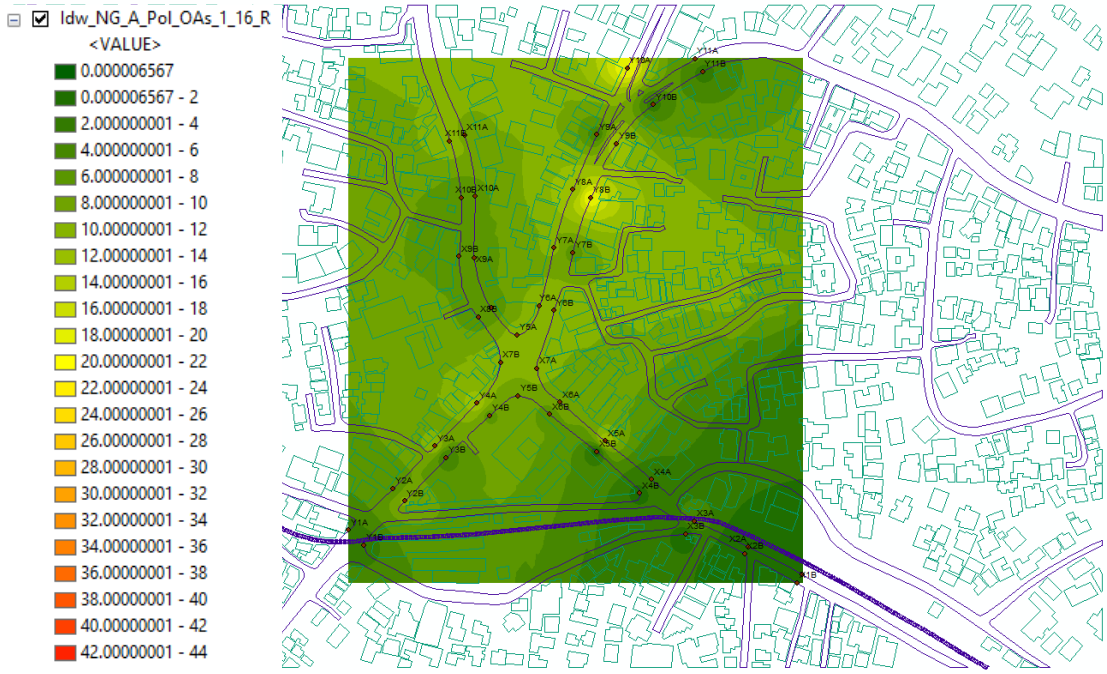


Figure 144: AVP Map of 1/16 : 1 at R; Source: Author

This map shows the case where bigger OAs reduced to the topset recommended ratio of OAs to Building façade area (1/16 : 1)), whereas smaller OAs kept in the same size compared to the recommended ratio. The assessed pollution has decreased vastly from the Figure 136 and reduced further compared to Figure 143. However, due to variation of the built volume and condition of the OAs the map above shows in variation of pollution level. Moreover, the area near main node still revealing as relatively higher moderate pollution compared to other areas.

3.7.1 Surveyed Visual Pollution Maps

The following Surveyed Pollution Maps are created with the Surveyed Visual Pollution Score (AVPS) for each (44) measured point. The SVP Map is created with using ArcGIS inverse distance weighted (IDW) Interpolation mapping technique. Hence, this map is produced for two different scenarios. Firstly, in the case where if all OAs Kept to the recommended ratios by the respondents. Secondly, in the case where only bigger OAs than the recommended ratios reduced to be recommended ratios where smaller OAs are kept in same way. Both cases are produced respectively with AVPS of the recommended ratios.

3.7.1.1 Case where if all OAs kept to the recommended ratios

This is the first scenario; in case where all OAs kept to the recommended to the area of OAs to Building façade ratios.

3.7.1.1.1 Reduced to 1/8 : 1

This section explains where all the OAs are kept in 1/8 :1 ratio of to the area of OAs to Building façade. The following map elaborate this scenario further.

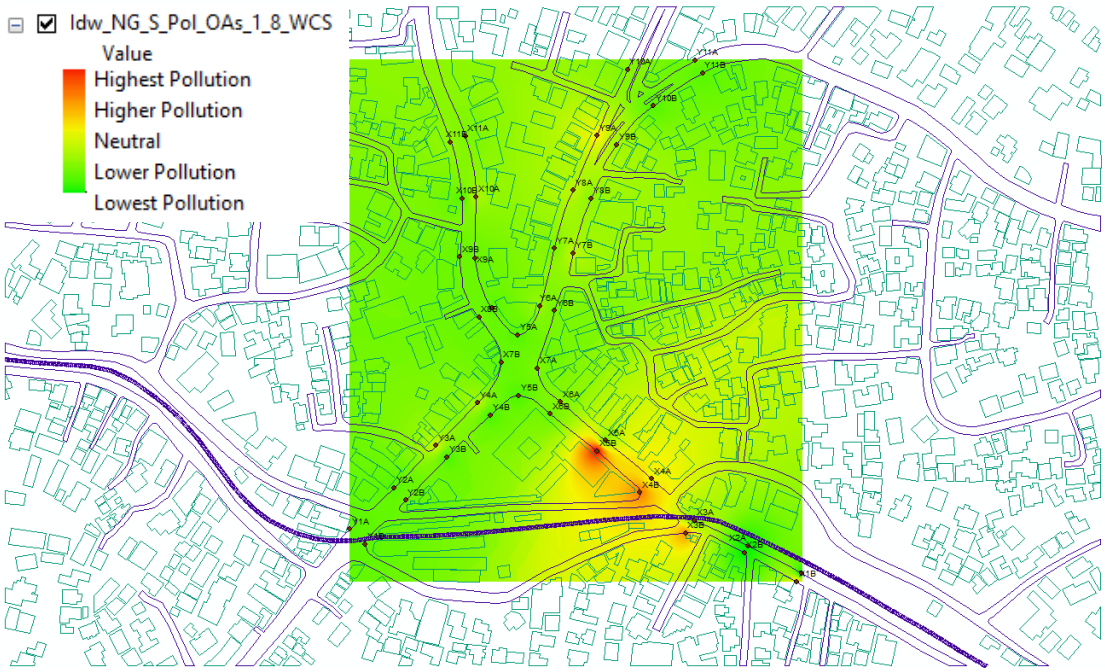


Figure 145: SVP Map of 1/8 : 1 at WCS; Source: Author

This map shows the case where bigger OAs reduced and increase smaller OAs to the topset recommended ratio of OAs to Building façade area (1/8 : 1). The assessed pollution has decreased from the Figure 127. However, due to the higher rating the respondents gave for the point X3A, X3B, X4A, X4B, X5A and X5B the map above shows a relatively higher pollution levels at these points.

3.7.1.1.2 Reduced to 1/16 : 1

This section explains where all the OAs are kept in 1/16 :1 ratio of to the area of OAs to Building façade. The following map elaborate this scenario further.

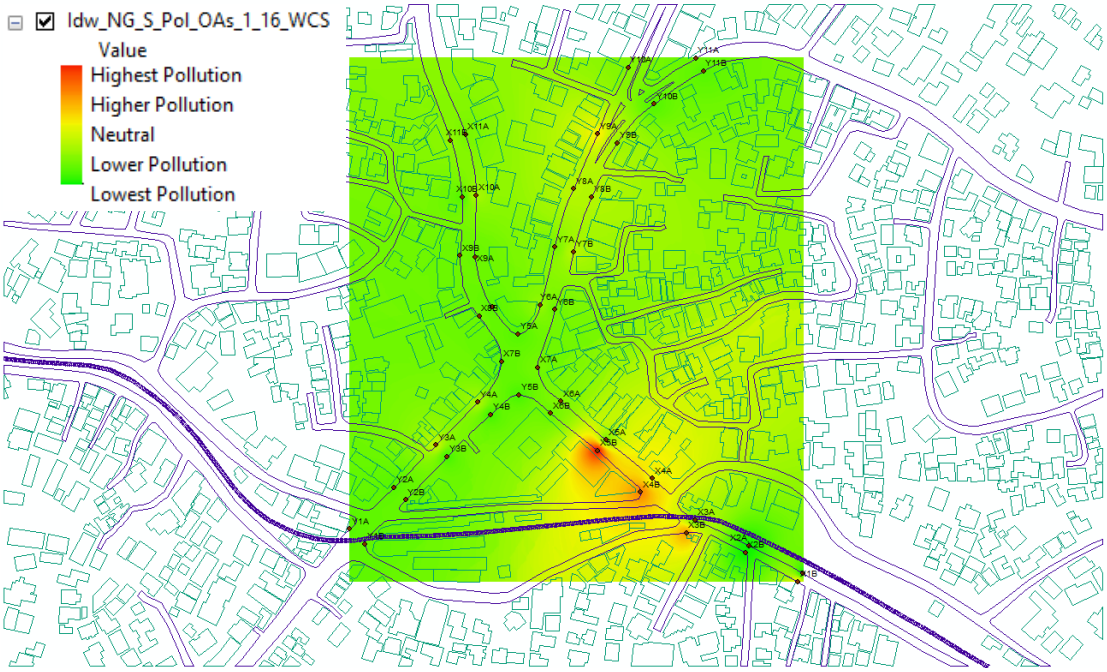


Figure 146: SVP Map of 1/16 : 1 at WCS; Source: Author

This map shows the case where bigger OAs reduced and increase smaller OAs to the topset recommended ratio of OAs to Building façade area (1/16 : 1). The assessed pollution has decreased from the Figure 127. However, due to the higher rating the respondents gave for the point X3A, X3B, X4A, X4B, X5A and X5B the map above shows a relatively higher pollution levels at these points. Moreover, compared to the previous case in the Figure 145 the map reveals there is not significant changes even though it is reduced from 1/8 to 1/16. This is due to higher rating given by the respondents at these above-mentioned points.

3.7.1.2 Case where only bigger OAs reduced to the recommended ratios

This is the second scenario; in case where only bigger OAs are reduced the recommended ratios by the respondents and all the other small OAs are kept as it is.

3.7.1.2.1 Reduced to 1/8 : 1

This section explains where all the OAs are kept in 1/8 :1 ratio of to the area of OAs to Building façade. The following map elaborate this scenario further.

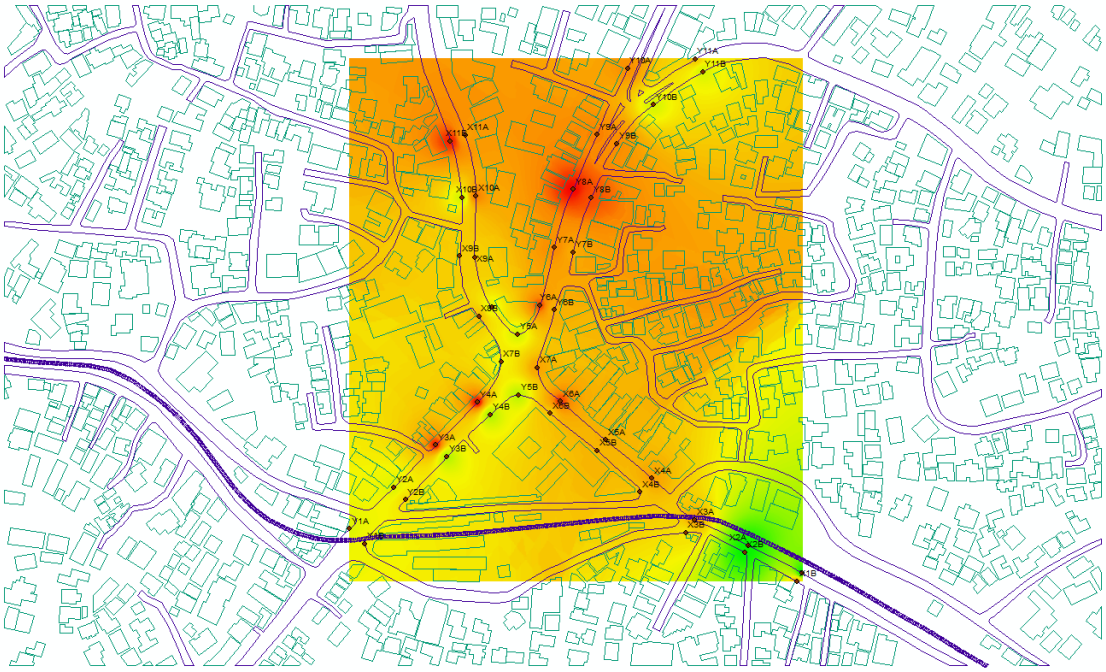


Figure 147: SVP Map of 1/8 : 1 at R; Source: Author

This map shows the case where bigger OAs reduced to the topset recommended ratio of OAs to Building façade area (1/8 : 1), whereas smaller OAs kept in the same size compared to the recommended ratio. The assessed pollution has decreased from the Figure 127. However, due to variation of the built volume and condition of the OAs the map above shows in variation of pollution level. Moreover, the points of X6A, Y3A, Y4A, Y8A, Y8B and X11B still revealing as relatively higher moderate pollution compared to other areas because of the higher rating given by the respondents at these particular points.

3.7.1.2.2 Reduced to 1/16 : 1

This section explains where all the OAs are kept in 1/16 :1 ratio of to the area of OAs to Building façade. The following map elaborate this scenario further.

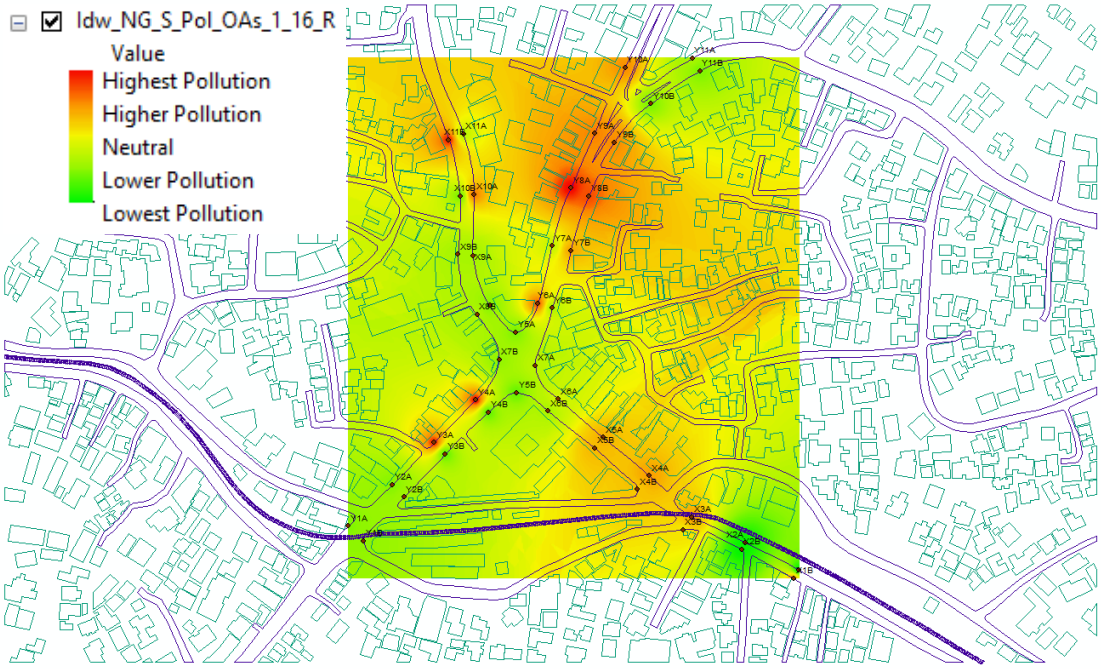


Figure 148: SVP Map of 1/16 : 1 at R; Source: Author

This map shows the case where bigger OAs reduced to the topset recommended ratio of OAs to Building façade area (1/16 : 1)), whereas smaller OAs kept in the same size compared to the recommended ratio. The assessed pollution has decreased vastly from the Figure 127 and reduced further compared to Figure 147. However, due to variation of the built volume and condition of the OAs the map above shows in variation of pollution level. Moreover, the points of Y3A, Y4A, Y8A, Y8B and X11B still revealing as relatively higher moderate pollution compared to other areas because of the higher rating given by the respondents at these particular points.

CONCLUSION

This study mainly focused on the perception of architects & urban designers on impact of outdoor advertisement on visual pollution within the context of Nugegoda, Sri Lanka. The population sample of the study is mixture of 100 architects and urban designers and their demographic descriptive study summarized in the Table 2,3,4 & 5. The study focused on 44 surveyed points within the study area and gathered responses from the respondents (perception) regarding the appearance of the street (as), number of OAs in the street (na) and appearance of the OAs in the street (as). Respondents' perceptions were mapped as Surveyed Map for Number of OAs in the Street, Number of OAs in the Street and Appearance of OAs in the Street; the following Figures 124, 125 and 126 summarizes the maps respectively.

Hence, the diagnostic tests (Chapter 3.3) reveals that the independent variables of appearance of the street (as), number of OAs in the street (na) and appearance of the OAs in the street (as) area discussing a common dependent variable which is Surveyed Pollution Score (SVPS). The developed Surveyed Pollution Map (Figure 127) reveals that the area near the main node becomes the highest polluted area and pollution are decreasing with the distance away from the main node. Additionally, this map shows that there is positive relationship with SVPS and the hierarchy of the roads.

This study contains following outcomes and recommendations by the respondents;

- A higher number of 38 out of 100 respondents strongly agree to place OAs in the Streetscape. (Figure 128)
- A higher percentage of 46.7% respondents perceive OAs as means of Visual Pollution. (Table 13)
- The second highest percentage of 24.1% respondents perceive OAs effects the Image of the City. (Table 14)
- A higher percentage of 34.9% respondents prefers to have virtual and social media advertising rather OAs. (Table 15)

- A higher percentage of 70.1% respondents recommends to implement suitable guidelines & regulations that lead to mitigate Visual Pollution from OAs. (Table 16)
- 50 out of 100 respondents agreed to adopting the guidelines and regulations of precedents from overseas to mitigate visual pollution in Sri Lanka. (Figure 129)
- The highest number of respondents (30 out of 100 respondents recommended) recommended to premise the area ratio of OAs to building façade of 1/8 : 1. Moreover, another 25 out of 100 respondents recommended to premise the area ratio of OAs to building façade of 1/16 : 1. (Figure 130)

Finally, this study reveals that there is higher impact of OAs on Visual Pollution within the study area (Nugegoda, Sri Lanka).

Scope for the further research on this study:

- Implementing Guidelines and Regulations based on the recommendations from the respondents.
- This study can be further expanded to find the intangible aspects of the perception of architects and urban designers.
- This study methodology can be applicable to test other Major Urban Centre in Sri Lanka.

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APPENDIX A

The following are the assessed pollution scores and details of all 44 points surveyed points.

Visual Pollution Assessment Tool																
Section 1: Place Character																
1.1	Number of road lanes	1	2	3	4											
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I								
1.3	Nature of activity	Residential														
1.4	Average height of majority of buildings (no of stories)	1	2	3	4											
1.5	Average road width	8.1														
1.6	Average distance between facing building lines	26														
1.7	Area type (planned/ unplanned)	P	UP													
1.8	Socio-economic status	Low		Medium		High										
1.9 Location																
Lat: 6.87190 Lng: 79.89357																
1.10 Node Address																
Old Kesbawa Road, Nugegoda.																
1.11 Node ID: X1A																
Section 2: Visual Pollution																
2.1	**Outdoor Advertisements:**	**P**	**Area Covered by OAs**	**Physical appearance**	**Structure**	**Placement**	**Display Surfaces**	**Size**	**Content**	**Media Type**	**Individual OAs A. Pollution Score**	**Total A. Pollution Score**	**Individual OAs A. Pollution Index If OAs reduced to 1/8**	**Total A. Pollution Score If OAs reduced to 1/8**	**Individual OAs A. Pollution Index If OAs reduced to 1/16**	**Total A. Pollution Score If OAs reduced to 1/16**
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	0									0.00		0.00		0.00	
2.1.2	**Sign Boards**	0									0.00	0.00	0.00	0.00	0.00	0.00
2.1.3	**Banners / Steamers / Posters**	0									0.00		0.00		0.00	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Residential						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	8.1						
1.6	Average distance between facing building lines	26						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location
Lat: 6.87183 Lng: 79.89592

1.10 Node Address
Old Kesbawa Road,
Nugegoda.

1.11 Node ID: X1B

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	0									0.00	1.85	0.00	5.47	0.00	2.73
2.1.2	**Sign Boards**	0									0.00		0.00		0.00	
2.1.3	**Banners / Steamers / Posters**	1	4.22	3	3	1	1	1	4	1	1.85		5.47		2.73	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Residential						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	6.4						
1.6	Average distance between facing building lines	26						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87212 Lng: 79.89313

1.10 Node Address

Old Kesbawa Road,
Nugegoda.

1.11 Node ID: X2A

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	0									0.00		0.00		0.00	
2.1.2	**Sign Boards**	0									0.00	0.00	0.00	0.00	0.00	0.00
2.1.3	**Banners / Steamers / Posters**	0									0.00		0.00		0.00	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Residential						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	6.4						
1.6	Average distance between facing building lines							
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location
Lat: 6.87206 Lng: 79.89310

1.10 Node Address
Old Kesbawa Road,
Nugegoda.

1.11 Node ID: X2B

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	0									0.00		0.00		0.00	
2.1.2	**Sign Boards**	0									0.00	0.00	0.00	0.00	0.00	0.00
2.1.3	**Banners / Steamers / Posters**	0									0.00		0.00		0.00	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Residential						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	13.4						
1.6	Average distance between facing building lines	18						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87229 Lng: 79.89276

1.10 Node Address

Old Kesbawa Road,
Nugegoda.

1.11 Node ID: X3A

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	11.23	3	2	2	3	1	4	3	6.32	6.32	7.03	7.03	3.52	3.52
2.1.2	**Sign Boards**	0	0.00								0.00		0.00		0.00	
2.1.3	**Banners / Steamers / Posters**	0	0.00								0.00		0.00		0.00	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Residential						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	13.4						
1.6	Average distance between facing building lines	18						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location
Lat: 6.87222 Lng: 79.89272

1.10 Node Address
Old Kesbawa Road,
Nugegoda.

1.11 Node ID: X3B

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	0									0.00	0.68	0.00	3.52	0.00	1.76
2.1.2	**Sign Boards**	0									0.00		0.00		0.00	
2.1.3	**Banners / Steamers / Posters**	1	2.40	2	2	1	1	1	1	1	0.68		3.52		1.76	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4				
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I	
1.3	Nature of activity	Commerical							
1.4	Average height of majority of buildings (no of stories)	1	2	3	4				
1.5	Average road width	12.0							
1.6	Average distance between facing building lines	30							
1.7	Area type (planned/ unplanned)	P	UP						
1.8	Socio-economic status	Low		Medium		High			

1.9 Location

Lat: 6.87261 Lng: 79.89239

1.10 Node Address

Old Kesbawa Road,
Nugegoda.

1.11 Node ID: X4A

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	0									0.00	3.22	0.00	8.98	0.00	4.49
2.1.2	**Sign Boards**	1	5.26	1	2	2	1	1	3	3	2.14		5.08		2.54	
2.1.3	**Banners / Steamers / Posters**	1	3.48	1	1	2	1	1	3	1	1.09		3.91		1.95	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	12.0						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87525 Lng: 79.89228

1.10 Node Address

Old Kesbawa Road,
Nugegoda.

1.11 Node ID: X4B

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	0									0.00	1.27	0.00	6.25	0.00	3.13
2.1.2	**Sign Boards**	1	2.53	2	2	2	1	1	4	4	1.27		6.25		3.13	
2.1.3	**Banners / Steamers / Posters**	0									0.00		0.00		0.00	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	12.0						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87287 Lng: 79.8908

1.10 Node Address

Old Kesbawa Road,
Nugegoda.

1.11 Node ID: X5A

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	25.29	5	4	3	1	2			11.85	14.02	5.86	16.02	2.93	8.01
2.1.2	**Sign Boards**	1	3.27	1	2	2	1	1	4	3	1.43		5.47		2.73	
2.1.3	**Banners / Steamers / Posters**	1	1.96	3	1	1	1	1	4	1	0.74		4.69		2.34	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	12.0						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location
Lat: 6.87281 Lng: 79.89200

1.10 Node Address
Old Kesbawa Road,
Nugegoda.

1.11 Node ID: X5B

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	0									0.00	0.75	0.00	4.69	0.00	2.34
2.1.2	**Sign Boards**	1	2.00	1	2	2	1	1	1	4	0.75		4.69		2.34	
2.1.3	**Banners / Steamers / Posters**	0									0.00		0.00		0.00	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	13.4						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87318 Lng: 79.89171

1.10 Node Address

Old Kesbawa Road,
Nugegoda.

1.11 Node ID: X6A

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	16.30	2	4	3	1	2	4	4	10.19	20.56	7.81	18.75	3.91	9.38
2.1.2	**Sign Boards**	1	15.26	2	2	2	1	1	4	4	7.63		6.25		3.13	
2.1.3	**Banners / Steamers / Posters**	1	7.30	2	1	2	1	1	4	1	2.74		4.69		2.34	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	13.4						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location
Lat: 6.87311 Lng: 79.89163

1.10 Node Address
Old Kesbawa Road,
Nugegoda.

1.11 Node ID: X6B

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	27.35	1	4	1	3	2	4	4	16.24	18.48	7.42	13.67	3.71	6.84
2.1.2	**Sign Boards**	1	4.49	3	1	2	1	1	4	4	2.25		6.25		3.13	
2.1.3	**Banners / Steamers / Posters**	0									0.00		0.00		0.00	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4	5		
1.5	Average road width	31.0						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87345 Lng: 79.89152

1.10 Node Address

Old Kesbawa Road,
Nugegoda.

1.11 Node ID: X7A

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	26.19	3	4	3	1	5	4	4	19.64	28.64	9.38	22.66	4.69	11.33
2.1.2	**Sign Boards**	1	12.43	2	2	2	1	4	4	4	7.38		7.42		3.71	
2.1.3	**Banners / Steamers / Posters**	1	3.46	3	1	2	3	1	4	1	1.62		5.86		2.93	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	31.0						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87348 Lng: 79.89120

1.10 Node Address

Old Kesbawa Road,
Nugegoda.

1.11 Node ID: X7B

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	39.00	3	4	3	1	5	4	4	29.25	42.59	9.38	23.83	4.69	11.91
2.1.2	**Sign Boards**	1	21.79	2	2	2	1	4	4	4	12.94		7.42		3.71	
2.1.3	**Banners / Steamers / Posters**	1	0.71	5	3	1	3	1	4	1	0.40		7.03		3.52	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4				
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I	
1.3	Nature of activity	Commerical							
1.4	Average height of majority of buildings (no of stories)	1	2	3	4				
1.5	Average road width	13.4							
1.6	Average distance between facing building lines	30							
1.7	Area type (planned/ unplanned)	P	UP						
1.8	Socio-economic status	Low		Medium		High			

1.9 Location

Lat: 6.87389 Lng: 79.89114

1.10 Node Address

Nawala Road,
Nugegoda.

1.11 Node ID: X8A

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	0									0.00	23.55	0.00	12.50	0.00	6.25
2.1.2	**Sign Boards**	1	34.22	2	2	3	1	3	4	4	20.32		7.42		3.71	
2.1.3	**Banners / Steamers / Posters**	1	7.96	3	1	2	1	1	4	1	3.23		5.08		2.54	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	13.4						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87388 Lng: 79.89101

1.10 Node Address

Nawala Road,
Nugegoda.

1.11 Node ID: X8B

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	11.56	1	4	3	1	2	4	4	6.86	18.96	7.42	14.06	3.71	7.03
2.1.2	**Sign Boards**	1	22.77	3	2	2	1	1	4	4	12.10		6.64		3.32	
2.1.3	**Banners / Steamers / Posters**	0									0.00		0.00		0.00	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4				
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I	
1.3	Nature of activity	Commerical							
1.4	Average height of majority of buildings (no of stories)	1	2	3	4				
1.5	Average road width	12.6							
1.6	Average distance between facing building lines	30							
1.7	Area type (planned/ unplanned)	P	UP						
1.8	Socio-economic status	Low		Medium		High			

1.9 Location

Lat: 6.87432 Lng: 79.89099

1.10 Node Address

Nawala Road,
Nugegoda.

1.11 Node ID: X9A

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	18.69	1	4	3	2	3	4	4	12.27	18.40	8.20	14.45	4.10	7.23
2.1.2	**Sign Boards**	1	12.26	2	1	2	1	3	4	3	6.13		6.25		3.13	
2.1.3	**Banners / Steamers / Posters**	0									0.00		0.00		0.00	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	12.6						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87431 Lng: 79.89088

1.10 Node Address

Nawala Road,
Nugegoda.

1.11 Node ID: X9B

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	21.20	3	4	3	1	3	4	4	14.58	20.69	8.59	14.84	4.30	7.42
2.1.2	**Sign Boards**	1	12.22	2	2	2	1	1	4	4	6.11		6.25		3.13	
2.1.3	**Banners / Steamers / Posters**	0									0.00		0.00		0.00	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4				
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I	
1.3	Nature of activity	Commerical							
1.4	Average height of majority of buildings (no of stories)	1	2	3	4				
1.5	Average road width	12.0							
1.6	Average distance between facing building lines	30							
1.7	Area type (planned/ unplanned)	P	UP						
1.8	Socio-economic status	Low		Medium		High			

1.9 Location

Lat: 6.87486 Lng: 79.89100

1.10 Node Address

Nawala Road,
Nugegoda.

1.11 Node ID: X10A

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	0									0.00	7.84	0.00	12.11	0.00	6.05
2.1.2	**Sign Boards**	1	11.16	2	2	2	1	3	4	4	6.28		7.03		3.52	
2.1.3	**Banners / Steamers / Posters**	1	3.84	2	2	2	1	1	4	1	1.56		5.08		2.54	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	12.0						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87483 Lng: 79.89087

1.10 Node Address

Nawala Road,
Nugegoda.

1.11 Node ID: X10B

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	0									0.00	18.95	0.00	12.50	0.00	6.25
2.1.2	**Sign Boards**	1	19.87	1	2	2	1	2	4	4	9.94		6.25		3.13	
2.1.3	**Banners / Steamers / Posters**	1	18.03	1	2	2	1	2	4	4	9.02		6.25		3.13	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	13.4						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87551 Lng: 79.89079

1.10 Node Address

Nawala Road,
Nugegoda.

1.11 Node ID: X11A

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	20.04	1	2	2	1	3	4	4	10.65	21.36	6.64	18.75	3.32	9.38
2.1.2	**Sign Boards**	1	10.07	1	2	2	1	2	4	4	5.04		6.25		3.13	
2.1.3	**Banners / Steamers / Posters**	1	12.12	1	2	1	2	1	4	4	5.68		5.86		2.93	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	13.4						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87549 Lng: 79.89063

1.10 Node Address

Nawala Road,
Nugegoda.

1.11 Node ID: X11B

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	4.89	2	1	2	1	1	4	4	2.29	11.62	5.86	12.89	2.93	6.45
2.1.2	**Sign Boards**	1	16.58	3	2	2	1	2	4	4	9.33		7.03		3.52	
2.1.3	**Banners / Steamers / Posters**	0									0.00		0.00		0.00	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	16.0						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87205 Lng: 79.88996

1.10 Node Address

Stanley Thilakaratne Mawatha, Nugegoda.

1.11 Node ID: Y1A

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	0									0.00	13.43	0.00	7.03	0.00	3.52
2.1.2	**Sign Boards**	1	23.88	3	2	3	1	1	4	4	13.43		7.03		3.52	
2.1.3	**Banners / Steamers / Posters**	0									0.00		0.00		0.00	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	16.0						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87202 Lng: 79.89007

1.10 Node Address

Stanley Thilakaratne Mawatha, Nugegoda.

1.11 Node ID: Y1B

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	0									0.00	8.17	0.00	5.86	0.00	2.93
2.1.2	**Sign Boards**	1	17.43	3	2	2	3	1	1	3	8.17		5.86		2.93	
2.1.3	**Banners / Steamers / Posters**	0									0.00		0.00		0.00	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	14.3						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87218 Lng: 79.89007

1.10 Node Address

Stanley Thilakaratne Mawatha, Nugegoda.

1.11 Node ID: Y2A

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	0									0.00	21.24	0.00	12.89	0.00	6.45
2.1.2	**Sign Boards**	1	32.16	2	2	2	1	3	4	4	18.09		7.03		3.52	
2.1.3	**Banners / Steamers / Posters**	1	6.72	2	1	2	1	1	4	4	3.15		5.86		2.93	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	14.3						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87214 Lng: 79.89021

1.10 Node Address

Stanley Thilakaratne Mawatha, Nugegoda.

1.11 Node ID: Y2B

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	13.93	3	4	1	1	2	4	4	8.27	30.54	7.42	20.70	3.71	10.35
2.1.2	**Sign Boards**	1	31.61	2	2	3	1	2	4	4	17.78		7.03		3.52	
2.1.3	**Banners / Steamers / Posters**	1	8.97	3	1	2	1	1	4	4	4.49		6.25		3.13	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4				
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I	
1.3	Nature of activity	Commerical							
1.4	Average height of majority of buildings (no of stories)	1	2	3	4				
1.5	Average road width	13.4							
1.6	Average distance between facing building lines	30							
1.7	Area type (planned/ unplanned)	P	UP						
1.8	Socio-economic status	Low		Medium		High			

1.9 Location

Lat: 6.87281 Lng: 79.89069

1.10 Node Address

Stanley Thilakaratne Mawatha,
Nugegoda.

1.11 Node ID: Y3A

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	12.29	3	2	2	3	2	4	4	7.68	11.86	7.81	20.70	3.91	10.35
2.1.2	**Sign Boards**	1	4.86	2	2	2	1	1	4	4	2.43		6.25		3.13	
2.1.3	**Banners / Steamers / Posters**	1	3.30	2	2	1	3	1	4	4	1.75		6.64		3.32	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	13.4						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87275 Lng: 79.89079

1.10 Node Address

Stanley Thilakaratne Mawatha,
Nugegoda.

1.11 Node ID: Y3B

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	21.16	2	4	1	1	4	4	4	13.23	13.23	7.81	7.81	3.91	3.91
2.1.2	**Sign Boards**	0									0.00		0.00		0.00	
2.1.3	**Banners / Steamers / Posters**	0									0.00		0.00		0.00	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	14.8						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87313 Lng: 79.89101

1.10 Node Address

Stanley Thilakaratne Mawatha, Nugegoda.

1.11 Node ID: Y4A

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	6.25	3	2	2	1	1	4	4	3.32	13.87	6.64	19.53	3.32	9.77
2.1.2	**Sign Boards**	1	16.16	2	2	2	1	2	4	4	8.59		6.64		3.32	
2.1.3	**Banners / Steamers / Posters**	1	3.92	3	2	1	1	1	4	4	1.96		6.25		3.13	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4				
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I	
1.3	Nature of activity	Commerical							
1.4	Average height of majority of buildings (no of stories)	1	2	3	4				
1.5	Average road width	14.8							
1.6	Average distance between facing building lines	30							
1.7	Area type (planned/ unplanned)	P	UP						
1.8	Socio-economic status	Low		Medium		High			

1.9 Location

Lat: 6.87308 Lng: 79.89110

1.10 Node Address

Stanley Thilakaratne Mawatha, Nugegoda.

1.11 Node ID: Y4B

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	31.06	3	4	3	3	4	4	4	24.27	26.03	9.77	14.45	4.88	7.23
2.1.2	**Sign Boards**	0									0.00		0.00		0.00	
2.1.3	**Banners / Steamers / Posters**	1	4.70	2	1	2	1	1	4	1	1.76		4.69		2.34	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4				**1.9 Location**
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I	Lat: 6.87373 Lng: 79.89133
1.3	Nature of activity	Commerical							
1.4	Average height of majority of buildings (no of stories)	1	2	3	4				**1.10 Node Address**
1.5	Average road width	50.8							Stanley Thilakaratne Mawatha,
1.6	Average distance between facing building lines	30							Nugegoda.
1.7	Area type (planned/ unplanned)	P	UP						**1.11 Node ID: Y5A**
1.8	Socio-economic status	Low		Medium		High			

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	43.57	2	4	3	1	4	4	4	29.95	42.89	8.59	21.88	4.30	10.94
2.1.2	**Sign Boards**	1	17.30	3	2	2	1	2	4	4	9.73		7.03		3.52	
2.1.3	**Banners / Steamers / Posters**	1	6.40	4	1	1	1	1	4	4	3.20		6.25		3.13	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	50.8						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location
Lat: 6.87321 Lng: 79.89135

1.10 Node Address
Stanley Thilakaratne Mawatha,
Nugegoda.

1.11 Node ID: Y5B

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	45.72	3	4	3	3	5	4	4	37.15	39.93	10.16	16.80	5.08	8.40
2.1.2	**Sign Boards**	0									0.00		0.00		0.00	
2.1.3	**Banners / Steamers / Posters**	1	5.23	3	2	2	1	1	4	4	2.78		6.64		3.32	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	13.0						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87397 Lng: 79.89151

1.10 Node Address

Stanley Thilakaratne Mawatha, Nugegoda.

1.11 Node ID: Y6A

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	0									0.00	11.11	0.00	13.67	0.00	6.84
2.1.2	**Sign Boards**	1	14.27	3	2	2	1	2	4	4	8.03		7.03		3.52	
2.1.3	**Banners / Steamers / Posters**	1	5.80	3	2	2	1	1	4	4	3.08		6.64		3.32	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	13.0						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87396 Lng: 79.89162

1.10 Node Address

Stanley Thilakaratne Mawatha,
Nugegoda.

1.11 Node ID: Y6B

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	23.28	2	4	3	3	4	4	4	17.46	30.06	9.38	22.27	4.69	11.13
2.1.2	**Sign Boards**	1	16.62	2	2	2	1	2	4	4	8.83		6.64		3.32	
2.1.3	**Banners / Steamers / Posters**	1	7.55	2	2	2	1	1	4	4	3.78		6.25		3.13	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	16.4						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87434 Lng: 79.89160

1.10 Node Address

Stanley Thilakaratne Mawatha,
Nugegoda.

1.11 Node ID: Y7A

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	11.06	3	2	2	1	3	4	4	6.57	23.07	7.42	20.70	3.71	10.35
2.1.2	**Sign Boards**	1	25.30	3	2	2	1	3	4	4	15.02		7.42		3.71	
2.1.3	**Banners / Steamers / Posters**	1	3.15	2	2	1	1	1	4	4	1.48		5.86		2.93	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	16.4						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87431 Lng: 79.89172

1.10 Node Address

Stanley Thilakaratne Mawatha, Nugegoda.

1.11 Node ID: Y7B

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	5.61	3	4	1	1	3	4	4	3.51	7.11	7.81	14.06	3.91	7.03
2.1.2	**Sign Boards**	1	7.21	2	2	2	1	1	4	4	3.61		6.25		3.13	
2.1.3	**Banners / Steamers / Posters**	0									0.00		0.00		0.00	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4				**1.9 Location**
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I	Lat: 6.87477 Lng: 79.89175
1.3	Nature of activity	Commerical							
1.4	Average height of majority of buildings (no of stories)	1	2	3	4				**1.10 Node Address**
1.5	Average road width	16.6							Stanley Thilakaratne Mawatha,
1.6	Average distance between facing building lines	30							Nugegoda.
1.7	Area type (planned/ unplanned)	P	UP						**1.11 Node ID: Y8A**
1.8	Socio-economic status	Low		Medium		High			

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	6.30	2	4	2	1	1	4	4	3.54	12.28	7.03	19.53	3.52	9.77
2.1.2	**Sign Boards**	1	10.17	2	2	2	1	1	4	4	5.09		6.25		3.13	
2.1.3	**Banners / Steamers / Posters**	1	7.30	2	2	2	1	1	4	4	3.65		6.25		3.13	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	16.6						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87473 Lng: 79.89187

1.10 Node Address

Stanley Thilakaratne Mawatha,
Nugegoda.

1.11 Node ID: Y8B

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	14.65	3	4	1	1	3	4	4	9.16	19.60	7.81	22.27	3.91	11.13
2.1.2	**Sign Boards**	1	16.21	2	2	2	1	2	4	4	8.61		6.64		3.32	
2.1.3	**Banners / Steamers / Posters**	1	2.93	3	4	1	3	1	4	4	1.83		7.81		3.91	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4				**1.9 Location**
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I	Lat: 6.87523 Lng: 79.89193
1.3	Nature of activity	Commerical							
1.4	Average height of majority of buildings (no of stories)	1	2	3	4				**1.10 Node Address**
1.5	Average road width	17.8							Stanley Thilakaratne Mawatha,
1.6	Average distance between facing building lines	30							Nugegoda.
1.7	Area type (planned/ unplanned)	P	UP						**1.11 Node ID: Y9A**
1.8	Socio-economic status	Low		Medium		High			

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	0									0.00	4.80	0.00	12.89	0.00	6.45
2.1.2	**Sign Boards**	1	4.69	2	2	2	1	1	4	4	2.35		6.25		3.13	
2.1.3	**Banners / Steamers / Posters**	1	4.63	3	2	2	1	1	4	4	2.46		6.64		3.32	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4				
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I	
1.3	Nature of activity	Commerical							
1.4	Average height of majority of buildings (no of stories)	1	2	3	4				
1.5	Average road width	17.8							
1.6	Average distance between facing building lines	30							
1.7	Area type (planned/ unplanned)	P	UP						
1.8	Socio-economic status	Low		Medium		High			

1.9 Location

Lat: 6.87519 Lng: 79.89209

1.10 Node Address

Stanley Thilakaratne Mawatha, Nugegoda.

1.11 Node ID: Y9B

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	11.37	1	2	2	1	3	4	4	6.04	13.97	6.64	20.31	3.32	10.16
2.1.2	**Sign Boards**	1	12.37	2	2	2	1	3	4	4	6.96		7.03		3.52	
2.1.3	**Banners / Steamers / Posters**	1	1.82	3	1	1	3	1	4	4	0.97		6.64		3.32	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4	5		
1.5	Average road width	36						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87560 Lng: 79.89232

1.10 Node Address

Stanley Thilakaratne Mawatha, Nugegoda.

1.11 Node ID: Y10A

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	22.44	3	4	2	1	2	4	4	14.03	19.99	7.81	21.88	3.91	10.94
2.1.2	**Sign Boards**	1	6.13	5	2	2	1	1	4	4	3.64		7.42		3.71	
2.1.3	**Banners / Steamers / Posters**	1	4.37	3	2	2	1	1	4	4	2.32		6.64		3.32	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	36						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87549 Lng: 79.89240

1.10 Node Address

Stanley Thilakaratne Mawatha, Nugegoda.

1.11 Node ID: Y10B

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	0									0.00	10.76	0.00	6.64	0.00	3.32
2.1.2	**Sign Boards**	1	20.25	3	2	2	1	1	4	4	10.76		6.64		3.32	
2.1.3	**Banners / Steamers / Posters**	0									0.00		0.00		0.00	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Commerical						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	12.5						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87581 Lng: 79.89267

1.10 Node Address

Stanley Thilakaratne Mawatha, Nugegoda.

1.11 Node ID: Y11A

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	0									0.00	17.45	0.00	12.89	0.00	6.45
2.1.2	**Sign Boards**	1	17.88	3	2	2	1	1	4	4	9.50		6.64		3.32	
2.1.3	**Banners / Steamers / Posters**	1	15.90	3	2	1	1	1	4	4	7.95		6.25		3.13	

Visual Pollution Assessment Tool

Section 1: Place Character

1.1	Number of road lanes	1	2	3	4			
1.2	Dominant landuse (more than 70%)	R	C	O	E	H	RL	I
1.3	Nature of activity	Residnetial						
1.4	Average height of majority of buildings (no of stories)	1	2	3	4			
1.5	Average road width	12.5						
1.6	Average distance between facing building lines	30						
1.7	Area type (planned/ unplanned)	P	UP					
1.8	Socio-economic status	Low		Medium		High		

1.9 Location

Lat: 6.87570 Lng: 79.89270

1.10 Node Address

Stanley Thilakaratne Mawatha, Nugegoda.

1.11 Node ID: Y11B

Section 2: Visual Pollution

2.1	Outdoor Advertisements:	P	Area Covered by OAs	Physical appearance	Structure	Placement	Display Surfaces	Size	Content	Media Type	Individual OAs A. Pollution Score	Total A. Pollution Score	Individual OAs A. Pollution Index If OAs reduced to 1/8	Total A. Pollution Score If OAs reduced to 1/8	Individual OAs A. Pollution Index If OAs reduced to 1/16	Total A. Pollution Score If OAs reduced to 1/16
	Number of objects/ spots/ phenomena	Presence	Percentage	Very well shaped_1 Normal_2 Torn off_3 Leaning_4 Structure Broken_5	Wooden structure_1 Steel Structure_2 Monopole_3 Multi Post_4	Stand alone_1 On wall_2 On roof top_3	Single facing_1 Double facing (back to back)_3 V facing Triangle_5	Small_1 3X6m_2 6X9m_3 9X12m_4 Larger_5	Public service message_1 Movie_2 Religious_3 Commercial_4 Harsh religious/ Political statement & Undecent postures_5	poster_1 mobile_2 painted_3 mechanical_4 digital_5				12.50		6.25
2.1.1	**Billboards**	1	18.46	2	2	1	1	1	4	4	8.65	8.65	5.86	5.86	2.93	2.93
2.1.2	**Sign Boards**	0									0.00		0.00		0.00	
2.1.3	**Banners / Steamers / Posters**	0									0.00		0.00		0.00	

APPENDIX B

The following is the questionnaire survey of this study.

1/14/22, 10:25 PM Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution

Dissertation - 2021 - Master of Urban Design - Faculty of Architecture - University of Moratuwa.

* Required

1. Email *

2. Gender *

Mark only one oval.

- Male
- Female
- Prefer not to say

3. Age Group *

Mark only one oval.

- 20-29
- 30-39
- 40-49
- 50-59
- Above 60

4. Highest Educational Qualifications *

Mark only one oval.

- Bachelors
- Masters
- MPhil
- PhD
- Other:

5. Professional Qualifications *

Check all that apply.

- AIA (SL)
- FIA (SL)
- MITP(SL)
- Other:

6. Post Credential Industrial Experience *

Mark only one oval.

- Less than 1 Year
- 2 - 5 Years
- 6 -10 Years
- 11 - 15 Years
- More than 15 years

7. Is there any Architectural or Urban Design intervention done by you, available within Nugegoda, Sri Lanka?

Mark only one oval.

- Yes
- No
- Prefer not to say

Definition of Outdoor Advertisements

The term 'Outdoor Advertisement' encompasses a wide range of advertising and promotional activities that will be posted or erected in the environment's outside space. (e.g. - Posters, Name Boards, Billboards, Hoardings, Digital Displays, Mobile Displays, Sandwich Board Man, Political Campaign Boards and etc.)

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution within the context of Nugegoda, Sri Lanka. (X1)

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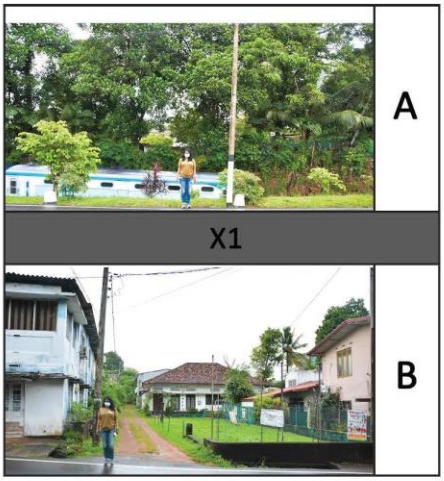
https://docs.google.com/forms/d/1BtFi3715Xmpa9hjvmvejs__TCiRJyPoBbXNi9V0gABY/edit 1/25

According to this view (reference human scale of 1.6m Height)



8. How do you like the appearance of this street? *

Mark only one oval per row.

	Really don't like	Don't like	Neutral	Like	Really like
A					
B					

9. The number of advertisement signs (billboards and banners) on this street are: *

Mark only one oval per row.

	Too many	Many	Moderate	Few	Very Few
A					
B					

10. The advertisement signs make the appearance of this street: *

Mark only one oval per row.

	Very ugly	Ugly	Do not matter	Beautiful	Very beautiful
A					
B					

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution within the context of Nugegoda, Sri Lanka. (X2)

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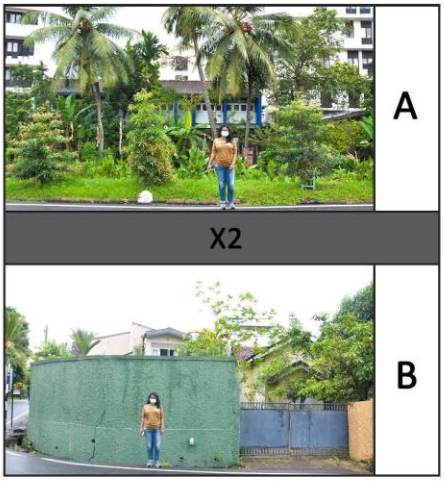
According to this view (reference human scale of 1.6m Height)



11. How do you like the appearance of this street? *

Mark only one oval per row.

	Really don't like	Don't like	Neutral	Like	Really like
A					
B					

12. The number of advertisement signs (billboards and banners) on this street are: *

Mark only one oval per row.

	Too many	Many	Moderate	Few	Very Few
A					
B					

13. The advertisement signs make the appearance of this street: *

Mark only one oval per row.

	Very ugly	Ugly	Do not matter	Beautiful	Very beautiful
A					
B					

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution within the context of Nugegoda, Sri Lanka. (X3)

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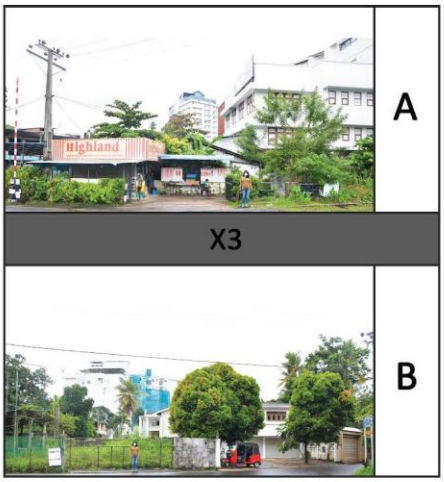
According to this view (reference human scale of 1.6m Height)



14. How do you like the appearance of this street? *

Mark only one oval per row.

	Really don't like	Don't like	Neutral	Like	Really like
A					
B					

15. The number of advertisement signs (billboards and banners) on this street are: *

Mark only one oval per row.

	Too many	Many	Moderate	Few	Very Few
A					
B					

16. The advertisement signs make the appearance of this street: *

Mark only one oval per row.

	Very ugly	Ugly	Do not matter	Beautiful	Very beautiful
A					
B					

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution within the context of Nugegoda, Sri Lanka. (X4)

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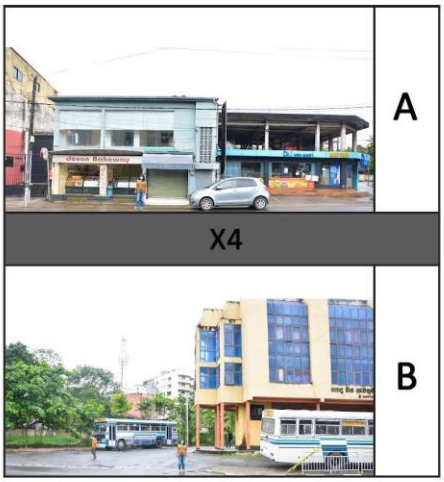
According to this view (reference human scale of 1.6m Height)



17. How do you like the appearance of this street? *

Mark only one oval per row.

	Really don't like	Don't like	Neutral	Like	Really like
A					
B					

18. The number of advertisement signs (billboards and banners) on this street are: *

Mark only one oval per row.

	Too many	Many	Moderate	Few	Very Few
A					
B					

19. The advertisement signs make the appearance of this street: *

Mark only one oval per row.

	Very ugly	Ugly	Do not matter	Beautiful	Very beautiful
A					
B					

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution within the context of Nugegoda, Sri Lanka. (X5)

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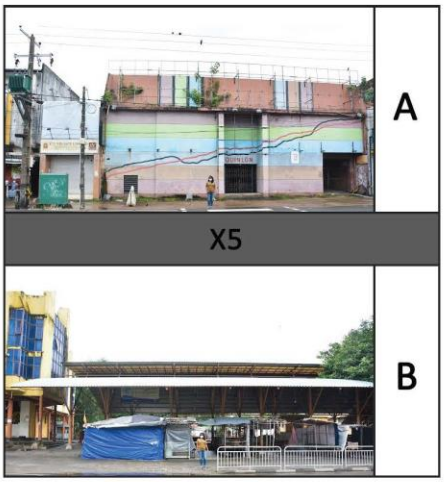
According to this view (reference human scale of 1.6m Height)



20. How do you like the appearance of this street? *

Mark only one oval per row.

	Really don't like	Don't like	Neutral	Like	Really like
A					
B					

21. The number of advertisement signs (billboards and banners) on this street are: *

Mark only one oval per row.

	Too many	Many	Moderate	Few	Very Few
A					
B					

22. The advertisement signs make the appearance of this street: *

Mark only one oval per row.

	Very ugly	Ugly	Do not matter	Beautiful	Very beautiful
A					
B					

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution within the context of Nugegoda, Sri Lanka. (X6)

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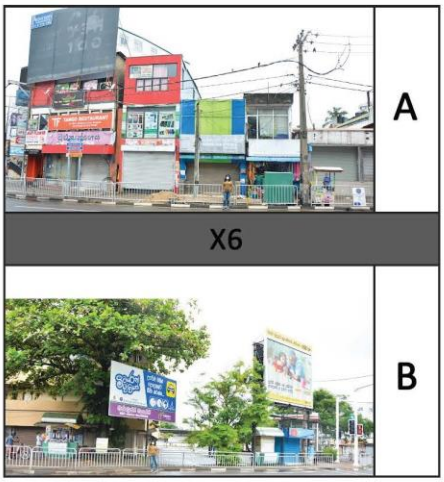
According to this view (reference human scale of 1.6m Height)



23. How do you like the appearance of this street? *

Mark only one oval per row.

	Really don't like	Don't like	Neutral	Like	Really like
A					
B					

24. The number of advertisement signs (billboards and banners) on this street are: *

Mark only one oval per row.

	Too many	Many	Moderate	Few	Very Few
A					
B					

25. The advertisement signs make the appearance of this street: *

Mark only one oval per row.

	Very ugly	Ugly	Do not matter	Beautiful	Very beautiful
A					
B					

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution within the context of Nugegoda, Sri Lanka. (X7)

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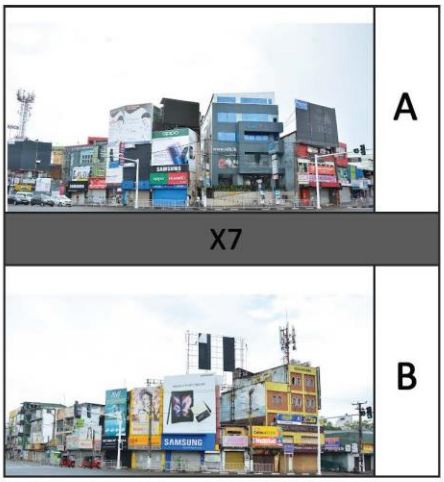
According to this view (reference human scale of 1.6m Height)



26. How do you like the appearance of this street? *

Mark only one oval per row.

	Really don't like	Don't like	Neutral	Like	Really like
A					
B					

27. The number of advertisement signs (billboards and banners) on this street are: *

Mark only one oval per row.

	Too many	Many	Moderate	Few	Very Few
A					
B					

28. The advertisement signs make the appearance of this street: *

Mark only one oval per row.

	Very ugly	Ugly	Do not matter	Beautiful	Very beautiful
A					
B					

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution within the context of Nugegoda, Sri Lanka. (X8)

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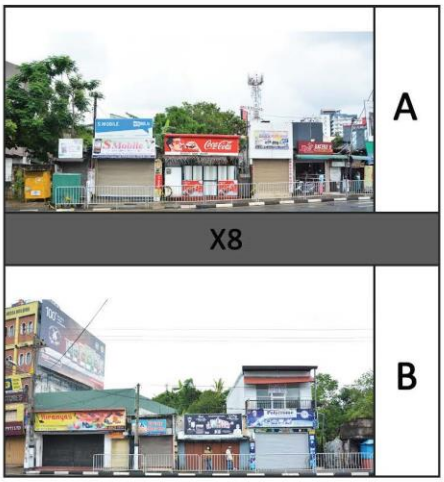
According to this view (reference human scale of 1.6m Height)



29. How do you like the appearance of this street? *

Mark only one oval per row.

	Really don't like	Don't like	Neutral	Like	Really like
A					
B					

30. The number of advertisement signs (billboards and banners) on this street are: *

Mark only one oval per row.

	Too many	Many	Moderate	Few	Very Few
A					
B					

31. The advertisement signs make the appearance of this street: *

Mark only one oval per row.

	Very ugly	Ugly	Do not matter	Beautiful	Very beautiful
A					
B					

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution within the context of Nugegoda, Sri Lanka. (X9)

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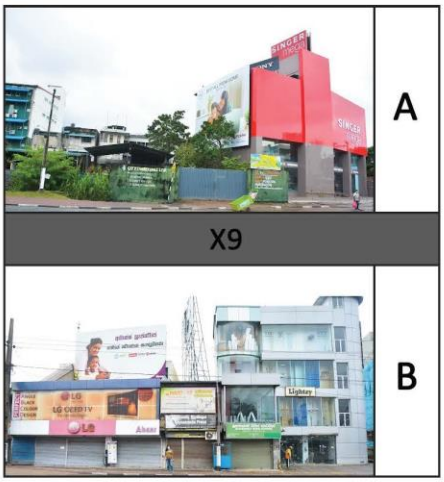
According to this view (reference human scale of 1.6m Height)



32. How do you like the appearance of this street? *

Mark only one oval per row.

	Really don't like	Don't like	Neutral	Like	Really like
A					
B					

33. The number of advertisement signs (billboards and banners) on this street are: *

Mark only one oval per row.

	Too many	Many	Moderate	Few	Very Few
A					
B					

34. The advertisement signs make the appearance of this street: *

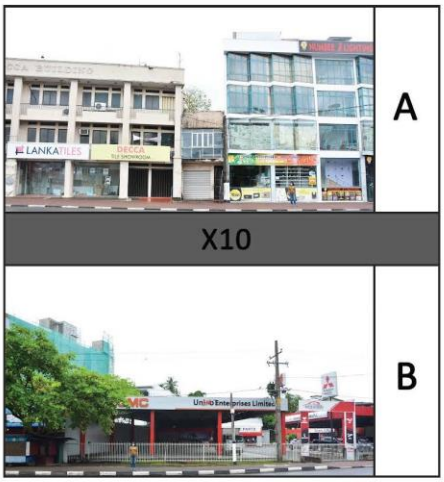
Mark only one oval per row.

	Very ugly	Ugly	Do not matter	Beautiful	Very beautiful
A					
B					

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution within the context of Nugegoda, Sri Lanka. (X10)

Dissertation - 2021 - Master of Urban Design - Faculty of Architecture - University of Moratuwa.

According to this view (reference human scale of 1.6m Height)



35. How do you like the appearance of this street? *

Mark only one oval per row.

	Really don't like	Don't like	Neutral	Like	Really like
A					
B					

36. The number of advertisement signs (billboards and banners) on this street are: *

Mark only one oval per row.

	Too many	Many	Moderate	Few	Very Few
A					
B					

37. The advertisement signs make the appearance of this street: *

Mark only one oval per row.

	Very ugly	Ugly	Do not matter	Beautiful	Very beautiful
A					
B					

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution within the context of Nugegoda, Sri Lanka. (X11)

Dissertation - 2021 - Master of Urban Design - Faculty of Architecture - University of Moratuwa.

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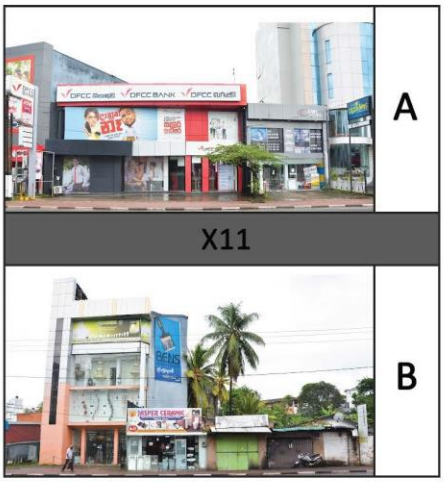

38. How do you like the appearance of this street? *

Mark only one oval per row.

	Really don't like	Don't like	Neutral	Like	Really like
A					
B					

39. The number of advertisement signs (billboards and banners) on this street are: *

Mark only one oval per row.

	Too many	Many	Moderate	Few	Very Few
A					
B					

40. The advertisement signs make the appearance of this street: *

Mark only one oval per row.

	Very ugly	Ugly	Do not matter	Beautiful	Very beautiful
A					
B					

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution within the context of Nugegoda, Sri Lanka. (Y1)

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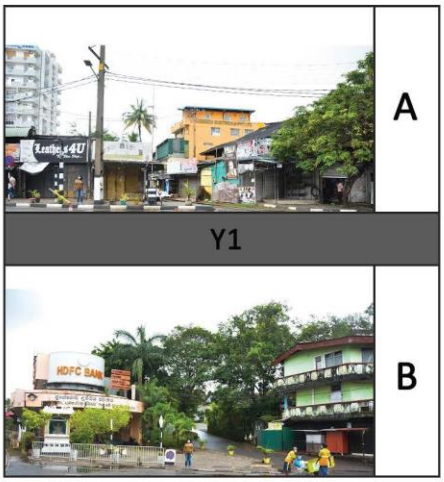
According to this view (reference human scale of 1.6m Height)



41. How do you like the appearance of this street? *

Mark only one oval per row.

	Really don't like	Don't like	Neutral	Like	Really like
A					
B					

42. The number of advertisement signs (billboards and banners) on this street are: *

Mark only one oval per row.

	Too many	Many	Moderate	Few	Very Few
A					
B					

43. The advertisement signs make the appearance of this street: *

Mark only one oval per row.

	Very ugly	Ugly	Do not matter	Beautiful	Very beautiful
A					
B					

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution within the context of Nugegoda, Sri Lanka. (Y2)

Dissertation - 2021 - Master of Urban Design - Faculty of Architecture - University of Moratuwa.

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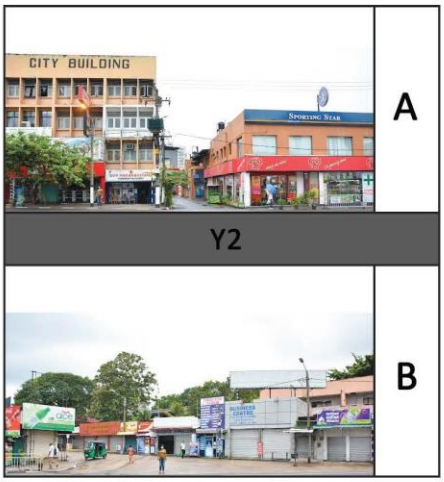


44. How do you like the appearance of this street? *

Mark only one oval per row.

	Really don't like	Don't like	Neutral	Like	Really like
A					
B					

45. The number of advertisement signs (billboards and banners) on this street are: *

Mark only one oval per row.

	Too many	Many	Moderate	Few	Very Few
A					
B					

46. The advertisement signs make the appearance of this street: *

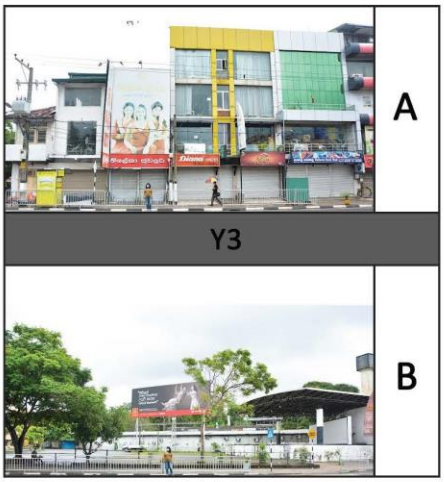
Mark only one oval per row.

	Very ugly	Ugly	Do not matter	Beautiful	Very beautiful
A					
B					

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution within the context of Nugegoda, Sri Lanka. (Y3)

Dissertation - 2021 - Master of Urban Design - Faculty of Architecture - University of Moratuwa.

According to this view (reference human scale of 1.6m Height)



47. How do you like the appearance of this street? *

Mark only one oval per row.

	Really don't like	Don't like	Neutral	Like	Really like
A					
B					

48. The number of advertisement signs (billboards and banners) on this street are: *

Mark only one oval per row.

	Too many	Many	Moderate	Few	Very Few
A					
B					

49. The advertisement signs make the appearance of this street: *

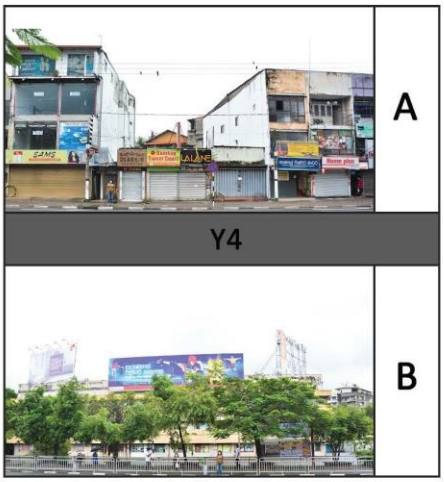
Mark only one oval per row.

	Very ugly	Ugly	Do not matter	Beautiful	Very beautiful
A					
B					

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution within the context of Nugegoda, Sri Lanka. (Y4)

Dissertation - 2021 - Master of Urban Design - Faculty of Architecture - University of Moratuwa.

According to this view (reference human scale of 1.6m Height)



50. How do you like the appearance of this street? *

Mark only one oval per row.

	Really don't like	Don't like	Neutral	Like	Really like
A					
B					

51. The number of advertisement signs (billboards and banners) on this street are: *

Mark only one oval per row.

	Too many	Many	Moderate	Few	Very Few
A					
B					

52. The advertisement signs make the appearance of this street: *

Mark only one oval per row.

	Very ugly	Ugly	Do not matter	Beautiful	Very beautiful
A					
B					

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution within the context of Nugegoda, Sri Lanka. (Y5)

Dissertation - 2021 - Master of Urban Design - Faculty of Architecture - University of Moratuwa.

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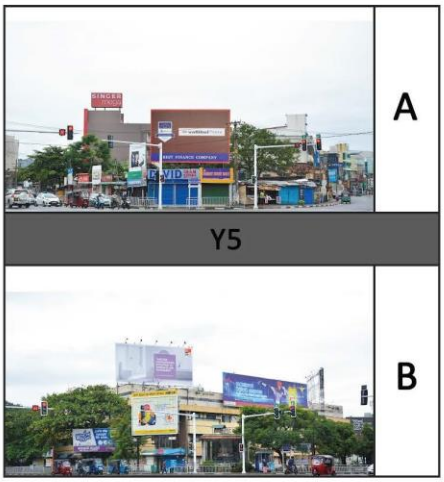

53. How do you like the appearance of this street? *

Mark only one oval per row.

	Really don't like	Don't like	Neutral	Like	Really like
A					
B					

54. The number of advertisement signs (billboards and banners) on this street are: *

Mark only one oval per row.

	Too many	Many	Moderate	Few	Very Few
A					
B					

55. The advertisement signs make the appearance of this street: *

Mark only one oval per row.

	Very ugly	Ugly	Do not matter	Beautiful	Very beautiful
A					
B					

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution within the context of Nugegoda, Sri Lanka. (Y6)

Dissertation - 2021 - Master of Urban Design - Faculty of Architecture - University of Moratuwa.

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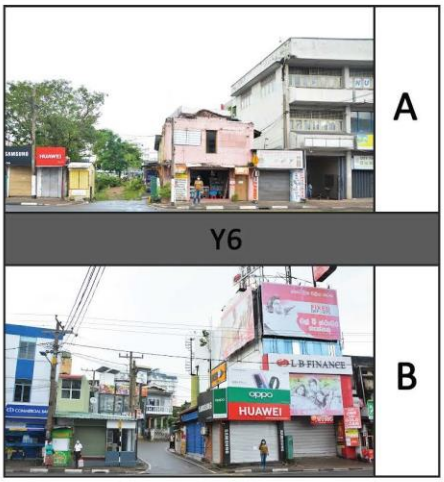


56. How do you like the appearance of this street? *

Mark only one oval per row.

	Really don't like	Don't like	Neutral	Like	Really like
A					
B					

57. The number of advertisement signs (billboards and banners) on this street are: *

Mark only one oval per row.

	Too many	Many	Moderate	Few	Very Few
A					
B					

58. The advertisement signs make the appearance of this street: *

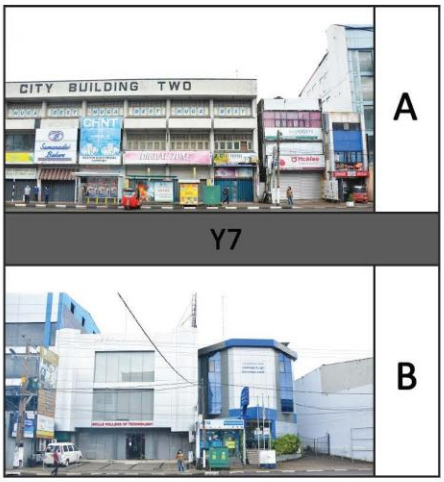
Mark only one oval per row.

	Very ugly	Ugly	Do not matter	Beautiful	Very beautiful
A					
B					

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution within the context of Nugegoda, Sri Lanka. (Y7)

Dissertation - 2021 - Master of Urban Design - Faculty of Architecture - University of Moratuwa.

According to this view (reference human scale of 1.6m Height)



59. How do you like the appearance of this street? *

Mark only one oval per row.

	Really don't like	Don't like	Neutral	Like	Really like
A					
B					

60. The number of advertisement signs (billboards and banners) on this street are: *

Mark only one oval per row.

	Too many	Many	Moderate	Few	Very Few
A					
B					

61. The advertisement signs make the appearance of this street: *

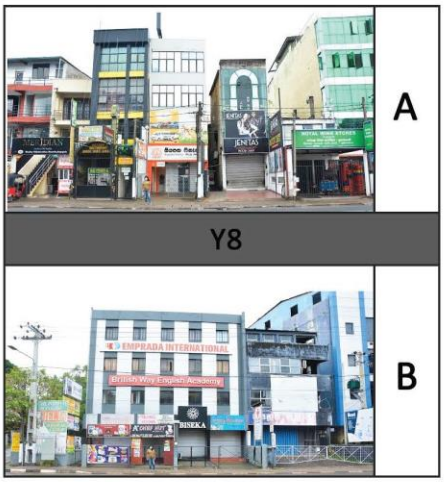
Mark only one oval per row.

	Very ugly	Ugly	Do not matter	Beautiful	Very beautiful
A					
B					

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution within the context of Nugegoda, Sri Lanka. (Y8)

Dissertation - 2021 - Master of Urban Design - Faculty of Architecture - University of Moratuwa.

According to this view (reference human scale of 1.6m Height)



62. How do you like the appearance of this street? *

Mark only one oval per row.

	Really don't like	Don't like	Neutral	Like	Really like
A					
B					

63. The number of advertisement signs (billboards and banners) on this street are: *

Mark only one oval per row.

	Too many	Many	Moderate	Few	Very Few
A					
B					

64. The advertisement signs make the appearance of this street: *

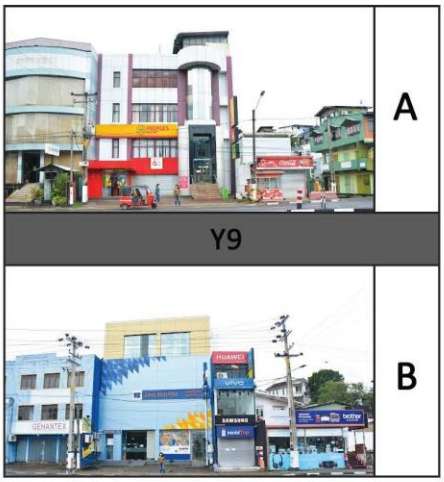
Mark only one oval per row.

	Very ugly	Ugly	Do not matter	Beautiful	Very beautiful
A					
B					

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution within the context of Nugegoda, Sri Lanka. (Y9)

Dissertation - 2021 - Master of Urban Design - Faculty of Architecture - University of Moratuwa.

According to this view (reference human scale of 1.6m Height)



65. How do you like the appearance of this street? *

Mark only one oval per row.

	Really don't like	Don't like	Neutral	Like	Really like
A					
B					

66. The number of advertisement signs (billboards and banners) on this street are: *

Mark only one oval per row.

	Too many	Many	Moderate	Few	Very Few
A					
B					

67. The advertisement signs make the appearance of this street: *

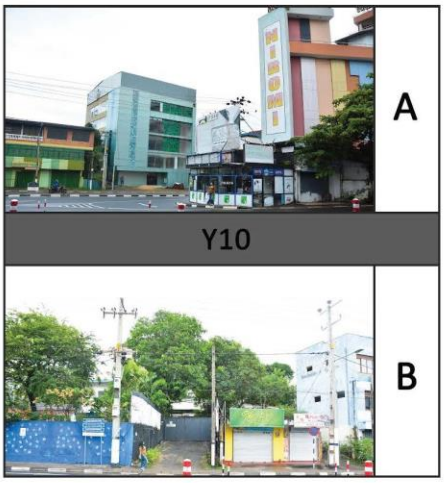
Mark only one oval per row.

	Very ugly	Ugly	Do not matter	Beautiful	Very beautiful
A					
B					

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution within the context of Nugegoda, Sri Lanka. (Y10)

Dissertation - 2021 - Master of Urban Design - Faculty of Architecture - University of Moratuwa.

According to this view (reference human scale of 1.6m Height)



68. How do you like the appearance of this street? *

Mark only one oval per row.

	Really don't like	Don't like	Neutral	Like	Really like
A					
B					

69. The number of advertisement signs (billboards and banners) on this street are: *

Mark only one oval per row.

	Too many	Many	Moderate	Few	Very Few
A					
B					

70. The advertisement signs make the appearance of this street: *

Mark only one oval per row.

	Very ugly	Ugly	Do not matter	Beautiful	Very beautiful
A					
B					

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution within the context of Nugegoda, Sri Lanka. (Y11)

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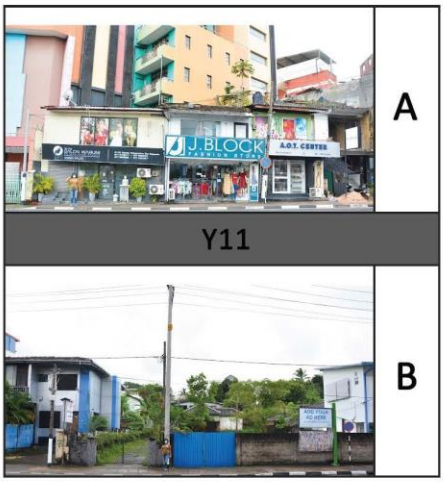
According to this view (reference human scale of 1.6m Height)



71. How do you like the appearance of this street? *

Mark only one oval per row.

	Really don't like	Don't like	Neutral	Like	Really like
A					
B					

72. The number of advertisement signs (billboards and banners) on this street are: *

Mark only one oval per row.

	Too many	Many	Moderate	Few	Very Few
A					
B					

73. The advertisement signs make the appearance of this street: *

Mark only one oval per row.

	Very ugly	Ugly	Do not matter	Beautiful	Very beautiful
A					
B					

Perception of Architects & Urban Designers on the Impact of Outdoor Advertisement on Visual Pollution within the context of Nugegoda, Sri Lanka.

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74. Do you think it is appropriate to have Outdoor Advertisements placed in the street scape to express the idea as the means of communication ? *

Mark only one oval per row.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Your Perception					

75. According to you, how do you perceive Outdoor Advertisements ? *

Check all that apply.

- [ ] Informative
- [ ] Means of Visual Pollution
- [ ] Political Statement
- [ ] Mafia

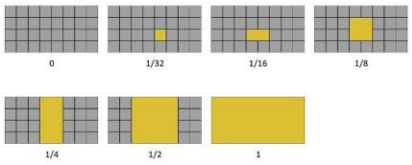
Other: [ ] _____

76. Which of the following effects the most to the image of the city?

Check all that apply.

- [ ] Over Population
- [ ] Traffic Congestion
- [ ] Built Form
- [ ] Outdoor Advertisements
- [ ] All of them

77. According to you, what is the permissable Outdoor Advertisement size to building facade ratio as for the mode of communication? (Yellow area shows the size of the Outdoor Advertisement) *



Mark only one oval.

- ◯ 0 : 1
- ◯ 1/32 : 1
- ◯ 1/16 : 1
- ◯ 1/8 :1
- ◯ 1/4 : 1
- ◯ 1/2 : 1
- ◯ 1 : 1
- ◯ Other: _____

78. What is the appropriate place for Advertisements?

Check all that apply.

- [ ] Near Nodes
- [ ] Parallel to Road & clamped to wall
- [ ] Roof Top
- [ ] Virtual & Scoial Media
- [ ] Indoor Advertising

Other: [ ] _____

79. How to mitigate the visual pollution from Outdoor Advertisements ?

Check all that apply.

- [ ] Control Outdoor Advertisement by imposing tax
- [ ] Implementing suitable Guidelines and Regulations
- [ ] Outdoor Advertisements need to be Banned

80. Do you think that the regulations and guidelines of the countries who controlled Outdoor Advertisements can be adopt to Sri Lanka to Mitigate visual pollution from Outdoor Advertisements ? *

Mark only one oval.

- ◯ Agree
- ◯ Disagree
- ◯ Adaptation can correct the shortcomings of the current legal system in Sri Lanka
- ◯ Develop a legal system specific to Sri Lanka without adaptation

81. Finally, How honest do you answer this survey ? *

Mark only one oval.

	1	2	3	4	5	6	7	8	9	10	
Careless	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯	Honestly

82. Any Comments about the survey?

Thank you so much for you valuable time and cooperation. Your views and observations are very valuable to us.
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