

SHAHJAHANABAD

SAFETY AUDIT REPORT





Image © 2015 DigitalGlobe

INTRODUCTION

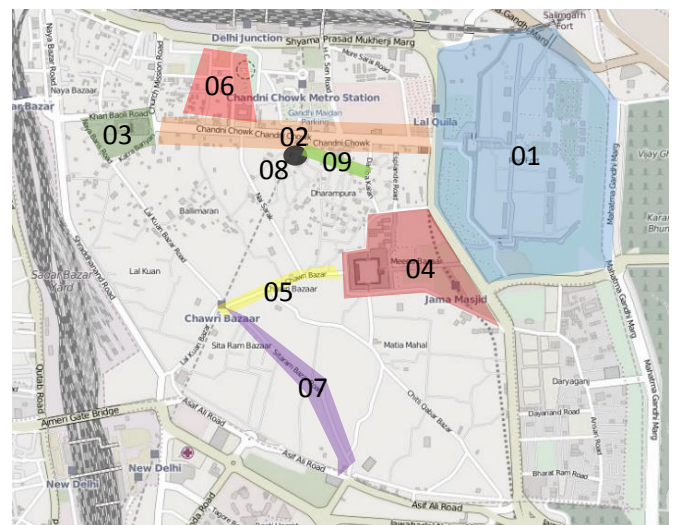
Safety Audits were conducted by INTACH and SafetiPin in Delhi's walled city of Shahjahanabad. The audits were done to assess the infrastructure and services gaps that exist in the area and to document these as objective data. This can then be used as an advocacy tool to facilitate upgradation of the area.

Shahjahanabad, being a centuries old settlement is currently facing many issues and challenges. Being densely populated housing residences and wholesale markets along with many heritage buildings; the area attracts people from all parts of the city for domestic shopping as well as national and international tourists. However, the infrastructure is inadequate to support these. The area, thus is in dire need of redevelopment.

METHODOLOGY

The audits were carried out using the SafetiPin App. SafetiPin, is a map-based mobile phone 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 Usage of Public Spaces and Feeling.

The audits were done in the evening hours of 5pm-10pm on nine selected routes inside Shahjahanabad, to evaluate the level of safety and identify ways to improve it. A total of 280 audit pins and 16 hazard pins were collected.



The nine areas selected for study are:

1. Red Fort
2. Chandni Chowk
3. Fatehpuri Masjid
4. Jama Masjid Precinct
5. Chawri Bazaar
6. Katra Neel
7. Sitaram Bazaar
8. Paranthe Wali Gali
9. Kinari Bazaar

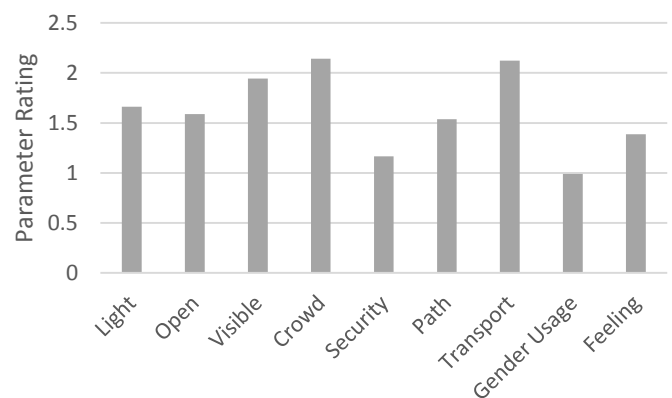
SHAHJAHANABAD

An Overview of Findings

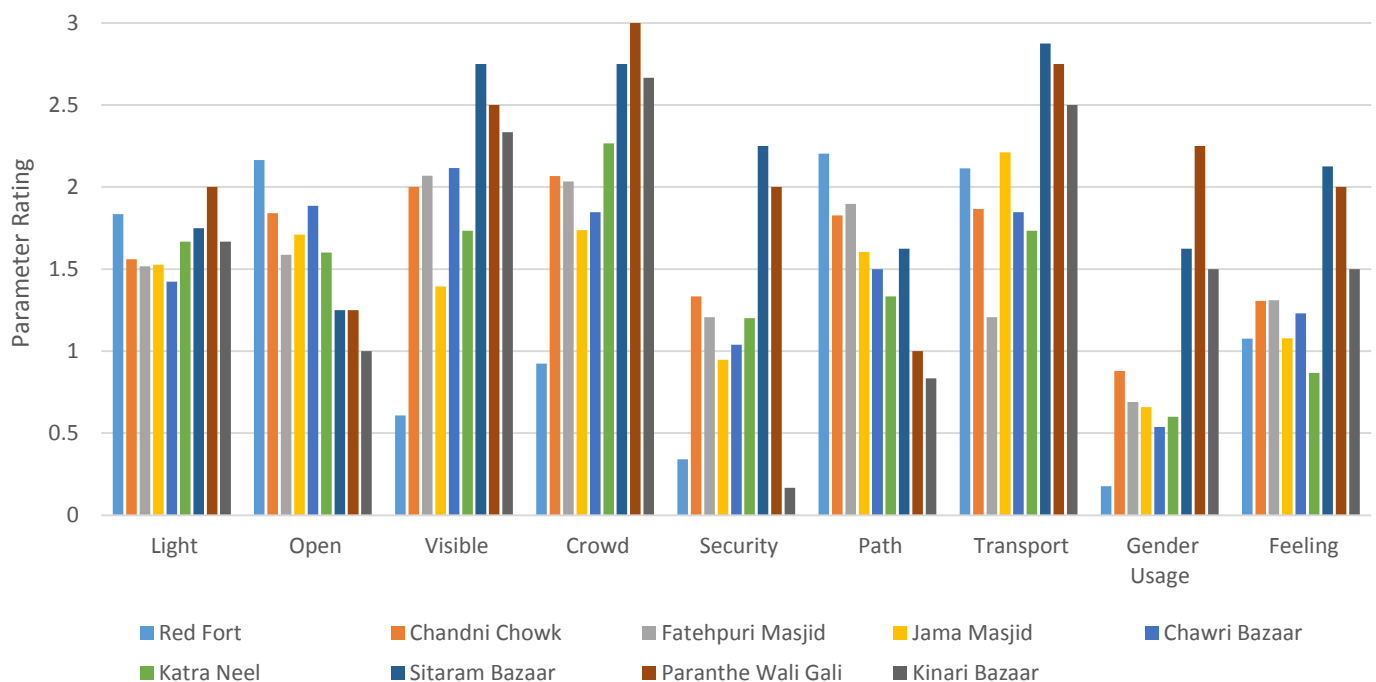
Safety Audits of the nine areas of Shahjahanabad indicate that the area offers basic safety in the evening hours. Each of the nine areas studied is different from the other. While the Jama Masjid, Red Fort and Chandni Chowk have been planned with a certain grandeur, the streets being used for commerce as well as residential purposes have a more intimate scale. The varying scales and uses has a direct relation with the perceived feeling of safety.

While the parameters of gender usage and security are rated poorly, the area fares average in all other parameters. However, due to extreme congestion, open drains and litter, and less women using these spaces, these areas feel uncomfortable.

Safety Audits indicate that the Walled City has an overall safety rating of 5/10, i.e. it is rated Average with respect to safety.



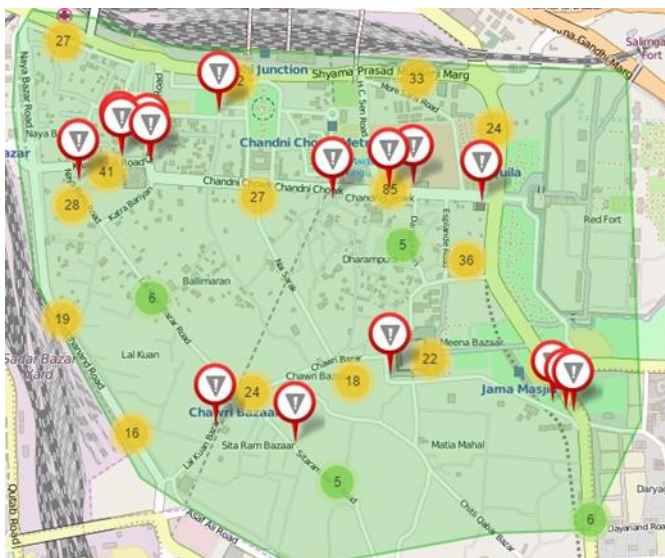
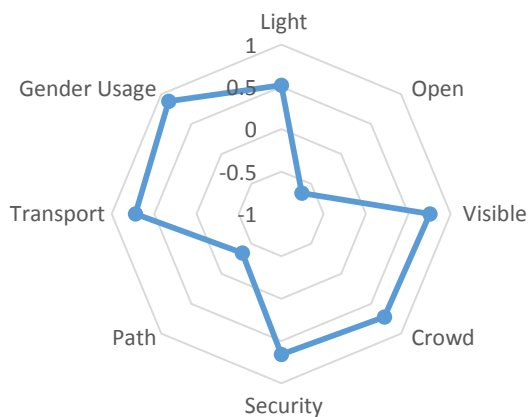
Average Audit Parameter Rating (out of 3)

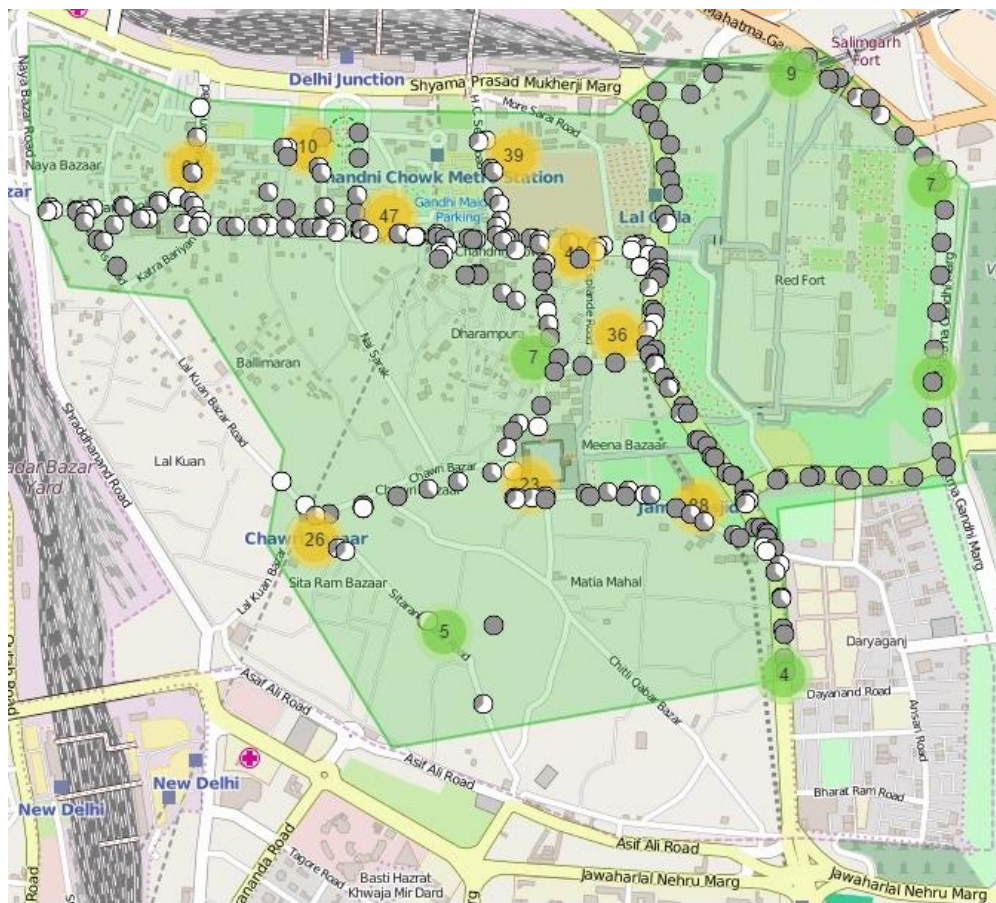


Average Audit Parameters (on a scale of 3) for the Nine Study Areas

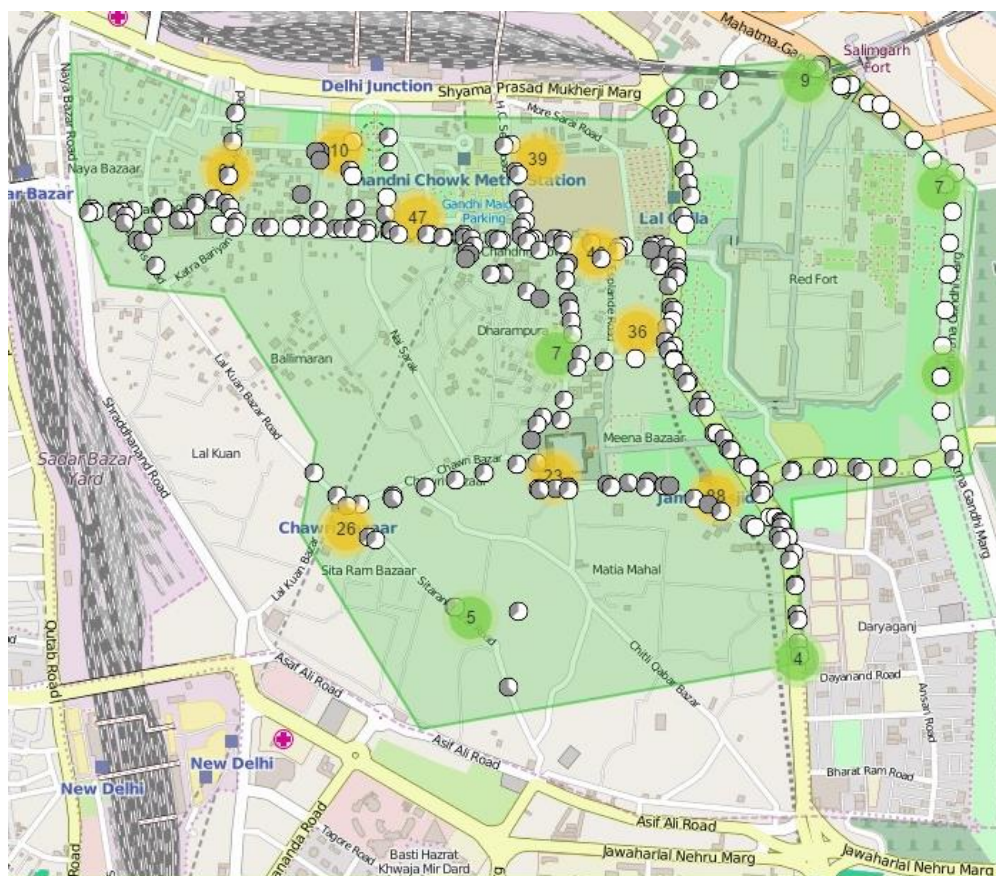


Safety Audits reveal that certain issues are common across all nine areas. The exposed electrical wires are a major threat to life and property. In many places they are very close to the windows of buildings and also hanging very low in the streets. Another major issue is the loading/unloading of goods taking place throughout the day. This adds to the congestion on the streets already choked with vehicles.



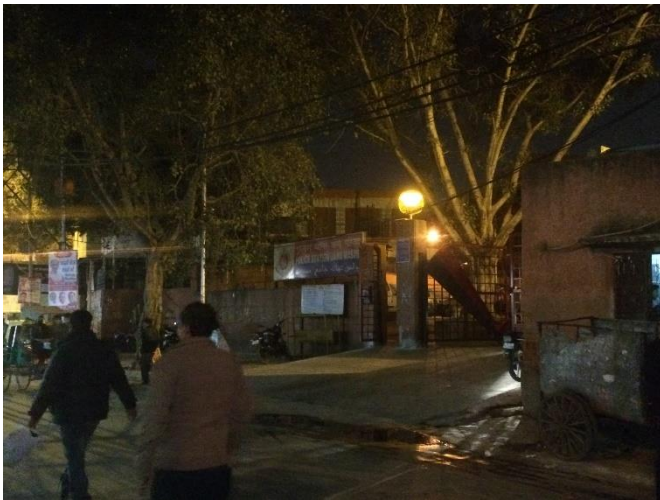


Security Rating of Shahjahanabad

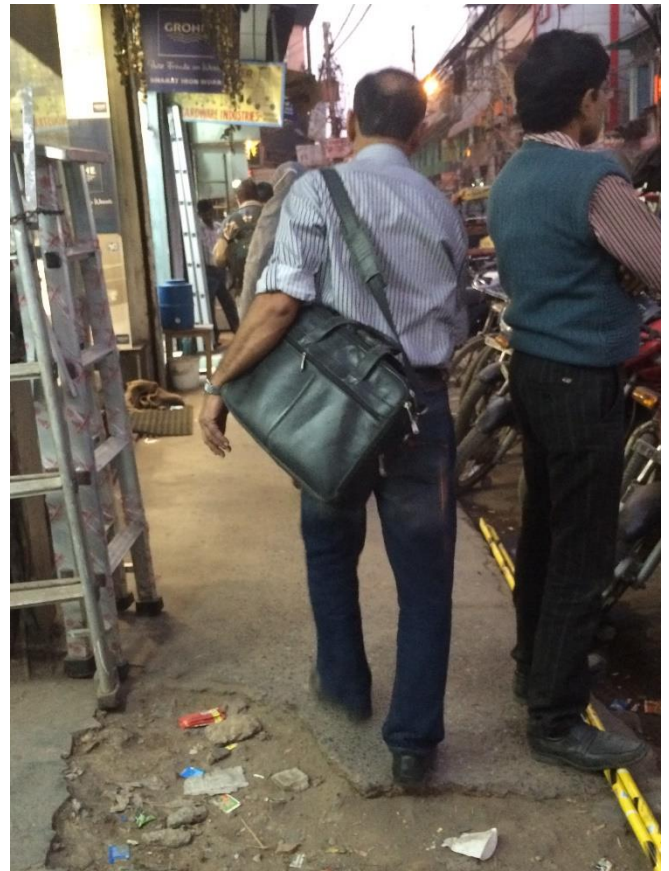


Walk path Rating of Shahjahanabad.

This area has many facilities in place. However, their maintenance needs more attention. The dead edges along building, condition of walk paths and the working of streetlights are all critical issues.



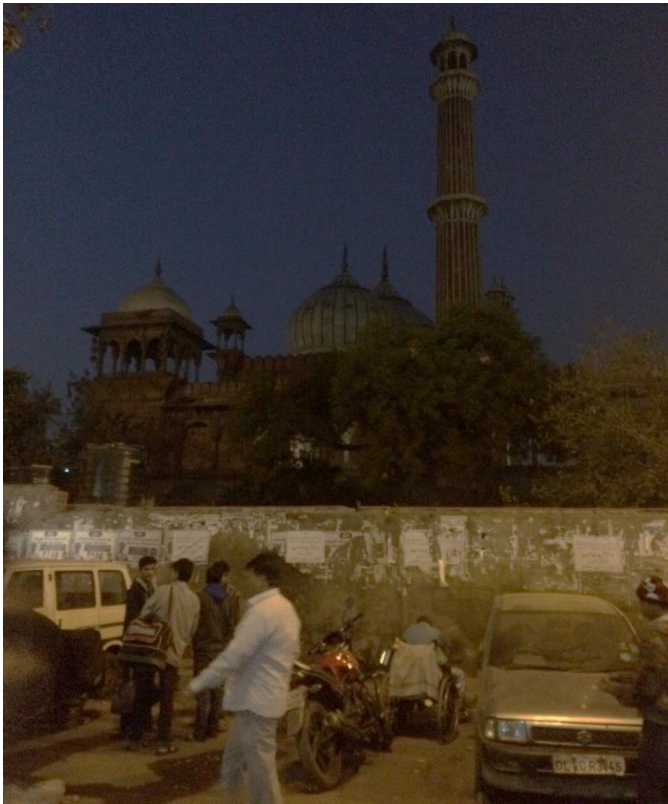
The public toilet is located with its entrance facing the walk path which makes it extremely uncomfortable for women to use it. The walk path is also used as a dumping ground for disused items. There is a Police Station in the area adding to the feeling of security.



There exists a dedicated walk path in most areas. However, it is not being maintained making it difficult to walk on. These are also being used for displaying of goods by the shops, impinging on the walking space.



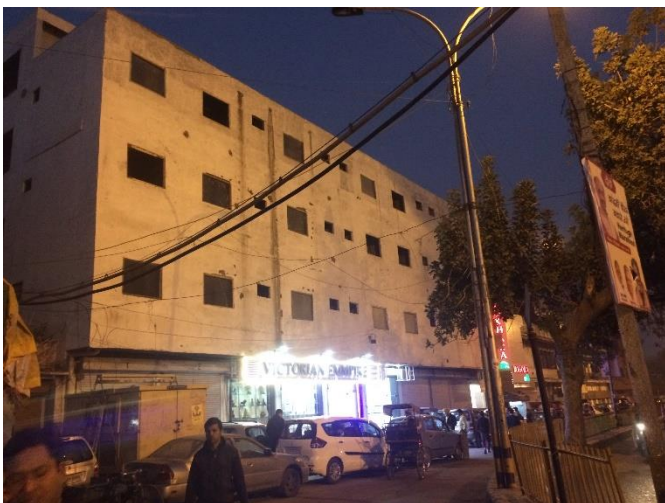
CCTV Cameras have been installed in many areas like chowks, junctions and outside metro stations. This adds to the feeling of security.



Dead spaces encourage homeless people to locate themselves and men to loiter. For women these areas are uncomfortable to pass by.



Goods and vehicles located on the walk path and along the street make it difficult for everyone to walk.



The new buildings being constructed have a different visual aesthetics. The number of windows looking onto the street is reducing.



The old buildings in the area have more windows and balconies, they thus offer greater visual connectivity with the street making them feel safer.












Rating of Gender Usage in Shahjahanabad



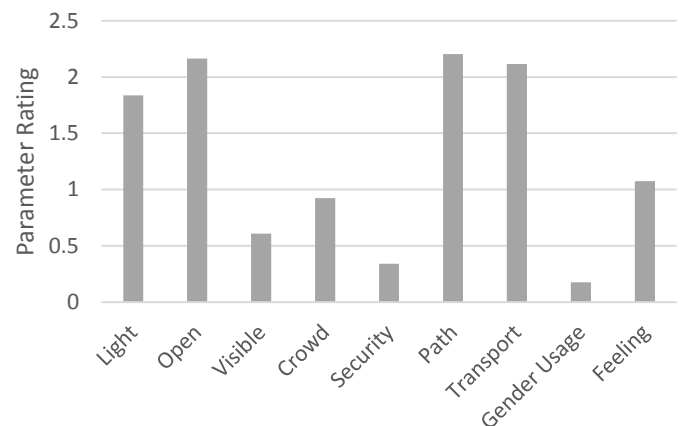
Rating of Visibility in Shahjahanabad

01.

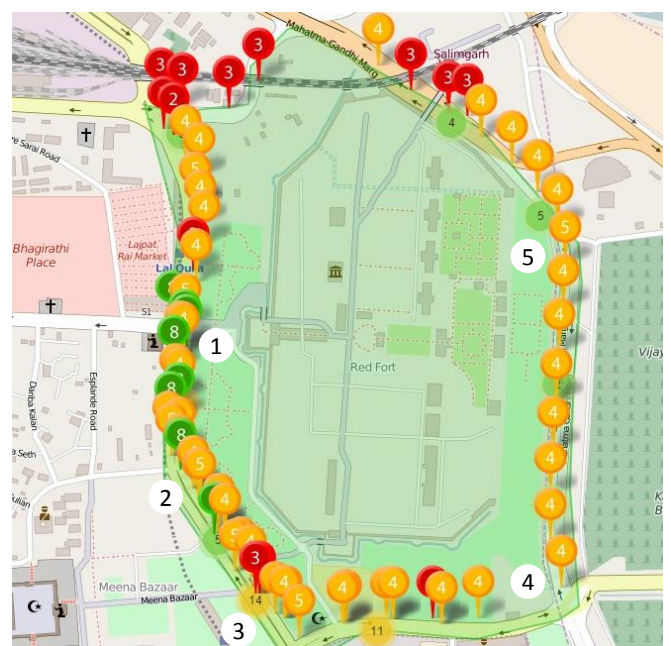
RED FORT

	1.8 – AVERAGE Majority of the area is well lit except for a few spots.
	2.2 – ABOVE AVERAGE The edge conditions of the complex are defined by wide open spaces and roads.
	0.6 – POOR The area is flanked primarily by boundary walls except the Chandni Chowk junction.
	0.9 – BELOW AVERAGE The Red Fort sees many tourists who along with few hawkers keep the entrance gate active. But, the other areas are secluded.
	0.3 – POOR Except the Red Fort Entrance, the area around the complex does not have any security.
	2.2 – ABOVE AVERAGE In most parts of this area, the walk paths in good condition.
	2.1 – ABOVE AVERAGE The area is well serviced by Metro and Bus, along with autos and cycle-rickshaws.
	0.2 – POOR The area is used by very few women.
	1.1 – BELOW AVERAGE The area mostly seems uncomfortable.

Safety Audits indicate that the area has an overall safety rating of 4/10, i.e. Average with the Red Fort entrance junction faring better than other areas.



Average Audit Parameters (on a scale of 3)

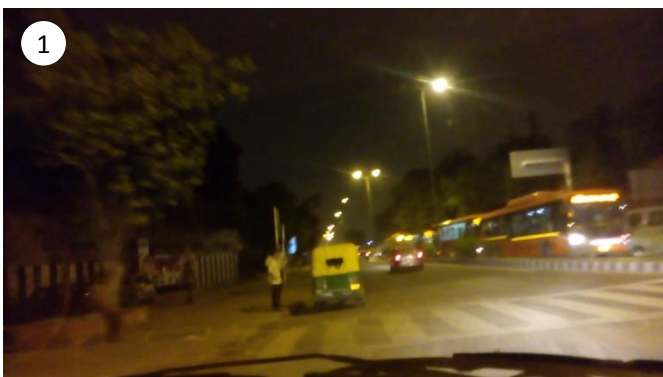


Map showing Audit Pins

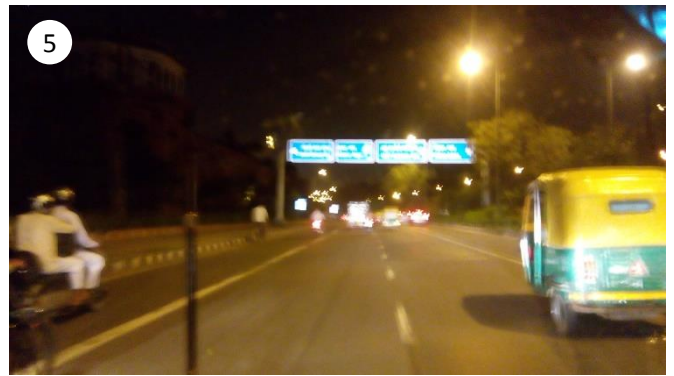
The Red Fort is one of the most visited tourist destinations. The junction at the entrance to the Fort, where it connects with Chandni Chwok is very active till the evening hours. There is also constant police patrolling in this area.

However, the other parts of the Red Fort do not see much activity. At few points, for example near the Petrol Pump or at the junction with road leading to Jama Masjid, there are a few hawkers. While they add eyes to the street, their locating themselves on the walk path makes it difficult to walk. On its eastern side, the Fort is flanked by an arterial road. This ensures easy access to public transport.

Overall, the area though has provision for walk path which is well lit as well. The lack of activity generating functions along the stretch makes it secluded.



Edge of the Red Fort



Being an arterial road, this stretch is wide open but there are no pedestrians using it.



No pedestrians as no activity happening along this stretch to attract people.












Walk path flanked by high boundary wall. Signage is partially covered. Also only men loitering on the road.



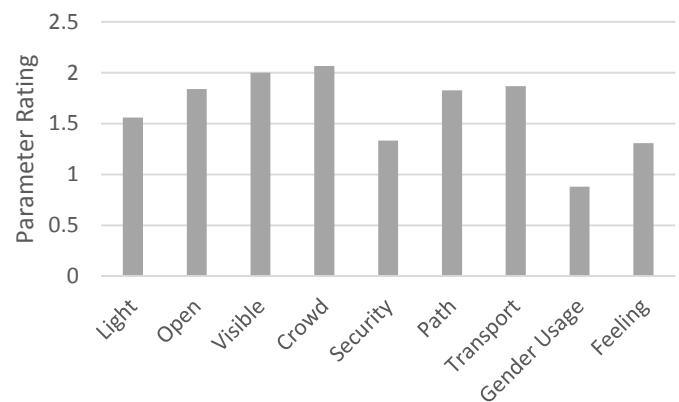
Walk path occupied by vendors

02.

CHANDNI CHOWK

	1.6 – AVERAGE	Majority of the area is well lit by street lights & light from shops. Lighting is poor after shops shut down (around 9pm).
	1.8 – AVERAGE	Being one of the wide streets on the Old City, the street scale is comfortable.
	2.0 – ABOVE AVERAGE	The street is defined by shops atleast on one side along with many hawkers ensuring lots of eyes on the street.
	2.1 – ABOVE AVERAGE	The street is occupied by shoppers, hawkers, along with worshippers going to the religious institutions.
	1.3 – AVERAGE	Presence of Temple, Gurudwara and public buildings like Town Hall offers some security.
	1.8 – AVERAGE	This stretch offers a colonnaded shaded path in many parts but the spill out from shops makes it difficult to walk on.
	1.9 – ABOVE AVERAGE	The Chandni Chowk metro station abuts the street and cycle rickshaws and autos are also available.
	0.8 – BELOW AVERAGE	Being a wholesale market selling a variety of products the area has many women shoppers but their number reduces in the evening hours.
	1.3 – AVERAGE	The area felt comfortable.

Safety Audits indicate that the area has an overall Safety Rating of 5/10, i.e. Average.



Average Audit Parameters (on a scale of 3)



Map showing Audit Pins

Chandni Chowk being one of the oldest wholesale markets of Delhi fares average in all the audit parameters. The shops cater to household goods and clothes. It also has many administrative and religious institutions. As a result it attracts many visitors of which a significant percentage are women. However, the women seen on the street reduces post sunset. Women accompanied by family members are seen using the religious buildings. Compared to other parts of Old Delhi, this area has a better gender mix.

Being originally designed as processional path, the street is very wide. The large number of vehicles-cycle rickshaws, autos, two-wheelers and cars have congested the area. The absence of a rickshaw prompts them to park themselves anywhere on the street. Private vehicles too are parked on street. The access to the metro station from Town Hall side gets very secluded and unsafe. The other exit/entry points need to be better defined.

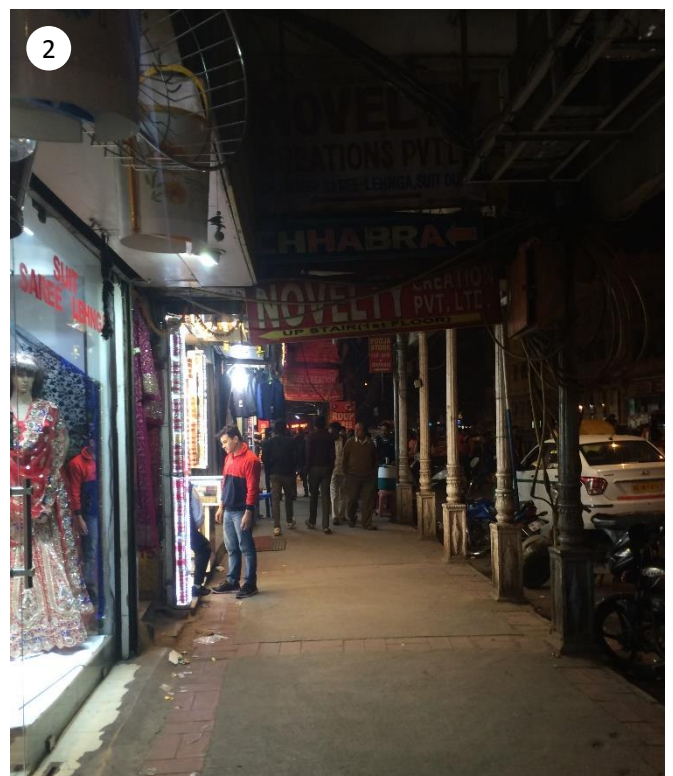
Owing to the diverse nature of user groups this stretch feels comfortable even in the evening.



Public facilities have been provided but the walk path needs to be provided integrating these.



The religious buildings tend to extend into the public right of way. The need to take off ones shoes makes the area inaccessible to the passer by.



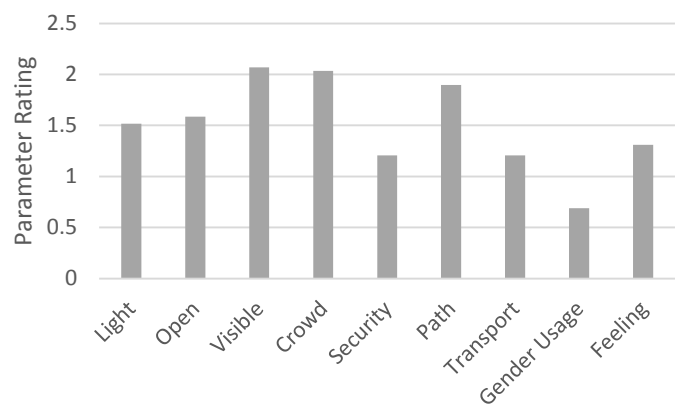
The stretch has a colonnaded walk path or an open path atleast on one side of the road. This is in fair condition in most parts. However, it is lit only by the light from the shops. Also, a lot of wires are seen hanging over it.

03.

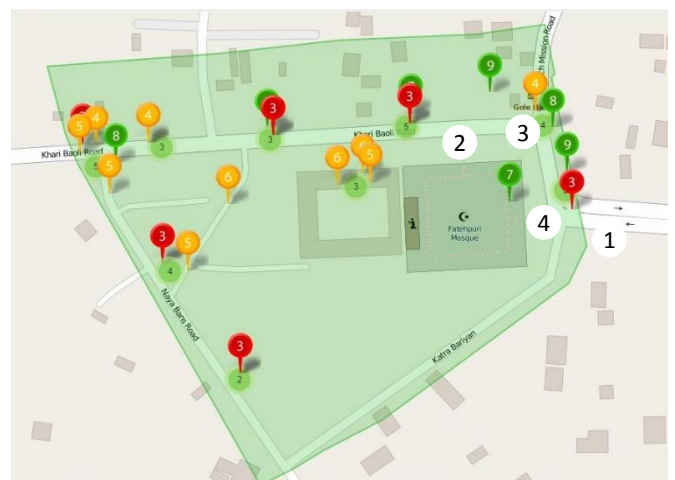
FATEHPURI MASJID

	1.5 – AVERAGE There are street lights provided along the stretch but many do not work.
	1.6 – AVERAGE The Fatehpuri Masjid junction is open but as one moves in the interior streets the scale starts to shrink.
	2.0 – ABOVE AVERAGE The presence of vendors and shops ensures good visibility.
	2.0 – ABOVE AVERAGE The area around the Masjid sees many visitors-worshippers and shoppers.
	1.2 – BELOW AVERAGE While there is some policing in front of the Masjid, the other areas are not patrolled.
	1.9 – ABOVE AVERAGE The walk path is in fair condition making it comfortable to walk on.
	1.2 – BELOW AVERAGE The Chandni Chowk metro station abuts the street and cycle rickshaws and autos are available.
	0.6 – POOR The area has very few women visitors.
	1.3 – AVERAGE The area felt fine.

Safety Audits indicate that the area has an overall Safety Rating of 4/10, i.e. Average.



Average Audit Parameters (on a scale of 3)



Map showing Audit Pins



The entrance to the Masjid is from a chowk. This is very congested and the open area is used to park more private vehicles.



The stretch has a walk path which is in a fair condition in most parts. However, the hawkers occupy parts of it reducing the space for walking.



There is a police booth at the junction but at times there is no policeman present.



The edge of the Masjid has shops in it. This makes it an active edge instead of a dead boundary wall.










The Fatehpuri Masjid defines one end of the axis of Chandni Chowk. This mosque being smaller than the Jama Masjid, the lack of grandness translates into a seamless interface with its surroundings. Unlike the edges of the Jama Masjid which is defined by a boundary wall, this masjid has shops all along it.

Towards its northern edge is the Spice Market. The area is active even in the evening hours though there are less women visible.

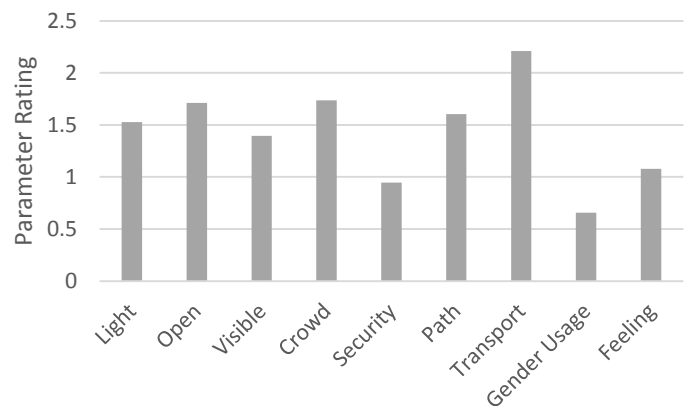
The walk path along the shops is in good condition as it is being maintained by the shop owners themselves. But in parts where it gets occupied by a hawker, it becomes narrow. Being a crowded area this makes walking a little difficult. This combined with the congestion generates an average overall feeling.

04.

JAMA MASJID PRECINCT

	1.5 – AVERAGE
Light(Night)	Street lights have been provided, but some do not work. Few are also hidden among trees.
	1.8 – AVERAGE
Openness	The entrance area to the mosque is open but the street otherwise isn't.
	1.1 – BELOW AVERAGE
Visibility	The street presence is due to the shops on one side as the Jama Masjid creates a blank edge.
	1.3 – AVERAGE
People	The entrance to the Jama Masjid is crowded, but the remaining stretch does not have many users.
	0.8 – BELOW AVERAGE
Security	There is a guard at the entrance to the Masjid but the other areas offer no sense of security.
	1.9 – ABOVE AVERAGE
Walk Path	There is a walk path provided but it is being used as an extension to the shops, making it unusable in some parts.
	2.3 – ABOVE AVERAGE
Public Transport	Metro Station and Bus Stops are nearby and can be reached by both autos and cycle rickshaws.
	0.4 – POOR
Gender Usage	There are very few women using this area. The shops deal with automobile and hardware products.
	1.0 – BELOW AVERAGE
Feeling	The congestion makes this area uncomfortable.

Safety Audits indicate that the area has an overall Safety Rating of 4/10, i.e. Average.



Average Audit Parameters (on a scale of 3)



Map showing Audit Pins

The Jama Masjid precinct has diverse edge conditions. Most of it is mixed use with shops on the ground floor and residences on the upper floor. There are few public buildings like a hospital and police station along it. The way these important functions interface with the road i.e. the public realm also plays an important role in determining the feeling of safety.



The buildings define the road edge followed by cars parked along it. In the absence of any walk path, people walk on the road itself.



Certain parts have dead walls flanking them. There are no or very few windows overlooking the road. The absence of a walk path and the vehicles parked all along, make it extremely uncomfortable.












The area around the mosque is lined with shops on the ground floor. These spill out onto the road. Private vehicles too are parked on the road itself. These make the area extremely congested.



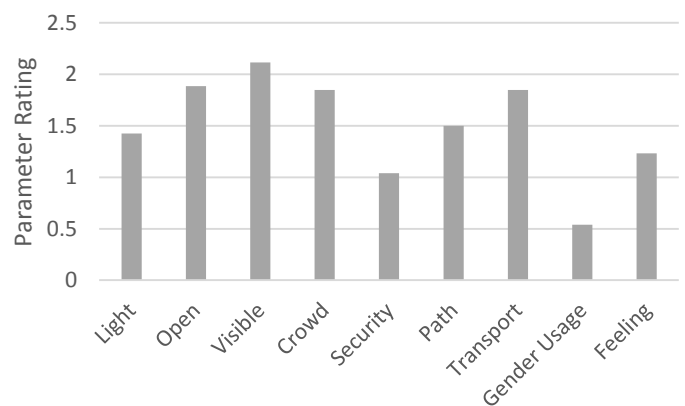
The high boundary walls provide a support for homeless people. While they do enhance the visibility, they make these parts uncomfortable to cross despite the walk path being a wide one.

05.

CHAWRI BAZAAR

	1.4 – AVERAGE
Light(Night)	There are few street lights in the area which along with light from the shops ensure average lighting in the area.
	1.9 – ABOVE AVERAGE
Openness	The bazaar street is of a comfortable scale, however, vehicular and goods congestion is a problem.
	2.1 – ABOVE AVERAGE
Visibility	The mixed use nature of the street having shops and residences, along with street vendors ensure one's high visibility.
	1.8 – AVERAGE
People	The bazaar experiences a lot of customers even in the evening hours and also people working in the shops.
	1.0 – BELOW AVERAGE
Security	While there is a police booth and some security outside the metro station, there are parts where there is no policing.
	1.5 – AVERAGE
Walk Path	The walk path exists but is occupied by good spilling out from the shops.
	1.8 – ABOVE AVERAGE
Public Transport	The metro station is located within 10minutes walk. Cycle rickshaws too are easily available.
	0.5 – POOR
Gender Usage	While there are many people in the street, very few are women.
	1.2 – BELOW AVERAGE
Feeling	The congestion, low gender usage, loading-unloading of goods; all make this place uncomfortable.

Safety Audits indicate that the area has an overall Safety Rating of 4/10, i.e. Average.



Average Audit Parameters (on a scale of 3)



Map showing Audit Pins

The Chawri Bazaar extends from the Chawri Bazaar Metro Station upto the Jama Masjid. This mixed use street offers high visibility. But the nature of commercial activity does not encourage many women users. There is some security near the metro station but throughout the street the security is less. There exists a walk path on both sides of the street along the shops. Constantly loading/unloading of goods and stacking them on the footpath itself makes it difficult to walk on. The bazaar has a comfortable open scale with two-three storey high structures.



The Chawri Bazaar metro station at night.



The bazaar street has a comfortable open scale.








Wholesale hardware market in Chawri Bazaar is not frequented by women. Few women were seen passing by.



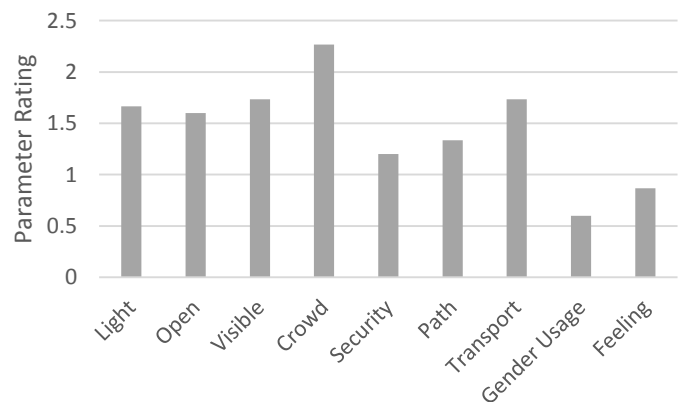
The goods are stored on the footpath and along the road causing hindrance to pedestrian movement.

06.

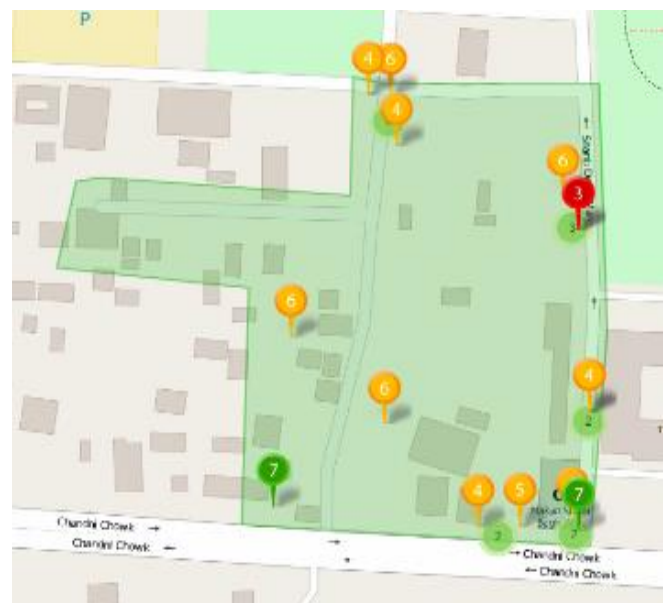
KATRA NEEL

	1.6 – AVERAGE There are few street lights and the area is lit due to light from the shops. After the shops close, the area is poorly lit.
	1.6 – AVERAGE The Katra Neel has an intimate scale while opens up along the Town Hall side.
	1.7 – AVERAGE The area has many small temples along with shops ensuring some visibility.
	2.2 – ABOVE AVERAGE The area is used by residents cum shop owners, shoppers, devotees visiting the temples; thus keeping the area active.
	1.2 – BELOW AVERAGE There is a guard house at the entrance but no regular policing inside or towards Town Hall.
	1.3 – AVERAGE The walk path is in a poor condition in Katra Neel though towards Town Hall it is in better condition.
	1.7 – AVERAGE The Chandni Chowk metro station is available within 10minutes.
	0.6 – POOR The area despite having clothes shops and temples, does not have women users in the evening hours.
	0.8 – BELOW AVERAGE The area is uncomfortable because of congestion.

Safety Audits indicate that the area has an overall Safety Rating of 4/10, i.e. Average.



Average Audit Parameters (on a scale of 3)



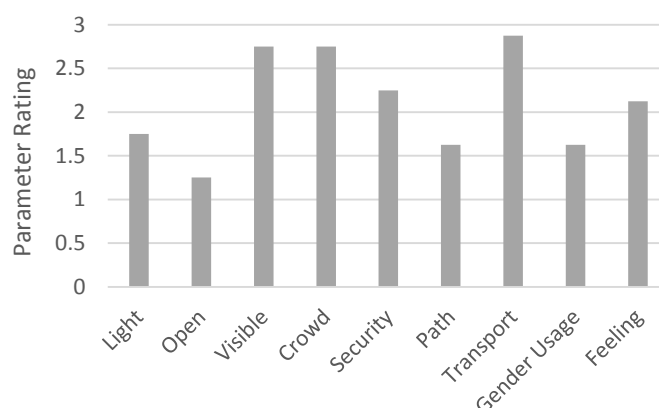
Map showing Audit Pins

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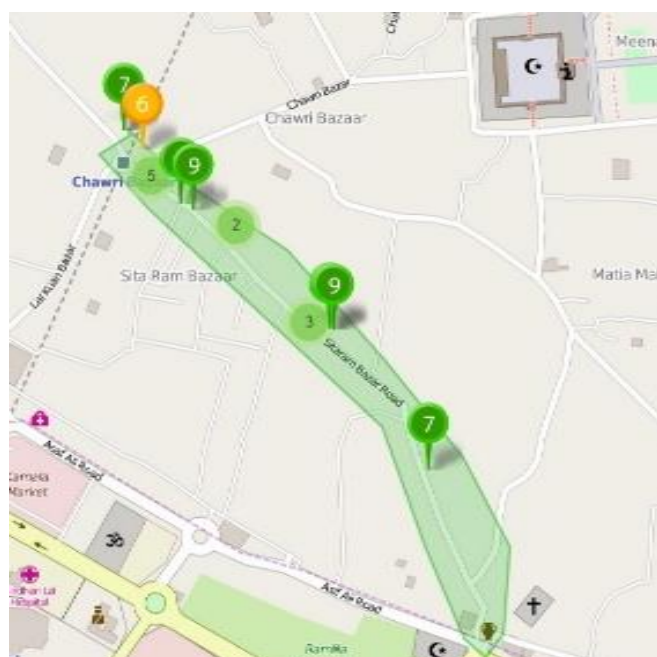
SITARAM BAZAAR

Safety Audits indicate that the area has an overall Safety Rating of 7/10, i.e. Good.

	1.7 – AVERAGE There are street lights provided in the area but still a patches with low lighting exist.
	1.2 – BELOW AVERAGE The street is not very wide and is congested due to vehicles and goods.
	2.7– GOOD Being a mixed use street with shops, residences and a number of street vendors, the stretch offers good visibility.
	2.7 – GOOD The area is crowded owing to shops.
	2.2 – ABOVE AVERAGE Police Booth is located in this area adding to the feeling of safety.
	1.6 – AVERAGE A walk path exists but is not in a good condition and is used by shops for keeping goods.
	2.8 – GOOD The stretch has the Chawri Bazaar metro station at one end and cycle rickshaws and autos are available.
	1.6 – AVERAGE The area has some women users even in the evening hours.
	2.1 – ABOVE AVERAGE The feeling is comfortable in this area.



Average Audit Parameters (on a scale of 3)












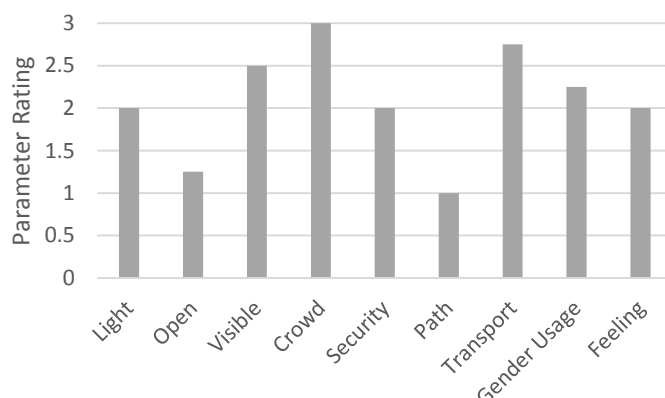
Map showing Audit Pins

08.

PARANTHE WALI GALI

Safety Audits indicate that the area has an overall Safety Rating of 7/10, i.e. Good.

	2.0 – ABOVE AVERAGE The area is lit by street lights as well as light from shops and eateries.
	1.2 – BELOW AVERAGE The street is narrow with three storey buildings, making it uncomfortable.
	2.5– GOOD The area is famous for its <i>paranthas</i> and sees many visitors who along with the local people ensure high visibility.
	3.0 – GOOD The area is full of people-localites, shoppers, foodies.
	2.0 – ABOVE AVERAGE The area is regularly patrolled by Police.
	1.0 – BELOW AVERAGE There is no proper walk path and the drains of the edges are left uncovered.
	2.7 – GOOD The Chandni Chowk metro station is within 10 minutes walk.
	2.2 – ABOVE AVERAGE There are many women visiting this area.
	2.0 – ABOVE AVERAGE The area feels comfortable.












Average Audit Parameters (on a scale of 3)



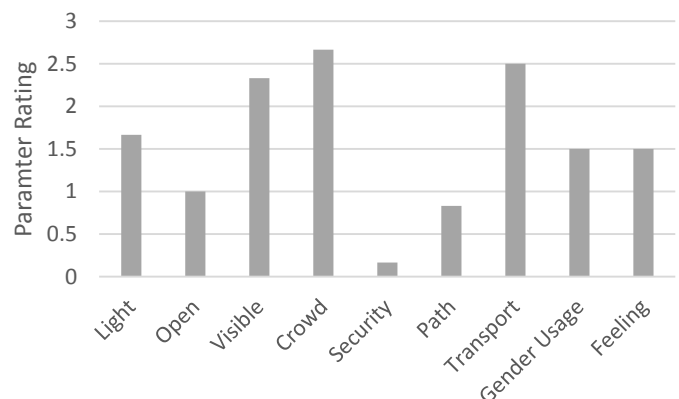
Map showing Audit Pins

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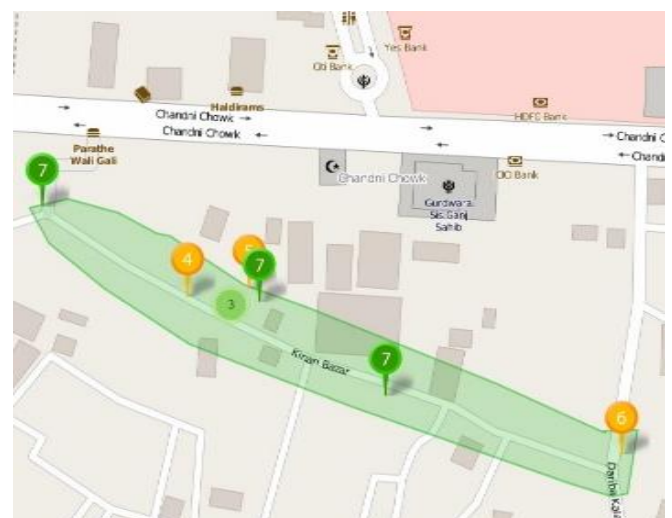
KINARI BAZAAR

	1.6 – AVERAGE Light from the shops and the street lights ensure the area is lit.
	1.0 – BELOW AVERAGE The street has a very intimate scale cause of its narrow street and three storey high buildings.
	2.3– ABOVE AVERAGE The shops and residences ensure high presence on street along with a few vendors.
	2.6 – GOOD The area sees crowd in big numbers.
	0.1 – VERY POOR There is no security along this stretch.
	0.8 – BELOW AVERAGE The narrow street with its open drains on the side is very difficult to walk on.
	2.5 – GOOD The Chandni Chowk metro station is within 10 minutes and can be reached by cycle rickshaw.
	1.5 – AVERAGE The area has few women visitors as the market caters to jewelry and clothing accessories.
	1.5 – AVERAGE The area is comfortable.

Safety Audits indicate that the area has an overall Safety Rating of 5/10, i.e. Average.



Average Audit Parameters (on a scale of 3)



Map showing Audit Pins

RECOMMENDATIONS

Safety Audits of Shahjahanabad reveal that by better urban management of services and upgradation of infrastructure, the area can be made much safer.

- **Regulation of movement of goods.** The shops have goods delivered throughout the day. Autos, cycle rickshaws and hand pulled carts are all parked along the road. This causes congestion hindering both pedestrian and vehicular movement.
- **Creating Vehicular Parking Zones.** In the absence of defined parking zones, private vehicles are all parked on the road. Proper parking zones need to be created. These have to be located to ensure they are convenient to use. The existing parking areas, for example the one near Meena Bazaar needs to be upgraded.
- **Integrated Public Transport (IPT).** Attention needs to be given for better integration of IPT into the transportation network. Metro Feeder service to major destinations can be introduced.
- **Dedicated stands for cycle rickshaws and auto rickshaws** need to be established. Proper stands outside metro stations and along each road or major junction will help streamline their operation. Bus Stops too need to be improved near the Red Fort.
- **Overhead electrical wires need to be shifted underground.** Also, the infrastructure provision should not pose a threat to human safety.
- **Improve Street lighting.** There is provision for street lighting. However, it is insufficient. Many old light poles without the lamp can be spotted. A lot of the street lights do not work. The area is well lit by the light from the shops. After the shops close i.e. after 8pm, the area becomes dark. Dark spots have also been identified in certain areas where there are no shops.
- **Improve Drainage and Sanitation.** In certain areas like Kinari Bazaar and Paranthi Wali Gali, open drains run along the side of the street. These make walking difficult besides becoming a breeding ground for infection spreading insects.



Congestion on the street

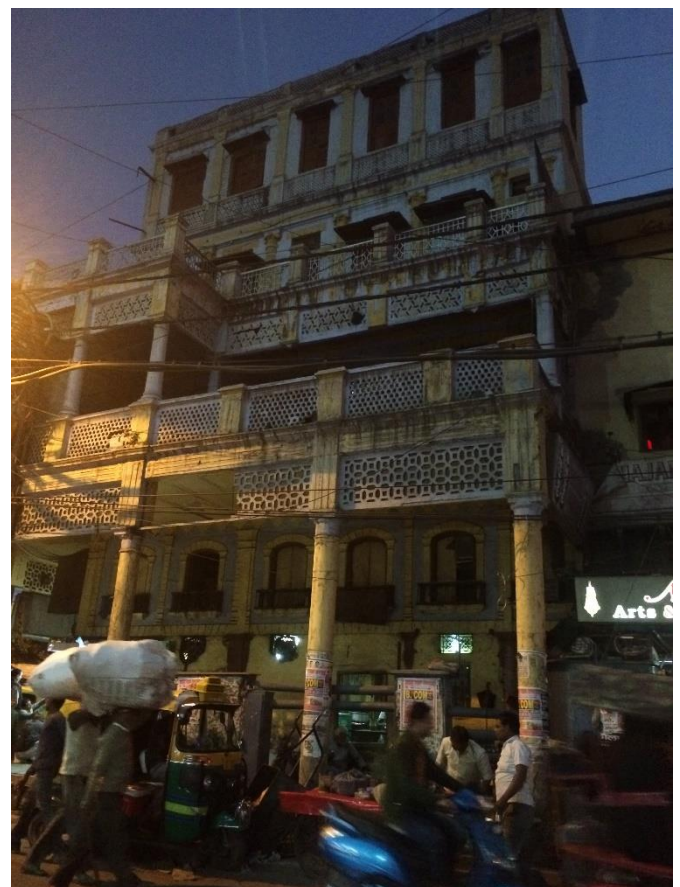


Transformers and electrical wire along the street.

- **Maintenance of Walkpaths.** The walkpaths are broken in many parts. Some shop owners are maintaining the path in front of their shops. Also, the staking of goods along the walk path needs to be prohibited. In certain areas, the footpath needs to be widened. There needs to be regular checks for monitoring and maintenance.
- **Improve Police Presence.** Ensuring that this is constant police patrolling in the entire area will make it safer.
- **Space for Hawkers.** In the absence of any designated space, the hawkers and vendors locate themselves on the street or on the footpath.
- **Control encroachments and expansions.** This is extremely important along narrow streets. The overhangs from the shops and projections on upper floors further increase the sense of enclosure, reducing openness. Building bye-laws are needed to regulate these.
- **Activate dead zones.** The areas along blank boundary walls and where the back of a building defines the street edge, these need to be activated. The areas being used for dumping need to be cleared. Street Furniture can be provided which would allow for better use of the area. For example, the area along the secondary entrance to the Jama Masjid. Clearing the area and turning that into a cycle rickshaw stand could ease congestion on the main entry side. Provision can then also be made for hawkers to locate themselves there.
- **Restoration of abandoned structures.** Many structures in the old city are lying vacant. This reduces one's visibility in that area. If these structures can be retrofitted/restored and become habitable, they can be used to introduce new activities into these areas. Currently, certain areas on account of the nature of activity, do not encourage women users. A new function could become a catalyst for change and revive the magic of the heritage city.



Entrance to the Paranthi Wali Gali.



Old buildings retaining the original built character of the walled city.