

## EXAMINATION OF THE PRESENT STATE OF THE RAILWAYS

The most obvious ways of subdividing the railway business as a whole, for the purpose of detailed examination, are in relation to:

- (a) units and sub-units of general managerial responsibility;
- (b) functional subdivision;
- (c) types of traffic;
- (d) parts of the physical system.

No one of these modes of subdivision is, alone, sufficient to lead to understanding of such a large and complex business as that of British Railways, nor can any one of them be pursued in a manner which is completely accurate and reliable. For those reasons, some use has been made of all of them, so as to create a more detailed and reliable picture by the combination of several modes of study.

Subdivisions along the lines of (a) and (b) fall within the scope of normal accountancy. As has already been mentioned, however, railway accountancy has been limited, very largely, to global accounts for the railways as a whole. In consequence, very little information of the kind which could be derived by a thoroughgoing breakdown along the lines (a) and (b) was available. Moreover, because an accountancy system cannot be modified and extended so as to produce much more detailed results quickly, in an organisation of the size of the railways, the main attack on the problem was by subdivision along lines (c) and (d). To build the picture, however, it is convenient to start with the British Railways' accounts.

The figures presented are those for 1961 and, with minor exceptions, cost figures used throughout the Report relate to that year. The reason is that this was the latest year for which fully detailed cost data could be made available during the course of the investigation, and it was also the year in which the special traffic studies were made.

In a situation as changeable as that of the railways, no year can be described as typical. The year 1961 was not a good one from the traffic point of view, because the recession in the steel industry affected the latter part of it. In this respect, therefore, it was worse than 1960, but it was better than 1962, and it is not yet known whether 1963 will be better or worse. Also, although substantial economies were made in 1962, there were two increases in wage rates during that year which amounted to just over 9 per cent. and the working week was reduced.

It is known that the conclusions reached would all have been substantially the same had they been based upon figures for 1960, and there is no reason to think that they would be different were it possible to use figures for 1962 or the early part of 1963. Therefore, the Railways Board is satisfied that although the figures used throughout the Report are not, and could not be, completely up-to-date, they form a sound basis for decision making.

*Consolidated Revenue Account*

	<i>£m.</i>	<i>£m.</i>
Gross Receipts:		
Passenger	157.5	
Freight (including parcels and mails)	306.7	
Miscellaneous	<u>10.5</u>	474.7
Working Expenses:		
Train and vehicle operating expenses	187.5	
Maintenance of rolling stock	122.2	
Other traffic expenses	92.7	
Signalling expenses	39.1	
Maintenance of way and structures	85.4	
General	22.6	
Collection and delivery by road	<u>22.1</u>	
	571.6	
Deduct internal charges raised for transport charges	<u>10.0</u>	561.6
Net receipts		86.9
		<i>(Deficit)</i>

Interest and other central charges amounted to £49 m., making a total deficit of £135.9 m. Additionally, a sum of £23.4 m. was charged to Special Account (pursuant to Section 3 of *the Transport (Railway Finances) Act, 1957*) in respect of interest for the year on borrowings during the years 1958 to 1961 for capital purposes.

*Functional Split of Expenses*

This table shows a re-allocation of the Working Expenses of £561.6 m. according to operational functions:—

	<i>£m.</i>	<i>£m.</i>
Train Working:—		
Locomotives Provision, maintenance, stabling and servicing	55.9	
Carrying units Provision, maintenance, stabling and servicing:—		
Multiple units, carriages and parcels vans	<u>55.0</u>	
Wagons	<u>46.1</u>	
Operating wages	39.8	
Fuel, water and lubricants	<u>52.3</u>	249.1
Marshalling		20.3
Shunting		29.4
Terminal handling and facilities		64.9
Documentation		26.0
Collection and delivery by road		22.1
Miscellaneous (including publicity and claims)		6.9
Track and signalling		110.5
General administration		<u>32.4</u>
	TOTAL EXPENSES	<u>561.6</u>

This re-allocation to operational functions of the Working Expenses as shown in the Accounts is the first stage in the production of the analysis referred to in the following section.

### **ANALYSIS BY TYPES OF TRAFFIC**

With the growth of the Traffic Costing Service, figures on the lines of the table which follows have been prepared annually, showing the breakdown of revenue and costs between the main classes of traffic for British Railways as a whole. To do this, it is necessary to allocate many costs which are not identifiably associated with particular traffics. Such allocations cannot be made in a manner which is beyond dispute, but by dealing with cost elements individually and allocating them in the manner which seems most appropriate for each, results can be produced which provide a sound basis for general conclusions. The figures are shown in Table No. 1.

It will be seen that, in 1961, none of the main classes of traffic covered their full costs, with the exception of coal, which yielded a small margin of net revenue. Therefore, none of the traffic groups can be considered good, in an absolute sense, but there is a wide spread in their relative merit which reflects the extent to which they permit movement by dense flows of well loaded trains.

Thus, in the passenger field, stopping-trains are by far the worst loss maker. These trains, which derive little advantage from the speed of rail movement, are known to be very lightly loaded and to run, very largely, on routes which carry little traffic of any kind. Against direct cost alone they show losses almost equal to total receipts, and the overall loss is nearly twice receipts. On the other hand, fast and semi-fast services, provided by through trains which mostly load well and operate over the routes with high traffic levels, show a substantial margin of receipts over direct costs, even though the group as a whole falls short of paying its full share of system cost.

In the freight field the disparity between classes of traffic is just as great. Wagon-load general merchandise, which loads badly and gives rise to very little through train movement is a bad loss maker. Sundries traffic is bad for the same reason. The two freight traffics which show the best margin over direct cost are minerals and coal. Of these, coal gives a small margin of profit over full cost, while mineral traffic, falls just short of doing so. These are classes of freight which give rise to a much higher proportion of through movement of well loaded trains than the others.

The allocations of traffics to groups is necessarily somewhat arbitrary and the traffics within any one group are far from homogeneous. Within groups of traffic which are relatively good as a whole there may well be some bad low makers, and in groups which are bad, there may be some good streams of traffic. Therefore, although these figures for main traffic groups are informative in a broad sense, they fall far short of providing a basis for selective reshaping of the railways' traffic pattern. Also, because they give no information about the way in which traffic varies in mixture and density over the route system, they give no clear guidance as to how the physical system should be changed. For that purpose, a more detailed analysis is necessary.

Before more detailed consideration of particular types of traffic, however, it is necessary to say something about the route system itself and the distribution of traffic over it.

REVENUE AND ASSESSED COSTS BY MAIN TRAFFICS FOR BRITISH RAILWAYS, 1961

Table No. 1

Type of traffic	Receipts	Direct costs	Margin— surplus or shortfall of receipts over direct costs	Allocated indirect cost	Net revenue or <i>deficit</i> over total cost	Train miles	
	<i>£m.</i>	<i>£m.</i>	<i>£m.</i>	<i>£m.</i>	<i>£m.</i>	<i>m.</i>	
<i>Passenger</i>							
Fast and semi-fast	91-2	72-7	18-5	40-3	21-8	80-0	
Stopping	30-8	56-9	26-1	29-8	55-9	91-4	
Suburban	39-8	40-3	•5	24-5	25-0	58-2	
Total	161-8	169-9	8-1	94-6	102-7	229-6	
Freight by coaching train, mainly parcels and mails.	57-3	40-2	17-1	10-3	6-8		
						<i>Wagon miles</i>	<i>Tons</i>
						<i>m.</i>	<i>m.</i>
<i>Freight</i>							
Coal	108-3	83-5	24-8	22-0	2-8	913	145-7
Minerals	44-5	36-9	7-6	11-3	3-7	459	54-3
General							
Merchandise:	64-8	96-6	31-8	22-0	53-8	1,139	34-4
Wagon-load							
Sundries ....	38-0	51-5	13-5	7-8	21-3	462	3-8
Total	255-6	268-5	12-9	63-1	76-0	2,973	238-2
GRAND TOTAL	474-7	478-6	3-9	168-0	171-9		

The estimated costs in this table include interest and the provision for depreciation is calculated in terms of present money values.