

A photograph of a train at a station platform. The train is yellow and green. The number '21118' is visible on the side. The text 'उरे NR' is written on the side. A logo for 'श्रीराम निर्माण सीमेंट' is also visible. Several passengers are seen on the platform, some walking and some standing near the train doors. A red arrow graphic points to the right on the left side of the image.

Ring Railway

Excluding Passengers or
Excluded Service?

Introduction

- In 2002, the Delhi Metro was introduced to facilitate connections between far flung areas of the city.
- The Delhi Ring Railway track runs parallel to the inner ring road
- This system was commissioned in 1975 in order to take the load of goods trains off the arterial railway lines of the city.

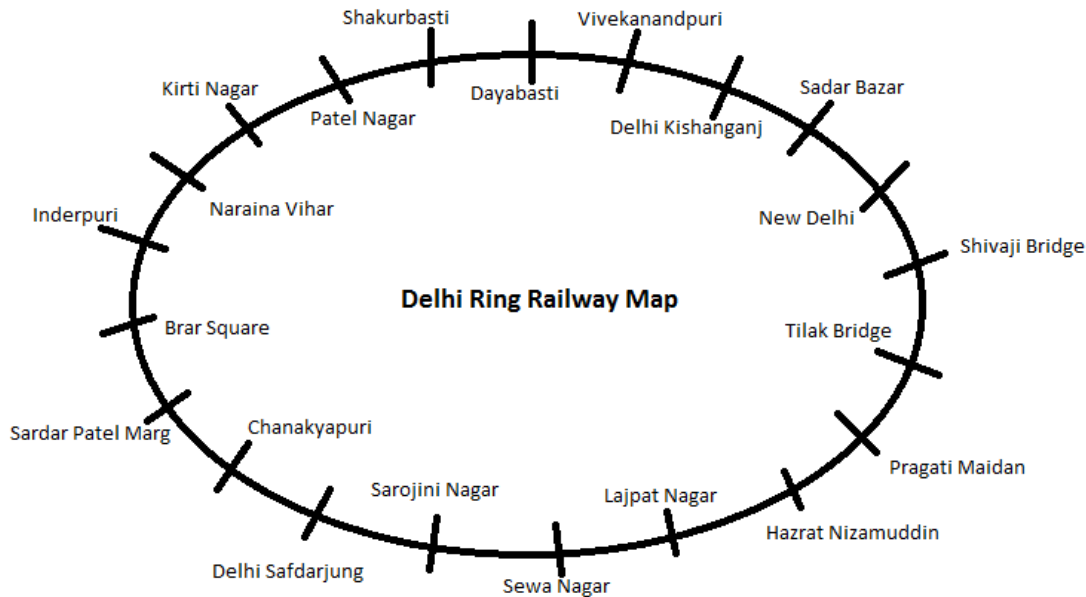
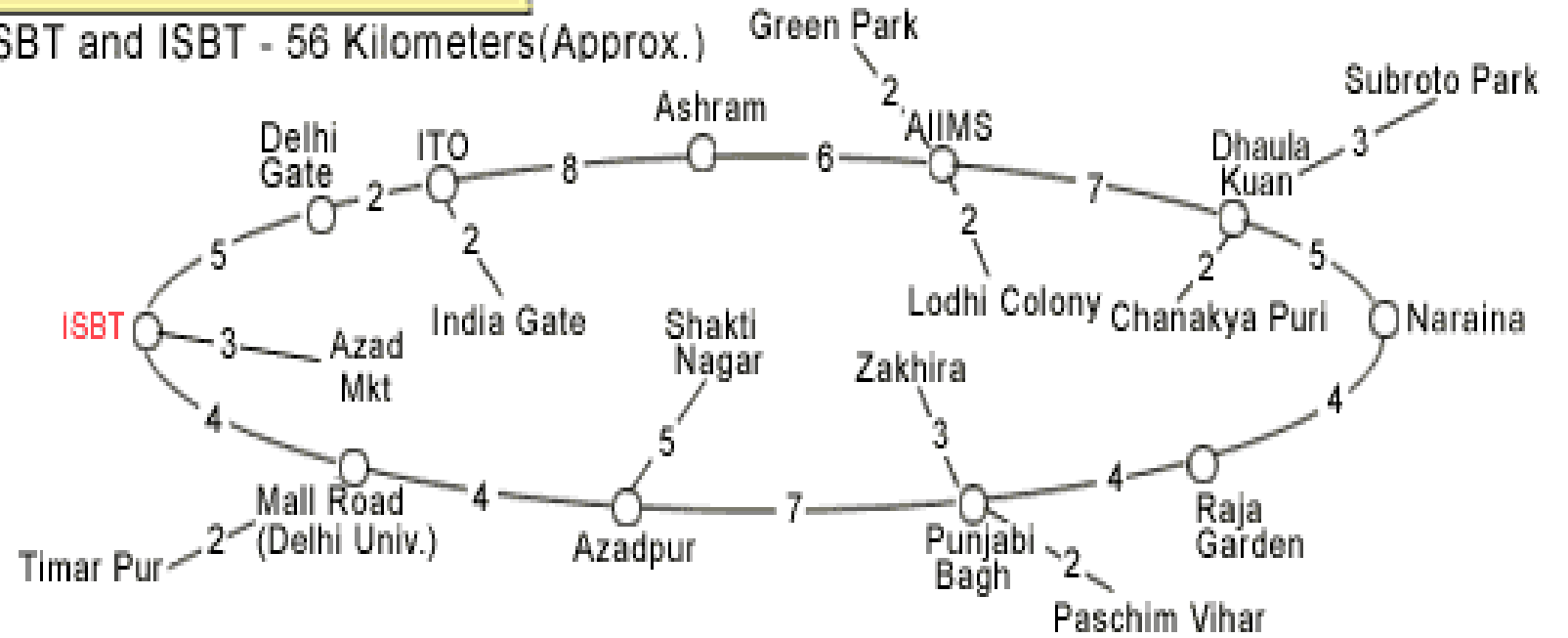


First EMU service at Victoria Terminus in 1853



ISBT to ISBT (Inner Ring Road)

Distance between ISBT and ISBT - 56 Kilometers (Approx.)



Metropolitan Transport Project (Railways) Group

- The group was constituted to assess the demand for commuter rail services and came up with the 'Project Report for Electrified Rail Commuter Services (Surface) in Delhi Urban Area'
- Report suggested replacement of diesel-loco hauled Parikrama services by electrified rails.
- It recommended the electrification of the ring railway route in order to provide circular commuter rail services along this route.
- It envisioned that such services would cater to nearly 2.86 lakh person trips daily and recommended running a total of 110 services



‘Development of existing Ring Railway Network in Delhi’ (Letter)

- ▶ Services a circular route of 35.36km
- ▶ Only 18 services throughout the day
- ▶ Passenger traffic dropped from 4493 passengers in 2011-12 to 3342 passengers in 2015-16
- ▶ “the average capacity utilization of EMUs on Ring Railway is barely 30%” (Railway Board, 2016)
- ▶ Other issues include speed restrictions, land acquisition problems and encroachment of station premises



Key Concepts

- ▶ Glenn Lyons's **'Technology Fix Versus Behaviour Change'**
- ▶ Transport has traditionally been seen as belonging to the domains of science, engineering and technology. Due to this solutions to transport issues are often viewed in terms of a 'technology fix'.
- ▶ He argues that the underlying assumption in the concept of 'technology fix' is that transport exists to serve society and hence, should be modified according to people's needs and demands. This in turn leads to the preservation of the regime of automobility and consumers are not encouraged to make lifestyle changes for efficient mobility.
- ▶ Lyons argues that problems of climate change and traffic congestion have resulted from looking for technology fixes for transport issues.
- ▶ He advises that encouraging behavior change (in combination with technology fix) is the best way to move ahead as the current regime of automobility is unsustainable in the long run.

Key Concepts (Contd.)

- **Transport Demand Management**
- It gathered traction in the 1970s, in response to issues of increasing traffic congestion and deteriorating air quality.
- “The inability to easily and quickly add new infrastructure coupled with the growth in passenger and freight travel have led to the need transportation system managers and operators to pay more attention to managing demands”. (Breman, 2002)

Identifying
Demand

What
commuters
need?

Providing
Incentives

Increasing
access,
lowering prices
etc.

Behaviour
Change

Encouraging
commuters to
shift to shared
modes of
transport

Methodology

Qualitative Methodology

Survey
200 respondents

Mobile
Ethnography
Researcher
becoming
commuter

Focus Group
Discussion
Understanding
group commuting
behaviour

Structured
Interviews
Understanding
demands,
identifying
incentives and
disincentives,
brainstorming
solutions

Services

<i>Train No.</i>	<i>Time</i>	<i>From</i>	<i>To</i>
64087	18:27 to 19:35	NZM	NDLS
64088	20:38 to 21:05	NZM	NDLS
64089	16:45 to 18:25	NZM	NZM
64090 (Mon to Fri)	09:10 to 10:55	NZM	NZM
64091	08:00 to 09:45	NZM	NZM
64092 (Mon to Fri)	18:50 to 20:35	NZM	NZM
64093	09:47 to 10:32	NZM	Shakurbasti
64094	08:25 to 09:08	Shakurbasti	NZM
64095 (Mon to Fri)	09:50 to 11:00	NDLS	Shakurbasti
64096 (Mon to Fri)	10:55 to 11:45	Shakurbasti	NZM
64097	19:45 to 20:20	NDLS	Shakurbasti
64098	18:00 to 18:48	Shakurbasti	NZM

Safety



“I have witnessed and complained against instances of snatching and since the ladies compartment is often empty, I prefer to sit in the general compartment as that feels safer with the daily users of the train recognizing me. I even advise other women passengers to also avoid sitting in the ladies compartment if there are very few passengers. Even my own family members do not prefer this train service due to the ‘crowd’ though the train can be made safer for women by posting female constables in the ladies compartment.”

- N, 40, female

Station entrance and premise maintenance



- Some located in the middle of dense residential colonies as well as industrial areas thick with factories
- Most stations are not well-lit during the night
- Foot over-bridges are ill-maintained
- Basic facilities such as drinking water and washrooms are missing

Encroachment



Delhi Safdarjung Station



Inter-modal connectivity



- In response to our RTI, the govt said that lack of feeder services have led to a decline in popularity of this service.
- Public transport cannot always provide last-mile connectivity which is where paratransit come into play.
- However, a primary network of strong public transit with heavy footfall is key to the maintenance of a heavy secondary layer of paratransit.

Inter-modal connectivity (contd.)



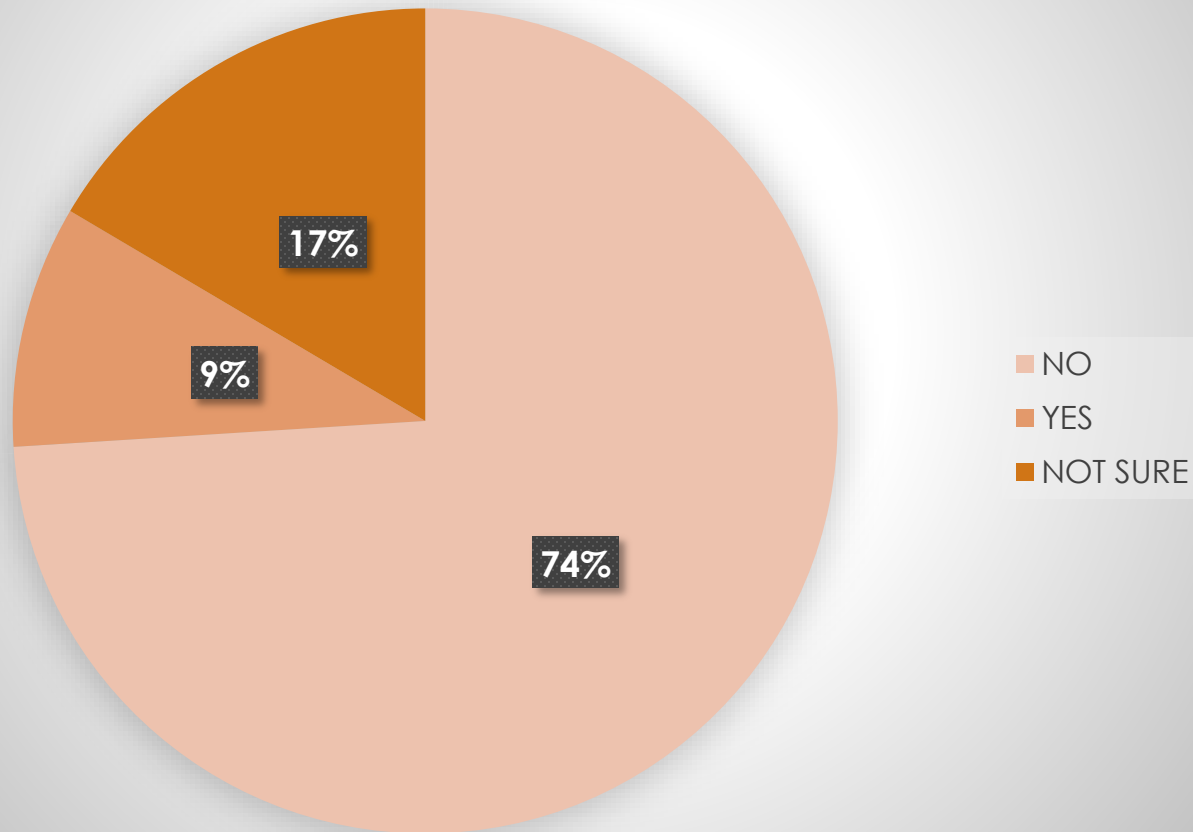
Pricing

- ▶ A one-way ticket can cost maximum Rs.10.
- ▶ A one-month pass for unlimited travel is Rs.100 while a three-month pass is Rs.270.
- ▶ For instance, the distance from Tilak Bridge to Lajpat Nagar can be covered for Rs.10 on this service while if a similar journey is replicated on the metro using similar stations (ITO-Lajpat Nagar), the journey would cost Rs.20.
- ▶ Most users agreed that this is a low-cost service which is one of the most important factors in making this their priority. They also argued that they would be willing to pay a steeper fare, say a hike of 100-150 per cent if the service was improved especially in the evening.



Lack of popularity

Do you know about the ring railway service?



Urban transit planning

Connect

Residential area
Commercial sites
Industrial regions
Mixed use areas

Mix

Delhi Metro
DTC buses
Private vehicles
Paratransit
Suburban rails

Compact

Decongest
Transit oriented
development
Inter-modal
transfer

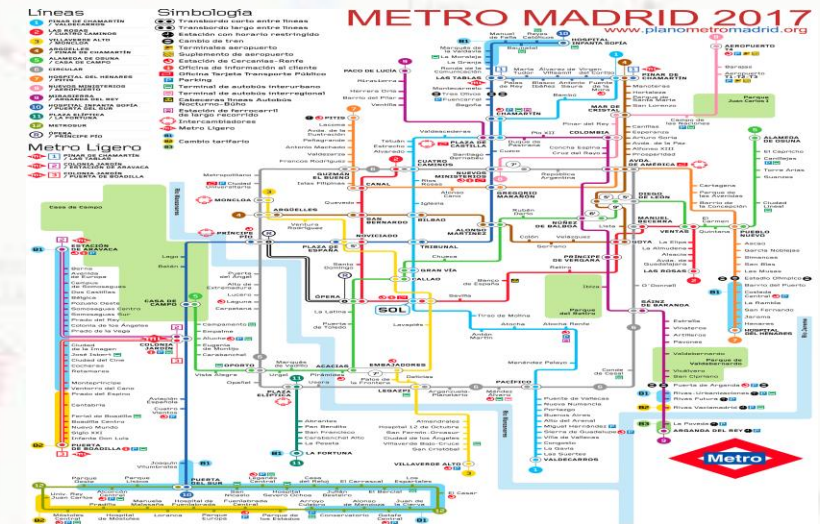


Last-mile connectivity and more

- ▶ The Ring Railway service is marked by its ability to go to the interiors of Delhi's industrial hubs primarily and residential and commercial hubs secondarily which explains the working class as its primary users. It currently plies to areas where either there is no metro service or lack of last-mile connectivity as well as heavy jams in cases of bus connectivity.
- ▶ Minor transit oriented development such as a snack shop (for instance, one such shop services six platforms at the Patel Nagar station) or other basic amenities will not just boost revenue but also contribute indirectly towards increasing the footfall on a station.
- ▶ Bringing about better and greater inter-modal transfers will lead to a diverse mix of passengers operating in a compact transport zone servicing a variety of operations such as business and industry, hospitals, universities and residences.

Mixed modes of transport

- ▶ We thus propose a mixed-transport model and in doing so draw from Madrid's example which also has a circular line as part of its metro service that goes around the center while radial highways connect the periphery. (Durán Bernal 2016)
- ▶ Strengthening Delhi's public transit requires considerable intermodal integration and a circular railway line that covers the northern, southern and western parts of the city can be the first step in this direction.





Exclusionary or excluded?

- ▶ The Ring Railway in Delhi need no longer be 'exclusionary' or 'excluded' as long its connections with the existing mainline (such as at NDLS and NZM), the Metro (at Patel Nagar), DTC bus stops (at NZM) can be strengthened.
- ▶ Certain stations and their relevance must be re-examined for that only leads to greater wastage of existing infrastructure.
- ▶ For instance, the Sardar Patel Marg station that lies in the heart of the ridge forests has no ticket window.
- ▶ Land-use pattern must be re-assessed and the relevance of the stoppage on this station be re-evaluated.