Demand for Grants 2017-18 Analysis Railways

The Railways finances were presented on February 1, 2017 by the Finance Minister Mr. Arun Jaitley along with the Union Budget 2017-18. This was the first time since 1924, that the Railways Budget was merged with the Union Budget. In his address, the Finance Minister laid out the budget proposals for Railways for 2017-18. This note gives an overview of Railways' finances, changes from the 2016-17 Budget to the 2017-18 Budget estimates, and the impact of the budget merger.

Key highlights^{1,2}

- Merger with the Union Budget: The Railways Budget will be merged with the Union Budget from this year onward. This would facilitate multi modal transport planning between railways, highways and inland waterways. However, the functional autonomy of the Railways will continue.
- **Outlay**: The total proposed outlay for 2017-18 is Rs 1,31,000 crore which is an 8% increase from the 2016-17 budget estimates (Rs 1,21,000 crore).
- Revenue: Railways' revenue for 2017-18 is estimated at Rs 1,78,350 crore which is a 9% increase from the revised estimates of 2016-17. Total revenue in 2016-17, undershot budget estimates by Rs 6,300 crore (4%).
- Traffic revenue: Total revenue from traffic for 2017-18 is estimated at Rs 1,88,998 crore, which is a 10% increase from the revised estimates of 2016-17. Revenue from freight and passenger is expected to grow by 9% and 4% respectively. In 2016-17, the revenue from freight traffic decreased from budget estimates by 8%, while revenue from passenger traffic decreased by 6%.
- **Expenditure**: Total expenditure for 2017-18 is projected at Rs 1,80,550 crore which is a 10% increase from the revised estimates of 2016-17. In 2016-17, total expenditure decreased from budget estimates by Rs 6,450 crore (4%).
- Dividend: Earlier, every year Railways paid a return on the budgetary support it received from the government every year, known as dividend. The rate of dividend was about 5%. In 2016-17, the proposed dividend payable was Rs 9,731 crore.
 From 2017-18, Railways will not be required to pay dividend to the central government.

2017-18 Budget announcements

Key announcements and proposals related to Railways made in Budget 2017-18 include:

 Focus areas: Railways will focus on four major areas: (i) passenger safety, (ii) capital and development works, (iii) cleanliness, and (iv) finance and accounting reforms.

(10) years

- **Safety:** For passenger safety, a Rashtriya Rail Sanraksha Kosh will be created with a corpus of Rs one lakh crore over a period of five years (Rs 20,000 crore per year). Other safety related measures include elimination of unmanned level crossings on broad gauge lines by 2020.
- **Traffic volume:** The traffic volume will be increased by 10% over the next three years. This will be achieved through the modernisation and upgradation of identified corridors. Railway lines of 3,500 km will be commissioned in 2017-18, which is a 25% increase from last year (2,800 km).
- Railway operations: With Railways facing competition from other modes of transportation (such as roads, airlines), few measures will be undertaken to improve its performance. Some of these include:
 - i. End-to-end transport solutions for select commodities will be introduced through partnerships with logistics players;
- ii. Rolling stock will be customised to transport perishable goods;
- iii. Service charge on tickets booked through IRCTC will be withdrawn;
- iv. Accrual based financial statements will be rolled out by March 2019.
- **Tariff rationalisation:** Railway tariffs will be fixed after considering the cost, quality of service, social obligations, and competition from other forms of transport.
- Metro rail: A new Metro Rail Policy will be announced with focus on innovative models of implementation and financing, and standardisation and indigenisation of hardware and software. A new Metro Rail Act will be enacted by rationalising the existing laws.
- Station redevelopment: 500 stations will be made differently abled friendly by providing lifts and escalators. About 7,000 stations will be fed with solar power in the medium term. Works will be taken up for 2,000 railway stations as part of the 1,000 MW solar mission.
- **Cleanliness:** A coach mitra facility will be introduced. This will be a single window interface

Prachee Mishra prachee@prsindia.org to register all coach related complaints and requirement. By 2019, all coaches will be fitted with bio-toilets.

• **IPO:** The shares of Railway public sector enterprises such as IRCTC, Indian Rail Finance Corporation and Ircon International Limited will be listed in stock exchanges.

Overview of Finances^{1,2,3}

Revenue

Indian Railways is primarily financed through (i) gross budgetary support from the central government, (ii) its own internal resources (freight and passenger revenue, leasing of railway land, etc.), and (iii) extra budgetary resources (market borrowings, institutional financing, etc.).³ The proposed plan investment for 2017-18 is Rs 1,31,000 crore. This is about 8% higher than the proposed plan investment for 2016-17.

Table 1: Plan outlay (in Rs crore)

	2015-16 Actuals	2016-17 Revised	2017-18 Budget	% Change (BE 2017- 18/ RE 2016-17)
Gross budgetary support	35,008	46,355	55,000	19%
Internal resources	19,446	14,715	14,000	-5%
Extra budgetary resources	39,066	59,930	62,000	3%
Railway Safety Fund	2,661	0	0	NA
Total	96,181	1,21,000	1,31,000	8%

Sources: Notes on Demand for Grants for Ministry of Railways, 2017-18; PRS.

Gross Budgetary Support (GBS)

The central government supports Railways in the form of GBS, in order to expand its network. In 2017-18, the gross budgetary support from central government increased by 8% from revised estimates of Rs 46,366 crore to budget estimates of Rs 55,000 crore.

Internal Resources

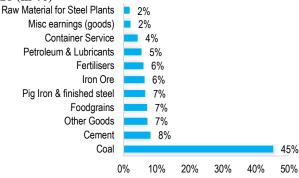
Railways earns its internal revenue primarily from passenger and freight traffic. In 2015-16 (latest actuals available), freight traffic contributed to about 66% of the internal revenue. In comparison, passenger traffic contributed to about 24% of the internal revenue. In 2017-18, Railways expects to earn 60 % of its internal revenue from freight traffic and 28% from passenger traffic.

Passenger revenue: In 2016-17 (revised estimates), revenue from passenger traffic decreased by 6% from budget estimates of Rs 51,012 crore to Rs 48,000 crore. However, passenger traffic increased by 2%. In 2017-18, Railways expects to earn Rs 50,125 crore from passenger traffic, an increase of 4% over revised estimates of 2016-17. The growth in passenger traffic for 2017-18 is estimated at 0.2%.

In September 2016, the Ministry of Railways introduced a flexi-fare system for first class passenger traffic in certain categories of trains.⁴ This had raised concerns about train fares becoming more expensive. In 2016-17, passenger revenue across all classes (first class, sleeper, etc.) declined despite an increase in passenger traffic. In light of this, it is unclear how passenger revenue will increase in 2017-18 with a marginal increase in traffic.

Freight revenue: In 2016-17, revenue from freight traffic was Rs 1,08,900 crore (revised estimates). In 2017-18, Railways expects to earn Rs 1,18,157 crore from goods traffic. In 2015-16 (latest actuals available), Railways generated most of its freight revenue from the transportation of coal (45%), followed by cement (8%), and foodgrains (7%) (see Figure 1).

Figure 1: Share in Railways freight revenue for 2015-16 (in %)



Sources: Detailed Demand for Grants of Ministry of Railways 2017-18; PRS.

Freight traffic: Freight traffic has been declining over the last few years. The freight traffic for 2017-18 is estimated to increase by 9% over revised estimates of 2016-17. The 2017-18 Budget speech referred to increasing traffic volume by modernising and upgrading certain corridors.

In order to improve freight traffic, in 2016-17, the Railways Ministry had proposed expanding the freight commodities basket, and reviewing the freight tariff policy. However, in 2016-17, freight traffic decreased by 11% from the budget estimates, and revenue from freight traffic decreased by 8%.

Figure 2: Volume growth for freight and passenger traffic



% Growth in freight volume
 % Growth in passenger volume
 Note: RE – Revised Estimates

Sources: Detailed Demand for Grants of Ministry of Railways 2017-18; PRS.

Extra Budgetary Resources (EBR)

EBR includes market borrowings, financing from banks, external investments, etc. External investments in Indian Railways could be in the form of public private partnerships (PPPs), joint ventures (JVs), or market financing by attracting private investors to buy bonds or equity shares in Railways.^{5,6} Most of Railways EBR comes in the form of market borrowings from the Indian Railways Finance Corporation (IRFC).⁵

In 2017-18, Rs 62,000 crore is estimated to be raised through EBR, an increase of 3% over revised estimates of 2016-17 (Rs 59,930 crore).

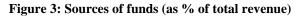
Trends in revenue

In the last few years, the share of gross budgetary support as a percentage of total plan outlay has remained constant. This suggests that the central government's support to Railways has broadly remained similar in the last few years.

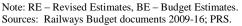
The share of internal resources has been declining, suggesting that Railways has been struggling to run its transportation business, and generate its own revenue. Figure 2 shows the change in freight and passenger volume in the last few years.

The Committee on Restructuring Railways had observed that raising revenue for Railways is a challenge because: (i) investment is made in projects that do not have traffic and hence do not generate revenue, (ii) the unbalanced mix of passenger and freight traffic does not help generate revenue, (iii) the efficiency improvements do not result in increasing revenue, and (iv) delays in projects results in cost escalation, which makes it difficult to recover costs.⁵

The share of extra budgetary resources has been increasing (see Figure 3). In 2015-16, majority of the revenue for Railways came from extra budgetary resources, suggesting an increasing dependence on borrowings. Various committees have noted that an increased reliance on borrowings will further exacerbate the financial situation of Railways.^{5,6}







Social service obligations of the Railways

The NITI Aayog had noted that Indian Railways carries out various activities in national interest which are not driven strictly by commercial principles.⁷ Railways' passenger business faced losses of about Rs 33,000 crore in 2014-15 due to its social service obligations.⁷ Such social service obligations include: (i) pricing essential commodities lower than cost, (ii) low fares and passenger concessions (such as cheaper tickets for senior citizens, army veterans), (iii) uneconomic branch lines, and (iv) new lines not yet profitable.

However, NITI Aayog had also noted that the data related to the cost of running passenger business is not scientific and accurate. Therefore, it is difficult to compute accurately the levels of under-recoveries. The calculation of social costs does not factor the efficiency of various expenditures (whether fuel consumption is optimal, maintenance practices and costs are reasonable, etc.).⁷ The calculation also does not factor in Railways' potential to leverage existing assets (such as stations, land banks) that could increase its revenue sources.⁷

Expenditure

In 2015-16, Indian Railways spent most of its money on staff (36%), followed by expenses on pension fund (22%), and fuel (17%). In Budget 2017-18, the total expenditure is estimated to increase by 8% over the revised estimates of 2016-17. In 2017-18, the trends in expenditure are estimated to be broadly similar, with the addition of the new safety fund, Rail Sanraksha Kosh.

Dividend

Railways paid a return on the budgetary support it received from the government (GBS) every year, known as dividend. The rate of this dividend was determined by the Railways Convention Committee, and was about 5% in 2016-17. From 2017-18, Railways will not be required to pay dividend to the central government.

In 2015-16, the dividend paid was Rs 8,722 crore. In 2016-17, the dividend payable was estimated at Rs 9,731 crore. However, as per the revised estimates of 2016-17, Railways did not pay any of this dividend amount.

Staff wages and pension

As per the revised estimates of 2016-17, the expenditure on Railway staff (Rs 70,824 crore) overshot the expenditure in 2015-16 (Rs 56,817 crore) by 25%. This may be attributed to the implementation of the Seventh Pay Commission. For 2017-18, the expenditure on staff is estimated at Rs 71,879 crore.

Staff costs have increased from 2005-06 to 2014-15 (BE) at an average rate (CAGR) of 13%.⁵ The Committee on Restructuring Railways had observed that the expenditure on staff is extremely high and unmanageable. This expense is not under the control of Railways and keeps increasing with each Pay Commission revision.⁵ It has also been observed that employee costs (including pensions) is one of the key components that reduces Railways' ability to generate surplus, and allocate resources towards operations.⁵

Fuel and electricity

In 2016-17, the expense on fuel and electricity was estimated to decrease to Rs 24,561 crore from Rs 27,331 crore in 2015-16 (10%). This was attributed to a decrease in fuel prices and low cost of electricity. However, as per the revised estimates of 2016-17, fuel expenses increased by 4% to Rs 28,253. In 2017-18 expenses on fuel and electricity is estimated to be Rs 29,478 crore.

Depreciation Reserve Fund (DRF)

Appropriation to the DRF is made annually based on the recommendation of the Railways Convention Committee. The DRF is intended to finance the costs of new assets replacing the old ones. The Standing Committee on Railways had observed that appropriation to the DRF is obtained as a residual after payment of the dividend and appropriation to the Pension Fund, instead of the actual requirement for maintenance of assets.⁵

In the last few years, appropriation to the DRF has been decreasing. In 2016-17, appropriation to the DRF was Rs 5,200 crore. This means that Railways spent Rs 5,200 crore on asset maintenance in 2016-17, as compared to Rs 7,775 and Rs 5,500 in 2014-15 and 2015-16 respectively. Under-provisioning for the DRF has been observed as one of the reasons behind the decline in track renewals, and procurement of wagons and coaches.⁵ In 2017-18, appropriation to the DRF is estimated at Rs 5,000 crore, 4% less than the revised estimates of 2016-17.

Rashtriya Rail Sanraksha Kosh

In his budget speech, the Finance Minister announced the creation of the Rashtriya Rail Sanraksha Kosh to provide for passenger safety in Railways. It will be created with a corpus of Rs one lakh crore over a period of five years (Rs 20,000 crore per year). The central government will provide a seed amount of Rs 1,000 crore for this fund. The remaining amount will be raised by the Railways from their own revenues or other sources. With the Railways struggling to meet its expenditure and declining internal revenues, it is unclear how Railways will fund the Rail Sanraksha Kosh. The Kosh will require the Railways to spend Rs 19,000 crore every year for the next five years. The central government will provide the guidelines and timeline for projects to be funded through this fund. This may affect the Railways' independence and autonomy in determining its own priorities with regard to railway safety.

Railways had a Railway Safety Fund existing to which received about 3% of allocation in the plan outlay. In 2015-16 (actuals), Rs 2,661 crore was allocated to this fund. Since 2016-17, no allocations have been made to this existing fund.

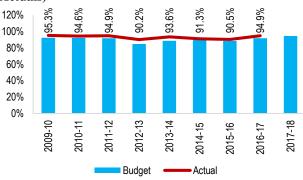
Surplus and Operating Ratio

The railways surplus (after payment of dividend to the central government) in 2017-18 is estimated at Rs 8,948 crore which is a 16% increase from the revised estimates of 2016-17. Railways' surplus declined by 27% from Rs 10,506 crore in 2015-16 to Rs 7,695 crore in 2016-17

Operating Ratio is the ratio of the working expenditure (expenses arising from day-to-day operations of Railways) to the revenue earned from traffic. Therefore, a higher ratio indicates a poorer ability to generate surplus that can be used for capital investments such as laying new lines, deploying more coaches, etc.

In 2016-17, the Operating Ratio increased from a budgeted estimate of 92% to 94.9%. The Operating Ratio for 2016-17 is projected at 94.57% (see Figure 4).

Figure 4: Operating Ratio (Budget Estimate vs Actuals)



Notes: Numbers for 2016-17 are Budget Estimates vs Revised Estimates.

Sources: Railways Budget documents 2009-2017; PRS.

http://www.indianrailways.gov.in/railwayboard/uploads/directorate/HL SRC/FINAL_FILE_Final.pdf.

http://164.100.47.134/lsscommittee/Railways/16_Railways_4.pdf.

⁷ Reviewing the Impact of "Social Service Obligations" by Indian Railways, NITI Aayog, September 2016, http://niti.gov.in/writereaddata/files/document_publication/Social-

http://niti.gov.in/writereaddata/files/document_publication/Social-Costs.pdf.

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¹ Notes on Demands for Grants 2017-18, Demand no 80, Ministry of Railways, <u>http://indiabudget.nic.in/ub2017-18/eb/sbe80.pdf</u>.

 $^{^{\}rm 2}$ Statement of Revenue Receipts and Expenditure 2017-18, Ministry of Railways,

http://www.indianrailways.gov.in/railwayboard/uploads/directorate/fin ance_budget/Budget_2017-

^{18/3 %20}Statement%20of%20Revenue%20Receipts%20and%20Expenditure.pdf.

³ Railways Budget documents for the years 2005-2017.

⁴ "Introduction of Flexi Fare system for Rajdhani/Duronto and Shatabdi trains", Press Information Bureau, Ministry of Railways, September 7, 2016.

⁵ Report of the Committee for Mobilization of Resources for Major Railway Projects and Restructuring of Railway Ministry and Railway Board, Ministry of Railways, June 2015,

⁶ "4th Report: Demands for Grants (2015-16)", Standing Committee on Railways, April 20, 2015,

ANNEXURE

Appendix I: Railways Budget 2017-18 Summary

Table 2: Railways Revenue and Expenditure for 2017-18 (in Rs crore)

	¥	2015-16	2016-17	2016-17	% Change	2017-18	% Change
		Actual	Budget	Revised	RE/BE 2016-17	Budget	2017-18 BE/ 2016- 17 RE
	Receipts						
1	Gross Traffic Receipts	1,64,334	1,84,820	1,72,155	-7%	1,88,998	10%
2	Miscellaneous	4,046	4,451	150	-97%	500	233%
3	Total Revenue (1+2)	1,68,380	1,89,271	1,72,305	-9%	1,89,498	10%
	Expenditure						
4	Ordinary Working Expenses	1,07,736	1,23,560	1,22,760	-1%	1,29,750	6%
5	Appropriation to Depreciation Reserve Fund	5,600	3,200	5,200	63%	5,000	-4%
6	Appropriation to Pension Fund	34,500	42,500	35,000	-18%	43,600	25%
7	Total Working Expenditure (4+5+6)	1,47,836	1,69,260	1,62,960	-4%	1,78,350	9%
8	Miscellaneous	1,315	1,800	1,650	-8%	2,200	33%
9	Total Expenditure (7+8)	1,49,151	1,71,060	1,64,610	-4%	1,80,550	10%
10	Net Revenue (3-9)	19,229	18,211	7,695	-58%	8,948	16%
11	Dividend payable to General Revenues	8,723	-	-	0%	-	0%
12	Net Surplus (10-11)	10,506	18,211	7,695	-58%	8,948	16%
13	Appropriation to Railway Development Fund	1,220	2,515	2,515	0%	2,000	-20%
14	Appropriation to Capital Fund	5,798	5,750	5,180	-10%	5,948	15%
15	Appropriation to Debt Service Fund	3,488	214	-	-100%	-	0%
16	Appropriation to Rashtriya Rail Sanraksha Kosh	0	0	0	0	1,000	
17	Operating Ratio	90.5%	92%	94.9%		94.57%	
18	Ratio of Net Revenue to Capital-at- Charge and investment from the Capital Fund	7.0%	5.8%	2.5%		2.5%	

Note: RE – Revised Estimate, BE – Budget Estimate. Sources: Statement of Revenue Receipts and Expenditure, Railways Budget 2017-18; PRS.

Explanatory Notes

Performance parameters

'Net Surplus' represents excess of receipts over expenditure after the Dividend liability (payment for investment in Railway 1. capital) of General Revenues has been paid off.

2. 'Operating Ratio' is the ratio of operating expenses to receipts. A lower ratio indicates higher surplus availability for investments.

Railway Funds

3. Depreciation Reserve Fund - Finances the cost of new assets replacing old assets including the cost of any improved features. Appropriation to this fund are made on the recommendations of the Railway Convention Committee (RCC).

4. Pension Fund - Finances all pension payments to retired Railway staff.

Appendix II: Details of freight and passenger traffic

Table 3: Freight traffic details (NTKM in millions; I	Earnings in Rs crore)
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	Budget 2016-17		Revised Estimates 2016-17		% Change RE/ BE 2016-17		Budget Estimates 2017-18		% Change BE 2017- 18/ RE 2016-17	
Commodity	NTKM	Earnings	NTKM	Earnings	NTKM	Earnings	NTKM	Earnings	NTKM	Earnings
Coal	2,99,594	53,685	2,40,186	43,458	-20%	-19%	2,73,454	49,541	14%	14%
Raw Material for Steel Plants	13,320	3,189	12,096	2,143	-9%	-33%	12,210	2,169	1%	1%
Iron Ore	35,533	6,967	39,028	8,773	10%	26%	43,465	9,738	11%	11%
Cement	59,940	9,902	57,780	9,415	-4%	-5%	62,715	10,243	9%	9%
Foodgrains	59,800	8,085	61,640	8,189	-3%	16%	66,052	8,796	9%	9%
Fertilisers	49,000	6,287	42,670	6,399	26%	30%	46,008	6,915	7%	7%
Petroleum & Lubricants	28,928	6,040	28,267	5,885	48%	6%	29,835	6,226	8%	8%
Container Service	48,293	5,177	46,323	5,147	-41%	14%	52,327	5,801	6%	6%
Other Goods	59,613	12,299	54,879	7,800	-8%	-37%	59,495	8,475	8%	9%
Misc earnings (goods)				4,634				4,634		
Total	6,94,607	1,17,933	6,21,247	1,08,900	-11%	-8%	6,75,622	1,18,157	9%	9%

Notes: NTKM – Net Tonne Kilometre (1 NTKM is the net weight of goods carried for a kilometre). Sources: Statement of Revenue Receipts and Expenditure, Railways Budget 2017-18; PRS.

Table 4: Passenger traffic details (PKM in millions; Earnings in Rs crore)

	Budget 2016-17		Revised 2016-17		% Change RE/ BE 2016-17		Budget Estimates 2017-18		% Change BE 2017- 18/ RE 2016-17	
	PKM	Earnings	PKM	Earnings	PKM	Earnings	PKM	Earnings	PKM	Earnings
Suburban		.						.		
First Class	10,122	404	8,693	369	-14%	-9%	8,710	386	0%	4%
Second Class (Ordinary)	1,41,212	2,544	1,37,347	2,422	-3%	-5%	1,37,616	2,529	0%	4%
Total Suburban	1,51,334	2,948	1,46,040	2,791	-3%	-5%	1,46,326	2,915	0%	4%
Non Suburban										
AC First class	1,614	528	1,714	492	6%	-7%	1,717	513	0%	4%
AC Sleeper	21,164	3,690	22,380	3,621	6%	-2%	22,424	3,782	0%	4%
AC 3 Tier	66,375	9,925	70,892	9,146	7%	-8%	71,030	9,550	0%	4%
Executive Class	306	210	424	138	39%	-34%	425	144	0%	4%
AC Chair Car	10,176	1,519	10,899	1,481	7%	-2%	10,921	1,547	0%	4%
First Class (M&E)	132	20	93	16	-30%	-22%	93	16	0%	4%
First Class (ordinary)	462	21	367	17	-21%	-20%	367	18	0%	4%
Sleeper Class (M&E)	2,71,379	14,981	2,89,047	13,953	7%	-7%	2,89,612	14,571	0%	4%
Sleeper Class (ordinary)	3,395	158	3,646	151	7%	-4%	3,653	158	0%	4%
Second Class (M&E)	3,34,095	11,091	3,50,699	10,627	5%	-4%	3,51,384	11,097	0%	4%
Second Class (Ordinary)	2,76,868	5,920	2,61,436	5,567	-6%	-6%	2,61,948	5,813	0%	4%
Total Non-Suburban	9,85,964	48,064	10,11,597	45,209	3%	-6%	10,13,574	47,210	0%	4%
Total Passenger	11,37,298	51,012	11,57,637	48,000	2%	-6%	11,59,900	50,125	0%	4%

Notes: PKM – Passenger Kilometre (One PKM is when a passenger is carried for a kilometre).

Sources: Statement of Revenue Receipts and Expenditure, Railways Budget 2017-18; PRS.