



**MOBILITY**  
*OR*  
**ACCESSIBILITY**

# Alternative Mobility Solutions and Pedestrianization of Existing Urban Neighbourhoods

(AAPKI SADAK)

## Project Team

Ashok B. Lall Architects  
Aastha Chauhan  
Innovative Transport  
Solutions  
Oasis Design Incorporated  
SGArchitects

## SUPPORTED BY:

**SHAKTI** SUSTAINABLE ENERGY  
FOUNDATION



*a community engagement led process  
with detailed surveys and  
technical design support to arrive at  
practical solutions*

Draft Proposal

# TRANSIT CONNECTIVITY IN DELHI

CWG STREET IMPROVEMENTS

CNG BASED PUBLIC TRANSPORT

DELHI METRO

BUS RAPID TRANSIT

...yet

*Where is the enjoyment of the city?*

*Where is the improvement to social life?*



Source: automotivehorizon.sulekha.com



SPEED-WAY: Vehicles zoom through the underpass at Prem Bari Pul Chowk near Wazirpur.  
Source: <http://img998.imageshack.us/img998/17672pk5.jpg>  
Source: <http://img998.imageshack.us/img998/17672pk5.jpg>

**TOO MANY RESOURCES?**

**TOO MUCH MONEY NEEDED?**

Indian Infrastructure Report 2010-11 (Baindur & Kamath, 2009);

During the year (2010-11), the High Powered Expert Committee (HPEC) for urban infrastructure services estimated the total investment requirements for urban infrastructure, renewal, and redevelopment (including slums) at **Rs 39,00,000 crore** (at 2009-10 prices) during 2012-31. The largest share of this investment is required for urban roads (about **44 per cent**)... Even the largest centre driven urban infrastructure programme, JNNURM, has not been able to contribute much towards meeting the investment requirements.

**OR IS THE ANSWER MUCH**

# THE 'FIRST / LAST MILE' PROBLEM

**Vehicular dependence**

**Unliveable neighbourhoods**

**Lack of pedestrian / NMT infrastructure**

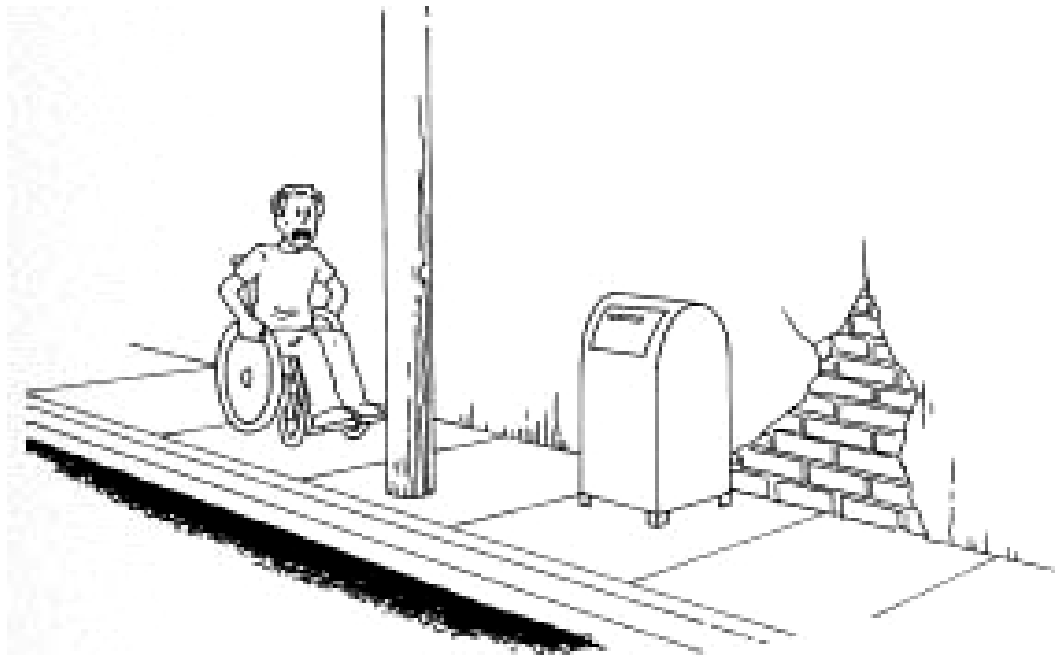
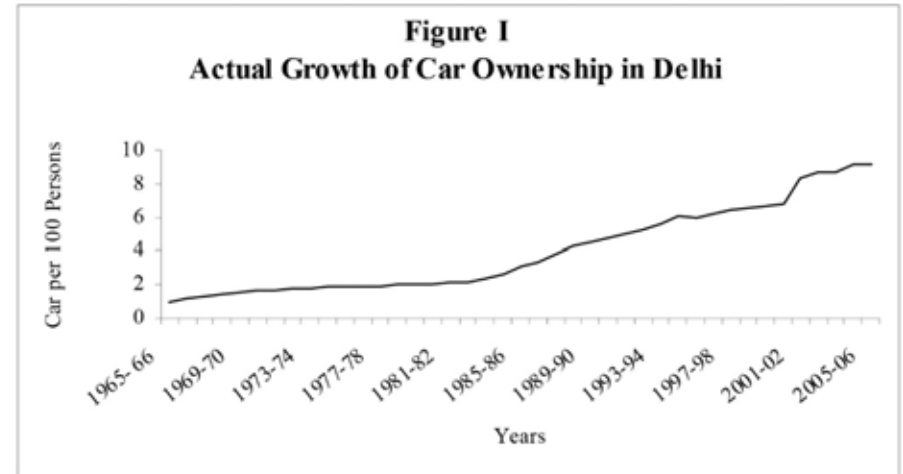
**Universal access**

**Clutter & obstacles**

**Parking crisis**

**Micro level issues unaddressed**

Source: Das, et. al, *Decision*, Vol. 37, No.2, August, 2010



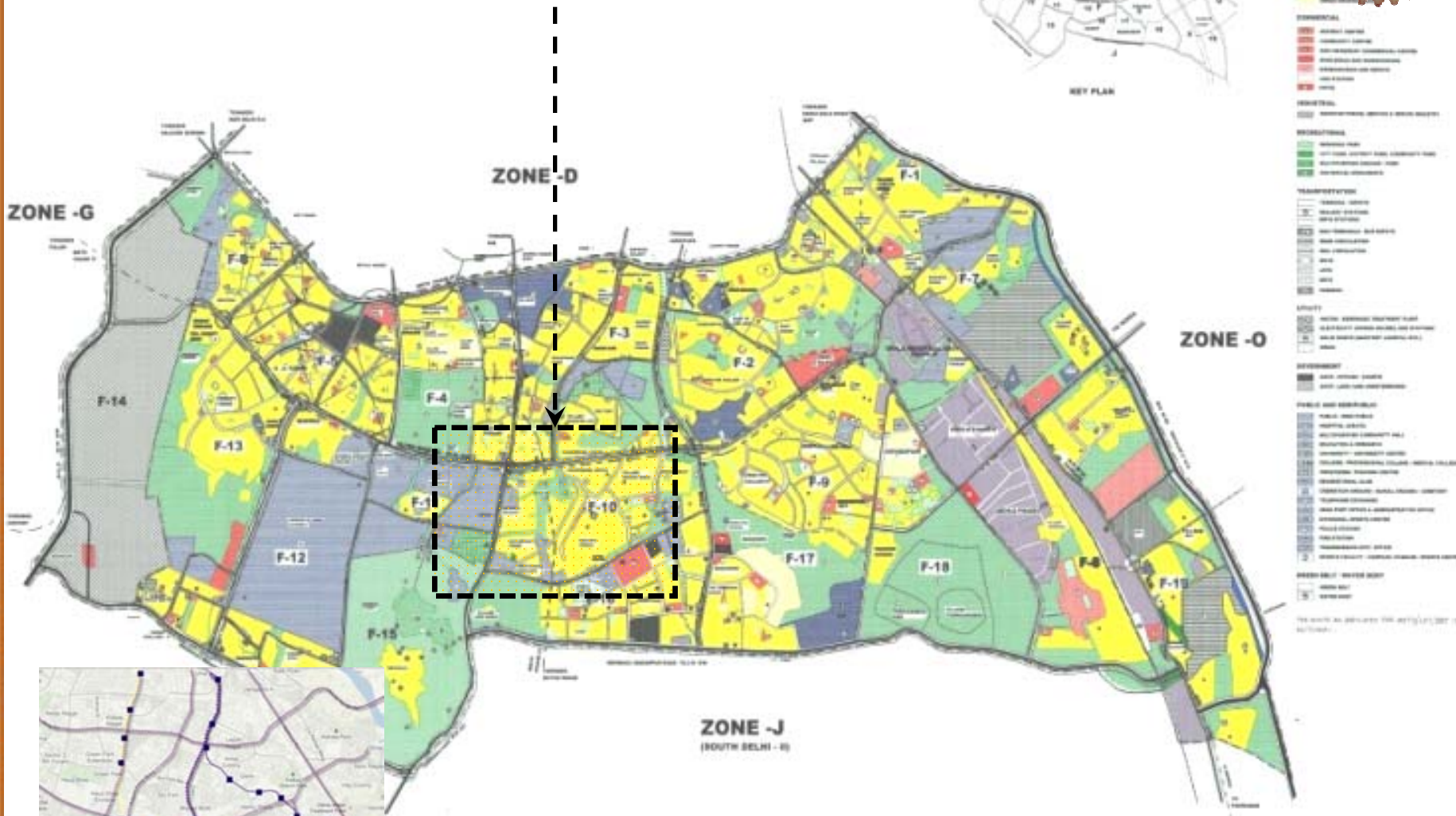
Source: fhwa.dot.gov



Source: pedestrianliberation.org

# SITE SELECTION

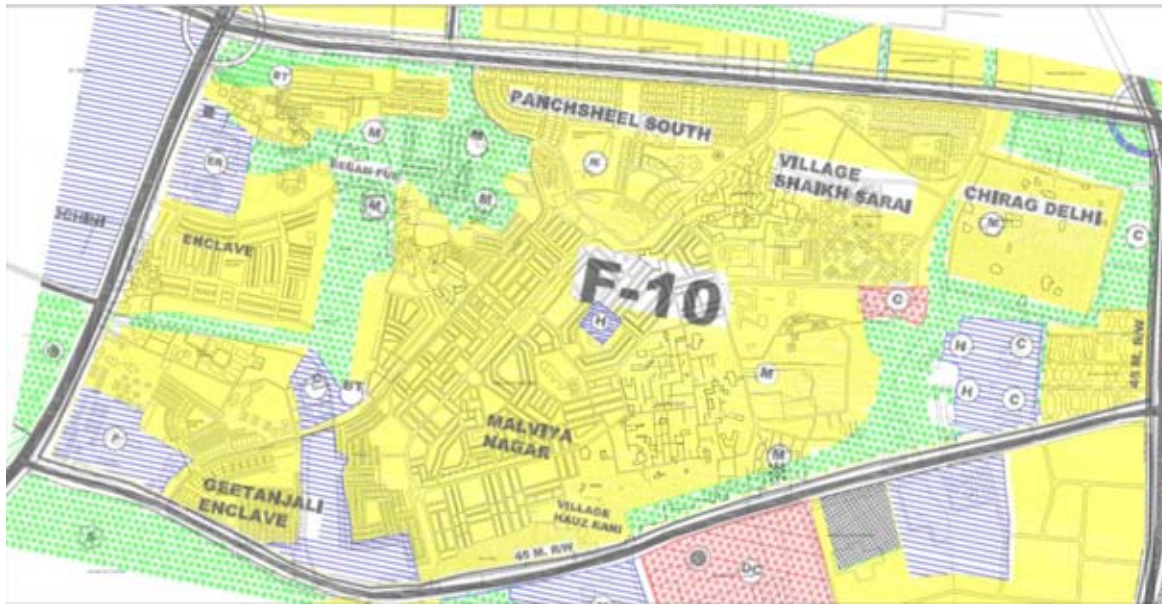
## F-10 Sub Zone



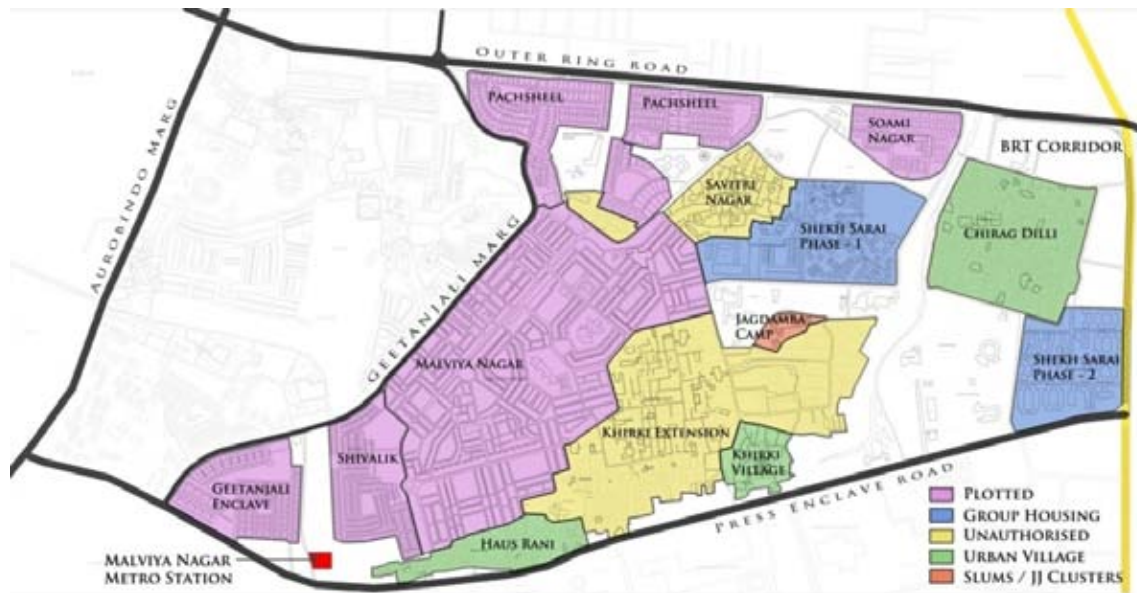
The site selected for the project is located within the urban precinct bounded on three sides by major vehicular roads (Outer Ring Road, Lal Bahadur Shastri Marg and Press Enclave Road) The fourth aspect is bounded by a congested internal road, Geetanjali Marg, running parallel to the Malviya Nagar Market. It is connected to the Transit system via the Malviya Nagar Metro Station in the south west corner and the BRTS corridor on the east.



# SITE – A TYPICAL URBAN PRECINCT IN DELHI



The Landuse Plan of Zone F-10 as per ZDP.



The REAL condition on ground considering the neighbourhoods and diversity within the selected study area

According to official record, the area is mainly residential and represented as a single fabric with little complexity.

However, even on an initial visual and physical analysis it is revealed that;

- Footpaths are too narrow, high, and or broken
- Not accessible to differently-abled persons
- No direct pedestrian or cycle access to important public transit nodes due to high speed traffic barriers
- Un-co-ordinated design of public utilities and poor maintenance leading to obstruction of pedestrian traffic (location of electric pillars, incorrectly placed fencing, flooding in subways etc.)
- Absence of certain NMT modes due to over congestion by personal automobiles

# SURVEY & ANALYSIS



TOPOGRAPHIC SURVEY

TRAFFIC SURVEYS

PHOTOGRAPHIC SURVEY

USER SURVEYS

PARKING COUNTS

*Analysis*

Effective Right Of Way

Available Open Land & Potential

Traffic Flow Analysis

Public Transport Routes & Connectivity

User Survey Analysis

Activity Mapping Of Major Areas





# COMMUNITY WORKSHOPS - Locations

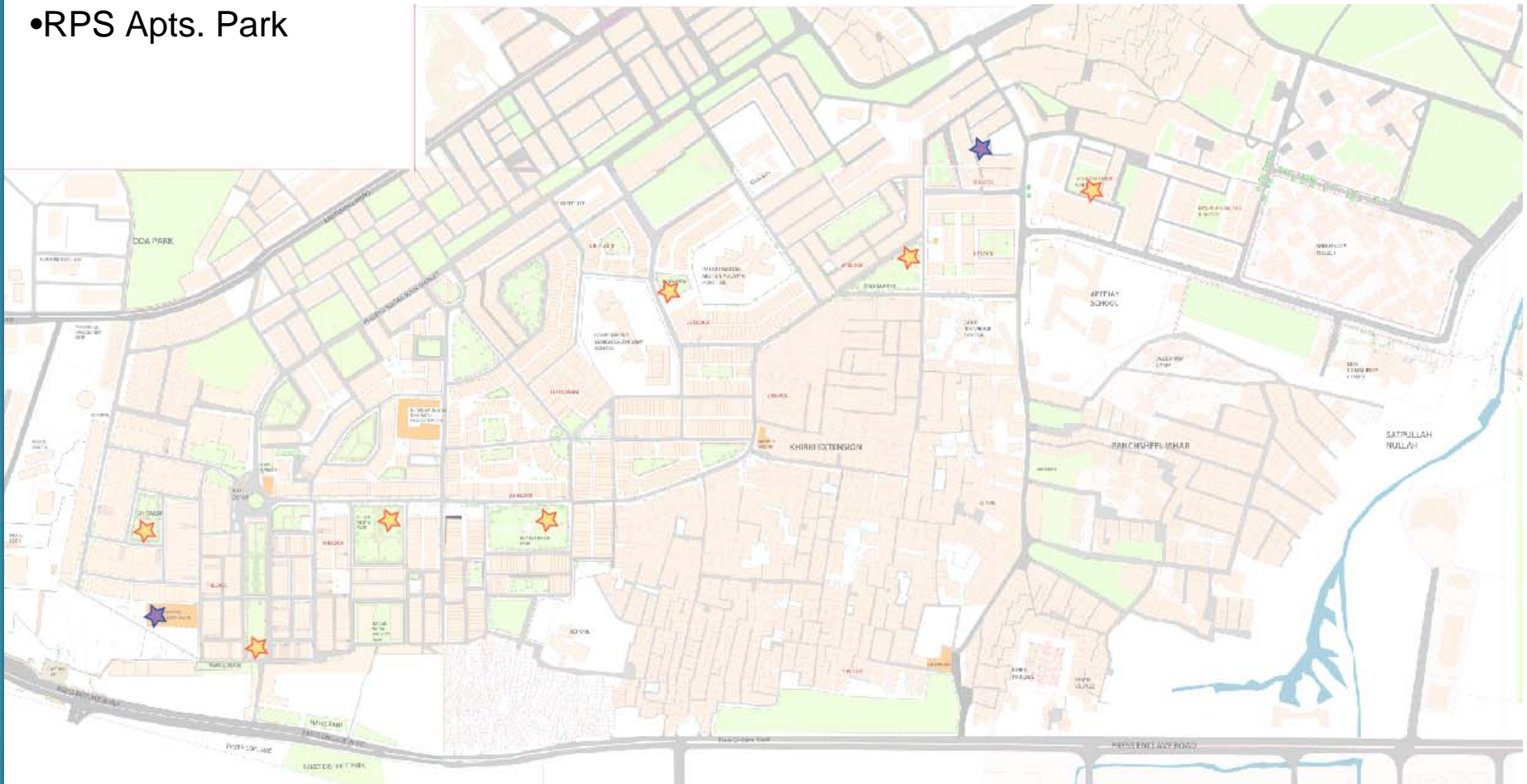


9 Community Park in all:

- Shivalik A Block Park
- F Block Linear Park
- Hitesh Mehta Park
- Bhagat Singh Park
- Ravi Mehta Park
- Tikona Park
- RPS Apts. Park

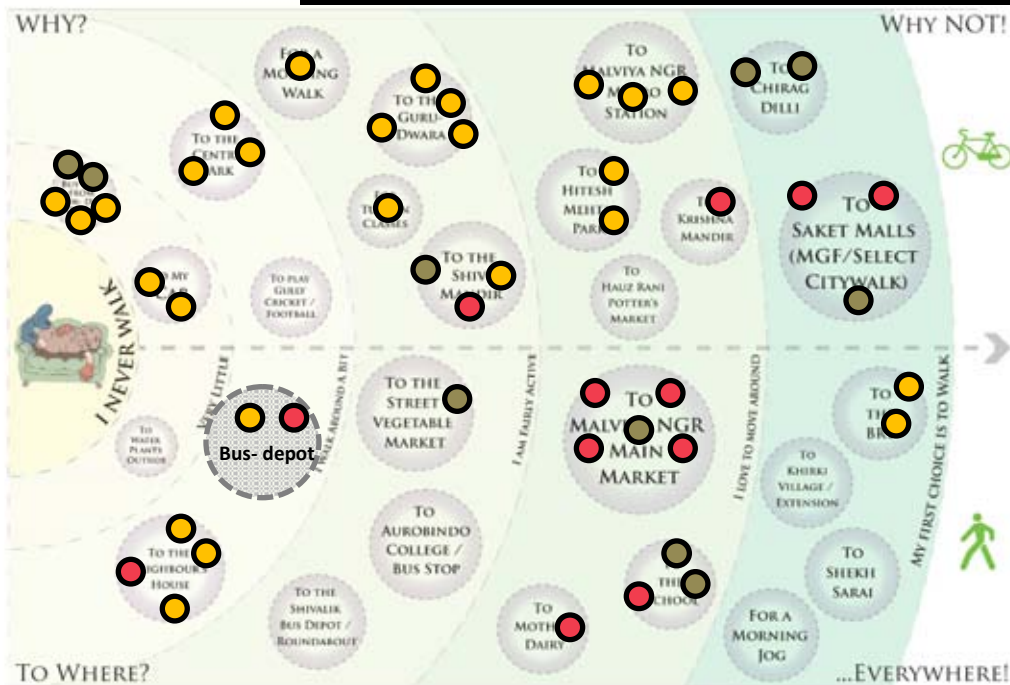
Indoor Brainstorming:

- Gurudwara Babadeep Singh (Metro Links and F Block)
- N Block – Residence of Mr. R P Kakkar (Ward Committee and MN RWA issues addressed)





# COMMUNITY WORKSHOPS - Exercises



LEGEND      ● Easily Accessible      ● Moderately Accessible      ● With Difficulty

							PARKING पार्किंग
निवासी				●		●	
HOUSEHOLD							
RESIDENT		●		●		●	●
RESIDENT							
SHOPKEEPER दुकानदार		● ●			●	● ● ● ●	● ●





# THE ENQUIRY

This aerial map shows the Malviya Nagar Market Street area. Key landmarks and features include:

- Neptune Hospital**: Located in the top left corner.
- DDA Park**: A green area in the top center.
- Sabka Bazaar**: A market area in the top right.
- Geeta Mandir**: A temple area in the center.
- Tuition Classes**: Located on the right side.
- Metro Gate No. 01**: Located in the bottom left.
- Press Enclave Road**: A road at the bottom.
- Geetanjali Marg**: A road in the top right.
- Malviya Nagar Market Street**: The main road running diagonally from the top right to the bottom left.

A red dotted line highlights a route starting from the top left, passing through the DDA Park area, and ending near the Metro Gate No. 01. A green dotted line highlights a route starting from the bottom left, passing through the Metro Gate No. 01, and ending near the Sabka Bazaar area. Red arrows point to specific locations along these routes.

This aerial map shows the Malviya Nagar Market Street area. Key landmarks and features include:

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- Metro Gate No. 01**: Located in the bottom left, marked with a black asterisk.
- Press Enclave Road**: A road at the bottom of the map.
- Geetanjali Marg**: A road at the top right, marked with a pink dashed line.
- Malviya Nagar Market Street**: A road running diagonally from the top right towards the center, marked with a pink dashed line.
- Highlighted Route**: A red dotted line starts from the Neptune Hospital area, goes south along the left side of the map, and then turns east towards the center.
- Other Features**: The map shows a grid of residential blocks, green spaces, and a large green area in the top center.

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# COMMUNITY WORKSHOPS - Demands

## Linear Park - Shivalik

Traffic on this narrow lane is actually mostly passing through, for Lado Sarai, Mehrauli, etc. Too much for this width  
People have vacated the ground floors due to traffic & congestion in front of houses

**Dedicated footpath is must.**

## A - Block - Shivalik

**Designated parking space elsewhere is demanded in order to free up walking**

**Spilling space**

Children demand safe cycling areas / routes

Tuition routes are dimly lit

Facilities connection to the Metro station

## F-Block - Malviya Nagar

Access to Metro in front of Hauz Rani is not good. Improvement of existing link should be first priority.

Development of further network of pedestrian and NM routes to Metro is agreeable

**Walls / gates might be reconsidered**

## Hitesh Mehta Park - Malviya Nagar

**Chained Parking system is hurting pedestrians. Alternative system is demanded!**

Dedicated walking path is demanded !

Shivalik society gates are closed, leading to taking of longer routes for metro. Short cut to Metro through Hauz Rani feels dim and unsafe. Improvement

MISSION

लक्ष्य



Walking  
Convenience

चलने की  
सहूलियत



For All  
People

सब लोगों  
के लिए



Children  
Playing

खेलते  
बच्चे



Public  
Transport

सार्वजनिक  
परिवाहन



Selling  
Space

बिक्री की  
जगह



Independent  
Public Transit

स्वतंत्र  
सार्वजनिक  
परिवाहन



Rest and  
Shade

आराम  
और छाया

access and critical idling / parking space  
School hours need to be managed much better.  
Traffic coordination demanded

## areas

Rickshaws or alternative feeder service to reach public transport in an affordable way, demanded.  
Park maintenance is a major issue

## RPS Apartments - Sheikh Sarai

Access to public transport critically demanded.  
Dedicated walking path demanded

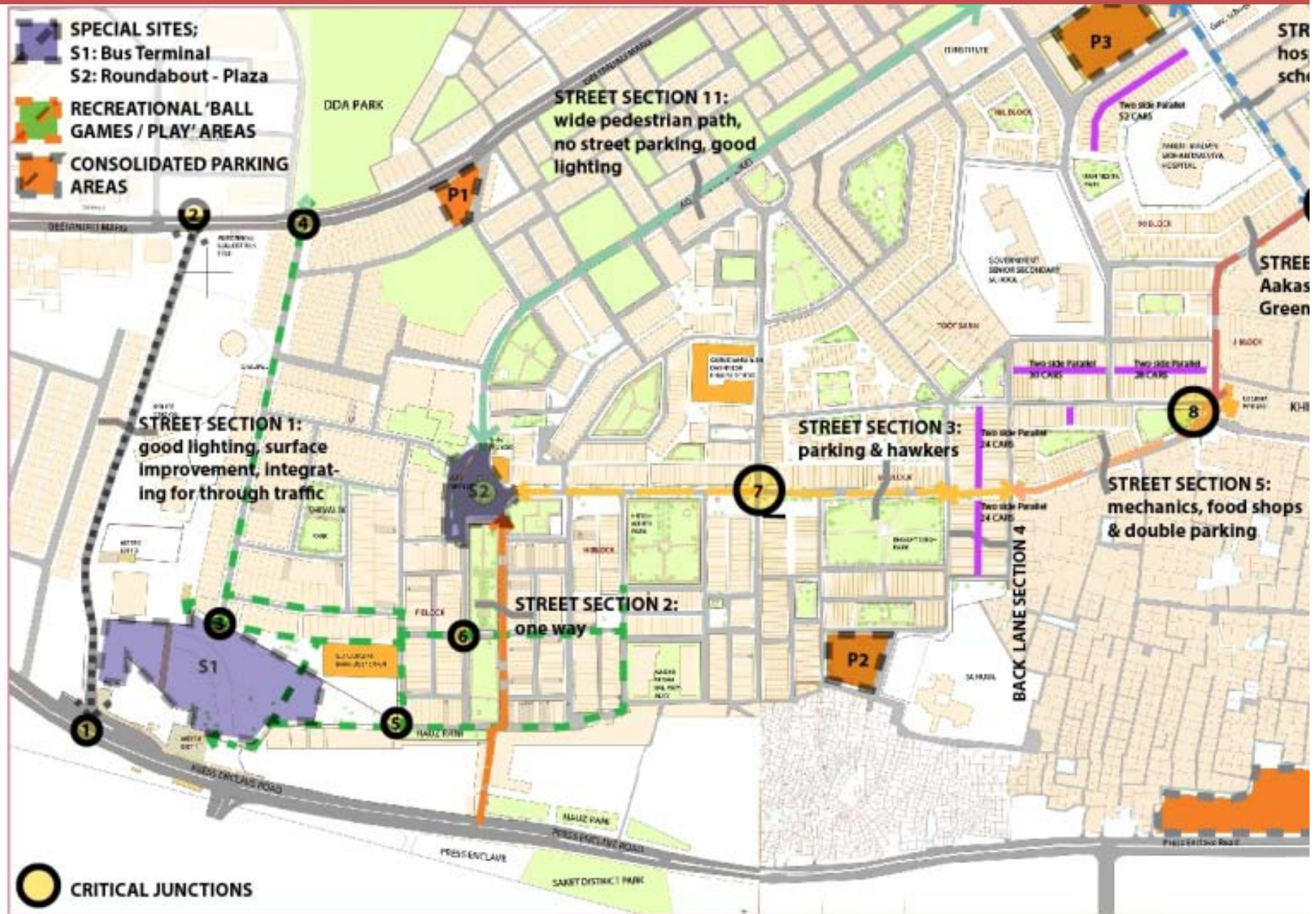
**School hours need to be managed much better. Traffic coordination demanded.**

Wine and Beer shop must be moved away in order for all neighbourhood residents to enjoy convenient access to the market.

Improvement works by PWD are good, but blocking water and entrance gates. It should be better planned and some parking spaces should be retained.



# TASKS IDENTIFIED – Focus Areas

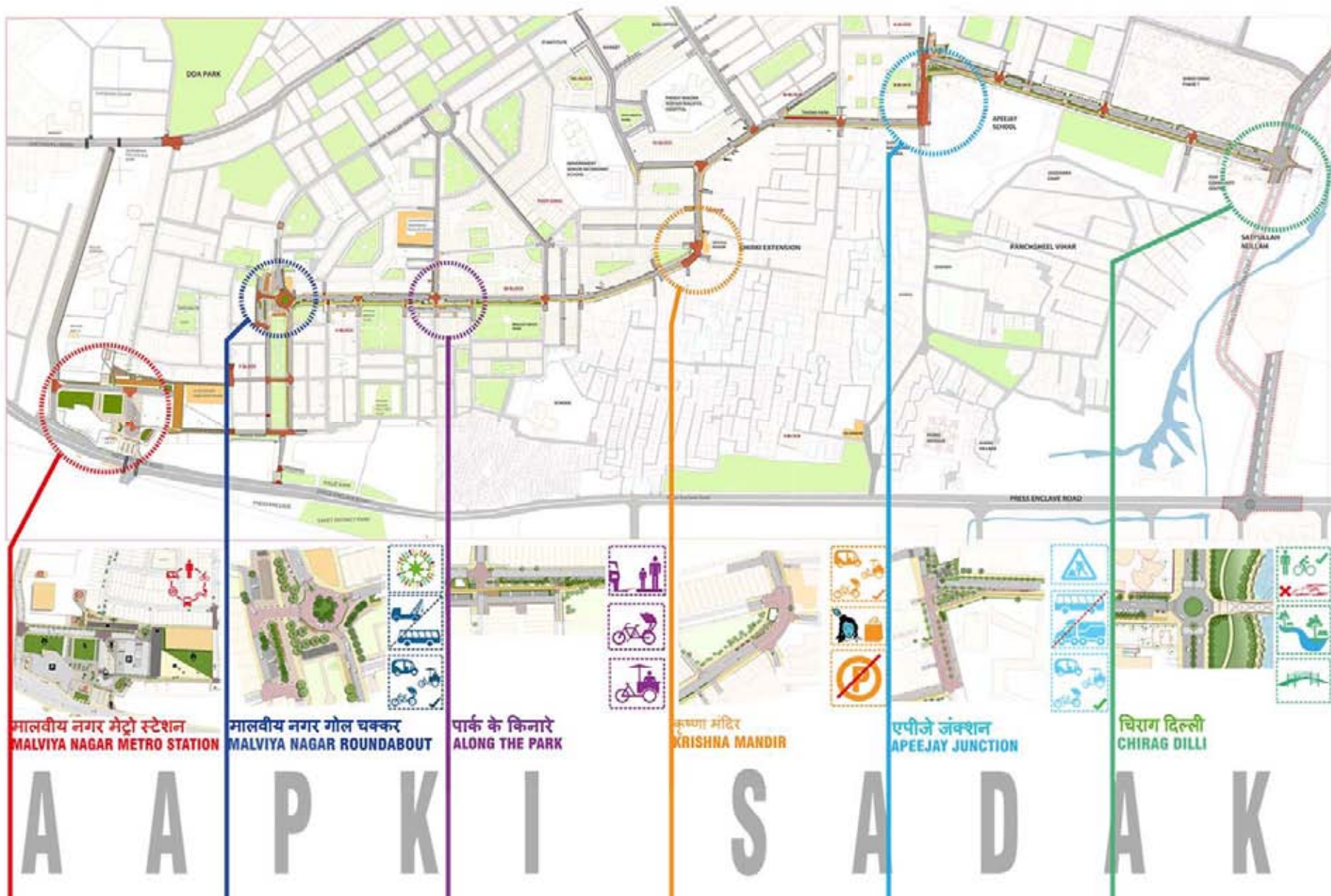




# TASKS IDENTIFIED – Proposals Made

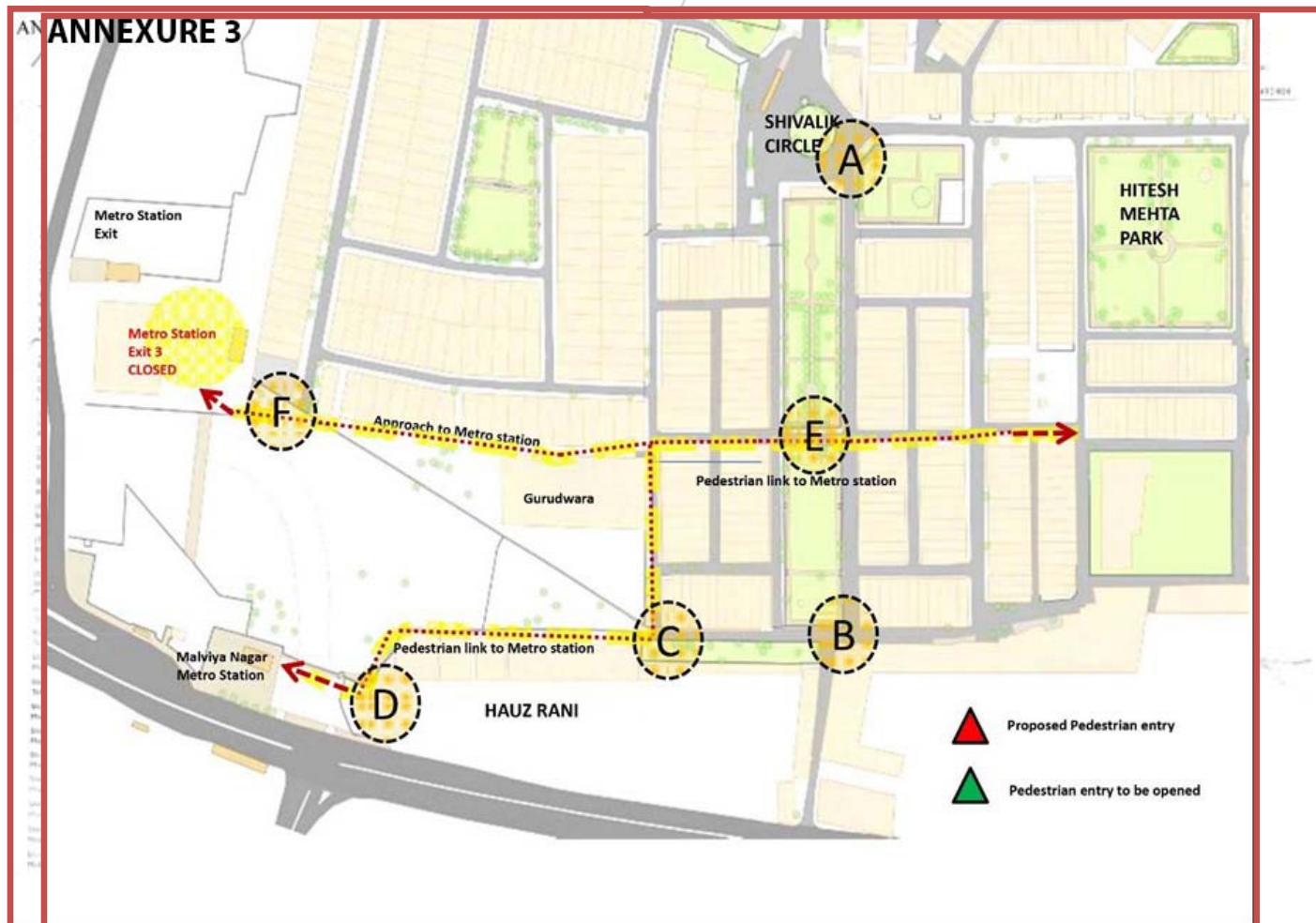
malviya nagar, hauz rani, khirki extension, sheikh sarai, chirag dilli

मालवीय नगर, हौज़ रानी, खिरकी एक्सटेंशन, शिख सराय, चिराग दिल्ली



## TASKS IDENTIFIED – Our Role

- Technical Support & Liaison – for residents
- Strategies for Testing & Piloting – for government
- Education & Advocacy – for all!!





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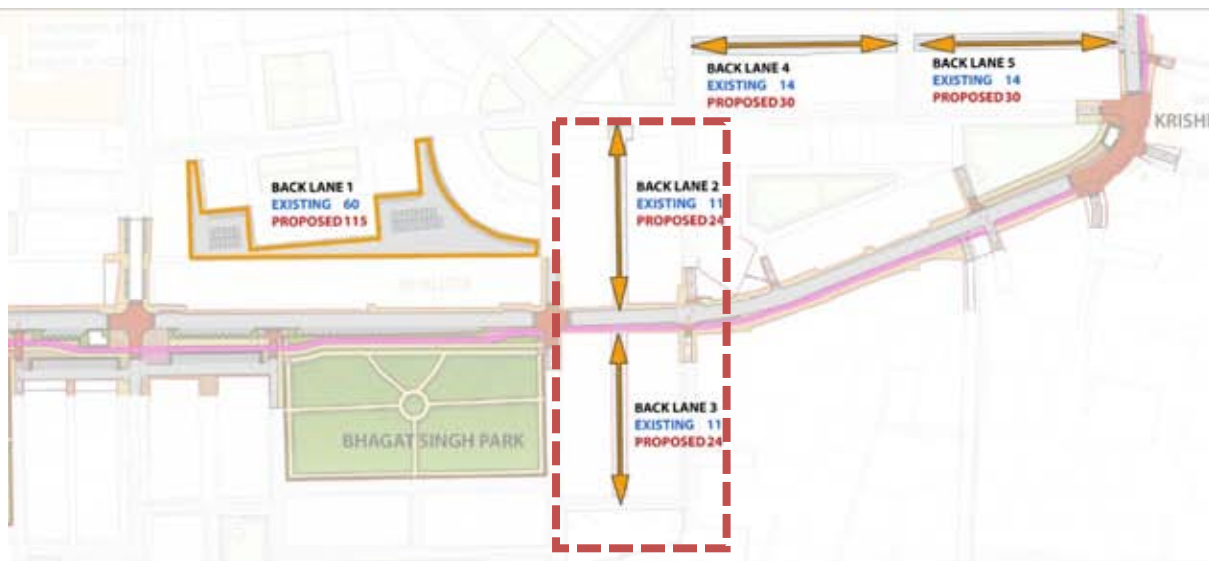
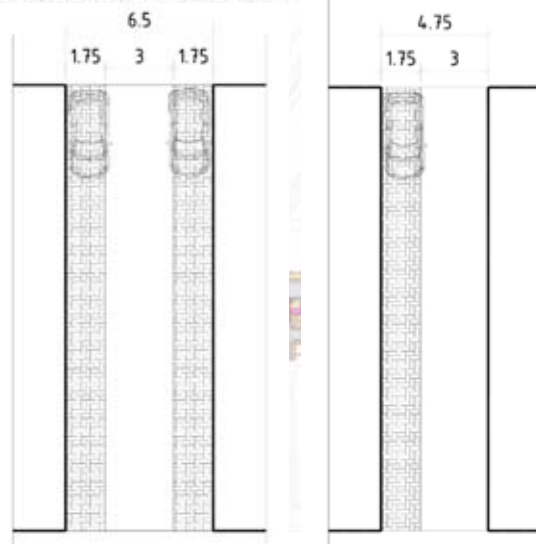
- 
- Incorporation of recent UTTIPEC Parking Policy into implementation plan of AAPKI SADAK

- **Parking Benefit Districts (PBD)** might be applied to the PARKS STRETCH.

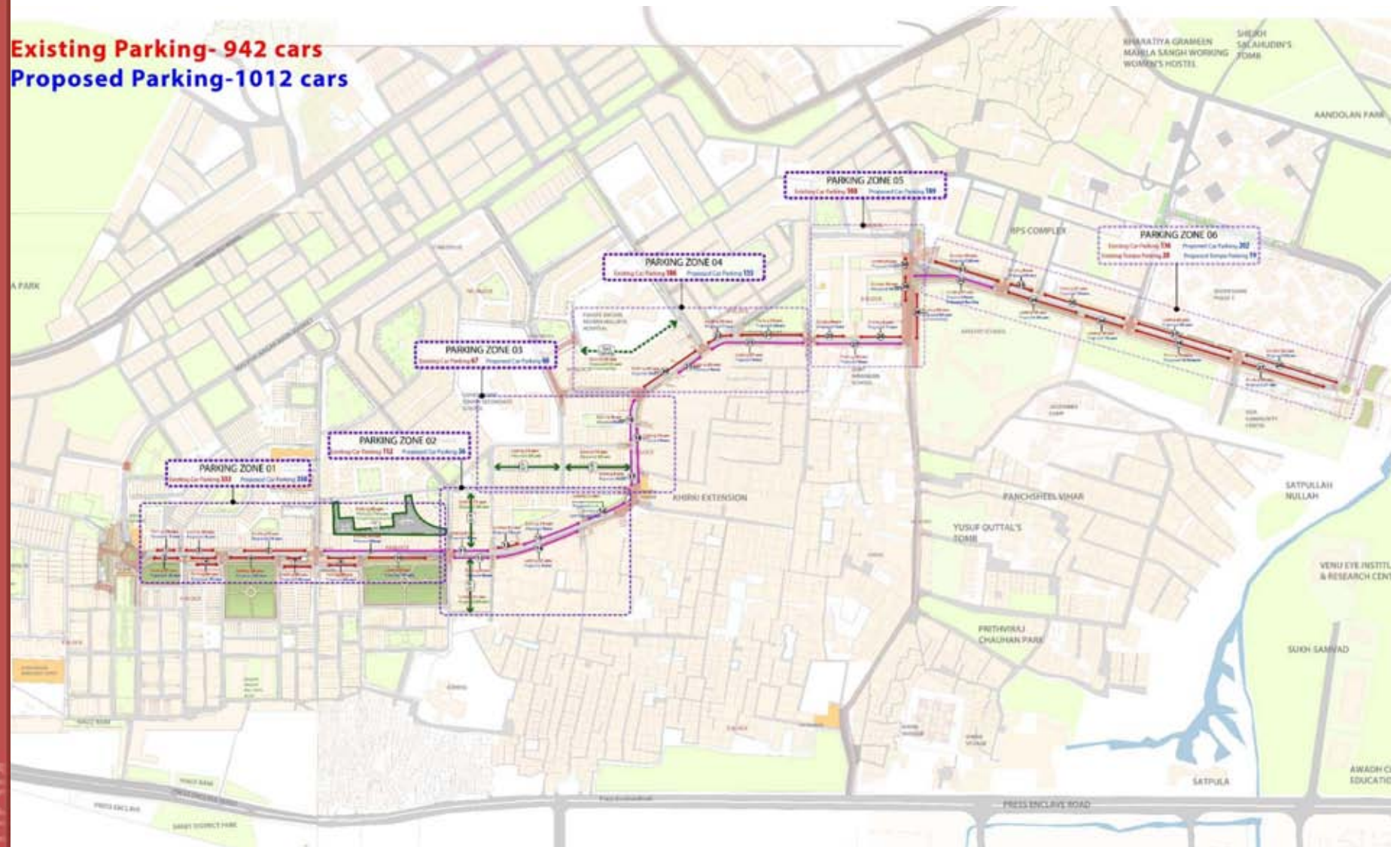
Salient Features as per Policy are:

- ULB is responsible for implementation: **SDMC**
  - Use of PPP recommended to arrive at viable solutions
  - Primarily on 'Mix-Use Spines'
  - Short term (upto 3 hrs) and Long Term (daily / monthly charging) parking zones.
  - Dynamic pricing to be adopted
  - **RWA participation** should be sought
  - Schools have to be made accountable
  - **Off-street parking favored** to On-Street Parking
  - **Public realm to be prioritised in favour of pedestrians**, commercial activity, vendors and IPT spaces
-

## BACK LANE PARKING PROPOSALS



**Existing Parking- 942 cars**  
**Proposed Parking-1012 cars**



.....TEST the PBD model on the Parks Stretch



## TASKS IDENTIFIED – Our Role

- Technical Support & Liaison – for residents
- Strategies for Testing & Piloting – for government
- Education & Advocacy – **for all!!**

# TASKS IDENTIFIED – Support Sought

**SHEILA DIKSHIT**  
CHIEF MINISTER



GOVT. OF NATIONAL CAPITAL TERRITORY OF DELHI  
DELHI SECRETARIAT, I.P. ESTATE, NEW DELHI-110113  
PHONE : 23392029, 23392030 FAX : 23392111

D.O. No.: OSD/CM/161  
Dated : 26.04.2013

## MESSAGE

I am pleased to learn that Aapki Sadak Project is being launched with an aim to make neighbourhood roads smooth & motorable.

When professional experts and citizens work together to propose practical solutions for improving their neighbourhood streets, our efforts are strengthened and we know your priorities. With your cooperative commitment as resident communities and your desire to lead the change we, as your government, will surely be able to do a more satisfactory job. This is the spirit of Bhagidari at work.

As our city continues to grow and develop, it faces new challenges. We have to find answers to the growing congestion of our streets, the renewed threat of air and noise pollution due to the needs of transportation, and growing sense of insecurity for our children, women and the elderly. We, at the policy and governmental level, are improving, expanding network and making it safer and more comfortable.

I would like to see that the Aapki Sadak Project shows the way. Please count on my support for your success.



*Sheila Dikshit*  
(SHEILA DIKSHIT)



**DELHI DEVELOPMENT AUTHORITY**  
**UNIFIED TRAFFIC & TRANSPORTATION INFRASTRUCTURE (PLG. & ENGG.) CENTRE**  
2nd Floor, Vikas Minar, New Delhi  
Phone No. 23379042, Telefax : 23379931  
E-mail: diruttipec@gmail.com

No. F.1.(2)2013/UTTIEPC/42<sup>nd</sup> D-110

Dated: 8.5.13

**MINUTES OF THE 42<sup>nd</sup> UTTIEPC GOVERNING BODY MEETING, HELD ON 5.4.13 AT 10.15 A. M. UNDER THE CHAIRMANSHIP OF THE HON'BLE LT. GOVERNOR OF DELHI.**

**3. Brief report on projects/proposals discussed in Working Group/ MAG(Transport) Meetings**

(ix) **A conceptual proposal for First and Last Mile Connectivity project –(Khirki/Malviya Nagar)- A Community Initiative.**

Shakti Sustainable Energy Foundation vide letter dated 1.2.2013 to UTTIEPC had mentioned that they are supporting project **"Alternative Mobility Solutions and Pedestrianization in Existing Neighbourhoods"** in the residential area stretching between Malviya Nagar metro station and the BRT Corridor. This project is being led by Ar. Ashok B. Lall with the partnership of innovative Transport Solutions, Oasis Design incorporated and Sandeep Gandhi Architects.

This project has identified and provided solutions with conceptual proposal for retrofitting of roads, optimum use of parking spaces and circulation system to create safe movement corridors for pedestrians and NMTs in consultation with various stakeholders and community. However, the group proposes to engage with government and transportation system stakeholders so that the proposals are aligned with various policies and programmes of the Government.

The conceptual proposal/plan was presented in the meeting by Ar. Ashok Lall for consideration of the Governing Body.

## Decision

Hon'ble LG appreciated the initiative taken by Ar. Lall in association with other professional partners to showcase a community based Eco-Mobility project and also noted that the proposal has been discussed with the Commr. of SDMC the main stakeholder. Hon'ble LG desired that the project be further discussed with all stakeholders like, SDMC, DDA, DMRC, PWD, Traffic Police and local residents/RWA's in the concerned Working Group of UTTIEPC for finalization and implementation of this first community based/supported project.

**Action – All Stakeholders, UTTIEPC**

The meeting ended with vote of thanks to the Chair.

Sd/-  
(Ashok Bhattacharjee)  
Director (Plg.)/  
Member Secretary, UTTIEPC



# ***THANK YOU***



# SURVEY & ANALYSIS



## TOPOGRAPHIC SURVEY

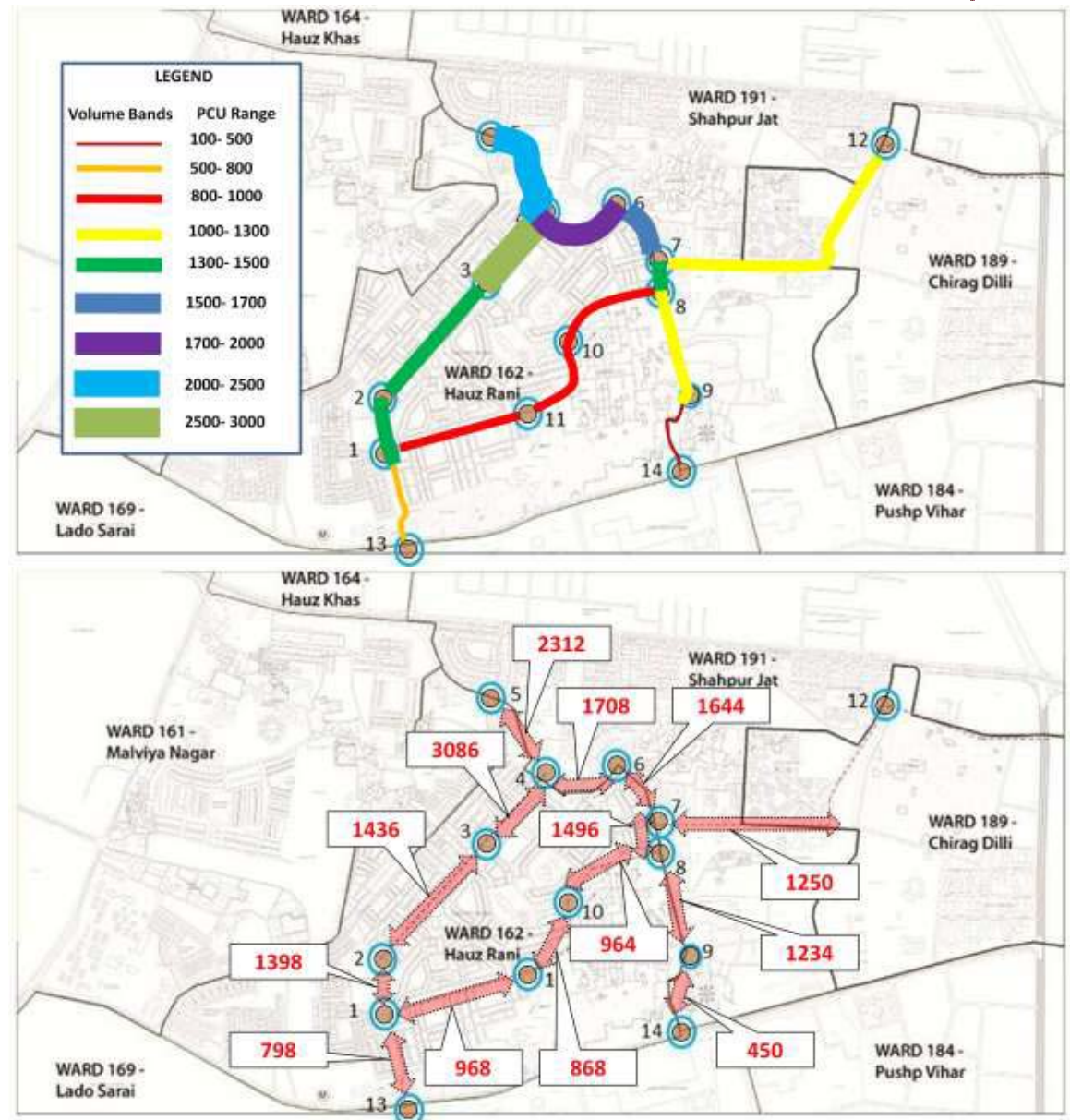




# SURVEY & ANALYSIS



## TRAFFIC SURVEYS



# SURVEY & ANALYSIS



## PHOTOGRAPHIC SURVEYS

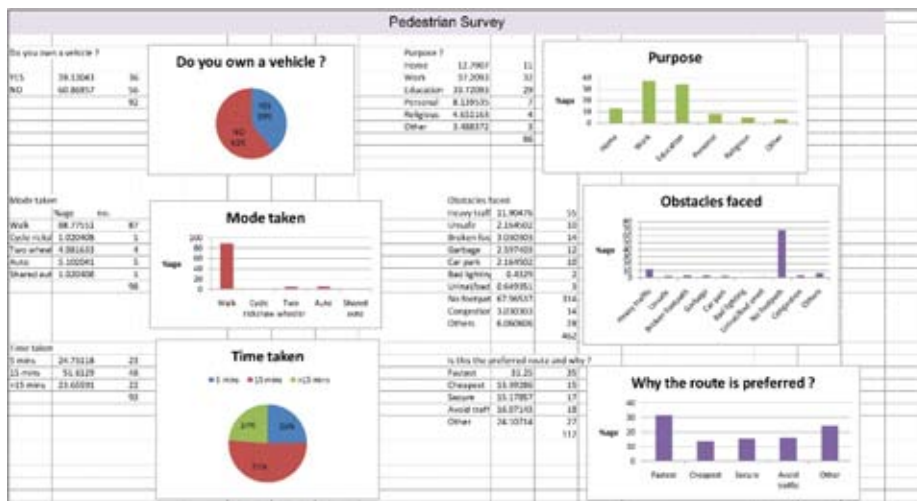
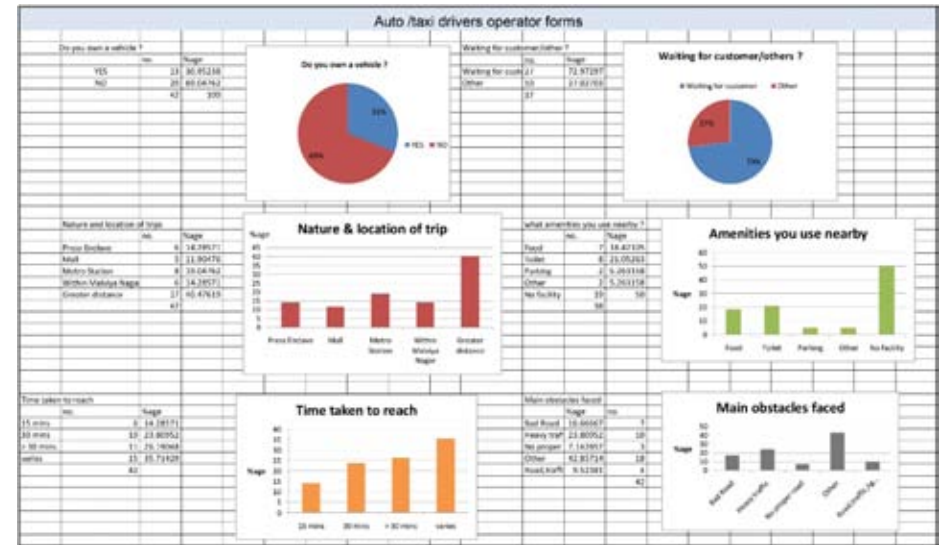
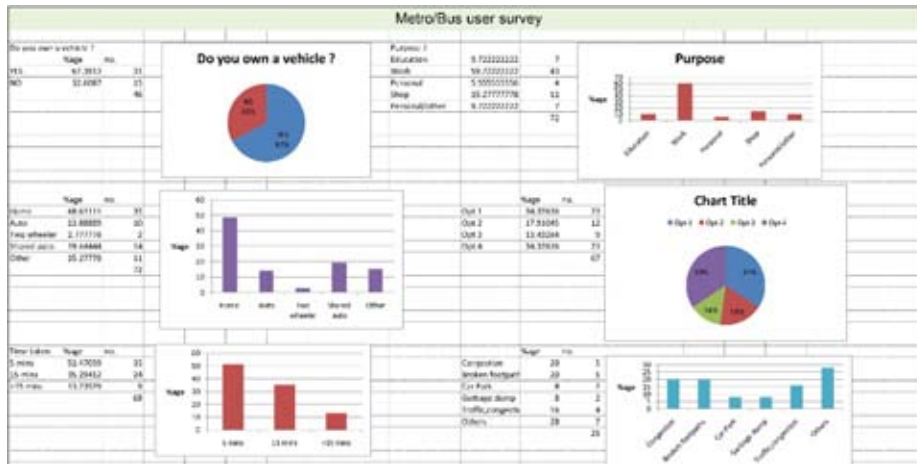




# SURVEY & ANALYSIS



## USER SURVEYS



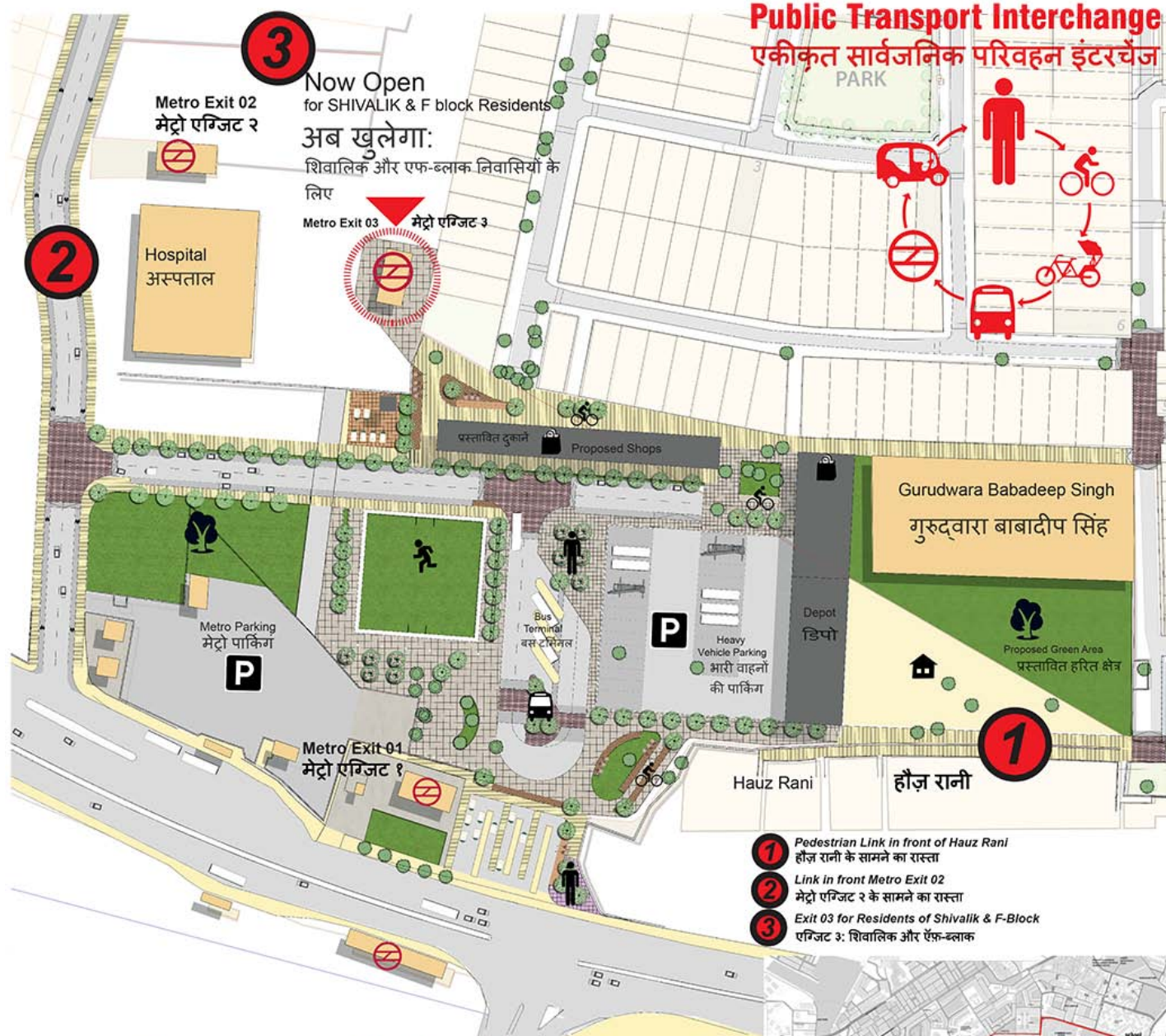
# SURVEY & ANALYSIS



## PARKING COUNTS







# मालवीय नगर मेट्रो स्टेशन MALVIYA NAGAR METRO STATION







# आपकी सड़क !!

## Malviya Nagar's Central Public Space! मालवीय नगर का नया केंद्रीय सार्वजनिक स्थल

Shift unfavourable activities like bus terminus, auto repair shops, cranes, to a more favorable location.

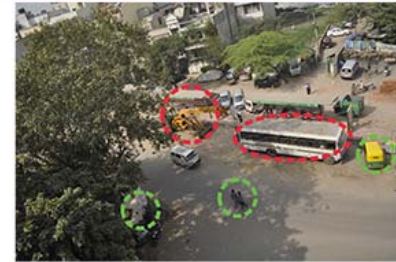
बस टर्मिनस, गाड़ी की मरम्मत की दुकानें, क्रेन पार्किंग जैसी प्रतिकूल गतिविधियों को अतिरिक्त स्थान प्रदान किये जायेंगे

Retain the toilets, shops, eateries, temple, auto stand, and improve access to them  
शौचालय, ढाबों, दुकानों और मंदिर तक पहुँचने के लिए निरंतर पैदल रास्ते



"the road should be like one where there is some separate space for cars and separate space for cycles (to go between DDA park and home, shops, temples, etc. because we can't play in our neighbourhood park, as people complain!)"

"लोगों की शिकायत की वजह से हम अपने पड़ोस के पार्क में नहीं खेल सकते हैं क्योंकि कारों और साइकिल के लिए अलग जगह नहीं है (डीडीए पार्क और घर के बीच जाने के लिए, दुकानों, मंदिरों, आदि के लिए अलग रास्ता होना चाहिए) "



मालवीय नगर गोल चक्कर  
MALVIYA NAGAR ROUNDABOUT





# आपकी सड़क !!

Create dedicated pedestrian paths  
सड़क के किनारे  
अभिहित पैदलपथ



Create separate rickshaw path  
that does not interfere with  
other traffic flow.

रिक्शा के लिए अभिहित रास्ते तैयार किये  
जायेंगे, जिससे बाकी के ट्रैफिक को किसी  
किसम की असुविधा ना हो



Organise area for  
street vendors  
सड़क पर रेधिवालों और  
विक्रेताओं के लिए  
अभिहित स्थान



मौजूदा स्थिति



बेहतर स्थिति

"because there is too much traffic on the main road (Krishna Mandir - Shivalik roundabout) we walk through internal streets to our tuition centre near the Gurudwara...but some parts are very dirty along that route and only some lights coming from a few houses, no street lights"

"कृष्णा मंदिर-गोल चक्कर सड़क पर इतना ट्रैफिक होता है, ट्यूशन जाने के लिए अन्दर गुरुद्वारे वाली गली में से जाना पड़ता . लेकिन वहां गली इतनी गन्दी है और कोई लाइट भी नहीं है, सिर्फ घरों के अन्दर से कुछ रोशनी आती है।"



बेहतर स्थिति



पार्क के किनारे  
ALONG THE PARK





# आपकी सड़क !!

Efficient organisation of Auto, Rickshaw, and Vendor spaces, to create enjoyable, congestion-free Mandir area

भीड़ से मुक्त मंदिर क्षेत्र बनाने के लिए, ऑटो, रिक्शा, और विक्रेताओं को संगठित स्थान प्रदान किये जायेंगे



Convenient & continuous pedestrian access to Mandir & shops

मंदिर और दुकानों के लिए सुविधाजनक निरंतर पैदल पथ



Organisation of parking space and shifting of unwanted cars for improved flow of traffic and pedestrian movement

यातायात और पैदल यात्रियों के बेहतर प्रवाह के लिए अवांछित कारों और पार्किंग के अतिरिक्त स्थान प्रदान किये जायेंगे



"the traffic on this road is ridiculous...to come from there (Krishna Mandir) to here (Bhagat Singh Park) it takes us ten minutes! Even in a car!! the chaos particularly in front of Krishna Mandir is too much!"

इस रोड पर यातायात की बहुत समस्या है। कृष्णा मंदिर से भगत सिंह पार्क तक आने में दस-पंद्रह मिनट लग जाते हैं। गाड़ी में भी







# आपकी सड़क !!

**Integrate government plan for Proposed Relief Road and make it pedestrian and cycle friendly**

गवर्नमेंट के प्रस्तावित सड़क के प्लेन को ध्यान में रखते हुए, सड़क को धीमा और पार करने वालों के लिए सुरक्षित बनाना है



**Create destination for enjoyment of "Green Lung" of city**

शहर के एक महत्वपूर्ण हरित क्षेत्र को फिर हरा-भरा बनाकर, निवासियों के लिए एक मजेदार जगह का निर्माण करना है



**Design of wider bridge for connecting to Chirag Dilli, rather than existing**

चिराग दिल्ली से साइकिल और पैदल आने-जाने के लिए चौड़ा पुल



EXISTING SITUATION

मौजूदा स्थिति

"this area used to be much greener. Now it is only garbage. Also, the connecting bridge from the other side is too narrow and dangerous as bikes also cross over"

"पहले यहाँ बहुत हरियाली होती थी। अब सिर्फ कूड़ा है। उस तरफ (चिराग दिल्ली) से आने का पुल बहुत पतला और खतरनाक है। उसपर लोग मोटरसाइकिल भी चला लेते हैं"



Proposed Bridge and Landscaping

प्रस्तावित स्थिति



2006



2013

**CHIRAG DILLI चिराग दिल्ली**

