

# INDIAN RAILWAYS

## BANKRUPTCY TO BILLIONS IN RAILWAYS

Presentation for  
Joint workshop by Planning Commission, Indian  
Railways and The World Bank  
25<sup>th</sup> March, 2009



THE TURNAROUND STORY



# IN FINANCIAL CRISIS

**“Indian Railways is today on the verge of a financial crisis. To put it bluntly, the Business As Usual Low Growth will rapidly drive IR to fatal bankruptcy, and in sixteen years the Govt. of India will be saddled with an additional financial liability of over Rs. 61,000 crores (12.20 billion US \$). On a pure operating level, IR is in a terminal debt trap.”**

**Expert Group on IR headed by Dr. Rakesh Mohan (July 2001)**



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# FASTER, HEAVIER AND LONGER TRAINS

## THE MIDAS TOUCH

(Figures in billion US \$)

	2000-01	2007-08
Internal Generation	0.47	5.01
Fund Balances	0.07	4.46
Operating Ratio	98.3%	75.9%
Ratio of Net Revenue to capital-at-charge (Return on Net Worth)	2.5%	20.7%
Debt services cash coverage ratio (times)	1.74	6.53

Exchange rate Rs.50 per dollar in November, 2008.



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# MANAGING CHANGE

**Appreciating  
Change**

**Mobilizing  
Support**



**Building  
Change  
Capability**

**Executing  
Change**

Source : Change Management by Prof. V. Nilakant & Prof. S. Ramnarayan



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# LEADERSHIP FOR CHANGE

Integrity

Humility

**'Can-Do'  
Attitude**

Visionary

Passionate



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# SCANNING BUSINESS ENVIRONMENT

Revenue  
streams

Cost centres

**Do  
Reality  
Check**

Socio-political  
context

Organization



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# EXECUTION

**Cross functional  
coordination**

**Guiding  
Coalition**

**Reflection  
And  
Learning**

**Inclusive  
innovation**

**Resource  
Leveraging**



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# INCLUSIVE INNOVATION

Low Cost

Scalability

**Garib Rath**

Resource efficient

Aspirational



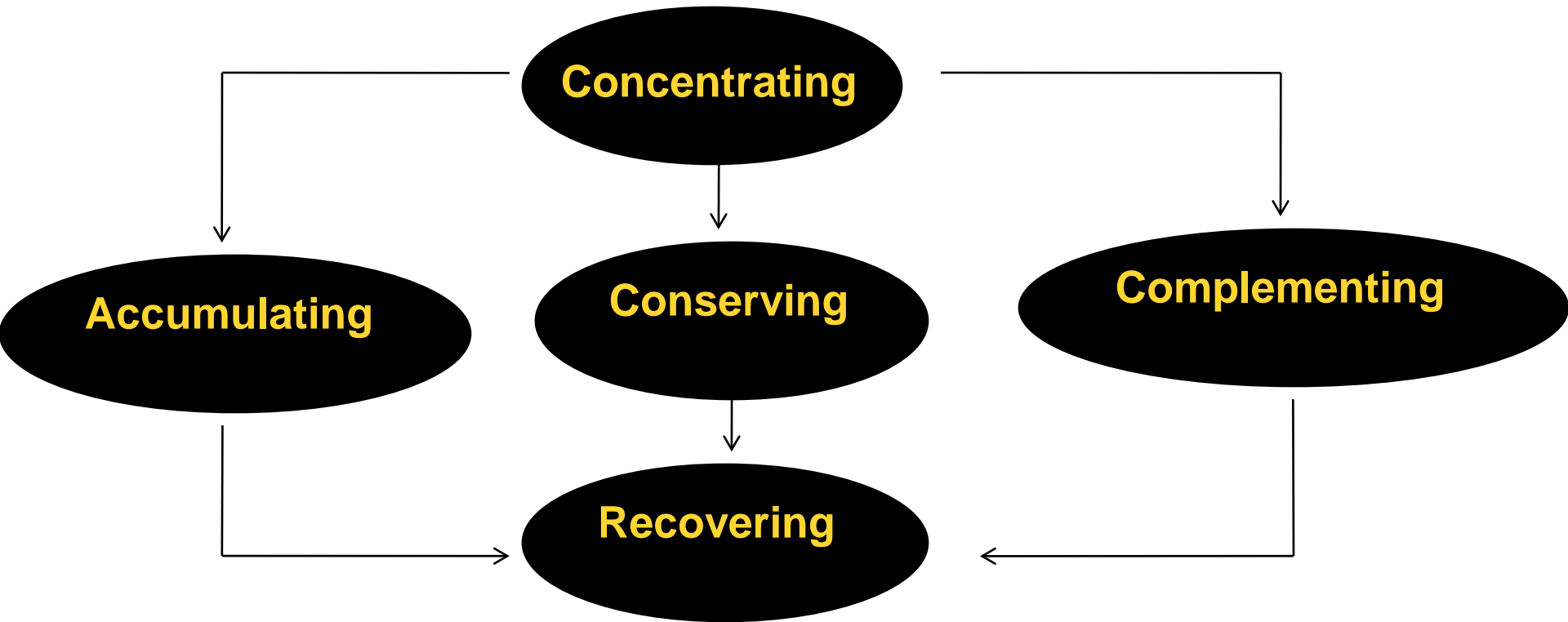
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# RESOURCE LEVERAGING

STRETCH AND LEVERAGE ARE BLOOD RELATIONS



Source : 'Competing for the Future' by Mr. Gary Hamel & Mr. CK Prahalad



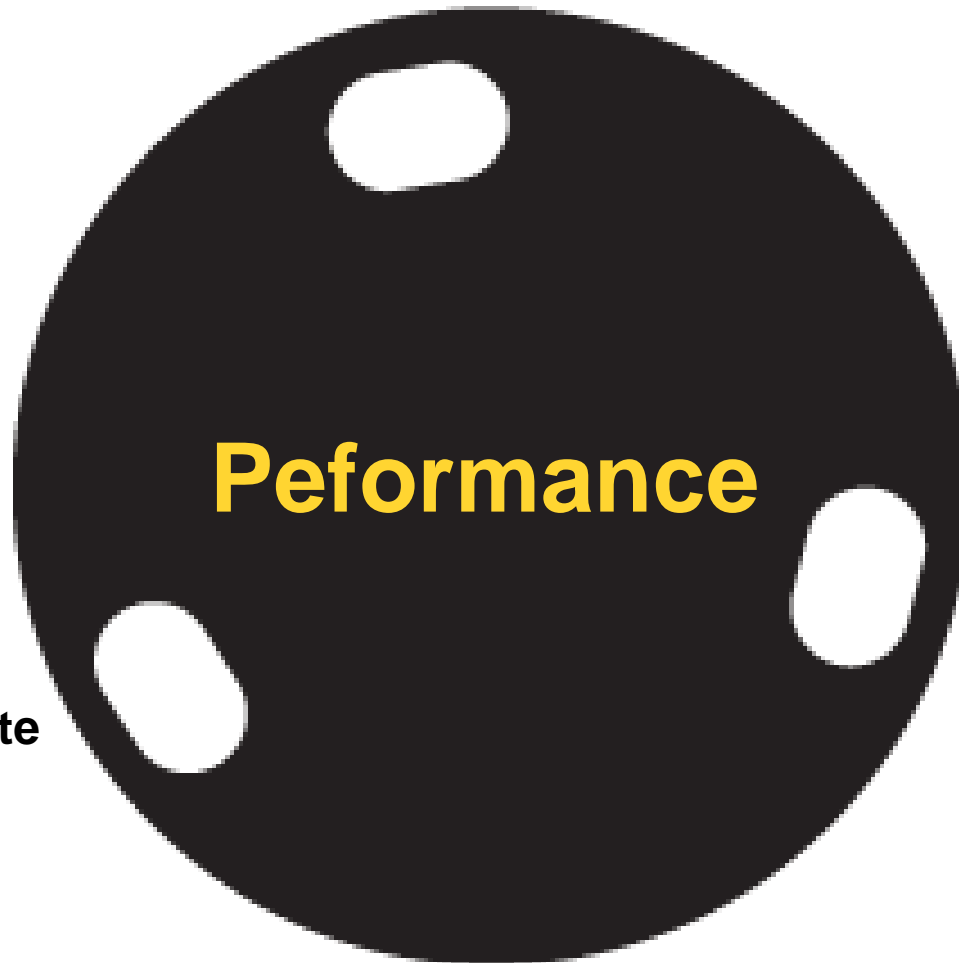
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# COMMUNICATION

**Ownership and  
involvement**

**Safeguard  
organizational  
identity**



**Create and celebrate  
success**

**Transparency**

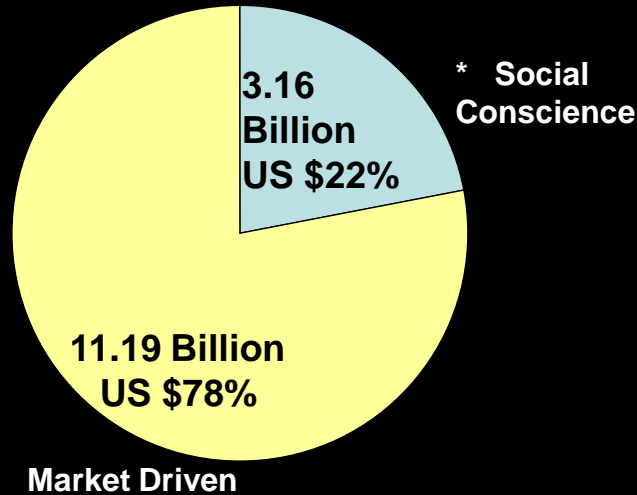


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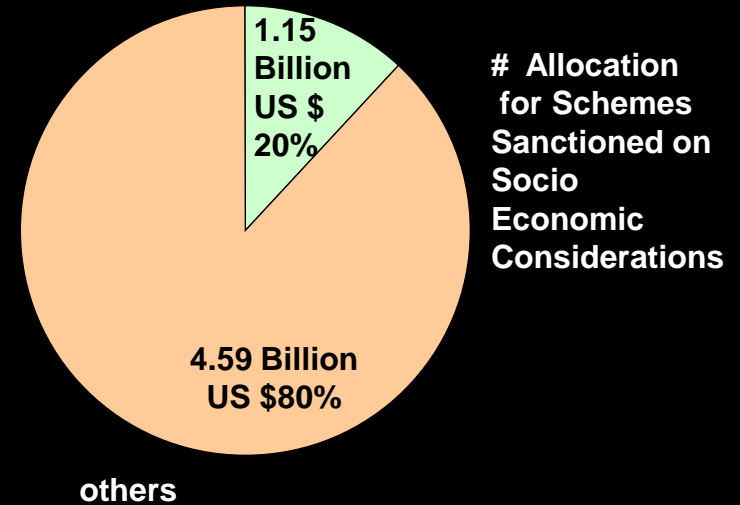


# RAILWAY REFORMS WITH A HUMAN FACE

## Traffic Earnings (2007-08)



## Annual Plan (2007-08)



\* Social conscience consists of passenger earnings other than earnings from AC classes.

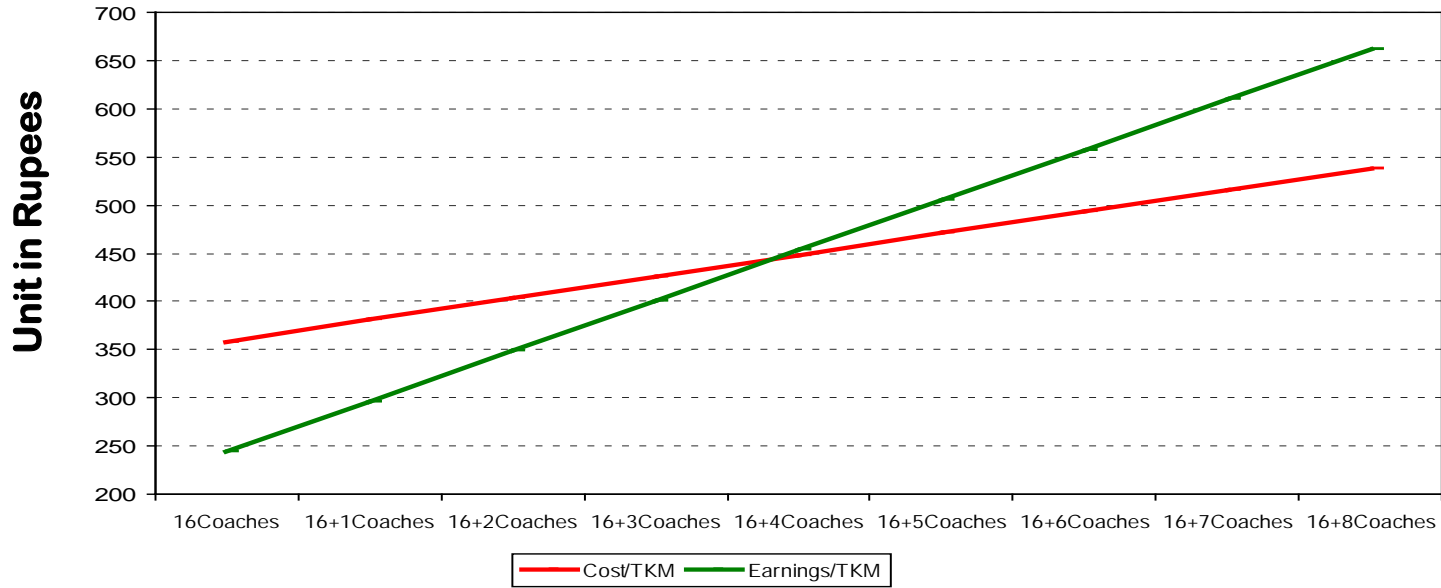
# It includes allocation for new lines & metropolitan transport projects but does not include gauge conversion works as it has become an operational necessity.



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# Cost & Earnings per Train Kilometer at same distance (1385 km) for different rake composition



	<u>16 Coach</u>	<u>24 Coach</u>	<u>% Increase</u>
Cost/TKM	- \$7.17	\$10.23	50
Earn/TKM	- \$4.89	\$13.23	171
Cost/TKM(Goods)	-	\$13.89	
Cost/Coach Km(Passenger)	-	\$0.76	
Cost/Wagon Km(Goods)	-	\$0.36	
Cost/PKM	-	0.78 US Cent	
Cost/NTKM	-	1.08 US Cent	

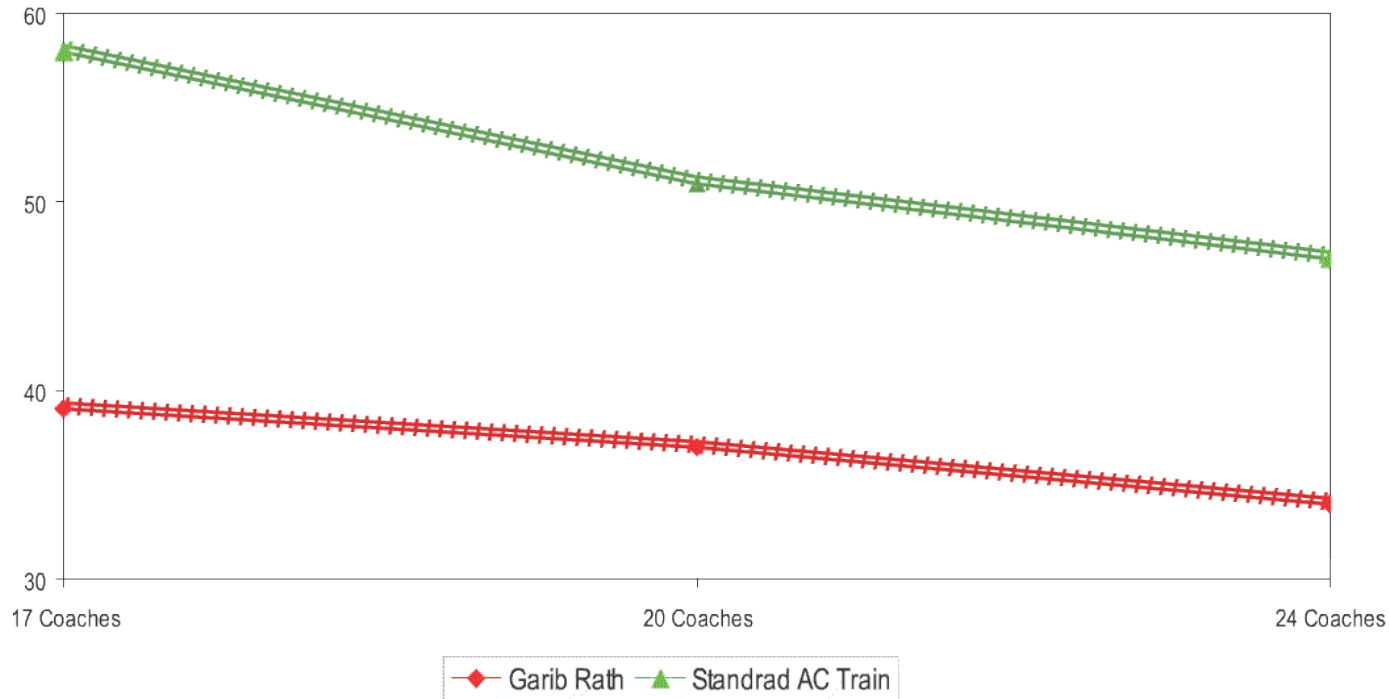
<u>Class</u>	<u>Earnings per Coach KM</u>	<u>Fare Index</u>
Sub-urban	\$ 0.44	100
General(Ordinary)	\$ 0.44	100
General(Mail/Express)	\$ 0.40	182
Sleeper	\$ 0.32	291
3AC	\$ 0.80	819
2AC	\$ 0.74	1310
1AC	\$ 0.74	2550



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# COST COMPARISON BETWEEN GARIB RATH AND A STANDARD AC TRAIN



<u>Seating Capacity</u>		
	Standard AC Train	Garib Rath
3AC	: 64	75
Chair Car	: 70	102

<u>Total No. of passengers</u>		
	Standard AC Train	Garib Rath
17 - coach	: 816	1233
24 - coach	: 1302	1920



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# REDUCTION IN PASSENGER LOSSES

Passenger losses are being reduced by

- Increasing length, seating capacity and occupancy
- Optimizing layout of coaches
- Standard composition of trains
- Reducing losses on catering and parcel services
- Increasing non-passenger fare income

## LOSSES ON COACHING SERVICES – 1.31 Billion US \$ (Figures in Billion US \$)

Passenger (Mail & Express trains)	0.39	30%
Passenger (Ordinary trains)	0.45	34%
Suburban services	0.16	12%
Parcel, Luggage and Catering services	0.31	24%



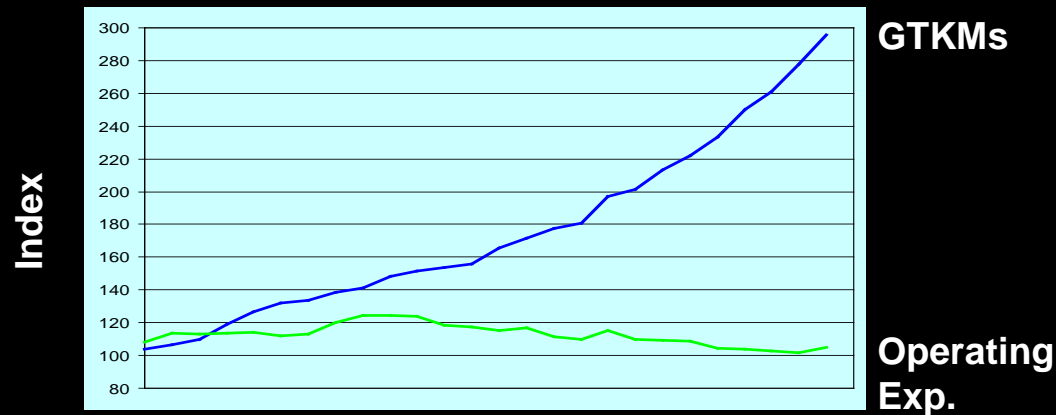
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# IR IS A PLAY ON VOLUMES

## HOW LONG IS LONG-TERM

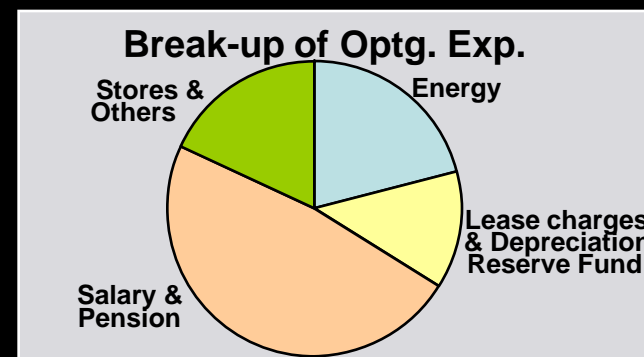
Index of Operating expenses at constant prices and GTKMs (1982-83 to 2007-08)



1982-83

GTKM (Billion)	1982-	2007-
Operating expenses at current prices (Billion US \$)	412	1174
Operating expenses at constant prices (Billion US \$)	0.78	11.08
Operating expenses at constant prices (Billion US \$)	0.69	0.67

2007-08



**Long Term Variable Cost may be taken as 78.5% – Finance Code, para 217**  
 GTKMs - Gross Tonne Kilometers

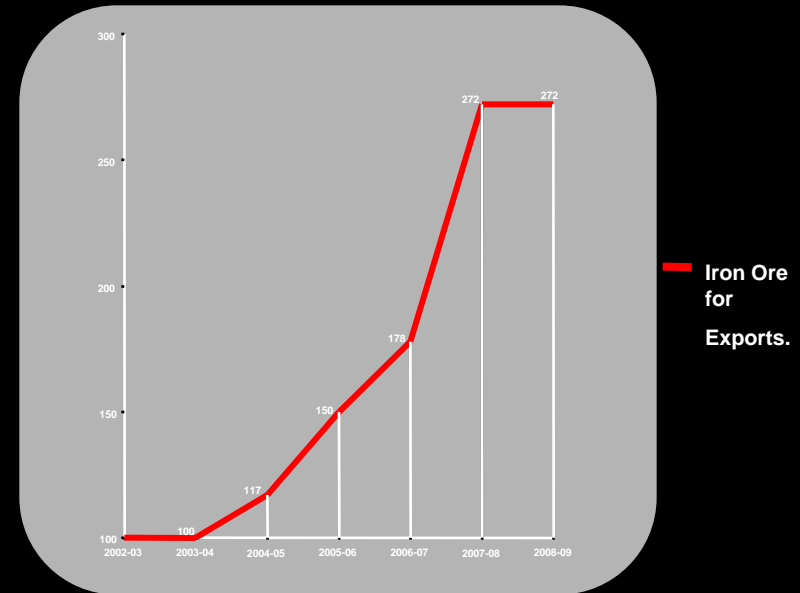
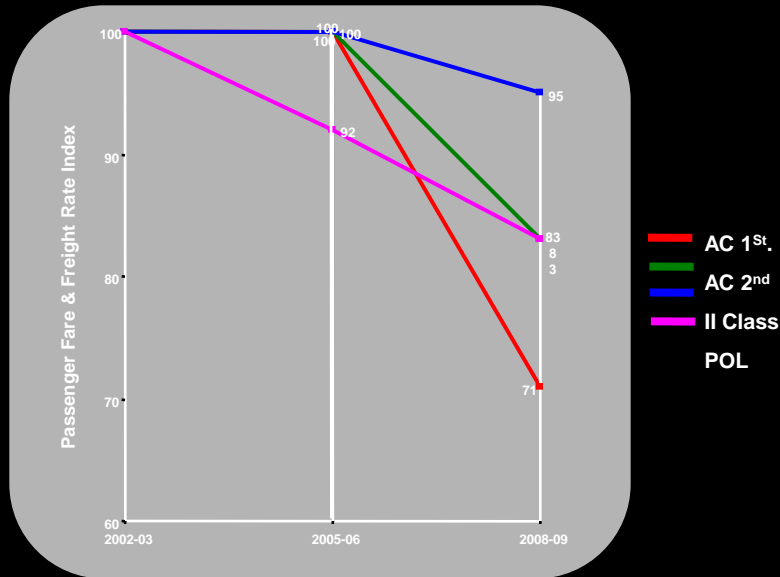


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# TARIFF RATIONALIZATION

## Passenger Fares and Freight Rates Index



- AC 1<sup>st</sup> class fares reduced by 29%.
- AC 2<sup>nd</sup> class fares reduced by 17%.
- Second class fares reduced by 5%.
- Freight rates for POL reduced by 17%.
- Freight rates for Iron Ore for Exports increased by 172%.

- Pricing based on affordability Vs elasticity of demand.
- Door to Door Vs Station to Station railway transportation.



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# FEASIBLE SET OF REFORM OUTCOMES

Commercially viable

Commercially unviable

Politically desirable

**Outcome 1: Win-Win**

Faster, Longer &  
Heavier Trains

**Outcome 3:  
Exclusively social  
returns**

Maintaining loss  
making rail lines

Politically undesirable

**Outcome 2:  
Exclusively  
Commercial returns**

Raising passenger  
fares

**Outcome 4:  
Lose-Lose**

Narrow  
departmentalism



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# FREIGHT BUSINESS IS A PLAY ON VOLUMES

## Higher Market Share and Margins

ITEM	2000-01	2007-08	VARIATION
Freight loading (Million Tonnes)	492	790	61%
NTKMs/Wagon per day	2,042	3,350	64%
Freight unit cost (US cents per NTKMs)	1.22	1.10	-12%

Driven by :

- Improved wagon turnaround and axle load
- Tariff rationalization and dynamic pricing policy
- Efficiency improvements and targeted investments

NTKMs – Net Tonne Kilometers



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# REDUCING TURN ROUND TIME OF WAGONS TO 5 DAYS

Commercial, Operational and Investment Issues

- Full rake placement
- Round the clock working
- Electrification of diesel sidings on electrified routes

- Amendment in Preferential Tariff Schedule (PTS)
- Faster train examination



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# WIN FOR US DOUBLE WIN FOR YOU

## ENCOURAGING PUBLIC PRIVATE PARTNERSHIPS (PPP)

- Private parties to run container trains
- Modernisation of metro stations
- Construction of agro outlets and logistics parks
- Construction of ICDs and warehouses

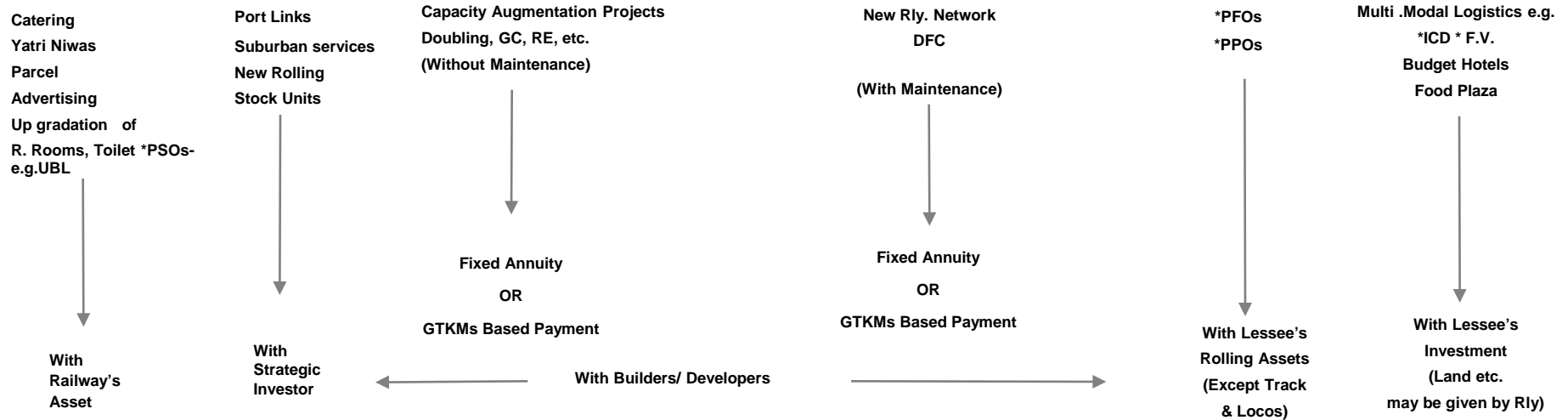
- Setting up of new rolling stock units
- Wagon investment scheme
- Port connectivity works
- Outsourcing non-core activities like catering and parcel
- Computerized train enquiry call centres



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# Increasing Degree of Cooperation between Public and Private sector



- PSO-Private Service Operators, UBL-Uneconomic Branch Lines like Hill Rly etc., LPVP-Least

Present Value of Payments, PFO-Private Freight Operator, Private Passenger Operator, ICD-Inland Container Depot, F.V.-Freight Village

GTKMs - Gross Tonne Kilometers



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# PRIORITIES FOR IT

- ERP for Railways
- Commercial Portal for Railways
- Throughput optimization and reduction in cost of operations.
- MIS and LRDSS for investment optimization

- Ticketing and other passenger revenue enhancement applications – integrated passenger information, reservation and distribution system
- Integration of different softwares including PRS, FOIS etc.



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# PRIORITIES FOR CONTAINER BUSINESS

- De-risking the business model of Railways
- Diversification of IR's freight portfolio by capturing Piece - meal traffic of heavy commodities
- CAGR of 40% per annum for next 5 years in container traffic

- Container traffic to go up from 22 MT to 100 MT by 2010-11
- Domestic traffic : 40 MT
- EXIM traffic : 60 MT
- Creation of infrastructure including ICDs, rolling stock etc.



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# MISSION 2012

## Double rail transport capacity

- Freight traffic from 728 to 1150 MT
- Passenger traffic from 6000 to 9000 million passengers

## Increase speed of trains

- Passenger trains from 55 to 100 KMPH
- Goods train from 24 to 60 KMPH

## Reduce unit cost

- 1.06 cent to 0.76 cent per PKM
- 1.38 cent to 0.88 cent per NTKM

**Deliver world class services and amenities**



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# TARGET 2012

(Figures in billion US \$)

■ Construction of dedicated freight corridors (11,500 Kms)	12.01
■ Upgradation of feeder routes of DFC (30,000 Kms)	4.00
■ Modernisation of assets	12.42
■ Doubling and port connectivity works ( 6,000 Kms)	6.00
■ Gauge conversion (12,000 Kms)	4.00
■ Misc. works	8.41
<b>Total</b>	<b>46.84</b>



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# FUNDING PATTERN

(Figures in billion US \$)

Source	Existing (2001-2006)	Proposed (2007-2012)
▪ Internal generation	5.67	18.01
▪ Borrowings	3.48	10.00
▪ Public Private Partnerships (PPPs)	0.12	8.00
▪ Budgetary support	7.50	10.83
<b>TOTAL</b>	<b>16.77</b>	<b>46.84</b>



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**THANK YOU**

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