

ENHANCING LAST MILE CONNECTIVITY

a safety analysis of the Jhandewalan 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 Safetipin team.





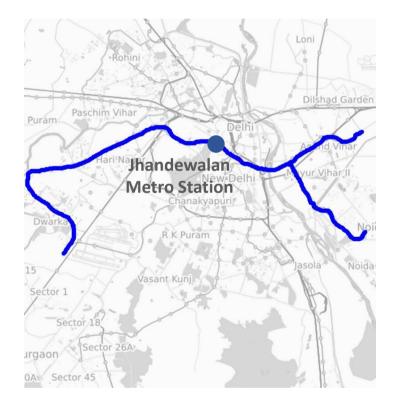
Jhandewalan SAFETY SCORE: 3.9/5

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.

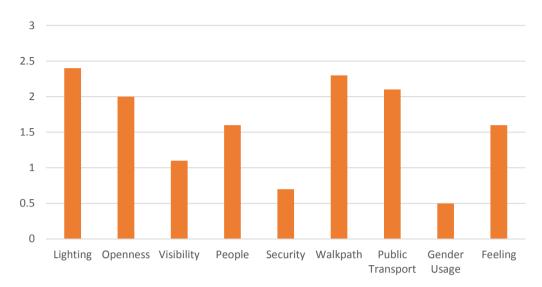
The audits were conducted by Safetipin team. The assessment was done post sunset till 9pm.

Jhandewalan is an overhead metro station on Delhi Metro's Blue line. This area is known for Hanuman temple, and Mata Jhandewali temple after which the metro station is named. While there is ridge on one side, there is a mixed use development on the other side of the station. It has offices, commercial complex and residences.

An area of approximately 500m radius around the metro station has been studied and 83 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. The area fares well in terms of safety score. The parameters of Lighting, Walkpath and Public Transport have been rated Above Average. After office hours, Security and Visibility parameters have been rated Below Average.

Though there are people on the streets after dark in this area, women and children are less in number. While the parameter of People has been rated Average, Gender Usage has been rated Poor. Overall, auditors have rated the Feeling in this area as Average.



Map indicating Safety Score

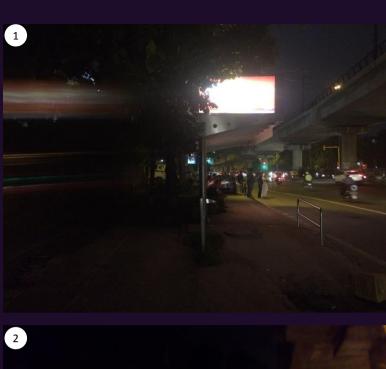
Lighting

Lighting Parameter has been rated 2.4/3 i.e. Above Average. With metro line running along the central median of Dr. Bhim Rao Ambedkar Marg and Pusa Road, streetlights are installed on both sides of the main road. However, at some audit points streetlights were found hidden behind trees' foliage, and some streetlights were found non – operational. Regular maintenance checks should be carried out and tree leaves should be pruned.

At some points, additional streetlights are needed to be installed along the footpath to illuminate pedestrian path. Along the inner lanes at some points, streetlights are installed at a distance from each other, resulting in low illumination in between the streetlights. This should be checked and additional streetlights should be installed wherever required.



Lighting Rating









Though there is illumination on the main road, the pedestrian path as seen in Pic 1 is not lit properly. Additional streetlights should be installed along the edge of the boundary wall to illuminate the footpath.

Some streetlights as seen in Pic 2 were found non – operational. Regular maintenance checks should be carried out and these streetlights should be made operational.

Some streetlights were found to be hidden behind trees' foliage as seen in Pic 3. As a result, shadows are cast by trees' foliage. Regular pruning of tree leaves should be done. At some points as seen in Pic 4, the height of the streetlights should be reduced so that it isn't obstructed by trees' foliage.

On Rani Jhansi Road as seen in Pic 5, the stretch is illuminated by light from the bus stop. Additional streetlights should be installed along the edge of the boundary wall to ensure uniform illumination.

Walkpath

Walkpath Parameter has been rated 2.3/3 i.e. Above Average. The footpath exists throughout the audit path. However, it was found to be broken, non – continuous and obstructed by vehicles at most of the audit points. With no ramps being provided at few points, the level of footpath is not easily accessible. A ramp of gradual slope should be provided for people on wheelchair.

The tactile paving provided on the main road is broken, and obstructed by sign boards, electrical units etc. at many points. The footpath should be continuous and clear of any obstruction. The tactile paving should be provided throughout on the footpath. The bollards should be placed to disallow vehicular parking on the footpath.



Walkpath Rating











The footpath was found to be damaged at many audit points. The broken and obstructed footpath as seen in Pic 1, 2 and 5 can prove risky for pedestrians. There are no ramps provided for the people on wheelchair. Tactile paving is provided, but it is broken and non-continuous at multiple audit points. Cars are seen parked on the footpath, despite a defined edge (Pic 1). The footpath should be repaired and the tactile paving should be laid again, clear of any obstruction. Also, ramps should be provided for the physically challenged. To avoid vehicular parking on the footpath, designated space should be provided for them.

Seen in Pic 3, a public toilet constructed in between the footpath, obstructs movement of the pedestrians. This public toilet should be shifted, and set up clear of the footpath. Also, the footpath should be repaired to bring it to the same level.

Currently, the kaccha walkpath along Dayal Chowk forces the pedestrians to walk on the main road (Pic 4). A proper footpath should be constructed for the pedestrians. It should also have separate space for the street vendors, clear of the footpath.

Visibility

Visibility Parameter has been rated 1.1/3 i.e. Below Average. It is due to high boundary walls along the main road. Also, the area around offices become inactive and secluded after dark. The area around temples and mixed use neighbourhood is active till late evening. To improve visibility and maintain some transparency within public space, the boundary walls of the public buildings should be kept low.

Street vendors were seen along the footpath at various audit points. These spaces need to be redesigned, and designated hawker zones should be set up. Niches can also be created in the boundary walls for the hawkers. Adding facilities like street furniture and public convenience can enhance these hawker zones.















High boundary wall as seen in Pic 1 and 2, results in low visibility on the streets. The boundary wall of public buildings such as temple complex, spiritual centre, offices should be of low height so as to maintain visual contact with the public realm. The opaque part of the boundary wall should be maintained at 1m and the rest of the height can be achieved using grills.

Street vendors contribute in maintaining some visibility as seen in Pic 3, 4 and 5. In absence of a designated zone, hawkers are seen occupying the road (Pic3) and pavement (Pic5). The pavement should be extended to accommodate vendors and provide them space along the built edge. Street furniture and a public convenience should also be provided, clear of the pedestrian path. The footpath seen in Pic 4 isn't utilized properly. A proper pavement should be constructed in space of existing kaccha walkpath, and should be flushed with the level of existing footpath. Streetlights should also be provided along this stretch.

The vegetable market seen in Pic6 isn't well maintained and the access path has been damaged. The access path should be repaired, and the market area should be equipped with streetlights, proper vehicular parking space and a public convenience.

Public Transport

Public Transport Parameter has been rated 2.1/3 i.e. Above Average. At the entry/ exit of the metro station, one can easily hail a cycle rickshaw or auto rickshaw. However, a designated parking space should be created for them. This para transit stand should be equipped with street furniture and a public convenience.

In the inner lanes of the residential neighbourhood, the rating of Public Transport was comparatively lower than the rest of the audit area. To improve last mile connectivity, para transit stands should be set up at regular distance within the neighbourhoods.



Public Transport Rating









At the entry/exit of the metro station, one can see cycle rickshaws waiting (Pic 1). At present, there is no designated space for them. There should be a para transit stand at each entry/ exit of the metro station. The stand should have proper parking space and a public convenience.

As seen in Pic 2 and 3, cycle rickshaws and auto rickshaws are parked at various audit points. These points can be set up as para transit stand. Along with designated parking space for rickshaw/auto/taxi, separate space should be provided for the street vendors. Α public convenience should also be set up, clear of the footpath for drivers and commuters. improve last mile connectivity to the neighbourhood level, such para transit stands should be set up along all the bus stops, and at within regular distance residential neighbourhoods.

The bus shelter as seen in Pic 4 is set up away from the main road along the boundary wall. The area surrounding the bus stop is poorly lit, and used for dumping garbage. Currently, commuters avoid using this bus shelter and prefer to stand on the main road. This area should be cleared and streetlights should be installed. In place of the kaccha walkpath, a proper footpath should be constructed that is flushed with the level of existing bus shelter. Separate space can be created for a para transit stand, and hawkers.

