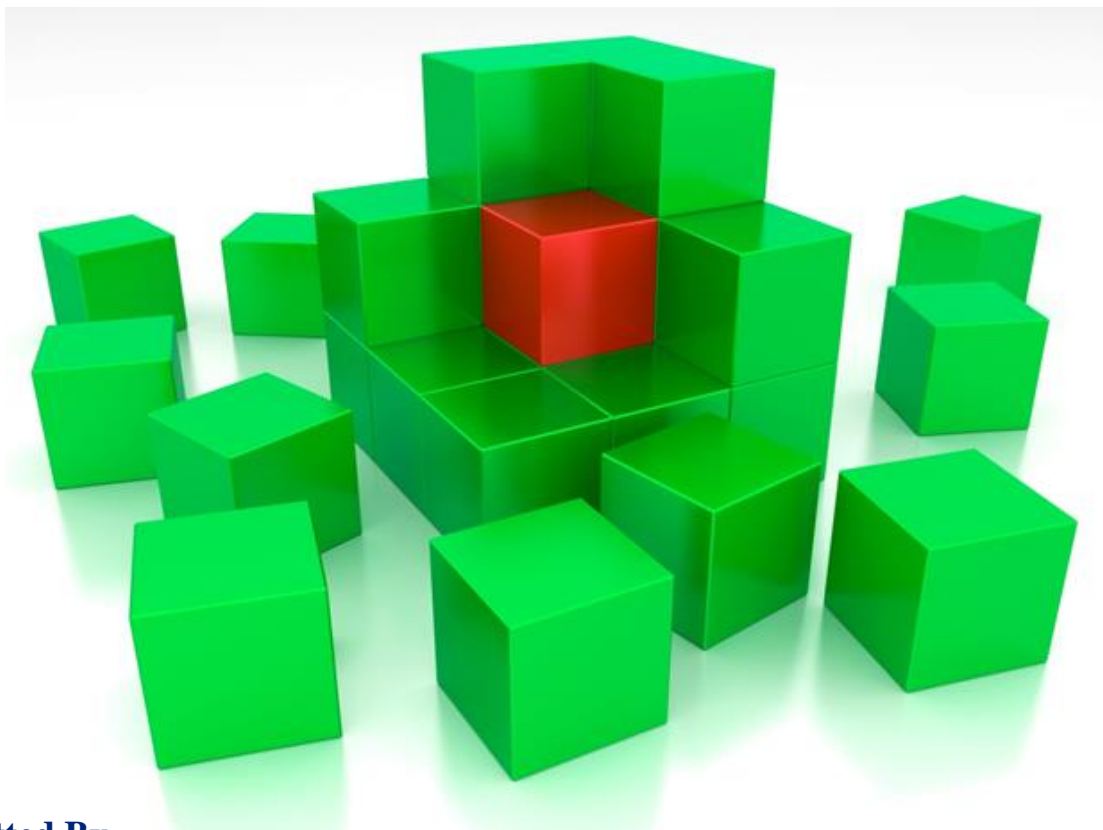




Sector Specific Inventory & Institutional Strengthening for PPP Mainstreaming

Bruhat Bengaluru Mahanagara Palike (BBMP)

Proposed Skywalks (Pedestrian Crossing Bridges) within BBMP limits: Final Report



Submitted By
Deloitte Touche Tohmatsu India Private Limited

June 2012

ACRONYMS

BBMP	Bruhat Bengaluru Mahanagara Palike
BOO	Build Own Operate
BOOT	Build Own Operate Transfer
BOT	Build Operate Transfer
DBFOT	Design Build Finance Operate and Transfer
DTTIPL	Deloitte Touche Tohmatsu India Private limited
FOB	Foot Over Bridge
Gol	Government of India
GoK	Government of Karnataka
IDD	Infrastructure Development Department
PPP	Public Private Partnership
UDD	Urban Development Department
ULB	Urban Local Body
VGf	Viability Gap Funding
EOI	Expression of Interest
RFQ	Request for Qualification
RFP	Request for Proposal

Disclaimer

This document is strictly private and confidential and has been prepared by Deloitte Touche Tohmatsu India Private Limited ("DTTIPL") specifically for the Infrastructure Development Department, Government of Karnataka ("IDD") and Bruhat Bengaluru Mahanagar Palike ("BBMP") for the purposes specified herein. The information and observations contained in this document are intended solely for the use and reliance of IDD and BBMP, and are not to be used, circulated, quoted or otherwise referred to for any other purpose or relied upon without the express prior written permission of DTTIPL in each instance.

Deloitte has not verified independently all of the information contained in this report and the work performed by Deloitte is not in the nature of audit or investigation.

This document is limited to the matters expressly set forth herein and no comment is implied or may be inferred beyond matters expressly stated herein.

It is hereby clarified that in no event DTTIPL shall be responsible for any unauthorised use of this document, or be liable for any loss or damage, whether direct, indirect, or consequential, that may be suffered or incurred by any party.

Table of Contents

1	EXECUTIVE SUMMARY.....	5
2	INTRODUCTION.....	8
2.1	BACKGROUND.....	8
2.2	PROJECT IDEA	11
2.3	APPROACH & METHODOLOGY, STUDIES, SURVEYS INCLUDING DATA COLLECTION, ANALYSIS	12
2.4	STUDY OF EARLIER REPORTS IN THIS SECTOR IN THE RELEVANT AREA	13
3	THE PROJECT.....	16
3.2	INTERACTION WITH STAKEHOLDERS	41
3.3	DEVELOPMENT NEEDS, PUBLIC NEEDS & PLANNING CONSIDERATIONS.....	41
4	PROJECT FINANCIALS (DETAILED CALCULATIONS SHEETS IN EXCEL SUBMITTED ALONG WITH REPORT)	43
4.1	BASIS FOR FINANCIAL CALCULATIONS	43
4.2	COST ESTIMATION	43
4.3	TARIFF REVENUE STREAM	44
4.4	VIABILITY ASSESSMENT (NPV, PROJECT IRR, EQUITY IRR)	45
4.5	FINANCING.....	45
4.6	RESULTS OF THE FINANCIAL ANALYSIS	46
5	STATUTORY & LEGAL FRAMEWORK	47
5.1	APPLICABLE LAWS.....	47
5.2	LEGAL & REGULATORY FRAMEWORK, TARIFF FRAMEWORK ETC. (ANY SUGGESTIONS)	47
5.3	KEY ISSUES	47
6	OPERATING FRAMEWORK	49
6.1	RISK AND CHALLENGES FOR DESIGNING AND CONSTRUCTING SKYWALKS	49
7	WAY AHEAD.....	50
7.1	PROJECT DEVELOPMENT FRAMEWORK	50
7.2	PROCUREMENT PLAN FOR FURTHER DEVELOPMENT LIKE	50
8	ANNEXURES.....	51
8.1	DESCRIPTION OF THE LOCATIONS.....	52
8.2	PROJECT COST, REVENUE AND OPERATING COST FOR INDIVIDUAL LOCATIONS.....	110

1 Executive Summary

According to 2011 census, Karnataka is the ninth most populous and the eighth-largest State in area in the country. Bengaluru, the state capital is the third largest city in India with its population of over 8 million and is known as 'the garden city' for its serene green spaces and 'the silicon valley of India' for its thriving globally acclaimed Information Technology industry.



Bengaluru is India's third most populous city and fifth-most populous urban agglomeration. Bengaluru, a well-known as a hub for India's IT sector and is known as the Silicon Valley of India globally because of its position as the nation's leading IT exporter. With the increase in population and the expansion of the city, the problem of connectivity of the populace has increased. The personalized modes of transport have grown rapidly due to a lower growth in the public transportation for the newer areas. The vehicle numbers are mainly dominated by two wheelers and along with the cars personal vehicles almost comprise 90% of the total registered vehicular population in the city.

The fatal injuries and number of persons killed in accidents have remained nearly unchanged during last decade. Pedestrian safety has reduced due to increase in vehicular traffic in recent times in areas near schools, shopping complexes, residential complexes.

The vehicular traffic in dense areas of the growing city puts lot of pressure on the pedestrian movement and it often results into safety concerns of both pedestrian and moving vehicular

traffic. Also, in densely populated areas and central business districts, it is one of the most important goals of urban local bodies to improve pedestrian traffic and movement. At the same time long stretches and busy ring roads, it is important to provide seamless movement to fast moving vehicles without any obstacles such as signals or crossings. Foot over bridges or Sky Walks are one of the most efficient ways to achieve the above objectives of seamless vehicular traffic and safe pedestrian movement. BBMP intends to prepare a financial pre-feasibility of the project to develop sky walks on PPP basis for all 121 locations in 2-3 packages of high revenue potential and low revenue potential places bunched together.

BBMP had engaged Technical Consultants – M/S Infra Support Engineering Consultants Pvt Ltd, Bangalore to prepare a feasibility report for 121 locations in three zones. The report was provided by BBMP as input to this report to determine financial feasibility of designing a project on PPP basis.

The technical feasibility report has classified each location based on need into A,B,C,D,E or F which denotes the severity of need of sky walk and type of facility to be provided. Based on which the type of sky walk to be built and capital costs have been estimated. As a second step the vehicular traffic estimated for each location in the technical pre-feasibility was calculated. This vehicular traffic provides the basis for estimation of revenue potential for each location. The revenue potential was calculated based on the reference rates obtained from market for advertisements on existing sky walks. Further, the financial viability has been considered at Zone level to bunch a set of high revenue earning potential and low revenue earning potential skywalks together.

Based on the financial analysis, all projects are found feasible based on the pre-feasibility analysis.

Following table summarizes the key results of the financial analysis.

<i>Indicator</i>	<i>East Zone</i>	<i>West Zone</i>	<i>South Zone</i>
Total Number of Projects	58	25	37
Total Capital Cost	1,354,520,833	652,562,500	1,014,145,833
O&M Cost (First year)	135,896,213	66,537,288	101,598,152
• Operating Expenses	118,114,217	56,903,450	88,433,517
• Manpower Expenses	11,000,000	6,270,000	8,325,000
• S&G Expenses	6,781,996	3,363,838	4,839,635
Revenue	785,263,771	389,487,116	560,364,588
Project IRR	17.29%	17.79%	16.13%
Equity IRR	17.39%	18.02%	15.94%

Calculations for individual sky walks for project cost, revenue potential and operating costs have been provided in Annexure 8.2

2 Introduction

2.1 Background

2.1.1 About Bengaluru

2.1.1.1 According to 2011 census, Karnataka is the ninth most populous and the eighth-largest State in area in the country. Bengaluru, the state capital is the third largest city in India with its population of over 8 million and is known as ‘the garden city’ for its serene green spaces and ‘the silicon valley of India’ for its thriving globally acclaimed Information Technology industry.

2.1.1.2 Bengaluru is India's third most populous city and fifth-most populous urban agglomeration. Bengaluru, a well-known as a hub for India's IT sector and is known as the Silicon Valley of India globally because of its position as the nation's leading IT exporter. Bengaluru is home to many well-recognized colleges and research institutions in India such as Indian Institute of Science (IIS), Indian Institute of Technology, Indian Institute of Management and National Institute of Fashion Technology.

2.1.1.3 There are also numerous public sector heavy industries, software companies, aerospace, telecommunications, and defense organizations located in the city. Bengaluru is also known as garden city because of its beautiful gardens. A demographically diverse city, Bengaluru is a major economic and cultural hub and the second fastest growing major metropolis in India.

2.1.2 Bruhat Bengaluru Mahanagara Palike

2.1.2.1 Bruhat Bengaluru Mahanagara Palike (BBMP), a City Corporation was formed in 2007 by merging the wards of the erstwhile Bengaluru Mahanagara Palike, with seven neighbouring City Municipal Councils, one Town Municipal Council and 110 villages around Bengaluru.

2.1.2.2 BBMP is in charge of the civic administration of the city. BBMP is run by a city council comprising of 250 members, including 198 councillors representing each of the wards of the city and 52 other elected representatives.

2.1.2.3 The BBMP boundaries spread across approximately 800 square kilometers of area with over 2.5 million households. There are 198 wards with average population of 40,000 and 4 square kilometer of area. Further, the BBMP area is divided into eight zones.

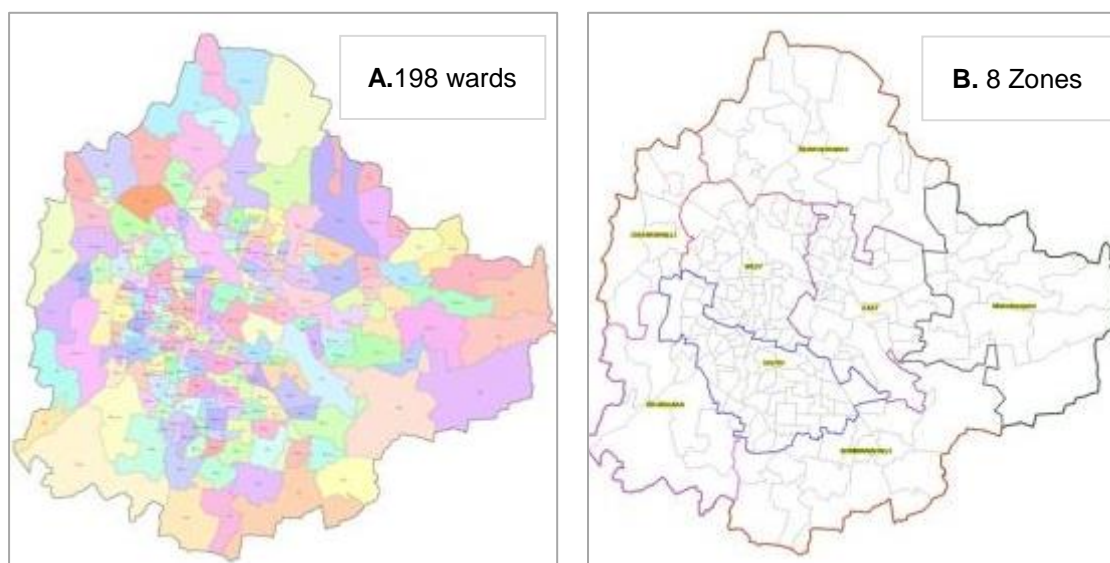


Figure i: BBMP area map A. 182 wards, B. 8 Zones

2.1.3 Traffic profile of BBMP Area

2.1.3.1 In past decade, rapid population growth because of IT and other associated industries in Bangalore has led to an increase in the vehicular population to over 2 million, with an annual growth rate of over 10%.

Table 1 Traffic Profile of BBMP Area (2001)

Population (2011)	8.4 million
Present Area	800 sq. km
Total Number of wards	198
Total number of Households	25 lakhs
Commercial Properties	3.5 lakhs
Total road length	14,000 km
Total number of Vehicles	37.91 million
Total two wheelers	7.91 million
Total four wheelers	26.24

2.1.3.2 With the increase in population and the expansion of the city, the problem of connectivity of the populace has increased. The personalized modes of transport have grown rapidly due to a lower growth in the public transportation for the newer areas. The vehicle numbers are mainly dominated by two wheelers and along with the cars

personal vehicles almost comprise 90% of the total registered vehicular population in the city.

Table 2 Vehicle growth in Bangalore since 2001

Year	Two Wheelers	M/Cars	Total
2001	10.92	2.07	14.73
2002	11.83	2.26	15.96
2003	13.23	2.53	17.82
2004	14.44	2.77	19.5
2005	15.7	3.18	21.3
2006	18.97	4	26.21
2007	21.11	4.69	29.6
2008	22.38	5.05	31.26
2009	23.34	5.75	33.05
2010	24.16	6.34	34.9
2011	26.24	7.1	37.91

2.1.3.3 Two wheelers constitute more than 70% of the total volume, while cars comprise 15%, autos 4% and the remaining 8% includes other vehicles such as buses, vans and tempos. Following table provides data on the growth of total vehicles, two wheelers and four wheelers.

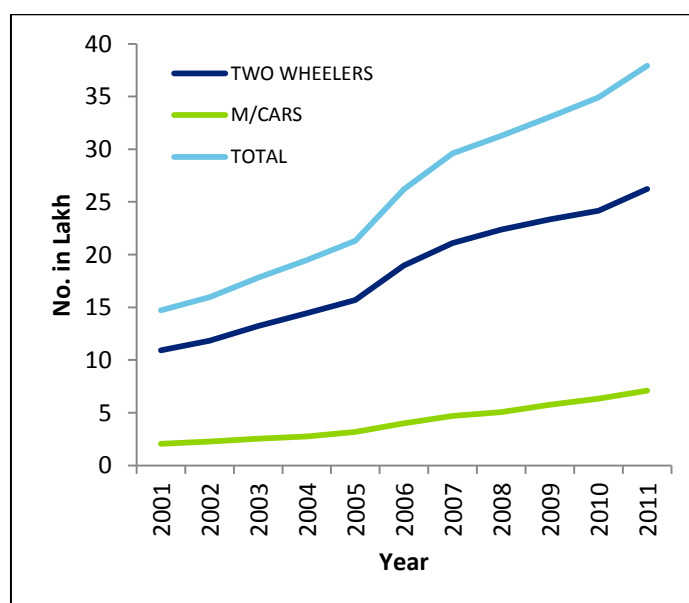


Figure ii Motorisation in Bangalore

2.1.3.4 Over the years during last decade there has been a decrease in total number of accidents in Bangalore city despite increase in the traffic and vehicle numbers. The fatal injuries and number of persons killed in accidents have remained nearly unchanged during these years. Pedestrian safety has reduced due to increase in

vehicular traffic in recent times in areas near schools, shopping complexes, residential complexes. Table below shows the incidence of road accidents and pedestrians killed / injured on Bangalore roads recorded from past one decade with Bangalore Traffic Police.

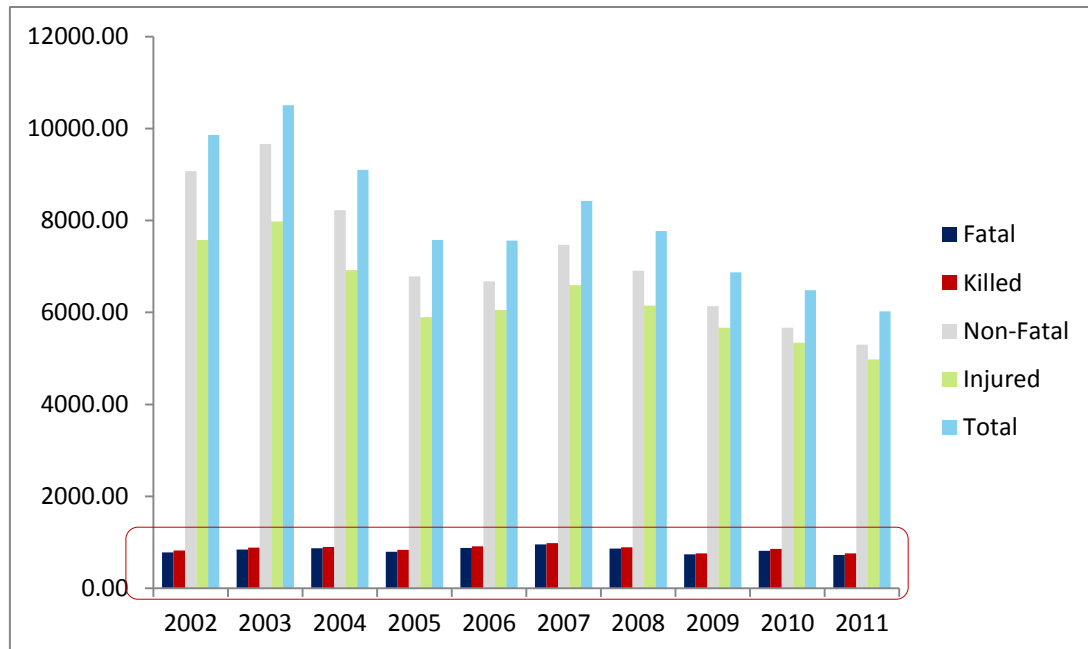


Figure iii Accident Statistics of Bangalore

2.2 Project Idea

2.2.1.1 Bangalore, capital city of Karnataka has seen unprecedented increase in its population in the last decade due to IT / ITES and biotechnology sectors. Not only city roads have become congested but this has led also led to greater intensity of pedestrian crossing at the city roads. This intensity not only has increased the waiting times of the road traffic but it has also adversely affected the safety of the pedestrians.

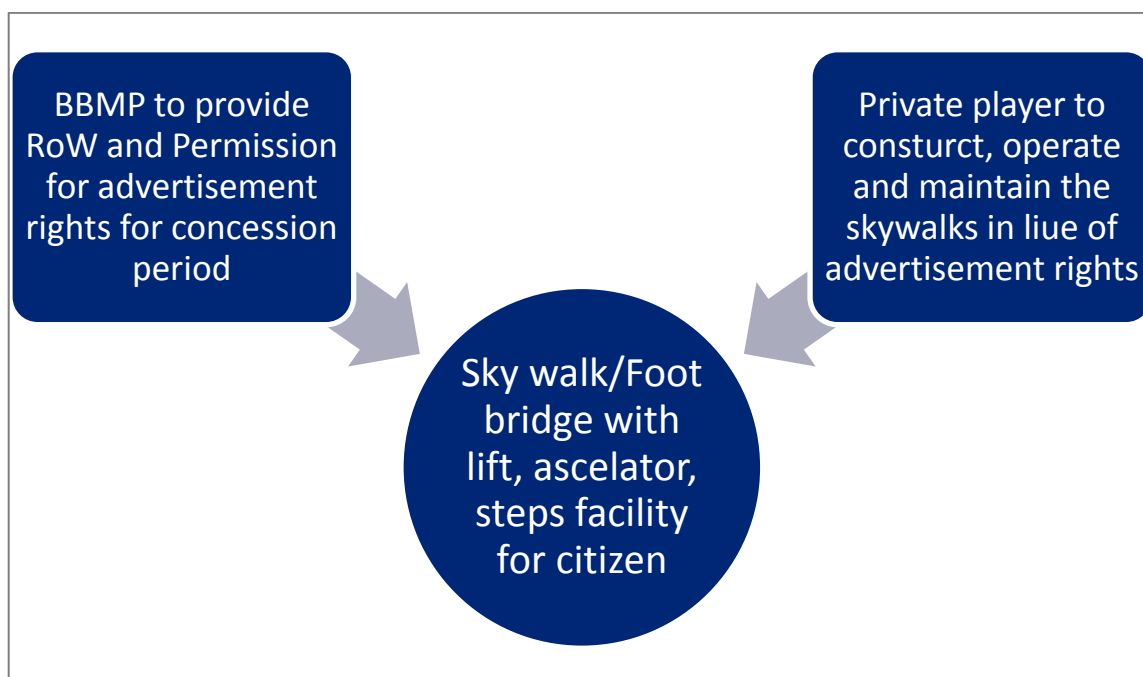
2.2.1.2 As per ADB report, the national pedestrian fatality share in India is 13% of total road accidents. However, in metropolitan cities like New Delhi, Bangalore, and Kolkata have pedestrian fatality shares greater than 40%. The problem is even more severe on the vulnerable groups like children and the elderly.

2.2.1.3 To achieve the important goal of providing pedestrian safety and easy movements of pedestrians and also the vehicular traffic, Bruhat Bangalore Mahanagara Palike (BBMP) intends to provide skywalks in the city limits of BBMP.

2.2.1.4 BBMP upon initiation of PPP cell and process of identification of projects on PPP basis has identified this project to be developed under PPP program initiated by IDD. In view

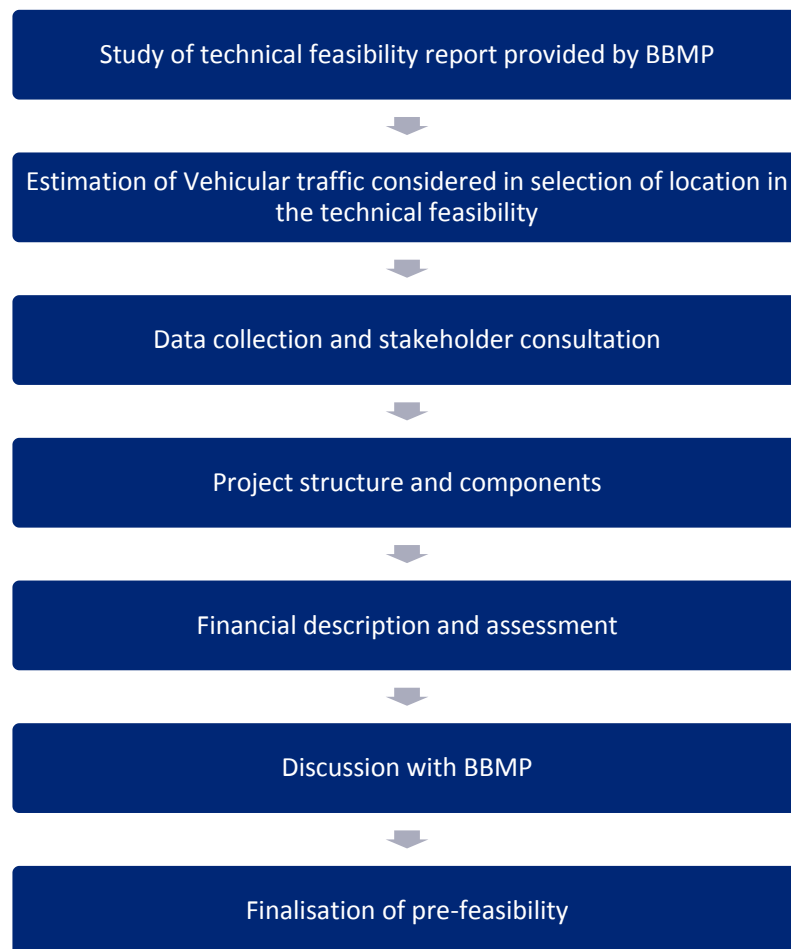
of the above, it was decided during the PPP workshop and subsequent meetings to prepare a pre-feasibility report based on the technical report for these location and commercial potential. Hence, this report constitutes the project idea for development on PPP basis, broad project structuring, market assessment and financial feasibility of the project on Public Private Partnership (PPP) basis.

2.2.1.5 BBMP had engaged Technical Consultants – M/S Infra Support Engineering Consultants Pvt Ltd, Bangalore for “Preparation of (Technical) Feasibility Report for Proposed Skywalks (Pedestrian Crossing Bridges) Within BBMP Limits – In West Zone” for identifying locations for the installation of skywalks and its project components. The report covers cost, technical feasibility, identification of locations based on vehicle and pedestrian traffic and technical components of each proposed skywalks such as escalator, lift etc. The data from technical feasibility provided by BBMP with regards to the selection of locations, facilities and costs have been used for preparation of financial projections for the project on PPP basis.



2.3 Approach & Methodology, studies, surveys including Data collection, analysis

Approach & Methodology and steps involved in preparation of this report are provided below:



2.4 Study of earlier reports in this sector in the relevant area

2.4.1 Technical feasibility report for identification of locations and construction cost for sky-walks provided by BBMP

2.4.1.1 As mentioned earlier BBMP had engaged Technical Consultants – M/S Infra Support Engineering Consultants Pvt Ltd, Bangalore to prepare a feasibility report for 121 locations in three zones. The report was provided by BBMP as input to this report to determine financial feasibility of designing a project on PPP basis. The following critical inputs were taken from the report to further prepare financial model to determine project viability on PPP basis.

2.4.1.2 Potential locations for skywalk has been identified based on following criteria

- Space Availability
- Time taken for pedestrian crossing the road
- Traffic congestions at a given point/ junction on the road corridors
- High-speed road corridors like Outer Ring Roads and National Highways
- Nearness to bus shelters and the road junctions
- Intensity of commercial activities like Central Business Districts, markets, shopping malls areas etc.
- Locations of institutional areas like schools, colleges, hospitals etc.
- Locations of public places like theatres, exhibition grounds, parks, play areas etc.
- Number of accidents at the given locations due to collision of high speed motorized fleet with the pedestrians crossing the road
- Proposed Road Development Plans of BBMP Town Planning Dept.

2.4.1.3 Locations for Skywalks were prioritized and phased based on ease of implementation, mitigation of legal, technical and political risks and alignment with Proposed Road Development Plans (RDPs) of Town Planning Department

2.4.1.4 Primary reasons for seeking to improve pedestrian crossing facilities has been identified as

- **Improve Pedestrian access and Level of Service (LOS):** This applies to sections where crossing opportunities available to pedestrians are below the desired level. It helps in determining the need for the facility and finding the most appropriate solution
- **Address a crash risk issue: Safety:** This applies when the selection of a pedestrian facility aims to address a specific pedestrian safety problem on sections where there is high probability of accidents based on historical records.
- **Specific Access Provision:** This applies to the sections near schools crossings, hospitals crossings, commercial markets, where there are large numbers of vulnerable group of pedestrians like young children, visually impaired, physically disabled and elderly people.
- **Integration and/or reinforcement:** This applies to sections where a need for a wider traffic management plan is felt especially in areas like Central Business Districts, shopping malls etc. Proposed skywalk would reflect state-of-art facilities in terms of pedestrian safety and pedestrian ease in those areas.

2.4.1.5 To study potential locations of skywalks in the city, the study area was divided into three zones-West, East and South and further in 10 localities each, the technical consultant team visited various locations as part of reconnaissance survey to collect information related to the present condition of each location. Reconnaissance survey and pedestrian count surveys were conducted at locations where there was heavy inflow of pedestrians. Pedestrian count surveys were conducted on weekdays for 12 hours at mid-block and junction locations. The survey was conducted from 8 AM to 8 PM on typical week days. The technical consultant team conducted hourly pedestrian

counts simultaneously in both directions at each survey location to obtain data on the amount of pedestrian flow. The survey was carried out by manual counting in 15 minutes intervals.

3 The Project

3.1.1 The project idea

3.1.1.1 In growing metropolis, increase in vehicular traffic is one of the early effects of urbanization, economic growth and increase in floating population. The vehicular traffic in dense areas of the growing city puts lot of pressure on the pedestrian movement and it often results into safety concerns of both pedestrian and moving vehicular traffic. Also, in densely populated areas and central business districts, it is one of the most important goals of urban local bodies to improve pedestrian traffic and movement. At the same time long stretches and busy ring roads, it is important to provide seamless movement to fast moving vehicles without any obstacles such as signals or crossings.

3.1.1.2 Foot over bridges or Sky Walks are one of the most efficient ways to achieve the above objectives of seamless vehicular traffic and safe pedestrian movement.

3.1.1.3 There are various approaches for financing and operation & maintenance of sky walks such as;

1. Constructed, funded, owned and operated by the local body
2. Funded, owned and operated by the local body; constructed by the private contractor
3. Constructed, funded, owned by the local body; operated and maintained by the private player
4. Funded, constructed, operated and maintained by the private player; owned by the local body (Built, Operate, Transfer)

3.1.1.4 Approach 4 above is increasingly prevalent in the recent times because of the fact that Sky Walks are often located in the busy business district and market areas or at road with high vehicular traffic. These areas provide an opportunity to earn revenue from advertisements on the large open spaces available on Sky Walk structures which come directly across the eyes of the vehicular traffic and pedestrians, prominent target of advertisers to catch attention.

3.1.1.5 The project is fully financed by the private player. The private player constructs and skywalk according to the standards provided by the authority. The private player maintains and operates the facility at own cost. In lieu of these investments, the private player receives exclusive rights to maintain designated advertisement space/hoardings

on the sky walk and retains the revenue generated from renting of such advertisement spaces.

- 3.1.1.6 Where, the advertisement revenue exceeds the value of the investments and expenditure made by the private players, the private player makes profit. In a PPP model, it is also considered that there are places where such revenue will significantly exceed the costs incurred over a period of time, such places are with high advertisement potential. At the same time, there will be places where the advertisement revenue will not be sufficient in connection to the expenditure incurred over period of time by the private player. In a competitive situation, the private player quotes a premium which will be paid to the local authority for premium locations, also known as revenue share for the advertisement revenues. Similarly, the local authority has to provide the excess of expenditure over the lower revenue received by the private party.
- 3.1.1.7 In order to take full advantage of the premium locations, when a large number of locations are to be developed across the city, premium locations and locations with power potential are bundled together generally, zone wise keeping adjacent areas together.

3.1.2 Project Components

- 3.1.2.1 The Sky Walks or Foot Over Bridges shall have Staircase, Lifts or Ramps based on the site conditions and Sky walk across the road.
- 3.1.2.2 The scope of the project includes design, construction and operation of sky Walk/Foot over Bridge at designated location on the sites identified by BBMP
- 3.1.2.3 The private party shall operate and maintain the Project Facilities in conformity to the provisions of the project for a specific period. The Concession/Authorization Period defined for the project is 30 years, which includes the construction period.
- 3.1.2.4 The project shall be developed as per the Standards and Specifications stated by BBMP and best industrial practices.
- 3.1.2.5 The project would be completely financed by the Developer. In consideration the Developer shall have access to revenue accruing form Advertisement rights at designated spaces on sky walks.
- 3.1.2.6 Following three main components will for the projects.

1. Components of Skywalk (Essential Facilities)

- Service Core : One Staircase unit, one escalator and one elevator on both sides with adequate power backup for the same
- Skywalk of 3.0m clear width at a clear height of 5.6m from the finished surface level of the road
- Skywalk shall include safety features such as guardrails/ handrails along the length of skywalk for safety of the users
- Lightning and electrical safety as per IRC guidelines
- Fire safety equipment

2. Public Utilities (Essential Facilities)

- Rubbish bins/dustbins at the vicinity
- Drainage system

3. Commercial Component

- Advertisement panels for external display on skywalk and elevator shafts, if permissible

3.1.2.7 The project has been divided into three packets according to the three zones of BBMP. West Zone, East Zone and South Zone.

3.1.3 Bangalore West Zone

3.1.3.1 For study purpose, Bangalore West Zone has been divided into 10 localities comprising of 47 wards as shown in the map below.



3.1.3.2 Table below shows list of 47 wards and their respective locality.

Sl. No.	Area / Locality	Ward No.
1	Yeshwanthapur	1, 2 & 3
2	Sanjaynagar	4 & 100
3	Malleswaram	5, 6 & 7
4	Mahalakshmpura	9,10,11 & 12
5	Gayathrinagar	8,13,14 & 23
6	Rajajinagar	15,16,19 & 20
7	Sriramamandira	17,18,21 & 22
8	Gandhinagar	24,25,26 & 27
9	Chickpet	28,29 & 30
10	Chamarajpet	46,47 & 48

3.1.3.3 It is observed that there is increased commercial activities and vehicular traffic in areas like Koramangala, MG Road, Shivajinagar, K G Road, Gandhinagara, etc., which therefore demands for better pedestrian facilities. The increase in vehicular traffic has given rise to widening the carriageway width to accommodate the vehicles resulting in reduction in the size of the foot paths. This in turn has given room for pedestrians to spill over to the carriageway, thereby affecting the flow of vehicles.

3.1.3.4 Bangalore West Zone contains 45 arterial roads and 97 sub-arterial roads and many link roads.

- **Arterial Roads:** These roads include the roads connecting important roads like Outer Ring Roads, National Highways and State Highways, those leading to well-developed commercial centers and important entry and exit points to and from the city, like the Airport, the Railway Station etc. Arterial Roads also include the roads that run along the periphery of the city.
- **Sub-Arterial Roads:** These roads connect the arterial roads.
- **Link Roads:** These roads include local roads that take off from the residential layouts and join the sub-arterial roads.

3.1.3.5 The consultants have identified the following 25 potential locations on the arterial and sub-arterial roads in Bangalore West Zone. The pedestrian volume for 12 hours at midblock and junctions for each of these locations were done. The details of 25 potential locations and pedestrian volume are given in the table below.

Sl.No	Skywalk Location	Zone	Total pedestrian volume (12 hrs)
1	Near KC General Hospital, Malleshwaram	West	14346

Sl .No	Skywalk Location	Zone	Total pedestrian volume (12 hrs)
2	Near Manthri Mall, Sampige Road Malleshwaram	West	5424
3	Mission Road near Flyover	west	4604
4	Near DIACON Hospital, Rajaji Nagar	West	19264
5	Near Vidyavaradhaka Sanga School, Rajajinagar	West	6904
6	Shivananda Circle Near Desai Hospital	West	14775
7	Subramanya Nagar Police Station	West	1047
8	Rajaram Mohan Roy Road	West	5330
9	Sampige Road, near Sirur Park (Rajiv Gandhi Circle, In front of Swathi Hotel)	West	12195
10	Palace Gutthalli Bus Stop, near Cauveri Theatre (Bellary Road)	West	15229
11	Malleshwaram 8th Cross, Sampige Road	West	15497
12	Mekhri circle Junction - Bellary Road	West	2513
13	Esteem mall- New airport road Hebbal	West	8666
14	Yashwantpur Railway Station	west	5291
15	Mount Carmel College	West	5933
16	Mysore Bank Junction (Near Avenue Road)	West	39649
17	Jalahalli Cross, Tumkur Road	West	16165
18	TVS circle- studio road, Near Jalahalli Cross	West	1922
19	Near N.E.S junction on Yelahanka - Doddaballapur Road	West (Yelahanka)	3803
20	Hebbal Flyover, ORR	West	12296
21	Bhasyam Circle-Sadashiv Nagar	West	5893
22	Himalaya theatre-K.G Road	West	6690
23	Near Iskcon Temple, Rajajinagar	West	4246
24	Raja Rajeshwari Nagar Entrance Gate, Mysore Road	West (Border of RR)	5312
25	HMT Road, Mattikere	West	3879

3.1.4 Bangalore- East Zone

3.1.4.1 Map of Bangalore East Zone comprising of 37 wards is shown in the map below.



3.1.4.2 Table below shows list of 37 wards and their respective study locality.

Sl. No.	Area / Locality	Ward No.
1	Kormangala	67,68 & 69
2	Shanthinagar	70,71 & 76
3	Jeevanbheema Nagar	72,73,74 & 75
4	Bharthinagar	80,81 & 82
5	Banaswadi	83,84 & 88
6	Sarvagna Nagar	85,86,87 & 89
7	Shivajinagar	77,78 & 79
8	Jayamahal	91,92,93 & 97
9	Hebbal	96,98 & 99
10	Kadugondana Halli	90,94 & 95

3.1.4.3 Bangalore East Zone contains 26 arterial roads and 83 sub-arterial roads and many link roads.

- **Arterial Roads:** These roads include the roads connecting important roads like Outer Ring Roads, National Highways and State Highways, those leading to well-developed commercial centers and important entry and exit points to and from the city, like the Airport, the Railway Station etc. Arterial Roads also include the roads that run along the periphery of the city.
- **Sub-Arterial Roads:** These roads connect the arterial roads.
- **Link Roads:** These roads include local roads that take off from the residential layouts and join the sub-arterial roads.

3.1.4.4 The consultants have identified the following 58 potential locations on the arterial and sub-arterial roads in Bangalore East Zone. The pedestrian volume for 12 hours at midblock and junctions for each of these locations were done. The details of 58 potential locations and pedestrian volume are given in the table below.

Sl.No	Skywalk Location	Zone	Total pedestrian volume (12 hrs)
1	Miller Road near Bhagawan Mahaveer Hospital	East	20690
2	Hennur Main Road near St.Charles School	East	7027
3	Queens Road near Congress Party Office	East	2761
4	St.German School Coles Park	East	17392
5	ASC centre at junction of Lower Argram Road and Victoria Road	East	10758

Sl .No	Skywalk Location	Zone	Total pedestrian volume (12 hrs)
6	Anil Kumble Circle	East	6720
7	Infront of Vishweshwaraiah Museum Kasturba Road	East	2254
8	Cubbon Park Kasturaba Road near Chinnaswsamy Stadium	East	18067
9	Commercial Street	East	8445
10	MS. Building	East	2575
11	Richmond Road near Vellara Junction	East	14280
12	Webb Junction Near MG Road	East	1055
13	Jayachamarajendra Road, near Town Hall	East	10795
14	St. Marks Road, near Straisi Memorial School	East	4485
15	In Queens Road from Edward Road to Tuskar Town ,near Kamala Bhai School	East	1532
16	In front of Cantonment Railway Station	East	7590
17	Balekundari Circle (near Indian Express),on Queens Road	East	16860
18	D'Souza Circle,near Sacred Heart School	East	6631
19	Museum Road,near Patrick Church (at CariappaCircle)	East	5233
20	Brigade Road Junction	East	41159
21	In front of Planetorium ,near Basaveshwara Circle.	East	12913
22	Sarvaton circle near St.German school	East	18552
23	Near Mallya Hospital	East	6461
24	Commissiarate street Garuda Mall	East	24479
25	Residency Road near Mayo Hall	East	5558
26	Richmond Road near Baldwins Girls College	East	2267
27	Brigade Road Patrick Church near St. Joshephs college	East	7247
28	Indiranagar 100ft Road near New Horizon School	East	6441
29	Indiranagar100ft Road and CMH Road junction (near Indiranagar Metro Station)	East	16878
30	On Station Road near Bamboo Bazar (Near Bharat Petrol Bunk)	East	4315

SI .No	Skywalk Location	Zone	Total pedestrian volume (12 hrs)
31	Queen's Road near junction before Congress Party Office (Miller's Tank bund Rd - MV Jayram Rd - Thimmaiah Rd Jn)	East	11308
32	N.R square near LIC Building (Corporation)	East	5449
33	Pillana Garden near Nethaji Road	East	1419
34	Amruth Theatre, Lingrajpuram	East	1986
35	Near Banappa Park (K.G/ Police memorial Road), Near Hudson Circle	East	6911
36	In front of S.J.E.S College, K .R.Puram (on NH4)	East (Mahadevpura Border)	3469
37	Near Mayura Bakery in White Field, Whitefield Road	East(Mahadevpura Border)	6711
38	Kuvempu Circle Old Airport Road	East (Mahadevpura Border)	9313
39	Old Airport Road (HAL post office)	East (Mahadevpura Border)	3283
40	Near JBJ quarters on Marathahalli - HAL Road	East (Mahadevpura Border)	2231
41	Old Madras Road & SD Road junction near Byapnalli Metro Station	East (Mahadevpura Border)	6046
42	In front of Munnekolalu - Spice Garden, Marathahalli	East (Mahadevpura Border)	5049
43	Old Madras Road (Bengenahalli to Nagavara Palakhya Road)	East (Mahadevpura Border)	9178
44	On NH4 at entrance of Garden City College (NH-4 near KR Puram)	East (Mahadevpura Border)	6141
45	Near water tank junction (Domlur Over Head tank), HAL Road	East (Mahadevpura Border)	5896
46	ITI colony Gate, KR Puram	East (Mahadevpura)	3124
47	Marathahalli Airport Road near Marathahalli Bridge	East (Mahadevpura)	26652
48	Near KR Puram Bus Stand, KR Puram	East (Mahadevpura)	12611
49	CMR Road &Kammanhalli Road Junction	East (Bytarayanapura border)	9940
50	Kammanahalli Road &Nehru Road Junction	East (Bytarayanapura border)	9020
51	Hennur Main road near Reliance Fresh	East (Bytarayanapura)	5781

SI .No	Skywalk Location	Zone	Total pedestrian volume (12 hrs)
		border)	
52	Rammurthy Nagar, Near Church Bus stop	East (Bytarayanapura border)	2124
53	Kammanahalli Road & ORR Junction (Kalyannagar)	East (Bytarayanapura border)	8833
54	Ambilipura Gate (near Bellandur Gate), Sarjapur Road	East (Bommanahalli)	7127
55	Kadugodi Railway Station	East	10712
56	K.R Puram Railway Station	East (Mahadevpura)	8894
57	Infront of RMZ infinity, Benaganhalli, Old Madras Road	East (Mahadevpura Border)	4508
58	Babusapalaya Bus Stop, ORR	East (Bytarayanapura border)	6978

3.1.5.2 Table below shows the list of 52 wards and their respective locality.

Sl. No.	Area / Locality	Ward No.
1	Binnypet	31,32,33 & 34
2	Govindaraj Nagar	35,36,37 & 38
3	Chandra Layout	39,40 & 41
4	Jagajeevan Ramnagar	42,43,44 & 45
5	Basavanagudi	49,50 & 51
6	Hanumanth Nagar	52,53 & 54
7	Padmanabha Nagar	55 & 56
8	Jayanagar	57,58,59 & 60
9	Hombegowda Nagar	61,62 & 63
10	Madiwala	64,65 & 66

3.1.5.3 Bangalore South Zone contains 25 arterial roads and 100 sub-arterial roads and many link roads.

- **Arterial Roads:** These roads include the roads connecting important roads like Outer Ring Roads, National Highways and State Highways, those leading to well-developed commercial centers and important entry and exit points to and from the city, like the Airport, the Railway Station etc. Arterial Roads also include the roads that run along the periphery of the city.
- **Sub-Arterial Roads:** These roads connect the arterial roads.
- **Link Roads:** These roads include local roads that take off from the residential layouts and join the sub-arterial roads.

3.1.5.4 The consultants have identified the following 37 potential locations on the arterial and sub-arterial roads in Bangalore South Zone. The pedestrian volume for 12 hours at midblock and junctions for each of these locations were done. The details of 37 potential locations and pedestrian volume are given in the table below.

Sl .No	Skywalk Location	Zone	Total pedestrian volume (12 hrs)
1	Gandhi bazaar main road	South	9265
2	Near Kamakya theatre, Katriguppa ORR	South	13600
3	Hosur Main Road near Madivala Shopping Complex	South	9561
4	Little Flower School Hosakerehalli, on ORR Road	South	1865
5	Near Jayadeva Hospital, Banneraghatta Road	South	4389

SI.No	Skywalk Location	Zone	Total pedestrian volume (12 hrs)
6	KH Road near Flyover	South	3757
7	Shopper Stop Mall, Banneraghatta Road	South	5569
8	Christ College, Hosur Road	South	3594
9	Jayanagar 11 th Main Road, Near Raghavendra Swamy Temple	South	16220
10	Silk Board, Hosur Road	South (Border to Bommanahalli)	9229
11	N.R.Colony, near Colony Bus Stop	South	4904
12	Katriguppe Junction, ORR	South	5692
13	Kadrenahalli cross	South	3088
14	D.G petrol bunk, ORR	South	10606
15	Laibagh (west gate) RV Road Junction	South	5628
16	Nimhans on Hosur Road	South	6716
17	In front of J.P Nagar Central Shopping Mall	South	6517
18	Kengeri Bus Stop	South (Border to R.R Nagar)	4796
19	Satellite Bus Stand , Mysore Road	South	10083
20	Forum mall from PVR entrance (on Hosur Rd)	South	15220
21	Koramangala Sony center	South	28733
22	Near Embassy Golf Link in Domlur (Koramangala IRR)	South	4171
23	In front of Emabaasy Software Park (Koramangala IRR)	South	3757
24	Forum Mall Adugodi Road (Luskar Rd)	South	12935
25	Jayanagar 4th Block (Cool Joint Junction)	South	18842
26	Jayanagar 3rd Block (near Corporation Bank)	South	13712
27	Banashankri Bus Stop	South	11150
28	Katriguppe Main Road near Ganesh Temple	South	1121
29	Kathirguppe 43A Bus Stop	South	1877
30	Kathirguppe Main Road ITI layout bus stand	South	1243

Sl.No	Skywalk Location	Zone	Total pedestrian volume (12 hrs)
31	Near Kathriguppe Arch (near Big Bazar)	South	1417
32	Bank Colony Bus Stand	South	3007
33	Bank Colony 12th Main Bus Stop	South	2138
34	In front of Sanjay Gandhi hospital in Jayanagar IV Block	South	2906
35	Sirsi Circle near Christian Graviyard	South	5046
36	Yadiyur Market, Yadiyur	South	4346
37	South End Circle near Pattalamma Road	South	5546

3.1.6 Classification of Locations according to Facility provision

3.1.6.1 The Skywalk should be designed with accordance with IRC SP: 56-2011.

3.1.6.2 Pedestrian Fencing should be used at the kerb side and medians to direct pedestrians to the Skywalk and to prevent pedestrians from crossing the road.

3.1.6.3 Technical Consultants have proposed Mechanised Skywalks over a Normal Skywalk to provide comfort and safety at major congested road crossings. The Mechanized Skywalks have mechanically operated escalators and lifts. They are especially useful to senior citizens and children to access the pedestrian bridge to cross the road.

3.1.6.4 The table below contains the list of options suggested for each location according to the need and feasibility for the Skywalks in terms of Staircase / Lifts / Escalators. It is seen from the table below that escalators may not be an option in all the cases.

3.1.7 West Zone – provision of facilities

Sl. No.	Skywalks	Locations of Skywalks	Approximate Length of Skywalk (m) **	Options		
				Staircase	Lift	Escalator
1	Near KC General Hospital, Malleshwaram	Location – From KC General Hospital to Vidyanayapura Side	58	Yes	Yes	No
2	Near Manthri Mall, Sampige Road Malleshwaram	From Mantri Mall to petrol bunk (near junction)	48	Yes	Yes	No

Sl. No.	Skywalks	Locations of Skywalks	Approximate Length of Skywalk (m) **	Staircase	Options Lift	Escalator
3	Mission Road near Flyover	From Poto Shop to Lal Bagh Side	53	Yes	Yes	No
4	Near DIACON HOSPITAL Rajajinagar	From Diacon Hospital to Civil Engg Corner	48	Yes	Yes	No
		From Civil Engg corner to Milk Parlor	46	Yes	Yes	No
5	Near Vidyavaradhaka Sanga School, Rajajinagar	From Panasonic to Vidya Vardhaka School	45	Yes	Yes	No
6	Shivanandha Circle near Desai Hospital	From Ashoka Hotel Side – Hospital	48	Yes	Yes	No
		Chalukya Hotel Side to Hospital	48	Yes	Yes	No
7	Subramanya Nagar Police Station	From Police Station to Infront of VRL	49	Yes	Yes	No
8	Rajaram Mohan Roy Road	From Cubbon Park Side to Lal Bagh Side	83	Yes	Yes	Yes
9	Sampige Road, near Sirur park (Rajiv Gandhi Circle, In front of swathi Hotel)	From SBM to Nokia Dealer	47	Yes	Yes	No
		From SBM to Metro Station Side on Sampige Road	53	Yes	Yes	No
10	Palace Gutthalli Bus Stop, near Cauveri Theatre(Bellary Road)	Palace Ground to Guttahalli Bus stop	63	Yes	Yes	Yes
11	Malleswaram 8th Cross, Sampige Road	From Guttahalli Road to Margasa Road	45	Yes	Yes	No
12	Mekhri circle Junction - Bellary Road	From RT Nagar Side IAF	63	Yes	Yes	Yes
13	Esteem mall- New airport road Hebbal	From Esteem Mall to Bus Stop	58	Yes	Yes	Yes
14	Yeshwantpur Railway Station	From Railway station to Total Gas	63	Yes	Yes	No
15	Mount Carmel College	From Embassy Star Building to Mount Carmel College	53	Yes	Yes	No
16	Mysore Bank Junction (Near Avenue Road)	From Mysore Bank to College	48	Yes	Yes	No
		From Temple to Govt	58	Yes	Yes	No

Sl. No.	Skywalks	Locations of Skywalks	Approximate Length of Skywalk (m) **	Staircase	Options Lift	Escalator
		red Building				
		From Cauvery Bhavan to College	73	Yes	Yes	No
17	Jalahalli Cross, Thumkur Road	From Petrol pump to Bus Stop(On Ring road)	63	Yes	Yes	Yes
		From Bus stop to Bus Stop (On Subrato Mukhraj Rd)	48	Yes	Yes	No
18	TVS Circle-studio road, Near Jalahalli Cross	From Millipore to Indosol Pvt. Ltd Company (On Main road)	65	Yes	Yes	Yes
19	Near N.E.S junction on Yelahanka - Doddaballapur Road	From Auto Stand to Bus Stop	58	Yes	Yes	Yes
20	Hebbal Flyover ,ORR	From Hebbal Bus Stop to Lake	78	Yes	Yes	Yes
21	Bhasyam Circle-Sadashiv Nagar	From Petrol Bunk to Airtel	51	Yes	Yes	No
		From School to Petrol Bunk	53	Yes	Yes	No
22	Himalaya theatre -K.G Road	From Arya Bhavan Sweets to Kanti Sweets	68	Yes	Yes	No
23	Near Iskcon Temple, Rajajinagar	From Left side of Bus Stop to Left side of Kalyana Mantapa.	56	Yes	Yes	Yes
24	Raja Rajeshwari Nagar Entrance Gate, Mysore Road	From Gopalan Mall (Near Lawn) to Bus Stop on opposite side	57	Yes	Yes	Yes
25	HMT Road, Mattikere	From Mataji Medicals to Karnataka Bag Shop.	56	Yes	Yes	Yes
** Length includes stairs (both sides), Landings (4no's)						

3.1.8 East Zone – provision of facilities

Sl. No.	Locations of Sky Walks	Approximate Length of Skywalk (m)**	Staircase	Options Lift	Escalator
---------	------------------------	-------------------------------------	-----------	-----------------	-----------

1	Miller Road near Bhagavan Mahaveer Hospital	From Pai Vihar to Vasanth Nagar	46	Yes	Yes	Yes
		From Play ground to TV Tower	42	Yes	Yes	-
2	Hennur main road near St.Charles school.	From School to Ground	42	Yes	Yes	-
3	Queens Road near congress party office.	From Congress office to star chamber	40	Yes	Yes	-
4	St.German school coles park	From St.German School to Park	43	Yes	Yes	-
		From Yoga Meditation Classes to School	41	Yes	Yes	-
5	ASC Center at junction of Lower Argram Road and Victoria Road.	From ASC to Police chowk	47	Yes	Yes	-
6	Anil kumble Circle	From LIC to Bible Society of India	52	Yes	Yes	Yes
		From LIC to Fire Station	45	Yes	Yes	Yes
7	Infront of Vishweshwaraiah Museum Kasturba Road	From Museum to Bus Stand	51	Yes	Yes	Yes
8	Cubbon Park Kasturaba Road near Chinnaswsamy stadium	From Cubbon Park to Chinnaswamy Stadium	55	Yes	Yes	Yes
		From Jewells De Paragon to Cubbon park	56	Yes	Yes	Yes
		From Chinnaswamy Stadium to St. Marks Cathedral	54	Yes	Yes	-
9	Commercial Street	From Samskruthi Silk to MG Road (Near Parking)	52	Yes	Yes	Yes (1 side)
10	M.S Building	From MS Building to Cubbon Park	46	Yes	Yes	Yes
11	Richmond Road near Vellara Junction	From Police Chowk to Church	55	Yes	Yes	-
		From Church to Vellara Junction	48	Yes	Yes	-
12	Webb Junction Near M.G Road	From Dickson road to Petrol bunk	53	Yes	Yes	-

13	Jayachamarajendra Road, near Town Hall	From Townhall To Canara bank	50	Yes	Yes	-
		From Polygal India Pvt To Town Hall	54	Yes	Yes	-
14	St.Marks Road, near Straisi Memorial School	From H P Petrol Bank to Straisi Memorial School	45	Yes	Yes	-
15	In Queens Road from Edward Road to Tuskar Town near Kamala Bhai School	From Queens Road to Trip to Travels	42	Yes	Yes	-
16	In front of Cantonment Railway Station	From Parking to Railway station	45	Yes	Yes	Yes
17	Balekundari Circle (near Indian Express),on Queens Road	From Queens Road to Park Temple	50	Yes	Yes	-
		From Shivaji Nagar to Indian Express	45	Yes	Yes	-
		From Indian Express to Air china Cunningham Road	45	Yes	Yes	-
18	D'Souza Circle, near Patrick church (at Cariappa Circle)	From Sapphire to Temple	46	Yes	Yes	-
		From Life Style to Samyakk	45	Yes	Yes	-
19	Museum Road, near Patrick Church (at Cariappa Circle)	From Cariappa Bavan to SIR M.V station	45	Yes	Yes	-
		From Police Chowk to C,Bhavan	43	Yes	Yes	-
20	Bridge Road Junction	From Sadhwam's to Maniksha Ground	52	Yes	Yes	Yes
		From Kaveri Arts to Sadhawan's	41	Yes	Yes	Yes
		From Army Ground to Kaveri Arts	52	Yes	Yes	Yes
21	In front of Planetorium, near Basaveshwara Circle	From Planetarium to Chalukya	56	Yes	Yes	Yes
		From Chalukya to DURS Road	51	Yes	Yes	-
22	Sarvaton circle near St.German school	From St German School to Shivajinagar	44	Yes	Yes	-

23	Near Mallya Hospital	From Hospital to Ground	44	Yes	Yes	-
24	Commissariate street Garuda Mall	From Home Stop to Garuda Mall	50	Yes	Yes	Yes
		From UCB to Fire Station	42	Yes	Yes	Yes
25	Residency Road near Mayo Hall	From BBMP Office to Power Station	44	Yes	Yes	-
26	Richmond Road near Baldwins Girls College	From School to Opposite	46	Yes	Yes	-
27	Brigade Road Patrick Church near St Joshephs College	From Samsung to St.Patrick Church	41	Yes	Yes	-
28	Indiranagar 100ft Road near New Horizon school	From Bus stop to Doopanahalli	46	Yes	Yes	-
29	Indiranagar 100ft Road and CMH Road Junction (near Indiranagar Metro Station)	From KFC to CMH Park	48	Yes	Yes	-
		From KFC to Metro side	42	Yes	Yes	-
30	On station Road near Bamboo Bazar (Near Bharat Petrol Bunk)	NOT REQUIRED				
31	Queen's Road near Junction before Congress Party Office(Miller's Tank bund Rd-MV Jayram Rd-Thimmaiah Rd Jn)	From Star Chamber to Congress Committee	46	Yes	Yes	-
32	N.R square near LIC Building (Corporation)	From LIC Building to Unity Building	67	Yes	Yes	Yes
33	Pillana Garden near Nethaji Road	From Nethaji Play Ground to State Bank	46	Yes	Yes	-
34	Amruth Theartre,Lingrajpuram	From Music World to Arch	51	Yes	Yes	-
35	Near Banappa Park (K.G/Police memorial Road), Near Hudson Circle	From Sri Vinayaka School to Canara Bank	70	Yes	Yes	-
36	In front of S.J.E.S College, K.R Puram (on NH4)	From bus stop(in front private building to bus stop (In front of RNS JCB building)	70	Yes	Yes	Yes

37	Near Mayura Bakery in White Field, Whitefield Road	From In front of Mayura Bakery to bus stop other side.	50	Yes	Yes	-
38	Kuvempu Circle Old Airport Road	From Parking to HAL border	53	Yes	Yes	-
		From Parking to Punjab National Bank	45	Yes	Yes	-
39	Old Airport Road (HAL post office)	From Post office to HAL	45	Yes	Yes	-
40	Near JBJ quarters on Marathahalli - HAL Road	From JBI Quarters side to HAL	52	Yes	Yes	-
41	Old Madras Road & SD Road junction near Byapnalli Metro Station.	From NGEF side road bus stand to SD road side	50	Yes	Yes	-
42	In front of Munnekolalu-Spice Garden, Marathahalli	From Spice Garden to Temple	67	Yes	Yes	-
43	Old Madras Road (Bengenahalli to Nagavara Palakhya Road)	From Bus Stop to bengenahalli	50	Yes	Yes	-
44	On NH4 at entrance of Garden City College (NH-4 near KR Puram)	From Garden city college road to Bus stop	60	Yes	Yes	-
45	Near water tank junction (Domlur Over Head tank), HAL Road	From Water tank to New Shanthi Sagar	54	Yes	Yes	-
46	ITI colony Gate, KR Puram	From Bus stop to Bus Stop (Corner of Ambedkar Stadium, ITI Grounds)	68	Yes	Yes	Yes
47	Marathahalli Airport Road near Marathahalli Bridge	From SBM to Shanthi Sagar Hotel corner	55	Yes	Yes	-
48	Near KR Puram Bus Stand, KR Puram	From Bus Stand to Market Side	55	Yes	Yes	-
49	CMR Road & Kammanhalli Road Junction	From ICICI Direct to Jalavaya Vihar	44	Yes	Yes	-
50	Kammanahalli Road & Nehru Road Junction	From Riti Jewelers to Bakery	44	Yes	Yes	-
51	Hennur Main road near Reliance Fresh	From Reliance fresh to Indian Academy Group	51	Yes	Yes	-
52	Rammurthy Nagar, Near Church Bus stop	From Vinayaka Medicals to Jayashree Enterprises	41	Yes	Yes	-

53	Kammanahalli Road & ORR Junction (Kalyanagar)	From Bus Stop to Lee Showroom	58	Yes	Yes	Yes
54	Ambilipura Gate (near Bellandur Gate). Sarjapur Road	From In front of Springfield apartment to in front HDFC Bank	50	Yes	Yes	-
55	Kadugodi Railway Station	From Canara Bank to Kadugodi Bus Stop	96	Yes	Yes	Yes
56	K.R Puram Railway Station	From Railway Station to Border Wall	81	Yes	Yes	-
57	In Front of RMZ Infinity, Benegalahalli Old Madras Road	From RMZ Infinity to Life Style Shopping Mall	50	Yes	Yes	Yes
58	Babusapalaya Bus Stop, ORR	From Bus Stop (In front of Ganesha Juice Center) to Bus Stop (Nandhini Parlor)	82	Yes	Yes	Yes
** Length includes crossing length, stairs length including landings						

3.1.9 South Zone – provision of facilities

No	Locations of Sky Walks	Approximate Length of Skywalk (m)**	Options			
			Staircase	Lift	Escalator	
1	Gandhi Bazaar main road at DVG Road Junction	On Gandhi Bazaar Rd-from Ladies Wear to Ashwini Store	50	Yes	Yes	No
		On DVG Road - From Ganjam to Ladies Wear	42	Yes	Yes	No
2	Near Kamakya theatre, Katriguppa ORR	On ORR - From Apollo to Kamakya	42	Yes	Yes	No
3	Madiwala Shopping Complex on Hosur Road	On Hosur Road - From Arafa Store to Total Mall	55	Yes	Yes	Yes
		On Madiwala Road - From Total Mall to Police station side	65	Yes	Yes	Yes
4	Little Flower Public School Hosakerehalli ORR	On ORR - From Little Flower Public School to Post office	50	Yes	Yes	Yes
5	Near Jayadeva hospital Banneraghatta Road	On Banneraghatta Road - Bus stop to Hotel	50	Yes	Yes	Yes
6	KH Road, Shanthinagar	On KH Road - From Bus stop to clinic	53	Yes	Yes	No

No	Locations of Sky Walks	Approximate Length of Skywalk (m)**	Options			
			Staircase	Lift	Escalator	
7	Shopper stop Banneraghatta road	On Banneraghatta Road - Bus stand to Brigade building	47	Yes	Yes	Yes
8	Christ College on Marigowda Road, Hosur Road	On Marigowda Road - From Christ college to Tech Mahindra	50	Yes	Yes	No
9	Jayanagar 11th Main Road, Near Raghavendra Swamy Temple	On Marenahalli Road - From Raghavendra Math to Apple	45	Yes	Yes	No
		On Marenahalli Road - Raghavendra Math To ATM	45	Yes	Yes	No
10	Silk Board, Hosur Road	On ORR - Madiwala side to Silk Board	54	Yes	Yes	Yes
		On ORR - Madiwala to Hosur	60	Yes	Yes	Yes
11	N.R.Colony, Near Colony Bus Stop	On Subramanya Shetty Road -Govt. Hospital to Montessori School	55	Yes	Yes	No
12	Katriguppe Junction ORR	On Katriguppe Road - From HDFC to Food world	45	Yes	Yes	No
		On ORR - From HDFC to BATA	53	Yes	Yes	Yes
13	Kadrenahalli Cross ORR	On ORR - From College to Banashankari	42	Yes	Yes	Yes
14	D.G petrol Bunk, ORR	On ORR - From Bunk to College	53	Yes	Yes	Yes
		On 30th Main Road - From Bunk to Fire station	52	Yes	Yes	No
15	Lalbagh-RV Road Junction (West gate)	On RV ROad - From Lal Bagh to Petrol .Bunk	65	Yes	Yes	Yes
		On Vanivilas Road - Petrol.Bunk to Citi bank	52	Yes	Yes	No
16	Nimhans on Hosur Road	On Hosur Road - From Gate 1 to Gate 2	45	Yes	Yes	Yes
17	In front of J.P Nagar Central Shopping Mall	On Marenahalli Road (ORR) - From Big Bazaar to Central	52	Yes	Yes	Yes

No	Locations of Sky Walks	Approximate Length of Skywalk (m)**	Options			
			Staircase	Lift	Escalator	
18	Kengeri Bus stop- Mysore Road	On ORR - From Bus stop to Kengeri New Bus stop	50	Yes	Yes	No
19	Satellite Bus Stand, Mysore Road	Big Bazar to Ramani Timber Mark	50	Yes	Yes	No
20	Forum mall from PVR entrance (on Hosur Rd)	On Hosur Road - From Sharma Enterprises to PVR side	55	Yes	Yes	No
21	Koramangala Sony center	On Koramangala IRR - From KFC to Aubon pain	60	Yes	Yes	Yes
		From Sapphire to KFC	52	Yes	Yes	Yes
		On Koramangala IRR - From Sony center to Sapphire	60	Yes	Yes	Yes
		From Aubon pain to Sony center	52	Yes	Yes	Yes
22	Near Embassy Golf Link Road, Domlur – Kormangala Inner Ring Road	On Koramangala IRR - From corner of Hero Honda Showroom to Corner of TVS Showroom.	59	Yes	Yes	Yes
23	In front of Embassy Software Park (Koramangala IRR)	On Koramangala IRR -From Yahoo Gate to Car workshop	58	Yes	Yes	Yes
24	Forum Mall Adugodi Road (Luskar Rd)	On Audugodi-Hosur Rd - From Bosch to forum mall	52	Yes	Yes	Yes
25	Jayanagar 4th Block (Cool Joint Junction)	From College to Shop	46	Yes	Yes	No
		From Cool Joint to Shop	46	Yes	Yes	No
		From Cool Joint to Reliance	51	Yes	Yes	No
26	Jayanagar 3rd Block (near Corporation Bank)	From Rajalakshmi Jewels to Construction Building	43	Yes	Yes	No
		From Rajalakshmi Jewels to Janardhan Store	52	Yes	Yes	No
27	Banashankari Bus Stop	From Bus Stand to Temple	46	Yes	Yes	No

No	Locations of Sky Walks		Approximate Length of Skywalk (m)**	Options		
				Staircase	Lift	Escalator
		From Metro to Bus Stand	65	Yes	Yes	Yes
28	Katriguppe Main Road near Ganesh Temple		Not Required			
29	Kathriguppe 43A Bus Stop		Not Required			
30	Kathriguppe Main Road ITI Layout Bus Stand		Not Required			
31	Near Kathriguppe Arch (near Big Bazar)	From Arch to Shop	46	Yes	Yes	Yes
32	Bank Colony Bus Stand	From Bus Stop to Raymond's Showroom	43	Yes	Yes	No
33	Bank Colony 12th Main Bus Stop		Not Required			
34	In front of Sanjay Gandhi hospital in Jayanagar IV Block	On 32nd Cross Road - From Hospital Gate to Bus Stop	48	Yes	Yes	No
35	Near Sirsi Circle at Christian Graveyard, Mysore Road	On Mysore Road - From Christian Graveyard to Furniture Shop	48	Yes	Yes	No
36	In front of yediyur market, yediyur	On Jayanagar Road- From Vidura Medicals to SLV Wines.	52	Yes	Yes	No
37	Near Patalamma Road in South end circle	On Patalamma Road- From Petrol Bunk to Park	53	Yes	Yes	No
** Length includes stairs (both sides), Landings (4no's)						

3.1.9.1 The preliminary cost estimates for a standardized skywalk has been worked out based on the preliminary drawing prepared by the Technical Consultant. The cost of viaduct portion of skywalk, staircase, lifts, and escalators are calculated separately.

3.1.9.2 The basis for cost of Skywalks used is added to arrive at the project cost at each location (basis used by the Technical Consultant) is given below:

- Cost per running metre for the viaduct portion of skywalk is estimated at Rs. 2.2 Lakhs,
- Cost of staircase is estimated at 20 lakhs on each side.
- The Cost of Escalator (1.2 m wide) per unit is estimated at Rs.55 Lakhs
- The Cost of Lift (of capacity 12 person) is estimated at Rs. 18Lakhs
- Cost of utility relocation @ 10%, price escalation @ 10% and physical contingency @ 5%

3.2 Interaction with Stakeholders

3.2.1.1 Bangalore has more than 14 operational skywalks developed by private players in lieu of advertisement rights. Different agencies namely Vantage advertising, Rajdeep Builders, Star Advertising, Prakash Arts etc and who operate the Skywalks/Advertisements on skywalks were approached to understand the market and prevailing practices and rates.

3.2.1.2 BBMP's advertisement department has the primary responsibility to issue the permits for development of advertisement space in the Bangalore city. The Chief Engineer and officials were contacted to understand the procedure that private developer will have to follow to procure the advertisement license for proposed skywalks.

3.3 Development Needs, Public needs & Planning Considerations

3.3.1.1 Five important objectives should be kept in mind while designing and constructing a Skywalk:

- Skywalk should be designed and constructed with the safety of the user in mind. Design facilities to be free of hazards and to minimize conflicts with external factors such as vehicular traffic and protruding architectural elements of the Skywalk.
- Skywalk should be accessible to all class of users. Lifts / escalator should be design for elderly / children / disabled.
- Skywalk should provide access to desired destinations so that delays are minimized i.e. provide continuous, direct routes and convenient connections between shopping areas, schools, etc.
- Skywalk should be pleasant to use. It should enhance the look and feel of the pedestrian environment. Amenities such as street furniture, banners, art, plantings

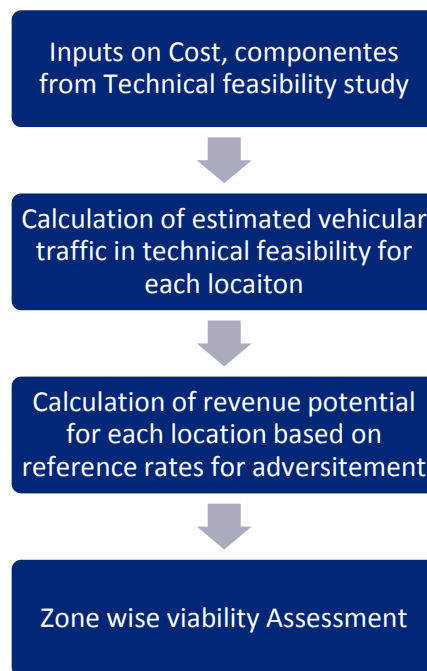
and special paving, along with historical elements and cultural references promote a sense of place.

- Skywalk should provide maximum benefit- to-cost to the public, including initial construction and maintenance costs for the public utility as well as reduced reliance on more expensive modes of transportation for the commuters.

4 Project Financials (Detailed Calculations sheets in Excel submitted along with report)

4.1 Basis for Financial calculations

4.1.1.1 The financial feasibility of the project was determined as per following approach;



4.1.1.2 The technical feasibility report has classified each location based on need into A,B,C,D,E or F which denotes the severity of need of sky walk and type of facility to be provided. Based on which the type of sky walk to be built and capital costs have been estimated. As a second step the vehicular traffic estimated for each location in the technical pre-feasibility was calculated. This vehicular traffic provides the basis for estimation of revenue potential for each location. The revenue potential was calculated based on the reference rates obtained from market for advertisements on existing sky walks. Further, the financial viability has been considered at Zone level to bunch a set of high revenue earning potential and low revenue earning potential skywalks together.

4.2 Cost Estimation

4.2.1 Capital Cost:

4.2.1.1 As indicated in the overview section, the recommendations of the Technical Consultants with respect to the project configuration (Staircase + Lifts / Staircase + Lift + Escalators) have been incorporated in the financial analysis and corresponding capital costs have been taken. The final capital cost of the project has been calculated from the technical recommendations based on the costs of construction of viaduct of the bridge, staircases, lifts and escalators. It is assumed that the entire capital expenditure is incurred in the first year itself.

4.2.2 Operating Cost

4.2.2.1 Three kinds of operating costs were considered for the project:

- Annual Maintenance
- Employee expenses
- Selling and General Expenses

4.2.2.2 Annual maintenance costs include electricity cost and routine maintenance costs for the skywalks. They were assumed to be 8% of the capital cost for all the kinds of skywalks (Staircase + Lifts / Staircase + Lifts + Escalators).

4.2.2.3 Selling and general expenses were assumed to be 2% of the revenue every year.

4.2.2.4 Three categories of employees were considered while calculating the salary expenses: Top Management, Technical team and the execution team. It was assumed the 1 of the employee from top management and 3 technical team members to service the lifts and escalators will be allotted per zone. It is additionally assumed that all lifts are manned. The salaries for these employees are:

- Top management: Rs.10 lakhs per annum
- Technical team: Rs.5 lakhs per annum
- Lift Operators (2 shifts): Rs. 0.5 lakh per annum per operator

4.2.2.5 The manpower cost and annual maintenance cost have been assumed to increase with inflation (reflected through WPI).

4.3 Tariff Revenue Stream

4.3.1.1 Revenue for each Sky-walk has been calculated based on the following assumptions:

- Each Sky-walk has two main advertisement boards (on the bridge) and two boards on the staircase.
- Advertisement rate is proportional to vehicular traffic on the road (estimated based on the report of the Technical Consultant). The data given by Vantage has been used as base data for advertisement rates. The minimum rental for any location considered is INR 200 / sq. ft. / month and the maximum rental considered for any location is INR 450 / sq. ft. / month. Sky-walks being premium locations in terms of visibility, they command a higher rate than normal advertisement boards in the vicinity.
- Visibility of advertisement boards has also been considered while estimating revenue potential of each Sky-walk.
- It is assumed that each sky-walk will be occupied with advertisements 75% of the time.
- The advertisement rental is also expected to increase with inflation year-on-year.

4.4 Viability Assessment (NPV, Project IRR, Equity IRR)

4.4.1.1 The financial analysis has been done for the sky walks proposals in three separate packages each for one zone i.e. for East Zone, West Zone and South zone. The Financial Viability of the Project is assessed with respect to the key parameters such as Project IRR and Equity Internal Rate of Returns (IRR). The viability analysis includes the identification of revenue and expenditure streams. Revenues will be from advertisements, while the expenditure would be primarily on account of Capital and O&M costs.

4.4.1.2 The methodology remains the same for each of the three packages. Findings of the report prepared by technical consultants M/s Infra Support Engineering Consultants Pvt. Ltd. (hereafter referred to as "Technical Consultants") forms the basis for assumptions related to capital cost and project configuration. Inputs obtained from advertising agencies operating in Bangalore esp. Vantage has been used in conjunction with report from Technical Consultants to assess advertising revenue estimates. The following sections outline the assumptions and methodology used to estimate Capital Expenditure, O&M Expenditure and Revenue etc and the last section presents the results of the pre-feasibility analysis.

4.5 Financing

4.5.1.1 The 100% financing has been assumed from project developer, BBMP or any other government grants have not been assumed to be available for this project. Each project is assumed to be financed by the developer with 70% debt and 30% equity.

4.6 Results of the Financial Analysis

4.6.1.1 Following table summarizes the key results of the financial analysis.

Indicator	East Zone	West Zone	South Zone
Total Number of Projects	58	25	37
Total Capital Cost	1,354,520,833	652,562,500	1,014,145,833
O&M Cost (First year)	135,896,213	66,537,288	101,598,152
• Operating Expenses	118,114,217	56,903,450	88,433,517
• Manpower Expenses	11,000,000	6,270,000	8,325,000
• S&G Expenses	6,781,996	3,363,838	4,839,635
Revenue	785,263,771	389,487,116	560,364,588
Project IRR	17.29%	17.79%	16.13%
Equity IRR	17.39%	18.02%	15.94%

4.6.1.2 Based on the financial analysis, all projects are found feasible based on the pre-feasibility analysis.

4.6.1.3 Calculations for individual sky walks for project cost, revenue potential and operating costs have been provided in Annexure 8.2

5 Statutory & Legal Framework

5.1 Applicable laws

5.1.1.1 As per Indian Road Congress IRC: 103 - 1988 - Guidelines for Pedestrian Facilities, clause 8.1, the Grade Separated Facilities will be warranted at locations where one or more following conditions exist:

- Volumes of pedestrians and vehicular traffic are so large that intersection of an exclusive pedestrian phase will increase the cycle time for traffic signals beyond 120 seconds.
- Vehicular traffic demands uninterrupted flow as associated with major arterial roads and expressway.
- Control at-grade pedestrian crossing decisively fails to mitigate the problems of pedestrian- vehicle collision. Viability of a grade separated pedestrians facility must be checked against delay costs for both pedestrians and vehicle drivers/users including increase in vehicle operating costs inflicted by increased delays.

5.1.1.2 As per IRC: SP: 56-2000 - Guidelines for Steel Pedestrian Bridges: This guidelines deals mainly with specific recommendations for the design of superstructure of pedestrian bridges in structural steel works.

5.1.1.3 International Standards should be considered to provide a world class pedestrian facility. As per the Design and Safety of Pedestrian Facilities guidelines of Institute of Transportation Engineers (ITE), Washington DC, the grade separated pedestrian crossing is warranted at locations

- if the pedestrian hourly volume is more than 300 in the four highest continuous hours periods
- if the speed is more than 40 mph
- if proposed sites in urban areas

5.2 Legal & Regulatory framework, Tariff framework etc. (Any suggestions)

5.2.1.1 BBMP's advertisement section issues licenses for advertisement space.....

5.3 Key Issues

5.3.1.1 It is proposed that the proposed developer will have to procure the license for advertisement space on skywalks and also pay the taxes as per the applicable rates of BBMP for such advertisement spaces.

6 Operating Framework

6.1 Risk and Challenges for Designing and Constructing Skywalks

6.1.1.1 Design Challenges

- Flexible spans for easy traffic movement
- Portal designs on narrow roads
- Frequent changes in footing designs
- Barricades for pedestrian safety
- Minimum disturbance to traffic
- Ensuring speedy implementation with effective quality control

6.1.1.2 Operational Challenges

- Working on narrow roads
- Underground utilities
- Restricted working hours
- Close proximity with buildings
- Heavy vehicle and pedestrian traffic on roads

6.1.1.3 Social Challenges

- Perceived notions of privacy
- Opposition from local commercial ventures
- Noise and nuisance during construction
- Disputes over alignment & access points
- Proximity to religious structures
- Perceived hindrance to various social & community activities
- Environmental issues-Tree cutting

7 Way Ahead

7.1 Project Development Framework

7.1.1.1 BBMP may choose either framework for project development – item rate contract or PPP basis.

- Item rate – This framework works like a normal EPC procurement contracts. In this case the detailed project report has to be prepared by BBMP which would include detailed structural designs, the working drawings, cost estimates and to assess the practical constraints for implementation.
- PPP basis – A private player is selected to construct and operate the facility. In this case the private player will prepare the detailed designs meeting minimum requirements. In this case, the BBMP shall undertake the project structuring and bid process management for selecting the most suitable developer to finance, design, construct, operate and maintain the subject project. The period of concession may vary around 20-30 years depending upon the costs involved and the revenue generation.

7.1.1.2 BBMP has already being adopted PPP model for the implementation of several skywalks; the same method can be continued if it is acceptable.

7.2 Procurement Plan for further development like

7.2.1.1 TOR for Transaction Advisor/ Technical Consultant and deliverables (Task, Deliverables, Timeline); Experience required for firm and experts for Transaction Advisor/ Technical Consultant; Evaluation Matrix (This will be moderated by the Dept/ Agency/ IDD to remove any bias)

8 Annexures

8.1 Description of the Locations

8.1.1 West Zone

8.1.1.1 Description of 25 potential Skywalks around Bangalore West Zone are given in the table below.

Sl. No.	Skywalk Location	Pedestrian volume (12 hours)	Level of Service	Proposed Skywalk Location	Remarks
1.	Near KC General Hospital, Malleshwaram	Location 1 – 14346	F	From KC General Hospital to Vidyaranyapura	This location is located in Malleshwaram. Malleshwaram is one of the popular residential areas in Bangalore. There are few schools located around this area. Also this location is near K.C General Hospital. Bus stop is existed at this location. Traffic on this road is quiet heavy. Pedestrians need to wait long time to cross the road. KC General Hospital is one of the famous hospitals in Bangalore.
2.	Near Manthri Mall on Sampige Road, Malleshwaram	On Main road (Sampige Road) – 5424	E	From Mantri Mall to petrol bunk (near junction)	Mantri mall is one of the biggest shopping mall in Bangalore, located on Sampige road in Malleshwaram. A huge number of pedestrian coming from Sheshadripuram, Palace Guttalli area and different places of Bangalore enter the mall by crossing the Sampige road. The traffic on this road is heavy. Pedestrians need to wait long time to cross the road.
3.	Mission Road near Flyover	Poto Shop to Lal Bagh Side – 4604	F	From Poto Shop to Lal Bagh Side	Sky Walk proposed in Mission Road before starting of Richmond flyover is the mid-block junction where barricading is provided. Crossing pedestrians trespass the barricade to cross the road and many pedestrians cross the road in the gaps provided between the barricades
4.	Near DIACON Hospital, Rajaji Nagar	Total for 4 locations – 19264	E & D	Location 1: From Diacon Hospital to Civil Engg Corner Location 2: From Civil Engg corner to Milk Parlor	Diacon Hospital in Rajajinagar near Chord road is the junction with heavy traffic. More Number of students and visitors to the hospital cross the road.
5.	Near	Panasonic to	F	From Panasonic to Vidya	Vidyavardhaka School in Rajajinagar is about 300 mtr from

Sl. No.	Skywalk Location	Pedestrian volume (12 hours)	Level of Service	Proposed Skywalk Location	Remarks
	Vidyavaradhaka Sanga School, Rajajinagar	Vidya Vardhaka School – 6904		Vardhaka School	Diacon hospital. Mainly school children cross the road.
6.	Shivananda Circle near Desai Hospital	All 4 locations – 14775	E	Location 1: From Ashoka Hotel Side – Hospital Location 2: From Chalukya Hotel Side to Hospital	This location is located at Shivananda Circle, Sheshadripuram. At this junction Desai Hospital is situated which is a very old and popular hospital. Traffic on this road is huge and increasing day by day. Sheshadripuram is a residential area.
7.	Subramanya Nagar Police Station	Police Station to In-front of VRL – 1047	E	From Police Station to In-front of VRL	Subramanya Nagar police station in Rajajinagar on Dr.Raj Kumar Road is a Mid-Block Junction.
8.	Rajaram Mohan Roy Road	Cubbon Park Side to Lal Bagh Side – 5330	F	From Cubbon Park Side to Lal Bagh Side	Sky walk proposed in Rajaram Mohan Roy road is near Hudson circle where pedestrian cross the road from Cubbon Park side crossing the Kantirava Stadium Boundary to Rajaram Mohan Roy road. The Crossing distance is too long and with the heavy traffic movement pedestrian is in trouble to cross the road. Skywalk may help in providing safety for crossing pedestrians.
9.	Sampige Road, near Sirur Park (Rajiv Gandhi Circle, In front of Swathi Hotel)	2 locations – 12195	E & F	Location 1:From SBM to Nokia Dealer Location 2:From SBM to Metro Station Side on Sampige Road	This location is located in Sheshadripuram on Platform road. The traffic on this road is quite heavy. Pedestrians need to wait long time to cross the road. Bus stops are located on either side. There are few educational institutions located around this place.
10.	Palace Gutthalli Bus Stop (Near Cauvery Theatre) on Bellary Rd	Palace Ground to Guttahalli Bus stop – 7324	F	Palace Ground to Guttahalli Bus stop	Palace Guttahalli is a sub Locality in Crescent Road Locality in Bangalore. Palace Guttahalli is about 2.68 K.M. Distance from Kempegowda Bus Station (Majestic Station).People travelling to Windsor Manor , Bashyam Circle (Sadashivanagar),Sudhindra Nagar , Bangalore Golf Course , Palace Grounds, Sadashivanagar Malleswaram, Vasanthanagar , Sivananda Stores , Cantonment Railway Station , Mekhri Circle take buses from Palace Guttahalli Bus stand. Traffic flow on Bellary road is

Sl. No.	Skywalk Location	Pedestrian volume (12 hours)	Level of Service	Proposed Skywalk Location	Remarks
					heavy. This road is a connecting road to Bangalore International Airport. It is recorded with traffic police as highest number of pedestrians killed on this road. It is a NH7 road
11.	Malleswaram 8th Cross, Sampige Road	Guttahalli Road to Margasa Road- 15497	F	From Guttahalli Road to Margasa Road	Malleswaram 8th cross in Sampige road is well known location for shopping. Intersecting road to the Sampige road is shopping areas and pedestrians cross the Sampige road
12.	Mekhri Circle Junction - Bellary Road	Location RT Nagar Side to IAF -2513	F	Location – From RT Nagar Side o IAF	Mekhri circle on Bellary road where R.T Nagar road intersects is heavy traffic road. This also connects to BLR International Airport. Traffic signal is provided for safe crossing of pedestrians. But still pedestrians need to wait for long.
13.	Esteem mall- New Airport Road , Hebbal	From Esteem Mall to Bus Stop– 8666	F	From Esteem Mall to Bus Stop	Esteem Mall near Hebbal on Airport road is heavy and fast moving traffic. More number of crossing pedestrians is Students. Traffic signal is provided for safety of pedestrians crossing the road. During weekends shopping mall will have more shoppers and which leads heavy pedestrian’s movements during that time. There are few colleges located around this place.
14.	Yeshwantpur Railway Station	From Railway station to Total Gas – 5291	F	From Railway station to Total Gas	Yeshwanthpura railway Station is located on Tumkur road. Tumkur Road is a National Highway. The people coming from the railway station need to cross the road to access the bus stops. It is very dangerous for the pedestrians to cross the road. Traffic on this road is enormous. The skywalk shall be placed below the metro bridge and it should check with metro authorities for Height clearance and installation.
15.	Mount Carmel College	From Embassy Star Building to Mount Carmel College– 5933	F	From Embassy Star Building to Mount Carmel College	Mount Carmel College in Vasathnagar is a college for Girls. Pedestrians crossing this road are mainly college students. Traffic on this road is heavy
16.	Mysore Bank Junction (Near Avenue Road)	5 locations – 39649	F	Location 1– From Mysore Bank to College Location 2 - From Temple to Govt red Building Location 3- From Cauvery Bhavan to	The Mysore bank junction is on K.G road where Avenue road intersects. At this junction traffic movement is high, also pedestrian movements is high


Sl. No.	Skywalk Location	Pedestrian volume (12 hours)	Level of Service	Proposed Skywalk Location	Remarks
				College	
17.	Jalahalli Cross, Tumkur Road	2 locations - 16165	F	Location 1 – From Petrol pump to Bus Stop(On Ring road) Location 2 – From Bus stop to Bus Stop (On Subrato Mukhrajji Rd)	This location is located on Tumkur Road, which is already separated by a flyover. Jalahalli Cross is a very populated area. There are few garment factories are located around this place. There are few pedestrians accidents recorded at this junction
18.	TVS Circle- studio road, Near Jalahalli Cross	From Millipore to Indosol Pvt. Ltd Company (On Main road) – 2989	F	From Millipore to Indosol Pvt. Ltd Company (On Main road)	This location is located on Outer Ring Road near Jalahalli Cross. The traffic on ring road is heavy. The pedestrians need to wait long time to cross the road. There are few factories located around this place.
19.	Near NES Junction Yelahanaka, Doddaballapur Road	Crossing Doddaballapur Road – 5684	F	From Auto Stand to Bus Stop	NES junction at Doddaballapur road in Yelahanka is located nearby to the NES bus stand. The buses stops on both sides of the Road, due to this many number of pedestrian cross the road. There is a school and college is located on either side of the road
20.	Hebbal Flyover, ORR	From Hebbal Bus Stop to Lake – 12296	F	From Hebbal Bus Stop to Lake	Hebbal Bus Stop is on Outer Ring road near Traffic Police station. The traffic on this road is heavy. This road connects to NH4 Tumkur road. There are bus stops located on both sides. At this location people exchanges buses
21.	Bhasyam Circle- Sadashiv Nagar	2 locations - 5893	F	Location 1: From Petrol Bunk to Airtel Location 2 : From School to Petrol Bunk	Sky walk proposed location is Bhasyam Circle in Sadashivnagar near Sankey Tank. More number of students crosses the road at this junction. Skywalk may help in safety of crossing pedestrians to reach the bus stop near that junction.
22.	Himalaya Theatre – K.G Road	From Arya Bhavan Sweets to Kanti Sweets – 6690	F	From Arya Bhavan Sweets to Kanti Sweets	Himalaya Theatre is Located in Kempegowda road near majestic. Sky walk already exists at this location. After interviewing few people at the location “the users are very less due to the height of the Skywalk”. This can be removed and reinstalled at the position shown
23.	Near Iskcon Temple, Rajajinagar	Location 1 – 4246	E	From Left side of Bus Stop to Left side of	This location is located on West of Chord Road, Rajajinagar. Iskcon is famous Sri Krishna temple in Bangalore. Devotees




Sl. No.	Skywalk Location	Pedestrian volume (12 hours)	Level of Service	Proposed Skywalk Location	Remarks
				Kalyana Mantapa	from different places are visiting the temple. Bus stop is located on both sides. Metro work is under progress. Before installation metro authorities shall be consulted. The Skywalk bridge should be installed below the metro bridge.
24.	Raja Rajeshwari Nagar	Location 1 – 5312	F	From Gopalan Mall (Near Lawn) to Bus Stop on opposite side	Rajarajeshwari nagar is a BBMP ward in Mysore road on south. Gopalan mall is adjacent to the entrance of Rajarajeshwari Nagar Gate
25.	HMT Road, Mattikere	Location 1 – 3879	E	From Mataji Medicals to Karnataka Bag Shop	Mattikere HMT road is also known as M.S. Ramaiah road which connects BEL, HMT factory and Ramaiah institutions




8.1.1.2 From the table above, it is seen that all 25 skywalks needs to be prioritised since they offer maximum impact to maximum number of pedestrians.



- In all 25 sections, pedestrian volume per 12 hours on a weekday is more than about 3000. It denotes number of beneficiaries of each skywalk per 12 hours.
- At present, Level of Service in all 25 sections is either E or F (very poor). It denotes that there is a there is major scope for improvement in these sections in terms of pedestrian safety and convenience.





8.1.1.3 Dimensions and location maps of 25 potential Skywalks around Bangalore West Zone are given in the table below.




Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
1.	Near KC General Hospital, Malleshwaram	On main road – 10.5m (on both sides)	On main road – 1.5 to 2.0m	Main road – 0.50 m	25	33	58	




Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
2.	Near Manthri Mall on Sampige Road, Malleshwaram	On Main road (Sampige) – 10.5 m	On Main road (Sampige Road) – 1.5m to 2.0 m	Main road – No median	15	33	48	
3.	Mission Road near Flyover	On Main road: 9 m (both Sides)	On Main road– 1.5 m to 2.0 m	Main road – 0.2 (Barricading)	20	33	53	
4.	Near DIACON Hospital, Rajaji Nagar	On Main road – 11 m On Intersecting road– 11 m	On Main road –2.0 m to 2.5 m On Intersecting road– 1.5 m to 2.5 m	Main road – 0.3 m	Location 1: 15 Location 2: 13	Location 1: 33 Location 2: 33	Location 1: 48 Location 2: 46	





Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
5.	Near Vidyavaradhaka Sanga School, Rajajinagar	On Main road – 10.5 m	On Main road – 2.0 m to 3.0 m	Main road – No median	12	33	45	
6.	Shivananda Circle near Desai Hospital	On Main road – 10.5 m On Intersecting road – 7.5 m	On Main road – 1.5 m to 2.0 m On Intersecting road – 1.5 m to 2.0 m	Main road – 0.3 to 0.5 m	Location 1: 15 Location 2: 15	Location 1: 33 Location 2: 33	Location 1: 48 Location 2: 48	
7.	Subramanya Nagar Police Station	On Main road – 8.0 m (both sides)	On Main road – 2.0 to 3.0 m	Main road – 0.5 – 1.0 m	16	33	49	

Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
8.	Rajaram Mohan Roy Road	On Main road – 12.0 m	On Main road– 2.0 to 3.0 m	Main road – 0.5 m	50	33	83	
9.	Sampige Road, near Sirur Park (Rajiv Gandhi Circle, In front of Swathi Hotel)	On Main road – 20.0 m On Intersecting road – 14.0 m	On Main road – 1.5 m to 2.0 m On Intersecting road – 1.0 to 1.5 m	Main road – No median	Location 1: 14 Location 2: 20	Location 1: 33 Location 2: 33	Location 1: 47 Location 2: 53	
10.	Palace Gutthalli Bus Stop (Near Cauvery Theatre) on Bellary Rd	On Main road (Bellary Rd) – 7.5m (each side) Intersecting road (Palace Gutthalli RD) - 8m	On Main road (Bellary Rd) – 2.0 to 2.5 m	On Main road (Bellary Rd) – 7.0	38	33	71	

Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
11.	Malleshwaram 8th Cross, Sampige Road	On Main road – 10.5 m On Intersecting road – 8.0 m	On Main road – 2.0 m to 3.0 m	Main road – No median	12	33	45	
12.	Mekhri Circle Junction - Bellary Road	On Main road – 15.0 m (both sides)	On Main road– 1.5 m to 2.5 m	Main road – 0.5 to 1.0 m	30	33	63	
13.	Esteem mall- New Airport Road , Hebbal	On Main road – 12.0 m (both sides) On Service road – 7.5 m	On Main road– 3.0 m to 4.0 m	Main road – 0.5 m to 1.0 m	25	33	58	
14.	Yeshwantpur Railway Station	On Main road – 6.5 m (both sides) On Service road – 9.0 m (With bus stop)	On Main road– 1.5 m to 2.0 m	Main road – 2.0 m (Metro Pier)	30	33	63	

Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
15.	Mount Carmel College	On Main road – 20.0 m	On Main road – 1.5 m to 2.0 m	Main road – No median	21	33	54	
16.	Mysore Bank Junction (Near Avenue Road)	On Main road – 24.0 m On Intersecting Road- 22.0 m	On Main road – 3.0 to 4.0 m	Main road – No median	Location 1: 15 Location 2: 25 Location 3: 40	Location 1: 33 Location 2: 33 Location 3: 33	Location 1: 48 Location 2: 58 Location 3: 73	
17.	Jalahalli Cross, Tumkur Road	On Main road (Ring Road) – 15.0 m (both sides) On Intersecting road – 10.5 m	On Main road – 1.5 m to 2.0 m	Main road – 0.3 to 0.5 m	Location 1: 30 Location 2: 15	Location 1: 33 Location 2: 33	Location 1: 63 Location 2: 48	

Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
18.	TVS Circle- studio road, Near Jalahalli Cross	On Main road (Ring Road) – 15.0 m (both sides) On Intersecting road – 11.0 m	On Main road– 2.0 m to 3.0 m	Main road – 3.0 m	32	33	65	
19.	Near NES Junction Yelahanka, Doddaballapur Road	On Main road (Doddaballapur Road) - 11m (each sides)	On Main road (Doddaballapur Road) – 4.0 m (both sides)	On Main road (Doddaballapur Road) - No median	25	33	58	
20.	Hebbal Flyover, ORR	On Main road – 10.5 to 11.0 m (Both sides)	On Main road – 1.5 to 2.0 m (Bus Stand on Another side)	On Main road – 8.0 to 10.0 m	45	33	78	
21.	Bhasyam Circle- Sadashiv Nagar	On Main road – 7.5 m (both sides) On Intersecting road – 7.5 m (both sides)	On Main road – 2.0 m to 3.0 m On Intersecting road – 1.5 to 2.0 m	Main road – 0.5 m	Location 1: 18 Location 2: 20	Location 1: 33 Location 2: 33	Location 1: 51 Location 2: 53	

Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
22.	Himalaya Theatre –K.G Road	On Main road – 10.5 m (both sides)	On Main road – 4.0 m on left and 1.5 m on right side	Main road – 6.0 to 7.0 m (Temple)	35	33	68	
23.	Near Iskcon Temple, Rajajinagar	On Main road– 10.5 m (both sides)	On Main road – 2.0 m to 3.0 m	Main road – 2.0 m (Metro)	23	33	56	
24.	Raja Rajeshwari Nagar	On Main road– 10.5 m (both sides)	On Main road – 2.0 m to 3.0 m	Main road – 0.5 m	24	33	57	
25.	HMT Road, Mattikere	On Main road– 10.5 m (both sides) On Intersecting Road- 10 m	On Main road – 1.5 m to 3.0 m	Main road – 0.5 m	23	33	56	

8.1.2 East Zone

8.1.2.1 Description of 58 potential Skywalks in Bangalore East Zone are given in the table below.

Sl. No.	Skywalk Location	Pedestrian volume (12 hours)	Level of Service	Proposed Skywalk Location	Remarks
1.	Miller Road near Bhagawan Mahaveer Hospital	Location 1: 4173 Location 2 : 5153	E & D	Location 1 – Pai Vihar to Vasanth Nagar Location 2 – Play ground to TV Tower	Miller road junction connects with Jayamahal road, cantonment railway station and MV Jayaram road. As per visual observation and pedestrian survey, pedestrians crossing are more from cantonment station to Millers road and wise versa.
2.	Hennur Main Road near St.Charles School	Location :_School to Ground(7027)	F	From School to Ground	St.Charles in Hennur Road is a Girls School with Pre University college. More Number of crossing pedestrians is students. The security guards of St Charles High School stop the peak hour traffic, to help students walk the zebra crossing to safety. Many parents and auto drivers invariably get an earful for stopping in front of the school to drop their children again disrupting the traffic.
3.	Queens Road near Congress Party Office	Location Congress office to star chamber – 2761	F	From Congress office to star chamber	Congress party office in Queens’s road is next to School. Most pedestrians crossing this point are school students.
4.	St.German School Coles Park	Location 1 : 3903 Location 2:_575 Location 3: 3746 Location 4: 5168	F	Location 1:From St.German School to Park Location 2: From Yoga Meditation Classes to School	This location is near St.German School near Coles Park. This junction is connecting some of the major schools in Frazer Town. The major pedestrians crossing this location are students.
5.	ASC centre at junction of Lower Argram Road and Victoria Road	ASC to Argram – 3416 ASC to Police chowk – 4002 Argram to Chowk – 3340	E	From ASC to Police Chowk	ASC Center is in Victoria road and old Argram road junction. Pedestrians Cross the road easily with the traffic signal provided. Traffic signal timings could be changed after providing skywalk. This will in turn reduce some amount of traffic congestion.
6.	Anil Kumble Circle	LIC to Bible Society of India – 3646 LIC to Fire Station – 3074	F	From LIC to Bible Society of India From LIC to Fire Station	Anil Kumble circle is one of the Major junction of M.G road. It runs east from Trinity Circle at one end to Anil Kumble circle at the other. Anil Kumble circle junction connects St.Marks Road and Central Street roads. M. G. Road is one of the busiest roads

Sl. No.	Skywalk Location	Pedestrian volume (12 hours)	Level of Service	Proposed Skywalk Location	Remarks
					and popular road in the city and is lined on one side with retail stores, food outlets and restaurants. It has many office buildings, shops and theatres. It is also a home to a large number of buildings and banks.
7.	Infront of Vishweshwaraiah Museum Kasturba Road	Museum to Bus Stand – 2254	F	From Museum to Bus Stand	Visvesvaraya Industrial and Technological Museum is one of the units of National Council of Science Museums an autonomous organization under the Ministry of Culture, Government of India. Many College and School Students visit this Museum as technical trips.
8.	Cubbon Park Kasturaba Road near Chinnaswsamy Stadium	Cubbon Park to Chinnaswamy Stadium – 4967 Jewells De Paragon to Cubbon park – 5897 Stadium to St. Marks Cathedral – 4539 St. Marks Cathedral to Jewells De Paragon – 2664	F	From _Cubbon Park to Chinnaswamy Stadium From Jewells De Paragon to Cubbon park From Chinnaswamy Stadium to St. Marks Cathedral	M. Chinnaswamy Stadium is an important stadium with a seating capacity of 55,000. The stadium hosts not only Cricket matches, but also other musical and cultural events. During these events a huge number of people move around this vicinity.
9.	Commercial Street	Samskruthi Silk to MG Road– 3000 Liberty Showroom to ACC cement shop – 2296 Gini & Jones to Optical– 3149	E	From Samskruthi Silk to MG Road (Near Parking)	Commercial Street is one of the major shopping streets in Bangalore. There many shops located on commercial street. A huge number of people moved around the commercial street, particularly on weekends and public holidays.
10.	MS. Building	MS Building to Park– 2575	F	From MS Building to Cubbon Park	M.S Building is a Multi Storage Building located near Vidhana Soudha. This is known to be a Government Building which accommodates many government Offices and hence a large pedsetrian number.
11.	Richmond Road near Vellara Junction	Velara Junction to Arpana School – 3210 Police Quarters to	E & F	Location1-Vellara Junction to Music Ltd.	Vellara junction is located on Richmond road. Huge traffic passes through this junction. Pedestrian face difficulty in crossing the road at this junction.

Sl. No.	Skywalk Location	Pedestrian volume (12 hours)	Level of Service	Proposed Skywalk Location	Remarks
		Music Limited – 8130 Arpana School to Police Quarters – 1960 Vellara Junction to Music Limited - 2095		Location 2-Police Quarters to Music Ltd.	
12.	Webb Junction Near MG Road	Dickson road to Petrol bunk – 1055	F	From Dickson road to Petrol bunk	Webb Junction is located on M.G road where Dickinson road meets M.G Road and is very near to Trinity circle Metro Station. This location is located on MG Road one of the popular road in Bangalore. Huge numbers of pedestrian cross this junction.
13.	Jayachamarajendra Road, near Town Hall	Polygal Indian pvt Ltd. To Canara Bank– 6741 Townhall To Canara bank–1412 Polygal India Pvt To Town Hall– 2642	F	From Townhall To Canara bank From Polygal India Pvt To Town Hall	Sir Puttanna Chetty Town Hall lies in Central Bangalore. This is used for official Purposes and also cultural and religious functions. J.C road and market road connects at this junction.
14.	St. Marks Road, near Straisi Memorial School	H P Petrol Bank to Straisi Memorial School– 4485	F	From H P Petrol Bank to Straisi Memorial School	Straisi School on St.Marks road is very near to Anil Kumble Circle which is one of the major junctions of M.G road. Due to Heavy traffic movement, Students face problems to cross the road.
15.	In Queens Road from Edward Road to Tuskar Town ,near Kamala Bhai School	Queens Road to Trip to Travels – 1532	F	From Queens Road to Trip to Travels	Kamala Bhai School is near Queens’s road. Most of pedestrians crossing at this place are School children.
16.	In front of Cantonment Railway Station	Parking to Railway station – 7590	F	From Parking to Railway station	Cantonment Railway station is located in East Zone of Bangalore. Many Railway Passengers cross the cantonment junction to reach millers road and to Board the bus going towards Mehkri circle.
17.	Balekundari Circle (near Indian Express),on Queens	Location _1- 2595 Location 2- 3913	F	From Queens Road to Park Temple	SG Balekundri Circle has one of the busiest bus stops, it is also known as Indian Express Circle. The junction connects Shivajinagar road, Cunningham Rd.

Sl. No.	Skywalk Location	Pedestrian volume (12 hours)	Level of Service	Proposed Skywalk Location	Remarks
	Road	Location 3– 2334 Location 4– 4554 Location: 5-3464		From Shivaji Nagar to Indian Express From Indian Express to Air china Cunningham Road	
18.	D'Souza Circle, near Sacred Heart School	Sapphire to Temple – 3903 Style to Samyakk – 2728	E	From Sapphire to Temple From Life Style to Samyakk	D'Souza Circle is the junction where three major roads Richmond road, Victoria road and McGrath road connect.
19.	Museum Road, near Patrick Church (at Cariappa Circle)	Cariappa Bhavan to SIR M.V station– 2863 Police Chowk to C.Bhavan – 2370	E	From Cariappa Bhavan to SIR M.V station From Police Chowk to C.Bhavan	Museum Road is near Brigade road junction where St.Joseph's Evening College is located .
20.	Brigade Road Junction	Location 1 – 5114 Location 2 – 18327 Location 3– 12384 Location 4 – 5334	F	From Sadhwam's to Maniksha Ground From Kaveri Arts to Sadhawan's From Army Ground to Kaveri Arts	Bridge Road is a popular place for shopping, there many shops located on this street. MG Road Metro Station is very close to Brigade road junction. We need to check the clearance available below metro flyover.
21.	In front of Planetarium ,near Basaveshwara Circle.	Planetarium to Chalukya – 8022 Chalukya to DURS Road – 4891	F	From Planetarium to Chalukya From Chalukya to DURS Road	Jawaharlal Nehru Planetarium is in Basaveshwara circle near Chalukya Hotel. More number of crossing pedestrians are Students who visit the planetarium. Sofia School is just about 100 m from this junction.
22.	Sarvaton circle near St.German school	Location 1 – 6811 Location2 – 4357 Location 3 – 4958 Location 4 - 2426	F	From St German School to Shivajinagar	Sarvaton Circle is near Coles Park. St.German School is located next to this Circle. The pedestrian crossing this junction are mainly school children.
23.	Near Mallya Hospital	Hospital to Ground – 6461	F	From Hospital to Ground	Mallya Hospital is a popular hospital in Bangalore. St.Joseph's School is located adjacent to this Hospital. Traffic Signal has been provided for the safety of pedestrian crossing in the mid block opposite to the hospital. However, the pedestrians need to wait for a long time to cross the road.

Sl. No.	Skywalk Location	Pedestrian volume (12 hours)	Level of Service	Proposed Skywalk Location	Remarks
24.	Commissariate street Garuda Mall	Location 1 – 6820 Location 2– 6164 Location 3 – 5774 Location 4– 5721	F	From Home Stop to Garuda Mall From UCB to Fire Station	Garuda mall is an important landmark of Bangalore. It is one of the biggest mall in South India. Pedestrian's movements around the mall are high during weekends and public holidays.
25.	Residency Road near Mayo Hall	BBMP Office to Power Station – 5558	F	From BBMP Office to Power Station	Mayo Hall is a Historic building located on Residency road which is one of the heavy traffic road in Bangalore. This Junction is Very Close to Shopping Centers like Bangalore Central Mall, Brigade road, etc.
26.	Richmond Road near Baldwins Girls College	School to opposite– 2267	F	From School to Opposite	Baldwin's Girls High school on Richmond Road is next to Richmond Circle Flyover. The main pedestrians crossing this location are school children. Richmond Road is one of the higher traffic volumes Road in Bangalore.
27.	Brigade Road Patrick Church near St. Joshephs college	Samsung to St.Patrick Church – 7247	F	From Samsung to St.Patrick Church	Patrick Church is opposite to St.Joseph's College on Brigade Road and adjacent to Patrick School. This is very close to Eva mall. The major pedestrians crossing this location are college students and school children.
28.	Indiranagar 100ft Road near New Horizon School	New Horizon School to More shopping mall – 1601 Bus stop to Doopanahalli – 4840	F	From :_Bus stop to Doopanahalli	This location is located on 100 ft Road Indiranagar. 100 ft road is a major arterial road in Bangalore. The Street is a business area, and many shops . Mainly school children and people residing in Doopanahalli are pedestrians crossing the road.
29.	Indiranagar100ft Road and CMH Road junction (near Indiranagar Metro Station)	Location 1- 2536 Location 2– 3341 Location 3– 4881 Location 4 – 6120	F	Location 1: KFC to CMH Park Location 2: KFC to Metro side	Indiranagar 100 Ft road is a major arterial road in Bangalore. This road acts as feeder road for Kormangala Inner Ring road, where many software companies are located. This road has many commercial shops. Also Indiranagar Metro Station is located next to this junction. Huge number of pedestrians crosses this junction every hour.
30.	On Station Road near Bamboo Bazar (Near Bharat Petrol Bunk)	Location 1–1546 Location 2 –1390 Location 3– 1379	D		As per site inspections, surveys and analysis skywalk is not required at this place.
31.	Queen's Road near junction before Congress Party	Star Chamber to Congress Committee – 4910	F	From Star Chamber to Congress Committee	This junction connects Miller's Tank bund Rd - MV Jayram Rd - Thimmaiah Rd. Many Pedestrians cross this junction.

Sl. No.	Skywalk Location	Pedestrian volume (12 hours)	Level of Service	Proposed Skywalk Location	Remarks
	Office (Miller's Tank bund Rd - MV Jayram Rd - Thimmaiah Rd Jn)				
32.	N.R square near LIC Building (Corporation)	LIC Building to Unity Building – 5449	F	From LIC Building to Unity Building	N.R Square is located Near Corporation Junction. Due to the Wide Road and Heavy Traffic Pedestrians need to wait for a long time to cross the road.
33.	Pillana Garden near Nethaji Road	Nethaji Play Ground to State Bank – 1419	F	From Nethaji Play Ground to State Bank	Pillana garden on Nethaji road connects to Tannery road and nearby pottery road.
34.	Amruth Theartre, Lingrajapuram	Music World to Arch – 1986	F	From Music World to Arch	This location is in Lingarajapuram. Both sides of road have bus stops. This road connects to Ring road on one side and other Bangalore City on the other.
35.	Near Banappa Park (K.G/ Police memorial Road), Near Hudson Circle	Sri Vinayaka School to Canara Bank – 6911	F	From Sri Vinayaka School to Canara Bank	The Junction is located near Bannappa Park, where three roads connect to the one major road. The crossing distance from one end to other is very long and due to heavy traffic, pedestrians face a lot of problem to crossing the road safely.
36.	In front of S.J.E.S College, K .R.Puram (on NH4)	Crossing NH – 3469	F	Location - From bus stop(in front private building to bus stop (In front of RNS JCB uilding)	This location is on NH4, from KR puram towards Kolar. Many educational institutions (SJES & WIMS college) are located on LHS of highway. Bus stops exist on both service roads of NH4. Most of the pedestrians are students crossing the Highway and is very risky for them due to high speed moving vehicles.
37.	Near Mayura Bakery in White Field, Whitefield Road	Crossing Whitefield Road – 6421	F	Location – In front of Mayura Bakery to bus stop other side.	On Whitefield road there are a number of multinational information technology companies thus leading to a heavy traffic flow on the road.
38.	Kuvempu Circle Old Airport Road	Parking to Punjab National Bank – 3974 Parking to HAL border– 5339	F	From Parking to HAL border From Parking to Punjab National Bank	HAL airport road connects the Outer Ring road.The HAL workers and school children are the main pedestrians crossing the location. A huge number of HAL workers cross this location during morning and evening after finishing their working shifts.
39.	Old Airport Road (HAL post office)	Post office to HAL– 3283	F	From Post office to HAL	This location is on HAL airport road which is connecting the Outer Ring road. Mainly HAL workers and school children are the major pedestrians crossing the road.
40.	Near JBJ quarters on Marathahalli -	JBI Quarters side to HAL– 2231	F	From JBI Quarters side to HAL	This location is on HAL airport road which is connecting the Outer Ring road.

Sl. No.	Skywalk Location	Pedestrian volume (12 hours)	Level of Service	Proposed Skywalk Location	Remarks
	HAL Road				
41.	Old Madras Road & SD Road junction near Byapnalli Metro Station	Location 1 – 4595 Location 2 – 1451	F	From NGEF side road bus stand to SD road side	This location is on Old Madras Road, near Baiyyappanahalli Metro Station. There is a bus stop near this junction that invites lots of pedestrians..
42.	In front of Munnekolalu - Spice Garden, Marathahalli	Spice Garden to Temple – 5049	F	From Spice Garden to Temple	This location is in Marathalli. Marathalli- HAL airport road connects the Outer Ring road with a grade separator. Huge numbers of pedestrians cross the Marthalli main road.
43.	Old Madras Road (Bengenahalli to Nagavara Palakhya Road)	Bus Stop to Bengenahalli – 9178	F	From Bus Stop to Bengenahalli	This location on Old Madras Road. There is huge traffic flow on this road. Pedestrians need to wait a long time to cross the road.
44.	On NH4 at entrance of Garden City College (NH-4 near KR Puram)	Garden city college road to Bus stop– 6141	F	From Garden city college road to Bus stop	This location is located on NH4, travelling from KR puram towards Kolar near many educational institutions, thus riskier for students..
45.	Near water tank junction (Domlur Over Head tank), HAL Road	Water tank to New Shanthi Sagar– 5896	F	From Water tank to New Shanthi Sagar Side	HAL airport road connects the MG Road and Outer Ring road on the other side. . There are few schools located in this vicinity.
46.	ITI colony Gate, KR Puram	From Bus stop to Bus Stop (Corner of Ambedkar Stadium, ITI Grounds) – 3124	F	From Bus stop to Bus Stop (Corner of Ambedkar Stadium, ITI Grounds)	This location is after the KR Puram Cable Bridge. The vehicles travel at very high speed from Cable Bridge. It is very dangerous for pedestrians to cross the road. On the other side Ambedkar Stadium, ITI Grounds is located.
47.	Marathahalli Airport Road near Marathahalli Bridge	State Bank of Mysore to Shanti Sagar Side – 16903	F	From SBM to Shanthi Sagar Hotel corner	There are many factory outlet shops in Marathalli. Marathalli-HAL airport road connects the Outer Ring road with a grade separator. There are many software companies located on outer ring road near Marthalli. Huge number of pedestrians cross the main road every hour.
48.	Near KR Puram Bus Stand, KR Puram	Bus Stand to Market Side– 12611	F	From Bus Stand to Market Side	Pedestrians have to wait for long time to cross the road and there is no safety for pedestrians. A Skywalk is very essential at this location.




Sl. No.	Skywalk Location	Pedestrian volume (12 hours)	Level of Service	Proposed Skywalk Location	Remarks
49.	CMR Road & Kammanahalli Road Junction	Location 1 – 4595 Location 2 – 5345	F	From ICICI Direct to Jalavaya Vihar	Kammanahalli Main road is located in Kalyana Nagar Area, which is one of the growing suburb in Bangalore. There are A few educational institutions located in this place. On Kammanahalli Main road there are many outlet shops and restaurants.
50.	Kammanahalli Road & Nehru Road Junction	Bekenjay Bakery to Samsung Smart café – 3584 Riti Jewelers to Bakery – 5436	F	From Riti Jewelers to Bakery	Kammanahalli Main road is located in Kalyana Nagar Area, which is one of the growing suburb in Bangalore. There are A large number of shops in this area. Also there are few educational institutions located in this place. On Kammanahalli Main road there are many outlet shops and restaurants.
51.	Hennur Main road near Reliance Fresh	Reliance fresh to Indian Academy Group – 5781	E	From Reliance fresh to Indian Academy Group	There are few educational institutions situated around this area. Bus stop is located on either side of the road. Traffic on this road is enormous. The pedestrians need to wait a long time to cross the road. There is no signal after junction of ORR.
52.	Rammurthy Nagar, Near Church Bus stop	Vinayaka Medicals to Jayashree Enterprises – 2124	E	From Vinayaka Medicals to Jayashree Enterprises	This location is on Ramamurthy Nagar. There are a number of shops on this road. This area is mainly a residential area. This road is connecting road to ORR and KR Puram through ITI colony.
53.	Kammanahalli Road & ORR Junction (Kalyannagar)	Bus Stop to Lee – 8833	F	From Bus Stop to Lee	There are few colleges located in this vicinity. Kammanahalli Road has many shopping areas. Bus stops are located on either side of the ring road. Pedestrians need to wait for a long time to cross the ring road.
54.	Ambilipura Gate (near Bellandur Gate), Sarjapur Road	Crossing Sarjapur Rd - 3562	F	Springfield apartment to in front HDFC Bank	The junction connects Bellandur and Ambalapur village. At the vicinity there is a shopping mall (Spencers Mall) and Springfield apartment. Enormous numbers of pedestrians cross from the apartment to the mall and vice versa. Also people from villages cross the road to take buses to the city and other places.
55.	Kadugodi Railway Station	From Canara Bank to Kadugodi Bus Stop – 10712	F	From Canara Bank to Kadugodi Bus Stop	This location is in Kadugodi. After constructing the ROB, there is restriction of pedestrian on ROB. There is bus stop located at the end of ROB either side. The pedestrians cross the railway line to access the Kadugodi bus stop, which is very dangerous for pedestrians. A skywalk is very much necessary at this place. Problem is greater for women carrying children, old/handicapped/sick people and those carrying luggage.
56.	K.R Puram Railway	Railway Station to Border Wall – 8894	F	From Railway Station to Border Wall	This location is at Outer Ring Road/Old Madras Road junction near Tin Factory, K R Puram. The traffic on this road is heavy.


Sl. No.	Skywalk Location	Pedestrian volume (12 hours)	Level of Service	Proposed Skywalk Location	Remarks
	Station				This road is the main feeder for Marathalli Ring road, where there are many software companies. During morning and evening many pedestrians cross this road. Most of the pedestrians are coming from the KR Puram Railway station. There is a bus stop located next to this place. The pedestrians need to wait a long time to get a break through the traffic.
57.	Infront of RMZ infinity, Benaganhalli, Old Madras Road	From RMZ Infinity to Life Style Shopping Mall - 4508	E	From RMZ Infinity to Life Style Shopping Mall	This is located on Old Madras Road. There is huge traffic flow on this road due to a newly opened shopping mall. Many people cross the busy road to access the shopping mall. Pedestrians need to wait for a long time to cross the road.
58.	Babusapalaya Bus Stop, ORR	Bus Stop to Bus Stop - 6978	F	From _Bus Stop (In front of Ganesha Juice Center) to Bus Stop (Nandhini Parlor)	This is located on Outer Ring Road, at Babusapalaya. There is a heavy Traffic flow on ORR. Recently the Kalyanagara Flyover was opened to traffic. The vehicles travel at very speed at this location. Bus stops are located on either side of the ring road. Pedestrians need to wait for a long time to cross the ring road.




8.1.2.2 From the table above, it is seen that all 58 skywalks needs to be prioritized since they offer maximum impact to maximum number of pedestrians. At present, Level of Service in all 58 sections is either E or F (very poor) except in two locations. It denotes that there is a there is major scope for improvement in these sections in terms of pedestrian safety and convenience.




8.1.2.3 Dimensions and location maps of 58 potential Skywalks around Bangalore East Zone are given in the table below




Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
---------	------------------	-------------------	----------------	--------------	---------------------	-------------------	------------------	---------------------



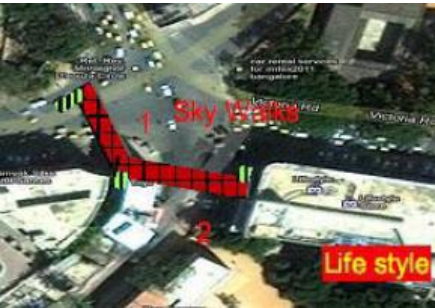
Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
1	Miller Road near Bhagawan Mahaveer Hospital	On Main road (Millers Road)– 12 m On intersecting road (Palace Road & Thimmaiah Road) – 10 m	On Main road – 2 to 3.0 m On Intersecting road –1.5 to 2.0 m	On Main road – No median On Intersecting road –0.5 to 1.0 m	Location 1: 16 Location 2: 30	Location 1: 30 Location 2: 30	Location 1: 42 Location 2: 42	
2	Hennur Main Road near St.Charles School	On Main road – 5.5 m (Both sides)	On Main road – 1.5 to 2.0 m (Both sides)	On Main road – 0.2 m	12	30	42	
3	Queens Road near Congress Party Office	On Main road – 10.5 m	On Main road – 1.5 to 8.0 m (Both sides)	_ On Main road – No Median	10	30	40	




Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
4	St.German School Coles Park	On Main road – 10.0 m (Both sides)	On Main road – 1.5 to 1.5 m (Both sides)	On Main road – 0.3 m	Location 1: 13 Location 2: 11	Location 1: 30 Location 2: 30	Location 1: 43 Location 2: 41	
5	ASC centre at junction of Lower Argram Road and Victoria Road	On Main road – 10.5 m (Both sides) On Intersecting road- 12 m	On Main road – 1.5 to 2.0 m (Both sides)	On Main road – 0.3 m	17	30	47	
6	Anil Kumble Circle	On Main road – 10.5 to 11.0 m (Both sides) _ On Intersecting road-10.5 m	On Main road – 3.0 to 4.0 m (Both sides)	On Main road – 0.5 to 1.0 m	Location 1: 22 Location 2: 15	Location 1: 30 Location 2: 30	Location 1: 52 Location 2: 45	




Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
7	Infront of Vishweshwaraiah Museum Kasturba Road	On Main road – 7.5 to 8.0 m (Both sides)	On Main road – 2.0 to 5.0 m (Both sides)	_ On Main road – 0.2 m (Barricading)	21	30	51	
8	Cubbon Park Kasturaba Road near Chinnaswsamy Stadium	On Main road – 12.0 m (Both sides) On Intersecting road – 10.5 m	On Main road 1.5 to 2.0 m (Both sides) On Intersecting road– 1.5 to 2.0 m (Both sides)	On Main road – 0.5 m	Location 1: 25 Location 2: 26 Location 3: 24	Location 1: 30 Location 2: 30 Location 3: 30	Location 1: 55 Location 2: 56 Location 3: 54	
9	Commercial Street	Carriageway Width: On Main road – 12 m On Intersecting road – 10.5 m	On Main road – 1.5 to 2.0 m (Both sides) On Intersecting road – 6.0 m	On Main road – 0.3 to 0.5 m	22	30	52	

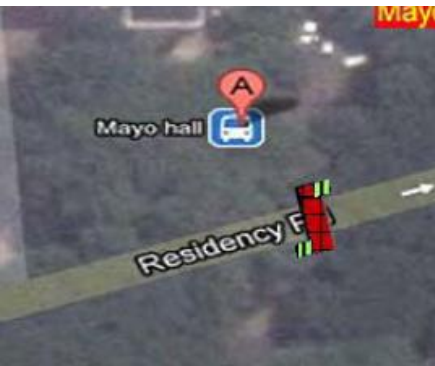


Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
10	MS. Building	On Main road – 7.5 to 8.0 m (Both sides)	On Main road – 3.0 to 5.0 m (Both sides)	On Main road – 0.3 m	16	30	46	
11	Richmond Road near Vellara Junction	On Main road (Hosur Rd) – 22 m Intersecting road (Richmond RD) – 15 m	On Main road (Hosur Rd) – 2.0 to 2.5 m Intersecting road (Richmond RD) – 1.5 to 2.0 m	On Main road (Hosur Rd) – 0.5 m Intersecting road (Richmond RD)– No Median	Location 1: 25 Location 2: 18	Location 1: 30 Location 2: 30	Location 1: 55 Location 2: 48	
12	Webb Junction Near MG Road	_ On Main road – 10.5 to 11.0 m (Both sides) _ On Intersecting road-10.5 m	On Main road – 2.0 to 2.5 m (Both sides)	On Main road – 2.0 m	23	30	53	




Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
13	Jayachamarajendra Road, near Town Hall	On Main road – 23.0 to 25.0 m (Both sides) On Intersecting road- 22.0 m	On Main road – 4.0 to 5.0 m (Both sides)	On Main road – 0.3 m	Location 1: 23 Location 2: 27	Location 1: 30 Location 2: 30	Location 1: 50 Location 2: 54	
14	St. Marks Road, near Straisi Memorial School	On Main road – 15. m (Both sides)	On Main road – 1.5 to 2.0 m (Both sides)	On Main road – No Median	15	30	45	
15	In Queens Road from Edward Road to Tuskar Town, near Kamala Bhai School	On Main road – 10.5 m (Both sides)	On Main road – 1.5 to 2.0 m (Both sides)	On Main road – No median	12	30	42	




Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
16	In front of Cantonment Railway Station	On Main road – 14.0 to 15.0 m (Both sides)	On Main road – 2.0 to 2.5 m (Both sides)	On Main road – No median	15	30	45	
17	Balekundari Circle (near Indian Express), on Queens Road	On Main road – 18.0 m On Intersecting road – 12.0 m (Both sides)	On Main road – 1.5 to 2.0 m (Both sides) On intersecting road-2.0 to 5.0 m	On Main road – 0.5 to 1.0 m	Location 1: 20 Location 2: 15 Location 3: 15	Location 1: 30 Location 2: 30 Location 3: 30	Location 1: 50 Location 2: 45 Location 3: 45	
18	D'Souza Circle, near Sacred Heart School	On Main road – 15.0 m (Both sides) On intersecting road-10.5 m	On Main road –2.0 to 3.0 m (Both sides) On intersecting road – 1.5- 2.0 m	On Main road – 0.5 m	Location 1: 16 Location 2: 15	Location 1: 30 Location 2: 30	Location 1: 46 Location 2: 45	




Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
19	Museum Road, near Patrick Church (at Cariappa Circle)	On Main road – 13.0 to 14.0 m (Both sides)	On Main road – 2.0 to 3.0 m (Both sides)	On Main road – No Median	Location 1: 15 Location 1: 13	Location 1: 30 Location 1: 30	Location 1: 45 Location 1: 43	
20	Brigade Road Junction	On Main road – 10.5 to 11.0 m (Both sides) On intersecting road – 11.0 m	On Main road – 2.0 to 3.0 m (Both sides)	On Main road – 0.5 to 1.0 m	Location 1: 22 Location 2: 11 Location 3: 22	Location 1: 30 Location 2: 30 Location 3: 30	Location 1: 52 Location 2: 41 Location 3: 52	
21	In front of Planetorium, near Basaveshwara Circle.	On Main road – 10.5 to 11 m (Both sides) On intersecting road- 10.5 to 11 m (both sides)	On Main road – 1.5 to 2.0 m (Both sides)	On Main road – 0.5 to 1.0 m	Location 1: 26 Location 2: 21	Location 1: 30 Location 2: 30	Location 1: 56 Location 2: 51	




Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
22	Sarvaton circle near St.German school	On Main road – 7.5 to 8.0 m (Both sides) On intersecting road- 6.0 m (both sides)	On Main road – 1.5 to 2.0 m (Both sides)	On Main road – 0.3 m	14	30	44	
23	Near Mallya Hospital	On Main road – 11.0 to 12.0 m	On Main road – 2.0 to 3.0 m (Both sides)	On Main road – No median	14	30	44	
24	Commissariate street Garuda Mall	On Main road – 11.0 to 12.0 m (Both sides) On Intersecting road- 10.5 m	On Main road – 2.5 to 3.0 m (Both sides) On intersecting road – 2.0 to 2.5 m	On Main road – 0.3 m	Location 1: 20 Location 2: 12	Location 1: 30 Location 2: 30	Location 1: 50 Location 2: 42	




Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
25.	Residency Road near Mayo Hall	On Main road – 12.0 m	On Main road – 2.0 to 6 m (Both sides)	On Main road – No median	14	30	44	
26.	Richmond Road near Baldwins Girls College	On Main road – 15 m	On Main road – 1.5 to 2.5 m (Both sides)	On Main road – No Median	16	30	46	
27.	Brigade Road Patrick Church near St. Joshephs college	On Main road – 10.5 m	On Main road – 3.0 to 4.0 m (Both sides)	On Main road – No median	11	30	41	




Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
28.	Indiranagar 100ft Road near New Horizon School	On Main road – 7.5 to 8.0 m (Both sides)	On Main road – 2.0 to 2.5 m (Both sides)	On Main road – 0.5 to 1.0 m	16	30	46	
29.	Indiranagar 100ft Road and CMH Road junction (near Indiranagar Metro Station)	On Main road – 7.5 to 8.0 m (Both sides) On Intersecting road- 8.0 m	On Main road – 1.5 to 2.0 m (Both sides)	On Main road – 0.5 to 1.0 m	18 12	30 30	48 42	
30.	On Station Road near Bamboo Bazar (Near Bharat Petrol Bunk)	NOT REQUIRED						
31.	Queen's Road near junction before Congress Party Office (Miller's Tank bund Rd - MV Jayram Rd - Thimmaiah Rd Jn)	On Main road – 14.0 to 15.0 m (Both sides) On Intersecting road – 7.5 m	On Main road – 1.5 to 5.0 m (Both sides)	On Main road – No Median	16	30	46	




Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
32.	N.R square near LIC Building (Corporation)	On Main road 11.0 to 12.0 m (Both sides) On Intersecting road – 10.5 m (Both sides)	On Main road – 1.5 to 2.0 m (Both sides)	On Main road – 0.5 to 1.0 m	37	30	67	
33.	Pillana Garden near Nethaji Road	On Main road – 7.5 to 8.0 m (Both sides)	On Main road – 1.5 to 5.0 m (Both sides)	On Main road – 0.5 to 1.0 m	16	30	46	
34.	Amruth Theartre, Lingrajpuram	On Main road – 20 m	On Main road – 2.0 to 4.0 m (Both sides)	On Main road – No Median	21	30	51	




Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
35.	Near Banappa Park (K.G/ Police memorial Road), Near Hudson Circle	On Main road – 20.0 m (Both sides)	On Main road – 1.5 to 2.0 m (Both sides)	On Main road – No Median	40	30	70	
36.	In front of S.J.E.S College, K R.Puram (on NH4)	On Main road (NH4) – 23 m plus service road -7.5 m (both sides)	On service road – 1.5 m (both sides)	Main road – 1.0 m	40	30	70	
37.	Near Mayura Bakery in White Field, Whitefield Road	On Main road (Whitefield road)- 8.0 m (both sides) Intersecting road (Immdahalli Road) – 7.0 m	On Main road (Whitefield road) – 2.5 m (both sides)	On Main road (Whitefield road) – 1.0 m	20	30	50	

Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
38.	Kuvempu Circle Old Airport Road	On Main road – 11.0 to 12.0 m (Both sides)	On Main road – 2.0 to 3.0 m (Both sides)	On Main road – 1.0 to 2.0 m	Location1: 23 Location2: 15	Location1: 30 Location2: 30	Location1: 53 Location2: 45	
39.	Old Airport Road (HAL post office)	On Main road – 7.5 to 8.0 m (Both sides)	On Main road –3.0 to 4.0 m (Both sides)	On Main road – 0.5 to 1.0 m	15	30	45	
40.	Near JBJ quarters on Marathahalli - HAL Road	On Main road – 11.0 to 12.0 m (Both sides)	On Main road – 2.0 to 3.0 m (Both sides)	On Main road – 0.5 to 1.0 m	22	30	52	




Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
41.	Old Madras Road & SD Road junction near Byapnalli Metro Station	On Main road – 9.0 m (Both sides)	On Main road – 2.0 to 2.5 m (Both sides)	On Main road – 0.5 to 1.0 m	20	30	50	
42.	In front of Munnekolalu - Spice Garden, Marathahalli	On Main road – 11.0 to 12.0 m (Both sides)	On Main road – 1.5 to 2.0 m (Both sides)	On Main road – 0.5 to 1.0 m	37	30	67	
43.	Old Madras Road (Bengenahalli to Nagavara Palakhya Road)	On Main road – 7.5 to 8.0 m (Both sides)	On Main road – 1.5 to 2.0 m (Both sides)	On Main road – 0.5 to 1.0 m	20	30	50	

Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
44.	On NH4 at entrance of Garden City College (NH-4 near KR Puram)	On Main road – 11.0 to 12.0 m (Both sides)	On Main road – 2.0 to 3.0 m (Both sides)	On Main road – 1.0 to 2.0 m	30	30	60	
45	Near water tank junction (Domlur Over Head tank HAL Road)	On Main road – 11.0 to 12.0 m (Both sides) On Intersecting road – 10.5 m	On Main road – 2.0 to 3.0 m (Both sides)	On Main road – 2.0 to 3.0 m	24	30	54	
46	ITI colony Gate, KR Puram	On Main road – 15 to 16 m (Both sides)	On Main road – 5.0 m (LHS) & 1.5 m (RHS)	On Main road – 2.0 to 2.5 m	38	30	68	

Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
47	Marathahalli Airport Road near Marathahalli Bridge	On Main road – 7.5 to 8.0 m (Both sides)	On Main road – 1.5 to 2.0 m (Both sides)	On Main road – 0.5 to 1.0 m	25	30	55	
48	Near KR Puram Bus Stand, KR Puram	On Main road – 7.5 to 8.0 m (Both sides)	On Main road – 2.0 to 3.0 m (Both sides)	On Main road – 2.0 to 5.0 m	25	30	55	
49	CMR Road & Kammanhalli Road Junction	On Main road – 8.0 m (Both sides) On Intersecting road- 5.5 m (Both sides)	On Main road – 1.5 to 2.0 m (Both sides)	On Main road – No median	14	30	44	

Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
50	Kammanahalli Road & Nehru Road Junction	On Main road – 7.5 to 8.0 m (Both sides)	On Main road – 1.5 to 2.0 m (Both sides)	On Main road – 0.3 m	14	30	44	
51	Hennur Main road near Reliance Fresh	On Main road – 20.0 m	On Main road – 1.0 to 2.0 m (Both sides)	On Main road – 0.5 m	21	30	51	
52	Rammurthy Nagar, Near Church Bus stop	On Main road – 10.5 to 11.0 m (Both sides)	On Main road – 1.5 to 2.0 m (Both sides)	On Main road – No Median	11	30	41	

Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
53	Kammanahalli Road & ORR Junction (Kalyanagar)	On Main road – 10.5 to 11.0 m (Both sides) On Service road – 7.0 to 7.5 m (Both sides)	On Main road – 1.5 to 2.0 m (Both sides)	On Main road – 10 m Main road to Service road – 12 m	72	30	102	
54	Ambilipura Gate (near Bellandur Gate). Sarjapur Road	On Main road (Sarjapur Road) - 8.0 m (each side)	On Main road (Sarjapur Road) - 1.5 to 2.0 m	On Main road (Sarjapur Road) - 1.0 m	20	30	50	
55	Kadugodi Railway Station	Railway Crossing – 30 m	1.5 m (both sides)	1.0 m	60	30	90	

Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
56	K.R Puram Railway Station	On Main road – 22 m	On Main road – 1.5 m to 2.0 m	Main road – 0.3 m to 0.5 m	45	18	63	
57	In Front of RMZ Infinity, Beneganhalli Old Madras Road	On Main road – 7.5 to 8.0 m (Both sides)	On Main road – 1.5 to 2.0 m (Both sides)	On Main road – 0.5 to 1.0 m	20	30	50	
58	Babusapalaya Bus Stop, ORR	On Main road – 10.5 to 11.0 m (Both sides) On Service road – 7.0 to 7.5 m (Both sides)	On Main road – 1.5 to 2.0 m (Both sides)	On Main road – 10 m Main road to Service road – 12 m	52	30	82	

8.1.3 South Zone

8.1.3.1 Description of 37 potential Skywalks around Bangalore South Zone are given in the table below.

Sl. No.	Skywalk Location	Pedestrian volume (12 hours)	Level of Service	Proposed Skywalk Location	Remarks
1.	Gandhi bazaar main road	Location – 1: 3227 Location -2: 2059	D & F	Location 1 – From Ladies Wear to Ashwini Store Location 2 – From Ganjam to Ladies Wear	Gandhi bazar is famous shopping destination Pedestrian crossing is more from Gandhi statue side to Ganjam Silks shop side and also from Ladies wear house side to ashwini store.
2.	Near Kamakya theatre, Katriguppa ORR	Location 1: 4434 Location 2: 2153 Location 3:_ 2370 Location 4:_ 4643	E	From Apollo to Kamakya	Kamakya Theatre Junction on Outer ring road is connected with two movie theatre Kamakya and Ishwari.
3.	Hosur Main Road near Madivala Shopping Complex	On Main road – 5630 On Intersecting road – 4825	F	Location 1 – From Arafa Store to Total Mall Location 2 – From Total Mall to Police station side	Madiwala junction lies on Hosur Road (NH7) and is very close to Madiwala market. Total mall shopping complex is adjacent to this junction. The Pedestrian crossing is more from Hosur road to Shopping complex.
4.	Little Flower School Hosakerehalli, on ORR Road	On Main road (ORR) – 1865	F	From Little Flower Public School to Post office	This junction is on outer ring road. Mainly school students cross this junction. Median Barricading is provided which makes people to walk a long way to cross the road. At times, pedestrians trespass the barricade.
5.	Near Jayadeva Hospital, Bannerghatta Road	Location 1:_Bus stop to Hotel – 4389	F	Bus stop to Hotel	Jayadeva Hospital on Bannerghatta road is a cardiological hospital and training center. Many I.T companies are also located opposite to this Hospital.
6.	KH Road near Flyover	Location 1: Bus stop to clinic – 3757	F	From Bus stop to clinic	Skywalk location selected on Shanthinagar, K.H road is adjacent to Shanthinagar Bus Terminal. Big Bazaar Shopping center is also located in this Bus terminal building.
7.	Shopper Stop Mall, Bannerghatta Road	Location 1:_Shopper's stop to hotel – 1439	F	Bus stand to Brigade building	Shopper's stop is a major shopping center in South Bangalore on Bannerghatta Road.

		Location 2: Bus stand to Brigade building – 4130			
8.	Christ College, Hosur Road	On Main road – 7650	F	Location – From Christ college to Tech Mahindra	Christ College is located on Hosur road (NH7) near Koramangala. Many software companies like Tech Mahindra, Tata etc. lie opposite to the college. Th junction has a huge number of Pedestrian crossing
9.	Jayanagar 11 th Main Road, Near Raghavendra Swamy Temple	Location 1: 4301 Location 2: 4885 Location 3: 543 Location 4: 3491	E	Location 1 - Raghavendra_Math to Apple Location 2 - Raghavendra Math To ATM	Raghavendra Swamy Temple is a famous Matta in Jayanagar area. Devotees from different places visit the temple. This Junction connects to Banashankari road and J.P Nagar road which has heavy traffic Movement. It is very difficult for the pedestrians to cross especially during peak hours.
10.	Silk Board, Hosur Road	Location 1- 4590 Location 2 – 4639	F	Location 1 - Madiwala side to Silk Board: Location 2 – Madiwala to Hosur	Silk board junction is intersection of Hosur road and Outer Ring road. Skywalk location selected is on either side of Silk Board Flyover. Buses passing towards Banashankari, Sarjapur, and Marathalli etc stop at this place.
11.	N.R.Colony, near Colony Bus Stop	Govt. Hospital to Montessori School – 1279	F	Govt. Hospital to Montessori School	N R Colony is a residential area. It is in proximity to Shopping areas like Gandhi bazaar and DVG road. Many educational institutions are also located nearby.
12.	Katriguppe Junction, ORR	Location 1 :_ 1533 Location 2: 535 Location 3:_ 2015 Location 4: 1609	F	From HDFC to Food world From HDFC to BATA	Katriguppe Junction ORR – Banashankari is near Big Bazaar. Many shopping retail outlet are located at this place.
13.	Kadrenahalli cross	College to Banashankari – 3088	E	Location - From College to Banashankari	Kadrenahalli Cross on outer ring road is intersecting with Dayanand Sagar College road on Banashankri where more number of pedestrian cross the road.This junction is about 50m from the underpass.
14.	D.G petrol bunk, ORR	Location 1 : 5623 Location 2: 2025 Location 3:_ 1487 Location 4 : 4171	F	From Bunk to College From Bunk to Fire station	Devegowda Petrol bunk junction is located on Channamma circle in Outer ring road.
15.	Lalbagh (west gate) RV Road Junction	Location 1:_ 1379 Location 2:_ 1794 Location 3:_ 1404 Location 4:_ 1051	F	Location 1- From Lal Bagh to Petrol .Bunk Location 2 -Petrol.Bunk to Citi bank	West gate lalbagh road connects with RV road. Lalbagh is one of the famous landmarks of Bangalore. Many pedestrians move in and move out from lalbagh.The park is also visited by many Senior citizens who go there for walking.



16.	Nimhans on Hosur Road	Gate 1 to Gate 2 – 6716	F	Location - From Gate 1 to Gate 2	Nimhans is a Government hospital located in South Bangalore near Dairy Circle on Hosur Road. People from Rural places and mainly the Patients visiting Hospital cross the Road. Traffic Signals Provided for the safety of Pedestrian crossing. It will reduce the traffic if we provide a skywalk at this location.
17.	In front of J.P Nagar Central Shopping Mall	Location : _Big Bazaar to Central – 6517	F	Location - From Big Bazaar to Central	Bangalore Central Mall is a big shopping mall located in J.P Nagar. This mall is situated opposite to Big Bazaar. People cross the road to access the Big Bazar and the mall. Pedestrian has to wait for a long time to cross the road because of heavy traffic movement on this road. During weekends pedestrians crossing this location are more.
18.	Kengeri Bus Stop	Location : _Bus Stop to Kengeri New Bus stop – 4796	F	Location - From Bus stop to Kengeri New Bus stop	This road has a very high traffic movements, Pedestrians have to wait for a long time to cross the road. This location is very close to Ring road.
19.	Satellite Bus Stand , Mysore Road	Location 1: 5547 Location 2: 4536	F	Location - Big Bazar to Ramani Timber Mark	The satellite Bus stand is the main bus stop of all KSRTC buses which are travelling towards Mysore. Main Pedestrians crossing this place are mainly bus passengers. Since, Mysore road is a very busy road, pedestrians need to wait for a long time to cross the road to reach the bus station.
20.	Forum mall from PVR entrance (on Hosur Rd)	Location 1: _Sharma Enterprises to PVR side– 6687 Location 2: _PVR to Yamaha Showroom - 8533	F	Location - From Sharma Enterprises to PVR side	This mall is located on Hosur road in Kormangala area. Pedestrian needs to wait long time to cross the road. Hosur road has heavy traffic flow as it is the feeder road to Madiwala, Kormagala, HSR Layout and Electronic city.
21.	Koramangala Sony center	Location1 : _KFC to Aubon pain – 6733 Location2 : Sapphire to KFC – 8621 Location3: Sony center to Sapphire – 6755 Location4: _Aubon pain to Sony center– 6624	F	Location1 : _From KFC to Aubon pain Location2 : From Sapphire to KFC Location3: From Sony center to Sapphire Location4: _From Aubon pain to Sony center	This junction is located on Kormangala inner ring road. There are many IT companies located on Kormanagala Inner ring road, thus there is a heavy traffic movement on this road. The peripheral 80 feet ring road from Sony World junction towards Koramangala 1st Block has many restaurants, eateries and commercial blocks and shopping mall.
22.	Near Embassy Golf Link in Domlur	Crossing Kormangala IRR – 4171	F	Location – From corner of Hero Honda howroom to Corner of TVS	Embassy Golf Park campus hosts many software companies that have their landmark in this campus. This is located on Koramangala Inner Ring road. The road has bus stops on




	(Koramangala IRR)			Showroom.	either sides.
23.	In front of Emabaasy Software Park (Koramangala IRR)	Location : Yahoo Gate to Car workshop – 3757	F	Location - From Yahoo Gate to Car workshop	Embassy Software Park is located in Embassy Golf Park. This is located on Koramangala Inner Ring road. The road has bus stops on either sides. This location is about 200 mts from the “Embassy Golf Link Road, Domlur – Kormangala Inner Ring Road”. During site inventory it was noticed that the place has a huge number of pedestrian crossing. Most of them are employees of the software companies.
24.	Forum Mall Adugod Road (Luskar Rd)	Location :_Bosch to forum – 12935	F	Location - From Bosch to forum	Forum Mall is a famous mall in Banaglore. This mall has two main entrance one is from Hosur Road and other one is from Adugod road. This is located in Kormanagala area. Pedestrian needs to wait long time to cross the road. Adugod road is one a heavy traffic flow road in Bangalore. This road is connected to Madiwala, Kormagala, HSR Layout and Electronic city and Hosur Road.
25.	Jayanagar 4th Block (Cool Joint Junction)	Location 1 : 4816 Location 2:4142 Location 3: 5159 Location 4:_ 4725	F	Location 1- From College to Shop Location 2 - Cool Joint to Shop Location 3 - Cool Joint to Reliance	Jayanagar 4 th Block is very a crowded area in Jayanagar. It's a popular shopping Area. There are few educational institutes located around this junction.
26.	Jayanagar 3rd Block (near Corporation Bank)	Location 1 : 2762 Location 2:_ 3742 Location 3: 4123 Location 4:_ 3085	F	Location 1- From Rajalakshmi Jewels to Construction Building Location 2- Rajalakshmi Jewels to Janardhan Store	Jayanagar 3 rd Block ICICI Bank junction is the junction where 5 roads intersect. There are few educational institutions located around this place. Also there are few banks and commercial establishments near this junction.
27.	Banashankri Bus Stop	Location 1- 5249 Location 2 -5901	F	Location 1 - From Bus Stand to Temple Location 2 –From Metro to Bus Stand	Banashankari Bus Stop is a Major Bus Stop in South Bangalore. Banashankari Temple is a famous temple in the area. Many devotees come to this temple from different places. The Buses Plying to Kanakapura, Jayanagar, Marathalli, Majestic etc.stop at this Bus Stand. There is also a metro outlet
28.	Katriguppe Main Road near Ganesh Temple	Location 1- From Ganasha Temple to building compound - 1121			As per site inspections, surveys and analysis skywalk is not required at this place.
29.	Kathirguppe 43A	Location :_Bus Stop			As per site inspections, surveys and analysis skywalk is not required at this place.




Bus Stop	to Shop– 1877			
30.	Kathriguppe Main Road ITI layout bus stand	Location :_Fair Price Shop to Bus Stop – 1243		As per site inspections, surveys and analysis skywalk is not required at this place.
31.	Near Kathriguppe Arch (near Big Bazar)	Location :_Arch to Shop– 1417	E	Location - From Arch to Shop This location falls in Kathriguppe suburb.The location has a number of shops and outlets like Big Bazar.. The traffic on this road is heavy. Pedestrians' need to wait for a long time to cross the road.
32.	Bank Colony Bus Stand	Location :_Bus Stop to Raymond's Showroom– 3007	D	Location - From Bus Stop to Raymond's Showroom This is located in Bank Colony which is a good residential area. There are many commercial shops around this place.
33.	Bank Colony 12th Main Bus Stop	Location :_Bus Stand to Shop– 2138	D	As per site inspections, surveys and analysis skywalk is not required at this place.
34.	In front of Sanjay Gandhi hospital in Jayanagar IV Block	Location :_Hospital Gate to Bus Stop – 2906	F	Location - From Hospital Gate to Bus Stop This is located in Jayanagar 4 th Block area. This area is a popular place for shopping. There are many educational institutions around this place. Also few hospitals are located around this area. The Sanjay Gandhi Hospital is one of hospital in this place. At the location pedestrians crossing this place are mostly patients or visitors. They have to wait a long time to cross road since the traffic flow on this road is heavy.
35.	Sirsi Circle near Christian Graviyard	Location :_Christian Graveyard to Furniture Shop– 5046	F	Location - From Christian Graveyard to Furniture Shop This is located on Mysore Road. Mysore Road has aheavy traffic flow. Pedestrians need to wait for a long time to cross this road. There are few Garment companies located around this place..
36.	Yadiyur Market, Yadiyur	Location 1 – 4346	E	Location – From Vidura Medicals to SLV Wine Shop. Yadiyur Market is located in Jayanagar 9 th Block. The market place is a busy area especially during weekends when people from different places come to shop.
37.	South End Circle near Pattalamma Road	Location 1 – 5546	F	Location – From Petrol Bunk to Park. South end circle is a 5 leg junction where Jayanagar road, Pattalamma road, Park road meet. Pedestrian crossing is more in the junction but due to the construction of metro with minimum vertical clearance, it is not possible to propose a skywalk for crossing pedestrian at the main junction.




8.1.3.2 From the table above, it is seen that all 37 skywalks needs to be prioritised since they offer maximum impact to maximum number of pedestrians. At present, Level of Service in all 37 sections is either E or F (very poor) except three locations where it is D. It denotes that there is a there is major scope for improvement in these sections in terms of pedestrian safety and convenience.

8.1.3.3 Dimensions and location maps of 37 potential Skywalks around Bangalore South Zone are given in the table below




Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
1	Gandhi bazaar main road	On Main road (Gandhi Bazaar Rd) - 11m On Intersecting road (DVG RD) - 8m	On Main road – 3.0 m On Intersecting road – 2.0 m	On Main road – No Median On Intersecting road – No Median	Location1: 20 Location2: 12	Location1 30 Location2 30	Location1 50 Location2 42	
2	Near Kamakya theatre, Katriguppa ORR	On Main road – 10.5m to 11m (Both sides) On Intersecting Road- 7.5 to 8 m (Both sides)	On Main road – 2.0 to 3.0 m (Both sides)	On Main road – 0.5 to 1.0 m	12	30	42	




Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
3	Hosur Main Road near Madivala Shopping Complex	On Main road (Hosur Rd) - 15m Intersecting road (Madivala RD) – 10 m	On Main road – 1.5 to 2.0 m On Intersecting road – 1.0 m	On Main road – 0.5 m On Intersecting road – 0.5 m	Location1: 25 Location2: 35	Location1 : 30 Location2 : 30	Location1 : 55 Location2 : 65	
4	Little Flower School Hosakerehalli, on ORR Road	On Main road (ORR) – 8.0 m (Both Sides)	On Main road (ORR) – 4.0 to 6.0 m	On Main road (ORR) – 0.5 m	20	30	50	
5	Near Jayadeva Hospital, Banneraghatta Road	On Main road – 10.5 m	On Main road – 2.0 m to 3.0 m	Main road – 0.3 m	20	30	50	




Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
6	KH Road near Flyover	On Main road – 10.5 m to 11 m (Both sides) Intersecting road – 8 m to 10 m.	On Main road – 2.0 to 4.0 m	On Main road – 0.5 to 1 m	23	30	53	
7	Shopper Stop Mall, Banneraghatta Road	On Main road – 10.5 m to 11 m (Both sides)	On Main road – 2.0 to 5.0 m	On Main road – 1 m	17	30	47	
8	Christ College, Hosur Road	On Main road (Marigowda Road) – 8 m (Both sides)	On Main road – 2.0 to 3.0 m	On Main road – 0.3 to 0.5 m	20	30	50	




Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
9	Jayanagar 11 th Main Road, Near Raghavendra Swamy Temple	On Main road – 10.5 m Intersecting road – 7.5 m	On Main road – 2.0 to 3.0 m Intersecting road – 2.0 to 3.0 m	On Main road – 0.3 m Intersecting road – No Median	Location1: 15 Location2: 15	Location1 : 30 Location2 : 30	Location1 : 45 Location2 : 45	
10	Silk Board, Hosur Road	On Main road – 11 m	On Main road– 2.0 to 3.0 m	On Main road– 0.5 m	Location1: 24 Location2: 30	Location1 : 30 Location2 : 30	Location1 : 54 Location2 : 60	
11	N.R.Colony, near Colony Bus Stop	On Main road (Subbarama Chetty Rd)– 11 m (each side) Intersecting road (Sannidhi RD) – 7m	On Main road – 5.0 m Intersecting road – 2.0 m	On Main road – No Median Intersecting road – No Median	25	30	55	

Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
12	Katriguppe Junction, ORR	On Main road – 11 m Intersecting road - 7.5 m	On Main road – 2.0 to 3.0 m	On Main road – 0.5 m	Location1: 15 Location2: 23	Location1 : 30 Location2 : 30	Location1 : 45 Location2 : 53	
13	Kadrenahalli cross	On Main road– 10.5 m Intersecting road – 7.5 m	On Main road – 1 to 2.0 m (both sides)	Main road – 0.5 m	12	30	42	
14	D.G petrol bunk, ORR	On Main road– 10.5 m (both sides) Intersecting road – 10.5 m (both sides)	On service road – 2.0 to 2.5 m (both sides)	Main road – 0.3 m	Location1: 23 Location2: 22	Location1 : 30 Location2 : 30	Location1 : 53 Location2 : 52	




Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
15	Lalbagh (west gate) RV Road Junction	On Main road– 10.0 m to 12.0 m On Intersecting road- 7.5 m to 8.0 m	On main road – 1.5 m (both sides) On Intersecting road- 1.5 m	Main road – 0.3 m	Location1: 35 Location2: 22	Location1 :30 Location2 : 30	Location1 :65 Location2 : 52	
16	Nimhans on Hosur Road	On Main road– 7.5 m to 8.0 m (both sides) On Intersecting road (Nimhans)- 6 m	On service road – 1.5 m (both sides)	Main road – 0.3 m	15	30	45	
17	In front of J.P Nagar Central Shopping Mall	On Main road– 10.5 m (both sides)	On Main road – 3.0 m (both sides)	Main road – 0.3 m	22	30	52	




Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
18	Kengeri Bus Stop	On Main road – 7.5 m (both sides)	On Main road – 1.5 m	Main road – 1.5 m	20	30	50	
19	Satellite Bus Stand , Mysore Road	On Main road – 8.5 m (both sides)	On Main road – 2.0 to 2.5 m (both sides)	Main road – 0.3 m	20	30	50	
20	Forum mall from PVR entrance (on Hosur Rd)	On Main road– 11 m (both sides)	On Main road– 2.0 to 3.0 m (both sides)	Main road – 1.0 m	25	30	55	



Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
21	Koramangala Sony center	On Main road – 11.0 m (both sides) On Intersecting road – 7.5 m (both sides)	On Main road – 2.0 to 4.0 m (both sides)	Main road – 1.0 m	Location1: 30 Location2: 22 Location3: 30 Location4: 22	Location1 :30 Location2 :30 Location3 :30 Location4 :30	Location1 :60 Location2 :52 Location3 :60 Location4 :52	
22	Near Embassy Golf Link in Domlur (Koramangala IRR)	On Main road (Kormangala IRR) - 11m (Both sides)	On Main road (Kormangala IRR) – 3.0 m	On Main road (Kormangala IRR) 1.0 m	29	30	59	
23	In front of Emabaasy Software Park (Koramangala IRR)	On Main road- 10.5(both sides) On Intersecting road – 7.0 m	On main road – 2.0 to 2.5 m (both sides)	Main road – 1.0 m	28	30	58	

Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
24	Forum Mall Adugod Road (Luskar Rd)	On Main road– 10.5 m (both sides)	On Main road – 2.0 to 3.0 m (both sides)	Main road – 1.0 m	22	30	52	
	Jayanagar 4th Block (Cool Joint Junction)	On Main road– 11.0 to 12.0 m (both sides) On Intersecting road- 7.5 m (both Sides)	On Main road – 1.5 to 2.5 m (both sides)	Main road – 0.3 m	Location1: 16 Location2: 16	Location1 :30 Location2 :30	Location1 :46 Location2 :46	
26.	Jayanagar 3rd Block (near Corporation Bank)	On Main road– 8.0 m (both sides)	On Main road – 2.0 to 3.0 m (both sides)	Main road – 0.3 m	Location1: 13 Location2: 22	Location1 :30 Location2 :30	Location1 :43 Location2 :52	

Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
27.	Banashankri Bus Stop	On Main road– 10.5 to 11.0 m (both sides) On Intersecting road-10.5 m	On Main road – 2.0 to 3.0 m (both sides)	Main road – 0.2 m	Location1: 16 Location2: 35	Location1 :30 Location2 :30	Location1 :46 Location2 :65	
28.	Katriguppe Main Road near Ganesh Temple	On Main road – 12.0 m	On Main road – 2.0 to 2.5 m	Main road –No Median		NOT REQUIRED		
29.	Kathriguppe 43A Bus Stop	On Main road– 15.0 m	On Main road – 3.0 to 4.0 m	Main road – No Median		NOT REQUIRED		

Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
30.	Kathriguppe Main Road ITI layout bus stand	On Main road - 12.0 m	On Main road – 1.5 m (both sides)	Main road – No Median		NOT REQUIRED		
31.	Near Kathriguppe Arch (near Big Bazar)	On Main road–7.5 m (both sides)	On Main road – 1.5 to 3.0 m (both sides)	Main road – 0.3 m	16	30	46	
32.	Bank Colony Bus Stand	On Main road–12.0 m	On Main road – 2.0 to 3.0 m	Main road – No Median	13	30	43	

Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
33.	Bank Colony 12th Main Bus Stop	On Main road– 12 m	On Main road – 1.5 to 3 m (both sides)	Main road – No Median		NOT REQUIRED		
34.	In front of Sanjay Gandhi hospital in Jayanagar IV Block	On Main road– 7.5 m (Both sides)	On Main road – 1.5 to 3 m (both sides)	Main road – 0.3 m	18	30	48	
35.	Sirsi Circle near Christian Graviyard	On Main road– 7.5 m (Both sides)	On Main road – 1.5 to 2.5m (both sides)	Main road – 0.3 to 0.5 m	18	30	48	

Sl. No.	Skywalk Location	Carriageway width	Footpath width	Median width	Crossing length (m)	Stairs length (m)	Total length (m)	Location on the Map
36.	Yadiyur Market, Yadiyur	On Main road– 10.5 m (both sides) On Intersecting Road- 10.5 m (Both Sides)	On Main road – 2.0 m to 3.0 m	Main road – 0.5 m	23	30	53	
37.	South End Circle near Pattamma Road	On Main road– 10.5 m (both sides) On Intersecting Road- 10.5 m	On Main road – 2.0 m to 3.0 m	Main road – 2.5 m (Metro) On intersecting road- 0.5 m	23	30	53	

8.2 Project cost, Revenue and Operating cost for individual locations

Sl. No	Zone	Locations of Sky Walks		Options			Project Cost (Final) (INR)	LOS (-)	Length of advertisement (Main hoarding) Feet	Height of Side hoarding Feet	Rental for side hoarding (INR)	No. of side hoardings (No.)	Revenue/month (INR)	Operating Cost (INR)
				Staircase	Lift	Escalator								
1	East	Miller Road near Bhagavan Mahaveer Hospital	From Pai Vihar to Vasanth Nagar	Yes	Yes	Yes	27,583,333	E	52	8.3	450.0	2.0	491,472	2,206,667
	East		From Play ground to TV Tower	Yes	Yes	-	12,750,000	D	39	8.3	450.0	2.0	393,442	1,020,000
2	East	Hennur main road near St.Charles school.	From School to Ground	Yes	Yes	-	12,750,000	F	39	8.3	450.0	2.0	393,442	1,020,000
3	East	Queens Road near congress party office.	From Congress office to star chamber	Yes	Yes	-	12,208,333	F	33	8.3	450.0	2.0	344,427	976,667
4	East	St.German school coles park	From St.German School to Park	Yes	Yes	-	13,020,833	F	43	8.3	450.0	2.0	417,949	1,041,667
	East		From Yoga Meditation Classes to School	Yes	Yes	-	7,729,167	F	36	8.3	450.0	2.0	368,934	618,333
5	East	ASC Center at junction of Lower Argram Road and Victoria Road.	From ASC to Police chowk	Yes	Yes	-	14,104,167	E	56	8.3	450.0	2.0	515,980	1,128,333
6	East	Anil kumble Circle	From LIC to Bible Society of India	Yes	Yes	Yes	29,208,333	F	72	8.3	384.6	2.0	545,742	2,336,667
	East		From LIC to Fire Station	Yes	Yes	Yes	15,687,500	F	49	8.3	384.6	2.0	399,115	1,255,000

Sl. No	Zone	Locations of Sky Walks		Options			Project Cost (Final)	LOS	Length of advertisement (Main hoarding)	Height of Side hoarding	Rental for side hoarding	No. of side hoardings	Revenue/month	Operating Cost
				Staircase	Lift	Escalator	(INR)	(-)	Feet	Feet	(INR)	(No.)	(INR)	(INR)
7	East	Infront of Vishweshwaraiah Museum Kasturba Road	From Museum to Bus Stand	Yes	Yes	Yes	28,937,500	F	69	8.3	307.7	2.0	419,836	2,315,000
8	East	Cubbon Park Kasturaba Road near Chinnaswsamy stadium	From Cubbon Park to Chinnaswamy Stadium	Yes	Yes	Yes	30,020,833	F	82	8.3	450.0	2.0	712,040	2,401,667
	East		From Jewells De Paragon to Cubbon park	Yes	Yes	Yes	30,291,667	F	85	8.3	450.0	2.0	736,548	2,423,333
	East		From Chinnaswamy Stadium to St. Marks Cathedral	Yes	Yes	-	16,000,000	F	79	8.3	450.0	2.0	687,533	1,280,000
9	East	Commercial Street	From Samskruthi Silk to MG Road (Near Parking)	Yes	Yes	Yes (1 side)	15,458,333	E	72	8.3	450.0	2.0	638,518	1,236,667
10	East	M.S Building	From MS Building to Cubbon Park	Yes	Yes	Yes	27,583,333	F	52	8.3	384.6	2.0	420,062	2,206,667
11	East	Richmond Road near Vellara Junction	From Police Chowk to Church	Yes	Yes	-	16,270,833	E	82	8.3	307.7	2.0	486,865	1,301,667
	East		From Church to Vellara Junction	Yes	Yes	-	9,625,000	F	59	8.3	307.7	2.0	369,564	770,000

Sl. No	Zone	Locations of Sky Walks		Options			Project Cost (Final)	LOS	Length of advertisement (Main hoarding)	Height of Side hoarding	Rental for side hoarding	No. of side hoardings	Revenue/month	Operating Cost
				Staircase	Lift	Escalator	(INR)	(-)	Feet	Feet	(INR)	(No.)	(INR)	(INR)
12	East	Webb Junction Near M.G Road	From Dickson road to Petrol bunk	Yes	Yes	-	15,729,167	F	75	8.3	450.0	2.0	663,025	1,258,333
13	East	Jayachamarajendra Road, near Town Hall	From Townhall To Canara bank	Yes	Yes	-	15,729,167	F	75	8.3	307.7	2.0	453,351	1,258,333
	East		From Polygal India Pvt To Town Hall	Yes	Yes	-	12,062,500	F	89	8.3	307.7	2.0	520,380	965,000
14	East	St.Marks Road, near Straisi Memorial School	From H P Petrol Bank to Straisi Memorial School	Yes	Yes	-	13,562,500	F	49	8.3	384.6	2.0	399,115	1,085,000
15	East	In Queens Road from Edward Road to Tuskar Town near Kamala Bhai School	From Queens Road to Trip to Travels	Yes	Yes	-	12,750,000	F	39	8.3	450.0	2.0	393,442	1,020,000
16	East	In front of Cantonment Railway Station	From Parking to Railway station	Yes	Yes	Yes	27,312,500	F	49	8.3	384.6	2.0	399,115	2,185,000
17	East	Balekundari Circle (near Indian Express),on Queens Road	From Queens Road to Park Temple	Yes	Yes	-	14,916,667	F	66	8.3	450.0	2.0	589,503	1,193,333
	East		From Shivaji Nagar to Indian Express	Yes	Yes	-	13,562,500	F	49	8.3	450.0	2.0	466,965	1,085,000

Sl. No	Zone	Locations of Sky Walks		Options			Project Cost (Final)	LOS	Length of advertisement (Main hoarding)	Height of Side hoarding	Rental for side hoarding	No. of side hoardings	Revenue/month	Operating Cost
				Staircase	Lift	Escalator	(INR)	(-)	Feet	Feet	(INR)	(No.)	(INR)	(INR)
	East		From Indian Express to Air china Cunningham Road	Yes	Yes	-	13,562,500	F	49	8.3	450.0	2.0	466,965	1,085,000
18	East	D'Souza Circle, near Patrick church (at Cariappa Circle)	From Sapphire to Temple	Yes	Yes	-	13,833,333	E	52	8.3	450.0	2.0	491,472	1,106,667
	East		From Life Style to Samyakk	Yes	Yes	-	8,812,500	E	49	8.3	450.0	2.0	466,965	705,000
19	East	Museum Road, near Patrick Church (at Cariappa Circle)	From Cariappa Bavan to SIR M.V station	Yes	Yes	-	13,562,500	E	49	8.3	450.0	2.0	466,965	1,085,000
	East		From Police Chowk to C,Bhavan	Yes	Yes	-	8,270,833	E	43	8.3	450.0	2.0	417,949	661,667
20	East	Bridge Road Junction	From Sadhwam's to Maniksha Ground	Yes	Yes	Yes	29,208,333	F	72	8.3	450.0	2.0	638,518	2,336,667
	East		From Kaveri Arts to Sadhawan's	Yes	Yes	Yes	14,604,167	D	36	8.3	450.0	1.0	184,467	1,168,333
	East		From Army Ground to Kaveri Arts	Yes	Yes	Yes	17,583,333	F	72	8.3	450.0	1.0	319,259	1,406,667

Sl. No	Zone	Locations of Sky Walks		Options			Project Cost (Final)	LOS	Length of advertisement (Main hoarding)	Height of Side hoarding	Rental for side hoarding	No. of side hoardings	Revenue/month	Operating Cost
				Staircase	Lift	Escalator	(INR)	(-)	Feet	Feet	(INR)	(No.)	(INR)	(INR)
21	East	In front of Planetorium, near Basaveshwara Circle	From Planetarium to Chalukya	Yes	Yes	Yes	30,291,667	F	85	8.3	450.0	2.0	736,548	2,423,333
	East		From Chalukya to DURS Road	Yes	Yes	-	15,187,500	F	69	8.3	450.0	2.0	614,010	1,215,000
22	East	Sarvaton circle near St.German school	From St German School to Shivajinagar	Yes	Yes	-	13,291,667	E	46	8.3	450.0	2.0	442,457	1,063,333
23	East	Near Mallya Hospital	From Hospital to Ground	Yes	Yes	-	13,291,667	F	46	8.3	450.0	2.0	442,457	1,063,333
24	East	Commissariate street Garuda Mall	From Home Stop to Garuda Mall	Yes	Yes	Yes	28,666,667	F	66	8.3	450.0	2.0	589,503	2,293,333
	East		From UCB to Fire Station	Yes	Yes	Yes	26,500,000	E	39	8.3	450.0	2.0	393,442	2,120,000
25	East	Residency Road near Mayo Hall	From BBMP Office to Power Station	Yes	Yes	-	13,291,667	F	46	8.3	384.6	2.0	378,168	1,063,333
26	East	Richmond Road near Baldwins Girls College	From School to Opposite	Yes	Yes	-	13,833,333	F	52	8.3	384.6	2.0	420,062	1,106,667
27	East	Brigade Road Patrick Church near St Joshephs College	From Samsung to St.Patrick Church	Yes	Yes	-	12,479,167	F	36	8.3	450.0	2.0	368,934	998,333
28	East	Indiranagar 100ft Road	From Bus stop to	Yes	Yes	-		F						

Sl. No	Zone	Locations of Sky Walks		Options			Project Cost (Final)	LOS	Length of advertisement (Main hoarding)	Height of Side hoarding	Rental for side hoarding	No. of side hoardings	Revenue/month	Operating Cost
				Staircase	Lift	Escalator	(INR)	(-)	Feet	Feet	(INR)	(No.)	(INR)	(INR)
		near New Horizon school	Doopannahalli				13,833,333		52	8.3	384.6	2.0	420,062	1,106,667
29	East	Indiranagar 100ft Road and CMH Road Junction (near Indiranagar Metro Station)	From KFC to CMH Park	Yes	Yes	-	14,375,000	F	59	8.3	450.0	2.0	540,487	1,150,000
	East		From KFC to Metro side	Yes	Yes	-	8,000,000	D	39	8.3	450.0	2.0	393,442	640,000
31	East	Queen's Road near Junction before Congress Party Office(Miller's Tank bund Rd-MV Jayram Rd-Thimmaiah Rd Jn)	From Star Chamber to Congress Committee	Yes	Yes	-	13,833,333	F	52	8.3	450.0	2.0	491,472	1,106,667
32	East	N.R square near LIC Building (Corporation)	From LIC Building to Unity Building	Yes	Yes	Yes	33,270,833	F	121	8.3	450.0	2.0	1,006,131	2,661,667
33	East	Pillana Garden near Nethaji Road	From Nethaji Play Ground to State Bank	Yes	Yes	-	13,833,333	F	52	8.3	450.0	2.0	491,472	1,106,667
34	East	Amruth Theatre,Lingrajpuram	From Music World to Arch	Yes	Yes	-	15,187,500	F	69	8.3	450.0	2.0	614,010	1,215,000
35	East	Near Banappa Park (K.G/Police memorial Road), Near Hudson Circle	From Sri Vinayaka School to Canara Bank	Yes	Yes	-	20,333,333	F	131	8.3	307.7	2.0	738,225	1,626,667

Sl. No	Zone	Locations of Sky Walks		Options			Project Cost (Final)	LOS	Length of advertisement (Main hoarding)	Height of Side hoarding	Rental for side hoarding	No. of side hoardings	Revenue/month	Operating Cost
				Staircase	Lift	Escalator	(INR)	(-)	Feet	Feet	(INR)	(No.)	(INR)	(INR)
36	East	In front of S.J.E.S College, K.R Puram (on NH4)	From bus stop(in front private building to bus stop (In front of RNS JCB building)	Yes	Yes	Yes	34,083,333	F	131	8.3	307.7	2.0	738,225	2,726,667
37	East	Near Mayura Bakery in White Field, Whitefield Road	From In front of Mayura Bakery to bus stop other side.	Yes	Yes	-	14,916,667	F	66	8.3	450.0	2.0	589,503	1,193,333
38	East	Kuvempu Circle Old Airport Road	From Parking to HAL border	Yes	Yes	-	15,729,167	F	75	8.3	450.0	2.0	663,025	1,258,333
	East		From Parking to Punjab National Bank	Yes	Yes	-	8,812,500	E	49	8.3	450.0	2.0	466,965	705,000
39	East	Old Airport Road (HAL post office)	From Post office to HAL	Yes	Yes	-	13,562,500	F	49	8.3	450.0	2.0	466,965	1,085,000
40	East	Near JBJ quarters on Marathahalli - HAL Road	From JBI Quarters side to HAL	Yes	Yes	-	15,458,333	F	72	8.3	307.7	2.0	436,593	1,236,667
41	East	Old Madras Road & SD Road junction near Byapnalli Metro Station.	From NGEF side road bus stand to SD road side	Yes	Yes	-	14,916,667	F	66	8.3	450.0	2.0	589,503	1,193,333

Sl. No	Zone	Locations of Sky Walks		Options			Project Cost (Final)	LOS	Length of advertisement (Main hoarding)	Height of Side hoarding	Rental for side hoarding	No. of side hoardings	Revenue/month	Operating Cost
				Staircase	Lift	Escalator	(INR)	(-)	Feet	Feet	(INR)	(No.)	(INR)	(INR)
42	East	In front of Munnekolalu-Spice Garden, Marathahalli	From Spice Garden to Temple	Yes	Yes	-	19,520,833	F	121	8.3	307.7	2.0	687,953	1,561,667
43	East	Old Madras Road (Bengenahalli to Nagavara Palakhya Road)	From Bus Stop to bengelahalli	Yes	Yes	-	14,916,667	F	66	8.3	307.7	2.0	403,079	1,193,333
44	East	On NH4 at entrance of Garden City College (NH-4 near KR Puram)	From Garden city college road to Bus stop	Yes	Yes	-	17,625,000	F	98	8.3	307.7	2.0	570,652	1,410,000
45	East	Near water tank junction (Domlur Over Head tank), HAL Road	From Water tank to New Shanthi Sagar	Yes	Yes	-	16,000,000	F	79	8.3	450.0	2.0	687,533	1,280,000
46	East	ITI colony Gate, KR Puram	From Bus stop to Bus Stop (Corner of Ambedkar Stadium, ITI Grounds)	Yes	Yes	Yes	33,541,667	F	125	8.3	307.7	2.0	704,710	2,683,333
47	East	Marathahalli Airport Road near Marathahalli Bridge	From SBM to Shanthi Sagar Hotel corner	Yes	Yes	-	16,270,833	F	82	8.3	307.7	2.0	486,865	1,301,667
48	East	Near KR Puram Bus Stand, KR Puram	From Bus Stand to Market Side	Yes	Yes	-	16,270,833	F	82	8.3	307.7	2.0	486,865	1,301,667

Sl. No	Zone	Locations of Sky Walks		Options			Project Cost (Final)	LOS	Length of advertisement (Main hoarding)	Height of Side hoarding	Rental for side hoarding	No. of side hoardings	Revenue/month	Operating Cost
				Staircase	Lift	Escalator	(INR)	(-)	Feet	Feet	(INR)	(No.)	(INR)	(INR)
49	East	CMR Road & Kammanhalli Road Junction	From ICICI Direct to Jalavaya Vihar	Yes	Yes	-	13,291,667	F	46	8.3	307.7	2.0	302,535	1,063,333
50	East	Kammanahalli Road & Nehru Road Junction	From Riti Jewelers to Bakery	Yes	Yes	-	13,291,667	F	46	8.3	450.0	2.0	442,457	1,063,333
51	East	Hennur Main road near Reliance Fresh	From Reliance fresh to Indian Academy Group	Yes	Yes	-	15,187,500	E	69	8.3	307.7	2.0	419,836	1,215,000
52	East	Rammurthy Nagar, Near Church Bus stop	From Vinayaka Medicals to Jayashree Enterprises	Yes	Yes	-	12,479,167	E	36	8.3	450.0	2.0	368,934	998,333
53	East	Kammanahalli Road & ORR Junction (Kalyanagar)	From Bus Stop to Lee Showroom	Yes	Yes	Yes	42,750,000	F	236	8.3	450.0	2.0	1,863,896	3,420,000
54	East	Ambilipura Gate (near Bellandur Gate). Sarjapur Road	From In front of Springfield apartment to in front HDFC Bank	Yes	Yes	-	14,916,667	F	66	8.3	384.6	2.0	503,848	1,193,333
55	East	Kadugodi Railway Station	From Canara Bank to Kadugodi Bus Stop	Yes	Yes	Yes	39,500,000	F	197	8.3	384.6	2.0	1,341,714	3,160,000

Sl. No	Zone	Locations of Sky Walks		Options			Project Cost (Final)	LOS	Length of advertisement (Main hoarding)	Height of Side hoarding	Rental for side hoarding	No. of side hoardings	Revenue/month	Operating Cost
				Staircase	Lift	Escalator	(INR)	(-)	Feet	Feet	(INR)	(No.)	(INR)	(INR)
56	East	K.R Puram Railway Station	From Railway Station to Border Wall	Yes	Yes	-	21,687,500	F	148	8.3	307.7	2.0	822,012	1,735,000
57	East	In Front of RMZ Infinity, Benegalahalli Old Madras Road	From RMZ Infinity to Life Style Shopping Mall	Yes	Yes	Yes	28,666,667	F	66	8.3	307.7	2.0	403,079	2,293,333
58	East	Babusapalaya Bus Stop, ORR	From Bus Stop (In front of Ganesha Juice Center) to Bus Stop (Nandhini Parlor)	Yes	Yes	Yes	37,333,333	F	171	8.3	307.7	2.0	939,313	2,986,667
1	West	Near KC General Hospital, Malleshwaram	Location – From KC General Hospital to Vidyaranyapura Side	Yes	Yes	No	16,270,833	F	82	8.3	307.7	2.0	486,865	1,301,667
2	West	Near Manthri Mall, Sampige Road Malleshwaram	From Manthri Mall to petrol bunk (near junction)	Yes	Yes	No	13,562,500	F	49	8.3	450.0	2.0	466,965	1,085,000
3	West	Mission Road near Flyover	From Poto Shop to Lal Bagh Side	Yes	Yes	No	14,916,667	F	66	8.3	307.7	2.0	403,079	1,193,333
4	West	Near DIACON HOSPITAL Rajajinagar	From Diacon Hospital to Civil Engg Corner	Yes	Yes	No	13,562,500	E	49	8.3	384.6	2.0	399,115	1,085,000

Sl. No	Zone	Locations of Sky Walks		Options			Project Cost (Final)	LOS	Length of advertisement (Main hoarding)	Height of Side hoarding	Rental for side hoarding	No. of side hoardings	Revenue/month	Operating Cost
				Staircase	Lift	Escalator	(INR)	(-)	Feet	Feet	(INR)	(No.)	(INR)	(INR)
	West		From Civil Engg corner to Milk Parlor	Yes	Yes	No	13,020,833	D	43	8.3	384.6	2.0	357,222	1,041,667
5	West	Near Vidyavaradhaka Sanga School, Rajajinagar	From Panasonic to Vidya Vardhaka School	Yes	Yes	No	12,750,000	F	39	8.3	450.0	2.0	393,442	1,020,000
6	West	Shivanandha Circle near Desai Hospital	From Ashoka Hotel Side – Hospital	Yes	Yes	No	13,562,500	E	49	8.3	450.0	2.0	466,965	1,085,000
	West		Chalukya Hotel Side to Hospital	Yes	Yes	No	13,562,500	E	49	8.3	450.0	2.0	466,965	1,085,000
7	West	Subramanya Nagar Police Station	From Police Station to Infront of VRL	Yes	Yes	No	13,833,333	E	52	8.3	307.7	2.0	336,049	1,106,667
8	West	Rajaram Mohan Roy Road	From Cubbon Park Side to Lal Bagh Side	Yes	Yes	Yes	36,791,667	F	164	8.3	450.0	2.0	1,324,730	2,943,333
9	West	Sampige Road, near Sirur park (Rajiv Gandhi Circle, In front of swathi Hotel)	From SBM to Nokia Dealer	Yes	Yes	No	13,291,667	E	46	8.3	307.7	2.0	302,535	1,063,333
	West		From SBM to Metro Station Side on Sampige Road	Yes	Yes	No	14,916,667	F	66	8.3	307.7	2.0	403,079	1,193,333

Sl. No	Zone	Locations of Sky Walks		Options			Project Cost (Final)	LOS	Length of advertisement (Main hoarding)	Height of Side hoarding	Rental for side hoarding	No. of side hoardings	Revenue/month	Operating Cost
				Staircase	Lift	Escalator	(INR)	(-)	Feet	Feet	(INR)	(No.)	(INR)	(INR)
10	West	Palace Gutthalli Bus Stop, near Cauveri Theatre(Bellary Road)	Palace Ground to Guttahalli Bus stop	Yes	Yes	Yes	31,375,000	F	98	8.3	450.0	2.0	834,578	2,510,000
11	West	Malleshwaram 8th Cross, Sampige Road	From Guttahalli Road to Margasa Road	Yes	Yes	No	12,750,000	F	39	8.3	384.6	2.0	336,275	1,020,000
12	West	Mekhri circle Junction - Bellary Road	From RT Nagar Side o IAF	Yes	Yes	Yes	31,375,000	F	98	8.3	450.0	2.0	834,578	2,510,000
13	West	Esteem mall- New airport road Hebbal	From Esteem Mall to Bus Stop	Yes	Yes	Yes	30,020,833	F	82	8.3	450.0	2.0	712,040	2,401,667
14	West	Yeshwantpur Railway Station	From Railway station to Total Gas	Yes	Yes	No	17,625,000	F	98	8.3	307.7	2.0	570,652	1,410,000
15	West	Mount Carmel College	From Embassy Star Building to Mount Carmel College	Yes	Yes	No	14,916,667	F	66	8.3	307.7	2.0	403,079	1,193,333
16	West	Mysore Bank Junction (Near Avenue Road)	From Mysore Bank to College	Yes	Yes	No	13,562,500	E	49	8.3	450.0	2.0	466,965	1,085,000
	West		From Temple to Govt red Building	Yes	Yes	No	13,770,833	F	82	8.3	450.0	2.0	712,040	1,101,667
	West		From Cauvery Bhavan to College	Yes	Yes	No	17,833,333	F	131	8.3	450.0	2.0	1,079,654	1,426,667

Sl. No	Zone	Locations of Sky Walks		Options			Project Cost (Final)	LOS	Length of advertisement (Main hoarding)	Height of Side hoarding	Rental for side hoarding	No. of side hoardings	Revenue/month	Operating Cost
				Staircase	Lift	Escalator	(INR)	(-)	Feet	Feet	(INR)	(No.)	(INR)	(INR)
17	West	Jalahalli Cross, Thumkur Road	From Petrol pump to Bus Stop(On Ring road)	Yes	Yes	Yes	31,375,000	F	98	8.3	450.0	2.0	834,578	2,510,000
	West		From Bus stop to Bus Stop (On Subrato Mukhraj Rd)	Yes	Yes	No	13,562,500	E	49	8.3	450.0	2.0	466,965	1,085,000
18	West	TVS Circle- studio road, Near Jalahalli Cross	From Millipore to Indosol Pvt. Ltd Company (On Main road)	Yes	Yes	Yes	31,916,667	F	105	8.3	450.0	2.0	883,593	2,553,333
19	West	Near N.E.S junction on Yelahanka - Doddaballapur Road	From Auto Stand to Bus Stop	Yes	Yes	Yes	30,020,833	F	82	8.3	307.7	2.0	486,865	2,401,667
20	West	Hebbal Flyover ,ORR	From Hebbal Bus Stop to Lake	Yes	Yes	Yes	35,437,500	F	148	8.3	307.7	2.0	822,012	2,835,000
21	West	Bhasyam Circle-Sadashiv Nagar	From Petrol Bunk to Airtel	Yes	Yes	No	14,375,000	F	59	8.3	307.7	2.0	369,564	1,150,000
	West		From School to Petrol Bunk	Yes	Yes	No	14,916,667	F	66	8.3	307.7	2.0	403,079	1,193,333
22	West	Himalaya theatre -K.G Road	From Arya Bhavan Sweets to Kanti Sweets	Yes	Yes	No	18,979,167	F	115	8.3	450.0	2.0	957,116	1,518,333

Sl. No	Zone	Locations of Sky Walks		Options			Project Cost (Final)	LOS	Length of advertisement (Main hoarding)	Height of Side hoarding	Rental for side hoarding	No. of side hoardings	Revenue/month	Operating Cost
				Staircase	Lift	Escalator	(INR)	(-)	Feet	Feet	(INR)	(No.)	(INR)	(INR)
23	West	Near Iskcon Temple, Rajajinagar	From Left side of Bus Stop to Left side of Kalyana Mantapa.	Yes	Yes	Yes	29,479,167		75	8.3	450.0	2.0	663,025	2,358,333
24	West	Raja Rajeshwari Nagar Entrance Gate, Mysore Road	From Gopalan Mall (Near Lawn) to Bus Stop on opposite side	Yes	Yes	Yes	29,750,000		79	8.3	450.0	2.0	687,533	2,380,000
25	West	HMT Road, Mattikere	From Mataji Medicals to Karnataka Bag Shop.	Yes	Yes	Yes	29,479,167		75	8.3	450.0	2.0	663,025	2,358,333
1	South	Gandhi Bazaar main road at DVG Road Junction	On Gandhi Bazaar Rd-from Ladies Wear to Ashwini Store	Yes	Yes	No	14,916,667	F	66	8.3	450.0	2.0	589,503	1,193,333
	South		On DVG Road - From Ganjam to Ladies Wear	Yes	Yes	No	12,750,000	D	39	8.3	450.0	2.0	393,442	1,020,000
2	South	Near Kamakya theatre, Katriguppa ORR	On ORR - From Apollo to Kamakya	Yes	Yes	No	12,750,000	E	39	8.3	450.0	2.0	393,442	1,020,000

Sl. No	Zone	Locations of Sky Walks		Options			Project Cost (Final)	LOS	Length of advertisement (Main hoarding)	Height of Side hoarding	Rental for side hoarding	No. of side hoardings	Revenue/month	Operating Cost
				Staircase	Lift	Escalator	(INR)	(-)	Feet	Feet	(INR)	(No.)	(INR)	(INR)
3	South	Madiwala Shopping Complex on Hosur Road	On Hosur Road - From Arafa Store to Total Mall	Yes	Yes	Yes	30,020,833	F	82	8.3	450.0	2.0	712,040	2,401,667
	South		On Madiwala Road - From Total Mall to Police station side	Yes	Yes	Yes	32,729,167	F	115	8.3	450.0	2.0	957,116	2,618,333
4	South	Little Flower Public School Hosakerehalli ORR	On ORR - From Little Flower Public School to Post office	Yes	Yes	Yes	28,666,667	F	66	8.3	307.7	2.0	403,079	2,293,333
5	South	Near Jayadeva hospital Banneraghatta Road	On Banneraghatta Road - Bus stop to Hotel	Yes	Yes	Yes	28,666,667	F	66	8.3	307.7	2.0	403,079	2,293,333
6	South	KH Road, Shanthinagar	On KH Road - From Bus stop to clinic	Yes	Yes	No	15,729,167	F	75	8.3	450.0	2.0	663,025	1,258,333
7	South	Shopper stop Banneraghatta road	On Banneraghatta Road - Bus stand to Brigade building	Yes	Yes	Yes	27,854,167	F	56	8.3	307.7	2.0	352,807	2,228,333
8	South	Christ College on Marigowda Road, Hosur Road	On Marigowda Road - From Christ college to Tech Mahindra	Yes	Yes	No	14,916,667	F	66	8.3	384.6	2.0	503,848	1,193,333

Sl. No	Zone	Locations of Sky Walks		Options			Project Cost (Final)	LOS	Length of advertisement (Main hoarding)	Height of Side hoarding	Rental for side hoarding	No. of side hoardings	Revenue/month	Operating Cost
				Staircase	Lift	Escalator	(INR)	(-)	Feet	Feet	(INR)	(No.)	(INR)	(INR)
9	South	Jayanagar 11th Main Road, Near Raghavendra Swamy Temple	On Marenahalli Road - From Raghavendra Math to Apple	Yes	Yes	No	13,562,500	E	49	8.3	450.0	2.0	466,965	1,085,000
	South		On Marenahalli Road - Raghavendra Math To ATM	Yes	Yes	No	13,562,500	E	49	8.3	450.0	2.0	466,965	1,085,000
10	South	Silk Board, Hosur Road	On ORR - Madiwala side to Silk Board	Yes	Yes	Yes	29,750,000	F	79	8.3	307.7	2.0	470,108	2,380,000
	South		On ORR - Madiwala to Hosur	Yes	Yes	Yes	31,375,000	F	98	8.3	307.7	2.0	570,652	2,510,000
11	South	N.R.Colony, Near Colony Bus Stop	On Subramanya Shetty Road - Govt. Hospital to Montessori School	Yes	Yes	No	16,270,833	F	82	8.3	307.7	2.0	486,865	1,301,667
12	South	Katriguppe Junction ORR	On Katriguppe Road - From HDFC to Food world	Yes	Yes	No	13,562,500	D	49	8.3	450.0	2.0	466,965	1,085,000
	South		On ORR - From HDFC to BATA	Yes	Yes	Yes	29,479,167	F	75	8.3	450.0	2.0	663,025	2,358,333

Sl. No	Zone	Locations of Sky Walks		Options			Project Cost (Final)	LOS	Length of advertisement (Main hoarding)	Height of Side hoarding	Rental for side hoarding	No. of side hoardings	Revenue/month	Operating Cost
				Staircase	Lift	Escalator	(INR)	(-)	Feet	Feet	(INR)	(No.)	(INR)	(INR)
13	South	Kadrenahalli Cross ORR	On ORR - From College to Banashankari	Yes	Yes	Yes	26,500,000	E	39	8.3	450.0	2.0	393,442	2,120,000
14	South	D.G petrol Bunk, ORR	On ORR - From Bunk to College	Yes	Yes	Yes	29,479,167	F	75	8.3	307.7	2.0	453,351	2,358,333
	South		On 30th Main Road - From Bunk to Fire station	Yes	Yes	No	15,458,333	F	72	8.3	307.7	2.0	436,593	1,236,667
15	South	Lalbagh-RV Road Junction (West gate)	On RV Road - From Lal Bagh to Petrol .Bunk	Yes	Yes	Yes	32,729,167	F	115	8.3	450.0	2.0	957,116	2,618,333
	South		On Vanivilas Road - Petrol.Bunk to Citi bank	Yes	Yes	No	15,458,333	F	72	8.3	450.0	2.0	638,518	1,236,667
16	South	Nimhans on Hosur Road	On Hosur Road - From Gate 1 to Gate 2	Yes	Yes	Yes	27,312,500	F	49	8.3	450.0	2.0	466,965	2,185,000
17	South	In front of J.P Nagar Central Shopping Mall	On Marenahalli Road (ORR) - From Big Bazaar to Central	Yes	Yes	Yes	29,208,333	F	72	8.3	450.0	2.0	638,518	2,336,667

Sl. No	Zone	Locations of Sky Walks		Options			Project Cost (Final)	LOS	Length of advertisement (Main hoarding)	Height of Side hoarding	Rental for side hoarding	No. of side hoardings	Revenue/month	Operating Cost
				Staircase	Lift	Escalator	(INR)	(-)	Feet	Feet	(INR)	(No.)	(INR)	(INR)
18	South	Kengeri Bus stop-Mysore Road	On ORR - From Bus stop to Kengeri New Bus stop	Yes	Yes	No	14,916,667	F	66	8.3	307.7	2.0	403,079	1,193,333
19	South	Satellite Bus Stand, Mysore Road	Big Bazar to Ramani Timber Mark	Yes	Yes	No	14,916,667	F	66	8.3	307.7	2.0	403,079	1,193,333
20	South	Forum mall from PVR entrance (on Hosur Rd)	On Hosur Road - From Sharma Enterprises to PVR side	Yes	Yes	No	16,270,833	F	82	8.3	307.7	2.0	486,865	1,301,667
21	South	Koramangala Sony center	On Koramangala IRR - From KFC to Aubon pain	Yes	Yes	Yes	31,375,000	F	98	8.3	450.0	1.0	417,289	2,510,000
	South		From Sapphire to KFC	Yes	Yes	Yes	29,208,333	F	72	8.3	450.0	1.0	319,259	2,336,667
	South		On Koramangala IRR - From Sony center to Sapphire	Yes	Yes	Yes	31,375,000	E	98	8.3	450.0	1.0	417,289	2,510,000
	South		From Aubon pain to Sony center	Yes	Yes	Yes	29,208,333	F	72	8.3	450.0	1.0	319,259	2,336,667

Sl. No	Zone	Locations of Sky Walks		Options			Project Cost (Final)	LOS	Length of advertisement (Main hoarding)	Height of Side hoarding	Rental for side hoarding	No. of side hoardings	Revenue/month	Operating Cost
				Staircase	Lift	Escalator	(INR)	(-)	Feet	Feet	(INR)	(No.)	(INR)	(INR)
22	South	Near Embassy Golf Link Road, Domlur – Kormangala Inner Ring Road	On Koramangala IRR - From corner of Hero Honda Showroom to Corner of TVS Showroom.	Yes	Yes	Yes	31,104,167	F	95	8.3	450.0	2.0	810,071	2,488,333
23	South	In front of Embassy Software Park (Koramangala IRR)	On Koramangala IRR -From Yahoo Gate to Car workshop	Yes	Yes	Yes	30,833,333	F	92	8.3	307.7	2.0	537,137	2,466,667
24	South	Forum Mall Adugodi Road (Luskar Rd)	On Audugodi-Hosur Rd - From Bosch to forum mall	Yes	Yes	Yes	29,208,333	F	72	8.3	450.0	2.0	638,518	2,336,667
25	South	Jayanagar 4th Block (Cool Joint Junction)	From College to Shop	Yes	Yes	No	13,833,333	E	52	8.3	450.0	2.0	491,472	1,106,667
	South		From Cool Joint to Shop	Yes	Yes	No	13,833,333	E	52	8.3	450.0	2.0	491,472	1,106,667
	South		From Cool Joint to Reliance	Yes	Yes	No	9,500,000	F	-	8.3	450.0	2.0	99,351	760,000
26	South	Jayanagar 3rd Block (near Corporation Bank)	From Rajalakshmi Jewels to Construction Building	Yes	Yes	No	13,020,833	D	43	8.3	450.0	2.0	417,949	1,041,667

Sl. No	Zone	Locations of Sky Walks		Options			Project Cost (Final)	LOS	Length of advertisement (Main hoarding)	Height of Side hoarding	Rental for side hoarding	No. of side hoardings	Revenue/month	Operating Cost
				Staircase	Lift	Escalator	(INR)	(-)	Feet	Feet	(INR)	(No.)	(INR)	(INR)
	South		From Rajalakshmi Jewels to Janardhan Store	Yes	Yes	No	15,458,333	F	72	8.3	450.0	2.0	638,518	1,236,667
27	South	Banashankari Bus Stop	From Bus Stand to Temple	Yes	Yes	No	13,833,333	E	52	8.3	450.0	2.0	491,472	1,106,667
	South		From Metro to Bus Stand	Yes	Yes	Yes	32,729,167	F	115	8.3	450.0	2.0	957,116	2,618,333
31	South	Near Kathriguppe Arch (near Big Bazar)	From Arch to Shop	Yes	Yes	Yes	27,583,333	E	52	8.3	307.7	2.0	336,049	2,206,667
32	South	Bank Colony Bus Stand	From Bus Stop to Raymond's Showroom	Yes	Yes	No	13,020,833	D	43	8.3	307.7	2.0	285,777	1,041,667
34	South	In front of Sanjay Gandhi hospital in Jayanagar IV Block	On 32nd Cross Road - From Hospital Gate to Bus Stop	Yes	Yes	No	14,375,000	F	59	8.3	307.7	2.0	369,564	1,150,000
35	South	Near Sirsi Circle at Christian Graveyard, Mysore Road	On Mysore Road - From Christian Graveyard to Furniture Shop	Yes	Yes	No	14,375,000	F	59	8.3	450.0	2.0	540,487	1,150,000
36	South	In front of yediyur market, yediyur	On Jayanagar Road- From Vidura Medicals to SLV Wines.	Yes	Yes	No	15,729,167	F	75	8.3	450.0	2.0	663,025	1,258,333

Sl. No	Zone	Locations of Sky Walks		Options			Project Cost (Final)	LOS	Length of advertisement (Main hoarding)	Height of Side hoarding	Rental for side hoarding	No. of side hoardings	Revenue/month	Operating Cost
				Staircase	Lift	Escalator	(INR)	(-)	Feet	Feet	(INR)	(No.)	(INR)	(INR)
37	South	Near Patalamma Road in South end circle	On Patalamma Road- From Petrol Bunk to Park	Yes	Yes	No	15,729,167	F	75	8.3	450.0	2.0	663,025	1,258,333



Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity. Please see www.deloitte.com/about for a detailed description of the legal structure of Deloitte Touche Tohmatsu Limited and its member firms.

This document and the information contained herein have been prepared by Deloitte Touche Tohmatsu Indian Private Limited (DTTIPL) for IDD and BBMP. Contents of this document should not be copied or reproduced by any third party or otherwise quoted or referred to, in whole or in part, without the prior permission of DTTIPL in writing. DTTIPL disclaims any responsibility for any loss or damage suffered by any entity by taking reliance of this document. Furthermore DTTIPL will not be bound to discuss, explain or reply to queries raised by any agency other than the intended recipients of this document.

The conclusions drawn and recommendations made are based on the information available at the time of writing this document.

DTTIPL does not accept any liability or responsibility for the accuracy, reasonableness or completeness of, or for any errors, omissions or misstatements, negligent or otherwise and does not make any representation or warranty, express or implied, with respect to the information contained in this document. The information contained in this document is selective and is subject to updating, expansion, revision and amendment. It does not, and does not purport to, contain all the information that a recipient may require. Further this is not an audit report and no reliance should be based on this report for the purposes of audit.

©2012 Deloitte Touche Tohmatsu India Private Limited. Member of Deloitte Touche Tohmatsu Limited