

2. Rail Transport



Delhi Metro

2. RAIL TRANSPORT

Concepts and Definitions

Panel Interlocking- (PI) is the system used in most medium-sized stations on Indian Railway. In this, the points and signals are worked by individual switches that control them.

Electronic Interlocking/ Electrically operated interlocking-In the more advanced electrical or electronic interlocking schemes, the points and signals are worked from one integrated mechanism in a signal cabin which features a display of the entire track layout with indications of sections that are occupied, free, set for reception or dispatch, etc. The interlocking is accomplished not by mechanical devices but by electrical circuitry -- relays and switches in older electrical or electropneumatic systems, and computerized circuits in the newer electronic systems.

Route Relay Interlocking (RRI) - is the system used in large and busy stations that have to handle high volumes of train movements. In this, an entire route through the station can be selected and all the associated points and signals along the route can be set at once by a switch for receiving, holding, blocking, or dispatching trains.

As an example, Old Delhi station has an RRI system from Siemens which allows selection from among 1122 possible routes. Central Railway (CR) has a large RRI system at Kurla which controls signals from Ghatkopar to Sion on the Main Line, at Lokmanya Tilak Terminus, and from Chembur to GTB Nagar on the Harbour Line. The first route-relay interlocking system was set up on WR at Churchgate station control tower in the 1950s.

Signalling system- Set of signals, instruments and standards which regulate the railway traffic by means of automatic, manual, optical or sound signalling. For enhancing efficiency and safety in train operation, modern signaling plays a very vital role. Induction of Multi Aspect Color Light signaling (MACLS), Panel Interlocking (PI), Route Relay Interlocking (RRI), Electronic Interlocking (EI), Automatic Block Signaling , Block proving by Axle Counter etc. have resulted in enhancement of safety levels in train operations on IR

Automatic Block System (ABS)- Running system based on the electrical spacing by distance, which enables the automatic performance of the safety operations. The operation of the railway line signals take place without the intervention of operators and the exchange of acknowledgements for the subsequent dispatch of the trains takes place automatically between the relative equipment.

Capital-at-charge- Book value of the capital assets of Railways.

Gross earnings- The true earnings in an accounting period whether actually realised or not.

Gross receipts- Earnings actually realised in an accounting period.

Net revenue- Gross traffic receipts minus total working expenses.

Operating ratio- Ratio of working expenses to gross earnings.

Working expenses- Expenditure on administration, operation, maintenance & repairs, contribution to Depreciation Reserve and Pension Funds.

Gross tonne kilometre- Gross tonnage comprising of payload and tare weight hauled by a train.

Tare (pronounced /tær/) weight - sometimes called **unladen weight**, is the weight of an empty vehicle or container. By subtracting it from the gross weight (laden weight), the weight of the goods carried (the net weight) may be determined.

Net tonne kilometre- Payload of one tonne carried over one km.

Non-revenue traffic- Traffic conveyed free for working the Railways.

Passenger kilometre- A passenger transported over one km.

Revenue-earning traffic- Traffic which is paid for by the consignor or the consignee.

Route kilometre- The distance between two points on the railway irrespective of the number of lines connecting them, viz. Single line, double line, etc.

Running track kilometre- The length of all running tracks excluding tracks in sidings, yards and crossings.

Track kilometre- The length of all running tracks and tracks including tracks in sidings, yards and crossings.

Train kilometre- Movement of a train over one kilometre.

Vehicle/Wagon kilometre- Movement of a vehicle/wagon over one kilometre.

Number of staff- All employees paid directly by the Railway administration

Gauge- Indian Railways uses four rail gauges: 1,676 mm (5 ft 6 in) Broad Gauge (BG) (Indian gauge), 1,000 mm (3 ft 3 3/8 in) Metre Gauge (MG) and two Narrow Gauges, 762 mm (2 ft 6 in) and 610 mm (2 ft) .

Project Unigauge seeks to standardise the rail gauges in India by converting most of metre gauge tracks and narrow gauges tracks to broad gauge track. Some narrow gauge tracks on which heritage trains run in hilly regions (Simla, Darjeeling, Ooty, Kangra and Matheran) will not be converted.

Delhi Metro Rail Corporation has constructed 1,435 mm (4 ft 8½ in) Standard Gauge in Delhi and started running metro trains in Delhi city in 2010. Delhi Metro is a separate urban mass rapid transit system not owned by Indian Railways.

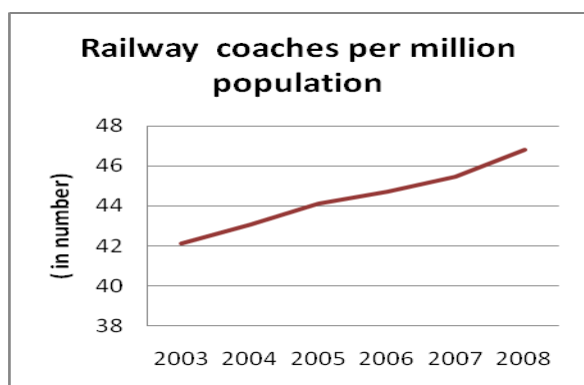
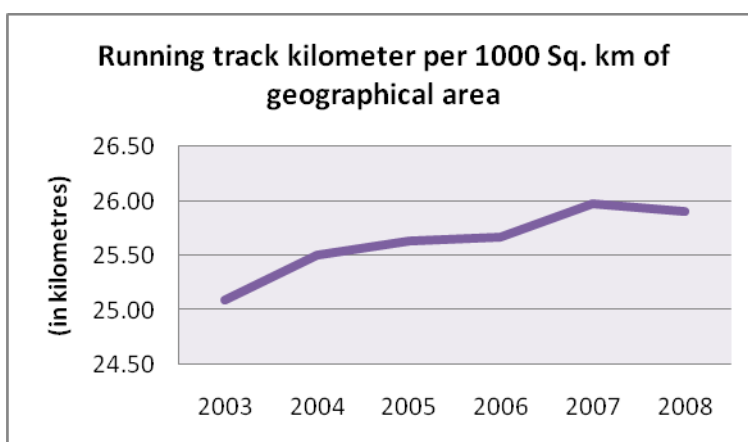
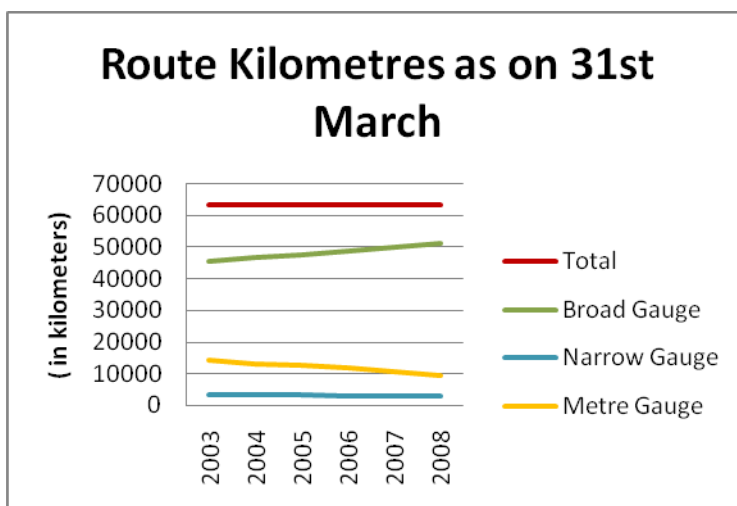
2. RAIL TRANSPORT

2.1 The chief data source for this sector is Railway Board, M/o Railways. Unless otherwise stated analytical highlights given below are based on Table No. 2.0 on Trends in Important Indicators of Rail Transport Infrastructure. The rail track length does not include privately owned lines.

Accessibility

2.2 The total route length of railway network has increased only marginally from 63122 kilometre in 2003 to 63273 kilometre in 2008 showing an increase of 151 kilometres. The increase is more noteworthy in terms of running track kilometres. The total running track length increased from 82492 kilometre in 2003 to 85158 kilometre in 2008, showing an increase of 2666 kilometre during the period.

2.3 Rail transport shows overall improvement in accessibility during the year 2002-03 to 2007-08. The positive growth rates of running track kilometre per 1000 square kilometre of geographical area (0.64% per annum) and railway passenger coaches per million population (2% per annum) indicate



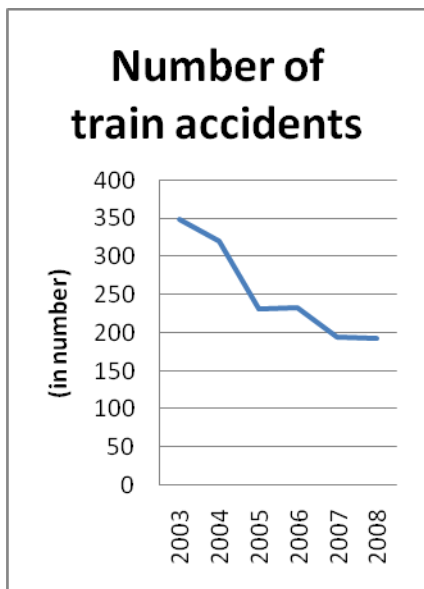
improvement in accessibility during the period.

2.4 The improvement in accessibility of rail transport is further reflected in increase in average number of passenger trains running per day from 8854 in 2002-03 to 10385 in 2007-08 and increase in average number of passengers carried per day from 13.6 million in 2002-03 to

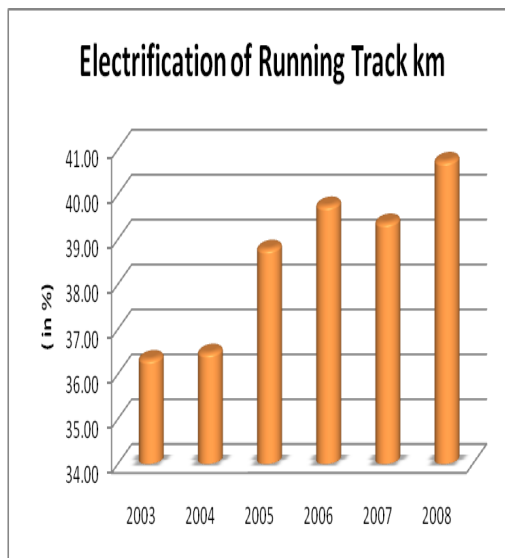
17.9 million in 2007-08.

Quality

2.5 Rail travel shows significant improvement in quality in terms of decreasing trend in number of train accidents,



reduction in number of deaths during train accidents, positive growth in electrification of track and gauge conversion from narrow gauge, metre gauge to broad gauge.



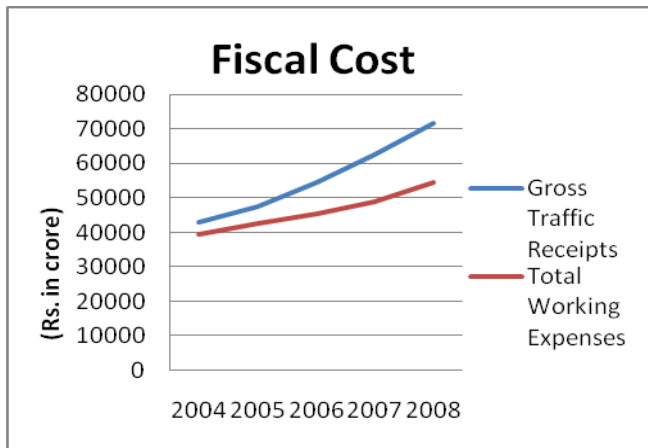
2.6 The number of persons killed in train accidents, decreased from 242 in 2003-04 to 191 in 2007-08 showing a negative growth rate of 6% per annum, indicating a reduction in severity of train accidents.

2.7 The percentage share of broad gauge route kilometres in total route kilometres increased from 72% in 2003 to 81% in 2008. In 2007-08, 1549 kilometre of Metre Gauge/Narrow Gauge track was converted to Broad Gauge.

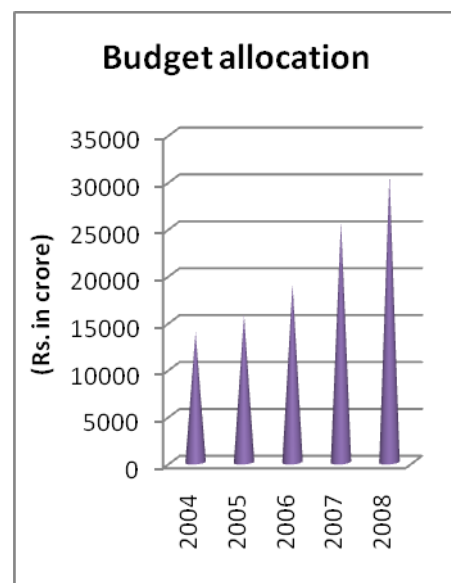
Fiscal Cost

2.8 During 2004-2008 central budgetary support to the sector has grown significantly from ₹13888 crore to ₹30618 crore at a CAGR of 22 percent per annum.

2.9 Comparison of gross traffic receipts and total working expenses shows improvement in profitability of the Indian Railway during the period.



expenses shows improvement in profitability of the Indian Railway during the period.



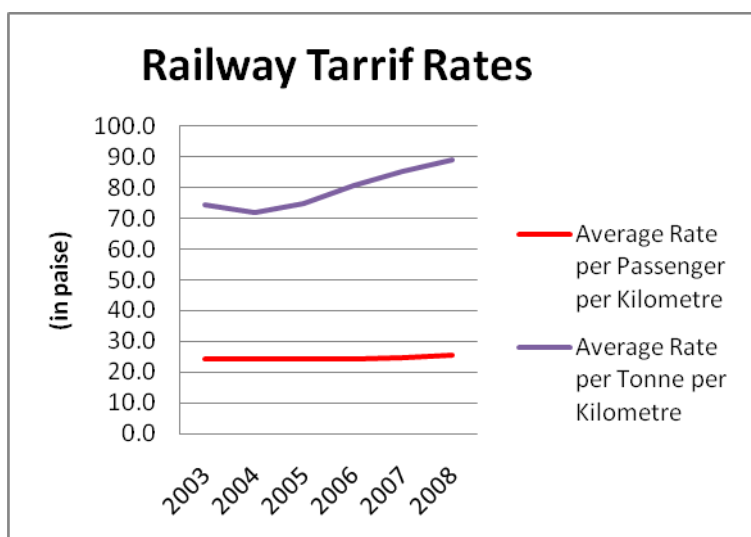
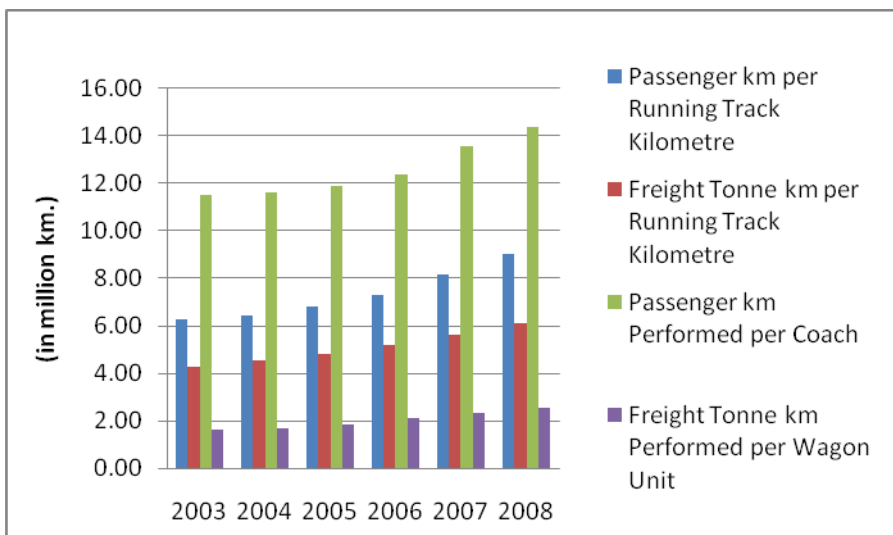
The gross traffic receipts increased from ₹42905 crore in 2004 to

₹71720 crore in 2008, while working expenses increased from ₹39482 crore to ₹54462 crore during the same period.

Utilisation

2.10 The positive growth rates in passenger kilometre and freight tonne kilometre performed per running track kilometre and per coach/wagon unit of rolling stock show significant growth in utilisation of rail network and rolling stock.

2.11 Passenger kilometre performed per running track kilometre increased from 62 lakh in 2003 to 90 lakh in 2008. Freight tonne kilometre performed per running track kilometre increased from 43 lakh in 2003 to 61 lakh in 2008. This implies increased utilisation of the rail tracks.



Affordability

2.12 The average railway passenger fare increased only nominally from 24 paise per passenger per kilometre in 2002-03 to 26 paise in 2007-08. The average goods fare increased from 74 paise per tonne per kilometre in 2002-03 to 89 paise in 2007-08. But increases in average passenger fare at CAGR of 1.1% and average freight transport cost at CAGR of 3.7% are lower than inflation rate (Annex - A4) during the period; indicating that prices in real terms for rail transport have become cheaper.

Table 2.0 : Trends in Important Indicators of Rail Transport Infrastructure

Sl. No.	Description	2003	2004	2005	2006	2007	2008	CAGR %
		(Reference Date / Period						
		- As on 31st March for Stock Variables						
		- Financial Year ending on 31st March for Flow Variables)						
A		ACCESS						
I	Route Kilometres as on 31st March (in km)							
1	Total	63122	63221	63465	63332	63327	63273	0.05
2	Broad Gauge	45622	46807	47749	48574	49819	51082	2.29
3	Narrow Gauge	3136	3124	3054	2924	2886	2749	-2.60
4	Metre Gauge	14364	13290	12662	11834	10622	9442	-8.05
5	Metro Railway, Kolkata	-	-	-	16.45	16.45	16.45	0
II	Running Track Kilometre as on 31st March (in km)							
6	Total	82492	83859	84260	84370	85389	85158	0.64
7	Metro Railway, Kolkata (ETKM)							
	Passenger	-	-	-	34.25	34.25	34.25	0
	Non-Passenger	-	-	-	27.12	27.12	27.12	0
III	Track Kilometre as on 31st March (in km)							
8	Total	109221	108486	108804	109808	109996	111599	0.43
9	Metro Railway, Kolkata (ETKM)	-	-	-	61.37	61.37	61.37	0
IV	Rail Density							
10	Route Kilometre							
	Per 1000 km ²	19.20	19.23	19.31	19.27	19.26	19.25	0.05
	Per 1000 Population	0.059	0.059	0.058	0.057	0.056	0.055	-1.43
11	Running Track Kilometre							
	Per 1000 km ²	25.09	25.51	25.63	25.67	25.98	25.91	0.64
	Per 1000 Population	0.078	0.078	0.077	0.076	0.076	0.074	-0.85

Table 2.0 (contd.) : Trends in Important Indicators of Rail Transport Infrastructure

Sl. No	Description	2003	2004	2005	2006	2007	2008	CAGR %
.		(Reference Date / Period - As on 31st March for Stock Variables - Financial Year ending on 31st March for Flow Variables)						
A	ACCESS							
V	Rolling Stock (in numbers)							
12	Number of Locomotives							
	Steam	52	45	44	44	43	44	-3.29
	Diesel	4699	4769	4807	4793	4816	4843	0.61
	Electric	2930	3004	3065	3188	3294	3443	3.28
	Total	7681	7818	7916	8025	8153	8330	1.64
13	Railway Passenger Coaches(EMU, Conventional, DMU/DHMU)	39853	40969	42713	44093	45359	47375	3.52
	Passenger Carrying Capacity	3437654	3657433	3766230	3860452	4061230	4234000	4.26
14	Other Coaching Vehicles	4904	5519	5600	5612	5949	6180	4.73
15	Total railway wagons(in units)	214760	227752	222409	207983	207723	204034	-1.02
	Population (in thousand)	1062388	1079117	1095722	1112186	1128521	1144734	1.50
16	Railway Coaches per Million Population	42	43	44	45	45	47	2.12
VI	Metro Railway, Kolkata							
17	Motor Coaches (in number)							
	Average authorised stock	-	-	-	108	108	108	0
	Average number in use daily	-	-	-	72	72	84	8.01
18	Trailer Coaches (in number)							
	Average authorised stock	-	-	-	36	36	36	0
	Average number in use daily	-	-	-	24	26	28	8.01
19	Train Units							
	Average authorised stock	-	-	-	36	36	36	0
	Average number in use daily	-	-	-	24	26	28	8.01

Table 2.0 (contd.) : Trends in Important Indicators of Rail Transport Infrastructure

Sl. No.	Description	2003	2004	2005	2006	2007	2008	CAGR %
		(Reference Date / Period - As on 31st March for Stock Variables - Financial Year ending on 31st March for Flow Variables)						
B		Quality						
20	Average Number of Passenger Trains Running per Day (in number)	8854	9513	8516	8750	10213	10385	3.24
21	Average Number of Passengers Carried per Day (in Million)	13.6	14	14.7	15.7	17	17.9	5.65
22	Number of Stations (in number)	6906	7031	7146	6974	6909	7025	0.34
23	Number of Staff(in thousand)	1471.9	1441.5	1424.4	1412.4	1397.6	1394.5	-1.07
24	Average speed of goods train (km/hour)	24.7	23.3	23.8	25.8	24.9	25.4	0.56
25	Average speed of passenger train (km/hour) (Mail /Express)	49	46.8	46.9	47.9	48.2	49.1	0.04
VII	Track Electrification (%) as on 31st March							
26	Route km	25.8	26.5	27.6	28.3	28.1	28.9	2.30
27	Running Track km [#]	36.34	36.48	38.79	39.75	39.38	40.75	2.32
28	Track km	36.04	38.64	39.86	40.81	40.73	42.38	3.30
VIII	Accidents							
29	Train Accidents (in number)	349	320	232	233	194	193	-11.17
30	Train Accidents per million train km [£]	0.44	0.41	0.29	0.28	0.22	0.21	-13.75
IX	Casualties							
31	Total Number of Persons							
	Killed	-	242	221	315	208	191	-5.74
	Injured	-	466	303	627	402	406	-3.39
X	Gaugewise % Share in Total Route Kilometre							
32	Broad Gauge	72.3	74.0	75.2	76.7	78.7	80.7	2.24
33	Narrow Gauge	5.0	4.9	4.8	4.6	4.6	4.3	-2.65
34	Metre Gauge	22.8	21.0	20.0	18.7	16.8	14.9	-8.09
XI	Gauge Conversion							
35	Track km Converted from MG/NG to BG	-	-	779	744	1082	1549	25.75

Table 2.0 (contd.) : Trends in Important Indicators of Rail Transport Infrastructure

Sl. No.	Description	2003	2004	2005	2006	2007	2008	CAGR %
(Reference Date / Period								
- As on 31st March for Stock Variables								
- Financial Year ending on 31st March for Flow Variables)								
C	FISCAL COST							
36	Gross Traffic Receipts (Rs. in crore)	-	42904.94	47370.21	54491.38	62731.50	71720.06	13.71
37	Total Working Expenses (Rs. in crore)	-	39482.21	42758.88	45573.53	49046.53	54462.17	8.37
38	Cost of Police and RPF personnel (Rs. in crore)	782.76	758.38	829.04	970.76	933.36	1112.52	7.28
39	Budget Allocation (Rs. in crore)	-	13888	15674.8	18975.8	25646.92	30618.11	21.85
40	Net Expenditure (Rs. in crore)	-	13363.92	15371.81	18320.35	25002.08	28980.34	21.35
41	Passenger Revenue ^{\$} (Rs. in crore)	12540.8	13259.8	14071.4	15080.76	17176.01	19783.25	9.55
42	Freight Revenue [^] (bulk commodities)(Rs. in crore)	26231.45	27403.15	30489.23	35534.69	41073.21	46425.49	12.10
XII	Metro Railway, Kolkata							
43	Passenger Earnings (Rs. in crore)	-	-	-	45.23	48.54	60.92	16.06
D	UTILISATION							
44	Passengers Carried (in Million)	4971	5112	5378	5725	6219	6524	5.59
45	Passenger Kilometres Carried (in Million)	515044	541208	575702	615614	694764	769956	8.37
46	Freight Carried*(in Million Tonnes)	518.7	557.4	602.1	666.5	727.75	793.89	8.89
47	Freight km Carried*(in Million Tonne km)	353194	381241	407398	439596	480993	521371	8.10
48	Engine hours pertaining to locomotives							
	Steam	-	-	100	96	98	88	-4.17
	Diesel	-	-	229086	229750	243911	245476	2.33
	Electric	-	-	176645	176505	185565	200520	4.32

Table 2.0 (contd.) : Trends in Important Indicators of Rail Transport Infrastructure

Sl. No.	Description	2003	2004	2005	2006	2007	2008	CAGR %
		(Reference Date / Period - As on 31st March for Stock Variables - Financial Year ending on 31st March for Flow Variables)						
D UTILISATION								
49	Passenger km per Running Track Kilometre (in Million)	6.24	6.45	6.83	7.30	8.14	9.04	7.69
50	Freight Tonne km per Running Track Kilometre (in Million)	4.28	4.55	4.84	5.21	5.63	6.12	7.41
51	Passenger km Performed per Coach (in Million)	11.51	11.64	11.92	12.39	13.54	14.38	4.55
52	Freight Tonne km Performed per Wagon Unit (in Million)	1.64	1.67	1.83	2.11	2.32	2.56	9.21
XIII Metro Railway, Kolkata								
53	Number of Passengers Originating / Carried (in Million)	-	-	-	107.87	114.85	120.62	5.74
54	Passenger Kilometres (in Million)	-	-	-	998.03	1057.04	1114.05	5.65
E AFFORDABILITY								
55	Average Rate per Passenger per Kilometre (in paise)	24.3	24.5	24.4	24.5	24.7	25.7	1.08
56	Average Rate per Tonne per Kilometre (in paise)	74.3	71.9	74.8	80.8	85.4	89.0	3.70

Includes track in yards, sidings, crossings at stations etc.,

* Revenue traffic only

\$ Excluding earnings by Metro Railway, Kolkata

^ Excludes 'other goods earnings' such as wharfage, demurrage, etc.

£ Excludes Metro and Konkan Railways

Source : 1. Material supplied by M/o Railways, Railway Board

2. Annual Statistical Statements, published by M/o Railways, Railway Board

3. Year Book, published by M/o Railways, Railway Board

Table 2A.1: Statewise Route Kilometres as on 31st March

		(in Km.)						
Sl. No.	States / UTs	2003	2004	2005	2006	2007	2008	CAGR %
1	Andhra Pradesh	5197.1	5195.8	5205.1	5185.1	5171.6	5170.4	-0.10
2	Arunachal Pradesh	1.3	1.3	1.3	1.3	1.3	1.3	0
3	Assam	2517.2	2517.2	2505.8	2284.3	2283.7	2283.7	-1.93
4	Bihar	3223.7	3377.1	3379.7	3330.4	3411.0	3406.5	1.11
5	Chhattisgarh	1180.3	1159.0	1159.0	1186.1	1185.5	1185.8	0.09
6	Goa	69.3	69.0	69.0	69.0	69.0	69.0	-0.09
7	Gujarat	5284.8	5282.8	5284.4	5282.9	5308.6	5328.2	0.16
8	Haryana	1554.5	1623.2	1596.9	1595.0	1540.4	1467.1	-1.15
9	Himachal Pradesh	268.7	269.0	285.0	285.0	285.0	285.0	1.19
10	Jammu & Kashmir	96.1	96.1	137.8	137.8	137.8	162.8	11.12
11	Jharkhand	1798.3	1943.1	1941.3	1954.8	1941.3	1965.2	1.79
12	Karnataka	2974.1	2979.9	2982.0	3002.3	3005.8	3005.4	0.21
13	Kerala	1050.2	1050.2	1050.2	1050.2	1050.2	1050.2	0
14	Madhya Pradesh	4824.7	4849.3	4905.2	4903.2	4883.9	4884.2	0.25
15	Maharashtra	5450.0	5496.7	5527.0	5528.0	5519.3	5535.8	0.31
16	Manipur	1.4	1.4	1.4	1.4	1.4	1.4	0
17	Meghalaya	0	0	0	0	0	0	-
18	Mizoram	1.5	1.5	1.5	1.5	1.5	1.5	0
19	Nagaland	12.9	12.9	12.9	12.9	12.9	12.9	0
20	Orissa	2323.6	2283.6	2279.7	2281.5	2246.9	2386.8	0.54
21	Punjab	2101.3	2097.7	2097.7	2133.4	2133.4	2133.4	0.30
22	Rajasthan	5899.8	5834.5	5837.7	5838.0	5911.1	5683.0	-0.75
23	Sikkim	0	0	0	0	0	0	-
24	Tamil Nadu	4184.3	4200.9	4170.9	4170.9	4121.1	4130.7	-0.26
25	Tripura	64.4	64.4	64.4	64.4	64.4	64.4	0
26	Uttar Pradesh	8798.8	8566.3	8545.5	8546.4	8574.8	8553.5	-0.56
27	Uttarakhand	344.9	344.9	344.9	344.9	344.9	344.9	0
28	West Bengal	3680.4	3706.1	3856.1	3910.7	3910.7	3950.8	1.43
State Total		62903.4	63023.8	63242.2	63101.1	63117.4	63063.8	0.05
Union Territories								
1	Andaman & Nicobar	0	0	0	0	0	0	-
2	Chandigarh	7.7	7.7	7.7	15.7	15.7	15.7	15.19
3	Dadar & Nagar Haveli	0	0	0	0	0	0	-
4	Daman & Diu	0	0	0	0	0	0	-
5	Delhi	199.7	177.9	204.2	204.2	182.5	182.5	-1.78
6	Lakshadweep	0	0	0	0	0	0	-
7	Puducherry	11.1	11.1	11.1	11.1	11.1	11.1	0
UT Total		218.5	196.8	223.1	231.0	209.3	209.3	-0.86
India Total		63121.9	63220.5	63465.3	63332.1	63326.7	63273.1	0.05

Source: Material supplied by M/o Railways, Railway Board

Table 2A.2 : Statewise Route km per 1000 km² as on 31st March

		(in Km.)						
Sl. No.	States / UTs	2003	2004	2005	2006	2007	2008	CAGR %
1	Andhra Pradesh	18.90	18.89	18.92	18.85	18.80	18.80	-0.10
2	Arunachal Pradesh	0.02	0.02	0.02	0.02	0.02	0.02	0
3	Assam	32.09	32.09	31.95	29.12	29.11	29.11	-1.93
4	Bihar	34.24	35.86	35.89	35.37	36.22	36.18	1.11
5	Chhattisgarh	8.73	8.57	8.57	8.77	8.77	8.77	0.09
6	Goa	18.72	18.64	18.64	18.64	18.64	18.64	-0.09
7	Gujarat	26.96	26.95	26.96	26.95	27.08	27.18	0.16
8	Haryana	35.16	36.71	36.12	36.08	34.84	33.18	-1.15
9	Himachal Pradesh	4.83	4.83	5.12	5.12	5.12	5.12	1.19
10	Jammu & Kashmir	0.43	0.43	0.62	0.62	0.62	0.73	11.12
11	Jharkhand	22.56	24.38	24.35	24.52	24.35	24.65	1.79
12	Karnataka	15.51	15.54	15.55	15.65	15.67	15.67	0.21
13	Kerala	27.02	27.02	27.02	27.02	27.02	27.02	0
14	Madhya Pradesh	15.65	15.73	15.91	15.91	15.84	15.85	0.25
15	Maharashtra	17.71	17.86	17.96	17.96	17.94	17.99	0.31
16	Manipur	0.06	0.06	0.06	0.06	0.06	0.06	0
17	Meghalaya	0	0	0	0	0	0	-
18	Mizoram	0.07	0.07	0.07	0.07	0.07	0.07	0
19	Nagaland	0.78	0.78	0.78	0.78	0.78	0.78	0
20	Orissa	14.92	14.67	14.64	14.65	14.43	15.33	0.54
21	Punjab	41.72	41.65	41.65	42.36	42.36	42.36	0.30
22	Rajasthan	17.24	17.05	17.06	17.06	17.27	16.61	-0.75
23	Sikkim	0	0	0	0	0	0	-
24	Tamil Nadu	32.17	32.30	32.07	32.07	31.69	31.76	-0.26
25	Tripura	6.14	6.14	6.14	6.14	6.14	6.14	0
26	Uttar Pradesh	36.52	35.56	35.47	35.47	35.59	35.50	-0.56
27	Uttarakhand	6.45	6.45	6.45	6.45	6.45	6.45	0
28	West Bengal	41.47	41.76	43.45	44.06	44.06	44.51	1.43
State Total		19.20	19.24	19.30	19.26	19.26	19.25	0.05
Union Territories								
1	Andaman & Nicobar	0	0	0	0	0	0	-
2	Chandigarh	67.89	67.89	67.89	137.72	137.72	137.72	15.19
3	Dadar & Nagar Haveli	0	0	0	0	0	0	-
4	Daman & Diu	0	0	0	0	0	0	-
5	Delhi	134.63	119.97	137.71	137.71	123.05	123.05	-1.78
6	Lakshadweep	0	0	0	0	0	0	-
7	Puducherry	23.17	23.17	23.17	23.17	23.17	23.17	0
UT Total		19.94	17.95	20.35	21.08	19.09	19.09	-0.86
India Total		19.20	19.23	19.31	19.27	19.26	19.25	0.05

Table 2A.3 : Statewise Route km per 1000 Population as on 31st March

		(in Km.)						
Sl. No.	States / UTs	2003	2004	2005	2006	2007	2008	CAGR %
1	Andhra Pradesh	0.067	0.066	0.065	0.064	0.063	0.063	-1.17
2	Arunachal Pradesh	0.001	0.001	0.001	0.001	0.001	0.001	-1.21
3	Assam	0.092	0.090	0.089	0.080	0.079	0.078	-3.27
4	Bihar	0.037	0.038	0.038	0.037	0.037	0.036	-0.39
5	Chhattisgarh	0.055	0.053	0.052	0.052	0.052	0.051	-1.43
6	Goa	0.050	0.049	0.048	0.046	0.045	0.043	-3.01
7	Gujarat	0.101	0.099	0.098	0.096	0.095	0.094	-1.37
8	Haryana	0.071	0.072	0.070	0.068	0.065	0.061	-2.98
9	Himachal Pradesh	0.043	0.043	0.045	0.044	0.044	0.043	0.05
10	Jammu & Kashmir	0.009	0.009	0.013	0.013	0.012	0.014	9.50
11	Jharkhand	0.064	0.068	0.067	0.067	0.065	0.065	0.22
12	Karnataka	0.055	0.054	0.054	0.053	0.053	0.052	-0.97
13	Kerala	0.032	0.032	0.032	0.032	0.031	0.031	-0.83
14	Madhya Pradesh	0.077	0.076	0.075	0.074	0.072	0.071	-1.55
15	Maharashtra	0.054	0.054	0.054	0.053	0.052	0.051	-1.21
16	Manipur	0.001	0.001	0.001	0.001	0.001	0.001	-1.22
17	Meghalaya	0	0	0	0	0	0	-
18	Mizoram	0.002	0.002	0.002	0.002	0.002	0.002	-1.23
19	Nagaland	0.006	0.006	0.006	0.006	0.006	0.006	-1.22
20	Orissa	0.062	0.060	0.059	0.059	0.057	0.060	-0.49
21	Punjab	0.084	0.083	0.082	0.082	0.081	0.080	-0.99
22	Rajasthan	0.100	0.097	0.095	0.094	0.093	0.088	-2.57
23	Sikkim	0	0	0	0	0	0	-
24	Tamil Nadu	0.066	0.066	0.065	0.064	0.063	0.062	-1.04
25	Tripura	0.020	0.019	0.019	0.019	0.019	0.018	-1.22
26	Uttar Pradesh	0.051	0.049	0.048	0.047	0.046	0.045	-2.44
27	Uttarakhand	0.039	0.039	0.038	0.037	0.037	0.036	-1.59
28	West Bengal	0.045	0.044	0.046	0.046	0.045	0.045	0.31
State Total		0.060	0.059	0.059	0.058	0.057	0.056	-1.39
Union Territories								
1	Andaman & Nicobar	0	0	0	0	0	0	-
2	Chandigarh	0.008	0.008	0.007	0.014	0.014	0.013	9.61
3	Dadar & Nagar Haveli	0	0	0	0	0	0	-
4	Daman & Diu	0	0	0	0	0	0	-
5	Delhi	0.014	0.012	0.013	0.013	0.011	0.011	-4.55
6	Lakshadweep	0	0	0	0	0	0	-
7	Puducherry	0.011	0.011	0.011	0.010	0.010	0.009	-3.84
UT Total		0.012	0.011	0.012	0.012	0.011	0.010	-3.89
India Total		0.059	0.059	0.058	0.057	0.056	0.055	-1.43

Table 2A.4 : Statewise Route Kilometres - Broad Gauge

(in Km.)

Sl. No.	States / UTs	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	CAGR %
1	Andhra Pradesh	4527.0	4651.6	4839.1	4856.1	4903.9	4985.7	1.95
2	Arunachal Pradesh	0	0	0	0	0	0	-
3	Assam	1227.7	1227.7	1227.7	1227.2	1226.6	1226.5	-0.02
4	Bihar	2148.8	2142.3	2145.3	2231.1	2376.0	2507.9	3.14
5	Chhattisgarh	1091.2	1070.1	1070.1	1096.9	1097.0	1097.3	0.11
6	Goa	69.3	69.0	69.0	69.0	69.0	69.0	-0.09
7	Gujarat	2497.4	2681.6	2775.0	3021.5	3100.0	3177.3	4.93
8	Haryana	1232.3	1302.0	1275.7	1275.2	1275.2	1274.6	0.68
9	Himachal Pradesh	23.3	23.2	39.2	39.2	39.2	39.2	10.97
10	Jammu & Kashmir	96.1	96.1	137.8	137.8	137.8	162.7	11.11
11	Jharkhand	1729.1	1873.9	1941.3	1954.8	1941.3	1965.1	2.59
12	Karnataka	2453.2	2508.0	2573.7	2604.0	2759.5	2759.4	2.38
13	Kerala	933.3	933.3	933.3	933.3	933.3	933.3	0
14	Madhya Pradesh	3616.9	3619.9	3675.8	3694.8	3829.9	3830.1	1.15
15	Maharashtra	4270.4	4299.2	4344.9	4365.8	4473.6	4707.2	1.97
16	Manipur	0	0	0	0	0	0	-
17	Meghalaya	0	0	0	0	0	0	-
18	Mizoram	0	0	0	0	0	0	-
19	Nagaland	11.13	11.13	11.13	11.13	11.13	11.10	-0.05
20	Orissa	2180.7	2192.8	2188.9	2244.1	2246.9	2386.8	1.82
21	Punjab	2089.6	2086.1	2086.1	2121.8	2121.8	2121.7	0.31
22	Rajasthan	3028.0	3334.6	3436.8	3550.7	3840.9	3885.4	5.11
23	Sikkim	0	0	0	0	0	0	-
24	Tamil Nadu	2071.0	2246.3	2310.4	2358.4	2496.9	2795.9	6.19
25	Tripura	0	0	0	0	0	0	-
26	Uttar Pradesh	6884.3	6797.5	6826.5	6836.4	6994.6	7082.2	0.57
27	Uttarakhand	283.8	283.8	283.8	283.8	283.8	283.7	0
28	West Bengal	2972.4	3181.6	3355.8	3451.8	3451.8	3570.1	3.73
State Total		45436.9	46631.6	47547.2	48364.8	49610.2	50872.2	2.29
Union Territories								
1	Andaman & Nicobar	0	0	0	0	0	0	-
2	Chandigarh	7.7	7.7	7.7	15.7	15.7	15.7	15.19
3	Dadar & Nagar Haveli	0	0	0	0	0	0	-
4	Daman & Diu	0	0	0	0	0	0	-
5	Delhi	177.9	156.2	182.5	182.5	182.5	182.5	0.51
6	Lakshadweep	0	0	0	0	0	0	-
7	Puducherry	0	11.1	11.1	11.1	11.1	11.1	0
UT Total		185.7	175.0	201.3	209.3	209.3	209.3	2.42
India Total		45622.6	46806.6	47748.5	48574.1	49819.4	51081.5	2.29

Source : Material supplied by M/o Railways, Railway Board

Table 2A.5: Statewise Route Kilometres - Narrow Gauge

		(in Km.)						
Sl. No.	States / UTs	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	CAGR %
1	Andhra Pradesh	36.7	36.7	36.7	0	0	0	0
2	Arunachal Pradesh	0	0	0	0	0	0	-
3	Assam	0	0	0	0	0	0	-
4	Bihar	0	0	0	0	0	0	-
5	Chhattisgarh	89.1	88.9	88.9	89.2	88.5	88.5	-0.15
6	Goa	0	0	0	0	0	0	-
7	Gujarat	786.7	786.7	786.7	786.7	786.7	786.7	0
8	Haryana	3.4	3.4	3.4	3.4	3.4	3.4	0
9	Himachal Pradesh	245.5	245.8	245.8	245.8	245.8	245.8	0
10	Jammu & Kashmir	0	0	0	0	0	0	-
11	Jharkhand	69.2	69.2	0	0	0	0	0
12	Karnataka	0	0	0	0	0	0	-
13	Kerala	0	0	0	0	0	0	-
14	Madhya Pradesh	707.5	729.2	729.2	708.1	708.1	708.1	0
15	Maharashtra	734.4	752.7	752.7	733.0	733.0	596.3	-4.08
16	Manipur	0	0	0	0	0	0	-
17	Meghalaya	0	0	0	0	0	0	-
18	Mizoram	0	0	0	0	0	0	-
19	Nagaland	0	0	0	0	0	0	-
20	Orissa	142.9	90.9	90.9	37.4	0	0	-36.05
21	Punjab	11.7	11.7	11.7	11.7	11.7	11.7	0
22	Rajasthan	88.8	86.8	86.8	86.8	86.8	86.8	-0.46
23	Sikkim	0	0	0	0	0	0	-
24	Tamil Nadu	0	0	0	0	0	0	-
25	Tripura	0	0	0	0	0	0	-
26	Uttar Pradesh	0	2.0	2.0	2.0	2.0	2.0	0
27	Uttarakhand	0	0	0	0	0	0	-
28	West Bengal	220.0	220.0	220.0	220.0	220.0	220.0	0
State Total		3135.7	3123.8	3054.7	2924.0	2885.9	2749.2	-2.60
Union Territories								
1	Andaman & Nicobar	0	0	0	0	0	0	-
2	Chandigarh	0	0	0	0	0	0	-
3	Dadar & Nagar Haveli	0	0	0	0	0	0	-
4	Daman & Diu	0	0	0	0	0	0	-
5	Delhi	0	0	0	0	0	0	-
6	Lakshadweep	0	0	0	0	0	0	-
7	Puducherry	0	0	0	0	0	0	-
UT Total		0	0	0	0	0	0	-
India Total		3135.7	3123.8	3054.7	2924.0	2885.9	2749.2	-2.60

Source: Material supplied by M/o Railways, Railway Board

Table 2A.6 : Statewise Route Kilometres - Metre Gauge

(in Km.)

Sl. No.	States / UTs	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	CAGR %
1	Andhra Pradesh	633.5	507.5	329.3	329.0	267.7	184.7	-21.85
2	Arunachal Pradesh	1.3	1.3	1.3	1.3	1.3	1.3	0
3	Assam	1289.5	1289.5	1278.1	1057.1	1057.1	1057.1	-3.90
4	Bihar	1074.9	1234.8	1234.4	1099.3	1035.0	898.5	-3.52
5	Chhattisgarh	0	0	0	0	0	0	-
6	Goa	0	0	0	0	0	0	-
7	Gujarat	2000.7	1814.5	1722.8	1474.8	1421.9	1364.2	-7.37
8	Haryana	318.8	317.9	317.9	316.4	261.8	189.1	-9.92
9	Himachal Pradesh	0	0	0	0	0	0	-
10	Jammu & Kashmir	0	0	0	0	0	0	-
11	Jharkhand	0	0	0	0	0	0	-
12	Karnataka	520.9	471.9	408.2	398.3	246.3	246.0	-13.93
13	Kerala	116.9	116.9	116.9	116.9	116.9	116.9	0
14	Madhya Pradesh	500.3	500.3	500.3	500.3	346.0	346.0	-7.11
15	Maharashtra	445.3	444.8	429.4	429.4	312.6	232.3	-12.20
16	Manipur	1.4	1.4	1.4	1.4	1.4	1.4	0
17	Meghalaya	0	0	0	0	0	0	-
18	Mizoram	1.5	1.5	1.5	1.5	1.5	1.5	0
19	Nagaland	1.7	1.7	1.7	1.7	1.7	1.7	0
20	Orissa	0	0	0	0	0	0	-
21	Punjab	0	0	0	0	0	0	-
22	Rajasthan	2783.0	2413.1	2314.1	2200.5	1983.5	1710.8	-9.27
23	Sikkim	0	0	0	0	0	0	-
24	Tamil Nadu	2113.3	1954.7	1860.5	1812.5	1624.2	1334.7	-8.78
25	Tripura	64.4	64.4	64.4	64.4	64.4	64.4	0
26	Uttar Pradesh	1914.5	1766.8	1717.0	1707.9	1578.2	1469.3	-5.16
27	Uttarakhand	61.2	61.2	61.2	61.2	61.2	61.2	0
28	West Bengal	488.0	304.4	280.2	238.9	238.9	160.6	-19.93
State Total		14330.9	13268.4	12640.3	11812.6	10621.4	9441.6	-8.01
Union Territories								
1	Andaman & Nicobar	0	0	0	0	0	0	-
2	Chandigarh	0	0	0	0	0	0	-
3	Dadar & Nagar Haveli	0	0	0	0	0	0	-
4	Daman & Diu	0	0	0	0	0	0	-
5	Delhi	21.7	21.7	21.7	21.7	0	0	0
6	Lakshadweep	0	0	0	0	0	0	-
7	Puducherry	11.1	0	0	0	0	0	-100
UT Total		32.8	21.7	21.7	21.7	0	0	-12.85
India Total		14363.7	13290.1	12662.1	11834.3	10621.4	9441.6	-8.05

Source: Material supplied by M/o Railways, Railway Board

Table 2B.1 : Zonewise Total Route Kilometres and Route Kilometres Electrified as on 31st March

Sl. No.	Zones	2007			2008		
		Total (km)	Electrified (km)	% Electrification	Total (km)	Electrified (km)	% Electrification
1	Central	3832.2	1827.17	47.7	3848.71	1827.17	47.5
2	Eastern	2413.8	1307.81	54.2	2413.81	1346.00	55.8
3	East Central	3480.3	1406.7	40.4	3464.54	1406.70	40.6
4	East Coast	2429.9	1293.05	53.2	2567.8	1304.64	50.8
5	Northern	6833.5	1,049.11	15.4	6858.5	1198.41	17.5
6	North Central	3079.5	1397.94	45.4	3078.3	1395.54	45.3
7	North Eastern	3452.2	-	-	3447.5	19.00	0.6
8	Northeast Frontier	3767.0	-	-	3756.6	-	-
9	North Western	5575.5	-	-	5274.6	-	-
10	Southern	5159.9	1600.22	31.0	5169.4	1722.9	33.3
11	South Central	5734.5	1623.00	28.3	5734.47	1726.59	30.1
12	South Eastern	2576.5	2157.25	83.7	2638.8	2198.07	83.3
13	South East Central	2431.0	1244.93	51.2	2439.76	1253.67	51.4
14	South Western	3106.4	156.44	5.0	3106.00	152.00	4.9
15	Western	6489.7	1448.34	22.3	6509.4	1448.34	22.2
16	West Central	2964.8	1274.52	43.0	2964.8	1274.52	43.0
Zone Total		63326.7	17786.48	28.1	63273.2	18273.55	28.9

Source: Annual Statistical Statements, published by M/o Railways, Railway Board

Table 2B.2 : Zone wise Total Track Kilometres and Track Kilometres Electrified as on 31st March

Sl. No.	Zones	2007			2008		
		Total (km)	Electrified (km)	% Electrification	Total (km)	Electrified (km)	% Electrification
1	Central	8079.86	5086.45	63.0	8115.12	5105.25	62.9
2	Eastern	6567.52	3605.28	54.9	6584.69	3756.98	57.1
3	East Central	6455.58	3778.96	58.5	7504.79	4214.79	56.2
4	East Coast	4747.31	2843.73	59.9	4945.46	2878.78	58.2
5	Northern	11780.58	2865.22	24.3	11982.36	3142.39	26.2
6	North Central	5158.13	3217.13	62.4	5468.99	3327.10	60.8
7	North Eastern	4951.55	0.00	0.0	4661.73	19.00	0.4
8	Northeast Frontier	5645.57	0.00	0.0	5644.65	3506.48	62.1
9	North Western	7357.58	0.00	0.0	6538.46	4225.50	64.6
10	Southern	8187.41	3493.46	42.7	8222.79	3658.39	44.5
11	South Central	9313.16	3862.02	41.5	9359.71	4021.52	43.0
12	South Eastern	6814.69	5387.96	79.1	7461.57	6447.60	86.4
13	South East Central	4769.44	3181.33	66.7	4794.16	3203.03	66.8
14	South Western	3838.89	401.84	10.5	3943.83	411.54	10.4
15	Western	10288.76	3813.94	37.1	10325.74	3851.91	37.3
16	West Central	6040.03	3266.83	54.1	6045.18	3257.65	53.9
Zone Total		109996.06	44804.15	40.7	111599.23	55027.91	49.3

Source: Annual Statistical Statements, published by M/o Railways, Railway Board

Table 2B.3 : Zonewise % Share of Broad Gauge, Meter Gauge and Narrow Gauge in Total Route Kilometres as on 31st March

Sl. No.	Zones	2006			2007			2008		
		Broad Gauge	Narrow Gauge	Meter Gauge	Broad Gauge	Narrow Gauge	Meter Gauge	Broad Gauge	Narrow Gauge	Meter Gauge
1	Central	85.06	14.94	-	85.06	14.94	-	88.68	11.32	-
2	Eastern	94.50	5.50	-	94.51	5.49	-	94.51	5.49	-
3	East Central	79.01	-	20.99	81.17	-	18.83	83.89	-	16.11
4	East Coast	100.00	-	-	100.00	-	-	100.00	-	-
5	Northern	94.96	3.77	1.27	96.02	3.82	0.16	96.03	3.80	0.16
6	North Central	89.12	9.37	1.51	89.12	9.37	1.51	89.12	9.37	1.51
7	North Eastern	45.50	-	54.50	50.04	-	49.96	53.13	-	46.87
8	Northeast Frontier	54.87	2.32	42.81	54.83	2.32	42.85	57.83	2.33	39.84
9	North Western	53.97	-	46.03	57.98	-	42.02	62.13	-	37.87
10	Southern	62.97	-	37.03	66.26	-	-	71.92	-	-
11	South Central	85.57	-	14.43	88.66	-	11.34	91.51	-	8.49
12	South Eastern	98.57	1.43	-	100.00	-	-	100.00	-	-
13	South East Central	68.84	31.16	-	68.85	31.15	-	68.96	31.04	-
14	South Western	87.20	-	12.80	92.07	-	7.93	92.08	-	7.92
15	Western	59.70	12.04	28.26	63.39	12.12	24.48	64.39	12.09	23.52
16	West Central	100.00	-	-	100.00	-	-	100.00	-	-
Zone Total		76.70	4.64	18.69	78.67	4.58	16.77	80.73	4.34	14.92

Source: Annual Statistical Statements, published by M/o Railways, Railway Board

**Table 2B.4 : Train Accidents and Casualties during
2006-07 & 2007-08**

Sl. No.	Zones	Accidents per Million Train km		Casualties per Million Passengers carried			
				Killed		Injured	
		2006-07	2007-08	2006-07	2007-08	2006-07	2007-08
1	Central	0.13	0.06	-	0.001	0.016	0.003
2	Eastern	0.24	0.06	0.041	0.001	0.019	0.018
3	East Central	0.14	0.2	0	-	-	-
4	East Coast	0.34	0.42	0	0.052	-	0.706
5	Northern	0.36	0.23	0.002	0.002	0.019	0.02
6	North Central	0.15	0.16	-	-	0.141	0.215
7	North Eastern	0.37	0.57	-	0.005	0.21	0.109
8	Northeast Frontier	0.33	0.46	-	0.028	-	1.309
9	North Western	0.47	0.38	-	-	-	0.078
10	Southern	0.26	0.19	-	0.002	0.018	0.057
11	South Central	0.12	0.14	0.004	-	0.026	0.031
12	South Eastern	0.13	0.32	-	-	-	0.113
13	South East Central	0.25	0.22	-	-	0.07	0.011
14	South Western	0.52	0.61	-	-	-	-
15	Western	0.17	0.14	-	-	0.07	-
16	West Central	0.09	0.14	-	-	-	-
Zone Total		0.22	0.21	0.0061	0.0014	0.0365	0.0376

Source: Annual Statistical Statements, published by M/o Railways, Railway Board

Table 2B.5 : Signalling System and Telecom Installations as on 31st March

Sl. No.	Signalling Installations	2003	2004	2005	2006	2007	2008	CAGR %
1	Panel Interlocking (No. of Stations)	2426	2692	2718	2911	3246	3462	7.37
2	Electronic Interlocking (No. of Stations)	247	259	203	219	159	229	-1.50
3	Route Relay Interlocking (No. of Stations)	..	197	203	219	221	223	3.15
4	LED Lit Signals (No. of Stations)	..	..	..	..	1308	1697	29.74
5	Data Loggers (No. of Stations)	..	..	..	..	2105	2650	25.89
6	Color light Signalling (No. of Stations)	..	3508	3820	4203	4424	4684	7.50
7	Last vehicles check by Axle Counters (No of Block Sections)	..	..	..	..	1045	1421	35.98
8	Track Circuiting (No. of Locations)	3606	3606	3095	3265	24499	27086	49.67
9	Automatic Block Signalling (Track km)	..	3009	3095	3265	3454	3672	5.10
10	Intermediate Block Signalling (No. of Block Sections)	..	..	..	..	164	188	14.63
11	Interlocked Level Crossing Gates (Nos.)	..	7006	7331	7781	8098	8413	4.68
12	Second Distance Signal (No. of Stations)	982	999	1015	1185	1022	1036	1.08

.. NA

Sl. No.	Telecom Installations	2003	2004	2005	2006	2007	2008	CAGR %
1	Digital Electronic Exchanges (No. of lines)	231015	235565	274034	285292	294214	294214	4.96
2	No. of Control Sections provided with Dual Tone Multiple Frequency (DTMF) control equipment	326	326	292	295	295	305	-1.32
3	Digital Microwave (7 GHz) (Route km)	6809	7093	7093	7093	7093	7093	0.82
4	Control communication through wireless (18 GHz) (Route km)	989	989	989	989	989	989	0
5	Mobile Train Radio Communication System (Route km)	1686	1686	1686	1686	1686	1686	0
6	Optical Fibre Cable communication (OFC) system for control communication (Route km)	9138	16089	22423	25269	28124	29181	26.14
7	Public address system (No. of stations)	528	588	2520	2708	3081	3133	42.78
8	Train display boards (No. of stations)	344	363	809	925	1055	1055	25.12
10	Coach guidance system (No. of stations)	..	..	129	129	141	235	22.13

Source: 1. Material supplied by M/o Railways, Railway Board
2. Year Book, published by M/o Railways, Railway Board

Table 2B.6 : Zonewise and Department-wise Number of Staff as on 31st March 2008

(in number)								
Sl. No.	Railway zone / Unit	Administration	Accounts	Engineering	Signal and Telecommunication	Transportation	Commercial	Mechanical Engineering
1	Central	3141	2237	27989	6496	19516	10519	21151
2	Eastern	4086	3279	19222	5579	14368	9516	37500
3	East Central	2230	1232	23703	5419	12781	5756	14669
4	East Coast	1088	918	14981	1897	6026	1632	9624
5	Northern	4269	3619	39234	8173	17401	15892	40185
6	North Central	1304	996	22251	4558	10723	5836	11539
7	North Eastern	2180	1435	16573	4031	6490	4196	13549
8	Northeast Frontier	2096	1715	21112	3402	7393	5168	14420
9	North Western	2782	1162	14764	2427	7446	3712	16028
10	Southern	3649	2432	22750	5062	11687	8935	25213
11	South Central	3522	1773	26179	4793	10271	7023	21002
12	South Eastern	3329	2847	19297	3764	10185	6208	20541
13	South East Central	1117	699	12961	2224	6182	2498	7761
14	South Western	1259	671	8443	1429	4043	2219	11135
15	Western	5776	2124	28999	6283	13368	10031	24706
16	West Central	2602	698	17105	3471	9189	3530	12490
17	Chittaranjan Locomotive Works	1069	410	684	43	0	0	5870
18	Diesel Loco. Mod. Works	131	159	158	19	0	0	2720
19	Diesel Locomotive Works	464	302	379	0	0	0	3300
20	Integral Coach Factory	530	314	625	0	0	0	9327
21	Rail Wheel Factory	118	89	211	17	0	0	1298
22	Rail Coach Factory	320	124	370	67	0	0	5145
23	Rly. Board & Other Rly Offices	0	0	0	0	0	0	0
Total		47062	29235	337990	69154	167069	102671	329173
Total Female Employees		12047	5296	11806	2784	5109	10065	10210

Source: Material supplied by M/o Railways, Railway Board

Table 2B.6 (contd.) : Zonewise and Department-wise number of Staff as on 31st March 2008

(in number)								
Sl. No.	Railway zone / Unit	Stores	Electrical	Medical	Railway Protection Force	Rly. Board & Other Rly Offices	Total Employees	Total Female Employees
1	Central	2618	17500	3881	4348	0	119396	8704
2	Eastern	4122	20668	4639	7343	0	130322	4990
3	East Central	707	10157	3072	3396	0	83122	2854
4	East Coast	248	6083	1670	1948	0	46115	2136
5	Northern	3570	14578	4695	5405	0	157021	7595
6	North Central	726	10094	1795	2738	0	72560	1843
7	North Eastern	1652	4636	2400	2681	0	59823	2335
8	Northeast Frontier	1828	4764	3923	4014	0	69835	3974
9	North Western	1250	4225	2034	2061	0	57891	2844
10	Southern	2381	14911	3591	4069	0	104680	10140
11	South Central	1601	9348	2990	3007	0	91509	7219
12	South Eastern	2171	14015	3855	4241	0	90453	5547
13	South East Central	490	7018	1230	1475	0	43655	3154
14	South Western	538	2120	1137	1405	0	34399	1747
15	Western	2161	13094	3579	3515	0	113636	11548
16	West Central	119	5899	1462	1568	0	58133	2746
17	Chittaranjan Locomotive Works	877	2966	548	399	0	12866	586
18	Diesel Loco. Mod. Works	262	168	92	66	0	3775	234
19	Diesel Locomotive Works	525	690	150	199	0	6009	331
20	Integral Coach Factory	529	1323	155	367	0	13170	1165
21	Rail Wheel Factory	220	311	85	54	0	2403	188
22	Rail Coach Factory	414	665	186	210	0	7501	339
23	Rly. Board & Other Rly Offices	0	0	0	0	16246	16246	493
Total		29009	165233	47169	54509	16246	1394520	82712
Total Female Employees		3059	5047	15849	947	493	82712	

Source: Material supplied by M/o Railways, Railway Board

Table 2B.7 : Zonewise Number of Stations

Sl. No.	Zones	(in numbers)					
		Broad Gauge		Narrow Gauge		Meter Gauge	
		2006-07	2007-08	2006-07	2007-08	2006-07	2007-08
1	Central	414	467	45	61	-	-
2	Eastern	419	422	12	14	-	-
3	East Central	378	386	-	-	94	86
4	East Coast	269	270	-	-	-	-
5	Northern	794	793	42	42	-	-
6	North Central	367	361	18	19	6	6
7	North Eastern	193	206	-	-	157	144
8	Northeast Frontier	258	263	13	13	143	154
9	North Western	266	295	-	-	202	179
10	Southern	447	476	-	-	83	58
11	South Central	506	520	-	-	49	34
12	South Eastern	321	321	-	-	-	-
13	South East Central	181	180	41	42	-	-
14	South Western	258	268	-	-	11	7
15	Western	531	536	31	32	151	149
16	West Central	278	278	-	-	-	-
Zone Total		5880	6042	202	223	896	817

Source: Annual Statistical Statements, published by M/o Railways, Railway Board

Table 2C.1 : Gaugewise and Zonewise Gross Revenue and Working Expenses for the Year 2007-08

(Rs. in crore)

Sl. No.	Railway	Gross Revenue			Total	Working Expenses
		Passenger Revenue	Freight Revenue	Other Income		
Broad Gauge						
1	Central	2365.19	3318.27	469.83	6153.28	4629.09
2	Eastern	1055.31	1488.89	299.71	2843.90	4080.55
3	East Central	1034.38	3050.66	225.26	4310.30	3327.00
4	East Coast	469.17	4835.41	152.80	5457.37	2631.62
5	Northern	2520.52	3296.94	1132.44	6949.90	6335.52
6	North Central	1925.53	3970.42	126.51	6022.46	3151.87
7	North Eastern	505.00	660.54	82.92	1248.46	1176.88
8	Northeast Frontier	383.75	1149.27	627.08	2160.11	2228.00
9	North Western	632.96	1419.61	237.11	2289.67	1203.52
10	Southern	1781.12	1617.01	322.43	3720.55	3580.31
11	South Central	1795.79	4804.69	259.56	6860.05	4577.30
12	South Eastern	658.17	4489.41	296.79	5444.37	2931.50
13	South East Central	404.19	4194.31	127.38	4725.87	2060.87
14	South Western	622.72	1682.08	247.06	2551.87	1759.91
15	Western	2069.41	3304.72	459.44	5833.56	4199.99
16	West Central	1166.94	3053.58	129.81	4350.33	2885.79
Sub Total		19390.15	46335.80	5196.11	70922.06	50759.71
Metre Gauge						
17	Central	-	-	-	-	-
18	Eastern	-	-	-	-	-
19	East Central	30.03	5.62	0	35.65	473.79
20	East Coast	-	-	-	-	-
21	Northern	-	-	-	-	13.64
22	North Central	4.78	0	0.21	4.99	6.64
23	North Eastern	169.72	27.06	12.44	209.21	743.44
24	Northeast Frontier	51.15	51.05	91.31	193.51	320.53
25	North Western	38.48	4.15	1.45	44.08	871.52
26	Southern	24.74	0.60	26.14	51.49	382.86
27	South Central	7.08	0.01	0.76	7.85	23.17
28	South Eastern	-	-	-	-	-
29	South East Central	-	-	-	-	-
30	South Western	0.84	0.07	0	0.90	7.54
31	Western	44.77	1.14	28.95	74.86	318.49
32	West Central	-	-	-	-	-
Sub Total		371.59	89.69	161.26	622.55	3161.62

Source: Annual Statistical Statements, published by M/o Railways, Railway Board

Table 2C.1(contd.) : Gaugewise and Zonewise Gross Revenue and Working Expenses for the Year 2007-08

(Rs. in crore)

Sl. No.	Railway	Gross Revenue			Total	Working Expenses
		Passenger Revenue	Freight Revenue	Other Income		
	Narrow Gauge	0	0	0	0	0
33	Central	2.17	0	0.36	2.53	44.19
34	Eastern	0.54	0	0.04	0.58	4.33
35	East Central	0	0	0	0	0
36	East Coast	0	0	0	0	0
37	Northern	4.74	0	0.46	5.20	86.73
38	North Central	2.45	0	0.71	3.16	64.19
39	North Eastern	0	0	0	0	0
40	Northeast Frontier	3.78	0	0.10	3.89	5.74
41	North Western	0	0	0	0	0
42	Southern	0	0	0	0	0
43	South Central	0	0	0	0	0
44	South Eastern	0	0	0	0	0
45	South East Central	7.26	0	0.10	7.36	104.26
46	South Western	0	0	0	0	0
47	Western	0.57	0	1.45	2.02	27.72
48	West Central	0	0	0	0	0
	Sub Total	21.50	0	3.22	24.73	337.16
	Grand Total	19783.25	46425.49	5360.60	71569.33	54258.49

Source: Annual Statistical Statements, published by M/o Railways, Railway Board

Table 2C.2 : Gross Expenditure, Capital Outlay and Capital at Charge for the Year 2007-08

(Rs. in crore)				
Sl. No.	Railway	Total Gross Expenditure	Capital Outlay	Total Capital-at-charge
Government Railways (Excl. Worked Lines and Purchased Rly.)				
1	Central	4674.26	433.62	4621.11
2	Eastern	4083.78	109.89	2020.14
3	East Central	3824.31	535.06	6148.53
4	East Coast	2639.39	213.73	3232.75
5	Northern			
	Commercial	6397.64	2102.74	14730.49
	Strategic	34.85	0.01	82.97
6	North Central	3265.84	212.65	2811.70
7	North Eastern	1926.94	136.68	1439.35
8	Northeast Frontier			
	Commercial	2033.07	1001.21	7322.42
	Strategic	526.60	1.45	48.03
9	North Western			
	Commercial	2008.63	143.01	1280.84
	Strategic	65.99		309.44
10	Southern	3968.64	175.83	4333.30
11	South Central	4588.53	347.46	4022.37
12	South Eastern	2919.22	62.60	2079.81
13	South East Central	2173.87	39.70	1488.93
14	South Western	1779.03	369.06	2570.75
15	Western			
	Commercial	4529.51	140.75	3499.61
	Strategic	1.47		33.66
16	West Central	2873.35	46.99	1948.27
Total		54314.93	6072.43	64024.47
Production Units and Independent Projects				
17	CLW	..	7.04	346.69
18	DLMW	..	11.41	240.38
19	DLW	..	264.54	700.65
20	ICF	..	78.61	387.01
21	RCF	..	110.45	783.21
22	RE	..	259.03	3814.21
23	Rail Wheel Factory	..	0.15	288.84
Total		..	731.23	6560.99
Metropolitan Transport Projects				
24	MTP Mumbai	..	..	..
25	MTP Kolkata	147.24	150.72	2428.46
26	MTP Delhi	..	..	34.74
27	MTP Chennai	..	15.17	696.38
Total		147.24	165.89	3159.58
Zone Total		54462.17	6969.55	73745.04

Source: Annual Statistical Statements, published by M/o Railways, Railway Board

Table 2C.3 : Plan Head-wise Allocation and Expenditure

(Rs. in crore)

Sl. No.	Plan Head	2005-06			2006-07			2007-08		
		Allocation (RE)	Actual Net Expenditure	% Utilization	Allocation (RE)	Actual Net Expenditure	% Utilization	Allocation (RE)	Actual Net Expenditure	% Utilization
1	New Lines (Construction)	1935.86	1990.98	102.85	2524.64	2488.44	98.57	2680.29	2667.49	99.52
2	Restoration of Dismantled Lines	16.01	13.3	83.07	10	10.72	107.20	30	35.69	118.97
3	Gauge Conversion	1234.21	1241.74	100.61	1901.85	2136.13	112.32	2770.52	3021.91	109.07
4	Doubling	674.69	687.21	101.86	1175.7	1201.72	102.21	1742.5	1670.48	95.87
5	Traffic Facilities-Yard Remodelling and Others	413.58	372.14	89.98	595.54	547.76	91.98	914.48	826.23	90.35
6	Computerisation	185.22	111.6	60.25	272.28	196.11	72.03	281.87	118.23	41.94
7	Railway Research	25.15	6.54	26.00	40.05	32.6	81.40	21.74	19.8	91.08
8	Rolling Stock	5172.19	5006.92	96.80	6661.39	6339.9	95.17	8439.11	8129.17	96.33
9	Leased Assets-Payment of Capital Component	1615.59	1615.59	100.00	1720.12	1720.12	100.00	1649.85	1677	101.65
10	Road Safety Works-Level Crossings	299.98	117.25	39.09	274.92	145.03	52.75	499.93	185.8	37.17
11	Road Safety Works-Road Over Bridges/Under Bridges	410.83	144.99	35.29	435.86	214.91	49.31	550.67	347.55	63.11
12	Track Renewals	2890.03	3223.64	111.54	3418.39	3796.06	111.05	3367.38	3035.04	90.13
13	Bridge Works	483.3	409.33	84.69	512.32	469.39	91.62	660.74	457.36	69.22
14	S & T works	1164.13	1042.54	89.56	1345.35	1179.15	87.65	1550.94	1342.8	86.58
15	Electrification	68.96	73	105.86	223.04	241.25	108.16	453.41	463.57	102.24
16	Other Electric Works	184.05	159.74	86.79	23.481	211.24	899.62	276.57	245.3	88.69
17	Machinery & Plant	199.37	185.83	93.21	238.68	174.53	73.12	286.05	191.68	67.01
18	Workshops & Production Units	332.03	238.44	71.81	421.41	358.87	85.16	604.81	495.13	81.87
19	Staff Quarters	80.17	60.78	75.81	115.13	87.82	76.28	189.86	168.06	88.52
20	Amenities for Staff	96.83	91.99	95.00	145.38	127.56	87.74	215.09	183.31	85.22
21	Passenger Amenities	273.54	256.19	93.66	400.98	407.5	101.63	633.6	668.17	105.46
22	Investment in PSUs (Rail Vikas Nigam)	593.4	172.67	29.10	2028	1710	84.32	1473.4	1581.74	107.35
23	Other Specified Works	220.48	187.87	85.21	268.21	241.02	89.86	338.16	293.7	86.85
24	Stores Suspense, Manufacture Suspense etc.	181.91	698.5	383.98	423.1	710.82	168.00	501.62	754.33	150.38
25	MTPs	224.29	211.57	94.33	259.77	253.43	97.56	485.82	400.8	82.50
	Total	18975.80	18320.35	96.55	25646.92	25002.08	97.49	30618.41	28980.34	94.65

Source: Year Book, published by M/o Railways, Railway Board

Table 2D.1: Zonewise Passenger Traffic on Broad Gauge, Metre Gauge and Narrow Gauge Lines during 2006-07 and 2007-08

Sl. No.	Railway	2006-07		2007-08	
		Passengers Carried in Lakhs	Passenger Kilometres in Crores	Passengers Carried in Lakhs	Passenger Kilometres in Crores
Broad Gauge					
1	Central	14858.43	9543.22	15675.64	10580.98
2	Eastern	8892.24	4859.55	9324.10	4937.09
3	East Central	2610.05	4975.13	2637.78	5105.97
4	East Coast	609.88	1154.57	673.58	1018.82
5	Northern	5676.28	9064.27	6060.24	9953.02
6	North Central	2807.29	5446.36	3098.73	6873.29
7	North Eastern	2047.53	2605.88	2370.50	3026.73
8	Northeast Frontier	332.63	751.59	385.06	768.88
9	North Western	1023.27	203.38	1234.16	2169.77
10	Southern	5641.65	5300.07	6369.24	5595.14
11	South Central	2601.23	4995.38	2943.94	5797.93
12	South Eastern	1880.03	1954.55	1953.69	2324.39
13	South East Central	839.19	1314.72	977.12	1417.17
14	South Western	1322.53	1464.63	1368.76	1949.19
15	Western	15373.75	8356.07	16149.35	9309.30
16	West Central	1433.47	3303.60	1579.48	3930.06
	Total	*60728.80	67123.38	63901.96	*74757.73
Metre Gauge					
17	Central	-	-	-	-
18	Eastern	-	-	-	-
19	East Central	214.66	290.07	97.41	303.21
20	East Coast	-	-	-	-
21	Northern	-	-	-	-
22	North Central	1.98	1.91	27.89	26.25
23	North Eastern	1402.83	1089.01	1481.39	1117.47
24	Northeast Frontier	128.02	75.63	96.46	61.07
25	North Western	182.67	225.70	159.12	190.66
26	Southern	233.22	209.16	182.41	137.60
27	South Central	31.40	31.55	30.46	28.99
28	South Eastern	-	-	-	-
29	South East Central	-	-	-	-
30	South Western	0.09	0.07	5.92	4.50
31	Western	339.31	363.34	268.11	287.21
32	West Central	-	-	-	-
	Total	*1933.71	2286.44	*1824.09	2156.97

*excludes the element of duplication in no. received at same gauge junction from other Indian Govt. Railways

Source: Annual Statistical Statements, published by M/o Railways, Railway Board

Table 2D.1(contd.): Zonewise Passenger Traffic on Broad Gauge, Metre Gauge and Narrow Gauge Lines during 2006-07 and 2007-08

Sl. No.	Railway	2006-07		2007-08	
		Passengers Carried in Lakhs	Passenger Kilometres in Crores	Passengers Carried in Lakhs	Passenger Kilometres in Crores
Narrow Gauge					
33	Central	20.45	8.08	23.89	8.60
34	Eastern	6.20	2.51	6.36	2.57
35	East Central	-	-	-	-
36	East Coast	-	-	-	-
37	Northern	38.22	23.10	39.61	23.73
38	North Central	0.65	0.22	30.69	10.75
39	North Eastern	-	-	-	-
40	Northeast Frontier	0.57	0.46	0.40	0.25
41	North Western	-	-	-	-
42	Southern	-	-	-	-
43	South Central	-	-	-	-
44	South Eastern	-	-	-	-
45	South East Central	82.08	29.22	87.74	32.09
46	South Western	-	-	-	-
47	Western	11.12	2.98	9.86	2.86
48	West Central	-	-	-	-
Total		*159.27	66.58	*198.52	80.85
Zone Total		*62188.81	69476.40	*65243.77	76995.56

*excludes the element of duplication in no. received at same gauge junction from other Indian Govt. Railways

Source: Annual Statistical Statements, published by M/o Railways, Railway Board

Table 2D.2: Zone wise Suburban and Non-suburban Passenger Traffic on Broad Gauge Lines during 2006-07 and 2007-08

(in crore numbers)

Sl. No.	Railway	Suburban				Non-Suburban			
		2006-07		2007-08		2006-07		2007-08	
		Passengers Carried	Passenger Kilometres	Passengers Carried	Passenger Kilometres	Passengers Carried	Passenger Kilometres	Passengers Carried	Passenger Kilometres
1	Central	1279	38761.55	1337	40728.64	207	56670.62	231	65081.19
2	Eastern	761	29618.92	798	30091.79	128	18976.55	134	19279.10
3	Northern	3	46.87	3	47.26	565	90595.83	603	99482.91
4	Southern	291	6500.02	324	7312.39	273	46500.68	312	48639.02
5	South Eastern	87	2905.49	87	3369.47	101	16640.00	109	19874.41
6	Western	1254	34064.45	1320	38292.69	283	49496.24	294	54800.33
Zone Total		*3514	111897.30	*3689	119842.25	*2559	559336.52	*2701	627735.09

*excludes the element of duplication in no. received at same gauge junction from other Indian Govt. Railways

Source: Annual Statistical Statements, published by M/o Railways, Railway Board

Table 2D.3 : Zonewise Freight Traffic on Broad Gauge, Metre Gauge and Narrow Gauge Lines during 2006-07 and 2007-08

Sl. No.	Railway	Total Freight Traffic (Revenue + Non Revenue)			
		2006-07		2007-08	
		Tonnes carried in thousands	Tonne km in lakhs	Tonnes carried in thousands	Tonne km in lakhs
Broad Gauge					
1	Central	109403	378663	117100	388596
2	Eastern	86682	143636	91029	139894
3	East Central	123884	319111	133683	335676
4	East Coast	114335	409092	131635	474801
5	Northern	142437	397646	153050	411802
6	North Central	134826	576581	151272	603754
7	North Eastern	27454	93019	26669	92150
8	Northeast Frontier	16911	110958	23710	129222
9	North Western	37825	169233	37249	172170
10	Southern	36803	149639	67370	151335
11	South Central	127494	475677	136386	523189
12	South Eastern	144507	349930	172988	423727
13	South East Central	136374	369361	162647	442164
14	South Western	62205	136470	59761	147705
15	Western	85075	396626	90319	419790
16	West Central	107098	343772	164534	365491
	Total	741528	4819415	801170	5221467
Metre Gauge					
17	Central	-	0	-	0
18	Eastern	-	0	-	0
19	East Central	582	597	487	481
20	East Coast	-	0	-	0
21	Northern	-	0	-	0
22	North Central	-	0	-	0
23	North Eastern	1580	2707	2729	4275
24	Northeast Frontier	1589	6994	2492	5086
25	North Western	843	2753	250	466
26	Southern	212	444	51	63
27	South Central	43	69	4	5
28	South Eastern	-	0	-	0
29	South East Central	-	0	-	0
30	South Western	1	0.05	3	2
31	Western	1162	1244	107	118
32	West Central	-	0	-	0
	Total	4169	14808	3931	10495

- Not Available

Source: Annual Statistical Statements, published by M/o Railways, Railway Board

Table 2D.3(contd.) : Zonewise Freight Traffic on Broad Gauge, Metre Gauge and Narrow Gauge Lines during 2006-07 and 2007-08

Sl. No.	Railway	Total Freight Traffic (Revenue + Non Revenue)			
		2006-07		2007-08	
		Tonnes carried in thousands	Tonne km in lakhs	Tonnes carried in thousands	Tonne km in lakhs
Narrow Gauge					
33	Central	-	-	-	-
34	Eastern	-	-	-	-
35	East Central	-	-	-	-
36	East Coast	-	-	-	-
37	Northern	-	-	-	-
38	North Eastern	-	-	-	-
39	Northeast Frontier	-	-	-	-
40	North Western	-	-	-	-
41	Southern	-	-	-	-
42	South Central	-	-	-	-
43	South Eastern	-	-	-	-
44	South East Central	-	-	-	-
45	South Western	-	-	-	-
46	Western	-	-	-	-
47	West Central	-	-	-	-
Total		-	-	-	-
Zone Total		744559	4834223	804110	5231962

- Not Available

Source: Annual Statistical Statements, published by M/o Railways, Railway Board