TRAFFIC NOISE POLLUTION IN DELHI
Traffic Noise Pollution in Delhi

Monitoring of noise levels at different traffic sites is one of the most important objectives of the present study. We want to cover all the cardinal points of Delhi situated along the important roads. The roads can be classified as arterial roads like the Ring Road, main roads like the Pusa road, commercial roads like the Daryaganj Road, residential roads like the RK Puram road etc. The sampling period as stated before is three hrs. a day. Each day is divided into three, morning, afternoon and evening. Sound level in dB(A) is measured at least 3 readings a minute. Every time, frequency spectrum is recorded putting the switch on on octave which puts the linear weighting network of SLM on functioning. Everytime the traffic flow in terms of Buses, Trucks, Cars, 2-ws and 3-ws were counted for five minutes. Later on, traffic flow per hr was calculated.

We have put the calculated values in each site in tables. The noise levels at each site, each time is given in terms of L10, L50, L90, LNP and TNI. The frequency spectra give an idea of energy distribution against octave band analysis.

However, we would like to give, brief sketch of each site monitored.
Site No. 01  Darya Ganj

It is one of the most commercial and commercial roads of Delhi bounded by high rise buildings on both sides. The road is usually congested and often causes traffic bottlenecks. The noise is supposed to persist for longer as successive reflection may take place between two vertical walls like buildings. The shopkeepers, salesmen both official and pedestrian are directed exposed to noise. There is virtual no greenery which is supposed to act like sink to noise. The sampling site was chosen the Darya Gunj thana on the gate of which the SLM was put and noise levels monitored three days, each day three times, each time an hour.

Site No. 02  Munirka Road (T-Junction)

It is a segment of the outer ring road, popularly known as Palam Road. It passes through the Munirka market and residential complex like RK Puram Sector No. 3 and 4 and DDA flats. It is regulated with the traffic light signals. It is partially aligned with trees.

Site No. 03  Ber Sarai

It is a segment of the New Mehrauli Marg crossing by the village Ber sarai and JNU old campus. The monitoring site chosen was at a bus stop. It is T-junction near a cential school. It is
equipped with traffic light signals. It is more or less an open space, Bersarai park on the left. It is green. There is no traffic jam.

Site No. 04  Flyover on Delhi Cantt. Rly. Station

It is situated on the way to Lajwanti Garden from Dhaula Kuan. Of course, there is a gradient on the road. There is a free flow of traffics. There is no traffic light. It is an open space. No greenbelt along.

Site No. 05  Rafi Ahmad Kidwai Marg

It is four-way intersection in between the President House and the India Gate. Traffic is regulated by light signals. It is greenbelt and open space. Occasionally there is public rallies in boat club. But our monitoring has been keen infringed with such disturbances.

Site No. 06  Shantivana

It is a segment of the Ring Road behind the Red Fort. It is a free flow traffic. No traffic regulation nearby. Trucks and interstate buses frequently and freely ply over it. The monitoring was conducting sitting on a park near the roadside. Greenbelt is all along the road. Behind the column of trees, there is open meadow. It is a free space.
Site No. 07  Yusuf Sarai

It is situated on Shri Aurobindo Road, next to AIIMS. It is a busy traffic thoroughfare. There are wall-like buildings on both the sides of the road. There are occasional traffic congestion in the evening. There is busy market on both sides of the road. There is no open space, no greenbelt. The monitoring site is at a four-way crossing.

Site No. 08  ITO (Towards Red Fort)

The monitoring site is at a T-junction with a police beat box. It is a busy thoroughfare. The traffic is always heavy but there is no bottlenecks. Community noise is always considerable as large number of commuters wait for buses at nearby bus stop. Vendors and pedestrians also are in large number. There is no greenbelt, no open space.

Site No. 09  Laxmi Nagar Market (Shakar Pur)

It is situated on the Vikas Marg. The road is aligned with wall-like buildings on both the sides. It is a market place. The monitoring site is at a bus stop. There is no open space nor greenbelt.
Site No. 10  Moti Nagar Crossing

It is in the west Delhi. It falls in industrial area. But industrial noises were not intruding. It has heavy traffics. There was a bus stop near a four-way crossing where monitoring was done.

Site No. 11  Ambedkar Stadium Crossing

It is a four-way traffic intersections. There is an open space and green meadow, if not greenbelt. The monitoring site is a traffic police beat box. Traffic is heavy and regulated by traffic light signals.

Site No. 12  Red Fort

It is monitoring site on the main road to the ISBT. It is a T-junction where Chandni Chowk Road meets. On the opposite side is the Red Fort. The traffic load is higher. Though the traffic is controlled by the traffic light signals, almost every day there is traffic jam in the evening. The left hand side of the road is crowded and virtually aligned with the buildings. Right hand side is an open space behind which the historical monuments, Red Fort is situated. There is heavy rush of commuters who board the buses. Pedestrians and hawkers are many. Community noise also is considerable.
Site No. 13  National Museum

The monitoring site chosen is on the Janpath, near the National Museum. It is four-way traffic cross section. The other road connects President House to the India Gate. The traffic is never heavy, no bottleneck. The traffic light system guide to the flow of traffic. It is studded with greenbelt and green meadow of the Boat Club.

Site No. 14  Bhairon Road Crossing

The monitoring site is situated at T-junction where the Ring Road takes a steep turn. It is very near the Pragati Maidan Gate No. 3. There is heavy traffic but no traffic jams. The traffic is regulated by the traffic light system. There is almost green open space nearby.

Site No. 15  On the ITO Flyover

The monitoring site on the middle of the flyover. Both sides, there are upward gradients. Free flow, no traffic light, no bottlenecks are the characteristics of this flyover. Virtually free space but no greenbelt exist here.

Site No. 16  Mall Road

The sampling site for noise monitoring is chosen on a police beat box situated on a small bridge over an open drain.
There is a free flow traffic. No traffic bottlenecks, open space, no greenbelt are the characteristics of the site.

Site No. 17 Ring Road (Azadpur Sabzi Mandi Crossing)

The sampling site is in a traffic police beat box. It is situated at a T-junction where the road to azadpur emanates from. The traffic is light signals regulated. Occasional traffic congestion occurs. Heavy rush of trucks are the characteristics. Partially open space, no greenbelt occur here. Community noise predominates.

Site No. 18 Ring Road (Punjabi Bagh)

The monitoring site is again at a traffic police beat box at the edge of the four way traffic cross section. There is heavy rush of traffic all the time. Morning and evening, there are occasional traffic chaos. Partially open, no greenbelts are the characteristics of the sampling site.

Site No. 19 Ring Road (Wazirpur Depot)

It is situated on the Ring Road in the North-West Delhi. The sampling site is a traffic police beat box at a T-junction, where a road goes towards Pitampura TV Tower from. It is a site of heavy traffic but there is no traffic bottlenecks. It is a
open space without greenbelt.

Site No. 20 Safdarjung Road

The sampling site is at a traffic police beat box at a four-way cross section of the road. It is a meeting point of the Race Course Road and Prithivi Raj Road. The light vehicles predominates the traffic. Buses also are frequent but trucks are not. It is a open space with a lot of trees.

Site No. 21 Qutab Minar (T-junction)

The sampling site at a police beat box in front of the entrance to the monuments. It is a T-junction with sharp bends. Three sides are the open space. Greenbelts and green meadow exist. There is no traffic control.

Site No. 22 Kamala Nagar (Ghanta Ghar)

It is a busy market cum residential place. The sampling site is a four-way cross section of the road near a traffic police beat box. There is no open space, no greenbelt. Communities noise also important.

Site No. 23 Lajwanti Garden Crossing

The sampling site is at a traffic police beat box. It is a four-way traffic junction with heavy rush of traffics. High
rise buildings, no open space, no greenbelt are the characteristics of the site.

Site No. 24  Ring Road (Raja Garden)

The sampling site is at a police beat box near a four-way traffic junction. The traffic is heavy and regulated by traffic light. But still occasional traffic jams occur. There is no open space, no greenbelt.

Site No. 25  Ring Road (Māyā purī)

It is a four-way traffic junction. The sampling site is at a traffic police beat box. There are occasional bottlenecks of traffic. No open space but greenbelt exist at the site.

Site No. 26  Yashwant Place

The monitoring site is on the Africa Avenue near the Yashwant Place Shopping Complex. The sampling point is at a four-way roundabout. Free flow of traffic occurs as there is no need of traffic light. Car predominates. Open space and greenbelt occur.

Site No. 27  Ring Road (Under Mulchand Flyover)

The monitoring site is on the ring Road just under the flyover. The traffic flow is regulated by traffic light. There is
closed space at the sampling point.

Site No. 28  Ring Road (Bhikaji Cama Palace)

It is a four-way traffic cross section. The sampling site is a traffic beat box. The traffic load is heavy. It has greenbelts on one side of the road, the other side is bounded by official complexes.

Site No. 29  Madras Coffee House (CP)

It is busy commercial-cum-shopping area. The sampling site at a bus stop in front of the Madras Coffee House. There is no traffic light. There is no open space, no greenbelt. Community noise predominates.

Site No. 30  Yamuna Bridge Far End (Vikas Marg)

It is a busy traffic thoroughfare. The sampling site is at a police beat box just at the far end of Yamuna Bridge, away from the ITO. Heavy traffic and traffic chaos are the characteristics of this site. There is open space all around.

Site No. 31  Madhuban Crossing

It is a four-way traffic cross section on the Vikas Marg. It is regulated by the traffic light. There are usual traffic bottlenecks in the morning and the evening. There is no
open space, no greenbelt. It is police beat box which serves our monitoring site.

Site No. 32  IIT Crossing

It is on the Shri Aurobindo Road. The sampling point is at a police beat box. There is a heavy rush of traffics all the time. There are traffic chaos more frequently in the evenings.

Site No. 34  Palika Crossing Janpath (CP)

It is a four-way traffic junction where Janpath meets the outer circular road of CP near the Palika Bazar. Traffic is regulated by light. There is heavy rush of traffic all the time. Commuters, pedestrians and street shoppers make noise also.

Site No. 35  India Gate

There is a four-way traffic cross section. There is a roundabout on which we have made sampling. There is free flow of traffic. There are open space and greenbelt. Community noise also is appreciable.

Site No. 36  Ring Road (Ashram Crossing)

It is a four-way traffic intersection where the Mathura road meets the Ring Road because of which there is always heavy traffic. The Sampling site is at a police beat box. There is
open space but no greenbelt.

Site No. 37    Ring Road (ISBT)

The sampling site is at a four-way traffic junction near Mori Gate. The traffic is regulated by traffic light system. Occasional traffic jams occur. It is a open space with greenbelt partially.

Site No. 38    Shankar Road (Delhi Ridge Crossing)

The sampling site is a circular park which acts as a traffic round about. There is always heavy traffic. The space is ideally open all the side. It is in the midst of a jungle called Delhi Ridge. There is no traffic light. The traffic is heavy but no traffic chaos occurs.

Site No. 39    Ring Road (South Extension)

The sampling site is at a traffic police beat box near a four-way traffic intersection. The traffic flow regulated by traffic light signals. The heavy traffic is interrupted by the cars and pedestrians who visit the place for shopping. The community noise is also present.

Site No. 40    Karampura Crossing

It is busy thoroughfare. Nearby is a DTC bus terminus.
The sampling site is a police beat box at the four-way traffic junction. The commuters are numerous. There is no open space, no greenbelt.

Site No. 41 Ring Road (AIIMS)

The sampling site is at the bus stop. There is open space but partial greenbelt. The other characteristics are the same as in a typical site on Ring Road.

Site No. 42 Nehru Place Crossing

The sampling point is at a traffic police beat box on a four-way traffic interaction near Paras Cinema. There is limited open space. There is heavy traffic but no traffic congestion.

Site No. 43 Josheph Brij Tito Marg

The sampling site is located at a traffic police beat box. It is a four-way traffic cross section. The evening is usually traffic jammed. Traffic regulation is made by traffic light. There is open space as well as greenbelt.

Site No. 44 Dhaula Kuan

The sampling site is at the center a circular park which also act as a roundabout around which the traffic flow occurs. The traffic is always heavy. In the morning and the evening there
occurs traffic bottlenecks.

Site No. 45 Hotel Janpath

The sampling site is at the center of a circular park which act as a traffic round about. The traffic is heavy but no traffic bottleneck occurs there. The site is green but surrounded by high rise buildings.

Site No. 46 Aurobindo Marg (AIIMS entrance)

The sampling site is at a bus stop facing Safdarjung Hospital infront and AIIMS at back. The traffic load is heavy and the number of commuters is much more.

Site No. 47 West Patel Nagar (Pusa Road)

The sampling is at a police beat box near a four-ways cross section after a green traffic round about. There is no traffic light as the roundabout is supposed to regulate the traffic. There is heavy traffic and traffic chaos are usual. The commuters predominate.

Site No. 48 Central Secretariat

The sampling site is at the center of a circular park near the Rakabganj Gurudwara. The open space is limited. There is partial greenbelt. No traffic light. As it is near a bus
terminus, there is always traffic noise.

Site No. 49 Nehru Park (Ashoka Hotel back)

It is a T-junction. Three sides are open and green. Traffic is regulated by light.

Site No. 50 ISBT (Inside)

The sampling sites are at bus stop numbers 30, 31, 17, 18, 21 and 22. The average value is taken. Here the buses are frequent. The passengers and hawkers make much noise which is added to the bus noise.