

ENHANCING LAST MILE CONNECTIVITY

a safety analysis of the Patel Chowk Metro Station



This Report has been prepared as part of the Project being undertaken with NDMC to Enhance the Last Mile Connectivity along the metro stations within its jurisdiction. The safety audits were conducted by Smt. Renu Verma and Smt. Rashmi Garg, architects from NDMC along with Safetipin team.



Patel Chowk

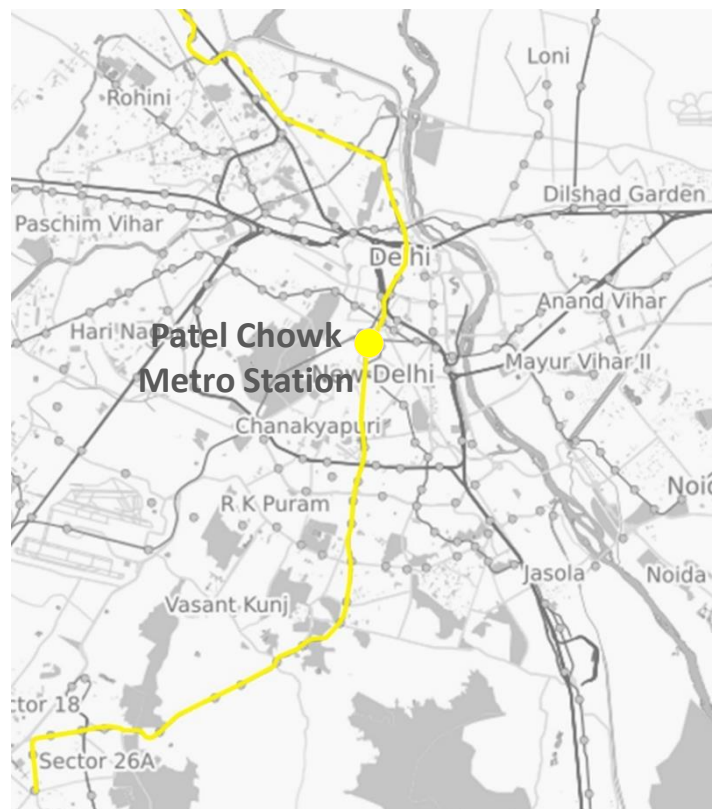
SAFETY SCORE: 3.9/5

SafetiPin, is a map-based mobile phone and online application, which works to make communities and cities safer by providing safety-related information collected by users and by trained auditors. At the core of the app is the Women's Safety Audit. A Women's Safety Audit (WSA) is a participatory tool for collecting and assessing information about perceptions of urban safety in public spaces. The audit is based on nine parameters – Lighting, Openness, Visibility, Crowd, Security, Walkpath, Availability of Public Transport, Gender Diversity and Feeling.

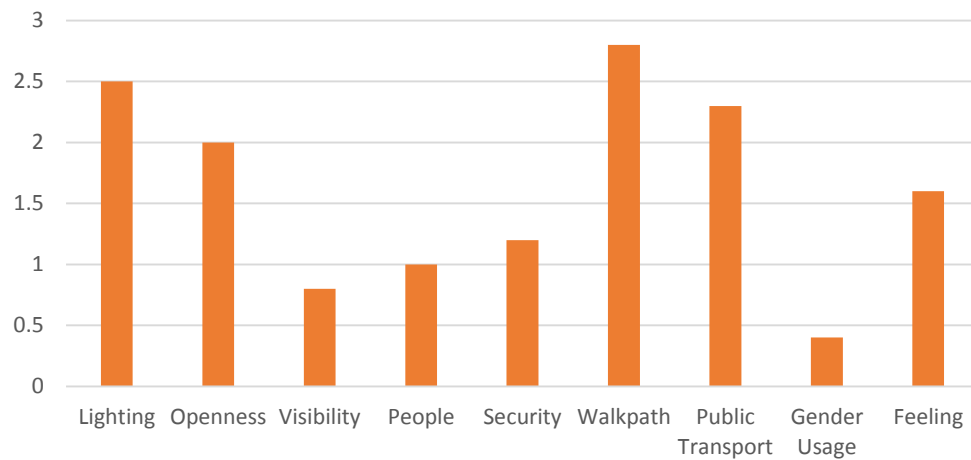
The audits were conducted by female architects from NDMC along with Safetipin team. The assessment was done post sunset till 9pm.

Patel Chowk is an underground metro station on Delhi Metro's Yellow line. It is surrounded by various government offices like Jeevan Tara, Dak Bhawan, Sanchar Bhawan, Yojana Bhawan etc. Additionally, it caters to tourists visiting Jantar Mantar, Gurudwara Bangla Sahib and National Philatelic Museum.

An area of approximately 500m radius around the metro station has been studied and 113 audit pins have been generated. The area outside the metro entry/exit and the bus stop were studied.



Average Audit Parameters (on a scale of 3)



Safety Audits indicate that the area around the metro station is safe. Due to lack of activity and pedestrians, the lane behind Akashwani Bhawan has been rated lower in terms of safety. The parameters of Lighting and Walkpath have been rated Good. Public Transport parameter is rated Above Average.

The number of pedestrians decreases after office hours. Therefore, People and Gender Usage parameters have been rated Below Average and Poor respectively. Visibility and Security parameters have been rated Below Average as well. Overall, auditors have rated the Feeling in this area as Average.

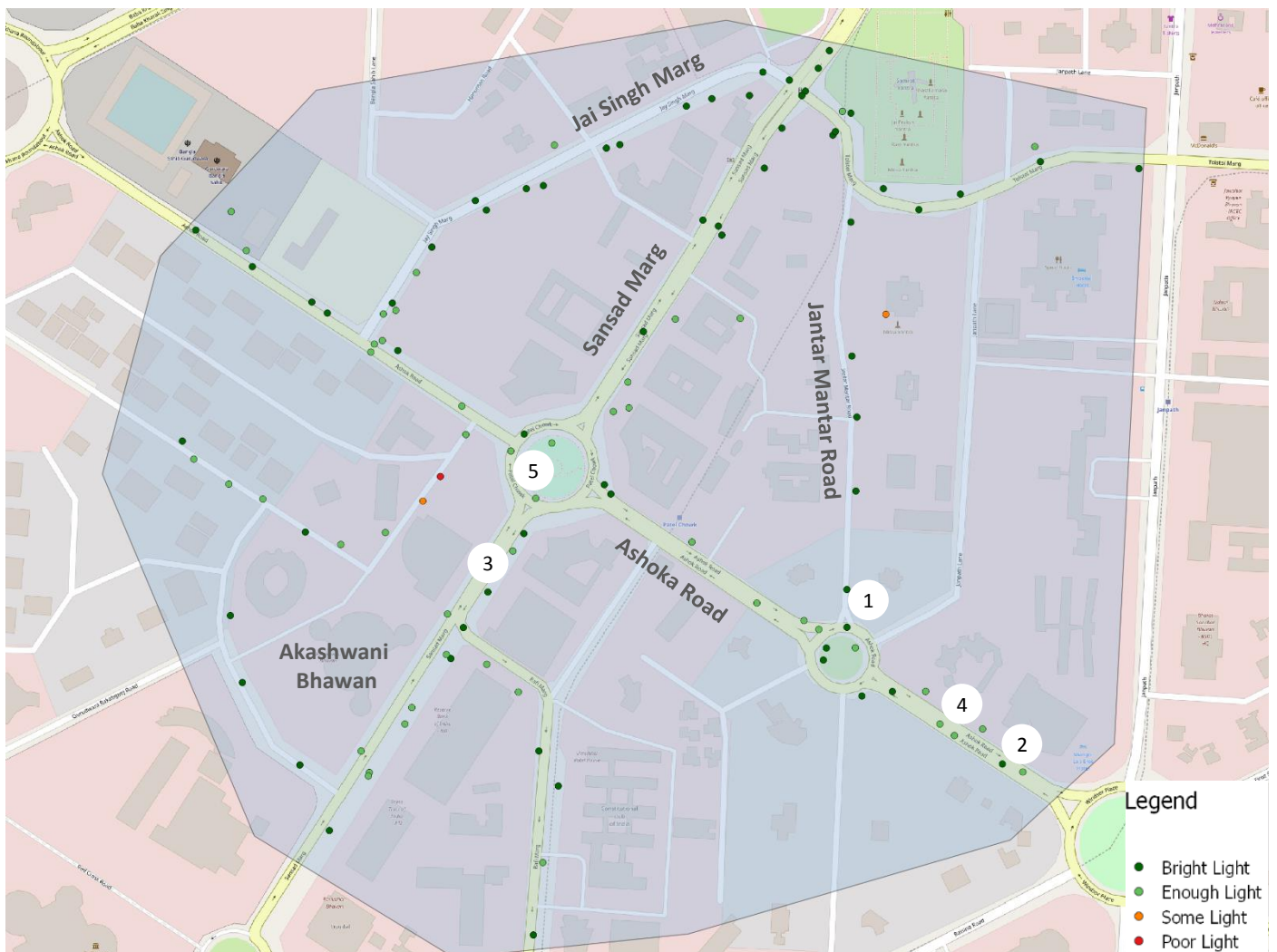


Map indicating Safety Score

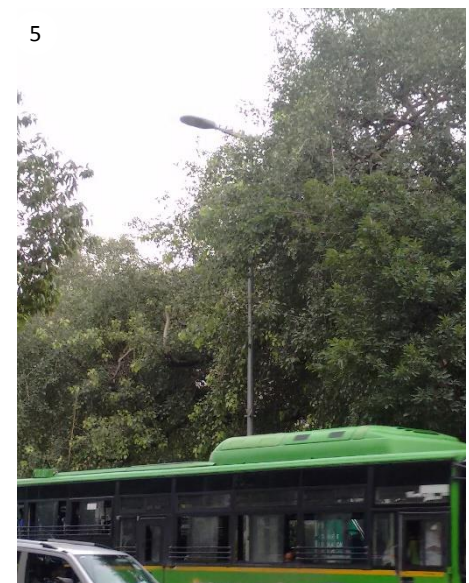
Lighting

Lighting Parameter has been rated 2.5/3 i.e. Good. Throughout this audit area, streetlights are installed along the edge of footpath facing the road. The illumination is bright on the vehicular carriageway but low on pedestrians path. Additional streetlights are needed along the footpath to ensure uniform illumination.

Care should be taken while installing streetlights in midst of trees along footpath. Some streetlights were found to be hidden behind trees' foliage, resulting in low illumination. Regular maintenance checks should be carried out to prune tree leaves in this area. The height of streetlights should be lower than that of trees to avoid disrupted and partial illumination.



Lighting Rating



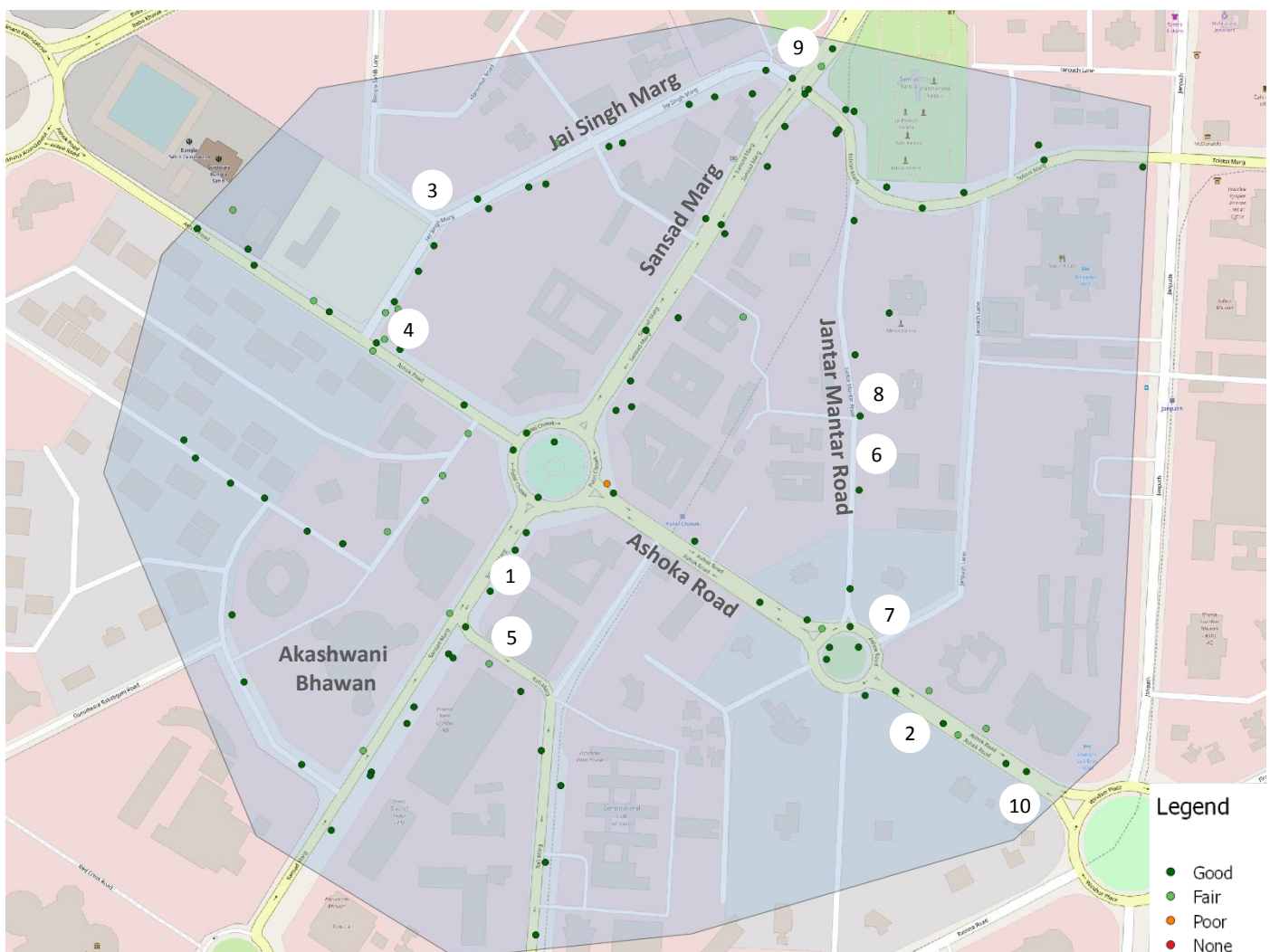
At various points, streetlights were found to be hidden behind trees' foliage (Pic 4). To avoid this, regular pruning of trees should be carried out. Also, shadows are cast by trees wherever height of the streetlight is higher than the trees (Pic 5). To ensure uniform illumination, the height of streetlights should be reduced.

In this area, the streetlights are installed along the footpath facing the main road (Pic 1). As a result, only vehicular carriageway is lit as seen in Pic 3. The footpath in this area is flanked by trees on both sides, often forming a colonnade shading the whole path (Pic 2). Pedestrian scale lighting should be provided facing pedestrian path either along the edge of footpath or boundary wall.

Walkpath

Walkpath Parameter has been rated 2.8/3 i.e. Good. The footpath exists in good condition throughout the audit path. Maintenance is needed for broken paving at some points. Also at various points, footpath is not easily accessible by physically challenged people. Tactile paving was limited to bus stops and within the premises of metro station.

At some points, footpath was found to be obstructed by vehicles, boards, barricades etc. Separate space should be provided for vehicular parking, and barricades when not in use. Signage/ advertisement board should be installed along the edge of the footpath. Table top crossing with proper ramps should be provided at the junctions.



Walkpath Rating



Though well maintained footpath exists throughout the audit path, it is not user friendly for physically challenged people. As seen in Pic 1 and 2, the slope of ramp and the placement of bollards is inconsistent and inconvenient to use. In Pic 1, there should be table top crossing and should have a gradual slope. The spacing between the bollards should be such that it is accessible by a person on wheelchair(Pic 2). Seen in Pic 3, while there is a ramp provided, the footpath is obstructed by a planter and a religious structure. With defined edges and obstructions, it is difficult for people on wheelchair to commute around. Existing unused green belt should be paved to provide a footpath, clear of any obstruction. Additionally, tactile paving should be provided throughout on the footpath for the visually challenged.



At some points, paving on the footpath were found to be broken as seen in Pic 4. The paving around manholes should be repaired and the manhole's cover should be flushed with the level of the footpath.

The footpath should be widened wherever tree obstructs. If the case is as seen in Pic 5, paving around trees should be done with perforated pavers, thus providing an even footpath for the pedestrians.



Area around Jantar Mantar Road is known for public meetings, protest march etc. One can see people waiting on the footpath outside officials' residence as seen in Pic 6 and 7. Also, at some points the footpath is blocked using barricades (Pic 8). Pedestrians are forced to walk on main road. There should be street furniture provided in the green belt, clear of the footpath for the people, and space should be provided to keep the barricades, when not in use.

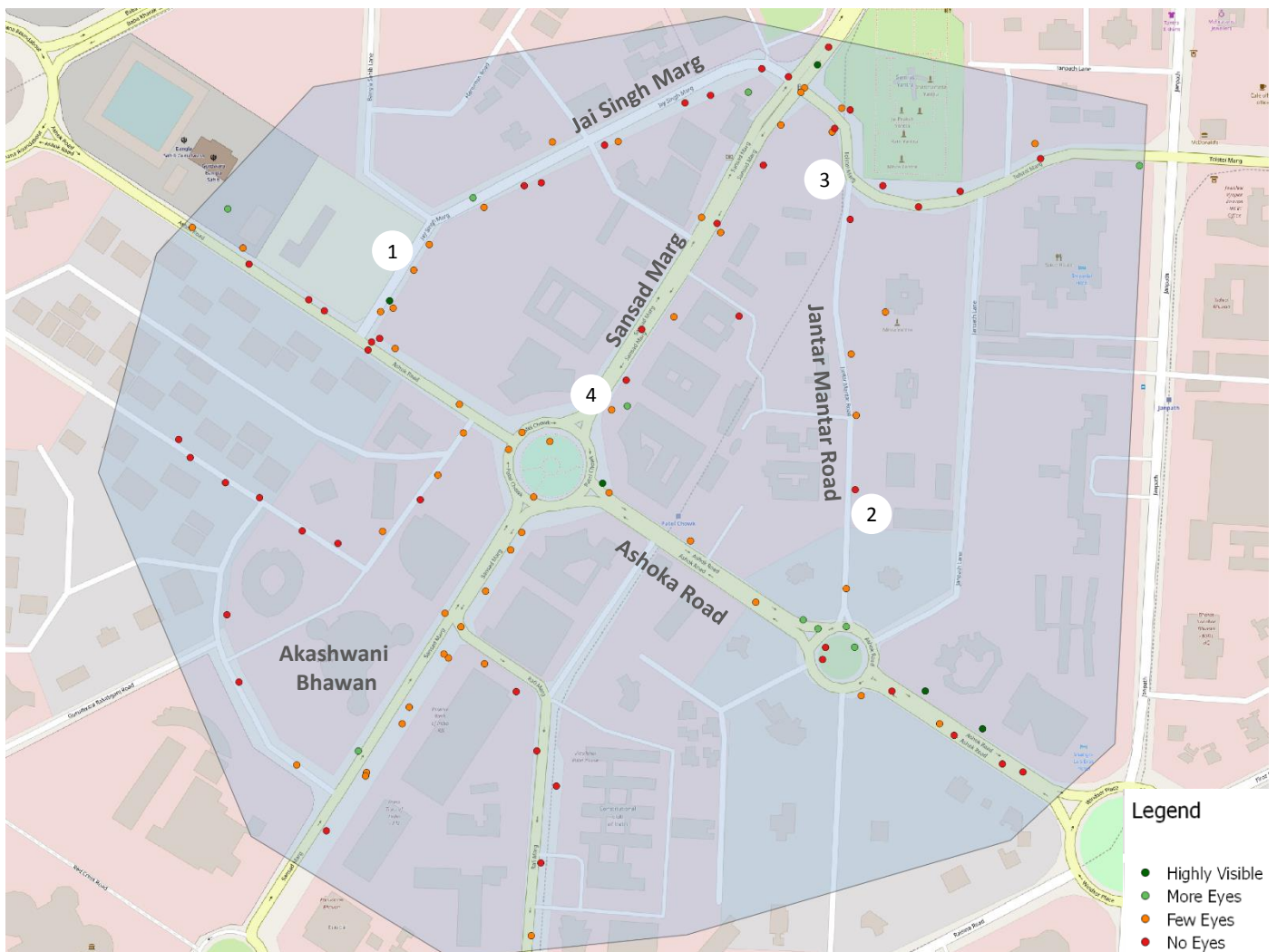
The footpath should be kept clear of any obstruction. As seen in Pic 9 and 10, vehicles obstruct the pedestrian path at some audit points. Separate space should be provided for vehicular parking. To reclaim the footpath seen in Pic 9, a footpath should be constructed, raised at a level, clear of any obstruction.



Visibility

Visibility Parameter has been rated 0.8/3 i.e. Below Average. This is due to high boundary walls and large setback area within a public building. Though most of the government buildings in this area have low height boundary walls, their large setback area results in low visibility on the streets.

Few kiosks and street vendors present at various audit points provide some visibility. The area surrounding them should be developed as a designated hawker zone. They should be equipped with street furniture, street lights and a public convenience.



Visibility Rating



Seen in Pic 1 and 2, high boundary walls and shrubs limit visibility on the streets. The opaque part of boundary wall should be maintained low just like other public buildings in this area. The height can be achieved using grills. Alternatively, a hawker zone can be set up in the green belt outside institutions like Youth Hostel as seen in Pic 1. Seen in Pic 2, the shrubs along road side should be pruned and their height should be maintained at 1 m.



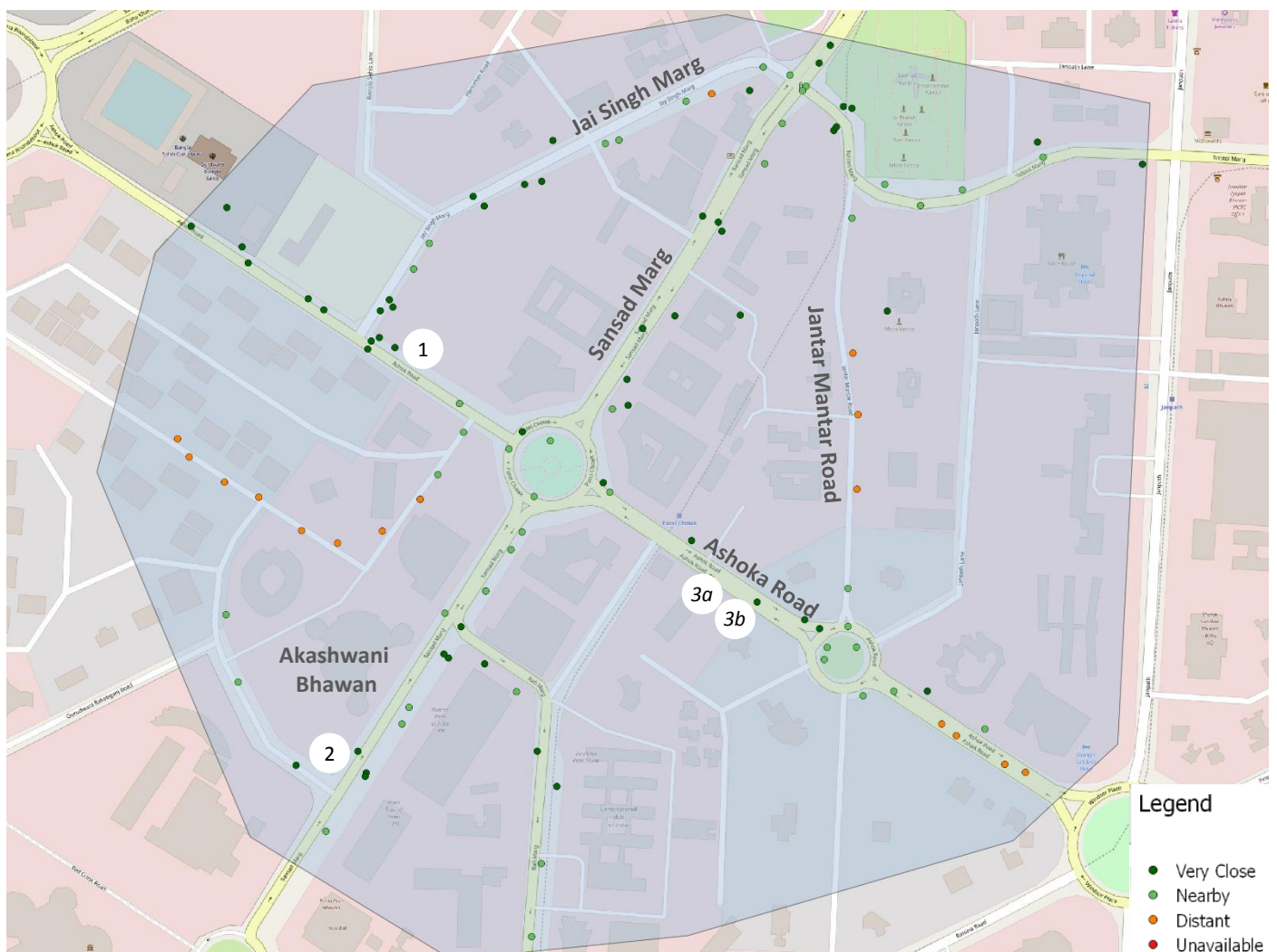
As mentioned before, Jantar Mantar Road is frequented by people for public gatherings. Several hawkers and kiosks can be seen along this road (Pic 3). Similarly, vending kiosks can be seen in front of government offices as seen in Pic 4. These spaces need to be developed as designated hawker zones. With proper lighting and street furniture for people and vendors alike, these spaces can be enhanced. Public convenience should also be provided. Separate space should be provided for vehicular parking (Pic 3).



Public Transport

Public Transport Parameter has been rated 2.3/3 i.e. Above Average. Being an administrative zone, auto rickshaws are easily available near the entry/exit of the metro station. Similar provision should be provided near bus stops along Sansad Marg and Ashoka Road.

Para – transit stands should be set up near bus stops, which has designated parking space for autos/ taxi. Additionally, these stands should have street furniture, vending kiosks and public toilet for drivers and commuters.



Public Transport Rating



In addition to metro station, bus stops should also have designated parking space for auto rickshaw and taxi. As seen in Pic 1 and 2, the space near the bus stop can be used to set up a para transit stand. The unused service lane seen in Pic 2 can be set up as a hawker zone. The vending kiosks should be set up along the boundary wall, clear of the footpath. Further along this stretch, there is a functional public toilet. Adding streetlights and street furniture for the vendors and commuters would enhance this space.

Seen in Pic 3a and 3b, entry/exit to this bus lane on Ashoka Road is occupied by taxis. As a result, buses are not able to enter their designated lane, instead stop on main road. Vehicular parking should be disallowed in the bus lane and a para transit stand should be set up for auto/taxi. Also, the advertisement board at the bus shelter hinders pedestrian movement on the footpath. The board should be removed and a ramp should be constructed ensuring smooth transition to the footpath.

