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# EVALUATION STUDY OF FOOT OVER BRIDGES & SUBWAYS IN DELHI

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(Final REPORT)

Prepared for

**PLANNING DEPARTMENT  
GOVERNMENT OF N.C.T. OF DELHI**

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## LIST OF INSTALLATIONS WITH IDENTIFICATION NUMBER

### CODES USED FOR IDENTIFICATION OF FOB AND SUBWAYS

Sl. No.	ID/Group	FOB/ SUBWAY	Zone	Name/ Location
1	1.3	FOB	North	Near Azadpur Around
2	1.4	FOB	North	Road no. 51 Mukundpur Road
3	2.1	FOB	North	Bohara Enclave 1
4	2.2	FOB	North	Bohara Enclave 2
5	3.1	FOB	North	Near Lokesh cinema, Nagloi
6	3.2	FOB	North	Near Rajdhani park, Nagloi
7	4.2	FOB	North	Near Janmastmi Park, Punjabi Bagh
8	4.3	FOB	North	Near sakurbasti Railway station
9	4.4	FOB	North	Punjab keshari, Wazirpur
10	5.3	FOB	North	Shivdas puri marg, Karmapura
11	6.3	FOB	North	Near Sarai Rohila police station
12	6.4	FOB	North	Sakurpur Metro station
13	7.1	FOB	North	Prembari
14	7.2	FOB	North	Netaji shubhace place
15	7.3	FOB	North	Sahipur Village Near Shalimar
16	7.4	FOB	North	Road no. 37 Near kanhaiya nagar
17	9.3	FOB	South	Pankha Road Sagarpur
18	9.4	FOB	East	Hasanpur, Patparganj
19	10.1	FOB	South	Pampsh enclave
20	10.2	FOB	South	Moti bagh Ring Road, Moti Bagh
21	10.3	FOB	South	Gurudwara Nanakpur, Moti Bagh
22	10.4	FOB	South	Mochi bagh Shatya Niketan, Moti Bagh
23	11.1	FOB	South	Dhaura Kuan to Moti bagh on NH8
24	11.2	FOB	South	Near Dhaura kuan Metro station
25	12.3	FOB	South	Maharani bagh
26	12.4	FOB	South	Nehru Nagar
27	13.1	FOB	South	Ashram Mathura Road
28	13.2	FOB	South	Bhogal Mathura Road
29	13.3	FOB	South	Sarita Vihar
30	13.4	FOB	South	Sahin bagh Kalindi kunj
31	14.1	FOB	South	Modi mill Near NSIC
32	14.2	FOB	South	Prahladpur MB Road
33	14.3	FOB	South	Lal kuan, Badarpur
34	14.4	FOB	South	Jamiya Hamdard University, Sangam Vihar
35	15.1	FOB	South	Batra hospital, Sangam Vihar
36	15.2	FOB	South	Subarato Park, Vasant Vihar
37	15.3	FOB	South	Munirka
38	16.1	FOB	South	Kalka ji Mandir
39	16.2	FOB	South	Bhairo Mandir Kalkaji

Sl. No.	ID/Group	FOB/ SUBWAY	Zone	Name/ Location
40	16.3	FOB	South	Near DC office MB Road
41	16.4	FOB	South	Saket Metro station, MB Road
42	17.1	FOB	South	Ansari Nagar
43	17.2	FOB	South	Jia Sarai, Panchsheel
44	17.3	FOB	South	Panchsheel Enclave, Panchsheel
45	20.4	FOB	East	ITO
46	21.1	FOB	South	Rajauri Garden
47	22.2	FOB	East	Majnu ka tila
48	22.3	FOB	East	Delhi police Apartment, UP link Road Mayur Vihar
49	22.4	FOB	East	Kishan kunj
50	23.1	FOB	East	Ghazipur Grade seprator-1
51	23.2	FOB	East	Latita park
52	23.3	FOB	East	Pandav Nagar NH 24
53	23.4	FOB	East	Samachar Apartment, Mayur Vihar Extension
54	24.1	FOB	East	Sakarpur School Block, Marginal Band Road
55	24.2	FOB	East	Sakarpur School Block
56	24.3	FOB	East	Vinod Nagar Patparganj NH 24
57	24.4	FOB	East	Ambedkar collage Road No. 59
58	25.1	FOB	East	Brijpuri Road no. 59
59	25.2	FOB	East	Ashok nagar
60	25.3	FOB	East	Bhopra Border Harsh Vihar
61	25.4	FOB	East	Jhandewalan Mandir, Rani jhansi Road
62	26.1	FOB	East	Jhandewalan Mandir, D B G Road
63	26.2	FOB	East	Apsara Boder No. 1, Shahadra
64	26.3	FOB	East	Apsara Boder No. 2, Shahadra
65	26.4	FOB	East	Ramprasth Road No. 56, Ramprastha
66	27.1	FOB	East	Vishwas Nagar Road Nol 57A
67	27.2	FOB	East	Bhikam Singh Colony Road No. 57, Vishwas Nagar
68	27.3	FOB	East	EDM Mall, Anand Vihar
69	27.4	FOB	East	ISBT Anand Vihar
70	28.1	FOB	East	Ghazipur Road No. 57
71	28.2	FOB	East	Ghazipur Grade seprator-2
72	28.3	FOB	East	Taj Highway Apartment Road No 56, Ghazipur
73	28.4	FOB	East	Gandhi nagar Road No 57
74	29.4	FOB	East	ISBT Kasmiri gate
75	1.1	SUB	North	In front of Azadpur Fruit and Vegetable Mandi
76	1.2	SUB	North	Azadpur fruit and Vegetable mandi near Masjid
77	2.3	SUB	North	Near Rohini court Madhuban chouk Pitampura
78	2.4	SUB	North	Sarswati Vihar
79	3.3	SUB	North	Metro station, Nagloi
80	3.4	SUB	North	Maharaja Agrasen Hospital, Punjabi Bagh
81	4.1	SUB	North	Ashok park main, Punjabi Bagh
82	5.1	SUB	North	Near Rajdhani Collage, Raja Garden
83	5.2	SUB	North	ESI Hospital, Raja Garden

Sl. No.	ID/Group	FOB/ SUBWAY	Zone	Name/ Location
84	5.4	SUB	North	Punjabi bagh Chauk, Punjabi Bagh
85	6.1	SUB	North	Near Indralok Masjid
86	6.2	SUB	North	Near Subhadra colony gate, Sashtri Nagar
87	9.1	SUB	North	Shivaji marg Najafgadh road
88	9.2	SUB	South	Palam dabri Road
89	11.3	SUB	South	Dhaura kuan
90	11.4	SUB	South	Naraina
91	12.1	SUB	North	At Ring Road Wazirpur
92	12.2	SUB	North	At Ring Road Britainia
93	15.4	SUB	South	Munirka
94	17.4	SUB	South	Hyatt Near Bhikhaji kama place
95	18.1	SUB	South	Hyatt Subway
96	18.2	SUB	South	Safdarjang Hospital Subway
97	18.3	SUB	South	Ansal plaza subway
98	18.4	SUB	South	Narauji nagar
99	19.1	SUB	South	IIT
100	19.2	SUB	South	Hauz khas Outer Ring Road
101	19.3	SUB	South	Swami nagar
102	19.4	SUB	South	Masjid Moth
103	20.1	SUB	South	Subway at Nehru place
104	20.2	SUB	East	Opp. WHO Building/Front of WHO
105	21.2	SUB	East	Vikas marg Near Laxmi nagar Metro station
106	21.3	SUB	East	Vikas marg Near Preet Vihar
107	21.4	SUB	East	Bhajanpura
108	22.1	SUB	East	Nigam bodh ghat
109	29.1	SUB	East	Gokulpuri
110	29.2	SUB	East	Jagatpuri T Point
111	29.3	SUB	East	Road No 58A Master Somnath marg, Yamuna Sports Complex

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# EVALUATION STUDY OF FOOT OVER BRIDGES & SUBWAYS IN DELHI

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## 1. STUDY BACKGROUND

Delhi is one of the fastest growing cities in the World both in terms of population and vehicular density. With increasing urban population, there are corresponding increases in the pedestrian movement as well as vehicle density on the roads leading to higher demand for appropriate infrastructure and facilitation in terms of walkways for smooth flow of traffic both along as well as across the roads. In absence of adequate and well-maintained infrastructure coupled with lack of awareness and respect for road safety norms among people, the possibilities of road accidents become much higher.

According to the Road Accident Statistics 2016 published by the Central Ministry of Road Transport, Delhi, with 7375 road accidents, was second among most populated cities of the country, first being Chennai with 7486 accidents. However, Delhi reported highest number of road accident deaths (1591) followed by Chennai (1183).<sup>1</sup>

Many of the road accidents in busy cities occur due to unsafe and uncoordinated movements of vehicles and pedestrians on the roads in violation with the traffic rules. But, such movements also become compulsions in absence of infrastructure facilities such as well-designed and suitably located foot over bridges (FOBs) and subways (SUBs) for crossing roads by the pedestrians. In Delhi, a large number of FOBs & SUBs have been constructed to avoid conflict between movements of vehicles and pedestrian, and facilitate accident-free movement of vehicles and pedestrians without interruptions.

In order to assess the utilisation of such facilities, the Planning Department of the Government of National Capital Territory (GNCT) have commissioned this study to survey, identify and analyse the factors affecting utilization of pedestrian facilities; and recommend measures to increase the use of such facilities.

## 2. INTRODUCTION

Overpasses and underpasses are built as part of road and rail transport infrastructure to allow for the uninterrupted flow of bicycle and pedestrian movement separated from vehicle traffic.

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<sup>1</sup> <http://www.indiaenvironmentportal.org.in/files/file/Road%20accidents%20in%20India%202016.pdf>

However, construction and maintenance of such over bridges and underpass are costly. Therefore, sometimes it is argued that it may be more appropriate to use traffic-calming measures or install a pedestrian-activated signals that are accessible to all pedestrians because overpasses and underpasses are costly, visually intrusive, and often poorly utilized when a more direct at-grade crossing is possible.<sup>2</sup>

Pedestrian overpasses over highways or railroads become more expensive, especially when elevators or long ramps for wheelchair users are required. Without elevators or ramps, people with mobility handicaps will not be able to use the structure. Often, people will prefer to walk across a busy road at grade rather than expend the effort to climb up the bridge and go over it. Therefore, it may be argued that overpasses should only be used where the numbers of users justify the costs. Narrow, enclosed structures can result in perceptions of low personal security among users; while wide structures with good lighting can help reduce this perception.<sup>3</sup>

### 3. OBJECTIVE OF THE STUDY

The issue of safe walking of pedestrians in view of high speed multi modes traffic in the city can be addressed by providing the option of pedestrian subways and foot over-bridges for crossing the roads. A foot over bridge & subway is designed for pedestrians or in some cases cyclist to cross the roads. In Delhi, large numbers of FOBs & Subways have been constructed to avoid vehicle pedestrian conflict and smooth flow of both without interruptions. The objective of this survey is to evaluate the FOBs and SUBs with respect to the status of their physical condition, quality and utilisation; and to identify and analyse factors affecting utilization of these facilities.

### 4. METHODOLOGY USED

The Public Works Department (PWD) of the GNCT have constructed 74 foot over bridges (FOBs) & 37 subways (SUB) in Delhi. For the purpose of this study, all the 74 FOBs and 37 SUBs have been considered. The primary methodology for evaluation involves interviews of users and non-users of these facilities as well as counting of persons actually using and not using these facilities. Structured questionnaires have been used to collect the data. Qualitative as well as quantitative methods have been used to arrive at the key findings leading to implementable recommendations. Thus, the evaluation study has covered two type of survey i.e.

- (a) Observational survey for number of footfalls and non-users
- (b) Perception survey of users and non-users at FOBs & SUBs

<sup>2</sup> [http://www.pedbikeinfo.org/planning/facilities\\_crossings\\_over-underpasses.cfm](http://www.pedbikeinfo.org/planning/facilities_crossings_over-underpasses.cfm)

<sup>3</sup> <https://en.wikipedia.org/wiki/Footbridge>

The perception survey covers both types of pedestrians i.e. those using FOB & subway and those not using FOB & subway (i.e. crossing road at/around FOB & Subway). Separate schedules have been used for the two groups.

Besides this, the availability and status of functioning of various infrastructural facilities at the site of FOB & SUBs are also noted using a separate Infrastructure schedule.

The selection of respondents has been random but attempt has been made to include persons of different age group and gender.

In order to capture the effect of time, **survey of “users” and “non-users” have been done** during three periods of the day, namely morning hours (7:00 am to 10:00 am), day time (10:00 am to 5:00 pm), and evening time (5:00 pm to 8:00 pm).

#### 4.1 Summary of Questionnaires used to evaluate the performance of FOBs and SUBs:

There are four types of schedules which have been used in this study and a copy of each of them is annexed at the end of this report. These schedules include the following:

Infrastructure Schedule: The infrastructure schedule has been developed to capture the status of the existing installations in terms of type of facilities, number of steps, safety provisions, its maintenance, GPS (Global Positioning System) location in terms of Latitudes and Longitudes, etc.

Users Schedule: The user schedule has five sections namely: (a) information to identify the infrastructure; (b) personal profile of the respondent; (c) plausible reasons for USING the infrastructure; (d) Plausible suggestions to improve the use of infrastructure; and (e) open question to capture any other suggestion.

Non-users Schedule: Similar to the user schedule, the non-user schedule also has five sections namely: (a) information to identify the infrastructure; (b) personal profile of the respondent; (c) plausible reasons for NOT USING the infrastructure; (d) Plausible suggestions to improve the use of infrastructure; and (e) open question to capture any other suggestion.

Counting Schedule: Counting schedule has three sections to capture data on total users and non-users and also those who are using facilities like lift and escalators. The counting Schedule includes provision to count gender-wise, age-group-wise distribution.

#### 4.2 Use of LIKERT scale for responses

The importance of reasons for using/not-using infrastructure could vary from person to person. Therefore, to capture this variation in importance, five-point LIKERT scale has been used. The Five points are (1) Most Important, (2) Important, (3) Moderately Important, (4) Slightly Important, and (5) Not Important. The same scale has been used for the suggestions also. It may be noted that suggestions are prompted in the sense that a plausible list of suggestions as well as reasons has been provided in the questionnaire.

### 4.3 Open Questions

Going beyond the prompting statements for reasons and suggestions, a section has been added to capture spontaneous response for suggestions through an open question.

### 4.4 Overall Rating

An open question on the overall rating of FOBs and SUBs in general has also been included to understand the expectation of the users and non-users about the available infrastructure. The response has been obtained on a five point scale: (1) Very Good, (2) Good, (3) Acceptable, (4) Poor, and (5) Very Poor.

Another open question is asked to name the best FOB/SUB in Delhi irrespective of the agency it belonged to.

### 4.5 Data Analysis

The data has been analysed using statistical packages.

### 4.6 Sample Design

The schedules for users or non-users of FOBs & subway are canvassed at all 74 locations of FOBs and 37 locations of subway. The persons are interviewed in the vicinity of FOBs & subway within the range of 50 meters on both sides of it across the road. The feedback is collected on two separate questionnaires meant for, (a) pedestrian using FOBs & subways and (b) pedestrian not using FOB & subway. In this way, the perceptions of both types of pedestrians are captured.

For this study, 60 respondents from each foot over bridge/subway are selected randomly on the site containing 30 respondent using foot over bridge/subway and 30 respondents not using the facility of foot over bridge/subway, each equally distributed across three different time intervals as indicated in Table 1. Accordingly, 6660  $[(74+37) \times 60]$  respondents have been interviewed.

TABLE 1: SCHEDULE OF SAMPLES TO BE CANVASSED FROM USERS AND NON-USERS

Time Slot	Respondents using FOB/Subway	Respondents not using FOB/Subway	Total Respondents
7 a.m. to 10.00 a.m.	10	10	20
10.00 a.m. to 05.00 p.m.	10	10	20
5.00 p.m. to 8.00 p.m.	10	10	20
Total	30	30	60

In addition to the interviews of users and non-users, data is also collected in respect of infrastructure facilities available and their status of functioning on the day of survey.



#### 4.7 Actual number of Responses

During the survey one of the SUBs at Ansal Plaza was found to be closed. However, this unit is also included for the purpose of analysis. The infrastructure data has been collected and users and non-users both are considered to be zero in counting. Accordingly, the total respondents as users and non-users have reduced.

In additions, a few FOB/SUB were found to have no user; while some of them had no non-users. Thus, the total number of respondents does not match with the theoretical number as per sampling plan. As mentioned earlier, with 111 FOBs and SUBs, the theoretical number of total respondents as users and non-user is expected to be 6600. Out of this 3300 are expected to be users and another 3300 are expected to be non-users. However, because of the reasons mentioned above, the numbers of respondents are lower as would be presented in subsequent chapters.

## 5. REGIONAL DISTRIBUTION OF FOOT OVERBRIDGES AND SUBWAYS IN DELHI

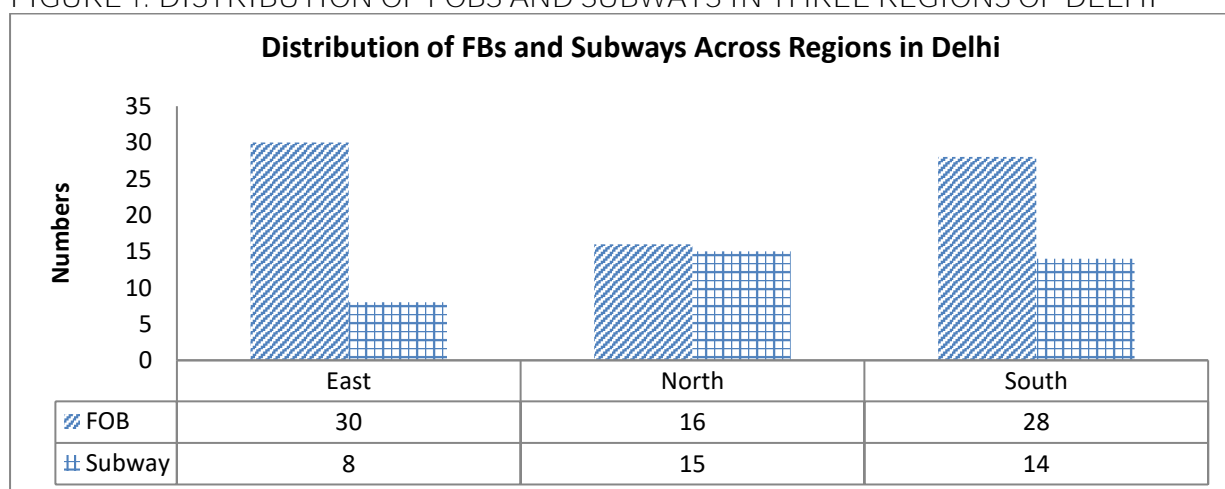
The list of FOBs and SUs has been provided by the PWD, GNCTD, which are distributed in three broad zones namely East, North and South. Accordingly, all the information in this report is presented by these zones for better understanding of the status. The survey has been conducted for all the 74 FOBs and 37 SUBs. The distribution of these FOBs and SUBs is given in Table 2. Clearly, East zone dominates in provisioning of FOBs, while North zone dominates in provisioning of SUBs.

TABLE 2: GEOGRAPHICAL DISTRIBUTION OF FOB AND SUBWAYS IN DELHI

Geographical distribution of FOB and Subways in Delhi			
Numbers			
Zone	FOB	Subway	Total
East	30	8	38
North	16	15	31
South	28	14	42
Total	74	37	111
Distribution (percentage)			
East	40.54	21.62	34.23
North	21.62	40.54	27.93
South	37.84	37.84	37.84
Total	100	100	100

Source (basic data): PWD of GNCTD

FIGURE 1: DISTRIBUTION OF FOBS AND SUBWAYS IN THREE REGIONS OF DELHI



Source (basic data): PWD of GNCTD

## 6. STATUS OF FOB/SUBWAY INFRASTRUCTURE IN DELHI

The status of infrastructure is summarised in Tables 3 to 37, while full detail of each FOB and SUB is provided in Appendix 1. Section 6.1 presents descriptive data on FOBs and Section 6.2 present facilities at Subways.

### 6.1 Facilities at FOBs

#### 6.1.1 Lifts

Out of 74 FOBs 17 FOBs are provided with lifts (Table 3). This means about 23 per cent of the FOBs do not have lifts. Numbers of FOBs with lifts are almost evenly distributed across three zones of East, North, and South (Table 3).

TABLE 3: DISTRIBUTION OF LIFTS INSTALLED WITH FOBs IN DELHI

Zone	Lift			Distribution by Column			Distribution by Row		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
East	6	24	30	20.00	80.00	100	35.3	42.1	40.5
North	6	10	16	37.50	62.50	100	35.3	17.5	21.6
South	5	23	28	17.86	82.14	100	29.4	40.4	37.8
Total	17	57	74	22.97	77.03	100	100	100	100

#### 6.1.2 Lift Capacity

The lift capacities vary from five persons to 16 persons. Most of the heavy duty lifts are located in East and South zones (Table 4). The highest capacity is installed at FOB near Saket Metro Station. Complete list of lifts with capacity is presented in Table 5 (also see Appendix 1).

TABLE 4: LIFT CAPACITY WHEREVER IT IS AVAILABLE

Zone	Lift Cap (persons)					Total
	5	8	10	13	16	
East	0	1	0	5	0	6
North	3	1	2	0	0	6
South	1	1	0	2	1	5
Total	4	3	2	7	1	17

TABLE 5: LIST OF FOBS WITH LIFTS AND THEIR CAPACITIES

List of all Lifts with capacity					
SL No	ID	FOB/SUB	Zone	Location	Lift Capacity
1	1.4	FOB	North	Azadpur Road no. 51 Mukundpur Road	5
2	3.2	FOB	North	Near Rajdhani park Nagloi	5
3	4.4	FOB	North	Punjab Keshari	10
4	6.4	FOB	North	Sakurpur Metro station	5
5	7.2	FOB	North	Netaji shubhace place	10
6	7.4	FOB	North	Road no. 37 Near kanhaiya nagar	8
7	11.2	FOB	South	Near Dhaula kuan Metro station	5
8	15.3	FOB	South	Munirka	13
9	16.4	FOB	South	Saket Metro station, MB Road	16
10	17.2	FOB	South	Jia Sarai, Panchsheel	13
11	17.3	FOB	South	Panchsheel Enclave	8
12	22.3	FOB	East	Delhi police Apartment	13
13	22.4	FOB	East	Kishan kunj	13
14	23.4	FOB	East	Samachar Apartment, Mayur Vihar	13
15	24.2	FOB	East	Sakarpur School Block	8
16	26.2	FOB	East	Apsara Boder No. 1, Shahadra	13
17	26.3	FOB	East	Apsara Boder No. 2, Shahadra	13

### 6.1.3 Lifts in working order

Out of 17 lifts installed with FOBs, only nine were found to be working during the survey period. In fact, all the six lifts installed in East zone were in break-down conditions, while North and South zones reported break downs of one lift each (Table 6). Thus, the overall availability of lifts is about 53 per cent (Table 5). In particular the lifts found to be broken down on the days of survey include: (1) Near Radhani Park, (2) Delhi Police Apartment, (3) Apsara Border-2, (4) Kishan Kunj, (5) Apsara Border-1, (6) Sanchar Apartment, (7) Sakarpur School Block, and (8) Near Dhaula Kuan Metro Station.

TABLE 6: LIFTS FOUND TO BE IN WORKING CONDITION

Zone	Lift Working			Distribution by Column			Distribution by Row		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
East	0	6	6	0.0	100.0	100	0.0	75.0	35.3
North	5	1	6	83.3	16.7	100	55.6	12.5	35.3
South	4	1	5	80.0	20.0	100	44.4	12.5	29.4
Total	9	8	17	52.9	47.1	100	100	100	100

#### 6.1.4 Lift Break down days

The breakdown period of lifts varies from one day to 1460 days. Out of eight broken down lifts, seven lifts were down for more than seven days (Table 7).

TABLE 7: NUMBER OF DAYS LIFTS IS REPORTED TO BE IN BREAKDOWN CONDITION

Zone	Number of lifts breakdown by Number of days of break down					
	1	7	60	90	1460	Total
East	0	1	2	2	1	6
North	1	0	0	0	0	1
South	0	0	0	0	1	1
Total	1	1	2	2	2	8
Names	Near Rajdhani Park	Delhi Police Apartment	Apsara Border-2 Kishan Kunj	Apsara Border-1 Sanchar Apartment	Sakarpur School Block Near Dhaura Kuan Metro Station	

#### 6.1.5 Escalators

There are 17 FOBs equipped with escalators, which means about 23 per cent of FOBs have escalators (Table 8). Maximum numbers of eight escalators are installed in East Zone, six in South Zone and only three out of 13 FOBs in North zone have Escalator. Thus, together with lifts, about 46 per cent of the FOBs have mechanised lift either in the form of lift or escalator. List of all escalators is given in Table 9.

TABLE 8: NUMBER OF FOBs EQUIPPED WITH ESCALATORS

Zone	Escalator			Distribution by Column			Distribution by Row		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
East	8	22	30	26.67	73.33	100	47.1	38.6	40.5
North	3	13	16	18.75	81.25	100	17.6	22.8	21.6
South	6	22	28	21.43	78.57	100	35.3	38.6	37.8
Total	17	57	74	22.97	77.03	100	100	100	100

TABLE 9: LIST OF FOBs WITH ESCALATOR

List of all Escalators				
Sl. No.	ID	FOB/ SUB	Zone	Place of Interview
1	1.3	FOB	North	Azadpur Near Azadpur Around
2	2.1	FOB	North	Bohara Enclave -1
3	2.2	FOB	North	Bohara Enclave 2
4	9.4	FOB	East	Hasanpur Patparganj
5	10.2	FOB	South	Moti bagh Ring Road

List of all Escalators				
Sl. No.	ID	FOB/ SUB	Zone	Place of Interview
6	10.3	FOB	South	Gurudwara Nanakpur
7	10.4	FOB	South	Mochi bagh Shatya Niketan
8	12.3	FOB	South	Maharani bagh
9	12.4	FOB	South	Nehru Nagar
10	20.4	FOB	East	ITO
11	21.1	FOB	South	Rajauri Garden
12	26.4	FOB	East	Ramprasth Road No. 56
13	27.2	FOB	East	Bhikam Singh Colony Road No. 57
14	27.3	FOB	East	EDM Mall Anand Vihar
15	27.4	FOB	East	ISBT Anand Vihar
16	28.3	FOB	East	Taj Highway Apartment Road No 56
17	29.4	FOB	East	ISBT Kashmiri gate

#### 6.1.6 Escalators in Working Order

The availability of escalators appears to be better than lifts. Almost 71 per cent of escalators were reported to be operational during the survey period. Maximum break down of 66.7 per cent is reported from the South zone (Table 10). In particular the lifts found to be broken down on the days of surveys include: (1) Bohara Enclave -1, (2) Bohara Enclave- 2, (3) Moti Bagh Ring Road, (4) Maharani Bagh, and (5) Rajauri Garden.

TABLE 10: ESCALATORS FOUND TO BE IN WORKING CONDITION

Zone	Escalator Working			Distribution by Column			Distribution by Row		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
East	8	0	8	100.0	0.0	100	66.7	0.0	47.1
North	1	2	3	33.3	66.7	100	8.3	40.0	17.6
South	3	3	6	50.0	50.0	100	25.0	60.0	35.3
Total	12	5	17	70.6	29.4	100	100	100	100

#### 6.1.7 Escalators Breakdown Days

Like lifts, the breakdown period of escalators also vary from one day to 1095 days. Almost 60 per cent of the break down escalators was found to be out of operations for more than 15 days. The names of the escalators in break-down condition are presented in Table 11.

TABLE 11: NUMBER OF DAYS AN ESCALATOR IS REPORTED TO BE IN BREAKDOWN CONDITION

	Distribution of Escalator by break down days				
Zone	1	15	60	1095	Total
East	0	0	0	0	0
North	2	0	0	0	2
South	0	1	1	1	3
Total	2	1	1	1	5
Names of the Infrastructure	Bohara Enclave -1, Bohara Enclave -2	Maharani Bagh	Moti Bagh on Ring Road	Rajauri Garden	

### 6.1.8 Security Guard

Almost 78 per cent of the FOBs did not report presence of security guards. Maximum presence was reported in North zone where about 56 per cent of them were present on the dates of surveys (Table 12).

A complete list of installations where Security Guards were not found on the dates of survey is presented in Appendix 2.

TABLE 12: AVAILABILITY OF SECURITY GUARDS AT FOBS

	Availability of Security Guard								
	Numbers			Distribution by Column			Distribution by Row		
Zone	Yes	No	Total	Yes	No	Total	Yes	No	Total
East	1	29	30	3.3	96.7	100	6.3	50.0	40.5
North	9	7	16	56.3	43.8	100	56.3	12.1	21.6
South	6	22	28	21.4	78.6	100	37.5	37.9	37.8
Total	16	58	74	21.6	78.4	100	100	100	100

### 6.1.9 Steps in Staircase

The FOBs have been constructed with staggered number of steps. Some do not have steps and only ramp is there, while some have very small numbers of steps. Thus, the numbers of steps vary from three to 116. However, majority of FOBs have 40-50 steps (Table 13).

Some of the FOBs having exceptionally high number of Steps include: ITO (116), Maharani Bagh (108), Batra hospital (108), and Jamiya Hamdard University (99).

Full list of FOBs with number of steps is provided in Appendix 2. FOB at Ghazipur Grade Separator has just three steps as it is on level ground.

TABLE 13: NUMBER OF STEPS IN STAIRCASE AT FOBS

Zone wise number of FOB					Distribution by Column					Distribution by Row				
Stair Steps Category	East	North	South	Total	Stair Steps Category	East	North	South	Total	Stair Steps Category	East	North	South	Total
3	2	0	0	2	3	7.4	0.0	0.0	3.0	3	100	0.0	0.0	100
25	0	1	0	1	25	0.0	7.7	0.0	1.5	25	0.0	100	0.0	100
35	1	0	1	2	35	3.7	0.0	3.7	3.0	35	50.0	0.0	50.0	100
36	0	0	1	1	36	0.0	0.0	3.7	1.5	36	0.0	0.0	100	100
38	1	2	4	7	38	3.7	15.4	14.8	10.4	38	14.3	28.6	57.1	100
39	0	1	1	2	39	0.0	7.7	3.7	3.0	39	0.0	50.0	50.0	100
40	3	2	9	14	40	11.1	15.4	33.3	20.9	40	21.4	14.3	64.3	100
41	3	1	0	4	41	11.1	7.7	0.0	6.0	41	75.0	25.0	0.0	100
42	3	1	1	5	42	11.1	7.7	3.7	7.5	42	60.0	20.0	20.0	100
43	1	1	2	4	43	3.7	7.7	7.4	6.0	43	25.0	25.0	50.0	100
44	1	0	2	3	44	3.7	0.0	7.4	4.5	44	33.3	0.0	66.7	100
45	2	2	0	4	45	7.4	15.4	0.0	6.0	45	50.0	50.0	0.0	100
46	3	0	2	5	46	11.1	0.0	7.4	7.5	46	60.0	0.0	40.0	100
48	1	1	0	2	48	3.7	7.7	0.0	3.0	48	50.0	50.0	0.0	100
50	1	0	1	2	50	3.7	0.0	3.7	3.0	50	50.0	0.0	50.0	100
52	2	1	0	3	52	7.4	7.7	0.0	4.5	52	66.7	33.3	0.0	100
55	1	0	0	1	55	3.7	0.0	0.0	1.5	55	100	0.0	0.0	100
56	1	0	0	1	56	3.7	0.0	0.0	1.5	56	100	0.0	0.0	100
99	0	0	1	1	99	0.0	0.0	3.7	1.5	99	0.0	0.0	100	100
108	0	0	2	2	108	0.0	0.0	7.4	3.0	108	0.0	0.0	100	100
116	1	0	0	1	116	3.7	0.0	0.0	1.5	116	100	0.0	0.0	100
Total	27	13	27	67	Total	100	100	100	100	Total	40.3	19.4	40.3	100

#### 6.1.10 Blockade along road side to restrict direct cross over

Blockade alongside road is reported to be constructed in case of 97 per cent of FOBs (Table 14). There is no blockade at FOBs installed at Modi mill Near NSIC, and Apsara Boder No. 2. However, at most of the places, blockade/ road dividers are not sufficient to prevent movement of people. Appendix 3 presents a set of photographs revealing the inadequacies that allow pedestrians to be able to cross over roads with least resistance.

TABLE 14: PROVISIONING OF BLOCKADE ALONG ROAD SIDE TO RESTRICT DIRECT CROSS OVER

Blockade									
Zone	Numbers			Distribution by Column			Distribution by Row		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
East	29	1	30	96.7	3.3	100	40.3	50.0	40.5
North	16	0	16	100.0	0.00	100	22.2	0.0	21.6
South	27	1	28	96.4	3.6	100	37.5	50.0	37.8
Total	72	2	74	97.3	2.7	100	100	100	100

It is very obvious that roads can be crossed over avoiding FOBs and SUBs only if there are alternative ways in the form of broken dividers, low dividers, cuts etc.



In fact, near every FOB and Subway, the blockades must be redesigned and constructed with such height and length that it becomes impossible for pedestrians to cross the roads without taking the help of FOBs and SUBs.

#### 6.1.11 Railing along Stairs

Railings are constructed along the stairs in case of 99 per cent of FOBs (Table 15). Only at Latita Park, there is no railing along the stairs.

TABLE 15: PROVISIONING OF RAILINGS ALONG STAIRS

Railing along Stairs									
	Numbers			Distribution by Column			Distribution by Row		
Zone	Yes	No	Total	Yes	No	Total	Yes	No	Total
East	29	1	30	96.7	3.3	100	39.7	100.0	40.5
North	16	0	16	100.0	0.0	100	21.9	0.0	21.6
South	28	0	28	100.0	0.0	100	38.4	0.0	37.8
Total	73	1	74	98.7	1.4	100	100	100	100

#### 6.1.12 Bridge side Rail

Almost 99 per cent of FOBs have railings constructed along the bridge side stairs (Table 16). Only at Ghazipur Grade separator -1, there is no railing along part of the bridge. However, since the height is not much and it has only three steps, this could be a low risk problem.

TABLE 16: PROVISIONING OF BRIDGE SIDE RAIL

Bridge Side Rail									
	Numbers			Distribution by Column			Distribution by Row		
Zone	Yes	No	Total	Yes	No	Total	Yes	No	Total
East	29	1	30	96.67	3.33	100	39.7	100.0	40.5
North	16	0	16	100.00	0.00	100	21.9	0.0	21.6
South	28	0	28	100.00	0.00	100	38.4	0.0	37.8
Total	73	1	74	98.65	1.35	100	100	100	100

#### 6.1.13 Rooftop

Only about 64 per cent of the FOBs have rooftop and this inadequacy is almost uniformly distributed across all the three regions (Table 17). Table 18 provides list of FOBs without rooftop. It may be noted that a large number of respondents in this survey have shown desirability for roof top. Roof top provides safety during rainy season, extreme summer and extreme cold. On top of it rooftop is essential for safeguard against height fear, which may lead to unbalanced step while walking on such FOBs. Therefore, rooftops may be provided for all FOBs.

TABLE 17: PROVISIONING OF ROOFTOP

Rooftop									
Zone	Numbers			Distribution by Column			Distribution by Row		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
East	18	12	30	60.00	40.00	100	38.3	44.4	40.5
North	9	7	16	56.25	43.75	100	19.1	25.9	21.6
South	20	8	28	71.43	28.57	100	42.6	29.6	37.8
Total	47	27	74	63.51	36.49	100	100	100	100

TABLE 18: LIST OF FOBS WITHOUT ROOFTOP

Sl. No.	ID	Zone	Name
1	1.4	North	Azadpur, Road no. 51 Mukundpur Road
2	3.2	North	Near Rajdhani park
3	4.2	North	Near Janmastmi Park
4	6.3	North	Near Sarai Rohila police station
5	6.4	North	Sakurpur Metro station
6	7.2	North	Netaji Subhash place
7	7.4	North	Road no. 37 Near kanhaiya nagar
8	9.3	South	Pankha Road Sagarpur
9	10.2	South	Moti Bagh Ring Road
10	11.1	South	Dhaura kuan to Moti Bagh on NH8
11	13.3	South	Sarita Vihar
12	15.3	South	Munirka
13	17.1	South	Ansari Nagar
14	17.2	South	Jia Sarai
15	17.3	South	Panchsheel Enclave
16	22.3	East	Delhi police Apartment
17	22.4	East	Kishan kunj
18	23.1	East	Ghazipur Grade separator
19	23.4	East	Samachar Apartment
20	24.2	East	Sakarpur School Block
21	26.2	East	Apsara Boder No. 1
22	26.3	East	Apsara Boder No. 2
23	26.4	East	Ramprasth Road No. 56
24	27.3	East	EDM Mall
25	27.4	East	ISBT Anand Vihar
26	28.2	East	Ghazipur Grade separator
27	28.3	East	Taj Highway Apartment Road No 56

### 6.1.14 Ramp

Ramps are constructed in about 42 per cent of the FOBs (Table 19). About 52 per cent of them exist in South, 16 per cent in North and 32 per cent in East zone. Ramp is essential for physically impaired persons and easy transporting of bicycles of cyclists. Table 20 provides list of FOBs without Ramp.

TABLE 19: PROVISIONING OF RAMP

Ramp									
Zone	Numbers			Distribution by Column			Distribution by Row		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
East	10	20	30	33.33	66.67	100	32.3	46.5	40.5
North	5	11	16	31.25	68.75	100	16.1	25.6	21.6
South	16	12	28	57.14	42.86	100	51.6	27.9	37.8
Total	31	43	74	41.89	58.11	100	100	100	100

TABLE 20: LIST OF FOBs WITHOUT RAMP

Sl. No.	ID	Zone	Name	Sl. No.	ID	Zone	Name
1	1.4	North	Azadpur, Road no. 51 Mukundpur Road	23	21.1	South	Rajauri Garden
2	3.1	North	Near Lokesh cinema	24	22.2	East	Majnu ka tila
3	3.2	North	Near Rajdhani park	25	22.3	East	Delhi police Apartment
4	4.2	North	Near Janmastmi Park	26	22.4	East	Kishan kunj
5	4.4	North	Punjab keshari	27	23.1	East	Ghazipur Grade separator
6	5.3	North	Shivdas puri marg	28	23.3	East	Pandav Nagar NH 24
7	6.3	North	Near Sarai Rohila police station	29	23.4	East	Samachar Apartment
8	6.4	North	Sakurpur Metro station	30	24.2	East	Sakarpur School Block
9	7.2	North	Netaji shubhace place	31	24.3	East	Vinod Nagar Patparganj NH 24
10	7.3	North	Sahipur Village Near Shalimar	32	25.3	East	Bhopra Border Harsh Vihar
11	7.4	North	Road no. 37 Near kanhaiya nagar	33	25.4	East	Jhandewalan Mandir
12	9.3	South	Pankha Road Sagarpur	34	26.1	East	Jhandewalan Mandir
13	11.1	South	Dhaura kuan to Moti Bagh on NH8	35	26.2	East	Apsara Boder No. 1
14	11.2	South	Near Dhaura kuan Metro station	36	26.3	East	Apsara Boder No. 2
15	13.1	South	Ashram Mathura Road	37	26.4	East	Ramprasth Road No. 56
16	13.2	South	Bhogal Mathura Road	38	27.3	East	EDM Mall
17	14.1	South	Modi mill Near NSIC	39	27.4	East	ISBT Anand Vihar
18	14.3	South	Lal kuan	40	28.1	East	Ghazipur Road No. 57
19	16.2	South	Bhairo Mandir Kalkaji	41	28.2	East	Ghazipur Grade seprator
20	16.4	South	Saket Metro station	42	28.3	East	Taj Highway Apartment Road No 56
21	17.1	South	Ansari Nagar	43	29.4	East	ISBT Kashmiri gate
22	17.3	South	Panchsheel Enclave				

### 6.1.15 Lighting

Only about 78 per cent of FOBs have lighting arrangements, North zone being least lighted (Table 21). List of all FOBs without the provision of light is presented in Table 22.

TABLE 21: PROVISIONING OF LIGHTING FACILITY

Lighting									
	Numbers			Distribution by Column			Distribution by Row		
Zone	Yes	No	Total	Yes	No	Total	Yes	No	Total
East	20	10	30	66.67	33.33	100	34.5	62.5	40.5
North	15	1	16	93.75	6.25	100	25.9	6.3	21.6
South	23	5	28	82.14	17.86	100	39.7	31.3	37.8
Total	58	16	74	78.38	21.62	100	100	100	100

TABLE 22: LIST OF FOBS REPORTING NO LIGHT

Sl. No.	ID	Zone	Name
1	7.3	North	Sahipur Village Near Shalimar
2	9.3	South	Pankha Road Sagarpur
3	10.2	South	Moti Bagh Ring Road
4	13.3	South	Sarita Vihar
5	13.4	South	Sahin Bagh Kalindi kunj
6	17.1	South	Ansari Nagar
7	23.1	East	Ghazipur Grade separator
8	23.3	East	Pandav Nagar NH 24
9	24.3	East	Vinod Nagar Patparganj NH 24
10	25.2	East	Ashok nagar
11	25.3	East	Bhopra Border Harsh Vihar
12	26.2	East	Apsara Boder No. 1
13	26.3	East	Apsara Boder No. 2
14	27.1	East	Vishwas Nagar Road Nol 57A
15	28.1	East	Ghazipur Road No. 57
16	28.2	East	Ghazipur Grade separator

### 6.1.16 Drainage Facility

Drainage is constructed at 31 per cent of the FOBs, most of which exist in North zone (Table 23). In absence of proper drainage, water logging etc. may cause inconvenience to users, which may in turn discourage them from using the facility. Table 24 provides list of FOBs where drainage facility is not reported.

TABLE 23: AVAILABILITY OF DRAINAGE SYSTEM

Drainage									
Zone	Numbers			Distribution by Column			Distribution by Row		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
East	1	29	30	3.3	96.7	100	4.3	56.9	40.5
North	16	0	16	100	0.0	100	69.6	0.0	21.6
South	6	22	28	21.43	78.6	100	26.1	43.1	37.8
Total	23	51	74	31.1	68.9	100	100	100	100

TABLE 24: LIST OF FOBS WHERE DRAINAGE IS NOT OBSERVED

Sl. No.	ID	Zone	Place of Interview	Sl. No.	ID	Zone	Place of Interview
1	9.3	South	Pankha Road Sagarpur	27	22.4	East	Kishan kunj
2	9.4	East	Hasanpur	28	23.1	East	Ghazipur Grade separator
3	10.1	South	Pampsh enclave	29	23.2	East	Latita park
4	10.2	South	Moti Bagh Ring Road	30	23.3	East	Pandav Nagar NH 24
5	13.1	South	Ashram Mathura Road	31	23.4	East	Samachar Apartment
6	13.2	South	Bhogal Mathura Road	32	24.1	East	Sakarpur School Block
7	13.3	South	Sarita Vihar	33	24.2	East	Sakarpur School Block
8	13.4	South	Sahin Bagh Kalindi kunj	34	24.3	East	Vinod Nagar Patparganj NH 24
9	14.1	South	Modi mill Near NSIC	35	24.4	East	Ambedkar collage Road No. 59
10	14.2	South	Prahladpur MB Road	36	25.1	East	Brijpuri Road no. 59
11	14.3	South	Lal kuan	37	25.2	East	Ashok nagar
12	14.4	South	Jamiya Hamdard University	38	25.3	East	Bhopra Border Harsh Vihar
13	15.1	South	Batra hospital	39	25.4	East	Jhandewalan Mandir
14	15.2	South	Subarato Park	40	26.1	East	Jhandewalan Mandir
15	15.3	South	Munirka	41	26.2	East	Apsara Boder No. 1
16	16.1	South	Kalka ji Mandir	42	26.4	East	Ramprasth Road No. 56
17	16.2	South	Bhairo Mandir Kalkaji	43	27.1	East	Vishwas Nagar Road Nol 57A
18	16.3	South	Near DC office MB Road	44	27.2	East	Bhikam Singh Colony Road No. 57
19	16.4	South	Saket Metro station	45	27.3	East	EDM Mall
20	17.1	South	Ansari Nagar	46	27.4	East	ISBT Anand Vihar
21	17.2	South	Jia Sarai	47	28.1	East	Ghazipur Road No. 57
22	17.3	South	Panchsheel Enclave	48	28.2	East	Ghazipur Grade separator
23	20.4	East	ITO	49	28.3	East	Taj Highway Apartment Road No 56
24	21.1	South	Rajauri Garden	50	28.4	East	Gandhi nagar Road No 57
25	22.2	East	Majnu ka tila	51	29.4	East	ISBT Kashmiri gate
26	22.3	East	Delhi police Apartment				

### 6.1.17 Flooring

About 32 per cent of FOBs do not have flooring and majority of such FOBs are located in East and South zones (Table 25). Lis of FOBs reported to be without proper flooring is presented in Table 26. Bare mild steel floors can corrode and cause injuries to pedestrians. Good flooring is important to attract users and make walking enjoyable. Floors made of tiles or granites are attractive and durable. It may also be useful to consider using “**tactile tiles**” flooring for the convenience of blind persons.

TABLE 25: PROVISIONING OF PROPER FLOORING FOR WALKING

Flooring									
Zone	Numbers			Distribution by Column			Distribution by Row		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
East	13	17	30	43.3	56.7	100	26.0	70.8	40.5
North	16	0	16	100	0.0	100	32.0	0.0	21.6
South	21	7	28	75.0	25.0	100	42.0	29.2	37.8
Total	50	24	74	67.6	32.4	100	100	100	100

TABLE 26: LIST OF FOBS WHERE PROPER FLOORING IS NOT OBSERVED

SL. No.	Group	Zone	Place of Interview	SL. No.	Group	Zone	Place of Interview
1	9.4	East	Hasanpur	13	24.3	East	Vinod Nagar Patparganj NH 24
2	14.3	South	Lal kuan	14	24.4	East	Ambedkar collage Road No. 59
3	14.4	South	Jamiya Hamdard University	15	25.1	East	Brijpuri Road no. 59
4	15.1	South	Batra hospital	16	25.2	East	Ashok nagar
5	15.2	South	Subarato Park	17	25.3	East	Bhopra Border Harsh Vihar
6	16.3	South	Near DC office MB Road	18	25.4	East	Jhandewalan Mandir
7	16.4	South	Saket Metro station	19	27.1	East	Vishwas Nagar Road Nol 57A
8	17.1	South	Ansari Nagar	20	27.2	East	Bhikam Singh Colony Road No. 57
9	22.2	East	Majnu ka tila	21	27.3	East	EDM Mall
10	22.4	East	Kishan kunj	22	28.1	East	Ghazipur Road No. 57
11	23.1	East	Ghazipur Grade seprator	23	28.2	East	Ghazipur Grade seprator
12	23.3	East	Pandav Nagar NH 24	24	28.4	East	Gandhi nagar Road No 57

#### 6.1.18 Presence of School in the nearby Locality

There are schools in the vicinity of all the FOBs. This shows that in deciding the location of FOBs, some consideration might have been given to the presence of schools in the area, so that the crossing of roads by children could be facilitated.

## 6.2 Facilities at Subways

Most of the facilities that are required for the successful use of FOBs, are also required for the Subways.

### 6.2.1 Lift and Escalators

There is only one subway with lift and it is located in north zone (Tables 27). It is located at the Maharaja Agrasen Hospital SUB and has a capacity of five persons. The same was found to be in working order during the survey. There is no escalator with any of the subways.

TABLE 27: AVAILABILITY OF LIFT AT THE SUBWAYS

LIFT Available at Subways									
Zone	Numbers			Distribution by Column			Distribution by Row		
	Yes	NO	Total	Yes	NO	Total	Yes	NO	Total
East	0	8	8	0.0	100	100	0.0	22.2	21.6
North	1	14	15	6.7	93.3	100	100.0	38.9	40.5
South	0	14	14	0.0	100	100	0.0	38.9	37.8
Total	1	36	37	2.7	97.3	100	100	100	100

### 6.2.2 Security Guards

Security guards are provided in 70 per cent of Subways but almost half of them are deployed in North zone (Table 28). Other two zones have less deployment. Table 29 provides the list of SUBs where security guards need to be deployed.

TABLE 28: AVAILABILITY OF SECURITY GUARDS AT THE SUBWAYS

Availability of Security Guard									
Zone	Numbers			Distribution by Column			Distribution by Row		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
East	5	3	8	62.50	37.50	100	19.2	27.3	21.6
North	13	2	15	86.67	13.33	100	50.0	18.2	40.5
South	8	6	14	57.14	42.86	100	30.8	54.5	37.8
Total	26	11	37	70.27	29.73	100	100	100	100

TABLE 29: LIST OF SUBS WHERE SECURITY GUARDS WERE NOT FOUND ON THE DAY OF SURVEY

Sl. No.	ID	Zone	Place of Interview
1	5.4	North	Punjabi Bagh Chauk
2	6.2	North	Near Subhadra colony gate
3	15.4	South	Munirka
4	17.4	South	Hayat Near Bhikhaji kama place
5	19.1	South	IIT
6	19.2	South	Hauz khas Outer Ring Road
7	19.3	South	Swami nagar
8	19.4	South	Masjid Moth
9	22.1	East	Nigam bodh ghat
10	29.1	East	Gokulpuri
11	29.2	East	Jagatpuri T Point

### 6.2.3 Steps in Staircase

The Subways are designed with 16-32 steps, with majority of them falling under the category of 25-26 steps (Table 30). This is a marked difference between FOBs and Subways. Less numbers of steps make them favourable for children, old age people, females and divyang. A list of SUBs having more than 25 steps is presented in Table 31.

TABLE 30: NUMBER OF STAIRCASE STEPS AT THE SUBWAYS

Stair Steps											
Zone	16	20	23	24	25	26	28	29	31	32	Total
East	0	1	1	2	1	3	0	0	0	0	8
North	1	2	0	2	4	3	0	1	0	2	15
South	0	0	1	0	1	2	1	3	3	1	12
Total	1	3	2	4	6	8	1	4	3	3	35
Distribution by Column											
Stair Steps											
Zone	16	20	23	24	25	26	28	29	31	32	Total
East	0.00	12.50	12.50	25.00	12.50	37.50	0.00	0.00	0.00	0.00	100.00
North	6.67	13.33	0.00	13.33	26.67	20.00	0.00	6.67	0.00	13.33	100.00
South	0.00	0.00	8.33	0.00	8.33	16.67	8.33	25.00	25.00	8.33	100.00
Total	2.86	8.57	5.71	11.43	17.14	22.86	2.86	11.43	8.57	8.57	100.00
Distribution by Row											
Stair Steps											
Zone	16	20	23	24	25	26	28	29	31	32	Total
East	0.0	33.3	50.0	50.0	16.7	37.5	0.0	0.0	0.0	0.0	22.9
North	100.0	66.7	0.0	50.0	66.7	37.5	0.0	25.0	0.0	66.7	42.9
South	0.0	0.0	50.0	0.0	16.7	25.0	100.0	75.0	100.0	33.3	34.3
Total	100	100	100	100	100	100	100	100	100	100	100



TABLE 31: LIST OF SUBS WHERE NUMBER OF STEPS ARE MORE THAN 25

SL. No.	ID	Zone	Place of Interview
1	1.1	North	Azadpur
2	1.2	North	Azadpur
3	5.1	North	Near Rajdhani Collage
4	5.4	North	Punjabi Bagh Chauk
5	11.3	South	Dhaura kuan
6	11.4	South	Naraina
7	12.1	North	At Ring Road Wazirpur
8	12.2	North	At Ring Road Britainia
9	15.4	South	Munirka
10	17.4	South	Hyatt Near Bhikhaji kama place
11	18.1	South	Hyatt Subway
12	18.2	South	Safdarjang Hospital Subway
13	18.3	South	Ansal plaza subway
14	19.1	South	IIT
15	19.3	South	Swami nagar
16	19.4	South	Masjid Moth
17	20.2	East	Opp. WHO Building/Front of WHO
18	21.3	East	Vikas marg Near Preet Vihar
19	29.3	East	Road No 58A Master Somnath marg

#### 6.2.4 Road side Blockade

Almost 92 per cent of the Subways have been observed to have road side blockade in place but they all are not effective in controlling the movement of people across roads (Table 32). Road side blockade has been found to be missing in case of SUBs at Maharaja Agrasen Hospital, Ashok Park main, and Naraina. Road dividers are found to be inadequate in most of the cases where non-users are reported. These dividers are either very low in height or broken from place to place near SUBs, which allow pedestrians to pass through the roads.

Appendix 3 presents a set of photographs revealing the inadequacies that allow pedestrians to be able to cross over roads with least resistance.

In fact, near every FOB and Subway, the blockades must be redesigned and constructed with such height and length that it becomes impossible for pedestrians to cross the roads without taking the help of FOBs and SUBs.

TABLE 32: PROVISIONING OF BLOCKADE ALONG ROAD SIDE TO RESTRICT DIRECT CROSS OVER

Existence of Blockade									
Zone	Numbers			Distribution by Column			Distribution by Row		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
East	8	0	8	100.00	0.00	100	23.5	0.0	21.6
North	13	2	15	86.67	13.33	100	38.2	66.7	40.5
South	13	1	14	92.86	7.14	100	38.2	33.3	37.8
Total	34	3	37	91.89	8.11	100	100	100	100

### 6.2.5 Railing at Stairs

About 82 per cent of Subways are provided with railings along stairs. However, in South zone only 71 per cent of Subways have railing along stairs (Table 33). SUBs where railing is not reported include places like:

- Ashok park main
- Shivaji marg Najafgadh road
- Palam dabri Road
- Naraina
- Ansal plaza subway
- Hauz khas Outer Ring Road
- Nigam bodh ghat

TABLE 33: PROVISIONING OF RAILINGS ALONG STAIRS

Provisioning of Railing at Stairs									
Zone	Numbers			Distribution by Column			Distribution by Row		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
East	7	1	8	87.5	12.5	100	23.3	14.3	21.6
North	13	2	15	86.67	13.3	100	43.3	28.6	40.5
South	10	4	14	71.43	28.6	100	33.3	57.1	37.8
Total	30	7	37	81.1	18.9	100	100	100	100

### 6.2.6 Side Railing

Side railings are not very common with Subways and only 13 per cent have this facility, possibly because this may not be required (Table 34).

TABLE 34: PROVISIONING OF SIDE RAILING

Provisioning of Bridge Side Railing									
Zone	Numbers			Distribution by Column			Distribution by Row		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
East	0	8	8	0.00	100.00	100	0.0	25.0	21.6
North	4	11	15	26.67	73.33	100	80.0	34.4	40.5
South	1	13	14	7.14	92.86	100	20.0	40.6	37.8
Total	5	32	37	13.51	86.49	100	100	100	100

### 6.2.7 Ramp

Only about 27 per cent of the Subways have ram facility. The east and North zones have much smaller number of Subways with ramp (Table 35). Table 36 provides the list of SUBs where Ramp is not reported.

TABLE 35: PROVISIONING OF RAMP

Provisioning of Ramp									
Zone	Numbers			Distribution by Column			Distribution by Row		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
East	1	7	8	12.5	87.5	100	10.0	25.9	21.6
North	4	11	15	26.7	73.3	100	40.0	40.7	40.5
South	5	9	14	35.7	64.3	100	50.0	33.3	37.8
Total	10	27	37	27.0	73.0	100	100	100	100

TABLE 36: LIST OF SUB WHERE RAMP IS NOT PRESENT

Sl. No.	Group	Zone	Name
1	1.1	North	Azadpur
2	1.2	North	Azadpur
3	3.4	North	Maharaja Agrasen Hospital
4	4.1	North	Ashok park main
5	5.1	North	Near Rajdhani Collage
6	5.4	North	Punjabi Bagh Chauk
7	6.1	North	Near Indralok Masjid
8	6.2	North	Near Subhadra colony gate
9	9.1	North	Shivaji marg Najafgadh road
10	11.3	South	Dhaura kuan
11	11.4	South	Naraina
12	12.1	North	At Ring Road Wazirpur
13	12.2	North	At Ring Road Britainia
14	17.4	South	Hyatt Near Bhikhaji kama place

Sl. No.	Group	Zone	Name
15	18.1	South	Hyatt Subway
16	18.3	South	Ansal plaza subway
17	18.4	South	Narauji nagar
18	19.1	South	IIT
19	19.3	South	Swami nagar
20	20.1	South	Subway at Nehru place
21	20.2	East	Opp. WHO Building/Front of WHO
22	21.2	East	Vikas marg Near Laxmi nagar Metro station
23	21.3	East	Vikas marg Near Preet Vihar
24	21.4	East	Bhajanpura
25	29.1	East	Gokulpuri
26	29.2	East	Jagatpuri T Point
27	29.3	East	Road No 58A Master Somnath marg

### 6.2.8 Lighting Facility

Lighting is very critical for the safety in Subways and most of the Subways have installed this facility (Table 37). Only SUB at Gokulpuri has been reported not to have light facility. However, the maintenance of lights is reported to be poor in several places and users as well as non-user complain about this. Installation wise status of light is again discussed in Section 10.

TABLE 37: PROVISIONING OF LIGHTING FACILITY

Lighting									
Zone	Numbers			Distribution by Column			Distribution by Row		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
East	7	1	8	87.50	12.50	100	19.4	100.0	21.6
North	15	0	15	100.00	0.00	100	41.7	0.0	40.5
South	14	0	14	100.00	0.00	100	38.9	0.0	37.8
Total	36	1	37	97.30	2.70	100	100	100	100

### 6.2.9 Drainage System

Efficient and functioning drainage is directly associated with the usability of Subways. Except one SUB at Preet Vihar, Vikas Marg, all other Subways have drainage system as it must design feature (Table 38). However, drainages have been found to be clogged and non-functional. The maintenance is reported to be poor at several places. Installation wise status of drainage is discussed in Section 10.

TABLE 38: PROVISIONING OF DRAINAGE SYSTEM

Zone	Drainage								
	Numbers			Distribution by Column			Distribution by Row		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
East	7	1	8	87.50	12.50	100	19.4	100.0	21.6
North	15	0	15	100.00	0.00	100	41.7	0.0	40.5
South	14	0	14	100.00	0.00	100	38.9	0.0	37.8
Total	36	1	37	97.30	2.70	100	100	100	100

### 6.2.10 Flooring

Every subway has flooring but the maintenance and cleaning are not good at several places. Figures 2 and 3 provide examples of good and poor flooring. Photographs of all SUBS are presented in Appendix 9 and 10.

FIGURE 2: EXAMPLE OF GOOD FLOORING: 20.1 SUBWAY AT NEHRU PLACE

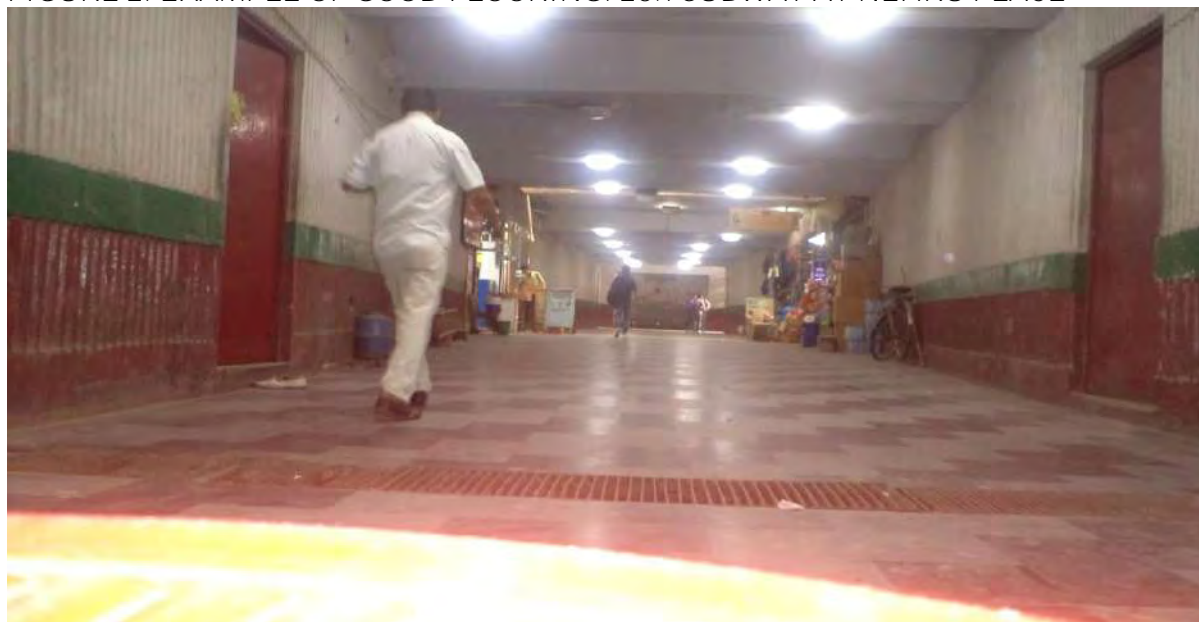


FIGURE 3: EXAMPLE OF POOR FLOORING: 25.1 BRIJPURI ROAD NO. 59



#### 6.2.11 Presence of School Nearby

There are schools in the vicinity of 36 SUBs (Table 39). This shows that in deciding the location of SUBs some consideration might have been given to the presence of schools in the area with an objective to facilitate the crossing of roads by children. Only at Punjabi Bagh Chowk there is no school in the vicinity.

TABLE 39: PRESENCE OF SCHOOL NEARBY

Zone	Presence of School Nearby								
	Numbers			Distribution by Column			Distribution by Row		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
East	8	0	8	100.00	0.00	100	22.2	0.0	21.6
North	14	1	15	93.33	6.67	100	38.9	100.0	40.5
South	14	0	14	100.00	0.00	100	38.9	0.0	37.8
Total	36	1	37	97.30	2.70	100	100	100	100

## 7. UTILISATION OF THE INFRASTRUCTURE

The utilisation of infrastructure is summarised in Tables 40 to 59 and Figures 1-6 while more detailed data are presented in Appendices 4 to 6. Appendix -4 provides overall data on users and non-users, Appendix-5 provides data on users and non-users of FOBs and Appendix-6 provide data on users and non-users of Subways. Appendix – 9 and 10 provides pictures of all FOBs and Subways.

### 7.1 Summary Statistics

During the survey almost 100 per cent counting has been done for those using the facility and those not using the facility. With respect to both FOBs and Subways summary statistics has been presented in Table 40 for users as well as non-users. Table 40 also presents the summary statistics by broad type of users/non-users namely Divyang and Other.

From the data presented in Table 40, it is clear that the average numbers of users per FOB per day is recorded as 6231 persons. The corresponding number for SUBs is 4908 persons per day. Average number of Divyang using FOBs and SUBs per day per FOB/SUB is recorded as eight and 11 respectively.

Data in Table 40 also indicates the average numbers of non-users per FOB per day, which is recorded as 2553 persons. The corresponding number for SUBs is 1889 persons per day. Average number of Divyang not using FOBs and SUBs per day per FOB/SUB is recorded as three and one respectively.

Given that the counting was done for 13 hours (7:00 am to 8:00 pm), the hourly flow of users can be estimated at about 479 persons per hour for FOBs and 378 persons per hour for SUBs (Table 40).

The minimum users and non-users in all groups are “zero”, while maximum users in case of FOBs is 1.32 lakh and in case of Subway it is 20634. The busiest FOB is Interstate Bus Terminus (ISBT), Anand Vihar, where hourly flow of users is estimated at 10144 persons per hour. On the other hand, the busiest subway is Safdarjang Hospital Subway where hourly flow of users is estimated at 1587 persons per hour.

Zero users have been reported from FOB at Jhandewalan Mandri, Desh Bandhu Gupta Road and Sakarpur School Block. Reason for no user at Jhandewalan Mandri is ongoing repair work, while at Sakarpur School Block there is clear passage just below the FOB.

The standard deviations for the users and non-users both are very high indicating high dispersion in the data from the mean. In the present case the minimum and maximum values are very wide apart; the number of users varies from zero to 1.32 lakh while the mean is only 6231. This reflects that the number of users across FOBs and SUBs are highly diverse.

TABLE 40: SUMMARY STATISTICS OF USERS AND NON-USERS OF FOB AND SUBWAYS ACROSS MAJOR GROUPS OF PERSONS

Summary Statistics of Users and Non-Users									
Details of Persons	Users/ Non-Users	Observations	Mean	Std. Dev.	Minimum	Maximum	Mean Per Hour	Maximum/ Hour	Name Corresponding to maximum
FOB									
All Persons	Users	74	6231	15582	0	132525	479	10194	ISBT Anand Vihar
	Non-Users	74	2553	3956	0	24876	196	1914	Afsara Border -I
Divyang	Users	74	8	30	0	255	1	20	ISBT Anand Vihar
	Non-Users	74	3	5	0	28	0	2	Batra Hospital (108 steps)
Others	Users	74	6223	15553	0	132270	479	10175	ISBT Anand Vihar
	Non-Users	74	2551	3953	0	24876	196	1914	Afsara Border -I
SUBWAYS									
All Persons	Users	37	4908	5549	0	20634	378	1587	Safdarjang Hospital
	Non-Users	37	1889	2705	0	9063	145	697	Munirka
Divyang	Users	37	11	31	0	186	1	14	Safdarjang Hospital
	Non-Users	37	1	2	0	9	0	1	Munirka
Others	Users	37	4897	5530	0	20600	377	1585	Safdarjang Hospital
	Non-Users	37	1887	2704	0	9054	145	696	Munirka

Note: Due to rounding-off the figures may not look to be reconciled. Per hour estimation is done using 13 hour of counting during the day.

## 7.2 Summary of Total Users, Non-Users and the User-Non-User (UNU) Ratio

The survey data indicates that about 6.43 lakh people are using FOBs and Subways in Delhi, while at the same time 2.59 lakh people, who otherwise could use the facility are not using. If they also start using the facility the potential number of users could be 9.01 lakh persons on daily basis (Table 41).

This shows that the overall ratio of users to non-users (let it be called as UNU Ratio or utilisation ratio) is 2.48. Considering FOBs and Subways this ratio in the case of Subways is better at 2.66 as compared to FOBs, which has user to non-user ratio of 2.44 (Table 42) and Figure 4). It may be noted that wherever non-users are reported to be zero, at least one non-user is assumed for calculating UNU-Ratio.<sup>4</sup> The difference in this ratio is important due to several regions. For example, less effort required in negotiating the total distance covered by Subways as compared to FOBs both in terms of height and distance. There is psychological advantage with subways as people have to go down first and then go up. The number of steps in stairs are also much less in subways as compared to FOBs.

<sup>4</sup> Other measure could be users as percentage of total users plus non-users. However, this measure can be used at a later stage if required for econometric analysis.



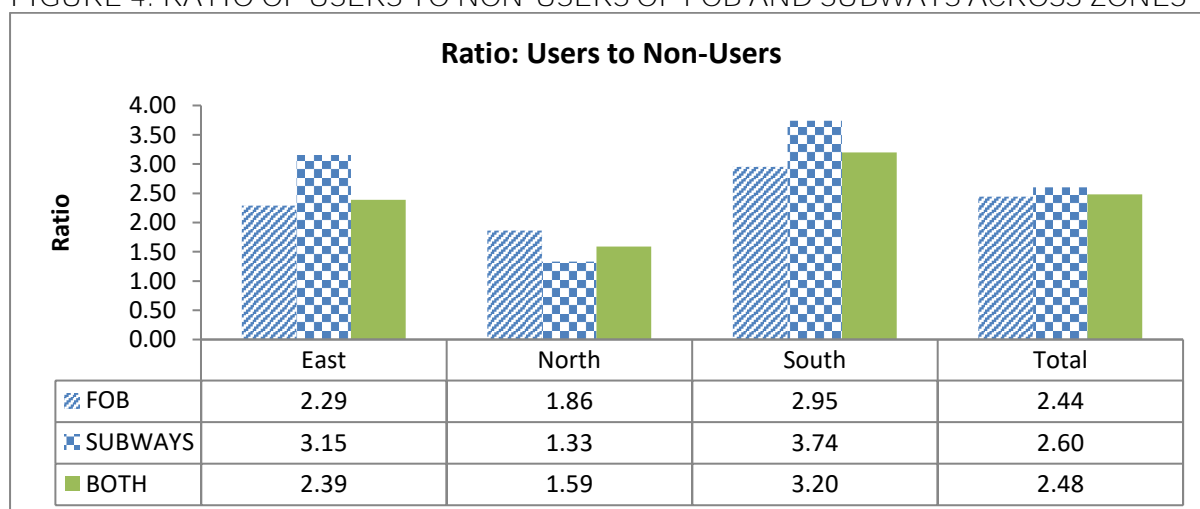
TABLE 41: SUMMARY OF TOTAL USERS, AND NON-USERS OF FOBS AND UNDERPASS DURING SURVEY PERIOD

Users and Non-Users on the days of Surveys									
Zone	Total Users			Total Non-Users			Total Potential Users + Non-Users		
	FOB	SUBWAYS	TOTAL	FOB	SUBWAYS	TOTAL	FOB	SUBWAYS	TOTAL
East	228226	40034	268260	99625	12693	112318	327851	52727	380578
North	52978	39873	92851	28433	29989	58422	81411	69862	151273
South	179870	101687	281557	60893	27195	88088	240763	128882	369645
Total	461074	181594	642668	188951	69877	258828	650025	251471	901496
Distribution Across Zones									
East	49.50	22.05	41.74	52.73	18.16	43.39	50.44	20.97	42.22
North	11.49	21.96	14.45	15.05	42.92	22.57	12.52	27.78	16.78
South	39.01	56.00	43.81	32.23	38.92	34.03	37.04	51.25	41.00
Total	100	100	100	100	100	100	100	100	100
Distribution Across Column									
East	85.08	14.92	100	88.70	11.30	100	86.15	13.85	100
North	57.06	42.94	100	48.67	51.33	100	53.82	46.18	100
South	63.88	36.12	100	69.13	30.87	100	65.13	34.87	100
Total	71.74	28.26	100	73.00	27.00	100	72.11	27.89	100

TABLE 42: OVERALL RATIOS OF USERS TO NON-USERS

Zone	Ratio of Users to Non-Users		
	FOB	SUBWAYS	BOTH
East	2.29	3.15	2.39
North	1.86	1.33	1.59
South	2.95	3.74	3.20
Total	2.44	2.60	2.48

FIGURE 4: RATIO OF USERS TO NON-USERS OF FOB AND SUBWAYS ACROSS ZONES



Source (basic data): Tables 30 and 31

### 7.3 Distribution of FOB and Subways by User/Non-User Range

Figures 5 and 6 summarise range-wise users and non-users of FOBs and Subways. Clearly, there are several FOBs and Subways which are highly underutilised (see Appendix 5 and 6 for details). There are seven FOBs and four Subways where number of users is less than 101.

At the same time, it may also be noted that there are at least 25 FOBs and 14 Subways where non-users are less than 100. This means, with proper arrangements of blockades/ road dividers etc., number of non-users can be considerably reduced.

Similarly, there are at least 46 FOBs and 15 Subways where non-users are reported to be in the range of 1000 to 5000. This is also a big number and need attention of traffic management.

Zone-wise, range-wise details of number of FOBs and Subways are provided in Tables 43 and 44 respectively. It appears that the high volume non-users are located in North and South Regions.

FIGURE 5: FOB AND SUBWAYS DISTRIBUTED BY RANGE OF USERS

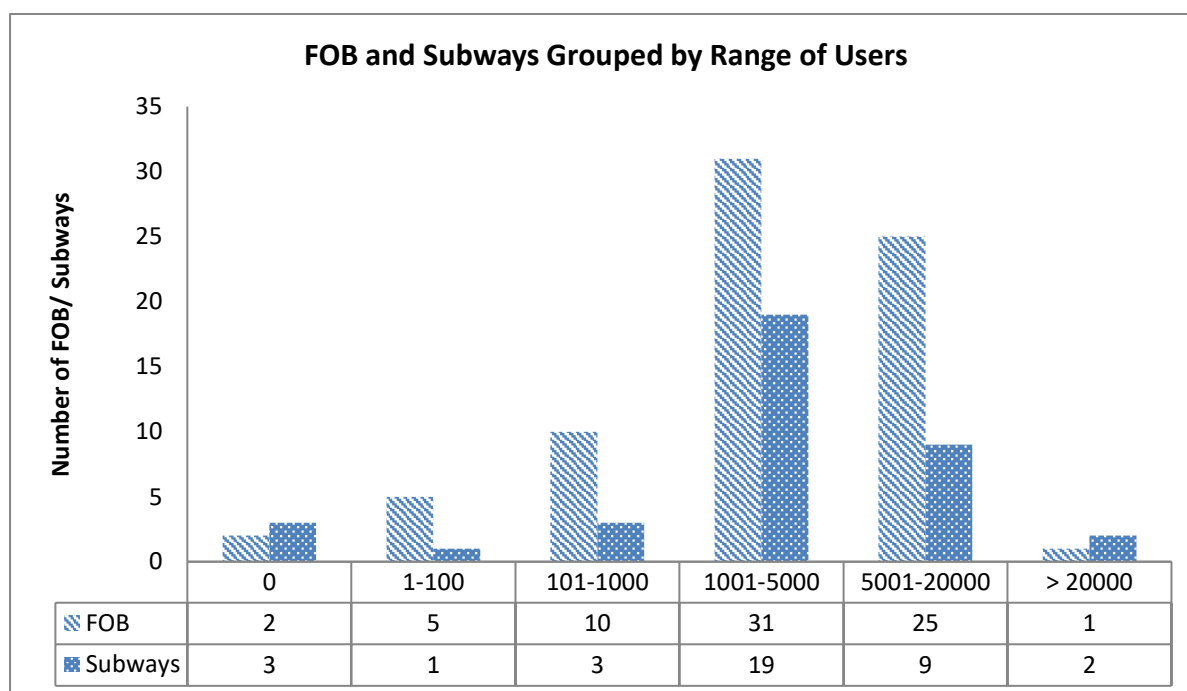


FIGURE 6: FOB AND SUBWAYS DISTRIBUTED BY RANGE OF NON-USERS

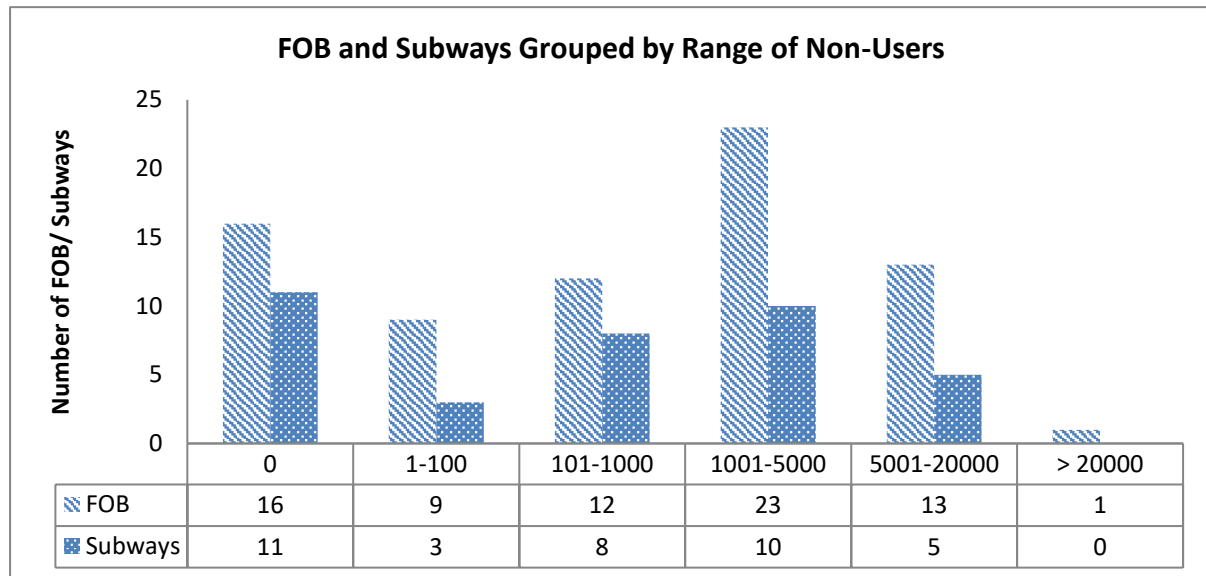


TABLE 43: DISTRIBUTION OF FOB BY USE/ NON-USE CATEGORY (BASED ON DATA ON THE DAY OF SURVEY)

## USERS

Zone	Intensity of Utilisation of FOBs (number of FOB falling under different use category)						
	Use Category (counts during the day of survey)						Total
	0	1-100	101-1000	1001-5000	5001-20000	> 20000	
Distribution of FOB by Use Category (counts)							
East	2	4	6	10	7	1	30
North	0	1	2	10	3	0	16
South	0	0	2	11	15	0	28
Total	2	5	10	31	25	1	74
Percentage distribution of FOBs by Use Category							
East	6.67	13.33	20.00	33.33	23.33	3.33	100
North	0.00	6.25	12.50	62.50	18.75	0.00	100
South	0.00	0.00	7.14	39.29	53.57	0.00	100
Total	2.70	6.76	13.51	41.89	33.78	1.35	100

## NON-USERS

Zone	Intensity of Utilisation of FOBs (number of FOB falling under different non-use category)						
	Non-use Category (counts during the day of survey)						Total
	0	1-100	101-1000	1001-5000	5001-20000	> 20000	
	Distribution of FOB by Non-Use Category (counts)						
East	6	3	5	9	6	1	30
North	0	4	2	8	2	0	16
South	10	2	5	6	5	0	28
Total	16	9	12	23	13	1	74
	Percentage distribution of FOBs by Non-Use Category						
East	20.00	10.00	16.67	30.00	20.00	3.33	100
North	0.00	25.00	12.50	50.00	12.50	0.00	100
South	35.71	7.14	17.86	21.43	17.86	0.00	100
Total	21.62	12.16	16.22	31.08	17.57	1.35	100

TABLE 44: DISTRIBUTION OF SUBWAYS BY USE/ NON-USE CATEGORY (BASED ON DATA ON THE DAY OF SURVEY)

USERS

Zone	Intensity of Utilisation of Subways (number of SUBWAYS falling under different use category)						
	Use Category (counts during the day of survey)						
	0	1-100	101-1000	1001-5000	5001-20000	> 20000	Total
Distribution of Subways across Use Category (counts)							
East	2	0	2	2	1	1	8
North	0	1	0	12	2	0	15
South	1	0	1	5	6	1	14
Total	3	1	3	19	9	2	37
Percentage distribution of Subways by Use Category							
East	25.00	0.00	25.00	25.00	12.50	12.50	100
North	0.00	6.67	0.00	80.00	13.33	0.00	100
South	7.14	0.00	7.14	35.71	42.86	7.14	100
Total	8.11	2.70	8.11	51.35	24.32	5.41	100

NON-USERS

Zone	Intensity of Utilisation of Subways (number of SUBWAYS falling under different non-use category)						
	Non-Use Category (counts during the day of survey)						
	0	1-100	101-1000	1001-5000	5001-20000	> 20000	Total
Distribution of Subways across Non-Use Category (counts)							
East	2	1	2	2	1		8
North	1	2	3	8	1		15
South	8	0	3	0	3		14
Total	11	3	8	10	5		37
Percentage distribution of Subways by Non-Use Category							
East	25.00	12.50	25.00	25.00	12.50	0.00	100
North	6.67	13.33	20.00	53.33	6.67	0.00	100
South	57.14	0.00	21.43	0.00	21.43	0.00	100
Total	29.73	8.11	21.62	27.03	13.51	0.00	100

## 7.4 Distribution of users/non-users of FOBs and Subways by Time Period

Distributions of users and non-users during the three periods are almost similar. About half of the people move during day time and about 23-27 per cent of them move during morning and evening hours (Table 45-46).

Similar pattern can be observed for both FOBs and Subways (Figure 7). However, the UNU ratio is higher for Subways. With respect to periods, the UNU ratio is better during day time and evening time. In terms of regional effect, North is worst performing region in terms of UNU ratio.

TABLE 45: FOB UTILISATION DURING THE THREE SELECTED PERIODS OF THE DAY ON THE DAY OF SURVEY

Zone	Users				Non User			
	Morning	Day Time	Evening	Total	Morning	Day Time	Evening	Total
East	44472	131011	52743	228226	26420	47291	25914	99625
North	15154	25477	12347	52978	7591	12560	8282	28433
South	50915	86097	42858	179870	18544	28080	14269	60893
Total	110541	242585	107948	461074	52555	87931	48465	188951
Percentage distribution across rows								
East	40.23	54.01	48.86	49.50	50.27	53.78	53.47	52.73
North	13.71	10.50	11.44	11.49	14.44	14.28	17.09	15.05
South	46.06	35.49	39.70	39.01	35.28	31.93	29.44	32.23
Total	100	100	100	100	100	100	100	100
Percentage distribution across column								
East	19.49	57.40	23.11	100	26.52	47.47	26.01	100
North	28.60	48.09	23.31	100	26.70	44.17	29.13	100
South	28.31	47.87	23.83	100	30.45	46.11	23.43	100
Total	23.97	52.61	23.41	100	27.81	46.54	25.65	100

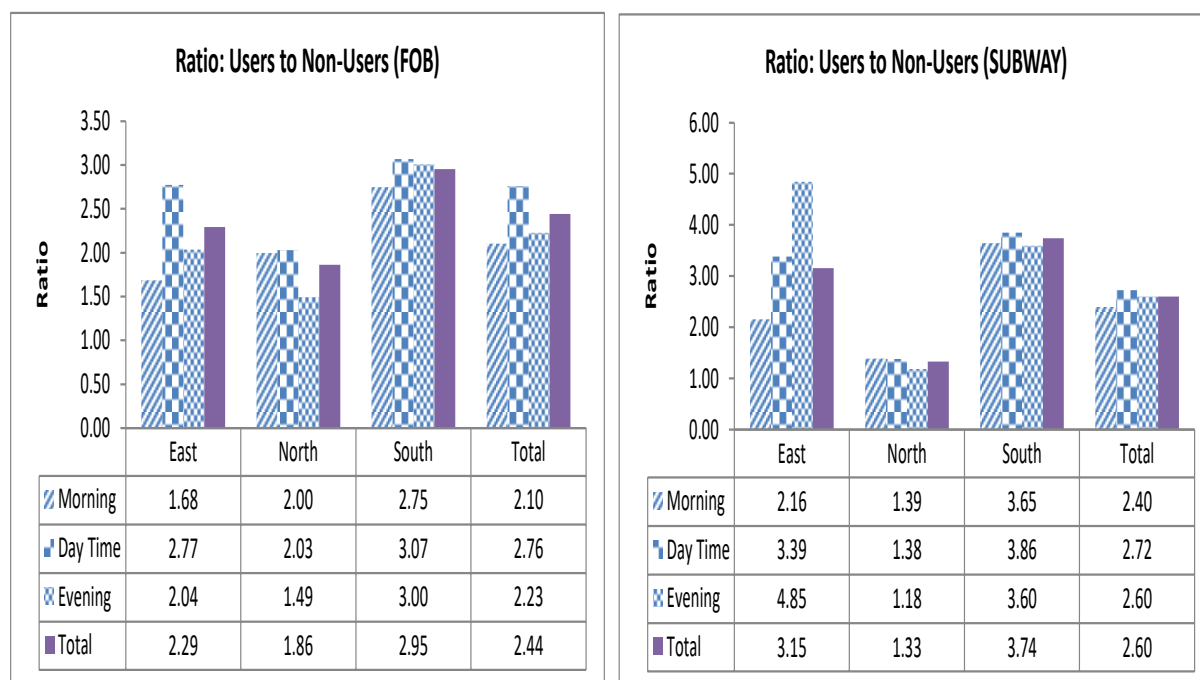
Note: Morning = 7:00 am to 10:00 am; Day = 10:00 am to 5:00 pm; evening = 5:00 pm to 8:00 pm

TABLE 46: SUBWAY UTILISATION DURING THE THREE SELECTED PERIODS OF THE DAY ON THE DAY OF SURVEY

Zone	Users				Non User			
	Morning	Day Time	Evening	Total	Morning	Day Time	Evening	Total
East	11220	17475	11339	40034	5193	5161	2339	12693
North	11224	19044	9605	39873	8091	13781	8117	29989
South	27623	51438	22626	101687	7567	13341	6287	27195
Total	50067	87957	43570	181594	20851	32283	16743	69877
Percentage distribution across rows								
East	10.15	7.20	10.50	8.68	9.88	5.87	4.83	6.72
North	10.15	7.85	8.90	8.65	15.40	15.67	16.75	15.87
South	24.99	21.20	20.96	22.05	14.40	15.17	12.97	14.39
Total	45	36	40	39	40	37	35	37
Percentage distribution across column								
East	28.03	43.65	28.32	100	40.91	40.66	18.43	100
North	28.15	47.76	24.09	100	26.98	45.95	27.07	100
South	27.16	50.58	22.25	100	27.82	49.06	23.12	100
Total	27.57	48.44	23.99	100	29.84	46.20	23.96	100

Note: Morning = 7:00 am to 10:00 am; Day = 10:00 am to 5:00 pm; evening = 5:00 pm to 8:00 pm

FIGURE 7: RATIOS OF USERS AND NON-USERS DURING THREE TIMES PERIODS



## 7.5 Distribution of users/non-users of FOBs and Subways by Age Group

The age-group wise distribution of users and non-users is presented in Tables 47 (FOBs) and 47 (Subways). The UNU Ratio is presented in Figure 8. The UNU ratio is very low for the North region. However, the users in children group of below 14 years age are relatively more than other groups.

The UNU ratio for below 14 years age group is highest in the case of FOBs in the North and in the case of Subways it is highest in South. Above 60 years group appear to avoid FOBs.

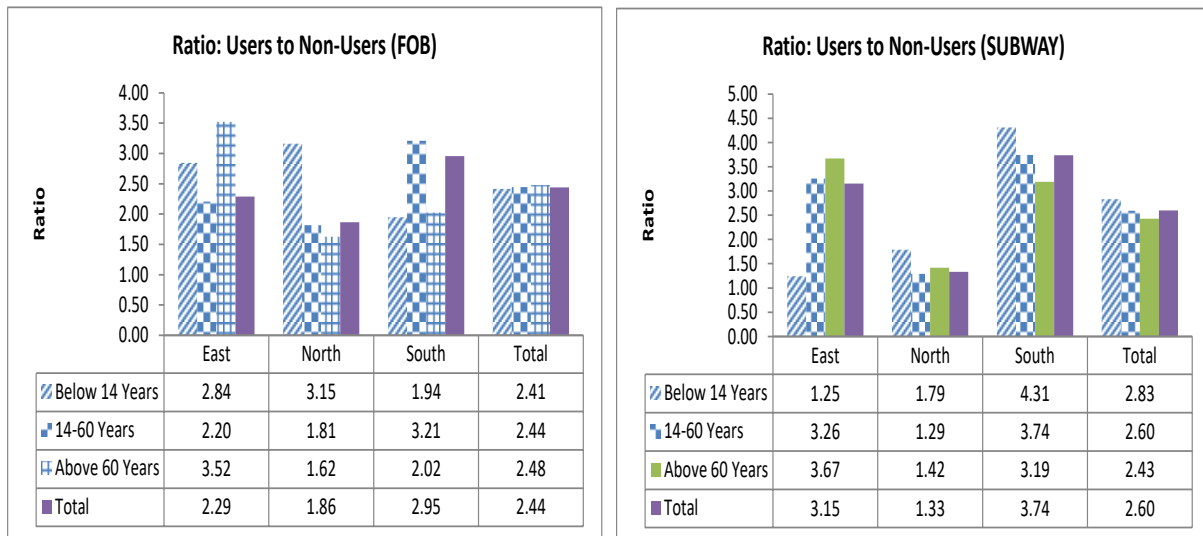
TABLE 47: DISTRIBUTION OF USERS/NON-USERS OF FOBS BY AGE GROUP

FOB								
Zone	Users				Non User			
	Below 14 Years	14-60 Years	Above 60 Years	Total	Below 14 Years	14-60 Years	Above 60 Years	Total
East	15928	198334	13964	228226	5609	90048	3968	99625
North	4174	45639	3165	52978	1323	25161	1949	28433
South	13938	155001	10931	179870	7167	48318	5408	60893
Total	34040	398974	28060	461074	14099	163527	11325	188951
Percentage distribution across rows								
East	46.79	49.71	49.76	49.50	39.78	55.07	35.04	52.73
North	12.26	11.44	11.28	11.49	9.38	15.39	17.21	15.05
South	40.95	38.85	38.96	39.01	50.83	29.55	47.75	32.23
Total	100	100	100	100	100	100	100	100
Percentage distribution across column								
East	6.98	86.90	6.12	100	5.63	90.39	3.98	100
North	7.88	86.15	5.97	100	4.65	88.49	6.85	100
South	7.75	86.17	6.08	100	11.77	79.35	8.88	100
Total	7.38	86.53	6.09	100	7.46	86.54	5.99	100

TABLE 48: DISTRIBUTION OF USERS/NON-USERS OF SUBWAYS BY AGE GROUP

SUBWAY								
Zone	Users				Non User			
	Below 14 Years	14-60 Years	Above 60 Years	Total	Below 14 Years	14-60 Years	Above 60 Years	Total
East	932	37686	1416	40034	748	11559	386	12693
North	2857	33974	3042	39873	1593	26253	2143	29989
South	8289	86373	7025	101687	1922	23070	2203	27195
Total	12078	158033	11483	181594	4263	60882	4732	69877
Percentage distribution across rows								
East	7.72	23.85	12.33	22.05	17.55	18.99	8.16	18.16
North	23.65	21.50	26.49	21.96	37.37	43.12	45.29	42.92
South	68.63	54.66	61.18	56.00	45.09	37.89	46.56	38.92
Total	100	100	100	100	100	100	100	100
Percentage distribution across column								
East	2.33	94.13	3.54	100	5.89	91.07	3.04	100
North	7.17	85.21	7.63	100	5.31	87.54	7.15	100
South	8.15	84.94	6.91	100	7.07	84.83	8.10	100
Total	6.65	87.03	6.32	100	6.10	87.13	6.77	100

FIGURE 8: RATIO OF USERS/NON-USERS OF FOBS AND SUBWAYS BY AGE GROUP



## 7.6 Distribution of Users/Non-Users by Gender

Overall female commuters have higher UNU ratio as compared to male counterparts (Figure 9). The detailed distribution with respect to FOBs and Subways are presented in Tables 49 and 50 respectively. It appears that like senior citizens, female members also tend to avoid FOBs but they prefer Subways.

TABLE 49: DISTRIBUTION OF USERS/NON-USERS OF FOBS BY GENDER

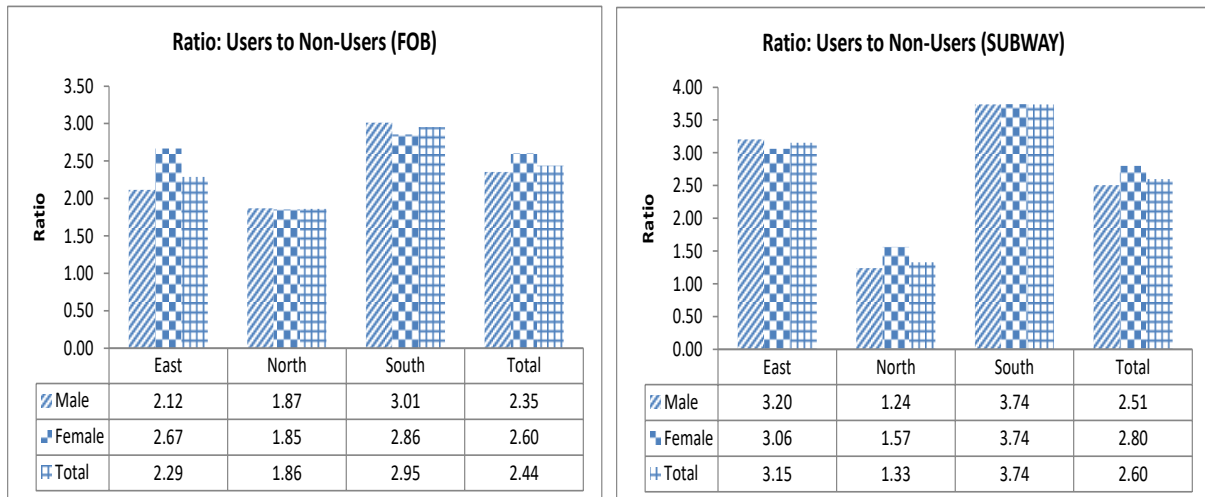
Zone	FOB					
	Users			Non User		
	Male	Female	Total	Male	Female	Total
East	143902	84324	228226	68003	31622	99625
North	33062	19916	52978	17696	10737	28433
South	113583	66287	179870	37689	23204	60893
Total	290547	170527	461074	123388	65563	188951
Percentage distribution across rows						
East	49.53	49.45	49.50	55.11	48.23	52.73
North	11.38	11.68	11.49	14.34	16.38	15.05
South	39.09	38.87	39.01	30.55	35.39	32.23
Total	100	100	100	100	100	100
Percentage distribution across column						
East	63.05	36.95	100	68.26	31.74	100
North	62.41	37.59	100	62.24	37.76	100
South	63.15	36.85	100	61.89	38.11	100
Total	63.02	36.98	100	65.30	34.70	100



TABLE 50: DISTRIBUTION OF USERS/NON-USERS OF SUBWAYS BY GENDER

SUBWAY						
Zone	Users			Non User		
	Male	Female	Total	Male	Female	Total
East	26574	13460	40034	8295	4398	12693
North	27239	12634	39873	21925	8064	29989
South	66589	35098	101687	17816	9379	27195
Total	120402	61192	181594	48036	21841	69877
Percentage distribution across rows						
East	22.07	22.00	22.05	17.27	20.14	18.16
North	22.62	20.65	21.96	45.64	36.92	42.92
South	55.31	57.36	56.00	37.09	42.94	38.92
Total	100	100	100	100	100	100
Percentage distribution across column						
East	66.38	33.62	100.00	65.35	34.65	100
North	68.31	31.69	100	73.11	26.89	100
South	65.48	34.52	100	65.51	34.49	100
Total	66.30	33.70	100	68.74	31.26	100

FIGURE 9: RATIO OF USERS/NON-USERS OF SUBWAYS BY GENDER



## 7.7 Distribution by User Groups (Divyang and Others)

The user, non-user data with respect to Divyang and others is analysed in Tables 51 (FOBs) and 52 (Subways). The UNU ratio is presented in Figure 10.

In general Divyang tend to use FOBs and Subways more than other people. However, the UNU ratio of Divyang is consistently high with respect to Subways as compared to FOBs. In the East zone, however, the UNU ratio of Divyang is relatively very high for FOBs also.

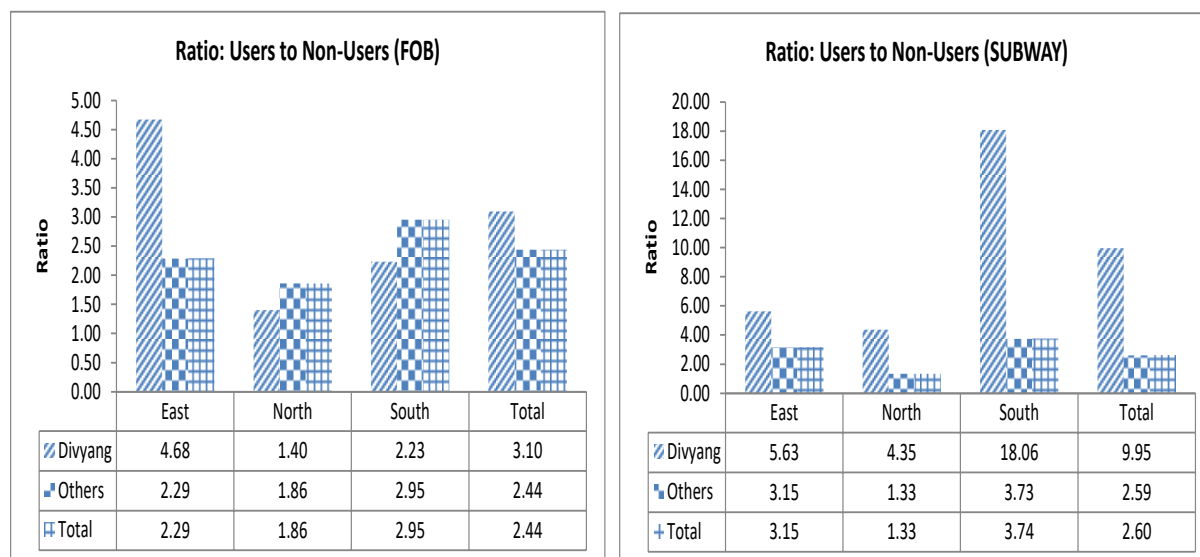
TABLE 51: DISTRIBUTION BY USER GROUPS (DIVYANG AND OTHERS): FOB

FOB						
Zone	Users			Non User		
	Divyang	Others	Total	Divyang	Others	Total
East	374	227852	228226	80	99545	99625
North	59	52919	52978	42	28391	28433
South	143	179727	179870	64	60829	60893
Total	576	460498	461074	186	188765	188951
Percentage distribution across rows						
East	64.93	49.48	49.50	43.01	52.73	52.73
North	10.24	11.49	11.49	22.58	15.04	15.05
South	24.83	39.03	39.01	34.41	32.22	32.23
Total	100	100	100	100	100	100
Percentage distribution across column						
East	0.16	99.84	100	0.08	99.92	100
North	0.11	99.89	100	0.15	99.85	100
South	0.08	99.92	100	0.11	99.89	100
Total	0.12	99.88	100	0.10	99.90	100

TABLE 52: DISTRIBUTION BY USER GROUPS (DIVYANG AND OTHERS): SUBWAY

SUBWAY						
Zone	Users			Non User		
	Divyang	Others	Total	Divyang	Others	Total
East	45	39989	40034	8	12685	12693
North	74	39799	39873	17	29972	29989
South	289	101398	101687	16	27179	27195
Total	408	181186	181594	41	69836	69877
Percentage distribution across rows						
East	11.03	22.07	22.05	19.51	18.16	18.16
North	18.14	21.97	21.96	41.46	42.92	42.92
South	70.83	55.96	56.00	39.02	38.92	38.92
Total	100	100	100	100	100	100
Percentage distribution across column						
East	0.11	99.89	100	0.06	99.94	100
North	0.19	99.81	100	0.06	99.94	100
South	0.28	99.72	100	0.06	99.94	100
Total	0.22	99.78	100	0.06	99.94	100

FIGURE 10: RATIO OF USER AND NON-USERS BY USER GROUPS (DIVYANG AND OTHERS): FOB &amp; SUBWAYS



## 7.8 Distribution by Lift/Escalator and Non-Lift/Escalator Users

Lifts and escalators are common with FOBs as compared to Subways. In case of FOBs, about 22 per cent people use lifts or escalator, while only 0.45 per cent people use lift in the case of Subways (Table 53 and 54). However, the percentage is dependent on the supply of facility. It may be noted that only one SUB has lift while lift/escalator is available at 34 FOBs.

TABLE 53: DISTRIBUTION OF LIFT AND NON-LIFT USERS: FOB

FOB				
Zone	Users			Non User
	Lift/Escalator	Other	Total	Total
East	64358	163868	228226	99625
North	13465	39513	52978	28433
South	22500	157370	179870	60893
Total	100323	360751	461074	188951
Percentage distribution across rows				
East	64.15	45.42	49.50	52.73
North	13.42	10.95	11.49	15.05
South	22.43	43.62	39.01	32.23
Total	100	100	100	100
Percentage distribution across column				
East	28.20	71.80	100	
North	25.42	74.58	100	
South	12.51	87.49	100	
Total	21.76	78.24	100	

TABLE 54: DISTRIBUTION OF LIFT AND NON-LIFT USERS: SUBWAYS

SUBWAY				
Zone	Users			Non User
	Lift/Escalator	Other	Total	Total
East	0	40034	40034	12693
North	815	39058	39873	29989
South	0	101687	101687	27195
Total	815	180779	181594	69877
Percentage distribution across rows				
East	0.00	22.15	22.05	18.16
North	100.00	21.61	21.96	42.92
South	0.00	56.25	56.00	38.92
Total	100	100	100	100
Percentage distribution across column				
East	0.00	100.00	100	0
North	2.04	97.96	100	0
South	0.00	100.00	100	0
Total	0.45	99.55	100	0

## 7.9 Most Used and Most Underused FOBs

A FOB is considered to be most used where maximum number are users are reported (Table 55), while most underused FOB is considered to be the one where maximum number of non-users are reported (Table 56). It is important to know the underused FOBs as these are the places where re-enforcements of blockade/ road dividers are most essential.

FOB at interstate bus terminal (ISBT), Anand Vihar is reported to be the most used FOB with 1.33 lakh users every day (Table 55). The large numbers of users are accumulated from the presence of Railway Station, Metro Stop, and Bust Terminal. Most non-users are reported from Apsara Border No.2 FOB (Table 56).

TABLE 55: MOST USED FOBs

15 Most Used FOB (number of users on the day of survey)			
ID	Name	Count	Share in Total for the Day
27.4	ISBT Anand Vihar	132525	28.743
29.4	ISBT Kashmiri gate	19120	4.147
11.2	Near Dhaula kuan Metro station	18532	4.019
10.3	Gurudwara Nanakpur, Moti Bagh	15615	3.387
16.4	Saket Metro station, MB Road	15536	3.370
28.3	Taj Highway Apartment Road No 56, Ghazipur	15443	3.349
15.1	Batra hospital, Sangam Vihar	14809	3.212
14.2	Prahladpur MB Road	11052	2.397
14.1	Modi mill Near NSIC	10961	2.377
6.4	Sakurpur Metro station	10303	2.235

15 Most Used FOB (number of users on the day of survey)			
ID	Name	Count	Share in Total for the Day
10.4	Mochi Bagh Shatya Niketan, Moti Bagh	9081	1.970
12.3	Maharani Bagh	8641	1.874
27.3	EDM Mall, Anand Vihar	8535	1.851
7.2	Netaji shubhace place	8518	1.847
20.4	ITO	8146	1.767

TABLE 56: MOST UNDER-USED FOB

15 Most Under-Used FOB (number of non-users on the day of survey)			
ID	Name	Count	Share in Total nonusers for the day
26.2	Apsara Boder No. 1, Shahadra	24876	13.165
14.2	Prahladpur MB Road	13016	6.889
26.3	Apsara Boder No. 2, Shahadra	12555	6.645
15.1	Batra hospital, Sangam Vihar	10188	5.392
24.2	Sakarpur School Block	8093	4.283
7.2	Netaji shubhace place	7616	4.031
27.1	Vishwas Nagar Road Nol 57A	6557	3.470
14.4	Jamiya Hamdard University, Sangam Vihar	6285	3.326
25.3	Bhopra Border Harsh Vihar	5820	3.080
27.4	ISBT Anand Vihar	5762	3.049
28.4	Gandhi nagar Road No 57	5655	2.993
7.4	Road no. 37 Near kanhaiya nagar	5364	2.839
14.1	Modi mill Near NSIC	5296	2.803
14.3	Lal kuan, Badarpur	5140	2.720
25.4	Jhandewalan Mandir, Rani Jhansi Road	4397	2.327

## 7.10 Most Used and Most Underused Subways

As explained above in the case of SUB also, a SUB is considered to be most used where maximum number are users are reported (Table 57), while most underused SUB is considered to be the one where maximum number of non-users are reported (Table 58). Again, it is important to appreciate the problems at underused FOBs as these are the places where re-enforcements of blockade/ road dividers are most essential to avoid accidents.

The Bhajanpura Subway is reported to be the most used Subway with about 20634 users or 11.4 per cent of the users daily (Table 57). The maximum number of non-users of Subways is recorded at Munirka Subway, where about 9063 people crossed over the road forming about 12.97 per cent of non-users (Table 58).

TABLE 57: MOST USED SUBWAYS

15 Most Used SUBWAYS (number of users on the day of survey)			
ID	Names	Count	Share in total users on the day
21.4	Bhajanpura	20634	11.363
18.2	Safdarjang Hospital Subway	20201	11.124
19.3	Swami nagar	14495	7.982
21.2	Vikas marg Near Laxmi nagar Metro station	14391	7.925
19.2	Hauz khas Outer Ring Road	14291	7.870
20.1	Subway at Nehru place	13352	7.353
18.1	Hyatt Subway	8375	4.612
17.4	Hyatt Near Bhikhaji kama place	6439	3.546
5.2	ESI Hospital, Raja Garden	5965	3.285
12.1	At Ring Road Wazirpur	5533	3.047
19.1	IIT	5076	2.795
15.4	Munirka	4809	2.648
19.4	Masjid Moth	4324	2.381
11.3	Dhaura kuan	3986	2.195
18.4	Narauji nagar	3891	2.143

TABLE 58: MOST UNDER-USED SUBWAYS

15 Most Under-Used SUBWAY (number of non-users on the day of survey)			
ID	Names	Count	Share in total nonusers for the day
15.4	Munirka	9063	12.970
9.2	Palam dabri Road	8757	12.532
11.4	Naraina	8476	12.130
29.1	Gokulpuri	7325	10.483
1.1	In front of Azadpru Fruit and Vegetable Mandi	5135	7.349
12.2	At Ring Road Britainia	4997	7.151
6.1	Near Indralok Masjid	3569	5.108
12.1	At Ring Road Wazirpur	3036	4.345
6.2	Near Subhadra colony gate, Sashtri Nagar	2637	3.774
1.2	Azadpur fruit and Vegetable mandi near Masjid	2580	3.692
5.4	Punjabi Bagh Chauk, Punjabi Bagh	2434	3.483
3.3	Metro station, Nagloi	2211	3.164
29.2	Jagatpuri T Point	2003	2.866
4.1	Ashok park main, Punjabi Bagh	1913	2.738
21.3	Vikas marg Near Preet Vihar	1873	2.680

## 7.11 Least Used FOBs and Subways

Similar to under-used FOBs and Subways, it is important to know the least used FOBs and Subways. The least used FOBs are presented in Table 59, while least used SUBs are presented in Table 60.

As explained zero user are reported at two FOBs and three subways. One of the FOBs at Jhandewalan Mandir was under repair, while the FOB at Sakurpur School Block has clear passage below FOB for crossing road.

Similarly, Ansal Plaza SUB is closed, while others have unrestricted passages for crossing. It may be noted that the list of under-utilised and list of least used FOBs and SUBs are not common. This means that the least used FOBs and SUBs contain installations which may not have enough loads at the moment.

TABLE 59: LEAST USED FOBs

15 Least Used FOB (persons used on the day of survey)			
ID	Name	Count	Share of Total for the day
24.2	Sakurpur School Block	0	0.0
26.1	Jhandewalan Mandir, D B G Road	0	0.0
4.3	Near sakurbasti Railway station	15	0.0
25.3	Bhopra Border Harsh Vihar	16	0.0
25.4	Jhandewalan Mandir, Rani jhansi Road	19	0.0
28.4	Gandhi nagar Road No 57	70	0.0
23.4	Samachar Apartment, Mayur Vihar Extension	72	0.0
26.2	Apsara Boder No. 1, Shahadra	148	0.0
26.3	Apsara Boder No. 2, Shahadra	166	0.0
22.3	Delhi police Apartment, UP link Road Mayur Vihar	171	0.0
14.3	Lal kuan, Badarpur	189	0.0
24.3	Vinod Nagar Patparganj NH 24	315	0.1
7.3	Sahipur Village Near Shalimar	379	0.1
28.2	Ghazipur Grade separator	440	0.1
4.2	Near Janmastmi Park, Punjabi Bagh	618	0.1
16.3	Near DC office MB Road	687	0.1
27.2	Bhikam Singh Colony Road No. 57, Vishwas Nagar	868	0.2

TABLE 60: LEAST USED SUBWAYS

15 Least Used SUB (persons used on the day of survey)			
ID	Name	Count	Share of Total for the day
18.3	Ansal plaza subway	0	0.0
29.1	Gokulpuri	0	0.0
29.3	Road No 58A Master Somnath marg, Yamuna Sports Complex	0	0.0
5.1	Near Rajdhani Collage, Raja Garden	73	0.0
29.2	Jagatpuri T Point	265	0.1
11.4	Naraina	526	0.3
21.3	Vikas marg Near Preet Vihar	840	0.5
20.2	Opp. WHO Building/Front of WHO	1108	0.6
6.2	Near Subhadra colony gate, Sashtri Nagar	1252	0.7
3.3	Metro station, Nagloi	1331	0.7
4.1	Ashok park main, Punjabi Bagh	1366	0.8
6.1	Near Indralok Masjid	1491	0.8
9.2	Palam dabri Road	1922	1.1
1.2	Azadpur fruit and Vegetable mandi near Masjid	1954	1.1
9.1	Shivaji marg Najafgadh road	2086	1.1
3.4	Maharaja Agrasen Hospital, Punjabi Bagh	2657	1.5
2.4	Sarswati Vihar	2727	1.5



## 8. USERS FEEDBACK

Feedbacks from users and non-users have been collected through structured questionnaires. Nearly 3108 users have been interviewed. The profile of respondents is presented in Tables 61-64 and the feedbacks are summarised in Tables 65 to 68.

### 8.1 Profile of User Respondents

Most of the user respondents come from age group of 16-50 years (Table 61). Females form about 11 per cent of sample (Table 62); about 61 per cent are educated but non-graduates (Table 63); about 47 per cent are salaried employed people; while about 27 per cent are students (Table 64). Thus, the sample is well represented by all class of society.

TABLE 61: DISTRIBUTION OF USERS BY AGE-CATEGORY

Zone	age category					Total
	<15	16-30	31-50	51-60	above 60	
East	36	541	353	15	19	964
North	60	540	263	20	31	914
South	39	805	317	42	27	1,230
Total	135	1,886	933	77	77	3,108
Distribution by Column						
East	3.73	56.12	36.62	1.56	1.97	100
North	6.56	59.08	28.77	2.19	3.39	100
South	3.17	65.45	25.77	3.41	2.20	100
Total	4.34	60.68	30.02	2.48	2.48	100
Distribution by Row						
East	26.7	28.7	37.8	19.5	24.7	31.0
North	44.4	28.6	28.2	26.0	40.3	29.4
South	28.9	42.7	34.0	54.5	35.1	39.6
Total	100	100	100	100	100	100

TABLE 62: DISTRIBUTION OF USERS BY GENDER

Zone	Gender		Total
	Female	Male	
East	125	839	964
North	122	793	915
South	108	1,121	1,229
Total	355	2,753	3,108
Distribution by Column			
East	12.97	87.03	100
North	13.33	86.67	100
South	8.79	91.21	100
Total	11.42	88.58	100
Distribution by Row			
East	35.2	30.5	31.0
North	34.4	28.8	29.4
South	30.4	40.7	39.5
Total	100	100	100

TABLE 63: DISTRIBUTION OF USERS BY EDUCATION

Education Level				
Zone	Illiterate	Literate(Non Graduate)	Graduate	Total
East	105	590	268	963
North	196	538	180	914
South	105	757	368	1,230
Total	406	1,885	816	3,107
Distribution by Column				
East	10.90	61.27	27.83	100
North	21.44	58.86	19.69	100
South	8.54	61.54	29.92	100
Total	13.07	60.67	26.26	100
Distribution by Row				
East	25.9	31.3	32.8	31.0
North	48.3	28.5	22.1	29.4
South	25.9	40.2	45.1	39.6
Total	100	100	100	100

TABLE 64: DISTRIBUTION OF USERS BY OCCUPATION

Occupation							
Zone	Business	Salaried Employment	Retired	Casual Labour	Student	Non-Working	Total
East	47	499	8	92	256	61	963
North	50	359	16	209	229	51	914
South	66	593	13	113	369	76	1,230
Total	163	1,451	37	414	854	188	3,107
Distribution by Column							
East	4.88	51.82	0.83	9.55	26.58	6.33	100.00
North	5.47	39.28	1.75	22.87	25.05	5.58	100.00
South	5.37	48.21	1.06	9.19	30.00	6.18	100.00
Total	5.25	46.70	1.19	13.32	27.49	6.05	100.00
Distribution by Row							
East	28.8	34.4	21.6	22.2	30.0	32.4	31.0
North	30.7	24.7	43.2	50.5	26.8	27.1	29.4
South	40.5	40.9	35.1	27.3	43.2	40.4	39.6
Total	100	100	100	100	100	100	100.0

## 8.2 Reasons of using FOBs/Subways by Category of Importance

Several questions were asked from the users and they were requested to rank the reasons by importance. The responses are summarised in Table 65 and 66 for FOBs and SUBs respectively. The ranks for the reasons are obtained by clubbing most important and important reasons together. Detailed table covering each zone and each reason is provided in Appendix 7.

In case of both FOBs and SUBs the top reasons is avoidance of accidents. The second most important reason for FOBs is self-discipline, while in case of SUB it is saving of time. These two reasons together, account for more than 70 per cent of the responses under the category of most important reasons.

Therefore, three factors, safety against accidents, saving of time and self-discipline are key factors for users to use FOBs and SUBs.

TABLE 65: REASONS FOR USING FOBs BY USERS

Reasons for Using FOB by Users (response counts)						
Potential Reasons	Most Important	Important	Sum of Most Important and Important	Other*	Total**	Rank
It Avoids Accident	1179	628	1807	282	2089	1
Self-discipline	436	661	1097	992	2089	2
It is Time Saving	401	620	1021	1065	2086	3
No alternatives	73	135	208	1880	2088	4
Motivated by NGOs/ Government Campaign	71	81	152	1937	2089	5
Total Response	2160	2125	4285	6156	10441	
Distribution by Column						
It Avoids Accident	56.4	30.1	86.5	13.5	100	
Self-discipline	20.9	31.6	52.5	47.5	100	
It is Time Saving	19.2	29.7	48.9	51.1	100	
No alternatives	3.5	6.5	10.0	90.0	100	
Motivated by NGOs/ Government Campaign	3.4	3.9	7.3	92.7	100	
Distribution by Row						
It Avoids Accident	54.6	29.6	42.2	4.6		
Self-discipline	20.2	31.1	25.6	16.1		
It is Time Saving	18.6	29.2	23.8	17.3		
No alternatives	3.4	6.4	4.9	30.5		
Motivated by NGOs/ Government Campaign	3.3	3.8	3.5	31.5		
Total Response	100	100	100	100		
* Other includes "moderately important", "Slightly important", and "Not important"						
** the total across potential reasons vary as many respondents did not respond to all potential reasons						

TABLE 66: REASONS FOR USING SUBWAYS BY USERS

Reasons for Using Subways by Users (response counts)						
Potential Reasons	Most Important	Important	Sum of Most Important and Important	Other*	Total	Rank
It Avoids Accident	636	278	914	106	1020	1
It is Time Saving	169	343	512	508	1020	2
Self-discipline	169	302	471	549	1020	3
No alternatives	33	76	109	910	1019	4
Motivated by NGOs/ Government Campaign	40	44	84	933	1017	5
Total Response	1047	1043	2090	3006	5096	
Distribution by Column						
It Avoids Accident	62.4	27.3	89.6	10.4	100	
It is Time Saving	16.6	33.6	50.2	49.8	100	
Self-discipline	16.6	29.6	46.2	53.8	100	
No alternatives	3.2	7.5	10.7	89.3	100	
Motivated by NGOs/ Government Campaign	3.9	4.3	8.3	91.7	100	
Distribution by Row						
It Avoids Accident	60.7	26.7	43.7	3.5		
It is Time Saving	16.1	32.9	24.5	16.9		
Self-discipline	16.1	29.0	22.5	18.3		
No alternatives	3.2	7.3	5.2	30.3		
Motivated by NGOs/ Government Campaign	3.8	4.2	4.0	31.0		
Total Response	100	100	100	100		
* Other includes "moderately important", "Slightly important", and "Not important"						
** the total across potential reasons vary as many respondents did not respond to all potential reasons						

### 8.3 Suggestions for Improvement by the Users

Tables 67 through 68 summarise importance wise suggestion given by the users. Detailed table covering each zone and each suggestion is provided in Appendix 7.

The survey data of users indicates that most people are concerned about deployment of security, cleanliness and mechanised system like lifts and escalators. It is learnt that the PWD has made arrangement for security guards for each FOB and SUBs, yet user feel their absence. Therefore, it may be important to monitor the timings of such arrangement. Large numbers of users have also suggested blocking the alternative path in order to increase the use of infrastructure.

TABLE 67: SUGGESTIONS FOR IMPROVEMENT BY USERS OF FOBS

Suggestion for improvement by Users of FOB (response counts)						
Potential Reasons	Most Important	Important	Sum of Most Important and Important	Other*	Total**	Rank
Deploying a Security guard	733	775	1508	582	2090	1
Making it Cleaner	689	534	1223	866	2089	2
Providing Escalator/ Lift	592	571	1163	923	2086	3
Blocking alternative modes of crossing in the vicinity of FOB/Subway	309	401	710	1377	2087	4
Reducing the Height of FOB	99	445	544	1546	2090	5
Ensuring their proximity to bus-stops	109	253	362	1727	2089	6
Ensuring that area is Hawkers-Free	121	171	292	1794	2086	7
Total Response	2652	3150	5802	8815	14617	
Distribution by Column						
Deploying a Security guard	35.1	37.1	72.2	27.8	100	
Making it Cleaner	33.0	25.6	58.5	41.5	100	
Providing Escalator/ Lift	28.4	27.4	55.8	44.2	100	
Blocking alternative modes of crossing in the vicinity of FOB/Subway	14.8	19.2	34.0	66.0	100	
Reducing the Height of FOB	4.7	21.3	26.0	74.0	100	
Ensuring their proximity to bus-stops	5.2	12.1	17.3	82.7	100	
Ensuring that area is Hawkers-Free	5.8	8.2	14.0	86.0	100	
Distribution by Row						
Deploying a Security guard	27.6	24.6	26.0	6.6	14.3	
Making it Cleaner	26.0	17.0	21.1	9.8	14.3	
Providing Escalator/ Lift	22.3	18.1	20.0	10.5	14.3	
Blocking alternative modes of crossing in the vicinity of FOB/Subway	11.7	12.7	12.2	15.6	14.3	
Reducing the Height of FOB	3.7	14.1	9.4	17.5	14.3	
Ensuring their proximity to bus-stops	4.1	8.0	6.2	19.6	14.3	
Ensuring that area is Hawkers-Free	4.6	5.4	5.0	20.4	14.3	
Total Response	100	100	100	100	100	
* Other includes "moderately important", "Slightly important", and "Not important"						
** the total across potential reasons vary as many respondents did not respond to all potential reasons						

TABLE 68: SUGGESTIONS FOR IMPROVEMENT BY USERS OF SUBS

Suggestion for improvement by Users of SUB (response counts)						
Potential Reasons	Most Important	Important	Sum of Most Important and Important	Other*	Total**	Rank
Deploying a Security guard	442	296	738	282	1020	1
Making it Cleaner	319	301	620	399	1019	2
Providing Escalator/ Lift	254	267	521	498	1019	3
Blocking alternative modes of crossing in the vicinity of FOB/Subway	154	215	369	649	1018	4
Reducing the Height of FOB and Depth of Subway	37	264	301	717	1018	5
Ensuring that area is Hawkers-Free	61	147	208	811	1019	6
Ensuring their proximity to bus-stops	69	138	207	812	1019	7
Total Response	1336	1628	2964	4168	7132	
Distribution by Column						
Deploying a Security guard	43.3	29.0	72.4	27.6	100	
Making it more Clean	31.3	29.5	60.8	39.2	100	
Providing Escalator/ Lift	24.9	26.2	51.1	48.9	100	
Blocking alternative modes of crossing in the vicinity of FOB/Subway	15.1	21.1	36.2	63.8	100	
Reducing the Height of FOB and Depth of Subway	3.6	25.9	29.6	70.4	100	
Ensuring that area is Hawkers-Free	6.0	14.4	20.4	79.6	100	
Ensuring their proximity to bus-stops	6.8	13.5	20.3	79.7	100	
Distribution by Row						
Deploying a Security guard	33.1	18.2	24.9	6.8	14.3	
Making it Cleaner	23.9	18.5	20.9	9.6	14.3	
Providing Escalator/ Lift	19.0	16.4	17.6	11.9	14.3	
Blocking alternative modes of crossing in the vicinity of FOB/Subway	11.5	13.2	12.4	15.6	14.3	
Reducing the Height of FOB and Depth of Subway	2.8	16.2	10.2	17.2	14.3	
Ensuring that area is Hawkers-Free	4.6	9.0	7.0	19.5	14.3	
Ensuring their proximity to bus-stops	5.2	8.5	7.0	19.5	14.3	
Total Response	100.0	100	100	100	100	
* Other includes "moderately important", "Slightly important", and "Not important"						
** the total across potential reasons vary as many respondents did not respond to all potential reasons						

## 9. NON-USERS FEEDBACK

Feedbacks from non-users have also been collected through structured questionnaires. Nearly 2215 non-users have been interviewed. The profile of respondents is presented in Tables 69-72 and the feedbacks are summarised in Tables 73 to 76.

### 9.1 Profile of Non-User Respondents

Most of the non-user respondents come from age group of 16-50 years (Table 69). Females form about 10 per cent of sample (Table 70); about 62 per cent are educated but non-graduates (Table 71); about 50 per cent are salaried employed people; while about 25 per cent are students (Table 72). Thus, the sample is well represented by all class of society.

TABLE 69: DISTRIBUTION OF NON-USER RESPONDENTS BY AGE GROUP

Zone	age category					Total
	<15	16-30	31-50	51-60	above 60	
East	14	482	264	13	7	780
North	56	424	231	26	30	767
South	24	401	212	17	14	668
Total	94	1,307	707	56	51	2,215
Distribution by Column						
East	1.79	61.79	33.85	1.67	0.90	100
North	7.30	55.28	30.12	3.39	3.91	100
South	3.59	60.03	31.74	2.54	2.10	100
Total	4.24	59.01	31.92	2.53	2.30	100
Distribution by Row						
East	14.9	36.9	37.3	23.2	13.7	35.2
North	59.6	32.4	32.7	46.4	58.8	34.6
South	25.5	30.7	30.0	30.4	27.5	30.2
Total	100	100	100	100	100	100

TABLE 70: DISTRIBUTION OF NON-USER RESPONDENTS BY GENDER

Zone	Gender		
	Female	Male	Total
East	69	710	779
North	92	675	767
South	55	612	667
Total	216	1,997	2,213
Distribution by Column			
East	8.86	91.14	100
North	11.99	88.01	100
South	8.25	91.75	100
Total	9.76	90.24	100
Distribution by Row			
East	31.9	35.6	35.2
North	42.6	33.8	34.7
South	25.5	30.6	30.1
Total	100	100	100

TABLE 71: DISTRIBUTION OF NON-USER RESPONDENTS BY EDUCATION

Zone	Education Level			Total
	Illiterate	Literate(Non Graduate)	Graduate	
East	86	460	234	780
North	149	471	149	769
South	55	449	165	669
Total	290	1,380	548	2,218
Distribution by Column				
East	11.03	58.97	30.00	100
North	19.38	61.25	19.38	100
South	8.22	67.12	24.66	100
Total	13.07	62.22	24.71	100
Distribution by Row				
East	29.7	33.3	42.7	35.2
North	51.4	34.1	27.2	34.7
South	19.0	32.5	30.1	30.2
Total	100	100	100	100

TABLE 72: DISTRIBUTION OF NON-USER RESPONDENTS BY PROFESSION

Zone	Occupation						Total
	Business	Salaried Employment	Retired	Casual Labour	Student	Non-Working	
East	55	419	1	62	203	39	779
North	43	310	12	147	183	74	769
South	39	371	7	54	164	34	669
Total	137	1,100	20	263	550	147	2,217
Distribution by Column							
East	7.06	53.79	0.13	7.96	26.06	5.01	100.00
North	5.59	40.31	1.56	19.12	23.80	9.62	100.00
South	5.83	55.46	1.05	8.07	24.51	5.08	100.00
Total	6.18	49.62	0.90	11.86	24.81	6.63	100.00
Distribution by Row							
East	40.1	38.1	5.0	23.6	36.9	26.5	35.1
North	31.4	28.2	60.0	55.9	33.3	50.3	34.7
South	28.5	33.7	35.0	20.5	29.8	23.1	30.2
Total	100	100	100	100	100	100	100.0

## 9.2 Reasons for Not Using

Several questions were asked from the non-users and like users they were also requested to rank the reasons by importance. The responses are summarised in Table 73 and 74 respective for FOBs and SUBs. Reasons wise table is presented in Appendix 8.

Top reasons for not using FOB include location, absence of lift/ Escalator, general conditions (usability), poor cleanliness, and absence of security.

Top reasons for not using SUBs also include the same factors, namely, location, general conditions (usability), poor cleanliness, and absence of security.



TABLE 73: REASONS FOR NOT USING FOB

Reasons for Using FOB by Non-Users (response counts)						
Potential Reasons	Most Important	Important	Sum of Most Important and Important	Other*	Total**	Rank
FOB/Subway is NOT located at Proper place	289	590	879	618	1497	1
There is NO lift/ Escalator	477	280	757	736	1493	2
FOB/Subway is not in usable condition	334	351	685	810	1495	3
FOB/Subway remain uncleansed	335	329	664	830	1494	4
Lack of security	275	344	619	876	1495	5
It is time consuming	283	237	520	974	1494	6
Lack of Sufficient Lighting during Night	254	206	460	1030	1490	7
FOB/Subway is too much congested	160	234	394	1096	1490	8
FOB/Subway is Occupied by Hawkers	149	154	303	1192	1495	9
FOB is too high/Subway is too deep	138	130	268	1228	1496	10
Total Response	2694	2855	5549	9390	14939	
Distribution by Column						
FOB/Subway is NOT located at Proper place	19.3	39.4	58.7	41.3	100	
There is NO lift/ Escalator	31.9	18.8	50.7	49.3	100	
FOB/Subway is not in usable condition	22.3	23.5	45.8	54.2	100	
FOB/Subway remain uncleansed	22.4	22.0	44.4	55.6	100	
Lack of security	18.4	23.0	41.4	58.6	100	
It is time consuming	18.9	15.9	34.8	65.2	100	
Lack of Sufficient Lighting during Night	17.0	13.8	30.9	69.1	100	
FOB/Subway is too much congested	10.7	15.7	26.4	73.6	100	
FOB/Subway is Occupied by Hawkers	10.0	10.3	20.3	79.7	100	
FOB is too high/Subway is too deep	9.2	8.7	17.9	82.1	100	
Distribution by Row						
FOB/Subway is NOT located at Proper place	10.7	20.7	15.8	6.6	10.0	
There is NO lift/ Escalator	17.7	9.8	13.6	7.8	10.0	
FOB/Subway is not in usable condition	12.4	12.3	12.3	8.6	10.0	
FOB/Subway remain uncleansed	12.4	11.5	12.0	8.8	10.0	
Lack of security	10.2	12.0	11.2	9.3	10.0	
It is time consuming	10.5	8.3	9.4	10.4	10.0	
Lack of Sufficient Lighting during Night	9.4	7.2	8.3	11.0	10.0	
FOB/Subway is too much congested	5.9	8.2	7.1	11.7	10.0	
FOB/Subway is Occupied by Hawkers	5.5	5.4	5.5	12.7	10.0	
FOB is too high/Subway is too deep	5.1	4.6	4.8	13.1	10.0	
Total Response	100.0	100.0	100.0	100.0	100.0	
* Other includes "moderately important", "Slightly important", and "Not important"						
** the total across potential reasons vary as many respondents did not respond to all potential reasons						

TABLE 74: REASONS FOR NOT USING SUB

Reasons for Not Using SUB by Non-Users (response counts)						
Potential Reasons	Most Important	Important	Sum of Most Important and Important	Other*	Total**	Rank
FOB/Subway is NOT located at Proper place	176	285	461	259	720	1
There is NO lift/ Escalator	176	285	461	259	720	2
Lack of security	149	232	381	332	713	3
FOB/Subway remain uncleansed	165	140	305	411	716	4
FOB/Subway is not in usable condition	120	170	290	427	717	5
It is time consuming	124	120	244	472	716	6
FOB/Subway is too much congested	89	122	211	509	720	7
FOB/Subway is Occupied by Hawkers	95	113	208	510	718	8
Lack of Sufficient Lighting during Night	120	85	205	513	718	9
Subway is too deep	59	66	125	591	716	10
Total Response	1273	1618	2891	4283	7174	
Distribution by Column						
FOB/Subway is NOT located at Proper place	24.4	39.6	64.0	36.0	100	
There is NO lift/ Escalator	24.4	39.6	64.0	36.0	100	
Lack of security	20.9	32.5	53.4	46.6	100	
FOB/Subway remain uncleansed	23.0	19.6	42.6	57.4	100	
FOB/Subway is not in usable condition	16.7	23.7	40.4	59.6	100	
It is time consuming	17.3	16.8	34.1	65.9	100	
FOB/Subway is too much congested	12.4	16.9	29.3	70.7	100	
FOB/Subway is Occupied by Hawkers	13.2	15.7	29.0	71.0	100	
Lack of Sufficient Lighting during Night	16.7	11.8	28.6	71.4	100	
Subway is too deep	8.2	9.2	17.5	82.5	100	
Distribution by Row						
FOB/Subway is NOT located at Proper place	13.8	17.6	15.9	6.0	10.0	
There is NO lift/ Escalator	13.8	17.6	15.9	6.0	10.0	
Lack of security	11.7	14.3	13.2	7.8	9.9	
FOB/Subway remain uncleansed	13.0	8.7	10.5	9.6	10.0	
FOB/Subway is not in usable condition	9.4	10.5	10.0	10.0	10.0	
It is time consuming	9.7	7.4	8.4	11.0	10.0	
FOB/Subway is too much congested	7.0	7.5	7.3	11.9	10.0	
FOB/Subway is Occupied by Hawkers	7.5	7.0	7.2	11.9	10.0	
Lack of Sufficient Lighting during Night	9.4	5.3	7.1	12.0	10.0	
Subway is too deep	4.6	4.1	4.3	13.8	10.0	
Total Response	100.0	100.0	100.0	100.0	100.0	
* Other includes "moderately important", "Slightly important", and "Not important"						
** the total across potential reasons vary as many respondents did not respond to all potential reasons						

### 9.3 Suggestions for improvement by the Non-Users

A number of suggestions, categorised by importance have been obtained from the non-user respondents. Complete tabulations are provided in Appendix 8. The responses are summarised in Tables 75 and 76 respectively for FOBs and SUBs. The top suggestions of non-users include provisioning of security guard, improvement in cleanliness, provisioning of lift/escalators, and closing the alternative paths of crossing roads.

TABLE 75: SUGGESTION FOR IMPROVEMENT BY NON-USERS OF FOB

Suggestion for improvement by Non-Users of FOB (response counts)						
Potential Reasons	Most Important	Important	Sum of Most Important and Important	Other*	Total**	Rank
Providing Security guard	500	575	1075	420	1495	1
Improving Cleanliness	498	403	901	592	1493	2
Providing Escalator / Lift	435	326	761	734	1495	3
Blocking of alternative modes of crossing in the vicinity of FOB/Subway	215	310	525	967	1492	4
Moderating Height of FOB/Depth of Subway	76	290	366	1127	1493	5
Locating FOB/Subways in Proximity to bus-stops	99	219	318	1175	1493	6
Making area Free from Hawkers and Like	99	128	227	1261	1488	7
Total Response	1922	2251	4173	6276	10449	
Distribution by Column						
Providing Security guard	33.4	38.5	71.9	28.1	100	
Improving Cleanliness	33.4	27.0	60.3	39.7	100	
Providing Escalator / Lift	29.1	21.8	50.9	49.1	100	
Blocking of alternative modes of crossing	14.4	20.8	35.2	64.8	100	
Moderating Height of FOB/Depth of Subway	5.1	19.4	24.5	75.5	100	
Locating FOB/Subways in Proximity to bus-stops	6.6	14.7	21.3	78.7	100	
Making area Free from Hawkers and Like	6.7	8.6	15.3	84.7	100	
Distribution by Row						
Providing Security guard	26.0	25.5	25.8	6.7	14.3	
Improving Cleanliness	25.9	17.9	21.6	9.4	14.3	
Providing Escalator / Lift	22.6	14.5	18.2	11.7	14.3	
Blocking of alternative modes of crossing	11.2	13.8	12.6	15.4	14.3	
Moderating Height of FOB/Depth of Subway	4.0	12.9	8.8	18.0	14.3	
Locating FOB/Subways in Proximity to bus-stops	5.2	9.7	7.6	18.7	14.3	
Making area Free from Hawkers and Like	5.2	5.7	5.4	20.1	14.2	
Total Response	100	100	100	100	100	
* Other includes "moderately important", "Slightly important", and "Not important"						
** the total across potential reasons vary as many respondents did not respond to all potential reasons						

TABLE 76: SUGGESTION FOR IMPROVEMENT BY NON-USERS OF SUB

Suggestion for improvement by Non-Users of SUB (response counts)						
Potential Reasons	Most Important	Important	Sum of Most Important and Important	Other*	Total**	Rank
Providing Security guard	281	266	547	171	718	1
Providing Escalator / Lift	260	146	406	308	714	2
Improving Cleanliness	158	199	357	361	718	3
Blocking of alternative modes of crossing in the vicinity of FOB/Subway	96	172	268	449	717	4
Moderating Height of FOB/Depth of Subway	45	204	249	466	715	5
Making area Free from Hawkers and Like	46	103	149	568	717	6
Locating FOB/Subways in Proximity to bus-stops	47	82	129	587	716	7
Total Response	933	1172	2105	2910	5015	
Distribution by Column						
Providing Security guard	39.1	37.0	76.2	23.8	100	
Providing Escalator / Lift	36.4	20.4	56.9	43.1	100	
Improving Cleanliness	22.0	27.7	49.7	50.3	100	
Blocking of alternative modes of crossing in the vicinity of FOB/Subway	13.4	24.0	37.4	62.6	100	
Moderating Height of FOB/Depth of Subway	6.3	28.5	34.8	65.2	100	
Making area Free from Hawkers and Like	6.4	14.4	20.8	79.2	100	
Locating FOB/Subways in Proximity to bus-stops	6.6	11.5	18.0	82.0	100	
Distribution by Row						
Providing Security guard	30.1	22.7	26.0	5.9	14.3	
Providing Escalator / Lift	27.9	12.5	19.3	10.6	14.2	
Improving Cleanliness	16.9	17.0	17.0	12.4	14.3	
Blocking of alternative modes of crossing in the vicinity of FOB/Subway	10.3	14.7	12.7	15.4	14.3	
Moderating Height of FOB/Depth of Subway	4.8	17.4	11.8	16.0	14.3	
Making area Free from Hawkers and Like	4.9	8.8	7.1	19.5	14.3	
Locating FOB/Subways in Proximity to bus-stops	5.0	7.0	6.1	20.2	14.3	
Total Response	100	100	100	100	100	
* Other includes "moderately important", "Slightly important", and "Not important"						
** the total across potential reasons vary as many respondents did not respond to all potential reasons						

## 10. ANALYSIS AND KEY FINDINGS

### 10.1 Status of Infrastructure

The status of FOBs and Subways has been assessed through structured schedule as well as unstructured inspection. A set of photographs of all FOBs and SUBs are presented in Appendix 9 and 10 respectively.

Information on the availability of facilities such as lighting, flooring, rooftop, railing, lifts, escalators, etc. have been obtained through structured survey as presented in Section 6. Data presented in Section 6 reflects that the maintenance of the facilities is not up to the expectation. The same message has been reported by the user and non-user respondents.

1. Out of 74 FOB 17 FOBs have been equipped with lifts and another 17 are equipped with escalators. Thus, about 46 per cent of FOBs have mechanised lifting of users. In case of Subways only one subway has lift. However, out of 34 lifts and escalators installed with FOBs, only 21 were found to be working on the day of survey (Section 6). This means the availability of mechanised system is only about 62 per cent. The period of breakdown of these facilities is reported to vary from one day to four years.
2. Almost 36 per cent of the FOBs do not have rooftop, about 58 per cent do not have ramp, and about 32 per cent of the FOBs do not have proper flooring. About 22 per cent of the FOBs do not have lighting facility.
3. During the survey days, security guards were not found to be deployed at 78 per cent of the FOBs and 30 per cent of the Subways. This is one of the major concerns raised by both users as well as non-users.
4. The perception of users and non-users is considerably at variance when it comes to assigning overall rating of FOBs and Subways in Delhi. While more than 62 per cent of users (considering both FOBs and SUBs) think that the facilities are good or very good, only about 47 per cent of non-users think so (Table 77).
5. Besides breakdown of physical installation, there are damages and poor upkeep of the system, which is reported through general inspection. Such problems are listed in Table 78.

TABLE 77: OVERALL RATING OF INFRASTRUCTURE BY USERS AND NON-USERS

A. Overall Rating by Non-Users of FOB (response counts)					
Respondent Group	Very Good	Good	Sum of Very Good and Good	Other*	Total
Users	225	1091	1316	773	2089
Non Users	127	580	707	791	1498
Total Response	352	1671	2023	1564	3587
Distribution across column					
Users	10.8	52.2	63.0	37.0	100
Non Users	8.5	38.7	47.2	52.8	100
Distribution across rows					
Users	63.9	65.3	65.1	49.4	58.2
Non Users	36.1	34.7	34.9	50.6	41.8
Total Response	100	100	100	100	100

B. Overall Rating by Non-Users of SUB (response counts)					
Respondent Group	Very Good	Good	Sum of Very Good and Good	Other*	Total
Users	110	517	627	392	1019
Non-Users	52	281	333	387	720
Total Response	162	798	960	779	1739
Distribution across column					
Users	10.8	50.7	61.5	38.5	100
Non-Users	7.2	39.0	46.3	53.8	100
Distribution across rows					
Users	67.9	64.8	65.3	50.3	58.6
Non-Users	32.1	35.2	34.7	49.7	41.4
Total Response	100	100	100	100	100
* Other includes "Acceptable", "Poor", and "Very Poor"					

6. The general inspection during the survey reveals the following issues, which are also presented in Table 78 with specific reference to selected installations (for selected FOBs and SUBs). The following issues are reflected:
  - i. Cleaning is not done daily. At many places the cleaning staffs come after several days.
  - ii. FOBs and Subways near Jhuggi-Jhopadi colonies are in general dirty and they need extra care.
  - iii. Some of the FOBs and Subways are occupied by hawkers, fixed shops, beggars, etc. leading to congestion and inconvenience for facility users.
  - iv. In many placed drainages are clogged leading to overflowing of dirty water and mud.

- v. At some places people have been found to use Subways and FOBs for drinking alcohol and playing cards. This kind of activity detracts people from using the infrastructure for its legitimate purpose.
- vi. Many ramps of FOBs and Subways are used for parking motorbikes and bicycles. Thus, the space is rendered occupied and useless for legitimate users, particularly the Divyang persons.
- vii. Near some of the Subways, the open space is used for urination leading to bad smell and unhygienic conditions.
- viii. Light is not available at many FOBs and Subways. The bulb and tubes are broken down and not maintained for days.
- ix. Some of the FOBs with ramp are used by Rickshaw pullers and bikes, while entrances of some of the FOBs are blocked by parking.
- x. The road side barriers near many FOBs and Subways are broken, thus allowing people to cross the road directly.

TABLE 78: GENERAL OBSERVATIONS ON THE DAY OF SURVEY WITH RESPECT TO FOBs AND SUBS

Sl. No	ID	Name of the Infrastructure	Type	Observations on the day of survey
1	1.3	Near Azadpur Round About Azadpur	FOB	Shop near Escalator
2	1.4	Road No. 51 Near Azadpur	FOB	No comments
3	2.1	Behra Enclave Outer Ring road (First)	FOB	Needs Repairing
4	2.2	Behra Enclave Outer Ring road (Second)	FOB	Cleaning is not done daily.
5	3.1	Nangloi (Near Lokesh Cinema), NH-10 (Delhi Rohtak Road)	FOB	Needs cleaning
6	3.2	Nangloi (Near Metro Station), NH-10 (Delhi Rohtak Road)	FOB	Needs cleaning
7	4.2	Near Janmashtmi Park Punjabi Bagh, Ring Road	FOB	Very dirty
8	4.3	Near sakurbasti Railway station	FOB	No users. After 2:30 PM, drinkers, and gamblers get together and occupy the space
9	4.3	Rani Bagh, Shakur Basti, Near Railway Station on Road No.43.	FOB	After 2.30Pm gamblers and drinkers get together to occupy the space
10	4.4	Punjab Kesri Footover Bridge at Ring Road	FOB	Very dirty
11	5.3	Karampura, Shiv Dass Puri Marg	FOB	No cleaning
12	6.3	Near Sarai Rohilla Police Station On Kalidass Marg	FOB	No comments
13	6.4	Sakurpur Metro station	FOB	Cleaning is not done
14	6.4	Sakurpur Footover Bridge At Ring Road	FOB	Cleaning is not done daily.
15	7.1	Prembari	FOB	Too much dirty due to presence of Jhuggi-Jhopari Basti

Sl. No	ID	Name of the Infrastructure	Type	Observations on the day of survey
16	7.1	Prembari Footover Bridge At Ring Road	FOB	Very dirty because of Jhuggi nearby
17	7.2	Netaji shubhace place	FOB	Cleaning is not done
18	7.2	Netaji Subhash Place Foot over Bridge at RoadNo.41 (Lala Jagat Narayan Road)	FOB	No cleaning
19	7.3	Kela Godown Road, Shalimar Bagh	FOB	No comments
20	7.4	Road no. 37 Near kanhaiya nagar	FOB	No Cleaning, Cut available just below FOB for crossing, and there are shops on FOB
21	7.4	Road No. 37 (Maharaja Nahar Singh Marg) near Kanhaiya Nagar	FOB	No cleaning; there is cut just below the FOB, which allows free movement of people across road
22	9.3	Pankha Road	FOB	No cleaning
23	10.1	Pampsh enclave	FOB	Beggars have occupied space and create safety issues
24	10.1	Pampse Enclave	FOB	Space is occupied by beggars
25	10.2	Moti Bagh, Ring Road	FOB	No comments
26	10.3	Gurudwara Nanakpura, Ring Road	FOB	People keep on sleeping on the foot over bridge
27	10.4	Mochi Bagh Shatya Niketan, Moti Bagh	FOB	Escalator not working, and people are sleeping on the FOB
28	10.4	Mochi Bagh, Shanti Niketan, Ring Road	FOB	Escalators mostly not working. People sleeping on the foot over bridge.
29	11.1	Dhaura Kuan to Moti Bagh on NH8	FOB	Junkies occupy the space
30	11.2	Dhaura Kuan Metro Station on NH8	FOB	No comments
31	12.3	Maharani Bagh	FOB	Shops are set up on the FOB
32	12.4	Nehru Nagar	FOB	No cleaning
33	13.1	Ashram Mathura Road	FOB	People drink alcohol on the FOB bridge
34	13.2	Bhogal Mathura Road	FOB	People use FOB for sleeping
35	13.3	Sarita Vihar	FOB	Slum is created under the FOB
36	14.1	Modi mill Near NSIC	FOB	Beggars have occupied space and create safety issues
37	14.2	Prahladpur MB Road	FOB	Parking in front of the divyang Ramp. Cleaning is not done.
38	14.3	Lal kuan, Badarpur	FOB	The gate of the Fob is surrounded by tire puncher shop.
39	14.4	Jamiya Hammad University, Sangam Vihar	FOB	Fob is not clean
40	15.1	Batra hospital, Sangam Vihar	FOB	Beggars have occupied space and create safety issues; People drink alcohol
41	16.2	Bhairo Mandir Kalkaji	FOB	Beggars have occupied space and create safety issues; Shop on FOB
42	16.3	Near DC office MB Road	FOB	One side grill of the Divyang ramp is broken. No cleaning is done. People drink alcohol at night
43	16.4	Saket Metro station, MB Road	FOB	Cleaning of Fob done weekly
44	17.1	Ansari Nagar	FOB	People drink alcohol at night.
45	17.2	Jia Sarai, Panchsheel	FOB	Bridge should also be rooftop. Mostly lifts are break down
46	21.1	Rajauri Garden	FOB	Escalator not working, and cleaning is not done



Sl. No	ID	Name of the Infrastructure	Type	Observations on the day of survey
47	22.2	Majnu ka tila	FOB	FOB has been made a waste house. Beggars have occupied the FOB bridge
48	22.3	Delhi police Apartment, UP link Road Mayur Vihar	FOB	Light not working, no cleaning
49	22.4	Kishan kunj	FOB	FOB is not clean and parking lot at the main gate has closed entire path
50	23.1	Ghazipur Grade seprator	FOB	FOB is not clean
51	23.2	Latita park	FOB	Rickshaw and bikes also use this FOB making it unsafe. Fob is not clean
52	23.3	Pandav Nagar NH 24	FOB	FOB is not clean.
53	23.4	Samachar Apartment, Mayur Vihar Extension	FOB	Lift not working
54	23.4	Samachar Apartment, Mayur Vihar Extension	FOB	Power cut for 3 months, so the lift and light is not working. No cleaning, Foot over bridge is broken.
55	24.1	Sakarpur School Block, Marginal Band Road	FOB	No cleaning; FOB Ramps is being used for riding bikes and Rickshaw
56	24.2	Sakarpur School Block	FOB	FOB is full of garbage and it never cleaned
57	24.3	Vinod Nagar Patparganj NH 24	FOB	Grill is broken along the stairs of the foot over bridge.
58	24.4	Ambedkar collage Road No. 59	FOB	No cleaning on the fob, people drink alcohol and take drugs in the evening
59	25.1	Brijpuri Road no. 59	FOB	Beggars and shop keepers have occupied the Fob. No cleaning and people drink alcohol and take drugs in the evening
60	25.2	Ashok nagar	FOB	Cleaning is not done
61	25.3	Bhopra Border Harsh Vihar	FOB	Cleaning is not done. People use the space for drinking alcohol and taking drugs
62	25.4	Jhandewalan Mandir, Rani jhansi Road	FOB	FOB is under repair for 2 months so it is closed.
63	26.1	Jhandewalan Mandir, D B G Road	FOB	FOB is under repair for few months so it is closed.
64	26.2	Apsara Boder No. 1, Shahadra	FOB	Lift works 1 or 2 times a month. People are sitting every time. Foot over bridge one gate blocked auto rickshaw and second gage is the house of urine
65	26.3	Apsara Boder No. 2, Shahadra	FOB	Cleaning is not done, liftman does not operate the lift daily
66	26.4	Ramprasth Road No. 56, Ramprastha	FOB	No cleaning; Road grill is broken.
67	27.1	Vishwas Nagar Road Nol 57A	FOB	Beggars have occupied the FOB bridge and people drink alcohol on this FOB making it unsafe
68	27.2	Bhikam Singh Colony Road No. 57, Vishwas Nagar	FOB	Escalator start at 8.30AM in the morning
69	27.3	EDM Mall, Anand Vihar	FOB	Cleaning is not done
70	27.4	ISBT Anand Vihar	FOB	Too crowded due to Railway Station, ISBT, Metro, beggars, shops on the FOB
71	28.3	Taj Highway Apartment Road No 56, Ghazipur	FOB	Cleaning is not done
72	28.4	Gandhi nagar Road No 57	FOB	FOB being used for dumping garbage and the divyang Ram being used as parking
73	29.4	ISBT Kasmiri gate	FOB	Too many beggars and junkies
74	1.1	In front of Azadpru Fruit and Vegetable Mandi	SUB	Poor cleaning

Sl. No	ID	Name of the Infrastructure	Type	Observations on the day of survey
75	1.2	In front of Azadpru Fruit and Vegetable Main road	SUB	maintenance is poor and there is parking which restricts movement of people
76	2.3	Near Rohini court Madhuban chowk Pitampur	SUB	No comments
77	2.4	Saraswati vihar	SUB	Needs Repairing and maintenance
78	3.3	Nangloi Subway (NH - 10) Delhi Rohtak Road	SUB	Very dirty and there is hawker selling fruit
79	3.4	Near Maharaja Agrasen Hospital NH -10 (Delhi Rohtak Road)	SUB	No comments
80	4.1	Ashok park Main NH -10 (Delhi Rohtak Road)	SUB	Very dirty
81	5.1	Near Rajdhani Collage, Raja Garden	SUB	Not being used because of bridge nearby
82	5.1	Raja garden (Rajdhani Collage) Ring Road	SUB	Drinkers occupy during evening hours
83	5.2	E S I Hospital Ring Road	SUB	No comments
84	5.4	Punjabi Bagh Intersection Ring Road	SUB	Very dirty and people collect to drink alcohol during evening
85	6.1	Near Indralok Masjid	SUB	Subway open from 8.00AM to 7.00PM
86	6.1	Near Inderlok Masjid Road No. 40	SUB	Subway open from 8.00AM to 7.00PM
87	6.2	Near Sughadra colony Gate Road No. 40 Sashtri nagar	SUB	No comments
88	9.1	Shivaji marg Najafgadh road	SUB	Being extensively used by drinkers, light is very poor
89	9.1	Sheo nath tyagi marg Intersection Najaf garh road	SUB	Most of the lights is broken down; drinkers occupy the space; no cleaning
90	9.2	Palam dabri Road	SUB	Cleaning is not done
91	9.2	Palam dabri road	SUB	No cleaning
92	11.3	Dhaura kuan	SUB	Full of dirt and drains have clogged
93	11.3	Dhaura kuan	SUB	Lot of dirt. Drainage is clogged
94	11.4	Naraina	SUB	Space being used drinking alcohol, drains are clogged, dirty
95	11.4	Naraina	SUB	All drains are clogged; very dirty; People sit in subway and drink Alcohol.
96	12.1	At Ring Road wazirpur Subway	SUB	No comments
97	12.2	At Ring Road Britainia	SUB	There is lot of dirt around SUB
98	12.2	At Ring Road Britainia Subway	SUB	There is lot of dirt around subway.
99	15.4	Munirka	SUB	Cleaning is not done, people drink alcohol
100	18.2	Safdarjang Hospital Subway	SUB	Dirt around subway. Shops inside the subway
101	18.3	Ansai plaza subway	SUB	Door closed
102	19.2	Hauz khas Outer Ring Road	SUB	Drainage is blocked
103	19.4	Masjid Moth	SUB	People urinate near SUB creating unhygienic conditions
104	20.1	Subway at Nehru place	SUB	No cleaning, shops on the stairs of SUB
105	20.2	Opp. WHO Building/Front of WHO	SUB	Dirty inside SUB and somebody resides inside the SUB
106	21.3	Vikas marg Near Preet Vihar	SUB	SUB opens at 8:30am and people use space for alcohol and drug

Sl. No	ID	Name of the Infrastructure	Type	Observations on the day of survey
107	21.4	Bhajanpura	SUB	It has not cleaned for several months. Garbage is gathered and very smells. Pump is not working at time.
108	22.1	Nigam bodh ghat	SUB	No cleaning
109	29.1	Gokulpuri	SUB	Too dirty to use
110	29.1	Gokulpuri	SUB	This Subway is not working and the space is being used by alcohol drinkers and drug addicts persons
111	29.3	Road No 58A Master Somnath marg, Yamuna Sports Complex	SUB	No cleaning

## 10.2 Best FOB/ Subways

An open question was asked to the respondents to name best FOB/Subways in Delhi. Out of 1772 responses the top 18 FOB/Subways are listed in Table 79 below. List includes only those FOBs or Subways which are named by at least 20 respondents. However these reporting are not verified as all of these did not form part of the survey. It may be noted that Survey has been conducted for those FOBs and Subways which fall under the jurisdiction of PWD of GNCT but respondents were free to report best infrastructure of their choice irrespective of the authority which constructed them. These needs to be verified as many of the names are not clear about FOB or Subways.

TABLE 79: BEST FOB/ SUBWAYS AS REPORTED BY RESPONDENTS

Best FOB/ Subways as Reported by Respondents				
SL No.	Name of the Place	Frequency.	Percent	Type
1	CP/Rajeev Chowk	249	14.05	Subway
2	Punjabi_Bagh	113	6.38	FOB/Subway
3	ITO	84	4.74	FOB
4	Dilshad_Garden	73	4.12	FOB
5	Moti_Bagh	70	3.95	FOB
6	South_Extension	63	3.56	Subway
7	Sarojini_Nagar	60	3.39	Subway
8	Laxmi_Nagar	56	3.16	Subway
9	Rohini_Court	54	3.05	Subway
10	Paschim_Vihar	53	2.99	FOB
11	Nehru_Place	50	2.82	Subway
12	KalkaJi	43	2.43	FOB
13	Maharani_Bagh	39	2.20	FOB
14	Lajpat_Nagar	34	1.92	Subway
15	Behra_Enclave	29	1.64	FOB
16	Dhaura_Kuan	25	1.41	FOB
17	Saraswati_Vihar	23	1.30	Subway
18	Nehru_Nagar	21	1.19	FOB

### 10.3 Status of Utilisation of Infrastructure by People

Several FOBs and Subways are found to be highly underutilised. There are at least 7 FOBs and 4 Subways which are utilised by less than 100 persons a day (Figure 2 and Table 33). Out of these two FOBs and three Subways find no users at all.

Several reasons can be attributed to such low utilisation of these infrastructures like breakdown of lifts/escalators, illegal activities by miscreants on the FOBs and inside Subways. Such activities include playing cards, drinking wine, etc. as discussed earlier.

How to measure the utilisation of FOBs and Subways? There could be alternative methods. However, one of the transparent ways is to examine the ratio of Users to Non-Users (UNU-Ratio) point by point and aggregate this ratio for regions and other groupings to assess the relative variations.

Users to Non-Users ratios have been presented in Section 7 for several cases. However, a summary of the utilisation ratios is reproduced in Table 80 for ready reference to emphasize its variation. The key findings in these regards are as following:

1. The overall users to non-user (UNU) ratio for Subways are 2.60 which are much better than the overall UNU ratio of FOBs, which are 2.44. This is so despite the fact that many FOBs have lifts and escalators. This also reflects preference for subways in comparison to FOBs.
2. The Users to Non-Users Ratio of Subways are better in almost all groupings, namely across most age group, across most time periods, across both genders and across both Divyang and other users.
3. This means, Subways are preferred in general. Such preference may be because of several reasons. Possibly they are more convenient and require less effort. They also have less number of staircases. In addition, Subways have Psychological advantage as the path to travel starts with downward slope which requires less effort and then takes an upward journey. They are also cool inside leading to less exhaustion.
4. It is also noticed that the ratio of users and non-users in case of Divyang is much higher with Subways as compared to FOBs.
5. The summary of utilisation ratio presented in Table 78 also shows that the ratio is higher during morning and evening hours when traffic is high and people find it difficult to cross the road directly. It is higher for Divyang as compared to other group of users.
6. In general Females have higher User to Non-User ratio as compared to their Male counterparts.
7. Utilisation Ratio is also higher for Children compared to other age groups.
8. Finally, North region has much inferior Utilisation ratio as compared to East and South zone.

TABLE 80: SUMMARY OF USER TO NON-USER RATIOS

User to Non-User Ratio			
S. No	Category	FOB	Subway
By Zones			
1	East	2.29	3.15
2	North	1.86	1.33
3	South	2.95	3.74
4	Total	2.44	2.60
By Periods			
5	Morning	2.10	2.40
6	Day Time	2.76	2.72
7	Evening	2.23	2.60
8	Total	2.44	2.60
By Age Group			
9	Below 14 Years	2.41	2.83
10	14-60 Years	2.44	2.60
11	Above 60 Years	2.48	2.43
12	Total	2.44	2.60
By Gender			
13	Male	2.35	2.51
14	Female	2.60	2.80
15	Total	2.44	2.60
By User Group			
16	Divyang	3.10	9.95
17	Others	2.44	2.59
18	Total	2.44	2.60

## 10.4 Important reasons for Use and Non-Use of Infrastructure as Stated by Users and Non-Users

Analysis of the feedback obtained from users and non-users are summarised in Section 8 and 9 respectively. Tables 65-66 indicate the ranking of top reasons for using FOBs/Subways while Tables 73-74 ranks top reasons for not using the same. The following inference is clearly brought out:

Most Users use FOBs and Subways to avoid accidents. They use it due to self-discipline and believe that it would save time). Very clearly, these positive points and it may be concluded that users use FOBs and Subways with positive mind-set.

Most non-users do not use FOBs and Subways because they think it is not located at proper place (top ranked reason), there are no lifts/escalators, there is no security, subways are not in usable conditions, there is lack cleanliness, it is time consuming, there is no light, congestion by hawkers/ beggars/ etc.

Clearly, the concerns raised by non-users have high merit but the fact that they were interviewed reasonably at close proximity to the FOBs or Subways, ranking proper location as the top most important reason for not using indicates carelessness towards road safety. Nevertheless, all other reasons are very reasonable and need to be resolved.

### 10.5 Important Suggestions by Users and Non-Users for Increasing Utilisation of Infrastructure

The respondents were given plausible list of suggestions and they were asked to give weight in terms of importance of each suggestion. The possible suggestions were assembled after brain storming at the Planning Department of GNCTD. The ranking of suggestions has been prepared after taking into account the number respondents considering a particular suggestion as most important or important. The resulting rank is presented in Sections 8 and 9 for users and non-users of FOBs and SUBs.

1. There is marked convergence in perception about the importance of Lifts/Escalators, Security, cleanliness between users and non-users.
2. Both consider deployment of security as top requirement. Clearly, it expected that security guard would take care of all other requirements. He/she can report breakdown; supervise the work of cleaning; forbid people from misusing the facility for playing cards, drinking alcohol, etc. Security guards could also ensure that the facility is free from congestions; etc.
2. Cleanliness is the second most import suggestion, and it is indeed observed by the survey team that dirt and garbage is rampant at and near many of the facilities.
3. Installation of Lifts and Escalators facilitate with FOBs and Subway is the third most important suggestion for increasing the utilisation of the infrastructure. However, several of them are found to be non-working. Therefore, it can also be argued that maintenance of the facility is equally important.
4. Construction of Blockades along roads to effectively restrict direct crossing of road is the fourth most important suggestion to increase the utilisation of FOBs and Subways. However, as mentioned earlier, many places such blockades are broken to allow clear passage of people and thus rendering the infrastructure of FOBs and Subways underutilised.

### 10.6 Evidence in Favour of Providing Lift and Escalators

The ratio of users to non-users improves considerably when lifts/escalators are available. Similarly, the ratio improves if blockade is provided along the road side to restrict direct crossing (Table 81). Table 81 provides a matrix of ratios where working lift and escalator is marked on y axis and presence of blockade is marked on the x axis.

The average values of utilisation ratio are much higher in Yes-Yes or Yes-No, or No-Yes cells as compared to those in No-No cells. It means if lift/escalator is there, the utilisation is high

even if blockade is absent. Similarly, if blockade is there, the utilisation is high even if lift/escalator is not provided. When both are there, utilisation is very high.

It may be noted that the high ratios include the points where almost zero non-users are reported and very low ratios indicate that include points where almost zero users are reported.

TABLE 81: RATIO OF USERS TO NON-USERS IN PRESENCE OF LIFT/ESCALATOR AND BLOCKADE

Lift/Escalator Working	Ratio of Users to Non-Users					
	FOB			SUBWAY		
	Blockade Exists			Blockade Exists		
	No	Yes	Total	No	Yes	Total
No	1.08	176.9	170.3	0.4	1086.0	1025.7
Yes	*	1366.4	1366.4	125.7	*	125.7
Total	1.08	523.9	509.7	42.1	1086.0	1001.4

\* shows one of the data is not available

## 10.7 Findings from Regression Analysis

Using the counting data and the users/non-users data econometric exercises have been conducted to examine whether there is significant support to some of the key findings stated above. The inferences of this exercise are as following:

1. Subways do improve the overall utilisation ratio of the infrastructure taken together.
2. Presence of Lift and escalators are significant variables in explaining the utilisation ratio of FOBs
3. People with age above 60 do not find it favourable to use FOBs and they like to cross-over the road directly. It may be because the FOB is too high to negotiate.
4. The north region has more problem of direct cross-over than other two regions.
5. Female find it much more convenient to use subways and they significantly explain the utilisation of subways. Otherwise also the probability of female to use FOB is found to be higher than males.

## 10.8 Findings from Open Question

As discussed in the Section on methodology, this study has also used open questions on suggestions to capture spontaneous response for suggestions. Whatever suggested by the respondents has been summarised in Tables 82 and 83 with respect to users of FOBs and

Subways on the day of survey. The suggestions are ranked by the frequency of repetition of the same suggestion by different respondents.

Both Table 82 and 83 reveal clear messages that people want cleanliness, security, lift/escalator, light, blocking of alternatives paths, installation of camera, removing undesired occupants, etc.

TABLE 82: SUGGESTIONS DERIVED FROM OPEN QUESTION: FOB

Sl. No.	Suggested Area Of Improvement	Responses	Share
1	Improve Cleanliness	976	28.5
2	Provide Security Guard	837	24.5
3	Install Lift/ Escalator	818	23.9
4	Install Light	205	6.0
5	Block Alternative	119	3.5
6	Reduce Lift Escalator Break Downs	67	2.0
7	Moderating Height Repair	63	1.8
8	Install Camera	57	1.7
9	Construct Near Bus Stand	53	1.5
10	Install Roof	52	1.5
11	Remove Hawkers	51	1.5
12	Remove smoker Drinker	27	0.8
13	Improve General Condition	25	0.7
14	Proper Location	24	0.7
15	Provide Dustbin	21	0.6
16	Remove Beggars	15	0.4
17	Sign Board	3	0.1
18	Remove Gambling	3	0.1
19	Remove Shops	2	0.1
20	Increase Passage Space	1	0.0
21	Remove Bikes From Sub Gate	1	0.0
	Total Responses	3420	100.0

TABLE 83: SUGGESTIONS DERIVED FROM OPEN QUESTION: SUB

Sl. No.	Suggested area of improvement	Responses	Share
1	Provide Security Guard	471	27.9
2	Improve Cleanliness	457	27.1
3	Provide Lift Escalator	353	20.9
4	Install Light	148	8.8
5	Install Camera	45	2.7
6	Install Sign Board	41	2.4
7	Block Alternative	36	2.1
8	Remove Hawkers	35	2.1
9	Moderating Height Repair	21	1.2



Sl. No.	Suggested area of improvement	Responses	Share
10	Improve General Condition	21	1.2
11	Construct Near Bus Stand	17	1.0
12	Remove Smoker Drinker	12	0.7
13	Remove Beggars	9	0.5
14	Proper Location	6	0.4
15	Provide Dustbin	4	0.2
16	Remove Shops	3	0.2
17	Increase Passage Space	2	0.1
18	Reduce Lift Escalator Break Downs	2	0.1
19	Remove Gambling	2	0.1
20	Install Roof	1	0.1
21	Remove Bikes From Sub Gate	1	0.1
	Total Responses	1687	100.0

## 11. RECCOMENDATION

Based on the analysis of survey data the following recommendations emerge in order to increase the utilisation of FOBs and Subways in Delhi.

### 11.1 Subways are Better Choice

Subways appear to be better option from the utilisation point view. They attract relatively more Users than FOBs. Therefore, it is recommended to build more SUBs for crossing roads.

**Design and construction of “At-grade Crossing”** may be considered where SUBs is constructed after giving hump shape to the road at the point of crossing, whereby the SUB can be at the level of road. This can be very effective in making road crossing safe and effortless. During the discussion on the draft report, Assistant Commissioner of Police, Delhi Traffic Police made this suggestion for future subways.

### 11.2 Need for Adequate Barricading

It is very obvious that people cross roads near FOBs and SUBs because they can do so. They take the advantage of broken barricades, very low road dividers, and cuts made for crossing the roads. Annexure 5 provides evidence of several such inadequacies near FOBs and SUBs. It can be said that except those FOBs and SUBs where non-users are zero as listed in Appendix 2, all other need reconstruction and strengthening.

### 11.3 Needs for Lifts/ Escalators

Presence of Lift or Escalator improves the utilisation of the facility and therefore they must be integral part of FOBs. Both users as well as non-users have placed very high importance to provide these facilities (Section 8 and 9).

In all FOBs where steps are in excess of 30-40, lifts and escalators may be installed for increasing the use of FOBs and SUBs.

However, many places Lifts and Escalators are found to be broken down. Therefore, good maintenance practices are also needed to be put in place to ensure round the clock operation of these installations.

### 11.4 Cleanliness and Maintenance

Cleanliness is highly desired to attract users of FOBs and Subways and therefore, a responsive and accountable system may be placed to ensure proper maintenance of the system. Both Users and non-users place high importance to cleanliness.

### 11.5 Security Guards

There is high desirability of appointing security guards to attend to the needs of users of the facility and to prevent untoward incidences. Both Users as well as non-users place high importance to security.

As per findings of survey, the security guard were not found to be present at several location of FOB/Subway on the day of survey. However, PWD representatives have informed that there is a provision of security guard at each location. Appendix 2 provides list of all FOBs and SUBs where security guards were found to be present.

### 11.6 Need for Rooftop on every FOB

Only about 64 per cent of the FOBs have rooftop and this inadequacy is almost uniformly distributed across all the three regions. Table 16 provides list of such FOBs. It may be noted that a large number of respondents in this survey have shown desirability for roof top. Roof top provides safety during rainy season, extreme summer and extreme cold. On top of it rooftop is essential for safeguard against height fear, which may lead to unbalance while walking on such FOBs. Therefore it is recommended that all FOBs must be provided with rooftop.

### 11.7 Need for facility of Ramp along stair case

Ramps are constructed in about 42 per cent of the FOBs. About 52 per cent of them exist in South, 16 per cent in North and 32 per cent in East zone. Ramp is essential for physically impaired persons and easy transporting of bicycles of cyclists

### 11.8 Lighting Facility

Although almost all Subways have lighting facilities in place but they are not found to be fully working. The lights are insufficient, which present a scary environment for users. Only about 78 per cent of FOBs have lighting arrangements, North zone being least lighted. List of all FOBs without the provision of light is presented in Section 6. However, more important is to ensure that the light remain sufficient all the time.

### 11.9 Need to improve flooring of FOBs and SUBs

About 32 per cent of FOBs do not have flooring and majority of such FOBs are located in East and South zones. Lis of FOBs reported to be without proper flooring are presented in Section 6. Bare mild steel floors can corrode and cause injuries to pedestrians. Good flooring is important to attract users and make walking enjoyable. Floors made of tiles or granites are attractive and durable.

### 11.10 Need for installing signage/sign-boards

Many times people do not know about the existence of FOBs and Subways in nearby vicinity. Therefore, it may be good idea to place appropriate signage to indicate the presence of FOBs and Subways.

Proper awareness among general public must be made nearby the location of each subway. For this purpose, boards and sign-marks should be installed near all subways. In many metro concourse facilities are available that the general public can cross concourse free of cost but due to lack of publicity large number of people are not availing the facility. It should be properly advertised

### 11.11 Need for redesign and reconstruction of road dividers and blocking alternative paths

Blocking of alternative path is highly desired by the respondents. Therefore, it is recommended that checking and maintenance of blockade and dividers along roads must be regularly done.

### 11.12 Stopping Misuse and Abuse

Several FOBs and SUBs have been reported to be occupied by alcohol drinkers, druggists, beggars, hawkers etc. (Table 78 Section 10). This has to be attended to for increasing the use of FOBs and SUBs.

People should not be allowed to occupy the walking space for any purpose. Proper warning/suggestive signage can be put at appropriate place.

Warnings against pasting stickers and advertisements should also be issued through notice displays.

Ramps and Stairs both should be provided at the FOB and Subways to facilitate movement of bicycles. However, such passages must also be blocked in such a way that allows bicycles but not motorbikes.

### 11.13 Beautification

Underpass may be made lively through decorations and colourful lighting.

Vertical gardens are becoming popular along roads and the same can be easily adopted for FOBs and SUBs

### 11.14 Capacity Audit

Some of the FOBs and Subways are carrying huge number of users and therefore, consideration should be given to protect them from overloading and eventual damage. Additional facility needs to be created at these places.

### 11.15 Tactile Tiles for flooring

During the discussion on the draft report, Assistant Commissioner of Police, Delhi Traffic Police suggested to introduce tactile paving. This is a system of textured ground surface indicator for footpaths, stairs and train station platforms to assist pedestrians who are visually impaired (Figure 11). The original tactile paving was developed by Seiichi Miyake in 1965. The paving was first introduced in a street in Okayama city, Japan, in 1967. Its use gradually spread in Japan and then around the world.

FIGURE 11: TECTILE PAVING (YELLOW STRIPS) IN JAPAN



Source: [https://en.wikipedia.org/wiki/Tactile\\_paving](https://en.wikipedia.org/wiki/Tactile_paving)

### 11.16 Enforcement of Rules

The enforcement of traffic rule and imposition of significant amount of fine may go a long way in deterring people from unsafe crossing of roads at least near the FOBs and SUBs. The amount of fine should be such that can deliver a sense of costly risk.

Similarly, fine should also be imposed on motor drivers if they do not “give way” to pedestrians at the “zebra crossings”. There should be provision of passage light for pedestrians at selected points on roads and it should be ensured that motor drivers follow the rule.

## APPENDIX-1: INFRASTRUCTURE CONDITION

### INFRASTRUCTURE CONDITION

Sl. No. ↓	Details ↓	SL. No.	1	2	3	4	5
		Group/ID	1.1	1.2	1.3	1.4	2.1
		FOB/SUB	SUB	SUB	FOB	FOB	FOB
		Zone	N	N	N	N	N
		Place of Interview	In front of Azadpur Fruit and Vegetable Mandi	Azadpur fruit and Vegetable mandi near Masjid	Near Azadpur Around	Road no. 51 Mukundpur Road	Bohara Enclave
1	Whether lift facility Yes=1&No =2	lift	2	2	2	1	2
1a	If there is lift, what is its capacity	lift Cap				5	
1b	If there is lift, whether it was found working on the day of survey Yes=1 & No=2	lift_wrkng				1	
1c	If there is lift and it is not found working on the day of survey, the period from which lift is non-functional (days)	lift_bd_d					
2	Whether Escalator facility is available	escltr	2	2	1	2	1
2a	If there is Escalator, whether it was found working on the day of survey Yes = 1 No = 2	escltr_wrkng			1		2
2b	If there is Escalator, and it was found to be not working on the day of survey what is the period from which escalator is non-functional (days)	escltr_bd_d					1
3	Whether security Guard is provided at the site of FOB/Subway	secu_gaurd	1	1	1	1	1
4	Number of steps in the stairs	stair_steps	26	26		42	
5	Whether the road below the FOB/above the Subway is having blockade iron grills at divider of road up to 500 meters on both sides	blockade	1	1	1	1	1
6	Whether proper railing facility is provided on the stairs	railing_stairs	1	1	1	1	1
7	Whether proper side grill is provided on the crossing bridge of FOB	brg_siderail	2	2	1	1	1
8	Whether rooftop is available on crossing bridge of FOB	rooftop			1	2	1
9	Whether the facility/ramp for Divyang is provided	ramp	2	2	1	2	1
10	Whether proper lightening facilities are available	lighting	1	1	1	1	1
11	Whether proper drainage facilities are available	drainage	1	1	1	1	1
12	Whether the FOB/Subway is having proper flooring for walking	flooring	1	1	1	1	1
13	Latitude and longitude distance North	latitude	28.714	28.713	28.707	28.715	28.673
13A	Latitude and longitude distance East	longitude	77.171	77.174	77.179	77.181	77.094
14	Whether there is any school/other institute	school_Yes_No	1	1	1	1	1

Sl. No. ↓	Details ↓	SL. No.	6	7	8	9	10	
		Group/ID	2.2	2.3	2.4	3.1	3.2	
		FOB/SUB	FOB	SUB	SUB	FOB	FOB	
		Zone	N	N	N	N	N	
		Place of Interview	Bohara Enclave 2	Near Rohini court Madhuban chouk Pitampura	Sarswati Vihar	Near Lokesh cinema	Near Rajdhani park	
1	Whether lift facility Yes=1&No =2	lift	2	2	2	2	1	
1a	If there is lift, what is its capacity	lift_cap					5	
1b	If there is lift, whether it was found working on the day of survey Yes=1 & No=2	lift_wrkng					2	
1c	If there is lift and it is not found working on the day of survey, the period from which lift is non-functional (days)	lift_bd_d					1	
2	Whether Escalator facility is available	escltr	1	2	2	2	2	
2a	If there is Escalator, whether it was found working on the day of survey Yes = 1 No = 2	escltr_wrkng	2					
2b	If there is Escalator, and it was found to be not working on the day of survey what is the period from which escalator is non-functional (days)	escltr_bd_d	1					
3	Whether security Guard is provided at the site of FOB/Subway	secu_gaurd	1	1	1	2	1	
4	Number of steps in the stairs	stair_steps		25	25	39	25	
5	Whether the road below the FOB/above the Subway is having blockade iron grills at divider of road up to 500 meters on both sides	blockade	1	1	1	1	1	
6	Whether proper railing facility is provided on the stairs	railing_stairs	1	1	1	1	1	
7	Whether proper side grill is provided on the crossing bridge of FOB	brg_siderail	1	1	1	1	1	
8	Whether rooftop is available on crossing bridge of FOB	rooftop	1			1	2	
9	Whether the facility/ramp for Divyang is provided	ramp	1	1	1	2	2	
10	Whether proper lightening facilities are available	lighting	1	1	1	1	1	
11	Whether proper drainage facilities are available	drainage	1	1	1	1	1	
12	Whether the FOB/Subway is having proper flooring for walking	flooring	1	1	1	1	1	
13	Latitude and longitude distance North	latitude	28.666	28.708	28.701	28.682	28.701	
13A	Latitude and longitude distance East	longitude	77.092	77.134	77.126	77.059	77.126	
14	Whether there is any school/other institute	school_Yes_No	1	1	1	1	1	

Sl. No.	Details	SL. No.	11	12	13	14	15	
↓	↓	Group/ID	3.3	3.4	4.1	4.2	4.3	
		FOB/SUB	SUB	SUB	SUB	FOB	FOB	
		Zone	N	N	N	N	N	
		Place of Interview	Metro station	Maharaja Agrasen Hospital	Ashok park main	Near Janmastmi Park	Near sakurbasti Railway station	
1	Whether lift facility Yes=1&No =2	lift	2	1	2	2	2	
1a	If there is lift, what is its capacity	lift_cap		5				
1b	If there is lift, whether it was found working on the day of survey Yes=1 & No=2	lift_wrkng		1				
1c	If there is lift and it is not found working on the day of survey, the period from which lift is non-functional (days)	lift_bd_d						
2	Whether Escalator facility is available	escltr	2	2	2	2	2	
2a	If there is Escalator, whether it was found working on the day of survey Yes = 1 No = 2	escltr_wrkng						
2b	If there is Escalator, and it was found to be not working on the day of survey what is the period from which escalator is non-functional (days)	escltr_bd_d						
3	Whether security Guard is provided at the site of FOB/Subway	secu_gaurd	1	1	1	2	2	
4	Number of steps in the stairs	stair_steps	25	16	20	40	45	
5	Whether the road below the FOB/above the Subway is having blockade iron grills at divider of road up to 500 meters on both sides	blockade	1	2	2	1	1	
6	Whether proper railing facility is provided on the stairs	railing_stairs	1	1	2	1	1	
7	Whether proper side grill is provided on the crossing bridge of FOB	brg_siderail	1	2	2	1	1	
8	Whether rooftop is available on crossing bridge of FOB	rooftop				2	1	
9	Whether the facility/ramp for Divyang is provided	ramp	1	2	2	2	1	
10	Whether proper lightening facilities are available	lighting	1	1	1	1	1	
11	Whether proper drainage facilities are available	drainage	1	1	1	1	1	
12	Whether the FOB/Subway is having proper flooring for walking	flooring	1	1	1	1	1	
13	Latitude and longitude distance North	latitude	28.681	28.675	28.672	28.670	28.684	
13A	Latitude and longitude distance East	longitude	77.066	77.133	77.154	77.138	77.128	
14	Whether there is any school/other institute	school_Yes_No	1	1	1	1	1	



Sl. No.	Details	SL. No.	16	17	18	19	20	
↓	↓	Group/ID	4.4	5.1	5.2	5.3	5.4	
		FOB/SUB	FOB	SUB	SUB	FOB	SUB	
		Zone	N	N	N	N	N	
		Place of Interview	Punjab keshari	Near Rajdhani Collage	ESI Hospital	Shivdas puri marg	Punjabi bagh Chauk	
1	Whether lift facility Yes=1&No =2	lift	1	2	2	2	2	
1a	If there is lift, what is its capacity	lift_cap	10					
1b	If there is lift, whether it was found working on the day of survey Yes=1 & No=2	lift_wrkng	1					
1c	If there is lift and it is not found working on the day of survey, the period from which lift is non-functional (days)	lift_bd_d						
2	Whether Escalator facility is available	escltr	2	2	2	2	2	
2a	If there is Escalator, whether it was found working on the day of survey Yes = 1 No = 2	escltr_wrkng						
2b	If there is Escalator, and it was found to be not working on the day of survey what is the period from which escalator is non-functional (days)	escltr_bd_d						
3	Whether security Guard is provided at the site of FOB/Subway	secu_gaurd	1	1	1	2	2	
4	Number of steps in the stairs	stair_steps	43	32	24	40	32	
5	Whether the road below the FOB/above the Subway is having blockade iron grills at divider of road up to 500 meters on both sides	blockade	1	1	1	1	1	
6	Whether proper railing facility is provided on the stairs	railing_stairs	1	1	1	1	1	
7	Whether proper side grill is provided on the crossing bridge of FOB	brg_siderail	1	2	1	1	2	
8	Whether rooftop is available on crossing bridge of FOB	rooftop	1			1		
9	Whether the facility/ramp for Divyang is provided	ramp	2	2	1	2	2	
10	Whether proper lightening facilities are available	lighting	1	1	1	1	1	
11	Whether proper drainage facilities are available	drainage	1	1	1	1	1	
12	Whether the FOB/Subway is having proper flooring for walking	flooring	1	1	1	1	1	
13	Latitude and longitude distance North	latitude	28.695	28.652	28.658	28.661	28.674	
13A	Latitude and longitude distance East	longitude	77.156	77.124	77.129	77.142	77.141	
14	Whether there is any school/other institute	school_Yes_No	1	1	1	1	2	

Sl. No.	Details	SL. No.	21	22	23	24	25	
↓	↓	Group/ID	6.1	6.2	6.3	6.4	7.1	
		FOB/SUB	SUB	SUB	FOB	FOB	FOB	
		Zone	N	N	N	N	N	
		Place of Interview	Near Indralok Masjid	Near Subhadra colony gate	Near Sarai Rohila police station	Sakurpur Metro station	Prembari	
1	Whether lift facility Yes=1&No =2	lift	2	2	2	1	2	
1a	If there is lift, what is its capacity	lift_cap				5		
1b	If there is lift, whether it was found working on the day of survey Yes=1 & No=2	lift_wrkng				1		
1c	If there is lift and it is not found working on the day of survey, the period from which lift is non-functional (days)	lift_bd_d						
2	Whether Escalator facility is available	escltr	2	2	2	2	2	
2a	If there is Escalator, whether it was found working on the day of survey Yes = 1 No = 2	escltr_wrkng						
2b	If there is Escalator, and it was found to be not working on the day of survey what is the period from which escalator is non-functional (days)	escltr_bd_d						
3	Whether security Guard is provided at the site of FOB/Subway	secu_gaurd	1	2	1	2	2	
4	Number of steps in the stairs	stair_steps	25	24	52	45	38	
5	Whether the road below the FOB/above the Subway is having blockade iron grills at divider of road up to 500 meters on both sides	blockade	1	1	1	1	1	
6	Whether proper railing facility is provided on the stairs	railing_stairs	1	1	1	1	1	
7	Whether proper side grill is provided on the crossing bridge of FOB	brg_siderail	2	2	1	1	1	
8	Whether rooftop is available on crossing bridge of FOB	rooftop			2	2	1	
9	Whether the facility/ramp for Divyang is provided	ramp	2	2	2	2	1	
10	Whether proper lightening facilities are available	lighting	1	1	1	1	1	
11	Whether proper drainage facilities are available	drainage	1	1	1	1	1	
12	Whether the FOB/Subway is having proper flooring for walking	flooring	1	1	1	1	1	
13	Latitude and longitude distance North	latitude	28.671	28.671	28.669	28.686	28.702	
13A	Latitude and longitude distance East	longitude	77.167	77.178	77.183	77.153	77.161	
14	Whether there is any school/other institute	school_Yes_No	1	1	1	1	1	

Sl. No.	Details	SL. No.	26	27	28	29	30	
↓	↓	Group/ID	7.2	7.3	7.4	9.1	9.2	
		FOB/SUB	FOB	FOB	FOB	SUB	SUB	
		Zone	N	N	N	N	S	
		Place of Interview	Netaji shubhace place	Sahipur Village Near Shalimar	Road no. 37 Near kanhalya nagar	Shivaji marg Najafgadh road	Palam dabri Road	
1	Whether lift facility Yes=1&No =2	lift	1	2	1	2	2	
1a	If there is lift, what is its capacity	lift_cap	10		8			
1b	If there is lift, whether it was found working on the day of survey Yes=1 & No=2	lift_wrkng	1		1			
1c	If there is lift and it is not found working on the day of survey, the period from which lift is non-functional (days)	lift_bd_d						
2	Whether Escalator facility is available	escltr	2	2	2	2	2	
2a	If there is Escalator, whether it was found working on the day of survey Yes = 1 No = 2	escltr_wrkng						
2b	If there is Escalator, and it was found to be not working on the day of survey what is the period from which escalator is non-functional (days)	escltr_bd_d						
3	Whether security Guard is provided at the site of FOB/Subway	secu_gaurd	1	2	1	1	1	
4	Number of steps in the stairs	stair_steps	48	38	41	20		
5	Whether the road below the FOB/above the Subway is having blockade iron grills at divider of road up to 500 meters on both sides	blockade	1	1	1	1	1	
6	Whether proper railing facility is provided on the stairs	railing_stairs	1	1	1	2	2	
7	Whether proper side grill is provided on the crossing bridge of FOB	brg_siderail	1	1	1	2	2	
8	Whether rooftop is available on crossing bridge of FOB	rooftop	2	1	2			
9	Whether the facility/ramp for Divyang is provided	ramp	2	2	2	2	1	
10	Whether proper lightening facilities are available	lighting	1	2	1	1	1	
11	Whether proper drainage facilities are available	drainage	1	1	1	1	1	
12	Whether the FOB/Subway is having proper flooring for walking	flooring	1	1	1	1	1	
13	Latitude and longitude distance North	latitude	28.694	28.720	28.677	28.656	28.613	
13A	Latitude and longitude distance East	longitude	77.150	77.161	77.167	77.139	77.087	
14	Whether there is any school/other institute	school_Yes_No	1	1	1	1	1	

Sl. No. ↓	Details ↓	SL. No.	31	32	33	34	35	
		Group/ID	9.3	9.4	10.1	10.2	10.3	
		FOB/SUB	FOB	FOB	FOB	FOB	FOB	
		Zone	S	E	S	S	S	
		Place of Interview	Pankha Road Sagarpur	Hasanpur	Pampsh enclave	Moti bagh Ring Road	Gurudwara Nanakpur	
1	Whether lift facility Yes=1&No =2	lift	2	2	2	2	2	
1a	If there is lift, what is its capacity	lift_cap						
1b	If there is lift, whether it was found working on the day of survey Yes=1 & No=2	lift_wrkng						
1c	If there is lift and it is not found working on the day of survey, the period from which lift is non-functional (days)	lift_bd_d						
2	Whether Escalator facility is available	escltr	2	1	2	1	1	
2a	If there is Escalator, whether it was found working on the day of survey Yes = 1 No = 2	escltr_wrkng		1		2	1	
2b	If there is Escalator, and it was found to be not working on the day of survey what is the period from which escalator is non-functional (days)	escltr_bd_d				60		
3	Whether security Guard is provided at the site of FOB/Subway	secu_gaurd	2	1	2	2	2	
4	Number of steps in the stairs	stair_steps	40	41	39	40	36	
5	Whether the road below the FOB/above the Subway is having blockade iron grills at divider of road up to 500 meters on both sides	blockade	1	1	1	1	1	
6	Whether proper railing facility is provided on the stairs	railing_stairs	1	1	1	1	1	
7	Whether proper side grill is provided on the crossing bridge of FOB	brg_siderail	1	1	1	1	1	
8	Whether rooftop is available on crossing bridge of FOB	rooftop	2	1	1	2	1	
9	Whether the facility/ramp for Divyang is provided	ramp	2	1	1	1	1	
10	Whether proper lightening facilities are available	lighting	2	1	1	2	1	
11	Whether proper drainage facilities are available	drainage	2	2	2	2	1	
12	Whether the FOB/Subway is having proper flooring for walking	flooring	1	2	1	1	1	
13	Latitude and longitude distance North	latitude	28.610	28.637	28.544	28.581	28.585	
13A	Latitude and longitude distance East	longitude	77.093	77.306	77.244	77.175	77.172	
14	Whether there is any school/other institute	school_Yes_No	1	1	1	1	1	

Sl. No. ↓	Details ↓	SL. No.	36	37	38	39	40	
		Group/ID	10.4	11.1	11.2	11.3	11.4	
		FOB/SUB	FOB	FOB	FOB	SUB	SUB	
		Zone	S	S	S	S	S	
		Place of Interview	Mochi bagh Shatya Niketan	Dhaura kuan to Moti bagh on NH8	Near Dhaura kuan Metro station	Dhaura kuan	Naraina	
1	Whether lift facility Yes=1&No =2	lift	2	2	1	2	2	
1a	If there is lift, what is its capacity	lift_cap			5			
1b	If there is lift, whether it was found working on the day of survey Yes=1 & No=2	lift_wrkng			2			
1c	If there is lift and it is not found working on the day of survey, the period from which lift is non-functional (days)	lift_bd_d			1460			
2	Whether Escalator facility is available	escltr	1	2	2	2	2	
2a	If there is Escalator, whether it was found working on the day of survey Yes = 1 No = 2	escltr_wrkng	1					
2b	If there is Escalator, and it was found to be not working on the day of survey what is the period from which escalator is non-functional (days)	escltr_bd_d						
3	Whether security Guard is provided at the site of FOB/Subway	secu_gaurd	2	1	2	1	1	
4	Number of steps in the stairs	stair_steps		40	50	31	26	
5	Whether the road below the FOB/above the Subway is having blockade iron grills at divider of road up to 500 meters on both sides	blockade	1	1	1	1	2	
6	Whether proper railing facility is provided on the stairs	railing_stairs	1	1	1	1	2	
7	Whether proper side grill is provided on the crossing bridge of FOB	brg_siderail	1	1	1	1	2	
8	Whether rooftop is available on crossing bridge of FOB	rooftop	1	2	1			
9	Whether the facility/ramp for Divyang is provided	ramp	1	2	2	2	2	
10	Whether proper lightening facilities are available	lighting	1	1	1	1	1	
11	Whether proper drainage facilities are available	drainage	1	1	1	1	1	
12	Whether the FOB/Subway is having proper flooring for walking	flooring	1	1	1	1	1	
13	Latitude and longitude distance North	latitude	28.588	28.594	28.593	28.595	28.619	
13A	Latitude and longitude distance East	longitude	77.170	77.166	77.163	77.167	77.137	
14	Whether there is any school/other institute	school_Yes_No	1	1	1	1	1	

Sl. No. ↓	Details ↓	SL. No.	41	42	43	44	45	
		Group/ID	12.1	12.2	12.3	12.4	13.1	
		FOB/SUB	SUB	SUB	FOB	FOB	FOB	
		Zone	N	N	S	S	S	
		Place of Interview	At Ring Road Wazirpur	At Ring Road Britainia	Maharani bagh	Nehru Nagar	Ashram Mathura Road	
1	Whether lift facility Yes=1&No =2	lift	2	2	2	2	2	
1a	If there is lift, what is its capacity	lift_cap						
1b	If there is lift, whether it was found working on the day of survey Yes=1 & No=2	lift_wrkng						
1c	If there is lift and it is not found working on the day of survey, the period from which lift is non-functional (days)	lift_bd_d						
2	Whether Escalator facility is available	escltr	2	2	1	1	2	
2a	If there is Escalator, whether it was found working on the day of survey Yes = 1 No = 2	escltr_wrkng			2	1		
2b	If there is Escalator, and it was found to be not working on the day of survey what is the period from which escalator is non-functional (days)	escltr_bd_d			15			
3	Whether security Guard is provided at the site of FOB/Subway	secu_gaurd	1	1	1	2	2	
4	Number of steps in the stairs	stair_steps	26	29	108	38	38	
5	Whether the road below the FOB/above the Subway is having blockade iron grills at divider of road up to 500 meters on both sides	blockade	1	1	1	1	1	
6	Whether proper railing facility is provided on the stairs	railing_stairs	1	1	1	1	1	
7	Whether proper side grill is provided on the crossing bridge of FOB	brg_siderail	2	2	1	1	1	
8	Whether rooftop is available on crossing bridge of FOB	rooftop			1	1	1	
9	Whether the facility/ramp for Divyang is provided	ramp	2	2	1	1	2	
10	Whether proper lightening facilities are available	lighting	1	1	1	1	1	
11	Whether proper drainage facilities are available	drainage	1	1	1	1	2	
12	Whether the FOB/Subway is having proper flooring for walking	flooring	1	1	1	1	1	
13	Latitude and longitude distance North	latitude	28.692	28.683	28.576	28.569	28.574	
13A	Latitude and longitude distance East	longitude	77.152	77.146	77.264	77.254	#####	
14	Whether there is any school/other institute	school_Yes_No	1	1	1	1	1	

Sl. No.	Details	SL. No.	46	47	48	49	50	
↓	↓	Group/ID	13.2	13.3	13.4	14.1	14.2	
		FOB/SUB	FOB	FOB	FOB	FOB	FOB	
		Zone	S	S	S	S	S	
		Place of Interview	Bhogal Mathura Road	Sarita Vihar	Sahin bagh Kalindi kunj	Modi mill Near NSIC	Prahladpur MB Road	
1	Whether lift facility Yes=1&No =2	lift	2	2	2	2	2	
1a	If there is lift, what is its capacity	lift_cap						
1b	If there is lift, whether it was found working on the day of survey Yes=1 & No=2	lift_wrkng						
1c	If there is lift and it is not found working on the day of survey, the period from which lift is non-functional (days)	lift_bd_d						
2	Whether Escalator facility is available	escltr	2	2	2	2	2	
2a	If there is Escalator, whether it was found working on the day of survey Yes = 1 No = 2	escltr_wrkng						
2b	If there is Escalator, and it was found to be not working on the day of survey what is the period from which escalator is non-functional (days)	escltr_bd_d						
3	Whether security Guard is provided at the site of FOB/Subway	secu_gaurd	2	2	2	2	2	
4	Number of steps in the stairs	stair_steps	38	40	44	40	40	
5	Whether the road below the FOB/above the Subway is having blockade iron grills at divider of road up to 500 meters on both sides	blockade	1	1	1	2	1	
6	Whether proper railing facility is provided on the stairs	railing_stairs	1	1	1	1	1	
7	Whether proper side grill is provided on the crossing bridge of FOB	brg_siderail	1	1	1	1	1	
8	Whether rooftop is available on crossing bridge of FOB	rooftop	1	2	1	1	1	
9	Whether the facility/ramp for Divyang is provided	ramp	2	1	1	2	1	
10	Whether proper lightening facilities are available	lighting	1	2	2	1	1	
11	Whether proper drainage facilities are available	drainage	2	2	2	2	2	
12	Whether the FOB/Subway is having proper flooring for walking	flooring	1	1	1	1	1	
13	Latitude and longitude distance North	latitude	28.564	28.537	28.543	28.555	28.501	
13A	Latitude and longitude distance East	longitude	77.250	77.290	77.303	77.266	77.291	
14	Whether there is any school/other institute	school_Yes_No	1	1	1	1	1	

Sl. No.	Details	SL. No.	51	52	53	54	55	
↓	↓	Group/ID	14.3	14.4	15.1	15.2	15.3	
		FOB/SUB	FOB	FOB	FOB	FOB	FOB	
		Zone	S	S	S	S	S	
		Place of Interview	Lal kuan	Jamiya Hamdard University	Batra hospital	Subarato Park	Munirka	
1	Whether lift facility Yes=1&No =2	lift	2	2	2	2	1	
1a	If there is lift, what is its capacity	lift_cap					13	
1b	If there is lift, whether it was found working on the day of survey Yes=1 & No=2	lift_wrkng					1	
1c	If there is lift and it is not found working on the day of survey, the period from which lift is non-functional (days)	lift_bd_d						
2	Whether Escalator facility is available	escltr	2	2	2	2	2	
2a	If there is Escalator, whether it was found working on the day of survey Yes = 1 No = 2	escltr_wrkng						
2b	If there is Escalator, and it was found to be not working on the day of survey what is the period from which escalator is non-functional (days)	escltr_bd_d						
3	Whether security Guard is provided at the site of FOB/Subway	secu_gaurd	2	2	2	2	1	
4	Number of steps in the stairs	stair_steps	44	99	108	40	46	
5	Whether the road below the FOB/above the Subway is having blockade iron grills at divider of road up to 500 meters on both sides	blockade	1	1	1	1	1	
6	Whether proper railing facility is provided on the stairs	railing_stairs	1	1	1	1	1	
7	Whether proper side grill is provided on the crossing bridge of FOB	brg_siderail	1	1	1	1	1	
8	Whether rooftop is available on crossing bridge of FOB	rooftop	1	1	1	1	2	
9	Whether the facility/ramp for Divyang is provided	ramp	2	1	1	1	1	
10	Whether proper lightening facilities are available	lighting	1	1	1	1	1	
11	Whether proper drainage facilities are available	drainage	2	2	2	2	2	
12	Whether the FOB/Subway is having proper flooring for walking	flooring	2	2	2	2	1	
13	Latitude and longitude distance North	latitude	28.502	28.513	28.512	28.575	28.555	
13A	Latitude and longitude distance East	longitude	77.284	77.249	77.235	77.148	77.176	
14	Whether there is any school/other institute	school_Yes_No	1	1	1	1	1	



Sl. No.	Details	SL. No.	56	57	58	59	60	
↓	↓	Group/ID	15.4	16.1	16.2	16.3	16.4	
		FOB/SUB	SUB	FOB	FOB	FOB	FOB	
		Zone	S	S	S	S	S	
		Place of Interview	Munirka	Kalka ji Mandir	Bhaira Mandir Kalkaji	Near DC office MB Road	Saket Metro station	
1	Whether lift facility Yes=1&No =2	lift	2	2	2	2	1	
1a	If there is lift, what is its capacity	lift_cap					16	
1b	If there is lift, whether it was found working on the day of survey Yes=1 & No=2	lift_wrkng					1	
1c	If there is lift and it is not found working on the day of survey, the period from which lift is non-functional (days)	lift_bd_d						
2	Whether Escalator facility is available	escltr	2	2	2	2	2	
2a	If there is Escalator, whether it was found working on the day of survey Yes = 1 No = 2	escltr_wrkng						
2b	If there is Escalator, and it was found to be not working on the day of survey what is the period from which escalator is non-functional (days)	escltr_bd_d						
3	Whether security Guard is provided at the site of FOB/Subway	secu_gaurd	2	2	2	2	1	
4	Number of steps in the stairs	stair_steps	29	40	35	42	40	
5	Whether the road below the FOB/above the Subway is having blockade iron grills at divider of road up to 500 meters on both sides	blockade	1	1	1	1	1	
6	Whether proper railing facility is provided on the stairs	railing_stairs	1	1	1	1	1	
7	Whether proper side grill is provided on the crossing bridge of FOB	brg_siderail	2	1	1	1	1	
8	Whether rooftop is available on crossing bridge of FOB	rooftop		1	1	1	1	
9	Whether the facility/ramp for Divyang is provided	ramp	1	1	2	1	2	
10	Whether proper lightening facilities are available	lighting	1	1	1	1	1	
11	Whether proper drainage facilities are available	drainage	1	2	2	2	2	
12	Whether the FOB/Subway is having proper flooring for walking	flooring	1	1	1	2	2	
13	Latitude and longitude distance North	latitude	28.557	28.553	28.548	28.518	28.520	
13A	Latitude and longitude distance East	longitude	77.173	77.264	77.255	77.212	77.202	
14	Whether there is any school/other institute	school_Yes_No	1	1	1	1	1	

Sl. No.	Details	SL. No.	61	62	63	64	65
↓	↓	Group/ID	17.1	17.2	17.3	17.4	18.1
		FOB/SUB	FOB	FOB	FOB	SUB	SUB
		Zone	S	S	S	S	S
		Place of Interview	Ansari Nagar	Jia Sarai	Panchsheel Enclave	Hyatt Near Bhikhaji kama place	Hyatt Subway
1	Whether lift facility Yes=1&No =2	lift	2	1	1	2	2
1a	If there is lift, what is its capacity	lift_cap		13	8		
1b	If there is lift, whether it was found working on the day of survey Yes=1 & No=2	lift_wrkng		1	1		
1c	If there is lift and it is not found working on the day of survey, the period from which lift is non-functional (days)	lift_bd_d		3			
2	Whether Escalator facility is available	escltr	2	2	2	2	2
2a	If there is Escalator, whether it was found working on the day of survey Yes = 1 No = 2	escltr_wrkng					
2b	If there is Escalator, and it was found to be not working on the day of survey what is the period from which escalator is non-functional (days)	escltr_bd_d					
3	Whether security Guard is provided at the site of FOB/Subway	secu_gaurd	2	1	1	2	1
4	Number of steps in the stairs	stair_steps	43	43	46	29	29
5	Whether the road below the FOB/above the Subway is having blockade iron grills at divider of road up to 500 meters on both sides	blockade	1	1	1	1	1
6	Whether proper railing facility is provided on the stairs	railing_stairs	1	1	1	1	1
7	Whether proper side grill is provided on the crossing bridge of FOB	brg_siderail	1	1	1	2	2
8	Whether rooftop is available on crossing bridge of FOB	rooftop	2	2	2		
9	Whether the facility/ramp for Divyang is provided	ramp	2	1	2	2	2
10	Whether proper lightening facilities are available	lighting	2	1	1	1	1
11	Whether proper drainage facilities are available	drainage	2	2	2	1	1
12	Whether the FOB/Subway is having proper flooring for walking	flooring	2	1	1	1	1
13	Latitude and longitude distance North	latitude	28.563	28.548	28.544	28.568	28.570
13A	Latitude and longitude distance East	longitude	77.207	77.189	77.213	77.189	77.186
14	Whether there is any school/other institute	school_Yes_No	1	1	1	1	1

Sl. No. ↓	Details ↓	SL. No.	66	67	68	69	70
		Group/ID	18.2	18.3	18.4	19.1	19.2
		FOB/SUB	SUB	SUB	SUB	SUB	SUB
		Zone	S	S	S	S	S
		Place of Interview	Safdarjang Hospital Subway	Ansal plaza subway	Narauji nagar	IIT	Hauz khas Outer Ring Road
1	Whether lift facility Yes=1&No =2	lift	2	2	2	2	2
1a	If there is lift, what is its capacity	lift_cap					
1b	If there is lift, whether it was found working on the day of survey Yes=1 & No=2	lift_wrkng					
1c	If there is lift and it is not found working on the day of survey, the period from which lift is non-functional (days)	lift_bd_d					
2	Whether Escalator facility is available	escltr	2	2	2	2	2
2a	If there is Escalator, whether it was found working on the day of survey Yes = 1 No = 2	escltr_wrkng					
2b	If there is Escalator, and it was found to be not working on the day of survey what is the period from which escalator is non-functional (days)	escltr_bd_d					
3	Whether security Guard is provided at the site of FOB/Subway	secu_gaurd	1	1	1	2	2
4	Number of steps in the stairs	stair_steps	28	31	25	31	
5	Whether the road below the FOB/above the Subway is having blockade iron grills at divider of road up to 500 meters on both sides	blockade	1	1	1	1	1
6	Whether proper railing facility is provided on the stairs	railing_stairs	1	2	1	1	2
7	Whether proper side grill is provided on the crossing bridge of FOB	brg_siderail	2	2	2	2	2
8	Whether rooftop is available on crossing bridge of FOB	rooftop					
9	Whether the facility/ramp for Divyang is provided	ramp	1	2	2	2	1
10	Whether proper lightening facilities are available	lighting	1	1	1	1	1
11	Whether proper drainage facilities are available	drainage	1	1	1	1	1
12	Whether the FOB/Subway is having proper flooring for walking	flooring	1	1	1	1	1
13	Latitude and longitude distance North	latitude	28.570	28.563	28.570	28.546	28.543
13A	Latitude and longitude distance East	longitude	77.206	77.223	77.196	77.197	77.205
14	Whether there is any school/other institute	school_Yes_No	1	1	1	1	1

Sl. No. ↓	Details ↓	SL. No.	71	72	73	74	75
		Group/ID	19.3	19.4	20.1	20.2	20.4
		FOB/SUB	SUB	SUB	SUB	SUB	FOB
		Zone	S	S	S	E	E
		Place of Interview	Swami nagar	Masjid Moth	Subway at Nehru place	Opp. WHO Building/Front of WHO	ITO
1	Whether lift facility Yes=1&No =2	lift	2	2	2	2	2
1a	If there is lift, what is its capacity	lift_cap					
1b	If there is lift, whether it was found working on the day of survey Yes=1 & No=2	lift_wrkng					
1c	If there is lift and it is not found working on the day of survey, the period from which lift is non-functional (days)	lift_bd_d					
2	Whether Escalator facility is available	escltr	2	2	2	2	1
2a	If there is Escalator, whether it was found working on the day of survey Yes = 1 No = 2	escltr_wrkng					1
2b	If there is Escalator, and it was found to be not working on the day of survey what is the period from which escalator is non-functional (days)	escltr_bd_d					
3	Whether security Guard is provided at the site of FOB/Subway	secu_gaurd	2	2	1	1	2
4	Number of steps in the stairs	stair_steps	26	32	23	26	116
5	Whether the road below the FOB/above the Subway is having blockade iron grills at divider of road up to 500 meters on both sides	blockade	1	1	1	1	1
6	Whether proper railing facility is provided on the stairs	railing_stairs	1	1	1	1	1
7	Whether proper side grill is provided on the crossing bridge of FOB	brg_siderail	2	2	2	2	1
8	Whether rooftop is available on crossing bridge of FOB	rooftop					1
9	Whether the facility/ramp for Divyang is provided	ramp	2	1	2	2	1
10	Whether proper lightening facilities are available	lighting	1	1	1	1	1
11	Whether proper drainage facilities are available	drainage	1	1	1	1	2
12	Whether the FOB/Subway is having proper flooring for walking	flooring	1	1	1	1	1
13	Latitude and longitude distance North	latitude	28.542	28.540	28.547	28.624	28.628
13A	Latitude and longitude distance East	longitude	77.225	77.236	77.253	77.247	77.244
14	Whether there is any school/other institute	school_Yes_No	1	1	1	1	1

Sl. No.	Details	SL. No.	76	77	78	79	80
↓	↓	Group/ID	21.1	21.2	21.3	21.4	22.1
		FOB/SUB	FOB	SU	SUB	SUB	SUB
		Zone	S	E	E	E	E
		Place of Interview	Rajauri Garden	Vikas marg Near Laxmi nagar Metro station	Vikas marg Near Preet Vihar	Bhajanpura	Nigam bodh ghat
1	Whether lift facility Yes=1&No =2	lift	2	2	2	2	2
1a	If there is lift, what is its capacity	lift_cap					
1b	If there is lift, whether it was found working on the day of survey Yes=1 & No=2	lift_wrkng					
1c	If there is lift and it is not found working on the day of survey, the period from which lift is non-functional (days)	lift_bd_d					
2	Whether Escalator facility is available	escltr	1	2	2	2	2
2a	If there is Escalator, whether it was found working on the day of survey Yes = 1 No = 2	escltr_wrkng	2				
2b	If there is Escalator, and it was found to be not working on the day of survey what is the period from which escalator is non-functional (days)	escltr_bd_d	1095				
3	Whether security Guard is provided at the site of FOB/Subway	secu_gaurd	2	1	1	1	2
4	Number of steps in the stairs	stair_steps	38	24	26	24	20
5	Whether the road below the FOB/above the Subway is having blockade iron grills at divider of road up to 500 meters on both sides	blockade	1	1	1	1	1
6	Whether proper railing facility is provided on the stairs	railing_stairs	1	1	1	1	2
7	Whether proper side grill is provided on the crossing rooftop of FOB	brg_siderail	1	2	2	2	2
8	Whether rooftop is available on crossing bridge of FOB	rooftop	1				
9	Whether the facility/ramp for Divyang is provided	ramp	2	2	2	2	1
10	Whether proper lightening facilities are available	lighting	1	1	1	1	1
11	Whether proper drainage facilities are available	drainage	2	1	2	1	1
12	Whether the FOB/Subway is having proper flooring for walking	flooring	1	1	1	1	1
13	Latitude and longitude distance North	latitude	28.647	28.631	28.640	28.704	28.663
13A	Latitude and longitude distance East	longitude	77.126	77.278	77.294	77.264	77.236
14	Whether there is any school/other institute	school_Yes_No	1	1	1	1	1

Sl. No.	Details	SL. No.	81	82	83	84	85
↓	↓	Group/ID	22.2	22.3	22.4	23.1	23.2
		FOB/SUB	FOB	FOB	FOB	FOB	FOB
		Zone	E	E	E	E	E
		Place of Interview	Majnu ka tila	Delhi police Apartment	Kishan Kunj	Ghazi pur Grade separator	Latita park
1	Whether lift facility Yes=1&No =2	lift	2	1	1	2	2
1a	If there is lift, what is its capacity	lift_cap		13	13		
1b	If there is lift, whether it was found working on the day of survey Yes=1 & No=2	lift_wrkng		2	2		
1c	If there is lift and it is not found working on the day of survey, the period from which lift is non-functional (days)	lift_bd_d		7	60		
2	Whether Escalator facility is available	escltr	2	2	2	2	2
2a	If there is Escalator, whether it was found working on the day of survey Yes = 1 No = 2	escltr_wrkng					
2b	If there is Escalator, and it was found to be not working on the day of survey what is the period from which escalator is non-functional (days)	escltr_bd_d					
3	Whether security Guard is provided at the site of FOB/Subway	secu_gaurd	2	2	2	2	2
4	Number of steps in the stairs	stair_steps	46	55	56	3	
5	Whether the road below the FOB/above the Subway is having blockade iron grills at divider of road up to 500 meters on both sides	blockade	1	1	1	1	1
6	Whether proper railing facility is provided on the stairs	railing_stairs	1	1	1	1	2
7	Whether proper side grill is provided on the crossing bridge of FOB	brg_siderail	1	1	1	2	1
8	Whether rooftop is available on crossing bridge of FOB	rooftop	1	2	2	2	1
9	Whether the facility/ramp for Divyang is provided	ramp	2	2	2	2	1
10	Whether proper lightening facilities are available	lighting	1	1	1	2	1
11	Whether proper drainage facilities are available	drainage	2	2	2	2	2
12	Whether the FOB/Subway is having proper flooring for walking	flooring	2	1	2	2	1
13	Latitude and longitude distance North	latitude	28.701	28.610	28.635	28.628	28.631
13A	Latitude and longitude distance East	longitude	77.228	77.286	77.270	77.318	77.271
14	Whether there is any school/other institute	school_Yes_No	1	1	1	1	1

Sl. No.	Details	SL. No.	86	87	88	89	90	
↓	↓	Group/ID	23.3	23.4	24.1	24.2	24.3	
		FOB/SUB	FOB	FOB	FOB	FOB	FOB	
		Zone	E	E	E	E	E	
		Place of Interview	Pandav Nagar NH 24	Samachar Apartment	Sakarpur School Block	Sakarpur School Block	Vinod Nagar Patparganj NH 24	
1	Whether lift facility Yes=1&No =2	lift	2	1	2	1	2	
1a	If there is lift, what is its capacity	lift_cap		13		8		
1b	If there is lift, whether it was found working on the day of survey Yes=1 & No=2	lift_wrkng		2		2		
1c	If there is lift and it is not found working on the day of survey, the period from which lift is non-functional (days)	lift_bd_d		90		1460		
2	Whether Escalator facility is available	escltr	2	2	2	2	2	
2a	If there is Escalator, whether it was found working on the day of survey Yes = 1 No = 2	escltr_wrkng						
2b	If there is Escalator, and it was found to be not working on the day of survey what is the period from which escalator is non-functional (days)	escltr_bd_d						
3	Whether security Guard is provided at the site of FOB/Subway	secu_gaurd	2	2	2	2	2	
4	Number of steps in the stairs	stair_steps	52	52		45	48	
5	Whether the road below the FOB/above the Subway is having blockade iron grills at divider of road up to 500 meters on both sides	blockade	1	1	1	1	1	
6	Whether proper railing facility is provided on the stairs	railing_stairs	1	1	1	1	1	
7	Whether proper side grill is provided on the crossing bridge of FOB	brg_siderail	1	1	1	1	1	
8	Whether rooftop is available on crossing bridge of FOB	rooftop	1	2	1	2	1	
9	Whether the facility/ramp for Divyang is provided	ramp	2	2	1	2	2	
10	Whether proper lightening facilities are available	lighting	2	1	1	1	2	
11	Whether proper drainage facilities are available	drainage	2	2	2	2	2	
12	Whether the FOB/Subway is having proper flooring for walking	flooring	2	1	1	1	2	
13	Latitude and longitude distance North	latitude	28.616	28.598	28.625	28.627	28.626	
13A	Latitude and longitude distance East	longitude	77.285	77.291	77.276	77.280	77.312	
14	Whether there is any school/other institute	school_Yes_No	1	1	1	1	1	

Sl. No.	Details	SL. No.	91	92	93	94	95	
↓	↓	Group/ID	24.4	25.1	25.2	25.3	25.4	
		FOB/SUB	FOB	FOB	FOB	FOB	FOB	
		Zone	E	E	E	E	E	
		Place of Interview	Ambedkar collage Road No. 59	Brijpuri Road no. 59	Ashok nagar	Bhopra Border Harsh Vihar	Jhandewalan Mandir	
1	Whether lift facility Yes=1&No =2	lift	2	2	2	2	2	
1a	If there is lift, what is its capacity	lift_cap						
1b	If there is lift, whether it was found working on the day of survey Yes=1 & No=2	lift_wrkng						
1c	If there is lift and it is not found working on the day of survey, the period from which lift is non-functional (days)	lift_bd_d						
2	Whether Escalator facility is available	escltr	2	2	2	2	2	
2a	If there is Escalator, whether it was found working on the day of survey Yes = 1 No = 2	escltr_wrkng						
2b	If there is Escalator, and it was found to be not working on the day of survey what is the period from which escalator is non-functional (days)	escltr_bd_d						
3	Whether security Guard is provided at the site of FOB/Subway	secu_gaurd	2	2	2	2	2	
4	Number of steps in the stairs	stair_steps	41	38	35	40	41	
5	Whether the road below the FOB/above the Subway is having blockade iron grills at divider of road up to 500 meters on both sides	blockade	1	1	1	1	1	
6	Whether proper railing facility is provided on the stairs	railing_stairs	1	1	1	1	1	
7	Whether proper side grill is provided on the crossing bridge of FOB	brg_siderail	1	1	1	1	1	
8	Whether rooftop is available on crossing bridge of FOB	rooftop	1	1	1	1	1	
9	Whether the facility/ramp for Divyang is provided	ramp	1	1	1	2	2	
10	Whether proper lightening facilities are available	lighting	1	1	2	2	1	
11	Whether proper drainage facilities are available	drainage	2	2	2	2	2	
12	Whether the FOB/Subway is having proper flooring for walking	flooring	2	2	2	2	2	
13	Latitude and longitude distance North	latitude	28.702	28.702	28.700	28.699	28.649	
13A	Latitude and longitude distance East	longitude	77.288	77.275	77.295	77.322	77.206	
14	Whether there is any school/other institute	school_Yes_No	1	1	1	1	1	



Sl. No.	Details	SL. No.	96	97	98	99	100
↓	↓	Group/ID	26.1	26.2	26.3	26.4	27.1
		FOB/SUB	FOB	FOB	FOB	FOB	FOB
		Zone	E	E	E	E	E
		Place of Interview	Jhandewalan Mandir	Apsara Border No. 1	Apsara Border No. 2	Ramprasth Road No. 56	Vishwas Nagar Road No. 57A
1	Whether lift facility Yes=1&No =2	lift	2	1	1	2	2
1a	If there is lift, what is its capacity	lift_cap		13	13		
1b	If there is lift, whether it was found working on the day of survey Yes=1 & No=2	lift_wrkng		2	2		
1c	If there is lift and it is not found working on the day of survey, the period from which lift is non-functional (days)	lift_bd_d		90	60		
2	Whether Escalator facility is available	escltr	2	2	2	1	2
2a	If there is Escalator, whether it was found working on the day of survey Yes = 1 No = 2	escltr_wrkng				1	
2b	If there is Escalator, and it was found to be not working on the day of survey what is the period from which escalator is non-functional (days)	escltr_bd_d					
3	Whether security Guard is provided at the site of FOB/Subway	secu_gaurd	2	2	2	2	2
4	Number of steps in the stairs	stair_steps	40	42	42	46	46
5	Whether the road below the FOB/above the Subway is having blockade iron grills at divider of road up to 500 meters on both sides	blockade	1	1	2	1	1
6	Whether proper railing facility is provided on the stairs	railing_stairs	1	1	1	1	1
7	Whether proper side grill is provided on the crossing bridge of FOB	brg_siderail	1	1	1	1	1
8	Whether rooftop is available on crossing bridge of FOB	rooftop	1	2	2	2	1
9	Whether the facility/ramp for Divyang is provided	ramp	2	2	2	2	1
10	Whether proper lightening facilities are available	lighting	1	2	2	1	2
11	Whether proper drainage facilities are available	drainage	2	2	1	2	2
12	Whether the FOB/Subway is having proper flooring for walking	flooring	1	1	1	1	2
13	Latitude and longitude distance North	latitude	28.647	28.676	28.677	28.660	28.659
13A	Latitude and longitude distance East	longitude	77.203	77.323	77.323	77.320	77.289
14	Whether there is any school/other institute	school_Yes_No	1	1	1	1	1

Sl. No. ↓	Details ↓	SL. No.	101	102	103	104	105
		Group/ID	27.2	27.3	27.4	28.1	28.2
		FOB/SUB	FOB	FOB	FOB	FOB	FOB
		Zone	E	E	E	E	E
		Place of Interview	Bhikam Singh Colony Road No. 57	EDM Mall	ISBT Anand Vihar	Ghazipur Road No. 57	Ghazipur Grade separator
1	Whether lift facility Yes=1&No =2	lift	2	2	2	2	2
1a	If there is lift, what is its capacity	lift_cap					
1b	If there is lift, whether it was found working on the day of survey Yes=1 & No=2	lift_wrkng					
1c	If there is lift and it is not found working on the day of survey, the period from which lift is non-functional (days)	lift_bd_d					
2	Whether Escalator facility is available	escltr	1	1	1	2	2
2a	If there is Escalator, whether it was found working on the day of survey Yes = 1 No = 2	escltr_wrkng	1	1	1		
2b	If there is Escalator, and it was found to be not working on the day of survey what is the period from which escalator is non-functional (days)	escltr_bd_d					
3	Whether security Guard is provided at the site of FOB/Subway	secu_gaurd	2	2	2	2	2
4	Number of steps in the stairs	stair_steps		45	44	50	3
5	Whether the road below the FOB/above the Subway is having blockade iron grills at divider of road up to 500 meters on both sides	blockade	1	1	1	1	1
6	Whether proper railing facility is provided on the stairs	railing_stairs	1	1	1	1	1
7	Whether proper side grill is provided on the crossing bridge of FOB	brg_siderail	1	1	1	1	1
8	Whether rooftop is available on crossing bridge of FOB	rooftop	1	2	2	1	2
9	Whether the facility/ramp for Divyang is provided	ramp	1	2	2	2	2
10	Whether proper lightening facilities are available	lighting	1	1	1	2	2
11	Whether proper drainage facilities are available	drainage	2	2	2	2	2
12	Whether the FOB/Subway is having proper flooring for walking	flooring	2	2	1	2	2
13	Latitude and longitude distance North	latitude	28.662	28.642	28.646	28.942	28.627
13A	Latitude and longitude distance East	longitude	77.287	77.317	77.318	77.323	77.318

Sl. No. ↓	Details ↓	SL. No.	101	102	103	104	105
		Group/ID	27.2	27.3	27.4	28.1	28.2
		FOB/SUB	FOB	FOB	FOB	FOB	FOB
		Zone	E	E	E	E	E
		Place of Interview	Bhikam Singh Colony Road No. 57	EDM Mall	ISBT Anand Vihar	Ghaziipur Road No. 57	Ghaziipur Grade separator
14	Whether there is any school/other institute	school_Yes_No	1	1	1	1	1

Sl. No. ↓	Details ↓	SL. No.	106	107	108	109	110	111
		Group/ID	28.3	28.4	29.1	29.2	29.3	29.4
		FOB/SUB	FOB	FOB	SUB	SUB	SUB	FOB
		Zone	E	E	E	E	E	E
		Place of Interview	Taj Highway Apartment Road No 56	Gandhi nagar Road No 57	Gokulpuri	Jagatpuri T Point	Road No 58A Master Somnath marg	ISBT Kashmiri gate
1	Whether lift facility Yes=1&No =2	lift	2	2	2	2	2	2
1a	If there is lift, what is its capacity	lift_cap						
1b	If there is lift, whether it was found working on the day of survey Yes=1 & No=2	lift_wrkng						
1c	If there is lift and it is not found working on the day of survey, the period from which lift is non-functional (days)	lift_bd_d						
2	Whether Escalator facility is available	escltr	1	2	2	2	2	1
2a	If there is Escalator, whether it was found working on the day of survey Yes = 1 No = 2	escltr_wrkng	1					1
2b	If there is Escalator, and it was found to be not working on the day of survey what is the period from which escalator is non-functional (days)	escltr_bd_d						
3	Whether security Guard is provided at the site of FOB/Subway	secu_gaurd	2	2	2	2	1	2

Sl. No. ↓	Details ↓	SL. No.	106	107	108	109	110	111
		Group/ID	28.3	28.4	29.1	29.2	29.3	29.4
		FOB/SUB	FOB	FOB	SUB	SUB	SUB	FOB
		Zone	E	E	E	E	E	E
		Place of Interview	Taj Highway Apartment Road No 56	Gandhi nagar Road No 57	Gokulpuri	Jagatpuri T Point	Road No 58A Master Somnath marg	ISBT Kashmiri gate
4	Number of steps in the stairs	stair_steps	43	42	23	25	26	40
5	Whether the road below the FOB/above the Subway is having blockade iron grills at divider of road up to 500 meters on both sides	blockade	1	1	1	1	1	1
6	Whether proper railing facility is provided on the stairs	railing_stairs	1	1	1	1	1	1
7	Whether proper side grill is provided on the crossing bridge of FOB	brg_siderail	1	1	2	2	2	1
8	Whether rooftop is available on crossing bridge of FOB	rooftop	2	1				1
9	Whether the facility/ramp for Divyang is provided	ramp	2	1	2	2	2	2
10	Whether proper lightening facilities are available	lighting	1	1	2	1	1	1
11	Whether proper drainage facilities are available	drainage	2	2	1	1	1	2
12	Whether the FOB/Subway is having proper flooring for walking	flooring	1	2	1	1	1	1
13	Latitude and longitude distance North	latitude	28.631	28.659	28.701	28.654	28.660	28.669
13A	Latitude and longitude distance East	longitude	77.317	77.262	77.282	77.292	77.312	77.233
14	Whether there is any school/other institute	school_Yes_No	1	1	1	1	1	1

## APPENDIX 2: AVAILABILITY OF SECURITY GUARDS

Availability of Security Guards on the day and time of Survey and number of Steps in Stair Cases							
ID/Group	FOB/SUB	Zone	Full Name	Date	Time	Security Guard Present	Number of steps in the stairs
1.3	FOB	North	Near Azadpur Around	18/06/2018	12.00PM	YES	NA
1.4	FOB	North	Road no. 51 Mukundpur Road	18/06/2018	11.00 AM	YES	42
2.1	FOB	North	Bohara Enclave 1	19/06/2018	12.10 PM	YES	NA
2.2	FOB	North	Bohara Enclave 2	19/06/2018	9.00 AM	YES	NA
3.1	FOB	North	Near Lokesh cinema, Nagloi	20/06/2018	3.30 PM	NO	39
3.2	FOB	North	Near Rajdhani park, Nagloi	20/06/2018	9.10 AM	YES	25
4.2	FOB	North	Near Janmastmi Park, Punjabi Bagh	21/06/2018	12.30 PM	NO	40
4.3	FOB	North	Near sakurbasti Railway station	21/06/2018	10.00 AM	NO	45
4.4	FOB	North	Punjab keshari, Wazirpur	21/06/2018	9.00 AM	YES	43
5.3	FOB	North	Shivdas puri marg, Karmapura	26/06/2018	7.30 AM	NO	40
6.3	FOB	North	Near Sarai Rohila police station	23/06/2018	10.20 AM	YES	52
6.4	FOB	North	Sakurpur Metro station	23/06/2018	7.45 AM	NO	45
7.1	FOB	North	Prembari	25/06/2018	8.30 AM	NO	38
7.2	FOB	North	Netaji shubhace place	25/06/2018	11.00 AM	YES	48
7.3	FOB	North	Sahipur Village Near Shalimar	25/06/2018	7.30 AM	NO	38
7.4	FOB	North	Road no. 37 Near kanhaiya nagar	25/06/2018	9.45 AM	YES	41
9.3	FOB	South	Pankha Road Sagarpur	26/06/2018	10.15 AM	NO	40
9.4	FOB	East	Hasanpur, Patparganj	07-10-2016	8.15 AM	YES	41
10.1	FOB	South	Pampsh enclave	08-01-2018	9.30 AM	NO	39
10.2	FOB	South	Moti bagh Ring Road, Moti Bagh	27/06/2018	2.20 PM	NO	40
10.3	FOB	South	Gurudwara Nanakpur, Moti Bagh	27/06/2018	12.00 PM	NO	36
10.4	FOB	South	Mochi bagh Shatya Niketan, Moti Bagh	27/06/2018	1.30 PM	NO	
11.1	FOB	South	Dhaura kuan to Moti bagh on NH8	28/06/2018	9.00 AM	YES	40
11.2	FOB	South	Near Dhaura kuan Metro station	28/06/2018	11.30 AM	NO	50
12.3	FOB	South	Maharani bagh	29/06/2018	12.00 PM	YES	108
12.4	FOB	South	Nehru Nagar	29/06/2018	12.50 PM	NO	38
13.1	FOB	South	Ashram Mathura Road	30/06/2018	10.00 AM	NO	38
13.2	FOB	South	Bhogal Mathura Road	30/06/2018	12.00 PM	NO	38

Availability of Security Guards on the day and time of Survey and number of Steps in Stair Cases							
ID/Group	FOB/SUB	Zone	Full Name	Date	Time	Security Guard Present	Number of steps in the stairs
13.3	FOB	South	Sarita Vihar	30/06/2018	11.00 AM	NO	40
13.4	FOB	South	Sahin bagh Kalindi kunj	30/06/2018	11.50 AM	NO	44
14.1	FOB	South	Modi mill Near NSIC	08-01-2018	8.00 AM	NO	40
14.2	FOB	South	Prahladpur MB Road	07-02-2018	11.30 AM	NO	40
14.3	FOB	South	Lal kuan, Badarpur	07-02-2018	11.00 AM	NO	44
14.4	FOB	South	Jamiya Hamdard University, Sangam Vihar	07-02-2018	10.00 AM	NO	99
15.1	FOB	South	Batra hospital, Sangam Vihar	07-02-2018	8.00 AM	NO	108
15.2	FOB	South	Subarato Park, Vasant Vihar	07-03-2018	9.15 AM	NO	40
15.3	FOB	South	Munirka	07-06-2018	9.45 AM	YES	46
16.1	FOB	South	Kalkaji Mandir	07-04-2018	8.45 AM	NO	40
16.2	FOB	South	Bhairi Mandir Kalkaji	07-04-2018	12.00 PM	NO	35
16.3	FOB	South	Near DC office MB Road	07-04-2018	10.00 AM	NO	42
16.4	FOB	South	Saket Metro station, MB Road	07-04-2018	10.40 AM	YES	40
17.1	FOB	South	Ansari Nagar	07-05-2018	7.15 AM	NO	43
17.2	FOB	South	Jia Sarai, Panchsheel	07-03-2018	10.30 AM	YES	43
17.3	FOB	South	Panchsheel Enclave, Panchsheel	07-06-2018	10.25 AM	YES	46
20.4	FOB	East	ITO	07-09-2018	11.00 AM	NO	116
21.1	FOB	South	Rajauri Garden	21/07/2018	9.00 AM	NO	38
22.2	FOB	East	Majnu ka tila	07-12-2018	8.30 AM	NO	46
22.3	FOB	East	Delhi police Apartment, UP link Road Mayur Vihar	13/07/2018	9.40 AM	NO	55
22.4	FOB	East	Kishan kunj	07-09-2018	1.00 PM	NO	56
23.1	FOB	East	Ghazipur Grade separator	17/07/2018	11.45 AM	NO	3
23.2	FOB	East	Latita park	07-09-2018	12.00 PM	NO	
23.3	FOB	East	Pandav Nagar NH 24	13/07/2018	7.00 AM	NO	52
23.4	FOB	East	Samachar Apartment, Mayur Vihar Extension	13/07/2018	10.30 AM	NO	52
24.1	FOB	East	Sakarpur School Block, Marginal Band Road	19/07/2018	11.30 AM	NO	
24.2	FOB	East	Sakarpur School Block	14/07/2018	8.30 AM	NO	45
24.3	FOB	East	Vinod Nagar Patparganj NH 24	13/07/2018	9.00 AM	NO	48
24.4	FOB	East	Ambedkar collage Road No. 59	07-11-2018	9.10 AM	NO	41
25.1	FOB	East	Brijpuri Road no. 59	07-11-2018	7.50 AM	NO	38
25.2	FOB	East	Ashok nagar	16/07/2018	9.10 AM	NO	35
25.3	FOB	East	Bhopra Border Harsh Vihar	16/07/2018	8.10 AM	NO	40
25.4	FOB	East	Jhandewalan Mandir, Rani jhansi Road	19/07/2018	9.10 AM	NO	41

Availability of Security Guards on the day and time of Survey and number of Steps in Stair Cases							
ID/Group	FOB/SUB	Zone	Full Name	Date	Time	Security Guard Present	Number of steps in the stairs
26.1	FOB	East	Jhandewalan Mandir, D B G Road	19/07/2018	8.15 AM	NO	40
26.2	FOB	East	Apsara Boder No. 1, Shahadra	16/07/2018	6.00 PM	NO	42
26.3	FOB	East	Apsara Boder No. 2, Shahadra	16/07/2018	10.30 AM	NO	42
26.4	FOB	East	Ramprasth Road No. 56, Ramprastha	18/07/2018	9.30 AM	NO	46
27.1	FOB	East	Vishwas Nagar Road Nol 57A	18/07/2018	10.45 AM	NO	46
27.2	FOB	East	Bhikam Singh Colony Road No. 57, Vishwas Nagar	18/07/2018	10.00 AM	NO	
27.3	FOB	East	EDM Mall, Anand Vihar	14/07/2018	11.00 AM	NO	45
27.4	FOB	East	ISBT Anand Vihar	14/07/2018	10.30 AM	NO	44
28.1	FOB	East	Ghazipur Road No. 57	17/07/2018	7.15 AM	NO	50
28.2	FOB	East	Ghazipur Grade seprator	17/07/2018	11.15 AM	NO	3
28.3	FOB	East	Taj Highway Apartment Road No 56, Ghazipur	17/07/2018	8.50 AM	NO	43
28.4	FOB	East	Gandhi nagar Road No 57	19/07/2018	10.40 AM	NO	42
29.4	FOB	East	ISBT Kashmiri gate	07-12-2018	9.50 AM	NO	40
1.1	SUB	North	In front of Azadpur Fruit and Vegetable Mandi	18-Jun	7.00 AM	YES	26
1.2	SUB	North	Azadpur fruit and Vegetable mandi near Masjid	18/06/2018	10.30 AM	YES	26
2.3	SUB	North	Near Rohini court Madhuban chook Pitampura	19/06/2018	10.09AM	YES	25
2.4	SUB	North	Sarwati Vihar	19/06/2018	11.00AM	YES	25
3.3	SUB	North	Metro station, Nagloi	20/06/2018	4.15 PM	YES	25
3.4	SUB	North	Maharaja Agrasen Hospital, Punjabi Bagh	20/06/2018	11.00 AM	YES	16
4.1	SUB	North	Ashok park main, Punjabi Bagh	21/06/2018	11.00 AM	YES	20
5.1	SUB	North	Near Rajdhani Collage, Raja Garden	22/06/2018	11.30 AM	YES	32
5.2	SUB	North	ESI Hospital, Raja Garden	22/06/2018	2.10 PM	YES	24
5.4	SUB	North	Punjabi bagh Chauk, Punjabi Bagh	22/06/2018	8.00 AM	NO	32
6.1	SUB	North	Near Indralok Masjid	23/06/2018	8.45AM	YES	25
6.2	SUB	North	Near Subhadra colony gate, Sashtri Nagar	23/06/2018	9.30 AM	NO	24
9.1	SUB	North	Shivaji marg Najafgadh road	26/06/2018	9.00 AM	YES	20
9.2	SUB	South	Palam dabri Road	26/06/2018	11.00 AM	YES	NA
11.3	SUB	South	Dhaura kuan	28/06/2018	9.30 AM	YES	31
11.4	SUB	South	Naraina	28/06/2018	10.30 AM	YES	26
12.1	SUB	North	At Ring Road Wazirpur	29/06/2018	8.00 AM	YES	26
12.2	SUB	North	At Ring Road Britainia	29/06/2018	9.50 AM	YES	29

Availability of Security Guards on the day and time of Survey and number of Steps in Stair Cases							
ID/Group	FOB/SUB	Zone	Full Name	Date	Time	Security Guard Present	Number of steps in the stairs
15.4	SUB	South	Munirka	07-03-2018	8.00 AM	NO	29
17.4	SUB	South	Hyatt Near Bhikhaji kama place	07-05-2018	10.00 AM	NO	29
18.1	SUB	South	Hyatt Subway	27/06/2018	8.00 AM	YES	29
18.2	SUB	South	Safdarjang Hospital Subway	07-05-2018	8.30 AM	YES	28
18.3	SUB	South	Ansai plaza subway	07-06-2018	4.30 PM	YES	31
18.4	SUB	South	Narauji nagar	07-05-2018	9.20 AM	YES	25
19.1	SUB	South	IIT	07-06-2018	8.45 AM	NO	31
19.2	SUB	South	Hauz khas Outer Ring Road	07-06-2018	7.45 AM	NO	NA
19.3	SUB	South	Swami nagar	07-07-2018	9.45 AM	NO	26
19.4	SUB	South	Masjid Moth	07-07-2018	8.00 AM	NO	32
20.1	SUB	South	Subway at Nehru place	07-07-2018	7.15 AM	YES	23
20.2	SUB	East	Opp. WHO Building/Front of WHO	07-09-2018	9.00 AM	YES	26
21.2	SUB	East	Vikas marg Near Laxmi nagar Metro station	07-10-2018	9.30 AM	YES	24
21.3	SUB	East	Vikas marg Near Preet Vihar	07-10-2018	8.50 AM	YES	26
21.4	SUB	East	Bhajanpura	07-11-2018	10.00 AM	YES	24
22.1	SUB	East	Nigam bodh ghat	07-12-2018	7.30 AM	NO	20
29.1	SUB	East	Gokulpuri	07-11-2018	8.20 AM	NO	23
29.2	SUB	East	Jagatpuri T Point	07-10-2018	10.40 AM	NO	25
29.3	SUB	East	Road No 58A Master Somnath marg, Yamuna Sports Complex	18/07/2018	8.00 AM	YES	26



## APPENDIX 3: PHOTOGRAPHS SHOWING INADEQUACIES IN BLOCKADE/ ROAD DIVIDERS

1.1 In front of Azadpur Fruit & Vegetable Mandi (SUB): Divider is too low



1.2 In front of Azadpur Fruit & Vegetable main Road (SUB): Divider is too low



2.1 Behra enclave Outer Ring Road First: Divider is broken



2.2 Behra Enclave Outer Ring Road Second: Divider is broken





2.3 Near Rohini Court Madhuban chauk Pitampura: Divider Grill is broken



2.4 Saraswati Vihar: Divider Grill is broken



3.1 Nagloi Near Lokesh Cinema NH 10: Divider Grill is broken



3.4 Near Maharaja Agrasen Hospital NH 10: Divider Grill is broken





4.1 Ashok park Main NH 10: Road divider is too low and there is no grill



4.3 Rani Bagh Shakur Basti Near Railway station on Road No. 43: Divider Grill is broken



4.4 Punjab kesri foot over Bridge at Ring Road: Divider Grill is broken



6.2 Near Subhadra colony Gate road No 40: Divider Grill is broken





6.3 Near Sarai Rohilla Police station on Kalidass Marg: Divider Grill is broken



7.2 Netaji Subhash Place: Divider Grill is broken



9.1 Sheo nath tyagi marg Najagarh: Divider Grill is broken



12.1 At Ring road Wazirput Subway: Divider Grill is broken





12.3 Maharani bagh: Divider Grill is broken



12.4 Nehru Nagar: Divider Grill is broken



13.1 Ashram Mathura road: Divider Grill is broken



13.4 Sahin Kalindi kunj Bagh Road: Divider Grill is broken





14.4 Jamia Hamdard University: Divider Grill is broken



16.3 Near d c Office South MB Road: Divider Grill is broken



17.4 Hyatt: Divider Grill is broken



20.2 Opp. WHO Building/front of WHO Office: Divider is too low





22.2 Majnu ka Tilla Ring Road: Divider Grill is broken



23.3 Pandav Nagar NH 24: Cut in Divider



24.4 Ambedkar College Road No. 59: Divider Grill is broken



25.2 Ashok Nagar: Divider Grill is broken





25.4 Jhandewalan Mandir, Rani Jhansi Road: Divider is too low and there is no grill



26.3 Apsra Border -2 Road No. 56: Divider Grill is broken



26.4 Ramprastha Road No. 56: Divider Grill is broken



27.1 Vishwas Nagar Road No 57A: Divider Grill is broken





27.3 EDM Mall Road No 56: Divider Grill is broken



27.4 ISBT Anand Vihar, Road No. 56: Divider Grill is broken



28.3 Ghazipur Taj Highway Apartment Road No. 56



28.4 Gandhi Nagar Road No 57: Divider Grill is broken





29.2 Jagatpuri T Point: Divider Grill is broken



29.3 Road No 58A Mastar somnath Marg Yamuna sports complex: Divider Grill is broken



## APPENDIX: 4: DAILY AND HOURLY MOVEMENT OF USERS AND NON-USERS

Users and Non-Users across Divyang and Others and Total for Each FOB and Subway											Hourly Movement of Users and Non-users	
Sl. No	ID	Name	FOB/SUB	Zone	User (Divyang)	Non-User (Divyang)	Other Users	Other Non-Users	Total User	Total nonuser	Users	Non-Users
1	1.3	Near Azadpur Around	FOB	North	10	12	4235	2131	4245	2143	327	165
2	1.4	Road no. 51 Mukundpur Road	FOB	North	4	10	2578	995	2582	1005	199	77
3	2.1	Bohara Enclave 1	FOB	North	0	0	1704	47	1704	47	131	4
4	2.2	Bohara Enclave 2	FOB	North	6	1	3217	32	3223	33	248	3
5	3.1	Near Lokesh cinema, Nagloi	FOB	North	2	8	2381	2205	2383	2213	183	170
6	3.2	Near Rajdhani park, Nagloi	FOB	North	2	0	3352	2589	3354	2589	258	199
7	4.2	Near Janmastmi Park, Punjabi Bagh	FOB	North	2	0	616	9	618	9	48	1
8	4.3	Near sakurbasti Railway station	FOB	North	0	1	15	1459	15	1460	1	112
9	4.4	Punjab keshari, Wazirpur	FOB	North	4	0	3447	848	3451	848	265	65
10	5.3	Shivdas puri marg, Karmapura	FOB	North	0	0	1249	812	1249	812	96	62
11	6.3	Near Sarai Rohila police station	FOB	North	0	0	1261	1971	1261	1971	97	152
12	6.4	Sakurpur Metro station	FOB	North	0	0	10303	16	10303	16	793	1
13	7.1	Prembari	FOB	North	9	0	5109	1183	5118	1183	394	91
14	7.2	Netaji shubhace place	FOB	North	13	0	8505	7616	8518	7616	655	586
15	7.3	Sahipur Village Near Shalimar	FOB	North	0	0	379	1124	379	1124	29	86
16	7.4	Road no. 37 Near kanhaiya nagar	FOB	North	7	10	4568	5354	4575	5364	352	413
17	9.3	Pankha Road Sagarpur	FOB	South	1	0	6013	4241	6014	4241	463	326
18	9.4	Hasanpur, Patparganj	FOB	East	8	0	1717	0	1725	0	133	0
19	10.1	Pampsh enclave	FOB	South	13	0	6074	0	6087	0	468	0
20	10.2	Moti bagh Ring Road, Moti Bagh	FOB	South	5	0	2737	50	2742	50	211	4
21	10.3	Gurudwara Nanakpur, Moti Bagh	FOB	South	1	0	15614	0	15615	0	1201	0
22	10.4	Mochi bagh Shatya Niketan, Moti Bagh	FOB	South	11	0	9070	0	9081	0	699	0
23	11.1	Dhaura kuan to Moti bagh on NH8	FOB	South	0	0	1937	40	1937	40	149	3
24	11.2	Near Dhaura kuan Metro station	FOB	South	10	0	18522	135	18532	135	1426	10
25	12.3	Maharani bagh	FOB	South	11	0	8630	731	8641	731	665	56
26	12.4	Nehru Nagar	FOB	South	19	0	7225	148	7244	148	557	11

Users and Non-Users across Divyang and Others and Total for Each FOB and Subway											Hourly Movement of Users and Non-users	
Sl. No	ID	Name	FOB/SUB	Zone	User (Divyang)	Non-User (Divyang)	Other Users	Other Non-Users	Total User	Total nonuser	Users	Non-Users
27	13.1	Ashram Mathura Road	FOB	South	4	0	1934	2977	1938	2977	149	229
28	13.2	Bhogal Mathura Road	FOB	South	2	16	1425	3175	1427	3191	110	245
29	13.3	Sarita Vihar	FOB	South	3	0	2674	2648	2677	2648	206	204
30	13.4	Sahin bagh Kalindi kunj	FOB	South	2	0	2032	4182	2034	4182	156	322
31	14.1	Modi mill Near NSIC	FOB	South	17	6	10944	5290	10961	5296	843	407
32	14.2	Prahladpur MB Road	FOB	South	9	6	11043	13010	11052	13016	850	1001
33	14.3	Lal kuan, Badarpur	FOB	South	0	4	189	5136	189	5140	15	395
34	14.4	Jamiya Hamdard University, Sangam Vihar	FOB	South	8	0	6867	6285	6875	6285	529	483
35	15.1	Batra hospital, Sangam Vihar	FOB	South	6	28	14803	10160	14809	10188	1139	784
36	15.2	Subarato Park, Vasant Vihar	FOB	South	2	0	4383	0	4385	0	337	0
37	15.3	Munirka	FOB	South	3	0	6403	0	6406	0	493	0
38	16.1	Kalka ji Mandir	FOB	South	0	0	2266	0	2266	0	174	0
39	16.2	Bhairo Mandir Kalkaji	FOB	South	2	4	6164	833	6166	837	474	64
40	16.3	Near DC office MB Road	FOB	South	0	0	687	188	687	188	53	14
41	16.4	Saket Metro station, MB Road	FOB	South	2	0	15534	0	15536	0	1195	0
42	17.1	Ansari Nagar	FOB	South	0	0	5330	0	5330	0	410	0
43	17.2	Jia Sarai, Panchsheel	FOB	South	4	0	2997	0	3001	0	231	0
44	17.3	Panchsheel Enclave, Panchsheel	FOB	South	4	0	3710	0	3714	0	286	0
45	20.4	ITO	FOB	East	18	0	8128	0	8146	0	627	0
46	21.1	Rajauri Garden	FOB	South	4	0	4520	1600	4524	1600	348	123
47	22.2	Majnu ka tila	FOB	East	12	0	4308	2468	4320	2468	332	190
48	22.3	Delhi police Apartment, UP Iink Road Mayur Vihar	FOB	East	0	0	171	1	171	1	13	0
49	22.4	Kishan kunj	FOB	East	0	0	2693	0	2693	0	207	0
50	23.1	Ghazipur Grade seprator	FOB	East	3	1	1223	2111	1226	2112	94	162
51	23.2	Latita park	FOB	East	3	0	3311	139	3314	139	255	11
52	23.3	Pandav Nagar NH 24	FOB	East	1	0	5718	164	5719	164	440	13
53	23.4	Samachar Apartment, Mayur Vihar Extension	FOB	East	0	0	72	1	72	1	6	0
54	24.1	Sakarpur School Block, Marginal Band Road	FOB	East	0	0	2802	6	2802	6	216	0
55	24.2	Sakarpur School Block	FOB	East	0	11	0	8082	0	8093	0	623
56	24.3	Vinod Nagar Patparganj NH 24	FOB	East	0	0	315	0	315	0	24	0
57	24.4	Ambedkar collage Road No. 59	FOB	East	5	3	1686	4005	1691	4008	130	308
58	25.1	Brijpuri Road no. 59	FOB	East	9	0	5691	3915	5700	3915	438	301
59	25.2	Ashok nagar	FOB	East	4	2	5800	3369	5804	3371	446	259
60	25.3	Bhopra Border Harsh Vihar	FOB	East	0	11	16	5809	16	5820	1	448
61	25.4	Jhandewalan Mandir, Rani jhansi Road	FOB	East	0	9	19	4388	19	4397	1	338

Users and Non-Users across Divyang and Others and Total for Each FOB and Subway											Hourly Movement of Users and Non-users	
Sl. No	ID	Name	FOB/SUB	Zone	User (Divyang)	Non-User (Divyang)	Other Users	Other Non-Users	Total User	Total nonuser	Users	Non-Users
62	26.1	Jhandewalan Mandir, D B G Road	FOB	East	0	1	0	2010	0	2011	0	155
63	26.2	Apsara Boder No. 1, Shahadra	FOB	East	0	0	148	24876	148	24876	11	1914
64	26.3	Apsara Boder No. 2, Shahadra	FOB	East	0	18	166	12537	166	12555	13	966
65	26.4	Ramprasth Road No. 56, Ramprastha	FOB	East	0	0	2893	2892	2893	2892	223	222
66	27.1	Vishwas Nagar Road Nol 57A	FOB	East	4	2	2653	6555	2657	6557	204	504
67	27.2	Bhikam Singh Colony Road No. 57, Vishwas Nagar	FOB	East	3	0	865	753	868	753	67	58
68	27.3	EDM Mall, Anand Vihar	FOB	East	6	0	8529	564	8535	564	657	43
69	27.4	ISBT Anand Vihar	FOB	East	255	0	132270	5762	132525	5762	10194	443
70	28.1	Ghazipur Road No. 57	FOB	East	6	0	1622	0	1628	0	125	0
71	28.2	Ghazipur Grade seprator	FOB	East	2	4	438	773	440	777	34	60
72	28.3	Taj Highway Apartment Road No 56, Ghazipur	FOB	East	4	0	15439	2728	15443	2728	1188	210
73	28.4	Gandhi nagar Road No 57	FOB	East	1	18	69	5637	70	5655	5	435
74	29.4	ISBT Kashmiri gate	FOB	East	30	0	19090	0	19120	0	1471	0
75	1.1	In front of Azadpur Fruit and Vegetable Mandi	SUB	North	5	4	3846	5131	3851	5135	296	395
76	1.2	Azadpur fruit and Vegetable mandi near Masjid	SUB	North	2	1	1952	2579	1954	2580	150	198
77	2.3	Near Rohini court Madhuban chouk Pitampura	SUB	North	10	0	3514	439	3524	439	271	34
78	2.4	Sarswati Vihar	SUB	North	2	0	2725	480	2727	480	210	37
79	3.3	Metro station, Nagloi	SUB	North	10	0	1321	2211	1331	2211	102	170
80	3.4	Maharaja Agrasen Hospital, Punjabi Bagh	SUB	North	11	3	2646	42	2657	45	204	3
81	4.1	Ashok park main, Punjabi Bagh	SUB	North	0	1	1366	1912	1366	1913	105	147
82	5.1	Near Rajdhani Collage, Raja Garden	SUB	North	0	0	73	0	73	0	6	0
83	5.2	ESI Hospital, Raja Garden	SUB	North	25	0	5940	7	5965	7	459	1
84	5.4	Punjabi bagh Chauk, Punjabi Bagh	SUB	North	2	4	2833	2430	2835	2434	218	187
85	6.1	Near Indralok Masjid	SUB	North	0	3	1491	3566	1491	3569	115	275
86	6.2	Near Subhadra colony gate, Sashtri Nagar	SUB	North	0	0	1252	2637	1252	2637	96	203
87	9.1	Shivaji marg Najafgadh road	SUB	North	1	0	2085	506	2086	506	160	39
88	9.2	Palam dabri Road	SUB	South	0	3	1922	8754	1922	8757	148	674
89	11.3	Dhaura kuan	SUB	South	5	0	3981	136	3986	136	307	10
90	11.4	Naraina	SUB	South	0	4	526	8472	526	8476	40	652
91	12.1	At Ring Road Wazirpur	SUB	North	6	0	5527	3036	5533	3036	426	234

Users and Non-Users across Divyang and Others and Total for Each FOB and Subway											Hourly Movement of Users and Non-users	
Sl. No	ID	Name	FOB/SUB	Zone	User (Divyang)	Non-User (Divyang)	Other Users	Other Non-Users	Total User	Total nonuser	Users	Non-Users
92	12.2	At Ring Road Britainia	SUB	North	0	1	3228	4996	3228	4997	248	384
93	15.4	Munirka	SUB	South	0	9	4809	9054	4809	9063	370	697
94	17.4	Hyatt Near Bhikhaji kama place	SUB	South	4	0	6435	592	6439	592	495	46
95	18.1	Hyatt Subway	SUB	South	46	0	8329	0	8375	0	644	0
96	18.2	Safdarjang Hospital Subway	SUB	South	186	0	20015	0	20201	0	1554	0
97	18.3	Ansal plaza subway	SUB	South	0	0	0	0	0	0	0	0
98	18.4	Narauji nagar	SUB	South	10	0	3881	0	3891	0	299	0
99	19.1	IIT	SUB	South	3	0	5073	0	5076	0	390	0
100	19.2	Hauz khas Outer Ring Road	SUB	South	3	0	14288	0	14291	0	1099	0
101	19.3	Swami nagar	SUB	South	5	0	14490	0	14495	0	1115	0
102	19.4	Masjid Moth	SUB	South	3	0	4321	0	4324	0	333	0
103	20.1	Subway at Nehru place	SUB	South	24	0	13328	171	13352	171	1027	13
104	20.2	Opp. WHO Building/Front of WHO	SUB	East	1	0	1107	45	1108	45	85	3
105	21.2	Vikas marg Near Laxmi nagar Metro station	SUB	East	7	0	14384	0	14391	0	1107	0
106	21.3	Vikas marg Near Preet Vihar	SUB	East	0	3	840	1870	840	1873	65	144
107	21.4	Bhajanpura	SUB	East	34	0	20600	0	20634	0	1587	0
108	22.1	Nigam bodh ghat	SUB	East	3	0	2793	676	2796	676	215	52
109	29.1	Gokulpuri	SUB	East	0	0	0	7325	0	7325	0	563
110	29.2	Jagatpuri T Point	SUB	East	0	0	265	2003	265	2003	20	154
111	29.3	Road No 58A Master Somnath marg, Yamuna Sports Complex	SUB	East	0	5	0	766	0	771	0	59

## APPENDIX 5: USRS AND NON-USERS WITH RESPECT TO FOB DURING THE THREE PERIODS ON THE DAY OF SURVEY

USERS AND NON-USERS WITH RESPECT TO FOB DURING THE THREE PERIODS ON THE DAY OF SURVEY

FOB												
Sl. No.	ID	Name	Users				Non-Users				Share in Total	
			Time			Total	Time			Total	Users	Non-users
			Morning	Day Time	Evening		Morning	Day Time	Evening			
1	1.3	Near Azadpur Around	1190	2373	682	4245	383	1396	364	2143	0.9	1.1
2	1.4	Road no. 51 Mukundpur Road	543	1567	472	2582	400	474	131	1005	0.6	0.5
3	2.1	Bohara Enclave 1	414	836	454	1704	10	18	19	47	0.4	0.0
4	2.2	Bohara Enclave 2	1146	1238	839	3223	7	22	4	33	0.7	0.0
5	3.1	Near Lokesh cinema, Nagloi	907	793	683	2383	543	887	783	2213	0.5	1.2
6	3.2	Near Rajdhani park, Nagloi	1353	1244	757	3354	856	664	1069	2589	0.7	1.4
7	4.2	Near Janmastmi Park, Punjabi Bagh	192	351	75	618	3	4	2	9	0.1	0.0
8	4.3	Near sakurbasti Railway station	2	10	3	15	446	735	279	1460	0.0	0.8
9	4.4	Punjab keshari, Wazirpur	1412	885	1154	3451	230	286	332	848	0.7	0.4
10	5.3	Shivdas puri marg, Karmapura	433	556	260	1249	277	363	172	812	0.3	0.4
11	6.3	Near Sarai Rohila police station	224	673	364	1261	391	1165	415	1971	0.3	1.0
12	6.4	Sakurpur Metro station	3473	5009	1821	10303	12	4	0	16	2.2	0.0
13	7.1	Prembari	2029	2042	1047	5118	409	459	315	1183	1.1	0.6
14	7.2	Netaji shubhace place	515	5318	2685	8518	1788	3009	2819	7616	1.8	4.0
15	7.3	Sahipur Village Near Shalimar	80	173	126	379	247	463	414	1124	0.1	0.6
16	7.4	Road no. 37 Near kanhaiya nagar	1241	2409	925	4575	1589	2611	1164	5364	1.0	2.8
17	9.3	Pankha Road Sagarpur	1004	3593	1417	6014	429	2648	1164	4241	1.3	2.2
18	9.4	Hasanpur, Patparganj	435	1039	251	1725	0	0	0	0	0.4	0.0
19	10.1	Pampsh enclave	2028	1253	2806	6087	0	0	0	0	1.3	0.0
20	10.2	Moti bagh Ring Road, Moti Bagh	1095	817	830	2742	21	19	10	50	0.6	0.0
21	10.3	Gurudwara Nanakpur, Moti Bagh	4369	7694	3552	15615	0	0	0	0	3.4	0.0
22	10.4	Mochi bagh Shatya Niketan,	3022	4023	2036	9081	0	0	0	0	2.0	0.0



FOB												
Sl. No.	ID	Name	Users				Non-Users				Share in Total	
			Time			Total	Time			Total	Users	Non-users
			Morning	Day Time	Evening		Morning	Day Time	Evening			
		Moti Bagh										
23	11.1	Dhaulta kuan to Moti bagh on NH8	557	830	550	1937	17	23	0	40	0.4	0.0
24	11.2	Near Dhaulta kuan Metro station	2646	11785	4101	18532	55	40	40	135	4.0	0.1
25	12.3	Maharani bagh	2304	4335	2002	8641	239	261	231	731	1.9	0.4
26	12.4	Nehru Nagar	2198	3529	1517	7244	74	49	25	148	1.6	0.1
27	13.1	Ashram Mathura Road	434	1174	330	1938	722	1575	680	2977	0.4	1.6
28	13.2	Bhogal Mathura Road	200	618	609	1427	1108	851	1232	3191	0.3	1.7
29	13.3	Sarita Vihar	1357	811	509	2677	1126	818	704	2648	0.6	1.4
30	13.4	Sahin bagh Kalindi kunj	360	1378	296	2034	1491	2387	304	4182	0.4	2.2
31	14.1	Modi mill Near NSIC	3590	4264	3107	10961	2267	1527	1502	5296	2.4	2.8
32	14.2	Prahladpur MB Road	1992	6382	2678	11052	2207	6860	3949	13016	2.4	6.9
33	14.3	Lal kuan, Badarpur	31	92	66	189	1701	1986	1453	5140	0.0	2.7
34	14.4	Jamiya Hamdard University, Sangam Vihar	3124	3082	669	6875	2867	2868	550	6285	1.5	3.3
35	15.1	Batra hospital, Sangam Vihar	6039	6223	2547	14809	3429	4973	1786	10188	3.2	5.4
36	15.2	Subarato Park, Vasant Vihar	829	2386	1170	4385	0	0	0	0	1.0	0.0
37	15.3	Munirka	1663	2278	2465	6406	0	0	0	0	1.4	0.0
38	16.1	Kalka ji Mandir	620	1091	555	2266	0	0	0	0	0.5	0.0
39	16.2	Bhaira Mandir Kalkaji	1585	2988	1593	6166	300	262	275	837	1.3	0.4
40	16.3	Near DC office MB Road	276	289	122	687	58	106	24	188	0.1	0.1
41	16.4	Saket Metro station, MB Road	5766	5853	3917	15536	0	0	0	0	3.4	0.0
42	17.1	Ansari Nagar	1122	2810	1398	5330	0	0	0	0	1.2	0.0
43	17.2	Jia Sarai, Panchsheel	744	1494	763	3001	0	0	0	0	0.7	0.0
44	17.3	Panchsheel Enclave, Panchsheel	583	2349	782	3714	0	0	0	0	0.8	0.0
45	20.4	ITO	1025	5716	1405	8146	0	0	0	0	1.8	0.0
46	21.1	Rajauri Garden	1377	2676	471	4524	433	827	340	1600	1.0	0.8
47	22.2	Majnu ka tila	1346	1675	1299	4320	657	946	865	2468	0.9	1.3
48	22.3	Delhi police Apartment, UP link Road Mayur Vihar	36	74	61	171	1	0	0	1	0.0	0.0
49	22.4	Kishan kunj	725	1318	650	2693	0	0	0	0	0.6	0.0
50	23.1	Ghazipur Grade separator	241	681	304	1226	231	1226	655	2112	0.3	1.1
51	23.2	Latita park	1523	815	976	3314	105	16	18	139	0.7	0.1
52	23.3	Pandav Nagar NH 24	2338	2171	1210	5719	33	99	32	164	1.2	0.1

FOB												
Sl. No.	ID	Name	Users				Non-Users				Share in Total	
			Time			Total	Time			Total	Users	Non-users
			Morning	Day Time	Evening		Morning	Day Time	Evening			
53	23.4	Samachar Apartment, Mayur Vihar Extension	18	22	32	72	1	0	0	1	0.0	0.0
54	24.1	Sakarpur School Block, Marginal Band Road	846	1313	643	2802	1	5	0	6	0.6	0.0
55	24.2	Sakarpur School Block	0	0	0	0	2238	3609	2246	8093	0.0	4.3
56	24.3	Vinod Nagar Patparganj NH 24	193	54	68	315	0	0	0	0	0.1	0.0
57	24.4	Ambedkar collage Road No. 59	431	859	401	1691	823	2568	617	4008	0.4	2.1
58	25.1	Brijpuri Road no. 59	2510	1677	1513	5700	1083	1505	1327	3915	1.2	2.1
59	25.2	Ashok nagar	1608	2806	1390	5804	1354	1354	663	3371	1.3	1.8
60	25.3	Bhopra Border Harsh Vihar	5	6	5	16	1904	1979	1937	5820	0.0	3.1
61	25.4	Jhandewalan Mandir, Rani jhansi Road	3	15	1	19	1374	1457	1566	4397	0.0	2.3
62	26.1	Jhandewalan Mandir, D B G Road	0	0	0	0	609	803	599	2011	0.0	1.1
63	26.2	Apsara Boder No. 1, Shahadra	16	113	19	148	6194	14149	4533	24876	0.0	13.2
64	26.3	Apsara Boder No. 2, Shahadra	44	59	63	166	3109	6561	2885	12555	0.0	6.6
65	26.4	Ramprasth Road No. 56, Ramprastha	771	1114	1008	2893	1423	637	832	2892	0.6	1.5
66	27.1	Vishwas Nagar Road Nol 57A	241	1193	1223	2657	1166	2550	2841	6557	0.6	3.5
67	27.2	Bhikam Singh Colony Road No. 57, Vishwas Nagar	162	434	272	868	118	387	248	753	0.2	0.4
68	27.3	EDM Mall, Anand Vihar	2350	3531	2654	8535	428	76	60	564	1.9	0.3
69	27.4	ISBT Anand Vihar	17030	86145	29350	132525	1008	2894	1860	5762	28.7	3.0
70	28.1	Ghazipur Road No. 57	436	594	598	1628	0	0	0	0	0.4	0.0
71	28.2	Ghazipur Grade seprator	70	123	247	440	183	225	369	777	0.1	0.4
72	28.3	Taj Highway Apartment Road No 56, Ghazipur	5571	7122	2750	15443	1063	1240	425	2728	3.3	1.4
73	28.4	Gandhi nagar Road No 57	31	29	10	70	1314	3005	1336	5655	0.0	3.0
74	29.4	ISBT Kashmiri gate	4467	10313	4340	19120	0	0	0	0	4.1	0.0
	Total		110541	242585	107948	461074	52555	87931	48465	188951	100.0	100.0

## APPENDIX 6: USRS AND NON-USERS WITH RESPECT TO SUBWAYS DURING THE THREE PERIODS ON THE DAY OF SURVEY

USERS AND NON-USERS WITH RESPECT TO SUBWAYS DURING THE THREE PERIODS ON THE DAY OF SURVEY

SUBWAY												
SL. No	ID	Name	Users				Non-Users				Share in Total	
			Time			Total	Time			Total	Users	Non Users
			Morning	Day Time	Evening		Morning	Day Time	Evening			
1	1.1	In front of Azadpur Fruit and Vegetable Mandi	1085	1841	925	3851	1050	2454	1631	5135	2.1	7.3
2	1.2	Azadpur fruit and Vegetable mandi near Masjid	509	976	469	1954	527	1266	787	2580	1.1	3.7
3	2.3	Near Rohini court Madhuban chok Pitampura	862	1801	861	3524	69	314	56	439	1.9	0.6
4	2.4	Sarswati Vihar	745	1484	498	2727	67	362	51	480	1.5	0.7
5	3.3	Metro station, Nagloi	182	865	284	1331	540	1399	272	2211	0.7	3.2
6	3.4	Maharaja Agrasen Hospital, Punjabi Bagh	431	1217	1009	2657	22	4	19	45	1.5	0.1
7	4.1	Ashok park main, Punjabi Bagh	450	791	125	1366	840	888	185	1913	0.8	2.7
8	5.1	Near Rajdhani Collage, Raja Garden	24	35	14	73	0	0	0	0	0.0	0.0
9	5.2	ESI Hospital, Raja Garden	1844	3312	809	5965	7	0	0	7	3.3	0.0
10	5.4	Punjabi bagh Chauk, Punjabi Bagh	868	1466	501	2835	812	812	810	2434	1.6	3.5
11	6.1	Near Indralok Masjid	109	723	659	1491	1076	1553	940	3569	0.8	5.1
12	6.2	Near Subhadra colony gate, Sashtri Nagar	272	618	362	1252	805	1284	548	2637	0.7	3.8
13	9.1	Shivaji marg Najafgadh road	818	791	477	2086	146	141	219	506	1.1	0.7
14	9.2	Palam dabri Road	269	700	953	1922	2616	3813	2328	8757	1.1	12.5
15	11.3	Dhaura kuan	1360	1783	843	3986	18	73	45	136	2.2	0.2
16	11.4	Naraina	125	243	158	526	1312	4469	2695	8476	0.3	12.1
17	12.1	At Ring Road Wazirpur	2147	1659	1727	5533	1092	984	960	3036	3.0	4.3
18	12.2	At Ring Road Britainia	878	1465	885	3228	1038	2320	1639	4997	1.8	7.2
19	15.4	Munirka	1644	1896	1269	4809	3345	4684	1034	9063	2.6	13.0
20	17.4	Hyatt Near Bhikhaji kama place	3127	2006	1306	6439	226	251	115	592	3.5	0.8
21	18.1	Hyatt Subway	1705	3756	2914	8375	0	0	0	0	4.6	0.0
22	18.2	Safdarjang Hospital Subway	7240	9899	3062	20201	0	0	0	0	11.1	0.0
23	18.3	Ansal plaza subway	0	0	0	0	0	0	0	0	0.0	0.0
24	18.4	Narauji nagar	2	2592	1297	3891	0	0	0	0	2.1	0.0
25	19.1	IIT	917	2747	1412	5076	0	0	0	0	2.8	0.0

SUBWAY												
SL. No	ID	Name	Users				Non-Users				Share in Total	
			Time			Total	Time			Total	Users	Non Users
			Morning	Day Time	Evening		Morning	Day Time	Evening			
26	19.2	Hauz khas Outer Ring Road	2396	9481	2414	14291	0	0	0	0	7.9	0.0
27	19.3	Swami nagar	5113	6062	3320	14495	0	0	0	0	8.0	0.0
28	19.4	Masjid Moth	1730	1481	1113	4324	0	0	0	0	2.4	0.0
29	20.1	Subway at Nehru place	1995	8792	2565	13352	50	51	70	171	7.4	0.2
30	20.2	Opp. WHO Building/Front of WHO	103	789	216	1108	24	14	7	45	0.6	0.1
31	21.2	Vikas marg Near Laxmi nagar Metro station	4522	6798	3071	14391	0	0	0	0	7.9	0.0
32	21.3	Vikas marg Near Preet Vihar	167	506	167	840	589	837	447	1873	0.5	2.7
33	21.4	Bhajanpura	5947	7304	7383	20634	0	0	0	0	11.4	0.0
34	22.1	Nigam bodh ghat	471	1961	364	2796	540	44	92	676	1.5	1.0
35	29.1	Gokulpuri	0	0	0	0	2495	3581	1249	7325	0.0	10.5
36	29.2	Jagatpuri T Point	10	117	138	265	1305	425	273	2003	0.1	2.9
37	29.3	Road No 58A Master Somnath marg, Yamuna Sports Complex	0	0	0	0	240	260	271	771	0.0	1.1
	Total		50067	87957	43570	181594	20851	32283	16743	69877	100	100

## APPENDIX 7: RESPONSE OF USERS

### A7-1 Reasons for Using FOB and SUB

#### A7-1.1 Accident is avoided

##### FOB USERS

Accident is Avoided						
Response by Scale of Importance						
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	347	287	114	22	15	785
North	349	97	14	1	3	464
South	483	244	62	31	20	840
Total	1179	628	190	54	38	2089
Distribution by Column						
East	44.20	36.56	14.52	2.80	1.91	100
North	75.22	20.91	3.02	0.22	0.65	100
South	57.50	29.05	7.38	3.69	2.38	100
Total	56.44	30.06	9.10	2.58	1.82	100
Distribution by Row						
East	29.4	45.7	60.0	40.7	39.5	37.6
North	29.6	15.4	7.4	1.9	7.9	22.2
South	41.0	38.9	32.6	57.4	52.6	40.2
Total	100	100	100	100	100	100

##### SUBWAY USERS

Accident is Avoided						
Response by Scale of Importance						
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	90	70	18	1	1	180
North	329	95	17	7	2	450
South	217	113	28	16	16	390
Total	636	278	63	24	19	1020
Distribution by Column						
East	50.0	38.9	10.0	0.6	0.6	100
North	73.1	21.1	3.8	1.6	0.4	100
South	55.6	29.0	7.2	4.1	4.1	100
Total	62.4	27.3	6.2	2.4	1.9	100
Distribution by Row						
East	14.2	25.2	28.6	4.2	5.3	17.6
North	51.7	34.2	27.0	29.2	10.5	44.1
South	34.1	40.6	44.4	66.7	84.2	38.2
Total	100	100	100	100	100	100

### A7.1.2: Time is saved

#### FOB USERS

Time is Saved						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	186	186	193	183	37	785
North	75	181	139	63	6	464
South	140	253	232	184	28	837
Total	401	620	564	430	71	2086
Distribution by Column						
East	23.7	23.7	24.6	23.3	4.7	100
North	16.2	39.0	30.0	13.6	1.3	100
South	16.7	30.2	27.7	22.0	3.3	100
Total	19.2	29.7	27.0	20.6	3.4	100
Distribution by Row						
East	46.4	30.0	34.2	42.6	52.1	37.6
North	18.7	29.2	24.6	14.7	8.5	22.2
South	34.9	40.8	41.1	42.8	39.4	40.1
Total	100	100	100	100	100	100

#### SUBWAY USERS

Time is Saved						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	49	34	56	38	3	180
North	60	192	135	53	10	450
South	60	117	96	86	31	390
Total	169	343	287	177	44	1020
Distribution by Column						
East	27.2	18.9	31.1	21.1	1.7	100
North	13.3	42.7	30.0	11.8	2.2	100
South	15.4	30.0	24.6	22.1	7.9	100
Total	16.6	33.6	28.1	17.4	4.3	100
Distribution by Row						
East	29.0	9.9	19.5	21.5	6.8	17.6
North	35.5	56.0	47.0	29.9	22.7	44.1
South	35.5	34.1	33.4	48.6	70.5	38.2
Total	100	100	100	100	100	100

### A7.1.3: Self Motivated

#### FOB USERS

Self- Motivated						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	223	264	211	55	32	785
North	40	135	156	103	30	464
South	173	262	262	111	32	840
Total	436	661	629	269	94	2089
Distribution by Column						
East	28.41	33.63	26.88	7.01	4.08	100
North	8.62	29.09	33.62	22.20	6.47	100
South	20.60	31.19	31.19	13.21	3.81	100
Total	20.87	31.64	30.11	12.88	4.50	100
Distribution by Row						
East	51.1	39.9	33.5	20.4	34.0	37.6
North	9.2	20.4	24.8	38.3	31.9	22.2
South	39.7	39.6	41.7	41.3	34.0	40.2
Total	100	100	100	100	100	100

#### SUBWAY USERS

Self-Motivated						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	33	69	52	18	8	180
North	48	130	119	115	38	450
South	88	103	119	56	24	390
Total	169	302	290	189	70	1020
Distribution by Column						
East	18.3	38.3	28.9	10.0	4.4	100
North	10.7	28.9	26.4	25.6	8.4	100
South	22.6	26.4	30.5	14.4	6.2	100
Total	16.6	29.6	28.4	18.5	6.9	100
Distribution by Row						
East	19.5	22.8	17.9	9.5	11.4	17.6
North	28.4	43.0	41.0	60.8	54.3	44.1
South	52.1	34.1	41.0	29.6	34.3	38.2
Total	100	100	100	100	100	100

A7.1.4: There is no alternative

FOB USERS

There is no alternative						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	31	36	204	334	180	785
North	6	40	109	146	162	463
South	36	59	225	295	225	840
Total	73	135	538	775	567	2088
Distribution by Column						
East	3.95	4.59	25.99	42.55	22.93	100
North	1.30	8.64	23.54	31.53	34.99	100
South	4.29	7.02	26.79	35.12	26.79	100
Total	3.50	6.47	25.77	37.12	27.16	100
Distribution by Row						
East	42.5	26.7	37.9	43.1	31.7	37.6
North	8.2	29.6	20.3	18.8	28.6	22.2
South	49.3	43.7	41.8	38.1	39.7	40.2
Total	100	100	100	100	100	100

SUBWAY USERS

There is no alternative						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	5	4	45	70	56	180
North	9	36	140	153	112	450
South	19	36	101	107	126	389
Total	33	76	286	330	294	1019
Distribution by Column						
East	2.8	2.2	25.0	38.9	31.1	100
North	2.0	8.0	31.1	34.0	24.9	100
South	4.9	9.3	26.0	27.5	32.4	100
Total	3.2	7.5	28.1	32.4	28.9	100
Distribution by Row						
East	15.2	5.3	15.7	21.2	19.0	17.7
North	27.3	47.4	49.0	46.4	38.1	44.2
South	57.6	47.4	35.3	32.4	42.9	38.2
Total	100	100	100	100	100	100



A7.1.5: Motivated by NGO/Government Campaign

FOB USERS

Motivated by NGO/Government Campaign						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	37	13	57	182	496	785
North	5	38	46	153	223	465
South	29	30	69	225	486	839
Total	71	81	172	560	1205	2089
Distribution by Column						
East	4.71	1.66	7.26	23.18	63.18	100
North	1.08	8.17	9.89	32.90	47.96	100
South	3.46	3.58	8.22	26.82	57.93	100
Total	3.40	3.88	8.23	26.81	57.68	100
Distribution by Row						
East	52.1	16.0	33.1	32.5	41.2	37.6
North	7.0	46.9	26.7	27.3	18.5	22.3
South	40.8	37.0	40.1	40.2	40.3	40.2
Total	100	100	100	100	100	100

SUBWAY USERS

Motivated by NGO/Government Campaign						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	4	1	10	53	112	180
North	16	23	40	117	253	449
South	20	20	46	123	179	388
Total	40	44	96	293	544	1017
Distribution by Column						
East	2.2	0.6	5.6	29.4	62.2	100
North	3.6	5.1	8.9	26.1	56.3	100
South	5.2	5.2	11.9	31.7	46.1	100
Total	3.9	4.3	9.4	28.8	53.5	100
Distribution by Row						
East	10.0	2.3	10.4	18.1	20.6	17.7
North	40.0	52.3	41.7	39.9	46.5	44.1
South	50.0	45.5	47.9	42.0	32.9	38.2
Total	100	100	100	100	100	100

### A7.1.6: Overall Rating

#### FOB USERS

Overall Rating						
	Response by Scale of Importance					
Zone	Very Good	Good	Acceptable	Poor	Very Poor	Total
East	53	411	233	83	5	785
North	81	251	109	19	4	464
South	91	429	257	58	5	840
Total	225	1091	599	160	14	2089
Distribution by Column						
East	6.75	52.36	29.68	10.57	0.64	100
North	17.46	54.09	23.49	4.09	0.86	100
South	10.83	51.07	30.60	6.90	0.60	100
Total	10.77	52.23	28.67	7.66	0.67	100
Distribution by Row						
East	23.6	37.7	38.9	51.9	35.7	37.6
North	36.0	23.0	18.2	11.9	28.6	22.2
South	40.4	39.3	42.9	36.3	35.7	40.2
Total	100	100	100	100	100	100

#### SUBWAY USERS

Overall Rating						
	Response by Scale of Importance					
Zone	Very Good	Good	Acceptable	Poor	Very Poor	Total
East	7	103	61	9	0	180
North	52	243	140	13	1	449
South	51	171	117	49	2	390
Total	110	517	318	71	3	1019
Distribution by Column						
East	3.9	57.2	33.9	5.0	0.0	100
North	11.6	54.1	31.2	2.9	0.2	100
South	13.1	43.8	30.0	12.6	0.5	100
Total	10.8	50.7	31.2	7.0	0.3	100
Distribution by Row						
East	6.4	19.9	19.2	12.7	0.0	17.7
North	47.3	47.0	44.0	18.3	33.3	44.1
South	46.4	33.1	36.8	69.0	66.7	38.3
Total	100	100	100	100	100	100

## A7-2 Suggestions for improvement by Users of FOB and SUB

### A7.2.1: Security

#### FOB USERS

1. Security						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	211	333	176	45	20	785
North	255	128	40	29	13	465
South	267	314	157	81	21	840
Total	733	775	373	155	54	2090
Distribution by Column						
East	26.88	42.42	22.42	5.73	2.55	100
North	54.84	27.53	8.60	6.24	2.80	100
South	31.79	37.38	18.69	9.64	2.50	100
Total	35.07	37.08	17.85	7.42	2.58	100
Distribution by Row						
East	28.8	43.0	47.2	29.0	37.0	37.6
North	34.8	16.5	10.7	18.7	24.1	22.2
South	36.4	40.5	42.1	52.3	38.9	40.2
Total	100	100	100	100	100	100

#### SUBWAY USERS

1. Security						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	35	77	51	11	6	180
North	270	104	48	17	11	450
South	137	115	77	45	16	390
Total	442	296	176	73	33	1020
Distribution by Column						
East	19.4	42.8	28.3	6.1	3.3	100
North	60.0	23.1	10.7	3.8	2.4	100
South	35.1	29.5	19.7	11.5	4.1	100
Total	43.3	29.0	17.3	7.2	3.2	100
Distribution by Row						
East	7.9	26.0	29.0	15.1	18.2	17.6
North	61.1	35.1	27.3	23.3	33.3	44.1
South	31.0	38.9	43.8	61.6	48.5	38.2
Total	100	100	100	100	100	100

## A7.2.2: Cleanliness

### FOB USERS

2. Cleanliness						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	317	177	110	143	38	785
North	102	144	153	62	3	464
South	270	213	153	167	37	840
Total	689	534	416	372	78	2089
Distribution by Column						
East	40.38	22.55	14.01	18.22	4.84	100
North	21.98	31.03	32.97	13.36	0.65	100
South	32.14	25.36	18.21	19.88	4.40	100
Total	32.98	25.56	19.91	17.81	3.73	100
Distribution by Row						
East	46.0	33.1	26.4	38.4	48.7	37.6
North	14.8	27.0	36.8	16.7	3.8	22.2
South	39.2	39.9	36.8	44.9	47.4	40.2
Total	100	100	100	100	100	100

### SUBWAY USERS

2. Cleanliness						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	71	27	39	38	4	179
North	127	162	103	51	7	450
South	121	112	62	72	23	390
Total	319	301	204	161	34	1019
Distribution by Column						
East	39.7	15.1	21.8	21.2	2.2	100
North	28.2	36.0	22.9	11.3	1.6	100
South	31.0	28.7	15.9	18.5	5.9	100
Total	31.3	29.5	20.0	15.8	3.3	100
Distribution by Row						
East	22.3	9.0	19.1	23.6	11.8	17.6
North	39.8	53.8	50.5	31.7	20.6	44.2
South	37.9	37.2	30.4	44.7	67.6	38.3
Total	100	100	100	100	100	100

### A7.2.3: Provision of lift/Escalator

#### FOB USERS

3. Provision of Lift/ Escalator						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	210	199	222	118	36	785
North	99	137	94	78	55	463
South	283	235	180	94	46	838
Total	592	571	496	290	137	2086
Distribution by Column						
East	26.75	25.35	28.28	15.03	4.59	100
North	21.38	29.59	20.30	16.85	11.88	100
South	33.77	28.04	21.48	11.22	5.49	100
Total	28.38	27.37	23.78	13.90	6.57	100
Distribution by Row						
East	35.5	34.9	44.8	40.7	26.3	37.6
North	16.7	24.0	19.0	26.9	40.1	22.2
South	47.8	41.2	36.3	32.4	33.6	40.2
Total	100	100	100	100	100	100

#### SUBWAY USERS

3. Provision of Lift/ Escalator						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	66	58	39	13	4	180
North	76	113	93	81	86	449
South	112	96	98	54	30	390
Total	254	267	230	148	120	1019
Distribution by Column						
East	36.7	32.2	21.7	7.2	2.2	100
North	16.9	25.2	20.7	18.0	19.2	100
South	28.7	24.6	25.1	13.8	7.7	100
Total	24.9	26.2	22.6	14.5	11.8	100
Distribution by Row						
East	26.0	21.7	17.0	8.8	3.3	17.7
North	29.9	42.3	40.4	54.7	71.7	44.1
South	44.1	36.0	42.6	36.5	25.0	38.3
Total	100	100	100	100	100	100

#### A7.2.4: Freeing of the FOB and Subways from Occupants

##### FOB USERS

4. Freeing of the FOB and Subways from Occupants						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	52	58	199	282	194	785
North	25	50	118	150	118	461
South	44	63	269	261	203	840
Total	121	171	586	693	515	2086
Distribution by Column						
East	6.62	7.39	25.35	35.92	24.71	100
North	5.42	10.85	25.60	32.54	25.60	100
South	5.24	7.50	32.02	31.07	24.17	100
Total	5.80	8.20	28.09	33.22	24.69	100
Distribution by Row						
East	43.0	33.9	34.0	40.7	37.7	37.6
North	20.7	29.2	20.1	21.6	22.9	22.1
South	36.4	36.8	45.9	37.7	39.4	40.3
Total	100	100	100	100	100	100

##### SUBWAY USERS

4. Freeing of the FOB and Subways from Occupants						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	5	7	50	62	56	180
North	27	91	106	140	85	449
South	29	49	105	98	109	390
Total	61	147	261	300	250	1019
Distribution by Column						
East	2.8	3.9	27.8	34.4	31.1	100
North	6.0	20.3	23.6	31.2	18.9	100
South	7.4	12.6	26.9	25.1	27.9	100
Total	6.0	14.4	25.6	29.4	24.5	100
Distribution by Row						
East	8.2	4.8	19.2	20.7	22.4	17.7
North	44.3	61.9	40.6	46.7	34.0	44.1
South	47.5	33.3	40.2	32.7	43.6	38.3
Total	100	100	100	100	100	100

### A7.2.5: Locate the facility in proximity to Road Transport Stops

#### FOB USERS

5. Locate the facility in Proximity to Road Transport Stops						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	40	99	147	162	337	785
North	40	72	80	98	174	464
South	29	82	158	197	374	840
Total	109	253	385	457	885	2089
Distribution by Column						
East	5.10	12.61	18.73	20.64	42.93	100
North	8.62	15.52	17.24	21.12	37.50	100
South	3.45	9.76	18.81	23.45	44.52	100
Total	5.22	12.11	18.43	21.88	42.36	100
Distribution by Row						
East	36.7	39.1	38.2	35.4	38.1	37.6
North	36.7	28.5	20.8	21.4	19.7	22.2
South	26.6	32.4	41.0	43.1	42.3	40.2
Total	100	100	100	100	100	100

#### SUBWAY USERS

5. Locate the facility in Proximity to Road Transport Stops						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	2	12	29	45	92	180
North	48	65	98	86	152	449
South	19	61	85	87	138	390
Total	69	138	212	218	382	1019
Distribution by Column						
East	1.1	6.7	16.1	25.0	51.1	100
North	10.7	14.5	21.8	19.2	33.9	100
South	4.9	15.6	21.8	22.3	35.4	100
Total	6.8	13.5	20.8	21.4	37.5	100
Distribution by Row						
East	2.9	8.7	13.7	20.6	24.1	17.7
North	69.6	47.1	46.2	39.4	39.8	44.1
South	27.5	44.2	40.1	39.9	36.1	38.3
Total	100	100	100	100	100	100



### A7.2.6: Reducing Height

#### FOB USERS

6. Reducing Height						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	14	127	290	166	188	785
North	54	165	89	75	82	465
South	31	153	253	171	232	840
Total	99	445	632	412	502	2090
Distribution by Column						
East	1.78	16.18	36.94	21.15	23.95	100
North	11.61	35.48	19.14	16.13	17.63	100
South	3.69	18.21	30.12	20.36	27.62	100
Total	4.74	21.29	30.24	19.71	24.02	100
Distribution by Row						
East	14.1	28.5	45.9	40.3	37.5	37.6
North	54.5	37.1	14.1	18.2	16.3	22.2
South	31.3	34.4	40.0	41.5	46.2	40.2
Total	100	100	100	100	100	100

#### SUBWAY USERS

6. Reducing Depth						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	2	41	55	30	52	180
North	30	141	102	94	82	449
South	5	82	123	84	95	389
Total	37	264	280	208	229	1018
Distribution by Column						
East	1.1	22.8	30.6	16.7	28.9	100
North	6.7	31.4	22.7	20.9	18.3	100
South	1.3	21.1	31.6	21.6	24.4	100
Total	3.6	25.9	27.5	20.4	22.5	100
Distribution by Row						
East	5.4	15.5	19.6	14.4	22.7	17.7
North	81.1	53.4	36.4	45.2	35.8	44.1
South	13.5	31.1	43.9	40.4	41.5	38.2
Total	100	100	100	100	100	100

### A7.2.7: Block Alternative paths of Crossing Roads

#### FOB USERS

7. Block Alternative paths of Crossing Roads						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	34	122	167	315	146	784
North	182	83	63	76	60	464
South	93	196	179	225	146	839
Total	309	401	409	616	352	2087
Distribution by Column						
East	4.34	15.56	21.30	40.18	18.62	100
North	39.22	17.89	13.58	16.38	12.93	100
South	11.08	23.36	21.33	26.82	17.40	100
Total	14.81	19.21	19.60	29.52	16.87	100
Distribution by Row						
East	11.0	30.4	40.8	51.1	41.5	37.6
North	58.9	20.7	15.4	12.3	17.0	22.2
South	30.1	48.9	43.8	36.5	41.5	40.2
Total	100	100	100	100	100	100

#### SUBWAY USERS

7. Block Alternative paths of Crossing Roads						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	5	32	39	70	34	180
North	132	86	58	84	89	449
South	17	97	115	105	55	389
Total	154	215	212	259	178	1018
Distribution by Column						
East	2.8	17.8	21.7	38.9	18.9	100
North	29.4	19.2	12.9	18.7	19.8	100
South	4.4	24.9	29.6	27.0	14.1	100
Total	15.1	21.1	20.8	25.4	17.5	100
Distribution by Row						
East	3.2	14.9	18.4	27.0	19.1	17.7
North	85.7	40.0	27.4	32.4	50.0	44.1
South	11.0	45.1	54.2	40.5	30.9	38.2
Total	100	100	100	100	100	100

### A7.2.8: Overall Rating

#### FOB USERS

Overall Rating						
	Response by Scale of Importance					
Zone	Very Good	Good	Acceptable	Poor	Very Poor	Total
East	53	411	233	83	5	785
North	81	251	109	19	4	464
South	91	429	257	58	5	840
Total	225	1091	599	160	14	2089
Distribution by Column						
East	6.75	52.36	29.68	10.57	0.64	100
North	17.46	54.09	23.49	4.09	0.86	100
South	10.83	51.07	30.60	6.90	0.60	100
Total	10.77	52.23	28.67	7.66	0.67	100
Distribution by Row						
East	23.6	37.7	38.9	51.9	35.7	37.6
North	36.0	23.0	18.2	11.9	28.6	22.2
South	40.4	39.3	42.9	36.3	35.7	40.2
Total	100	100	100	100	100	100

#### SUBWAY USERS

Overall Rating						
	Response by Scale of Importance					
Zone	Very Good	Good	Acceptable	Poor	Very Poor	Total
East	7	103	61	9	0	180
North	52	243	140	13	1	449
South	51	171	117	49	2	390
Total	110	517	318	71	3	1019
Distribution by Column						
East	3.9	57.2	33.9	5.0	0.0	100
North	11.6	54.1	31.2	2.9	0.2	100
South	13.1	43.8	30.0	12.6	0.5	100
Total	10.8	50.7	31.2	7.0	0.3	100
Distribution by Row						
East	6.4	19.9	19.2	12.7	0.0	17.7
North	47.3	47.0	44.0	18.3	33.3	44.1
South	46.4	33.1	36.8	69.0	66.7	38.3
Total	100	100	100	100	100	100

## APPENDIX 8: RESPONSE OF NON-USERS

### A8.1 Reasons for Not Using FOBs and SUBs

#### A8.1.1: Inappropriate Location

##### FOB NON-USERS

1. Inappropriate Location						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	59	303	144	83	21	610
North	115	124	70	49	40	398
South	115	163	107	79	25	489
Total	289	590	321	211	86	1497
Distribution by Column						
East	9.67	49.67	23.61	13.61	3.44	100
North	28.89	31.16	17.59	12.31	10.05	100
South	23.52	33.33	21.88	16.16	5.11	100
Total	19.31	39.41	21.44	14.09	5.74	100
Distribution by Row						
East	20.4	51.4	44.9	39.3	24.4	40.7
North	39.8	21.0	21.8	23.2	46.5	26.6
South	39.8	27.6	33.3	37.4	29.1	32.7
Total	100	100	100	100	100	100

##### SUBWAY NON-USERS

1. Inappropriate Location						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	16	63	58	25	8	170
North	136	122	52	31	29	370
South	24	100	27	24	5	180
Total	176	285	137	80	42	720
Distribution by Column						
East	9.4	37.1	34.1	14.7	4.7	100
North	36.8	33.0	14.1	8.4	7.8	100
South	13.3	55.6	15.0	13.3	2.8	100
Total	24.4	39.6	19.0	11.1	5.8	100
Distribution by Row						
East	9.1	22.1	42.3	31.3	19.0	23.6
North	77.3	42.8	38.0	38.8	69.0	51.4
South	13.6	35.1	19.7	30.0	11.9	25.0
Total	100	100	100	100	100	100

## A8.1.2: Poor Usability

### FOB NON-USERS

2. Poor Usability						
Response by Scale of Importance						
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	205	115	93	138	59	610
North	54	110	105	88	39	396
South	75	126	100	155	33	489
Total	334	351	298	381	131	1495
Distribution by Column						
East	33.61	18.85	15.25	22.62	9.67	100
North	13.64	27.78	26.52	22.22	9.85	100
South	15.34	25.77	20.45	31.70	6.75	100
Total	22.34	23.48	19.93	25.48	8.76	100
Distribution by Row						
East	61.4	32.8	31.2	36.2	45.0	40.8
North	16.2	31.3	35.2	23.1	29.8	26.5
South	22.5	35.9	33.6	40.7	25.2	32.7
Total	100	100	100	100	100	100

### SUBWAY NON-USERS

2. Poor Usability						
Response by Scale of Importance						
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	37	58	38	21	15	169
North	59	89	103	96	21	368
South	24	23	30	96	7	180
Total	120	170	171	213	43	717
Distribution by Column						
East	21.9	34.3	22.5	12.4	8.9	100
North	16.0	24.2	28.0	26.1	5.7	100
South	13.3	12.8	16.7	53.3	3.9	100
Total	16.7	23.7	23.8	29.7	6.0	100
Distribution by Row						
East	30.8	34.1	22.2	9.9	34.9	23.6
North	49.2	52.4	60.2	45.1	48.8	51.3
South	20.0	13.5	17.5	45.1	16.3	25.1
Total	100	100	100	100	100	100

### A8.1.3: No Lift/ Escalator

#### FOB USERS

2. No Lift /Escalator						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	224	99	155	93	39	610
North	104	81	77	72	62	396
South	149	100	104	85	49	487
Total	477	280	336	250	150	1493
Distribution by Column						
East	36.72	16.23	25.41	15.25	6.39	100
North	26.26	20.45	19.44	18.18	15.66	100
South	30.60	20.53	21.36	17.45	10.06	100
Total	31.95	18.75	22.51	16.74	10.05	100
Distribution by Row						
East	47.0	35.4	46.1	37.2	26.0	40.9
North	21.8	28.9	22.9	28.8	41.3	26.5
South	31.2	35.7	31.0	34.0	32.7	32.6
Total	100	100	100	100	100	100

#### SUBWAY NON-USERS

2. No Lift /Escalator						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	16	63	58	25	8	170
North	136	122	52	31	29	370
South	24	100	27	24	5	180
Total	176	285	137	80	42	720
Distribution by Column						
East	9.4	37.1	34.1	14.7	4.7	100
North	36.8	33.0	14.1	8.4	7.8	100
South	13.3	55.6	15.0	13.3	2.8	100
Total	24.4	39.6	19.0	11.1	5.8	100
Distribution by Row						
East	9.1	22.1	42.3	31.3	19.0	23.6
North	77.3	42.8	38.0	38.8	69.0	51.4
South	13.6	35.1	19.7	30.0	11.9	25.0
Total	100	100	100	100	100	100

#### A8.1.4: Inappropriate Location

FOB NON\_USERS

1. Inappropriate Location						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	59	303	144	83	21	610
North	115	124	70	49	40	398
South	115	163	107	79	25	489
Total	289	590	321	211	86	1497
Distribution by Column						
East	9.67	49.67	23.61	13.61	3.44	100
North	28.89	31.16	17.59	12.31	10.05	100
South	23.52	33.33	21.88	16.16	5.11	100
Total	19.31	39.41	21.44	14.09	5.74	100
Distribution by Row						
East	20.4	51.4	44.9	39.3	24.4	40.7
North	39.8	21.0	21.8	23.2	46.5	26.6
South	39.8	27.6	33.3	37.4	29.1	32.7
Total	100	100	100	100	100	100

SUBWAY NON-USERS

1. Inappropriate Location						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	16	63	58	25	8	170
North	136	122	52	31	29	370
South	24	100	27	24	5	180
Total	176	285	137	80	42	720
Distribution by Column						
East	9.4	37.1	34.1	14.7	4.7	100
North	36.8	33.0	14.1	8.4	7.8	100
South	13.3	55.6	15.0	13.3	2.8	100
Total	24.4	39.6	19.0	11.1	5.8	100
Distribution by Row						
East	9.1	22.1	42.3	31.3	19.0	23.6
North	77.3	42.8	38.0	38.8	69.0	51.4
South	13.6	35.1	19.7	30.0	11.9	25.0
Total	100	100	100	100	100	100

### A8.1.5: Poor Usability

#### FOB NON-USERS

2. Poor Usability						
Response by Scale of Importance						
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	205	115	93	138	59	610
North	54	110	105	88	39	396
South	75	126	100	155	33	489
Total	334	351	298	381	131	1495
Distribution by Column						
East	33.61	18.85	15.25	22.62	9.67	100
North	13.64	27.78	26.52	22.22	9.85	100
South	15.34	25.77	20.45	31.70	6.75	100
Total	22.34	23.48	19.93	25.48	8.76	100
Distribution by Row						
East	61.4	32.8	31.2	36.2	45.0	40.8
North	16.2	31.3	35.2	23.1	29.8	26.5
South	22.5	35.9	33.6	40.7	25.2	32.7
Total	100	100	100	100	100	100

#### SUBWAY NON-USERS

2. Poor Usability						
Response by Scale of Importance						
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	37	58	38	21	15	169
North	59	89	103	96	21	368
South	24	23	30	96	7	180
Total	120	170	171	213	43	717
Distribution by Column						
East	21.9	34.3	22.5	12.4	8.9	100
North	16.0	24.2	28.0	26.1	5.7	100
South	13.3	12.8	16.7	53.3	3.9	100
Total	16.7	23.7	23.8	29.7	6.0	100
Distribution by Row						
East	30.8	34.1	22.2	9.9	34.9	23.6
North	49.2	52.4	60.2	45.1	48.8	51.3
South	20.0	13.5	17.5	45.1	16.3	25.1
Total	100	100	100	100	100	100



### A8.1.6: No Lift/ Escalator

#### FOB USERS

2. No Lift /Escalator						
Response by Scale of Importance						
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	224	99	155	93	39	610
North	104	81	77	72	62	396
South	149	100	104	85	49	487
Total	477	280	336	250	150	1493
Distribution by Column						
East	36.72	16.23	25.41	15.25	6.39	100
North	26.26	20.45	19.44	18.18	15.66	100
South	30.60	20.53	21.36	17.45	10.06	100
Total	31.95	18.75	22.51	16.74	10.05	100
Distribution by Row						
East	47.0	35.4	46.1	37.2	26.0	40.9
North	21.8	28.9	22.9	28.8	41.3	26.5
South	31.2	35.7	31.0	34.0	32.7	32.6
Total	100	100	100	100	100	100

#### SUBWAY NON-USERS

2. No Lift /Escalator						
Response by Scale of Importance						
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	16	63	58	25	8	170
North	136	122	52	31	29	370
South	24	100	27	24	5	180
Total	176	285	137	80	42	720
Distribution by Column						
East	9.4	37.1	34.1	14.7	4.7	100
North	36.8	33.0	14.1	8.4	7.8	100
South	13.3	55.6	15.0	13.3	2.8	100
Total	24.4	39.6	19.0	11.1	5.8	100
Distribution by Row						
East	9.1	22.1	42.3	31.3	19.0	23.6
North	77.3	42.8	38.0	38.8	69.0	51.4
South	13.6	35.1	19.7	30.0	11.9	25.0
Total	100	100	100	100	100	100

A8.1.7: It is time consuming

FOB NON-USERS

3. It is time consuming						
Response by Scale of Importance						
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	60	74	204	202	70	610
North	103	75	102	69	46	395
South	120	88	131	88	62	489
Total	283	237	437	359	178	1494
Distribution by Column						
East	9.84	12.13	33.44	33.11	11.48	100
North	26.08	18.99	25.82	17.47	11.65	100
South	24.54	18.00	26.79	18.00	12.68	100
Total	18.94	15.86	29.25	24.03	11.91	100
Distribution by Row						
East	21.2	31.2	46.7	56.3	39.3	40.8
North	36.4	31.6	23.3	19.2	25.8	26.4
South	42.4	37.1	30.0	24.5	34.8	32.7
Total	100	100	100	100	100	100

SUBWAY NON-USERS

3. It is time consuming						
Response by Scale of Importance						
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	31	20	53	38	28	170
North	64	84	104	66	49	367
South	29	16	91	25	18	179
Total	124	120	248	129	95	716
Distribution by Column						
East	18.2	11.8	31.2	22.4	16.5	100
North	17.4	22.9	28.3	18.0	13.4	100
South	16.2	8.9	50.8	14.0	10.1	100
Total	17.3	16.8	34.6	18.0	13.3	100
Distribution by Row						
East	25.0	16.7	21.4	29.5	29.5	23.7
North	51.6	70.0	41.9	51.2	51.6	51.3
South	23.4	13.3	36.7	19.4	18.9	25.0
Total	100	100	100	100	100	100

A8.1.8: The FOBs are too high and SUBs are too deep

FOB NON-USERS

4. The FOBs are too high						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	50	35	122	122	281	610
North	51	56	60	73	157	397
South	37	39	87	113	213	489
Total	138	130	269	308	651	1496
Distribution by Column						
East	8.20	5.74	20.00	20.00	46.07	100
North	12.85	14.11	15.11	18.39	39.55	100
South	7.57	7.98	17.79	23.11	43.56	100
Total	9.22	8.69	17.98	20.59	43.52	100
Distribution by Row						
East	36.2	26.9	45.4	39.6	43.2	40.8
North	37.0	43.1	22.3	23.7	24.1	26.5
South	26.8	30.0	32.3	36.7	32.7	32.7
Total	100	100	100	100	100	100

SUBWAY USERS

4. The Subways are too deep to use						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	11	19	22	42	76	170
North	42	37	77	64	146	366
South	6	10	20	25	119	180
Total	59	66	119	131	341	716
Distribution by Column						
East	6.5	11.2	12.9	24.7	44.7	100
North	11.5	10.1	21.0	17.5	39.9	100
South	3.3	5.6	11.1	13.9	66.1	100
Total	8.2	9.2	16.6	18.3	47.6	100
Distribution by Row						
East	18.6	28.8	18.5	32.1	22.3	23.7
North	71.2	56.1	64.7	48.9	42.8	51.1
South	10.2	15.2	16.8	19.1	34.9	25.1
Total	100	100	100	100	100	100

### A8.1.9: No Security

#### FOB NON-USERS

5. No Security						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	80	123	224	85	98	610
North	86	91	79	78	62	396
South	109	130	109	62	79	489
Total	275	344	412	225	239	1495
Distribution by Column						
East	13.11	20.16	36.72	13.93	16.07	100
North	21.72	22.98	19.95	19.70	15.66	100
South	22.29	26.58	22.29	12.68	16.16	100
Total	18.39	23.01	27.56	15.05	15.99	100
Distribution by Row						
East	29.1	35.8	54.4	37.8	41.0	40.8
North	31.3	26.5	19.2	34.7	25.9	26.5
South	39.6	37.8	26.5	27.6	33.1	32.7
Total	100	100	100	100	100	100

#### SUBWAY NON-USERS

5. No Security						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	27	43	42	42	16	170
North	96	100	59	61	48	364
South	26	89	39	13	12	179
Total	149	232	140	116	76	713
Distribution by Column						
East	15.9	25.3	24.7	24.7	9.4	100
North	26.4	27.5	16.2	16.8	13.2	100
South	14.5	49.7	21.8	7.3	6.7	100
Total	20.9	32.5	19.6	16.3	10.7	100
Distribution by Row						
East	18.1	18.5	30.0	36.2	21.1	23.8
North	64.4	43.1	42.1	52.6	63.2	51.1
South	17.4	38.4	27.9	11.2	15.8	25.1
Total	100	100	100	100	100	100

### A8.1.10: Congestion

#### FOB NON-USERS

6. Congestion						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	53	81	133	243	100	610
North	50	77	86	105	73	391
South	57	76	90	191	75	489
Total	160	234	309	539	248	1490
Distribution by Column						
East	8.69	13.28	21.80	39.84	16.39	100
North	12.79	19.69	21.99	26.85	18.67	100
South	11.66	15.54	18.40	39.06	15.34	100
Total	10.74	15.70	20.74	36.17	16.64	100
Distribution by Row						
East	33.1	34.6	43.0	45.1	40.3	40.9
North	31.3	32.9	27.8	19.5	29.4	26.2
South	35.6	32.5	29.1	35.4	30.2	32.8
Total	100	100	100	100	100	100

#### SUBWAY NON-USERS

6. Congestion						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	19	17	54	46	34	170
North	44	79	93	100	54	370
South	26	26	34	79	15	180
Total	89	122	181	225	103	720
Distribution by Column						
East	11.2	10.0	31.8	27.1	20.0	100
North	11.9	21.4	25.1	27.0	14.6	100
South	14.4	14.4	18.9	43.9	8.3	100
Total	12.4	16.9	25.1	31.3	14.3	100
Distribution by Row						
East	21.3	13.9	29.8	20.4	33.0	23.6
North	49.4	64.8	51.4	44.4	52.4	51.4
South	29.2	21.3	18.8	35.1	14.6	25.0
Total	100	100	100	100	100	100

A8.1.11: Unclean

FOB NON-USERS

7. Unclean						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	143	129	153	115	69	609
North	61	75	108	82	70	396
South	131	125	110	77	46	489
Total	335	329	371	274	185	1494
Distribution by Column						
East	23.48	21.18	25.12	18.88	11.33	100
North	15.40	18.94	27.27	20.71	17.68	100
South	26.79	25.56	22.49	15.75	9.41	100
Total	22.42	22.02	24.83	18.34	12.38	100
Distribution by Row						
East	42.7	39.2	41.2	42.0	37.3	40.8
North	18.2	22.8	29.1	29.9	37.8	26.5
South	39.1	38.0	29.6	28.1	24.9	32.7
Total	100	100	100	100	100	100

SUBWAY NON-USERS

7. Unclean						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	44	27	48	33	18	170
North	68	86	84	83	45	366
South	53	27	50	32	18	180
Total	165	140	182	148	81	716
Distribution by Column						
East	25.9	15.9	28.2	19.4	10.6	100
North	18.6	23.5	23.0	22.7	12.3	100
South	29.4	15.0	27.8	17.8	10.0	100
Total	23.0	19.6	25.4	20.7	11.3	100
Distribution by Row						
East	26.7	19.3	26.4	22.3	22.2	23.7
North	41.2	61.4	46.2	56.1	55.6	51.1
South	32.1	19.3	27.5	21.6	22.2	25.1
Total	100	100	100	100	100	100

A8.1.12: Occupied by unwanted persons

FOB NON\_USERS

8. Occupied by unwanted persons						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	53	40	191	208	118	610
North	47	64	86	87	112	396
South	49	50	114	142	134	489
Total	149	154	391	437	364	1495
Distribution by Column						
East	8.69	6.56	31.31	34.10	19.34	100
North	11.87	16.16	21.72	21.97	28.28	100
South	10.02	10.22	23.31	29.04	27.40	100
Total	9.97	10.30	26.15	29.23	24.35	100
Distribution by Row						
East	35.6	26.0	48.8	47.6	32.4	40.8
North	31.5	41.6	22.0	19.9	30.8	26.5
South	32.9	32.5	29.2	32.5	36.8	32.7
Total	100	100	100	100	100	100

SUBWAY NON-USERS

8. Occupied by unwanted persons						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	14	13	31	50	62	170
North	51	61	76	94	86	368
South	30	39	51	32	28	180
Total	95	113	158	176	176	718
Distribution by Column						
East	8.2	7.6	18.2	29.4	36.5	100
North	13.9	16.6	20.7	25.5	23.4	100
South	16.7	21.7	28.3	17.8	15.6	100
Total	13.2	15.7	22.0	24.5	24.5	100
Distribution by Row						
East	14.7	11.5	19.6	28.4	35.2	23.7
North	53.7	54.0	48.1	53.4	48.9	51.3
South	31.6	34.5	32.3	18.2	15.9	25.1
Total	100	100	100	100	100	100

A8.1.13: Insufficient Light

FOB NON\_USERS

9. Insufficient light						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	69	49	110	116	266	610
North	112	63	42	63	111	391
South	73	94	86	80	156	489
Total	254	206	238	259	533	1490
Distribution by Column						
East	11.31	8.03	18.03	19.02	43.61	100
North	28.64	16.11	10.74	16.11	28.39	100
South	14.93	19.22	17.59	16.36	31.90	100
Total	17.05	13.83	15.97	17.38	35.77	100
Distribution by Row						
East	27.2	23.8	46.2	44.8	49.9	40.9
North	44.1	30.6	17.6	24.3	20.8	26.2
South	28.7	45.6	36.1	30.9	29.3	32.8
Total	100	100	100	100	100	100

SUBWAY NON-USERS

9. darkness						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	14	14	45	53	44	170
North	90	50	49	62	117	368
South	16	21	21	50	72	180
Total	120	85	115	165	233	718
Distribution by Column						
East	8.2	8.2	26.5	31.2	25.9	100
North	24.5	13.6	13.3	16.8	31.8	100
South	8.9	11.7	11.7	27.8	40.0	100
Total	16.7	11.8	16.0	23.0	32.5	100
Distribution by Row						
East	11.7	16.5	39.1	32.1	18.9	23.7
North	75.0	58.8	42.6	37.6	50.2	51.3
South	13.3	24.7	18.3	30.3	30.9	25.1
Total	100	100	100	100	100	100



# A8.1. 14: Overall Rating

FOB NON\_USERS

Overall Rating						
	Response by Scale of Importance					
Zone	Very Good	Good	Acceptable	Poor	Very Poor	Total
East	23	195	315	75	2	610
North	40	196	132	24	7	399
South	64	189	177	54	5	489
Total	127	580	624	153	14	1498
Distribution by Column						
East	3.77	31.97	51.64	12.30	0.33	100
North	10.03	49.12	33.08	6.02	1.75	100
South	13.09	38.65	36.20	11.04	1.02	100
Total	8.48	38.72	41.66	10.21	0.93	100
Distribution by Row						
East	18.1	33.6	50.5	49.0	14.3	40.7
North	31.5	33.8	21.2	15.7	50.0	26.6
South	50.4	32.6	28.4	35.3	35.7	32.6
Total	100	100	100	100	100	100

SUBWAY NON-USERS

Overall Rating						
	Response by Scale of Importance					
Zone	Very Good	Good	Acceptable	Poor	Very Poor	Total
East	8	69	63	29	1	170
North	25	161	140	42	2	370
South	19	51	102	5	3	180
Total	52	281	305	76	6	720
Distribution by Column						
East	4.7	40.6	37.1	17.1	0.6	100
North	6.8	43.5	37.8	11.4	0.5	100
South	10.6	28.3	56.7	2.8	1.7	100
Total	7.2	39.0	42.4	10.6	0.8	100
Distribution by Row						
East	15.4	24.6	20.7	38.2	16.7	23.6
North	48.1	57.3	45.9	55.3	33.3	51.4
South	36.5	18.1	33.4	6.6	50.0	25.0
Total	100	100	100	100	100	100

## A8.2 Suggestions for improvement by Non-users of FOBs and SUBs

### A8.2.1: Provide Security

#### FOB NON\_USERS

Suggestion 1: Provide Security						
Response by Scale of Importance						
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	129	303	123	40	14	609
North	190	121	39	23	24	397
South	181	151	89	45	23	489
Total	500	575	251	108	61	1495
Distribution by Column						
East	21.18	49.75	20.20	6.57	2.30	100
North	47.86	30.48	9.82	5.79	6.05	100
South	37.01	30.88	18.20	9.20	4.70	100
Total	33.44	38.46	16.79	7.22	4.08	100
Distribution by Row						
East	25.8	52.7	49.0	37.0	23.0	40.7
North	38.0	21.0	15.5	21.3	39.3	26.6
South	36.2	26.3	35.5	41.7	37.7	32.7
Total	100	100	100	100	100	100

#### SUBWAY NON-USERS

Suggestion 1: Provide Security						
Response by Scale of Importance						
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	34	53	52	25	6	170
North	212	101	31	14	10	368
South	35	112	23	7	3	180
Total	281	266	106	46	19	718
Distribution by Column						
East	20.0	31.2	30.6	14.7	3.5	100
North	57.6	27.4	8.4	3.8	2.7	100
South	19.4	62.2	12.8	3.9	1.7	100
Total	39.1	37.0	14.8	6.4	2.6	100
Distribution by Row						
East	12.1	19.9	49.1	54.3	31.6	23.7
North	75.4	38.0	29.2	30.4	52.6	51.3
South	12.5	42.1	21.7	15.2	15.8	25.1
Total	100	100	100	100	100	100

## A8.2.2: Maintain Cleanliness

### FOB NON\_USERS

Suggestion 2: Maintain Cleanliness						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	270	126	77	109	27	609
North	98	128	89	60	20	395
South	130	149	96	87	27	489
Total	498	403	262	256	74	1493
Distribution by Column						
East	44.33	20.69	12.64	17.90	4.43	100
North	24.81	32.41	22.53	15.19	5.06	100
South	26.58	30.47	19.63	17.79	5.52	100
Total	33.36	26.99	17.55	17.15	4.96	100
Distribution by Row						
East	54.2	31.3	29.4	42.6	36.5	40.8
North	19.7	31.8	34.0	23.4	27.0	26.5
South	26.1	37.0	36.6	34.0	36.5	32.8
Total	100	100	100	100	100	100

### SUBWAY NON-USERS

Suggestion 2: Maintain Cleanliness						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	60	52	33	12	13	170
North	67	126	81	78	16	368
South	31	21	24	103	1	180
Total	158	199	138	193	30	718
Distribution by Column						
East	35.3	30.6	19.4	7.1	7.6	100
North	18.2	34.2	22.0	21.2	4.3	100
South	17.2	11.7	13.3	57.2	0.6	100
Total	22.0	27.7	19.2	26.9	4.2	100
Distribution by Row						
East	38.0	26.1	23.9	6.2	43.3	23.7
North	42.4	63.3	58.7	40.4	53.3	51.3
South	19.6	10.6	17.4	53.4	3.3	25.1
Total	100	100	100	100	100	100

### A8.2.3: Providing Lift/ Escalator

FOB NON\_USERS

Suggestion 3: Provide Lift/Escalator						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	172	97	191	105	44	609
North	91	94	84	63	65	397
South	172	135	82	61	39	489
Total	435	326	357	229	148	1495
Distribution by Column						
East	28.24	15.93	31.36	17.24	7.22	100
North	22.92	23.68	21.16	15.87	16.37	100
South	35.17	27.61	16.77	12.47	7.98	100
Total	29.10	21.81	23.88	15.32	9.90	100
Distribution by Row						
East	39.5	29.8	53.5	45.9	29.7	40.7
North	20.9	28.8	23.5	27.5	43.9	26.6
South	39.5	41.4	23.0	26.6	26.4	32.7
Total	100	100	100	100	100	100

SUBWAY NON-USERS

Suggestion 3: Provide Lift/Escalator						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	51	51	36	26	6	170
North	97	68	66	61	72	364
South	112	27	19	13	9	180
Total	260	146	121	100	87	714
Distribution by Column						
East	30.0	30.0	21.2	15.3	3.5	100
North	26.6	18.7	18.1	16.8	19.8	100
South	62.2	15.0	10.6	7.2	5.0	100
Total	36.4	20.4	16.9	14.0	12.2	100
Distribution by Row						
East	19.6	34.9	29.8	26.0	6.9	23.8
North	37.3	46.6	54.5	61.0	82.8	51.0
South	43.1	18.5	15.7	13.0	10.3	25.2
Total	100	100	100	100	100	100

#### A8.2.4: Free the space from unwanted people

##### FOB NON\_USERS

Suggestion 4: Free the space from unwanted people						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	37	41	181	215	134	608
North	33	44	101	133	81	392
South	29	43	149	153	114	488
Total	99	128	431	501	329	1488
Distribution by Column						
East	6.09	6.74	29.77	35.36	22.04	100
North	8.42	11.22	25.77	33.93	20.66	100
South	5.94	8.81	30.53	31.35	23.36	100
Total	6.65	8.60	28.97	33.67	22.11	100
Distribution by Row						
East	37.4	32.0	42.0	42.9	40.7	40.9
North	33.3	34.4	23.4	26.5	24.6	26.3
South	29.3	33.6	34.6	30.5	34.7	32.8
Total	100	100	100	100	100	100

##### SUBWAY NON-USERS

Suggestion 4: Free the space from unwanted people						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	9	12	26	39	84	170
North	37	70	115	90	55	367
South	0	21	108	18	33	180
Total	46	103	249	147	172	717
Distribution by Column						
East	5.3	7.1	15.3	22.9	49.4	100
North	10.1	19.1	31.3	24.5	15.0	100
South	0.0	11.7	60.0	10.0	18.3	100
Total	6.4	14.4	34.7	20.5	24.0	100
Distribution by Row						
East	19.6	11.7	10.4	26.5	48.8	23.7
North	80.4	68.0	46.2	61.2	32.0	51.2
South	0.0	20.4	43.4	12.2	19.2	25.1
Total	100	100	100	100	100	100

### A8.2.5: Construct the FOB near Bus Stop

#### FOB NON\_USERS

Suggestion 5: Construct the FOB near Bus Stop						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	33	73	146	106	251	609
North	30	57	75	83	150	395
South	36	89	89	96	179	489
Total	99	219	310	285	580	1493
Distribution by Column						
East	5.42	11.99	23.97	17.41	41.22	100
North	7.59	14.43	18.99	21.01	37.97	100
South	7.36	18.20	18.20	19.63	36.61	100
Total	6.63	14.67	20.76	19.09	38.85	100
Distribution by Row						
East	33.3	33.3	47.1	37.2	43.3	40.8
North	30.3	26.0	24.2	29.1	25.9	26.5
South	36.4	40.6	28.7	33.7	30.9	32.8
Total	100	100	100	100	100	100

#### SUBWAY NON-USERS

Suggestion 5: Construct the SUB near Bust Stop						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	10	13	37	61	49	170
North	32	56	62	84	132	366
South	5	13	17	24	121	180
Total	47	82	116	169	302	716
Distribution by Column						
East	5.9	7.6	21.8	35.9	28.8	100
North	8.7	15.3	16.9	23.0	36.1	100
South	2.8	7.2	9.4	13.3	67.2	100
Total	6.6	11.5	16.2	23.6	42.2	100
Distribution by Row						
East	21.3	15.9	31.9	36.1	16.2	23.7
North	68.1	68.3	53.4	49.7	43.7	51.1
South	10.6	15.9	14.7	14.2	40.1	25.1
Total	100	100	100	100	100	100

### A8.2.6: Reduce the height of FOB

#### FOB NON\_USERS

Suggestion 6: Reduce the height of FOB						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	16	84	261	133	115	609
North	30	95	98	73	99	395
South	30	111	149	111	88	489
Total	76	290	508	317	302	1493
Distribution by Column						
East	2.63	13.79	42.86	21.84	18.88	100
North	7.59	24.05	24.81	18.48	25.06	100
South	6.13	22.70	30.47	22.70	18.00	100
Total	5.09	19.42	34.03	21.23	20.23	100
Distribution by Row						
East	21.1	29.0	51.4	42.0	38.1	40.8
North	39.5	32.8	19.3	23.0	32.8	26.5
South	39.5	38.3	29.3	35.0	29.1	32.8
Total	100	100	100	100	100	100

#### SUBWAY NON-USERS

Suggestion 6: Reduce the depth of SUB						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	3	36	55	31	45	170
North	38	99	82	71	75	365
South	4	69	62	28	17	180
Total	45	204	199	130	137	715
Distribution by Column						
East	1.8	21.2	32.4	18.2	26.5	100
North	10.4	27.1	22.5	19.5	20.5	100
South	2.2	38.3	34.4	15.6	9.4	100
Total	6.3	28.5	27.8	18.2	19.2	100
Distribution by Row						
East	6.7	17.6	27.6	23.8	32.8	23.8
North	84.4	48.5	41.2	54.6	54.7	51.0
South	8.9	33.8	31.2	21.5	12.4	25.2
Total	100	100	100	100	100	100

### A8.2.7: Block Alternative Paths

#### FOB NON\_USERS

Suggestion 7: Block Alternative Paths						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	32	105	138	248	85	608
North	101	74	45	97	78	395
South	82	131	95	106	75	489
Total	215	310	278	451	238	1492
Distribution by Column						
East	5.26	17.27	22.70	40.79	13.98	100
North	25.57	18.73	11.39	24.56	19.75	100
South	16.77	26.79	19.43	21.68	15.34	100
Total	14.41	20.78	18.63	30.23	15.95	100
Distribution by Row						
East	14.9	33.9	49.6	55.0	35.7	40.8
North	47.0	23.9	16.2	21.5	32.8	26.5
South	38.1	42.3	34.2	23.5	31.5	32.8
Total	100	100	100	100	100	100

#### SUBWAY NON-USERS

Suggestion 7: Block Alternative Paths						
	Response by Scale of Importance					
Zone	Most Important	Important	Moderately Important	Slightly Important	Not Important	Total
East	16	44	54	37	18	169
North	73	70	61	85	79	368
South	7	58	28	74	13	180
Total	96	172	143	196	110	717
Distribution by Column						
East	9.5	26.0	32.0	21.9	10.7	100
North	19.8	19.0	16.6	23.1	21.5	100
South	3.9	32.2	15.6	41.1	7.2	100
Total	13.4	24.0	19.9	27.3	15.3	100
Distribution by Row						
East	16.7	25.6	37.8	18.9	16.4	23.6
North	76.0	40.7	42.7	43.4	71.8	51.3
South	7.3	33.7	19.6	37.8	11.8	25.1
Total	100	100	100	100	100	100



## APPENDIX 9: PHOTOGRAPHS OF FOOT OVER BRIDGES (FOB) IN DELHI

1.3 Near Azadpur Round about Azadpur: There are shops in front of Ramp; People are using the ramp for shelter



1.3 Near Azadpur Round About Azadpur: Open path for crossing road



1.4 Road No. 51 Near Azadpur User: No Roof



1.4 Road No. 51 Near Azadpur: Road divider grill is broken





2.1 Behara Enclave Outer Ring Road (First): Floor is broken



2.1 Behara Enclave Outer Ring Road (First): Road divider grill is broken



2.2 Behara enclave Outer Ring Road (Second): Cleaning is not done



2.2 Behara Enclave Outer Ring Road (Second): Divider is low and grill is incomplete





3.1 Nangloi near Lokesh Cinema NH 10 Delhi Rohtak Road User: Dirty, cleaning is not done



3.1 Nangloi near Lokesh Cinema NH 10 Delhi Rohtak Road: Road divider grill is broken and of inadequate height



3.2 Nangloi Near Metro station NH 10 Delhi Rohatak Road: There is space for lift but it is not installed



3.2 Nangloi Near Metro station NH 10 Delhi Rohtak Road: There is no grill





4.2 Near Janmashtmi park Punjabi Bagh Ring Road User: Too much dirty



4.2 Near Janmashtmi park Punjabi Bagh Ring Road Non User: Divider is low, high risk to life



4.3 Rani Bagh Sakur Basti near Railway station on Road No. 43 User: Too much dirty and it is a den of gamblers



4.3 Rani Bagh Shakur Basti Near Railway station on Road No. 43 Non-User: Cut at the road divider





4.4 Punjab Kesri Foot over bridge at Ring road: Floor is broken



4.4 Punjab kesri Foot over bridge At Ring Road Non User: No grill at divider



5.3 Karampura, Shiv dass puri Marg User: Very Dirty



5.3 Karampura, Shiv dass puri marg Non User: Road divider grill is broken





6.3 Near Sarai Rohilla Police station On Kalidass marg User: No Rooftop



6.3 Near Sarai Rohilla Police station on kalidass marg Non user: Low divider and missing grill



6.4 Sakurpur foot over bridge At Ring Road User: No rooftop



6.4 Sakkurpur Foot over bridge At Ring Road Non user: Broken grill and divider is low





7.1 Prembari Foot over Bridge Ring Road User: Completely broken floor and rooftop



7.1 Prembari Foot over Bridge Non User: Low divider and missing grills



7.2 Netaji Subhash Place Foot over Bridge User: Very dirty



7.2 Netaji Subhash Place Non User: Road divider grill broken





7.3 Kela Godown Road Shalimar Bagh Sahipur village User: Unclean



7.3 Kela Godown Road Shalimar Bagh Sahipur village Non User: Low road divider, no grill





7.4 Road No. 37 (Maharaja Nahar singh Marg) Kanhiya nagar User: dirty and occupied by shops at the entry



7.4 Road No. 37 (Maharaja Nahar singh Marg) Kanhaiya nagar Non User: alternative path just below FOB



9.3 Pankha Road: No rooftop, very dirty



9.3 Pankha Road Non User: low road divider





9.4 Patparganj, (hasanpur) Road No. 57 User:



10.1 Pamposh enclave User: Very dirty



10.2 Moti Bagh, Ring Road User: Broken floor, dirty



10.2 Moti Bagh Ring Road User: Very dirty





10.2 Moti Bagh Ring Road Non User: Low divider



10.3 Gurudwara Nanakpur Ring Road User: Very dirty



10.4 Mochi Bagh Shanti niketan Ring Road User: Broken floor



11.1 Dhaula kuan to Moti Bagh on NH8 User: Very dirty





11.2 Dhaula kuan Metro station User: Very dirty



11.2 Dhaula kuan Metro station: Low divider





12.3 Maharani Bagh (Ring Road) User: Broken floor



12.3 Maharani Bagh Ring Road Non User: Low divider and broken grill



12.4 Nehru Nagar Ring Road User: Unclean



12.4 Nehru Nagar Ring Road Non User: Low and broken divider





13.1 Ashram Mathura Road User: Broken steps



13.1 Ashram Mathura Road Non User: Broken grill



13.2 Bhogal Mathura Road User: Broken steps



13.2 Bhogal Mathura Road Non User: Alternative path available





13.3 Sarita vihar Mathura Road User: Very dirty



13.3 Sarita Vihar Non-User: Divider is low



13.4 Sahin Kalindi kunj Bagh Road User Very dirty and den of smokers and druggists



13.4 Sahin kalindi kunj Bagh Road Non user: Divider is low and broken





14.1 Modi mill User: Very dirty



14.1 Modi mill Non User: Divider is low and no grill



14.2 Pul Pehladpur Near Police Station MB Road User: Very dirty, side glass on bridge missing



14.2 Pul Pehladpur Near Police station MB Road Non-User: No blockade

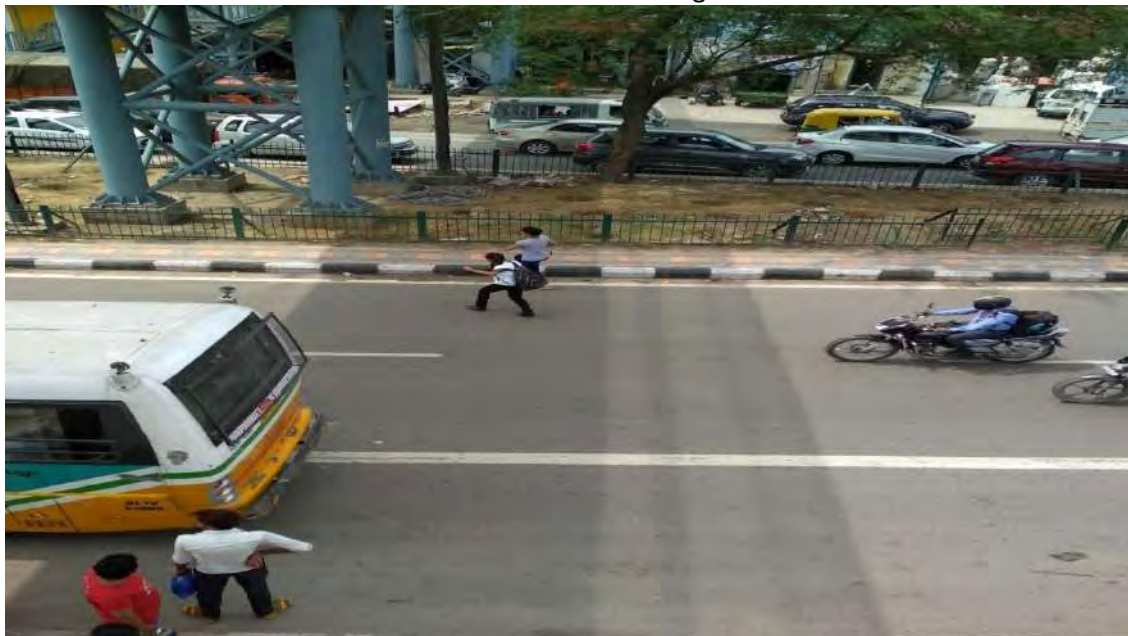




14.3 Lal kuan, MB Road User: FOB gate is occupied by bikers and repair shops



14.3 Lal kuan MB Road Non User: Road divider is low and grill is broken



14.4 Jamia Hamdard University User: Steps are broken, very dirty



14.4 Jaqmia Hamdard University Non User: Road divider low and grill broken





15.1 Batra Hospital on MB Road User: Very dirty; trash all around



15.1 Batra Hospital on MB Road Non User: Broken grill; Unclean



15.2 Subrato Park User: Unclean



15.3 Munirka FOB User: No rooftop





16.1 Kalkaji mandir User: Broken rooftop



16.2 Bhairon mandir User: Unclean; Broken steps; People keep sitting on the steps





16.2 Bhairon Mandir Non User: Low divider



16.3 Near DC Office South MB Road User: Unclean; Broken steps



16.3 Near DC Office South MB Road Non User: Broken divider grill



16.4 Saket Metro Station MB Road User: Very dirty, trash all around; broken roof





17.1 Ansari Nagar User: No rooftop



17.2 Jia Sarai User: No rooftop



17.3 Panchsheel Enclave User



20.4 ITO IP Marg User: Advertising stickers on the roof; unclean





21.1 Rajauri Garden Gurudwara User: Escalator broken for years



21.1 Rajauri garden Gurudwara Non User: Broken divider grill





22.2 Majnu ka tilla Ring Road User: Unclean; beggars occupying space



22.2 Majnu ka tilla Non User: Broken divider grill



22.3 Delhi Police Apartment UP Link Road User: Broken steps; unclean



22.4 Kishan kunj Marginal Band Road User: Unclean; No rooftop





23.1 Ghazipur Grade separator User: Very dirty; No rooftop



23.1 Ghazipur Grade separator Non User: Very dirty



23.2 Lalita Park User: Broken floor and rooftop



23.2 Lalita Park Marginal Band Road Non User: Broken and low dividers; people risking lives





23.3 Pandav Nagar NH 24 User: Very dangerous – Missing grill; Unclean



23.3 Pandav nagar NH 24 Non User: People risking lives to cross the road – barriers not high enough

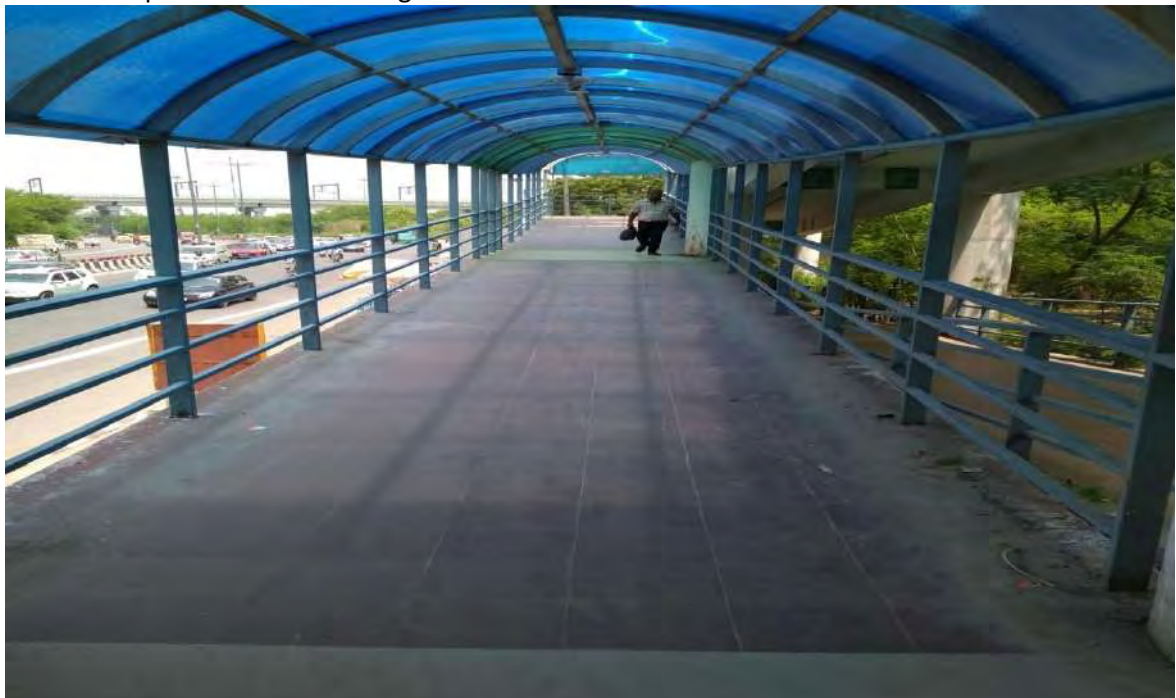




23.4 Samachar Apartment UP Link Road User: No rooftop; broken side grill glass



24.1 Shakarpur School Block Marginal Band Road User: Unclean



24.2 Shakarpur School block User: Lift not working; Very dirty



24.2 Shakarpur School block Non User: Broken divider; Unclean





24.3 Vinod Nagar Patparganj User: Unclean



24.4 Ambedkar Collage, Road No. 59 User: Unclean; Broken roof



24.4 Ambedkar Collage, Road No. 59 Non User: Broken divider grill



25.1 Brijpuri Road No 59 User: Very dirty; broken rooftop; advertising stickers on roof





25.1 Brijpuri Road No. 59 Non User: Broken divider grill



25.2 Ashok Nagar User: Unclean; advertising stickers on roof





25.2 Ashok Nagar Non-User: Broken divider grill



25.3 Bhopura Border, Road No. 59 User: Very dirty; Den of drinkers



25.3 Bhopura Border Road No. 59 Non User: No divider grill



25.4 Jhandewalan Mandir, Rani Jhansi Road User: Under repair





25.4 Jhandewalan Mandir Rani Jhansi Road Non User: Low divider



26.1 Jhandewalan Mandir Desh Bandhu Gupta Road User: Under repair



26.1 Jhandewalan Mandir Desh Bandhu Gupta Road Non User: Alternative path available



26.2 Apsara Border -1 Road No. 56 User: Very dirty; No rooftop





26.2 Apsara Border -1 Road No. 56 Non User: Alternative path available



26.3 Apsara Border -2 User: Open drainage right in front of the steps





26.3 Apsara Border -2 User: Drunkards sleeping on the floor; Very dirty



26.3 Apsara Border -2 Non User: Broken divider grill



26.4 Ramprastha Road No. 56 User: Unclean



26.4 Ramprastha Road No. 56 Non User: Broken divider grill; Side grill glass broken; No rooftop





27.1 Vishwas Nagar Road No. 57 A User: Very dirty; Broken rooftop



27.1 Vishwas Nagar Road No 57 A Non-User: Low road divider; broken divider grill; Alternative path



27.2 Bhikam Singh Colony Road No. 57 User: Broken floor



27.2 Bhikam Singh Colony Road No. 57 Non User: Low divider





27.3 EDM Mall Road No. 56 User: Broken steps; Very dirty



27.3 EDM Mall Road No. 56 Non User: Broken divider grill





27.4 ISBT Anand vihar Road No. 56 User: Shops occupying space



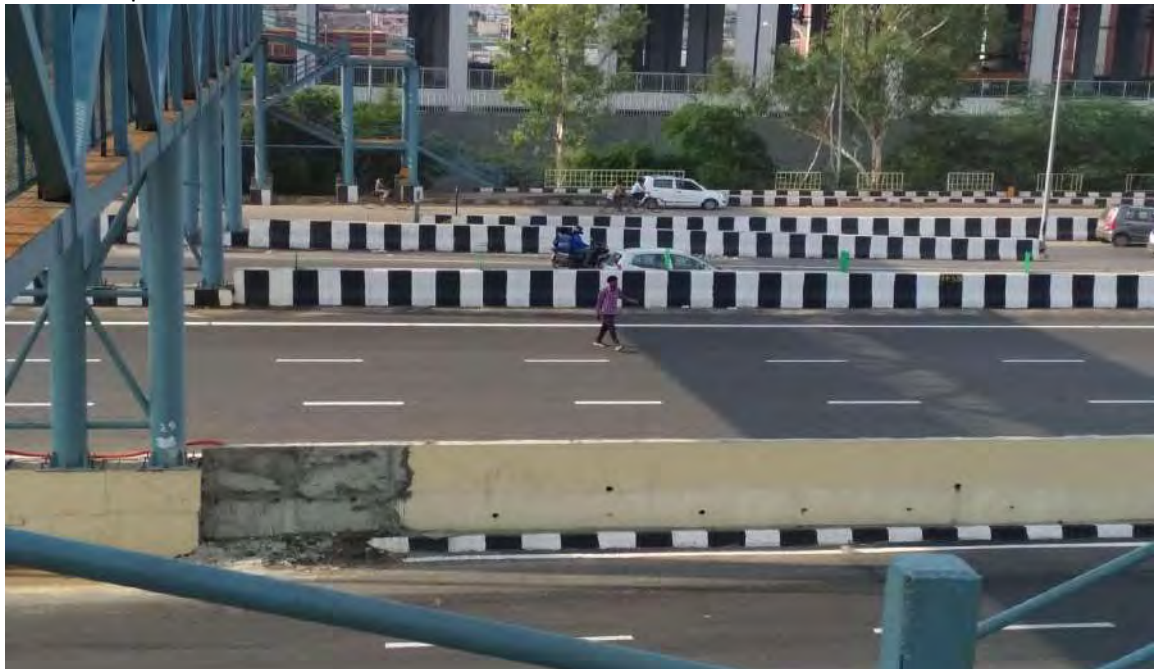
27.4 ISBT Anand Vihar Road No. 56 Non User: Divider grill broken by private bus owners



28.1 Ghazipur Road No 57 User: Unclean; Open drainage



28.1 Ghazipur Road No 57 Non-User: Low divider





28.2 Ghazipur Grade Separator User: Very dirty; No rooftop; Broken dividers



28.2 Ghazipur Grade Separator Non User: Dirty



28.3 Ghazipur Taj Highway Apartment Road No 56 User: Very dirty



28.3 Ghazipur Taj Highway Apartment Non User: Divider grill broken





28.4 Gandhi Nagar Road No. 57 User: Being used as parking space; very dirty; unused metal grills kept on the sides



28.4 Gandhi Nagar Road No. 57 Non User: Divider grill broken; Very dirty





29.4 ISBT Kashmiri Gate Ring Road User: Very dirty



## APPENDIX 10: PHOTOGRAPHS OF SUBWAYS IN DELHI

1.1 In front of Azadpur fruit and vegetable mandi: Broken drainage cover in front of the staircase; very dirty; broken tiles



1.1 Infront of Azadpur fruit and Vegetable mandi (Non user): Alternative path available; low divider





1.2 In front of Azadpur Fruit and Vegetable Main Road (User): Broken steps and side walls; unclean



1.2 In front of Azadpur Fruit and Vegetable Main Road. (Non-User): Divider low and broken



2.3 Near Rohini court Madhuban chowk Pitampura User: Gaps in drainage cover

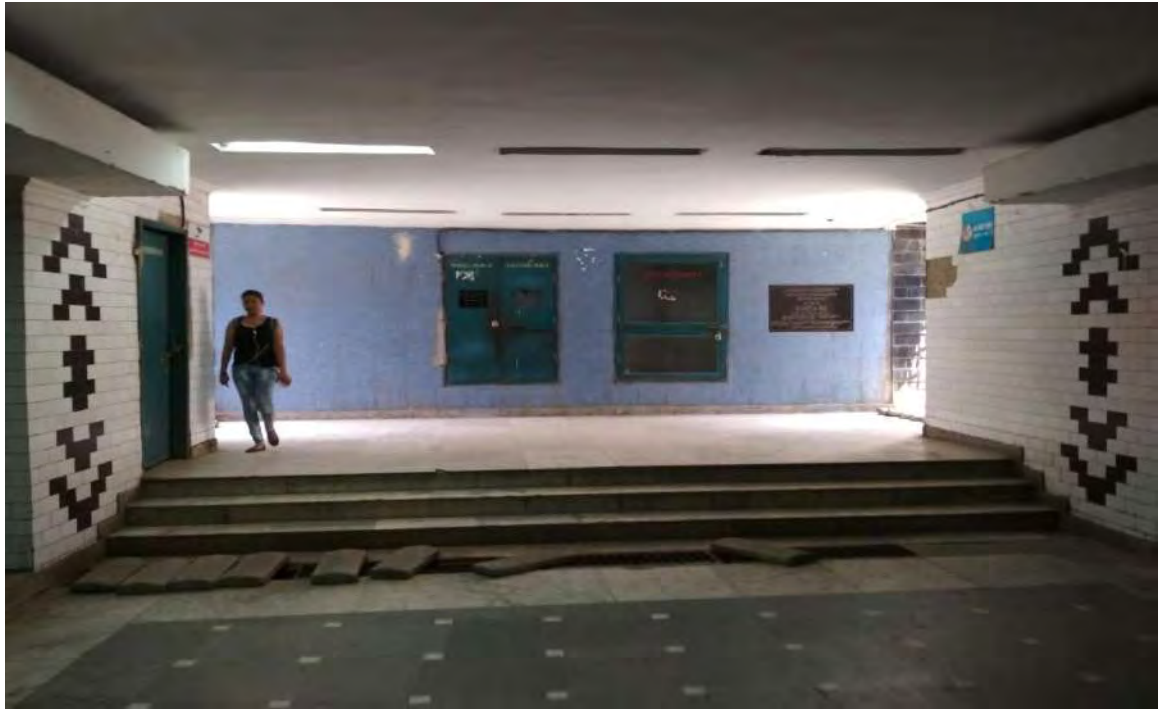


2.3 Near Rohini court Madhuban chowk Pitampura Non User: Broken divider grill





2.4 Saraswati vihar User: Open drainage; broken wall tiles; unclean



2.4 Sarsawati vihar Non User: Broken divider grill





3.3 Nangloi Subway NH 10 Delhi Rohtak Road User: Very dirty



3.4 Maharaja Agrasen Hospital NH 10 Delhi Rohtak Road User: Space in front of subway used as parking



3.4 Maharaja Agrasen Hospital NH 10 Delhi Rohtak Road User: Drains not cleaned; dirty



3.4 Maharaja Agrasen Hospital NH 10 Delhi Rohtak road Non-User: No divider grill; low divider





4.1 Ashok park main NH 10 Delhi Rohtak Road User: Very dirty



4.1 Ashok park main NH 10 Delhi Rohtak Road Non User: Low divider with no grills



5.1 Raja Garden Rajdhani Collage Ring Road User: Drainage not covered properly; Very dirty



5.2 ESI Hospital Ring Road User: Very dirty





5.4 Punjabi Bagh Intersection ring Road: Very dirty



5.4 Punjabi Bagh Intersection Ring Road Non User





6.1 Near Inderlok Masjid Road No. 40 User: Drainage cover broken



6.1 Near Inderlok Masjid Road No. 40 Non-User; Broken divider grill



6.2 Near Subhadra colony Gate Road No. 40 Sashtri Nagar: Car parking in front of subway entry



6.2 Near Subhadra colony Gate Road No. 40 Sashtri nagar Non User: Broken divider grill





9.1 Sheo nath tyagi marg Intersection Najaf Garh road User: Very dirty; den of drunkards; Broken flooring



9.1 Sheo nath tyagi marg Intersection Najaf garh Road Non User: Broken divider grill



9.2 Palam dabri Road User: Broken floor; dirty



9.2 Palam dabri Road: Alternative path available





11.3 Dhaula kuan User: Very dirty; open drains



11.3 Dhaula kuan Non User



11.4 Naraina User: Den of drunkards; very dirty



11.4 Naraina Non User: Broken divider





12.1 At Ring Road Wazirpur Subway: Unclean



12.1 At Ring Road Wazirpur Subway Non User: Broken divider; Dirty



12.2 At Ring Road Britainia Subway User: Dirty



12.2 At Ring Road Britainia Non User: Alternative path available





15.4 Munirika Subway User: Dirty



15.4 Munirika Subway Non User: Alternative path available



17.4 Hyatt User



17.4 Hyatt Non User: Broken divider grill





18.1 Hyatt Subway User: Unclean



18.2 Safadarjang Subway User: Shops set up inside subway



18.3 Ansal Plaza Subway August kranti Marg User: Closed



18.4 Narauji Nagar Subway User: Broken steps

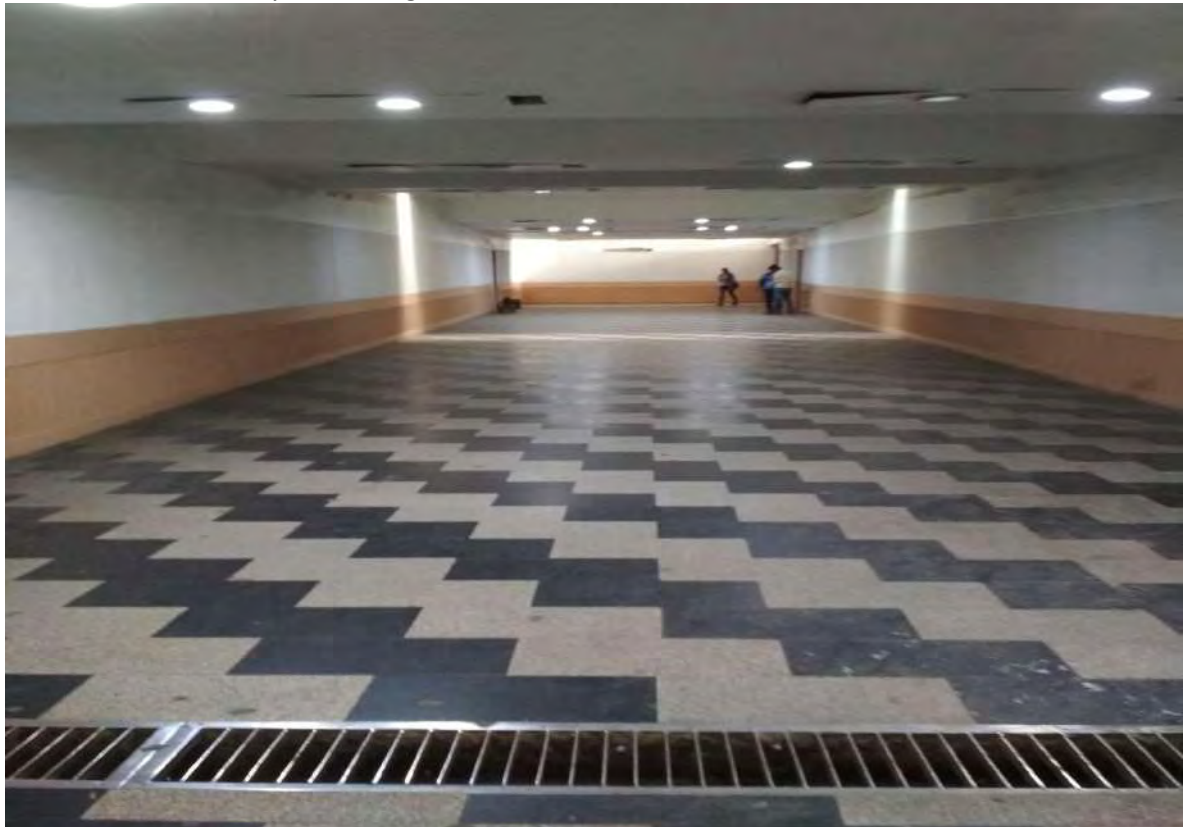




19.1 IIT Subway Outer Ring Road User: Broken steps; unclean



19.2 Hauz khas Subway Outer Ring Road User



19.3 Swami Nagar Subway Outer Ring Road User



19.4 Subway at Masjid morh User: Unclean





20.1 Subway at Nehru place User: Very dirty; broken light fixtures



20.2 Opp. WHO Building/Front of WHO office User: Very dirty



20.2 Opp. WHO Building/Front of WHO Office Non User: Low dividers



21.2 Vikas marg Near Laxmi nagar Metro station User





21.3 Vikas marg near Preet vihar metro station User: Opened late



21.3 Vikas marg near Preet vihar metro station Non User: Divider grill broken



21.4 Bhajanpur User: Very dirty; drainage cover broken



22.1 Nigambodh ghat User: Under repair





22.1 Nigambodh ghat User: Under repair



22.1 Nigambodh ghat Non User: Broken divider



29.1 Gokulpuri User: Not used; very dirty; dark



29.1 Gokulpuri Non User: U turn in front of subway





29.2 Jagatpuri T Point User: One of the gates is closed



29.2 Jagatpur T Point Non User: Broken divider



29.3 Road No 58A Mastar somnath Marg Yamuna sport complex User: Dirty



29.3 Road No. 58A Mastar somnath Marg Yamuna sport complex Non User: Broken divider grill

