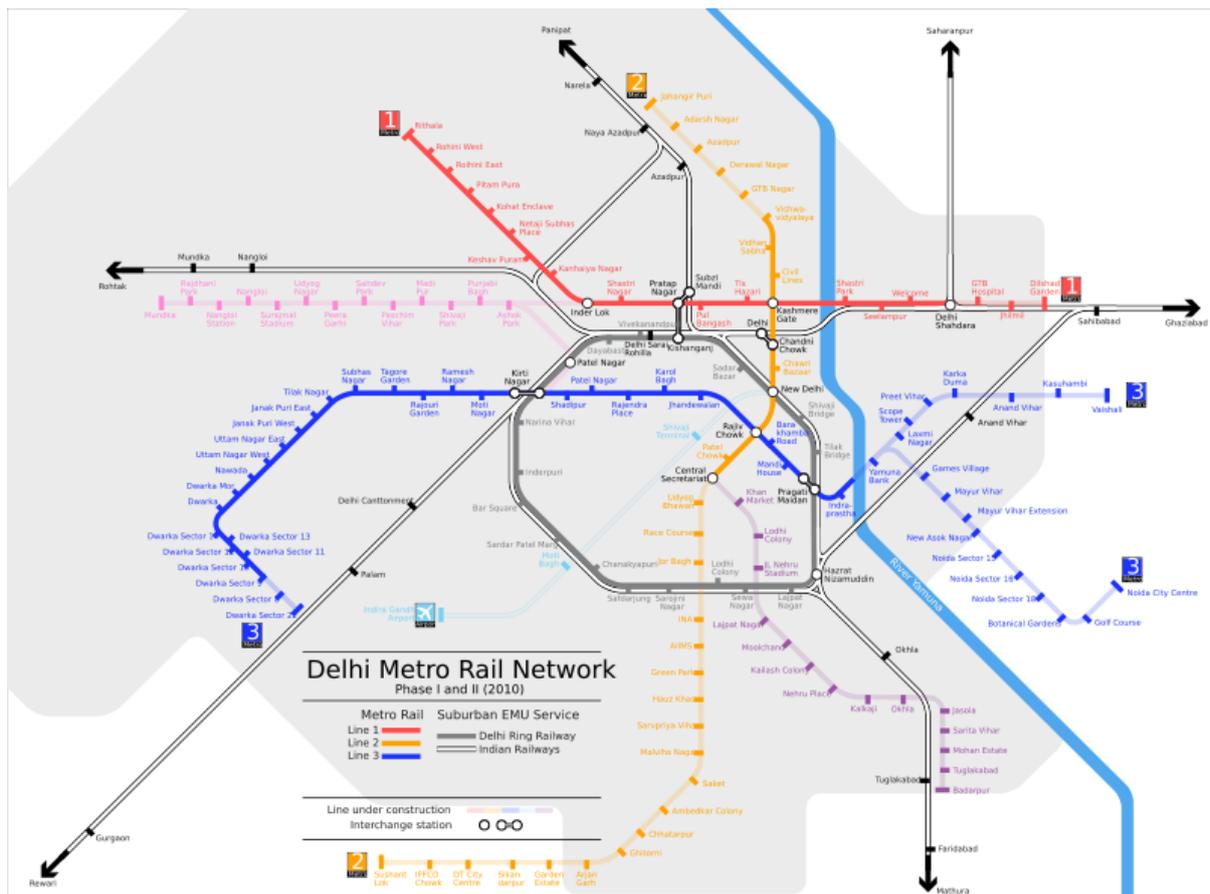


Integrated Public Transport System of Delhi: Delhi Ring Railway

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Source: <http://risingcitizen.blogspot.in/2008/05/why-london-wants-delhi-metro-model.html>

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In Brief

A ring of land and rail tracks encircling central Delhi, with a string of stations to handle a large number of passengers, would ideally have been a convenient and popular transport mode. However, that is not the case as we find that both road and metro transport have avoided the existing Delhi Ring Rail and set up their own independent networks.

This monograph deciphers the key problem that has prevented the use of Delhi's Ring Rail as an important mode of public transport. We find the same class of problems that are true of other areas in Indian governance that have prevented the optimal solution for Delhi's transport needs.

We find that there are three core issues that are creating hurdles in the use of this valuable opportunity.

- The first component lies in the inability of the land owning agency (Railways), land clearing agencies (Delhi Government, NDMC, MCD etc.) and policing agency (Delhi Police) to come to a cooperative solution. The inability of authorities/agencies to coordinate and cooperate is the fundamental factor that prevents optimal solutions.
- The second lies in the inability of the state to identify and implement resettlement for lakhs of slum dwellers who have occupied large and important sections of high-value land.
- The third lies in the lack of broader thought on integrated transport for Delhi, where the Delhi Development Authority has failed to come up with innovative solutions, the state government is not empowered, and the central government has till date been focused elsewhere.

But solutions do exist, and we propose a possible solution with the following components

- The creation of a single coordinating entity between DTC, Delhi Metro, Delhi Government, and Indian Railways, is necessary. This will help coordinate and set-up a comprehensive multi-modal integrated transport framework for Delhi.
- A Special Purpose Vehicle that will have ownership over the land owned by the Indian Railways must be set up. Change of land use, development, and eventual commercialization, as well as low-cost housing for slum dweller resettlement, will then be undertaken by the SPV.
- The construction of a new circular Delhi Metro line can then be undertaken by the Delhi Metro Corporation with the SPV. Indian Railways can continue to use its current tracks for freight purposes or even improve their quality with the resources generated. The SPV can also consider the commercial development of collateral land for residential and/or commercial use.

The optimal use of large tracts of high value, centrally located land that is currently being wasted, the need for urban transport, the positive environmental impact of integrated urban transport, the improvement in lives due to slum-dweller resettlement, will make this entire exercise into an extremely beneficial project.

What the Delhi Ring Rail is, and what it is not

The ring rail is officially Hazrat Nizamuddin-Hazrat Nizamuddin Parikrama Electric Multiple Unit (EMU). According to the National Train Enquiry System¹, the train leaves at 8:00 am in the morning every day from Hazrat Nizamuddin station and covers a distance of 43 kilometres in 1 hour 45 minutes.

When the Ring Rail line was constructed in the 1970s it was initially called "Delhi avoiding line" as it was outside the limits of Delhi. However, later it came to be known as "Goods avoiding line", as it was mainly used for freight trains. The aim was to bypass the crowded stations of Delhi. However, suburban trains were introduced on the ring rail during the 1982 Asian Games held in Delhi.

The main purpose for which the Delhi Ring Rail network was created was freight transport and not passenger transport. Passenger trains were added to the network, in an ad hoc manner.

The average daily ridership of the train is a little more than 3500. The train fare is Rs. 10 for which one can travel to any station. This low fare is the prime reason why people still use it for commuting. In fact, for many poor people, Delhi ring rail is a cheaper option than even the DTC bus service.

One train leaves in the morning and another in the evening. There is no confirmed number in between the two periods.

The Delhi Ring Rail Experience – Notes on a strange ride by Chander Shekhar

Despite being a resident of Delhi for more than 25 years, I was oblivious to the existence of Delhi Ring Rail. So when I did come to know about the train service I decided to have a first-hand experience. As per the Indian Railways, the train is supposed to cover the distance of 43 kilometres in 1 hour 45 minutes. However, it is not always that the train covers the distance within the specified time limit.

During my journey on the train, it was delayed by more than an hour as the track had fractured just outside the Naraina Vihar station. When I enquired with other regular passengers, I was told that this phenomenon of track fracturing was common on the Ring Rail line. The main reason for such regular fracturing of the track is the heavy freight traffic that this line handles and poor maintenance.

During most of the journey, the train was quite empty. It was only on the Dayabasti, Vivekanand Puri Halt, Delhi Kishanganj, Sadar Bazar, New Delhi stretch that number of passengers increased a little bit. Most of the time the train runs through a section that is surrounded by *jhuggies* on both the sides.

During its journey the train covers 22 stations which are Hazrat Nizamuddin, Lajpat Nagar, Sewa Nagar, Lodhi Colony, Sarojini Nagar, Delhi Safdarjung, Chanakyapuri, Sardar Patel Road, Brar Square, Delhi Indrapuri, Naraina Vihar, Kirti Nagar, Patel Nagar, Shakurbasti, Dayabasti, Vivekanand Puri Halt, Delhi Kishanganj, Sadar Bazar, New Delhi, Shivaji Bridge, Tilak Bridge, Pragati Maidan.

¹ National Train Enquiry System.

<http://enquiry.indianrail.gov.in/mntes/q?opt=MainMenu&subOpt=trainSchedule&excpType=>

During my journey, I observed certain distinct aspects of the Ring Rail.

Remoteness of Stations: Majority of the stations are surrounded by *jhuggees* or by residential colonies. This means that at most of the stations, people need to travel a significant distance on foot before they can reach the main road from where they can take other transport services. Moreover, given the fact that many stations are surrounded by illegal construction, it means that there are no indicators or signs for people to find their way to the main road. They have to depend on the guidance of the local residents.

In addition, stations like Chanakyapuri, and Sardar Patel Road give literally the feeling of being in a mountain gorge.

Security: Several stations have been encroached and so there is the problem of security. Trains running behind schedule and the presence of pickpockets and anti-social elements especially on night services are some of the reasons cited by commuters to give the trains a miss. Several stations are located in secluded areas where women are not likely to feel safe even during daytime. Moreover, stations like Dayabasti, Inderpuri, and Kisanganj are crime prone making them unsafe for all.

Ambience and Comfort: The route that the train takes ensures that one gets the experience of every type of bad odour that one can imagine. Moreover, given the harsh climate of Delhi with its scorching heat during the summer season, it is very unlikely that Delhi Ring Rail will be preferred by passengers given the bus and metro service, especially after the introduction of AC buses.

Dirty pigs roaming on the platform, and people defecating not only on the tracks but also close to the platform, ensures that people who have the option avoid the Delhi Ring Rail.



However, ascribing all that is wrong with the Delhi Ring Rail to the Indian Railways will be an over simplification of the problem. There are many other external factors, the biggest one being the lack

of coordination between the Indian Railways, Delhi Government, Municipal Corporation of Delhi, and Delhi Police.

Delhi Government's Inaction to remove encroachment: According to the Indian Railways, about 6 lakh square meters of railway land is under encroachment in Delhi, with about 47,000 *jhugges*². There is therefore ample space for additional lines for freight trains on Delhi Ring Rail. The problem, however, is the lack of political will to remove the illegal encroachments, primarily due to vote bank consideration. The Delhi government issued a notification in February 2015 against the demolition of any slum in the state.

Moreover, the Delhi government also does not have any policy for the resettlement of the large number of slum dwellers who are illegally occupying the prime and expensive land of Indian Railways. In fact, the decision of the Delhi government to ban the demolition of slums in Delhi is the result of policy paralysis with regard to resettlement of slum dwellers.

However, the central government is also responsible for this mess as the urban development in Delhi comes under the Ministry of Urban Development, Government of India.

Failure of Municipal Corporation of Delhi: The task of keeping Delhi clean is primarily with the Municipal Corporation of Delhi (MCD). The failure of MCD in garbage management has resulted in areas close to railway stations becoming garbage dumping grounds. This has also affected the functioning of the Delhi ring rail.

Moreover, removing illegal construction in Delhi is also the responsibility of the MCD in which it has miserably failed. This has further created incentive for the people to illegally encroach upon the land in and around the Delhi ring rail.

Shrugging of responsibility by the Indian Railways: While Indian railway is quick to highlight its inability to remove illegal *jhugges* due to lack of cooperation from the Delhi government and Delhi Police, it fails to keep its own house in check. One of the many things that require the immediate attention of the Indian Railways is the regular breaking of tracks due to heavy freight traffic. Moreover, ensuring that the railway stations remain clean and safe for the passengers is also the responsibility of the railways in which it miserably fails.

The fact remains that due to the financially lucrative freight business on the Delhi Ring Rail line, officials of the Indian railways have no incentive to revive the commercial passenger aspect of the Ring Rail service. In fact, it seems that they are waiting for the passenger service on the ring rail line to end completely.

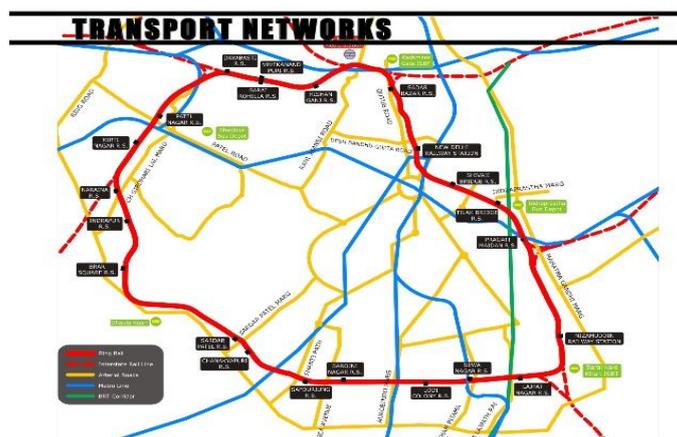
The Ring Rail network is important from freight point of view for the railways due to which it is difficult for the railways to shift freight from Ring Rail to other tracks. Out of the three main goods terminals in Delhi (Tughlakabad, Shakurbasti, and Delhi Kishanganj), two; Shakurbasti and Delhi Kishanganj, are along the Delhi Ring Rail line. Moreover, the power station at the Indraprastha is served by exclusive siding through the Delhi Ring Rail. Then there is Dedicated Freight Corridor Corporation of India (DFCCIL) which is located at Pragati Maidan railway station.

² <http://www.dailymail.co.uk/indiahome/article-3615495/Plans-Delhi-Ring-Rail-hit-dead-end-Train-network-planned-end-Capital-s-transport-pollution-woes-not-feasible-officials-admit.html>

Making the Ring Rail Contribute to its Potential

It is not that the Delhi ring rail cannot be revived. Moreover, the rising level of air pollution and traffic congestion has made the revival of ring rail imperative for the health of Delhi's residents. However, what is required is coordinated and concentrated efforts of Delhi government, MCD and Indian Railways for making passenger aspect of ring rail not only attractive to the commuters but also financially viable so that it can be sustained in the long-run.

Station map of Delhi Ring Rail:



Source: <https://www.slideshare.net/Delhi2050/ring-rail-delhi>

Making alternate tracks for goods/freight trains: If freight trains are withdrawn from the Ring Rail without providing alternate tracks for them, it would result in increase in the diesel truck traffic passing through Delhi. Moreover, the Ring Rail network is already overburdened with freight traffic, which is reflected in the more than 130% utilization rate³.

So, withdrawing freight trains from the Ring Rail network will only lead to increase in air pollution. In other words, Passenger Traffic should be added to the current freight traffic and not substitute it. The Indian Railways owns adequate land to develop alternate tracks or a second ring for passenger transport, over and above the already existing. However, the problem is that most of the land has been illegally encroached upon.

Creating single coordinating agency: Given the turf war that is the hallmark of Indian bureaucracy and administration, creation of a single coordinating authority is more viable than hoping that the different tiers of government can coordinate themselves. The coordinating authority will act as the hub for coordination between Delhi Transport Corporation (DTC), Delhi Metro, Delhi Government, Indian Railways, and government of India. This will help in coordinating and setting-up a comprehensive multi-modal integrated transport framework for Delhi.

³ "Plans for Delhi Ring Rail hit dead-end: Train network planned to end Capital's transport and pollution woes is 'not feasible,' officials admit," by Rakesh Ranjan. Mail Today: May 29, 2016. <http://www.dailymail.co.uk/indiahome/article-3615495/Plans-Delhi-Ring-Rail-hit-dead-end-Train-network-planned-end-Capital-s-transport-pollution-woes-not-feasible-officials-admit.html>

Feeder services like that of Delhi Metro: Provision of feeder bus services on the line of Delhi Metro can help in making Ring Rail attractive to the people of Delhi especially those from low-income households who cannot afford Delhi Metro. Feeder service of Delhi Metro can be used as a model.

Adding more stations closer to Delhi Metro: There are several stations on the Ring Rail that are along the Delhi Metro service. However, the Ring Rail stations and Delhi Metro stations are far from each other. If some new stations are added to the Delhi Ring Rail closer to or adjacent to Delhi Metro stations then it might become attractive for the people to take Ring Rail.

This is very much possible along the Green and Red Line of the Delhi Metro that runs parallel to several stations of the Ring Rail. For instance, Patel Nagar railway station is at walking distance from Satguru Ram Rahim Marg Metro station. Similarly, Kirti Nagar railway station is also somewhat closer to Kirti Nagar Metro station. A feeder bus service between the two stations can be beneficial.

Commercial use of railway stations to generate revenues: Several stations of the Ring Rail are located at prime commercial locations including, Sarojini Nagar and Lajpat Nagar. So, if these stations are developed as commercial hubs then the Ring Rail can become self-sufficient.

Indian Railways can rent out its land for shops and other commercial activities. Such a measure will not only bring revenue but also improve the security scenario around the Ring Rail stations as crowded areas will deter many illegal activities and anti-social elements. The Indian Railways can set up a Special Purpose Vehicle for this purpose that will work as the owner of the land of the Indian Railways.

How can Delhi Benefit from the Ring Rail?

Even if Delhi government, MCD, and Indian Railways, are brought on board and operate in a coordinated manner, the success of the Ring Rail will still depend on convincing the people of Delhi that this is an efficient commuting option.

Ring Rail a faster alternative: While the maximum speed at which Delhi Metro runs is around 80 Km/hour, Indian railway can run the Ring Rail at a speed of around 110 Km/hour. Given the fact that stations on Ring Rail are situated at a distance of 3 to 5 Km compared to 1 to 2 Km in Delhi Metro, the amount of time saved through Ring Rail is expected to be comparatively higher.

Sharing the load on overburdened Bus and Metro service: Revival of Delhi Ring Rail can help in relieving some of the pressure that the public transport system of Delhi is currently facing. This will also benefit consumers who have to bear with heavy congestion on buses and Delhi Metro.

Conclusion

The present paper examined the current status of Delhi Ring Rail. Although it was mainly designed for freight traffic, the rising level of traffic congestion and air pollution in Delhi has made the revival of passenger services on the Delhi Ring Rail important.

The key lies in improving the coordination between the different tiers of government, placing the Delhi Ring Rail within a broader integrated public transport system for Delhi, and exploiting commercial aspects to improve passenger traffic.

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