

Passenger Business

Indian Railways is a commonly used mode of public transportation in the country. During 2016-17, it carried 8,116 million passengers as against 8,107 million in 2015-16. Passenger kilometres, which is calculated by multiplying the number of journeys by mean kilometric distance in case of each class was 1,150 billion as against 1,143 billion in the previous year. Passenger earnings increased by 1,997 crore (4.5%) in comparison with 2015-16.

The trend of passenger traffic since 1950-51 is shown below:

Table I. Number of Passengers Originating

Year	Suburban (All classes)	Upper class	Non suburban			(in millions)	
			Second Class		Total Non- suburban	Grand Total	
			Mail/ Exp.#	Ordinary			Total
1950-51	412	25	52	795	847	872	1,284
1960-61	680	15	96	803	899	914	1,594
1970-71	1,219	16	155	1,041	1,196	1,212	2,431
1980-81	2,000	11	260	1,342	1,602	1,613	3,613
1990-91	2,259	19	357	1,223	1,580	1,599	3,858
2000-01	2,861	40	472	1,460	1,932	1,972	4,833
2010-11	4,061	100	1,046	2,444	3,490	3,590	7,651
2014-15	4,505	138	1,277	2,304	3,580	3,719	8,224
2015-16	4,459	145	1,321	2,182	3,503	3,648	8,107
2016-17	4,566	150	1,322	2,078	3,400	3,550	8,116

Also includes Sleeper Class

Table II. Passenger Kilometres

Year	Suburban (All classes)	Upper Class	Non suburban			(in millions)	
			Second Class		Total Non- suburban	Grand Total	
			Mail/ Exp#	Ordinary			Total
1950-51	6,551	3,790	12,537	43,639	56,176	59,966	66,517
1960-61	11,770	3,454	22,251	40,190	62,441	65,895	77,665
1970-71	22,984	4,394	37,856	52,886	90,742	95,136	118,120
1980-81	41,086	5,140	86,712	75,620	162,332	167,472	208,558
1990-91	59,578	8,712	138,054	89,300	227,354	236,066	295,644
2000-01	88,872	26,315	222,568	119,267	341,835	368,150	457,022
2010-11	137,127	62,203	500,631	278,547	779,178	841,381	978,508

2014-15	151,775	101,215	614,686	279,514	894,200	995,415	1,147,190
2015-16	145,253	105,315	634,604	257,867	892,471	997,786	1,143,039
2016-17	145,417	110,355	634,039	260,024	894,063	1,004,418	1,149,835

Also includes Sleeper Class.

Table III. Average Lead

Year	Suburban (All classes)	Non suburban				Total Non- suburban	(in kms.) Grand Total	
		Upper Class	Second Class		Total			
			Mail/ Exp.#	Ordinary				
1950-51	15.9	151.6	241.1	54.9	66.3	68.8	51.8	
1960-61	17.3	203.3	232.4	50.0	69.5	72.1	48.7	
1970-71	18.9	274.6	244.2	50.8	75.9	78.5	48.6	
1980-81	20.5	484.0	333.3	56.4	101.3	103.9	57.7	
1990-91	26.4	462.8	386.5	73.0	143.9	147.6	76.6	
2000-01	31.1	659.3	471.3	81.7	176.9	186.7	94.6	
2010-11	33.8	623.1	478.5	114.0	223.2	234.4	127.9	
2014-15	33.7	731.9	481.6	121.3	249.7	267.7	139.5	
2015-16	32.6	726.8	480.5	118.1	254.7	273.5	141.0	
2016-17	31.8	736.3	479.5	125.2	263.0	283.0	141.7	

#Also includes Sleeper Class.

Table IV. Proportion to total traffic-No. of Passengers (Percentage)

	1960-61	1970-71	1980-81	1990-91	2000-01	2010-11	2015-16	2016-17
Non-Suburban:								
Second Class Ordinary	50.38	42.82	37.14	31.70	30.20	31.95	26.92	25.60
Second Class Mail/ Express#	6.02	6.38	7.20	9.26	9.77	13.67	16.29	16.29
Upper Class	0.94	0.66	0.30	0.49	0.83	1.30	1.79	1.85
Total	57.34	49.86	44.64	41.45	40.80	46.92	45.0	43.74
Suburban (all classes)	42.66	50.14	55.36	58.55	59.20	53.08	55.0	56.26
Grand Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

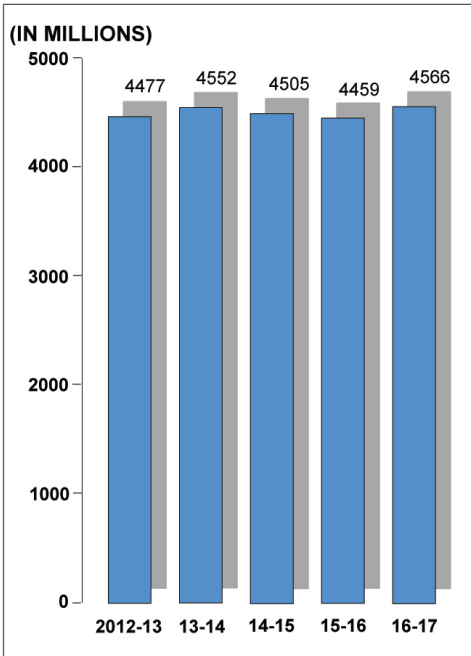
#Also includes Sleeper Class.

Table V. Proportion to total traffic – Passenger Kms. (Percentage)

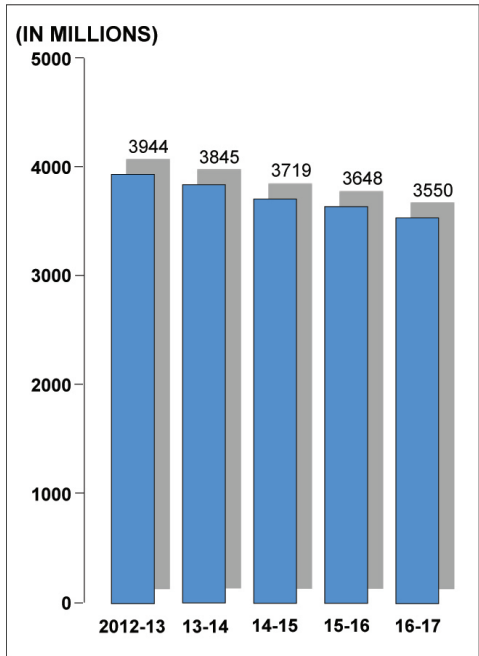
	1960-61	1970-71	1980-81	1990-91	2000-01	2010-11	2015-16	2016-17
Non-Suburban:								
Second Class Ordinary	51.75	44.77	36.26	30.20	26.10	28.47	22.56	22.61
Second Class Mail/Express#	28.65	32.05	41.58	46.70	48.70	51.16	55.52	55.14
Upper Class	4.45	3.72	2.46	2.95	5.75	6.36	9.21	9.60
Total	84.85	80.54	80.30	79.85	80.55	85.99	87.29	87.35
Suburban (all classes)	15.15	19.46	19.70	20.15	19.45	14.01	12.71	12.65
Grand Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Also includes Sleeper Class.

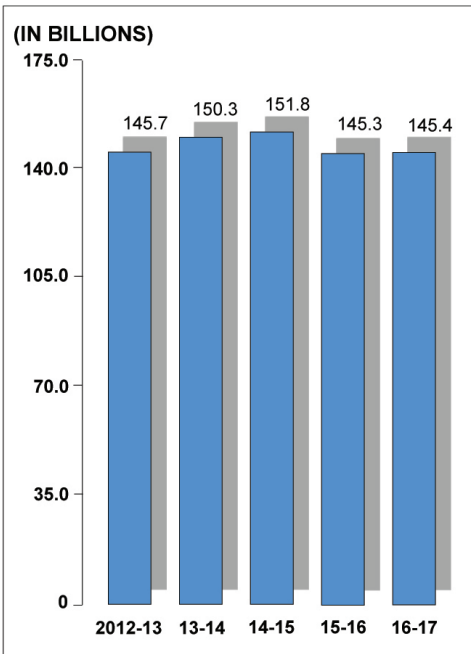
**PASSENGERS ORIGINATING
SUBURBAN**



**PASSENGERS ORIGINATING
NON-SUBURBAN**



**PASSENGER KILOMETRES
SUBURBAN**



**PASSENGER KILOMETRES
NON-SUBURBAN**

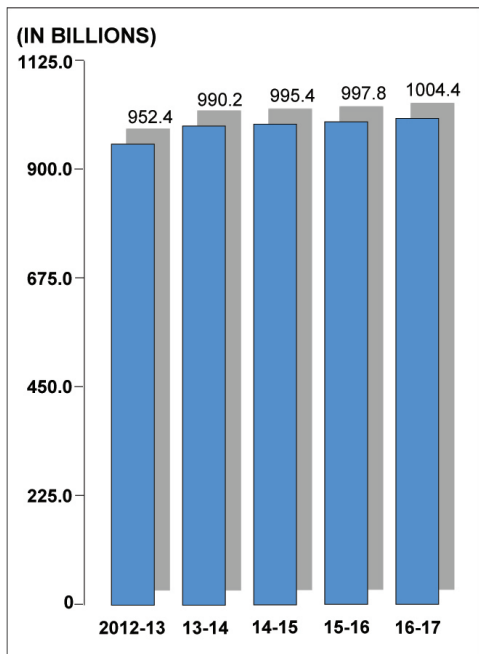


Table VI. Number of passenger trains run daily

Type of trains	Broad Gauge		Metre Gauge		Total (incl.NG)	
	2015-16	2016-17	2015-16	2016-17	2015-16	2016-17
EMU	5,128	5,148	0	0	5,128	5,148
Mail/Express	3,508	3,524	17	6	3,525	3,530
Ordinary Passenger Trains and Mixed Trains	4,366	4,387	168	158	4,660	4,651
Total	13,002	13,059	185	164	13,313	13,329

Table VII. Overall average speed including halts (Kms. /hr.)

Type of trains	Broad Gauge		Metre Gauge	
	2015-16	2016-17	2015-16	2016-17
EMU	41.0	37.4	-	-
Mail/Express	50.9	50.6	34.2	31.4
Ordinary Passenger Trains (incl. mixed)	33.9	33.9	25.3	26.6

Note: All figures shown in the above tables (I-VII) are inclusive of Metro Railway, Kolkata.

Passenger Revenue :

Passenger earnings in 2016-17 were ₹46,280.46 crore. This was ₹1,997.20crore (4.51 %) higher than the earnings in 2015-16. Suburban traffic contributed 5.81 % to the total earnings. The remaining 94.19 % came from non-suburban passengers. Earnings from Second and Sleeper Class Mail/Express passengers comprised 50.20 % of the total passenger earnings.

Passenger revenue in terms of earnings per passenger kilometre for different classes during 2015-16 and 2016-17 was as under:

Segment	(In paise)	
	2015-16	2016-17
Non-suburban:		
Upper class	130.62	135.60
Second Class-Mail/Express (incl. sleeper class)	35.95*	36.64
Second Class-Ordinary	19.92	20.75
Non-suburban (all classes)	41.8	43.4
Suburban(all classes)	17.73	18.49
Overall average	38.74	40.25
* revised		

Passenger revenue in different classes with corresponding number of passengers and Passenger Kms. in 2016-17 is given below:

Segment	No. of passengers		Passenger kms.		Revenue	
	Million	Percentage	Million	Percentage	₹ in cr.	Percentage
Non-suburban:						
Upper Class	150	1.85	110,355	9.60	14,964.18	32.33
Second Class	1322	16.29	634,039	55.14	23,232.37	50.20
Mail/Express#						
Second Class	2078	25.6	260,024	22.61	5,394.47	11.66
Ordinary						
Total	3550	43.74	1,004,418	87.35	43,591.02	94.19
Suburban (all classes)	4566	56.26	145,417	12.65	2,689.44	5.81
Grand Total	8116	100.00	1,149,835	100.00	46,280.46	100.00

#Also includes Sleeper Class.

Passenger Services:

Train kilometres and vehicle kilometres along with density of traffic for some selected years were:

Year	Suburban (EMU)		Non-suburban		Train kms. per running track km. per day	
	Train kms. (Million)	Vehicle kms. (Million)	Train kms. + (Million)	Vehicle kms. @ (Million)	Suburban (EMU)	Non-suburban +
1950-51	9.28	119.8	154	2,678	27.9	7.1
1960-61	14.05	196.8	190	3,594	28.7	8.2
1970-71	23.05	369.4	225	4,636	30.1	8.6
1980-81	35.55	601.5	258	5,582	36.6	9.7
1990-91	48.37	840.7	316	7,739	40.0	11.5
2000-01	56.04	1,029.5	397	11,035	47.1	13.8
2010-11	73.25	1,438.5	582	18,207	46.7	19.2
2014-15	85.81	1,942	674	22,860	45.8	21.6
2015-16	86.39*	1,970	684	23,356	50.0	21.6
2016-17	87.30	2002	700	24,274	50.6	21.5

@Includes Mainline EMUs, DEMUs, DHMUs and suburban services other than EMU but excluding Rail Cars/Bus and Departmental.

+ Excludes Departmental but includes Rail Cars/Bus, MEMU, DEMU and DHMU services.

* Revised

Passenger Service Improvements:

During the year 2016-17, Indian Railways introduced new trains, extended the runs and increased the frequency of existing trains, as given below:

	Trains introduced	Runs extended	Frequency increased	Total
Non-suburban	227 trains	134 trains	18 trains	379
Suburban	2 trains	19 trains	6 trains	27
Total	229	153	24	406

Ticketless Travel:

During 2016-17, 21.64 lakh checks were conducted against ticketless/irregular travel (including carriage of unbooked luggage). About 265.95

lakh cases of ticketless/irregular travel/unbooked luggage were detected and ₹992.13 crore were realized on this account.

Passenger Amenities:

The allocation under the Plan Head “Passenger Amenities” in 2016-17 was ₹838.27 crore (Budget Estimate) and ₹1920.66 crore (Revised Estimate).

1,253 stations have so far been identified for development under the Adarsh Station Scheme up to 31.12.16 out of which 1038 stations have already been developed.

During the Year 2016-17, 154 stations were provided with water coolers, 81 stations were electrified, 36 passenger lifts and 38 escalators were provided at stations.

Passenger Reservation System (PRS):

New Generation e-Ticketing System (NGeT):

In order to improve user experience while booking Reserved Rail Tickets online on www.irctc.co.in., a new system (NGeT) with enhanced capacity and new features has been launched. The system has the capacity to book about 15000 tickets per minute. E-ticketing website for reserved tickets now handles about 62% of total reserved tickets. In order to improve website availability at the time of opening of booking of Tatkal tickets, staggering of Tatkal ticket booking time for AC and non-AC classes has been implemented. Mobile Apps on various platforms (Android and Windows) are also available for booking reserved tickets. Booking of e-tickets through International Credit/Debit Cards has also been enabled.

Mobile Application for train enquiry:

Train running status enquiry is now available through Mobile Applications. Railway Enquiry Application are available on Android, iOS and Windows Platforms. Train running enquiry status is also available on enquiry.indianrail.gov.in. Information about train schedule, trains between stations, cancelled trains, rescheduled trains and diverted trains is also available on the website.

Paperless Unreserved Ticketing through Mobile Phones:

Paperless Unreserved Ticketing on mobile phones was launched at Mumbai and has since been extended to suburban sections of Chennai, Kolkata and Secundrabad and New Delhi-Palwal section of Northern Railway. This has eliminated the need for passengers to stand in queue for getting tickets for journey in unreserved compartments of trains. The ticket

is delivered on the Mobile Phone and is embedded with QR Code. This service has added to passenger convenience.

Paperless Platform tickets have also been launched at several major stations like Mumbai Central, Dadar, Lokmanya Tilak Terminus, Sealdah, Chennai Central, New Delhi, Nizamuddin, etc.

Currency Coin-cum Card Operated Automatic Ticket Vending Machines(ATVMs):

Currency Coin-cum Card Operated ATVMs was launched at New Delhi. About 460 such ATVMs are now functional over Indian Railway network. These machines issue unreserved tickets and accept Cash as well as Smart Cards for payment. In addition, about 2600 Smart Card based ATVMs have also been commissioned.

Parcel Management System (PMS):

Computerised system for booking, labeling, tracking, loading/unloading and delivery of parcel packages is being implemented in place of the manual system. Computerised Parcel Management System has been implemented at Delhi-Howrah, Delhi-Mumbai, Delhi-Chennai, Howrah-Mumbai and Howrah-Chennai corridors.

Railway Users' Amenities:

Railway Users' Consultative Committees, at different levels, provide opportunities for formal consultations between the management and the rail users with a view to improve services for rail users. National Railway Users' Consultative Council (NRUCC), Zonal Railway Users' Consultative Committees (ZRUCCs), Divisional Railway Users' Consultative Committees (DRUCCs), Konkan Railway Users' Consultative Committee (KRUCC), Metro Railway Users' Consultative Committee (MRUCC), Suburban Railway Users' Consultative Committees and Station Consultative Committees at important stations provide useful inputs to Railway Administration.

NRUCC has been reconstituted for a two years term from 17.04.2017 to 16.04.2019. ZRUCCs, KRUCC, MRUCC & DRUCCs have been reconstituted for a two year term from 01.10.2017 to 30.09.2019.

LHB Coaches:

Consequent upon the introduction of the first rake of indigenously designed LHB Coach in December 2003 and pursuant to the decision taken to convert more & more conventional coaches in LHB, 144 pairs of train services have till now been converted/inducted with LHB coaches including

all the 21 pairs of Rajdhani Express train and 22 pairs of Shatabdi Express trains. Conversion of the rakes of the remaining train services to LHB design is in progress.

Improvement in Facilities inside Passenger Coaches:

Provision of dustbins in all coaches:

It has been now decided to provide suitable dustbins below the outside wash basin or on the end wall in all newly manufactured coaches including non-AC sleeper and second class coaches. Retrofitment on existing coaches has also been taken up in a phased manner.

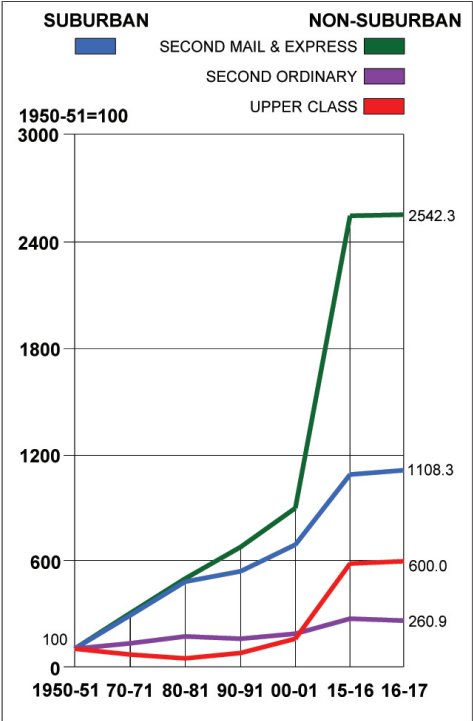
Provision of mug and chain arrangement in all coaches:

Previously mug and chain arrangement was being provided only in the toilets of AC coaches. Recently instructions have been issued for provision of mug and chain arrangement in non-AC coaches as well.

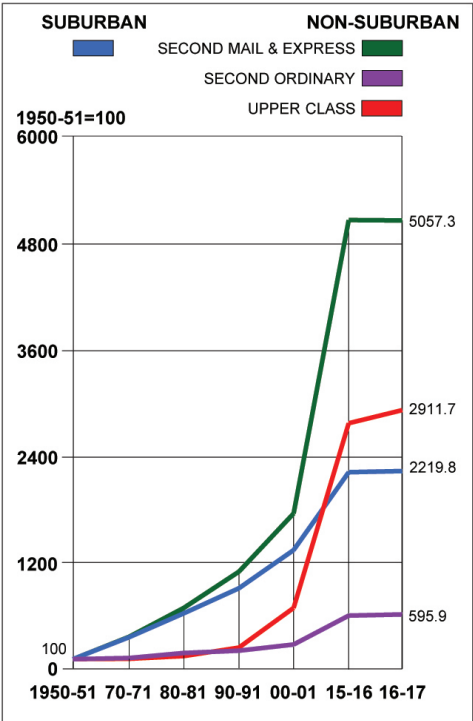
Refurbishing of model rake to start Mahamana Express

Some of the special features of the Model Rake include: Modular Panels, Superior material for panels, Ergonomically designed ladders, Aesthetically

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INDEX OF GROWTH OF PASSENGER KILOMETRES



appealing toilet modules, Large size mirrors, Platform washbasin, Controlled discharged water taps, Odour control system, Exhaust fans in toilets, Dustbin inside the toilet, use of LED Lighting to enhance illumination while minimizing energy consumption, Fire extinguisher in all coaches, Provision of electrically operated chimney in Pantry Car and Stainless Steel panelling in Luggage Compartment are provided in this rake. This rake has received wide appreciation from public at large. To make the passenger experience better and the journey more comfortable, Indian Railway has planned to improve the interior of the coaches. New interiors with more pleasing colours, aesthetically designed fittings, panelling, improved toilets, etc. will be provided in the existing coaches by refurbishing them during Mid-Life-Rehabilitation.

One such rake is already running in New Delhi-Varanasi Mahamana Express and similar rakes will be further introduced in more trains. Two Mahamana Express from Bhopal-Khajuraho Mahamana Super fast and Vadodara-Varanasi Mahamana Express has been introduced during this year.

Proliferation of Automatic Fire and Smoke Detection System in Coaches.

A pilot project for field trial with Automatic Fire and Smoke Detection system was taken up in one rake of New Delhi- Bhubaneswar Rajdhani. Besides, one LHB rake in New Delhi – Jammu Tawi Rajdhani train and one rake of LHB AC Double Decker rake running between Kacheguda-Tirupati/Guntakal of South Central Railway have been provided with Automatic Fire and Smoke Detection system. The specifications have recently been revised with a view to interface the air brake system in the coaches with Fire and Smoke detection system for stoppage of trains in emergency situations. RSP sanction for provision of Automatic Fire and Smoke Detection System in 3250 Coaches has been taken and work has been completed in more than 200 coaches. Also, instructions have been issued that all newly manufactured AC coaches shall be provided with Automatic Fire and Smoke Detection System by the Production Units (PUs).

Provision of Braille signage in passenger coaches

Presently coaches are provided with signages, instructions, seat Nos. etc, which are mostly in the form of vinyl stickers/metallic plates and have no Braille characters. It has now been planned to provide signages incorporating the information in Braille form also for the aid of visually impaired passengers in all the coaches. ICF/Chennai has developed technical specification in

consultation with Blind Associations for implementation in different types of coaches. Provision of Braille signages has already been commenced in newly manufactured coaches. Besides, retrofitment of Braille signages in existing coaches is also being taken up in a phased manner.

Proposal for Integrated Solution for elderly and Disabled in Indian Railway Special Coach Design:

Indian Railways have manufactured about 3700 SLRD/SRD coaches which have a suitably designed compartment & toilet adapted to the needs of disabled / wheel chair borne passengers. In SLRD coaches, wider entrance door for wheel chair borne passengers, wider berths, wider compartments, space for provision of Wheel chair, larger lavatory and lavatory doors have been provided. Inside the toilets, additional grab rails on the side walls for support, wash basin and mirror at lower height have provided. It is endeavored to have at least one such coach in each Mail/Express train.

Further, the fully air conditioned Garib Rath trains have been provided with an Air conditioned disabled friendly compartment & toilets in the power cars.

Cleanliness and Hygiene:

1. Intensive mechanized cleaning of coaches

Mechanized cleaning of coaches is being carried out in the coaching depots through professional agencies. Heavy duty machines such as high pressure jet cleaners, floor scrubbers, vacuum suction cleaners etc. are deployed for the purpose.

2. Clean Train Stations scheme

‘Clean Train Station’ Scheme is provided for limited mechanized cleaning attention to passing through trains during their halts at selected stations enroute. 39 such Clean Train Stations have been made operational by 31.03.2017.

3. On Board House Keeping Service (OBHS)

On Board House Keeping Service (OBHS) has been prescribed in all Rajdhani, Shatabdi, Durgam & other important long distance Mail/Express trains for cleaning of coach toilets, doorways, aisles & passenger compartments during the run of the trains. This scheme has been implemented on 864 pairs of trains till end of the year 2016-17. The scheme is further planned to be extended to cover all long distance Mail/Express vestibuled trains excluding purely overnight trains.

4. 'Clean My Coach' / 'Coach Mitra' service

'Clean My Coach' service was introduced in 2016 in OBHS trains. As per the scheme, for any cleaning requirement in the coach, passenger sends a Short Message Service (SMS) on a specified mobile number which is immediately acknowledged along with a code. A message is also sent by the server to the mobile number of On Board Housekeeping Service (OBHS) staff travelling on the same train along with the details of the passenger such as coach number, berth number. OBHS staff contacts the passenger and carries out the cleaning work as per demand.

Scope of 'Clean My Coach' has been extended to provide 'Coach Mitra' service in about 140 pairs of trains till March 2017 for providing single window assistance to train passengers regarding cleanliness, linen, disinfection, watering and petty repair.

Setting up of mechanized laundries for washing of Linen:

To improve upon the quality of washing of linen supplied to the passengers in trains, Indian Railways have indentified 71 major coaching depot locations for setting up of mechanized laundries. 49 such laundries have been commissioned by the year 2016-17. Action is underway for setting up laundries at other identified coaching depots.

In addition, following steps have been taken on Cleanliness at Stations :

- Provision of Integrated Housekeeping Contracts at major stations.
- Enforcement of Indian Railways (Penalties for activities affecting cleanliness at railway premises) Rules, 2012 has been intensified.
- Use of CCTVs is being extended for monitoring cleanliness work at major Stations.
- Third party Survey of passenger perception on Cleanliness standards of 407 major railway stations completed in 2016.
- Social / Charitable Organisations / NGOs have also been associated in periodic cleanliness / awareness drives at about 70 railway stations.
- Railways have taken up a pilot project for disposal of Municipal Solid Waste (MSW) being generated at major railway terminals in an environment friendly manner including segregation of waste and conversion of bio-degradable waste to energy (bio-methanation).

Catering Services:

New Catering Policy has been issued on 27th February 2017 with the objective to provide quality food to rail passengers by unbundling of catering services on trains. IRCTC has been mandated to carry out the unbundling by creating a distinction primarily between food preparation and food distribution. In order to upgrade quality of food preparation IRCTC to set up new kitchens and upgrade existing ones. IRCTC to manage catering service on all mobile units. IRCTC not to outrightly outsource or issue licenses for provision of catering services to private licensees. IRCTC to retain the ownership and be fully accountable for all the issues pertaining to setting up and operation of the Base Kitchens and quality of food.

During the year 2016-17, Catering facilities were provided through:

• Pairs of trains with pantry car/mini pantries	360
• Food Plazas/Fast Food units	224
• Automatic Vending Machines	237
• Jan Ahaar Units	50
• Milk Stalls	972
• Other static catering units	8559
• Book Stalls	1016
• Curio stalls	339
• Exclusive Chemist stalls	22
• Bookstall cum chemist corner	15

Mass Rapid Transit System for Metropolitan Cities:

The various projects under execution in different Metropolitan Cities have been summarised below:

S. No.	Section	Kms.	Latest cost (₹ in Cr.)	Year of sanction	Year of completion	Sharing ratio
Kolkata :						
1	Extension between Noapara-Netaji Subhash Chandra Bose Airport(6.40 km), *Dum Dum-Noapara (2.54 km) and Noapara-Baranagar (1.93 km)	10.87	595.89	2009-10	Not fixed**	Railway 100%
2	Noapara-Barasat via Bimanbandar	18.00	3159.59	2010-11	Not fixed**	Railway 100%
3	Baranagar-Barrackpore & Dakshineswar	14.50	2069.60	2010-11	Not fixed**	Railway 100%
4	NSCB Airport-New Garia via Rajarhat	32.00	4259.50	2010-11	Not fixed**	Railway 100%
5	Joka-Binay Badal Dinesh Bagh via Majerhat including Joka-Diamond Park Phase-I.	18.72	2619.02	2010-11 & 2012-13	Not fixed**	Railway 100%

6	Circular Railway including Extension from Remount Road to Santoshpur via Garden Reach (8.80 km).	8.80	268.52	2010-11	Not fixed**	Railway 100%
7	East-West Metro corridor, Kolkata from Howrah - Salt lake-Maidan	16.60	8996.96	2012-13	2019-20	74:26 (Rly. : MoUD)
Mumbai :						
1	Belapur-Seawood-Uran	27.00	1781.98	1996-97	Not fixed**	1:2 (Rly. : CIDCO)
2	Mumbai Urban Transport Project (MUTP) Ph.-II	63.89	8579.46	2008-09	2020-21	1:1 (Rly. : GoM)
3	Running of 12 car trains on Harbour lines	-	714.10	2012-13	Completed	1:1 (Rly. : GoM)
4	Mumbai Urban Transport Project (MUTP) Ph.-III	94.00	10947.00	2016-17	2021-22	46:54 (Rly.:GoM)
Chennai :						
1	Extension of MRTS Phase-II from Velachery to St. Thomas Mount	5.00	495.74	2006-07	Not fixed**	1:2 (Rly. : GoTN)
Hyderabad/Secunderabad:						
1	Hyderabad/Secunderabad Multi Model Transport System (MMTS) Phase-II	101.05	816.55	2012-13	Not fixed**	1:2 (Rly. : Go Telengana)

* Dum Dum-Noapara (2.54 km) has been completed on 10.07.2013.

**Target not fixed due to non availability encumbrance free land.



ATVM established at Railway Station NWR