

Analysis of the Rail Deficit

Information Paper

The aim of this study is to find out if railways are improving their financial performance following the industry reform programs initiated by the State and Commonwealth Governments in the 1980s.

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INFORMATION PAPER 40

ANALYSIS OF THE RAIL DEFICIT

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ISSN 1031-5179

ISBN 0 642 23540 6

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Printed by the Department of Transport, Canberra

FOREWORD

The financial performance of government railways has been a matter of public discussion and concern for over decade. The aim of this study is to find out if railways are improving their financial performance following the industry reform programs initiated by the State and Commonwealth Governments in the 1980s. The work was originally carried out for the Australian Rail Industry Advisory Council in 1994, then updated to include data for 1994-95.

The BTCE would like to thank the many individuals from whom it received assistance in preparing this report. Information and advice was provided by officers from the State Rail Authority of NSW, the Public Transport Corporation of Victoria, Queensland Rail, TransAdelaide, Transperth, Westrail, Australian National, the National Rail Corporation, the Australian Bureau of Statistics and some State Treasury Departments.

The work was carried out by Mr Pat McNamara with assistance from Mr Martin Kunz and Mr Tony Carmody.

David Luck
Research Manager
Land branch

Bureau of Transport and Communications Economics
Canberra

October 1995

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SUMMARY

In 1993–94, the Government Finance Statistics prepared by the ABS show that the Australian rail industry incurred a deficit of \$1.4 billion. Most of this figure was attributable to two systems with Victoria's deficit being \$747 million and NSW's deficit \$578 million. Figures obtained by the Bureau of Transport and Communications Economics (BTCE) direct from rail systems show that urban and country passenger services account for the majority of the deficit but the data are not exactly comparable and it is not possible to calculate the exact share of the deficit attributable to passenger services.

Figures for the last few years suggest that the deficit is trending down. After peaking at a nominal \$2.1 billion in 1988–89, the deficit stabilised at \$1.7 billion for three years before dropping to \$1.4 billion in 1992–93 and 1993–94. For recent years, part of the deficit is due to re-structuring costs such as redundancy payments.

In real terms, the ABS figures suggest that the rail deficit has fallen substantially. Measured in 1993–94 prices, the deficit was over \$2 billion per annum during the 1980s before declining to its present level of \$1.4 billion. In looking at time series, however, it must be remembered that railways have switched from cash to accrual accounting methods over the last decade with a resultant increase in depreciation costs. Further, the interest costs for the State Rail Authority (SRA) of NSW and the Public Transport Corporation (PTC) of Victoria were cut dramatically in the late 1980s by debt restructuring arrangements.

As the ABS figures were initially compiled for the National Accounts, it is likely that they over-state the size of the rail deficit; the revenues do not include government payments for CSO services while the costs include substantial payments for non-rail operations in Victoria. On the other hand, the ABS figures do not include the costs of urban rail services in Adelaide or Perth but the net effect of adjusting the figures would most likely be a reduction in the deficit below the ABS figure.

CHAPTER 1 INTRODUCTION

Australian railways began losing money on a major scale in the 1970s. In most post-war years of the 1950s and 1960s they produced a working surplus, covering operating expenses and making some contribution to capital costs. Annual deficits then grew rapidly, increasing fivefold in real terms over a decade. By 1979–80 railway revenues covered only 65 per cent of working expenses and capital charges (ARRDO 1981, p 25).

After rising to a peak of \$2.7 billion in 1983–84 (1993–94 prices), the deficit stabilised at about \$2 billion per annum during the 1980s, possibly due to Government initiatives during the early years of the decade. The general concern with rail efficiency can be traced in a series of reports from ARRDO (1981), the Industry Commission (1991), the Bureau of Industry Economics (1992) and the Parliamentary Library (Laird 1994).

Reducing the rail deficit is perceived to be important for both financial and economic reasons. First, the rail deficit is an on-going major financial cost to the tax-payer. If rail deficits fell, governments could cut taxes or re-direct money to other uses such as health, education or other industries. Second, reducing rail deficits is seen as essential for micro-economic reform in the Australian economy because their existence is partly caused by inefficiencies in the industry. Another cause is the requirement by governments to operate non-commercial services. The deficits could be reduced by more efficient operations or by terminating certain rail operations, leaving them to road or sea.

On the other hand, there are a number of situations in which governments might legitimately consider subsidising selected rail operations. The arguments for and against these traditional reasons for rail subsidies are discussed by Dodgson (1979) and can be summarised under four headings:

- first, there is the argument that rail is a decreasing cost industry. If so, it might be argued that the cost of subsidies is outweighed by the overall benefits to users.
- second, there may be situations in which rail operations produce external benefits and hence the community benefits from subsidies to increase rail operations. For example, government might subsidise urban rail services to reduce road congestion and air pollution from roads.

- third, there is the sunk cost argument; the assets have no alternative use or market value. As long as operating costs are covered, the operation should be continued until the assets wear out.
- fourth, governments might choose to subsidise selected rail services as a welfare assistance measure, providing cheap transport for the disadvantaged.

Insofar as deficits are caused by inefficiencies, there may be a need for industry reform programs; insofar as they result from externalities, governments might have to consider road pricing policies; and where rail is operating unprofitable services for welfare reasons, there is a case for developing a more transparent method of funding 'community service obligation' (CSO) services.

Data problems, however, have always precluded any detailed analysis of rail industry finances. The Industry Commission (1991) report on rail used Government Finance Statistics from the ABS, but these give only an aggregate picture without any break-down of operating costs or revenues. Railway's annual reports are an alternative source of data but they follow different formats and hence cannot be aggregated. In any case, they do not give all the detailed information required.

The BTCE has therefore carried out some research into the costs and revenues of Australian government railways, the results of which are presented in this paper. Chapter 2 presents previously unpublished figures for each system from the Government Finance Statistics collection of the Australian Bureau of Statistics. (Aggregate figures from the same source were published in the Industry Commission *Report on rail*, 1991). The figures show the costs and revenues for each rail system on a consistent basis over the last decade. Chapter 3 gives a detailed analysis of the costs and revenues for each system over the five years to 1993-94 based on data collected by the BTCE direct from railways.

In neither Chapter 2 or Chapter 3 has the BTCE evaluated the performance of systems or made comparisons between systems. Comparisons were avoided because:

- each railway performs a different transport task in a unique physical and commercial environment and;
- the railways do not all follow the same accounting methods.

With historical comparisons, there would be additional complications because some systems have switched from cash to accrual accounting over the last decade while two have transferred debt to other areas of government with a consequent fall in their interest costs.

CHAPTER 2 GOVERNMENT FINANCE STATISTICS

Chapter 2 comprises four sections which respectively :

- define the rail deficit and its method of calculation;
- present aggregate rail deficit figures for the last decade taken from the ABS data collection of Government Finance Statistics;
- analyse the deficit to show its revenue and cost components;
- show the deficit share attributable to each rail system.

DEFINITIONS

The definition of 'rail deficit' used in this paper is the same as in Industry Commission 1991. The Industry Commission (IC), in turn, was following the Australian Bureau of Statistics (ABS) which calculates the rail deficit as the industry's revenues less the sum of its costs and subsidies received. That is, the rail deficit equals:

- revenues received, including: passenger fares, freight rates, government subsidies and reimbursements for fare concessions and non-commercial services, and income from other activities (such as rent and advertising);

less the sum of:

- operating expenses, depreciation charges, interest costs, and government subsidies for non-commercial services¹.

Based on this definition, table 2.1 shows the 1993–94 rail deficit at \$1.4 billion, with revenues of \$5.7 billion and costs of \$7.1 billion. The figures in table 2.1 were collected by the ABS to compile the Australian National Accounts and Government Finance Statistics. The data came from Treasury or Finance departments of the Commonwealth and State governments and government

1 'Non-commercial services' comprise operations that are not justified on purely commercial criteria, such as services supported by Government because they meet a Community Service Obligation (CSO), or some other commitment (for example, the Commonwealth's agreements with South Australia and Tasmania for AN to operate intra-State services), or services that are simply not profitable.

trading enterprises (GTEs) including railways. In cases where GTE and Treasury figures differ, ABS uses the Treasury data.

The ABS analysis is similar to the profit and loss accounts of some rail systems, albeit with certain modifications. For example, in calculating the rail deficit, the ABS:

- does not include capital grants as income;
- includes subsidies for non-commercial services in both the revenue figure and the deductions (although concession reimbursements are counted only in revenue and not in subsidies);
- for operating leases, ABS counts the cost of depreciation even if it is not included in the railway accounts.

TABLE 2.1 AUSTRALIAN RAILWAYS DEFICIT, 1993-94
(\$ million)

<i>Item</i>	<i>Amount</i>
Revenue	
Operating revenue	5 667
Plus interest received	29
Total revenue	5 696
Less	
Subsidies received	1 400
Depreciation charges	690
Other operating expenditure	4 758
Interest payments	282
Total debits	7 130
Deficit	1 433

Source BTCE, ABS unpublished data.

ABS figures from its GFS collection have been used as the accepted measure of the rail deficit in public discussions since they were first published by the Industry Commission in 1991. In using the figures to evaluate the rail industry, however, there are a number of characteristics of the data that must be taken into account:

- Australian railways systems do not use a standard system of accounts and hence their financial results are not exactly comparable;
- for individual systems, results for different years may not be exactly comparable due to changes in accounting practices. For example, over the last decade, some rail systems have switched from cash accounting to accrual accounting methods with a consequent increase in capital costs and possibly other areas. The increase in Queensland Rail's depreciation costs during the 1980s was partly caused by its switch to accrual accounting;

- interest costs for the State Rail Authority (SRA) of NSW and the Public Transport Corporation (PTC) of Victoria were cut by transferring their debt to other government bodies (details are given in the next section); and
- the Queensland Government adopted a more transparent method of paying rail subsidies in 1993–94.

Since the ABS data are compiled from the rail systems' accounting figures, the following qualifications should be taken into account if the figures are used in economic studies:

- the figures are based on historical book values and might not reflect economic costs; and
- the figures do not give a break-down of subsidy payments showing the respective amounts paid for CSO operations as distinct from subsidies for operating. In an economic study, Government payments for CSO operations would be counted as revenue, the same as cash-box receipts from the public. In calculating the rail deficit, only subsidies for services that are not CSOs would be deducted from revenue. Thus, from an economic viewpoint, table 2.1 over-states the deficit to the extent that the subsidy figure includes payment for CSOs. The Industry Commission (1991) agrees with this approach although it assumed that rail CSOs are negligible².

The CSO and concession components of the ABS figures may be understated. The BTCE understands that some railways are not fully reimbursed for fare concessions and that governments have limited increases in fares without offsetting increases in CSO payments. Both omissions would tend to overstate the rail deficit. In cases where the resulting revenue is less than the cost, an economic study would add the value of these services to rail revenues before assessing the industry's performance.

DEFICIT TRENDS

Table 2.2 gives deficit figures for the decade in nominal and real terms (at 1993–94 prices). Measured in nominal dollars, the deficit started at \$1.2 billion, climbed to a peak of \$2.1 billion in 1988–89, then stabilised at about \$1.7 billion. In real terms, the deficit peaked at \$2.7 billion, in 1983–84, averaged over \$2 billion for the rest of the decade, then declined to \$1.4 billion in 1992–93.

The peak in 1988–89 coincided with the SRA's move to accrual accounting which increased depreciation charges (see forward to tables 2.6 and I.1 in Appendix I). In the next year, the NSW Government took over the SRA's debts, so that the SRA's interest costs fell, reducing its deficit.

² For two states, there is evidence to the contrary. The Queensland Government reviewed its country services in 1993 and identified operations to be retained while NSW Government Budget Paper No. 3 (1992-93 and later years) distinguishes between subsidies to cover losses and those to reduce fares and improve services.

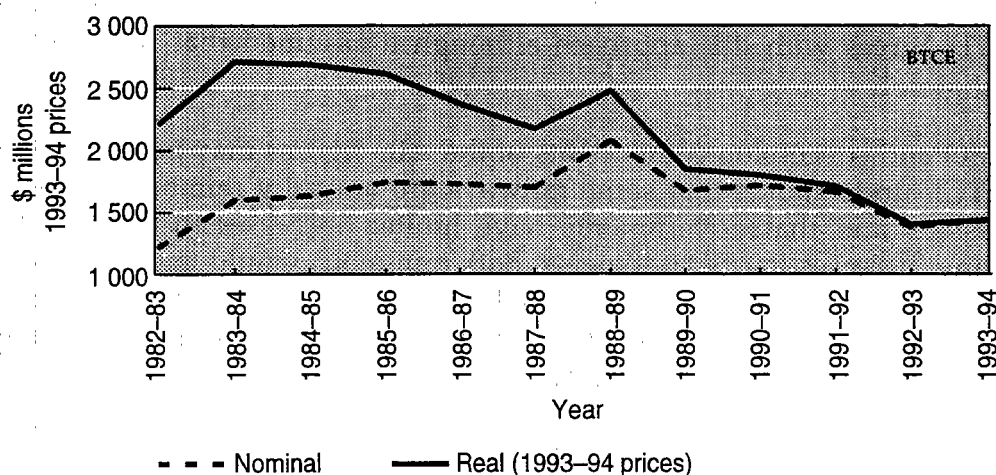
TABLE 2.2 DEFICITS IN NOMINAL AND REAL DOLLARS,
1982-83 TO 1993-94

(\$ million)

	Nominal values	1993-94 prices
1982-83	1 222	2 217
1983-84	1 598	2 712
1984-85	1 633	2 658
1985-86	1 740	2 612
1986-87	1 727	2 371
1987-88	1 697	2 171
1988-89	2 076	2 474
1989-90	1 672	1 845
1990-91	1 713	1 796
1991-92	1 660	1 707
1992-93	1 376	1 401
1993-94	1 433	1 433
Total	19 547	25 397

Source BTCE, ABS unpublished data.

FIGURE 1 THE RAIL DEFICIT 1982-1983 TO 1993-1994



Source BTCE, ABS unpublished data.

The peak in 1988-89 would have been higher had not the Victorian Government started to reorganise its rail debt in 1986-87, a process that reduced PTC interest costs from \$237 million in 1985-86 to \$22 million in 1989-90 (see forward to table I.2 in appendix I). On the other hand, the inclusion of non-rail urban transport costs in PTC figures has tended to overstate Victoria's rail deficit since 1989-90.

REVENUE AND COST COMPONENTS

Another perspective of the rail deficit is given by table 2.3 which shows industry revenues and cost over the same period in nominal dollars (Appendix I contains a similar table for each railway system). The changes are summarised in table 2.4 which shows each item at the beginning and end of

the decade ending 1993–94 and the percentage change. The Consumer Price Index increased by 81 per cent over the decade, so any increase less than 81 per cent was a fall in real terms while a higher figure shows a real increase.

Revenue

Total revenues increased by 92 per cent, from \$3 billion in 1982–83 to \$5.7 billion in 1993–94. Most of this came from an almost doubling of revenue from freight rates and fares from \$1.9 billion to \$4.2 billion.

Subsidies

In nominal values, subsidies increased by 29 per cent over the decade, from \$1.1 billion to \$1.4 billion (but with a peak of \$1.7 billion in 1987–88). In real terms (1993–94 prices), this was equivalent to a fall of almost 30 per cent from \$2 billion to \$1.4 billion.

Depreciation

Total depreciation charges increased by \$669 million, more than 31 times the level in 1982–83. This was a significant proportion of the increase in the deficit over the decade, probably caused by a combination of factors including adoption of accrual accounting methods and investment in new capital.

Operating costs

Expenditures on labour, fuel, stores and other operating costs increased by just under 66 per cent, less than the increase in revenue from freight rates and fares. A more detailed break-down of the costs is given in Chapter 3 of this paper.

Figures in annual reports show that the cost of reducing the rail workforce may be a significant part of the deficit for recent years. In 1991–92, the costs of redundancies and voluntary early retirements totalled at least \$386 million: \$139.7 million for NSW, \$58.8 million for Victoria, \$107.3 million for Australian National, \$71.3 million for Queensland and \$8.6 million for Westrail. Unless there are offsetting increases elsewhere, the deficit could fall significantly after the cost of workforce reductions are fully paid.

Interest

Interest costs in 1982–83 stood at \$214 million. They increased to \$744 million in 1988–89, then fell to \$282 million in 1993–94. The initial rise may have been caused by new investments and increased interest rates, the later fall to re-arrangements of debt.

- NSW interest charges were \$498 million in 1988–89, then fell to \$3 million in 1989–90 following a deal in which the NSW Treasury took over responsibility for SRA debt in return for its surplus, non-core, assets.
- Victorian interest costs were \$237 million in 1985–86, then fell to \$50 million two years later in 1987–88, the result of debt restructuring which transferred interest costs to a central debt authority.

TABLE 2.3 ANALYSIS OF THE RAIL DEFICIT, 1982-83 TO 1993-94

(\$ million)

	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
INCOME												
Revenue	2956	3 696	4 191	4 319	4 668	4 870	5 041	4 847	4 988	4 992	5 111	5667
Interest	11	14	12	23	23	16	14	43	20	21	17	29
Total	2 967	3 711	4 203	4 342	4 691	4 886	5 055	4 890	5 008	5 013	5 128	5 696
LESS												
Subsidies	1 083	1 227	1 298	1 459	1 674	1 691	1 687	1 281	1 449	1 338	1 300	1 400
Depreciation	21	90	133	143	143	160	312	350	363	392	445	690
Operating costs	2 871	3 734	3 972	3 895	4 032	4 199	4 388	4 655	4 552	4 606	4 455	4 758
Interest costs	214	257	433	585	569	532	744	277	357	337	305	282
Total	4 189	5 308	5 835	6 082	6 418	6 582	7 131	6 563	6 721	6 673	6 505	7 130
Deficit	-1 222	-1 598	-1 633	-1 740	-1 727	-1 697	-2 076	-1 672	-1 713	-1 660	-1 376	-1 433

Source: ABS unpublished data.

TABLE 2.4 COMPARISON OF RAIL FINANCES, 1982-83 AND 1993-94

<i>Cost/Revenue items</i>	<i>1982-83 (\$m)</i>	<i>1993-94 (\$m)</i>	<i>Change (\$m)</i>	<i>Increase (per cent)</i>
Freight rates & fares	1 873	4 267	2 394	128
Interest	11	29	18	164
Subsidies	1 083	1 400	317	29
Total revenue	2 967	5 696	2 729	92
Subsidies	1 083	1400	317	29
Depreciation	21	690	669	3 186
Operating costs	2 871	4 758	1 887	66
Interest	214	282	68	32
Total debits	4 189	7 130	2 941	70
Deficit	1 222	1 433	211	17

Note Between 1982-83 and 1993-94, the CPI increased 81%.

Source BTCE, ABS unpublished data.

The apparent cause of the deficit suggested by table 2.4 is that operating revenue did not cover operating costs. Indeed, if subsidies are discounted from revenue, then table 2.5 shows that the difference between the aggregate operating revenue and cost figures remained stable at a nominal value of about \$1 000 million per annum over the 1980s, declining slightly from \$998 million in 1982-83 to \$952 million in 1991-92. Figures for the 1990s suggest the difference is beginning to fall, especially since the later Victorian figures include tram and bus operations for Melbourne. The latest result, for 1993-94, shows operating costs exceeded cash-box revenue by \$491 million.

TABLE 2.5 REVENUES, NET OF SUBSIDY, LESS OPERATING COSTS, BY SYSTEMS 1982-83 TO 1993-94

(\$ million)

<i>Year</i>	<i>NSW</i>	<i>VIC</i>	<i>QLD</i>	<i>WA</i>	<i>Comm.</i>	<i>Total</i>
1982-83	-478	-303	-119	-5	-94	-998
1983-84	-451	-653	-56	-16	-90	-1 265
1984-85	-440	-708	96	16	-44	-1 079
1985-86	-424	-721	114	28	-33	-1 035
1986-87	-422	-715	100	24	-25	-1 038
1987-88	-435	-732	130	34	-19	-1 020
1988-89	-388	-835	156	38	-6	-1 034
1989-90	-387	-918	196	39	-17	-1 089
1990-91	-384	-852	181	70	-25	-1 013
1991-92	-428	-762	233	69	-64	-952
1992-93	-286	-688	236	98	-2	-644
1993-94	-310	-611	330	81	20	-491

Note BTCE, differences in totals are due to rounding.

Source BTCE, Derived from unpublished ABS data.

Saying that costs exceed revenues, however, is begging the question of what causes the deficit. On the basis of these figures, the deficit could be caused by several factors, including prices that are too low, costs that are too high and a level of operations too big or too small compared to what is commercially justified.

The only conclusions that can be drawn from tables 2.4 and 2.5 are that (i) the difference between operating costs and revenues remained constant in nominal dollars during the 1980s, then started to fall in the 1990s and (ii) the difference would be less if CSOs could be identified and the associated subsidies counted as revenue.

In addition to operating expenses, railways face substantial financial costs with interest and depreciation together totalling \$972 million in 1993–94, equivalent to 68 per cent of the rail deficit for that year.

SYSTEM SHARES

Table 2.6 gives an analysis of the Australian Rail Industry's deficit by system over the twelve years to 1993–94. The figures are in 'nominal' dollars. The bottom line of the table shows the total deficit incurred by each system over the period. As noted in the previous section, the figures were extracted from the ABS data base on government finances and would require some alterations and corrections for a study of the rail industry.

Even allowing for errors, the clear message from table 2.6 is that New South Wales and Victoria together account for the vast majority of the rail deficit:

- in 1993–94, NSW and Victoria together incurred a deficit of \$1.33 billion, slightly less than the national total of \$1.43 billion; and
- over the last 12 years, rail deficits have totalled \$19.55 billion in nominal terms with New South Wales and Victoria accounting for \$18.45 billion.

The same point is demonstrated in table 2.7 which shows the deficit distribution in percentage terms. For example, in 1993–94, New South Wales and Victoria accounted for 92 per cent of the rail industry deficit. New South Wales and Victoria have accounted for over 90 per cent in ten out of the twelve years covered by the table and for 94 per cent of the total deficit for the period.

Table 2.8 shows an analysis of each jurisdiction's results in 1993–94 (the Commonwealth figures are for AN and NRC). Given the differences in accounting practices, the figures may not be strictly comparable. Two systems—New South Wales and Victoria—did not generate sufficient revenue from freight rates and fares to cover their operating costs.

TABLE 2.6 AUSTRALIAN RAIL DEFICITS BY SYSTEM, 1982–83 TO 1993–94
(*\$ million*)

<i>Year</i>	<i>Commonwealth</i>	<i>NSW</i>	<i>VIC</i>	<i>QLD</i>	<i>WA</i>	<i>Total</i>
1982–83	-122	-592	-354	-143	-11	-1 222
1983–84	-124	-605	-748	-79	-42	-1 598
1984–85	-84	-639	-940	41	-11	-1 633
1985–86	-74	-687	-1 022	52	-9	-1 740
1986–87	-67	-746	-954	52	-13	-1 727
1987–88	-64	-805	-871	47	-5	-1 697
1988–89	-59	-1 050	-973	6	0	-2 076
1989–90	-58	-549	-1 047	11	-29	-1 672
1990–91	-87	-590	-1 026	3	-12	-1 713
1991–92	-139	-649	-910	69	-31	-1 660
1992–93	-80	-535	-832	90	-19	-1 376
1993–94	-55	-578	-747	-9	-44	-1 433
Total	-1013	-8 025	-10 424	140	-226	-19 547

a Commonwealth figures include AN and NRC, including AN's intrastate services in Tasmania and South Australia.

Source BTCE, ABS unpublished data.

TABLE 2.7 DISTRIBUTION OF RAIL DEFICITS BY SYSTEM, 1982–83 TO 1993–94
(*per cent*)

<i>Year</i>	<i>Commonwealth</i>	<i>NSW</i>	<i>VIC</i>	<i>QLD</i>	<i>WA</i>	<i>Total</i>
1982–83	10	48	29	12	1	100
1983–84	8	38	47	5	3	100
1984–85	5	39	58	-3	1	100
1985–86	4	39	59	-3	1	100
1986–87	4	43	55	-3	1	100
1987–88	4	47	51	-3	0	100
1988–89	3	51	47	0	0	100
1989–90	3	33	63	-1	2	100
1990–91	5	34	60	0	1	100
1991–92	8	39	55	-4	2	100
1992–93	6	39	60	-7	1	100
1993–94	4	40	52	1	3	100
Total	5	41	53	-1	1	100

Source BTCE, derived from ABS unpublished data.

TABLE 2.8 RAIL FINANCES BY SYSTEM, 1993-94

(\$ million)

	<i>Commonwealth</i>	<i>NSW</i>	<i>VIC</i>	<i>QLD</i>	<i>WA</i>	<i>Total</i>
Revenue						
Freight rates & fares	773	1 310	548	1 342	294	4 267
Interest	18	9	1	0	1	29
Subsidies	38	397	764	196	5	1 400
Total	829	1716	1313	1538	300	5 696
Less						
Subsidies	38	397	764	196	5	1 400
Depreciation	44	257	136	206	46	690
Operating Costs	753	1620	1159	1012	213	4 758
Interest	48	21	2	133	79	282
Total	883	2 295	2 061	1 547	343	7 130
Deficit	-55	-578	-747	-9	-44	-1 433

Source BTCE, ABS unpublished data.

CHAPTER 3 INDIVIDUAL SYSTEMS

This chapter gives an analysis of rail finances based on data collected by BTCE direct from railways for the years 1989–90 to 1993–94. The BTCE's aim in carrying out the data collection was to identify the key cost and revenue items determining the financial results of each rail system and the changes in performance over recent years.

The data collection was necessary because the required information was not available from any other source; ABS statistics show only total costs and revenues while the annual reports published by railways follow different formats and hence cannot be aggregated.

Data were collected from eight organisations: the State rail systems of Queensland, New South Wales, Victoria and Western Australia, the Commonwealth Government's Australian National (AN) and the National Rail Corporation (NRC). To get complete coverage of urban rail services, data were also collected from TransPerth and TransAdelaide which operate urban rail services in Perth and Adelaide respectively.

The arrangements in Western Australia during the period were that Westrail was paid by TransPerth to operate Perth's urban rail services. TransPerth collected passenger fares and received subsidies from the State Government. BTCE therefore obtained urban revenue data from TransPerth while Westrail supplied the cost figures.

All systems supplied data for the five years ending 1993–94 except, of course, the NRC which was recently set up to take over interstate freight operations. NRC supplied data for the three years to 1993–94. As this was a period of transition, the figures may prove to be atypical.

The set of data collected by the Bureau comprised:

- an analysis of cash-box revenue including fares, freight rates, interest receipts and rents;
- an analysis of receipts from government, comprising concession reimbursements and subsidies. A concession was defined as a reduction in price for a specific group of customers, for example pensioners or drought affected farmers. A subsidy is paid for a specific service, or group of services, which benefits all users of the service(s). Subsidies also include

- payments by governments to help railways meet other costs, such as superannuation and redundancies; and
- three analyses of costs—by business group (urban passenger, country passenger and freight), by operational function (for example train running, terminal costs, etc), and by cost item (labour, fuel, electricity, other consumable items, etc).

The data collected by BTCE are described in the remainder of Chapter 3 with a separate section for each system. The descriptive comments follow a similar format for each system although, to avoid repetition, the background notes and comments are more detailed for NSW. The figures are rounded to the nearest million dollars. For ease of reading, the percentage change figures are based on the rounded money values given in the tables although this may cause slight inaccuracies, particularly for small figures.

Each of the systems is considered individually and no comparative analysis is attempted. Any detailed comparison would need to take into account the fact that the systems perform different transport tasks in different physical environments. Further, to be valid, any detailed comparisons would first have to identify any differences among the accounting procedures used by the rail systems.

Although they are approximately the same, the cost and revenue figures supplied to the BTCE by each rail system do not equal exactly the ABS figures in Chapter 2 of this paper or in Appendix I. Differences are partly due to the ABS figures being supplied by Treasury/Finance departments while the data in these tables came direct from rail systems. The two may not follow identical accounting principles. Other causes of differences can be listed as follows:

- Queensland—the most recent ABS figures reflect Queensland Rail's change to accrual accounting but there may be differences in earlier years;
- NSW—SRA's classification of government payments into subsidies and concession reimbursements seems to differ from that supplied to ABS by Treasury; the totals are about the same;
- Victoria—the ABS figures include costs and revenues for the PTC's bus and tram operations plus government payments to private bus operators; the figures in Chapter 3 of this paper cover rail only; and
- South Australia and Western Australia—the ABS figures for these states do not include urban rail operations.

In addition, there are several other qualifications that might be relevant to any analyses of the rail industry which are based on these figures:

- the tables show costs and revenues in nominal dollars but for many purposes real data adjusted for inflation would be more appropriate;
- in order to present the data in the same format as the ABS figures in Chapter 2 of this report, all payments from governments to railways in

Chapter 3 are classified as concession reimbursements or subsidies, with subsidy figures including payments for 'community service obligation' (CSO) operations. From an economic viewpoint, CSO payments should be counted as revenue. (Data on CSO payments are not available.)

- care should be taken in comparing figures for different years, even for the same rail system. For many reasons, figures for different years may not be directly comparable without taking other factors into account. For example:
 - Queensland Rail's results for 1992–93 and later years cannot be compared directly with previous years because of its switch to accrual accounting;
 - maintenance costs can be reduced by buying new rolling stock or track upgrading; and
 - apparent changes in the level of individual cost or revenue items can result from changes in the chart of accounts or an improvement in reporting systems giving a better break-down of expenditures. For example, the Queensland Rail figures seem to show a fall in the costs of signalling and train working costs. In fact, better reporting systems allowed accountants to separate what were previously joint costs, and to record them in other, more appropriate accounts.
- on their own, financial accounts are not sufficient to evaluate the performance of any rail system. In any performance evaluation, one would need to take account of many other factors, such as the transport task performed (measured in tonne kilometres and passenger kilometres), and the resources employed, including the size of the rolling stock fleet and the length of track open for operations. Some evaluations are often best based on ratios, such as the operating cost per tonne kilometre or maintenance costs per kilometre of track;
- the year to year performance of the rail industry depends to a large extent on other sectors of the economy with freight tonnages depending largely on exports of coal and wheat;
- interest costs for the NSW and Victorian rail systems were reduced to low levels in the 1980s because their debt was transferred to other bodies in the respective State governments; and
- financial reporting arrangements vary considerably between rail organisations and have a large impact on the reported deficit. Different interpretations can occur in relation to: capital charges (interest costs); superannuation reporting and level of payment; the treatment of community service obligations (CSOs); and the size and reporting of redundancy costs.

NEW SOUTH WALES

The State Rail Authority (SRA) of New South Wales has three business groups (City Rail, Country Link and Freight Rail) which operate urban and country passenger services plus freight services. The country passenger operations

include interstate services to Brisbane, Melbourne and Canberra. Prior to the advent of the NRC, it also operated interstate freight trains.

There were two major changes to SRA finances in the late 1980s that still affect its current figures. First, the SRA adopted full accrual accounting in 1988–89, with a consequent increase in depreciation operating costs. (This can be seen in table I.1 in Appendix I). Second, in 1989–90, the NSW Treasury took over SRA debt in return for its surplus, non-core, assets. At the time, the value of the assets was estimated to approximate the debt, although current property values might be lower. Nevertheless, the Treasury still receives rents from some properties that were not sold.

Table 3.1 gives an overall summary of the results for NSW for the years 1989–90 to 1993–94. The figures are in nominal dollars and the table format follows the ABS approach for calculating the rail industry deficit, albeit in more detail.

Changes over the period are summarised in table 3.2 which gives figures for the first and last years of the period and the change in dollar and percentage terms. Inflation over the period was 8.2 per cent so any increase less than 8.2 per cent was a fall in real terms while a higher figure shows a real increase.

Following tables give detailed information on each cost and revenue item, but the major changes shown in table 3.2 can be summarised as follows:

- total revenue increased by 2 per cent, a \$32 million jump from \$1 705 to \$1 737 million: this comprised a 5 per cent (\$51 million) rise in cash box revenue and a 63 per cent (\$150 million) increase in concession reimbursements with an offsetting 46 per cent fall in subsidies;
- working costs fell by 6 per cent (\$97 million);
- interest costs went up by 633 per cent, albeit off a low base, from \$3 million to \$22 million; and
- depreciation increased by 43 per cent equivalent to \$77 million.

The figures supplied by the SRA suggest that the NSW rail deficit fell by \$202 million over the five years to 1993–94 from \$528 million to \$326 million. They differ from the ABS figures in Appendix I which show the deficit as almost constant at about \$550 million over the years 1989–90 to 1993–94.

The difference between the two sets of figures seems to lie in the break-down of government payments to SRA into 'subsidy' and 'concession reimbursement' components. This difference can be illustrated by looking at the data for 1992–93 for which:

- the SRA data in table 3.1 shows government payments totalling \$628 million, comprising subsidies of \$235 million and concession reimbursements of \$393 million; and

- the ABS show subsidies totalling \$430 million (table I.1 in Appendix I) implying concession reimbursements of about \$198 million.

The relevance to this exercise is that subsidies are deducted from revenue in calculating the 'rail deficit', whereas concession reimbursements are regarded as cash box revenue. If all else is equal, re-classifying a deficit subsidy as a concession reimbursement has the effect of reducing the size of the rail deficit.

TABLE 3.1 THE NSW RAIL DEFICIT BY ITEM, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Revenue					
Cash-box revenue	1 099	1 082	1 084	1 113	1 150
Concession reimbursements	237	313	376	393	387
Subsidies	369	351	265	235	200
Total revenue	1 705	1 746	1 725	1 741	1 737
Less					
Subsidies	369	351	265	235	200
Working costs	1 680	1 621	1 643	1 587	1 583
Interest	3	5	11	19	22
Depreciation	181	204	212	237	258
Total debits	2 233	2 181	2 131	2 078	2 063
Rail deficit/surplus	-528	-435	-406	-337	-326

Note Figures might not add to totals due to rounding.

Source BTCE, SRA, personal communications.

TABLE 3.2 COMPARISON OF NSW RAIL FINANCES, 1989-90 TO 1993-94

	(\$ million)			(per cent)
	1989-90	1993-94	Change	Change
Revenue				
Cash-box revenue	1 099	1 150	51	5
Concession reimbursements	237	387	150	63
Subsidies	369	200	-169	-46
Total revenue	1 705	1 737	32	2
Less				
Subsidies	369	200	-169	-46
Working costs	1 680	1 583	-97	-6
Interest	3	22	19	633
Depreciation	181	258	77	43
Total debits	2 233	2 063	-170	-8
Rail deficit/surplus	-528	-326	202	-38

Note Figures might not add to totals due to rounding.

Source BTCE, SRA, personal communications.

SRA Cash-box receipts

Table 3.3 gives an analysis of cash-box receipts, that is, passenger fares, freight rates and other income such as interest and rent. The figures do not include any subsidies or concession reimbursements but may include payments from government in its role as a customer.

Between 1989–90 and 1993–94, table 3.3 shows that cash box receipts went up from \$1 099 million to \$1 150 million, an increase of 5 per cent. Changes in revenue components were as follows:

- urban passenger services increased from \$254 million to \$268 million, or 6 per cent;
- country passenger services dropped from \$60 million to \$44 million, or 27 per cent; and
- freight went up by 10 per cent from \$667 million to \$734 million.

TABLE 3.3 NSW RAIL CASH BOX RECEIPTS, 1989–90 TO 1993–94
(\$ million)

	1989–90	1990–91	1991–92	1992–93	1993–94
Urban passenger	254	279	275	265	268
Country passengers	60	51	42	41	44
Freight					
Interstate	164	151	157	148	153
Intrastate bulk					
coal, ores & minerals	503	546	530	570	581
other bulk					
Other intrastate					
Total freight	667	697	687	718	734
Interest received	23	3	2	5	9
Asset sales	4	6	3	9	17
Rents	36	26	25	29	29
Other	55	20	50	46	49
Total	1 099	1 082	1 084	1 113	1 150

Note Figures might not add to totals due to rounding.

Source BTCE, SRA, personal communications.

SRA Government Payments

Table 3.4 gives a summary of SRA receipts from government comprising subsidies and concession reimbursements. As discussed above, the data seems to differ from the figures published by ABS which come from the NSW Treasury. The table 3.4 figures show total receipts from government falling by 3 per cent over the period, from \$606 million to \$587 million. This was the net effect of:

- concessions increasing by 63 per cent from \$237 million to \$387 million;
- subsidies falling by 46 per cent from \$369 million to \$200 million.

If subsidy and concession figures are aggregated, the SRA figures show that there were cuts in government payments for urban transport (down \$24 million) and country passenger (down \$57 million) but these were offset by increased payments for freight (up \$47 million) and redundancy costs (up \$18 million). Formal CSO contracts were introduced for Freight Rail in 1991–92 which were based on the ‘cash’ costs of operating CSO services.

TABLE 3.4 NSW RAIL RECEIPTS FROM GOVERNMENT, 1989–90 TO 1993–94
(\$ million)

	1989–90	1990–91	1991–92	1992–93	1993–94
Concession reimbursements^a					
Urban passenger	127	135	176	191	199
Country passenger	85	91	72	71	64
Freight	25	87	128	131	124
Total concessions	237	313	376	393	387
Subsidies					
Urban passenger	147	160	98	70	51
Country passenger	43	-2	12	9	7
Freight	52	44	9	0	0
Superannuation	0	11	6	6	0
Redundancy costs	124	134	140	150	142
Other purposes	3	4	0	0	0
Total subsidies	369	351	265	235	200
Total receipts from government	606	664	641	628	587

a The SRA regards all of these concession reimbursements as CSOs.

Note Figures might not add to totals due to rounding.

Source BTCE, SRA, personal communications.

SRA Cost by business group

Table 3.5 gives an analysis of fully allocated costs by business group, that is, urban passenger, country passenger and freight. Over the five years covered by the figures:

- urban passenger costs increased consistently from year to year, recording a 17 per cent increase from \$702 million to \$820 million;
- country passenger costs fell each year, dropping 41 per cent from \$238 million to \$141 million; and
- freight costs rose from \$924 million to a \$963 million in 1991–92, then fell to \$902 million, a net fall of 2 per cent while tonnage over the period increased by 22 per cent.

TABLE 3.5 NSW RAIL COSTS BY BUSINESS GROUP, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Urban passenger	702	732	748	785	820
Country passenger	238	163	155	142	141
Freight	924	935	963	916	902
Total	1 864	1 830	1 866	1 843	1 863

Notes Figures might not add to totals due to rounding.

SRA debt was restructured in 1989-90 and its interest costs are low; see table I.1 in Appendix I.

Source BTCE, SRA, personal communications.

SRA Costs by function

The second analysis of costs is shown in table 3.6 which gives a break-down by function. Total costs remained virtually unchanged over the five years at about \$1 860 million but there were offsetting changes in the component costs; working expenses fell by \$97 million while capital charges went up by about the same amount.

There were cuts in most costs included in working expenses, the largest being the 24 per cent fall in terminal costs from \$347 million to \$263 million. This was followed by a 24 per cent cut in corporate overheads (from \$174 million to \$133 million; this includes some non-train energy costs) to some extent reflecting the ongoing devolution of corporate functions to the business groups, and a 4 per cent cut in maintenance.

The apparent size of these reductions may have been due to a change in the SRA chart of accounts. A new classification 'business management' was created in 1991-92 and it seems reasonable to conjecture that about \$50 million of costs was diverted from other classifications during the last three years of the period.

The road services' classification was included for the costs of bus services operated by the SRA. The zero figures supplied by SRA suggests the costs are included elsewhere in the data. The Auditor-General's Office of NSW (1993 p. 6 and p. 22) gives a cost of \$8.6 million for 1992-93 with the Department of Transport paying about \$5 million.

TABLE 3.6 NSW RAIL COSTS BY FUNCTION, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
WORKING EXPENSES					
Train running					
Train crew	321	327	292	284	293
Diesel	81	81	77	98	104
Electricity	37	39	40	39	39
Total train running	439	447	409	421	436
Road services	0	0	0	0	0
Terminal costs					
Freight handling	49	50	49	25	19
Passenger duties	250	209	221	214	206
Shunting	48	47	46	33	38
Train examiners	0	0	0	0	0
Bogie exchange	0	0	0	0	0
Total terminal costs	347	306	316	272	263
Maintenance					
Rolling stock	345	333	319	304	326
Other maintenance/access	335	332	354	350	326
Total maintenance/access	680	665	673	654	652
Signalling, train working etc	40	46	52	48	49
Business management	0	0	61	57	50
Corporate overheads	174	157	132	135	133
TOTAL WORKING EXPENSES	1 680	1 621	1 643	1 587	1 583
Capital costs					
Interest	3	5	11	19	22
Depreciation	181	204	212	237	258
Total capital costs	184	209	223	256	280
TOTAL COSTS	1 864	1 830	1 866	1 843	1 863

Note Figures might not add to totals due to rounding.

Source BTCE, SRA, personal communications.

SRA Costs by item

The third analysis of costs is presented in table 3.7 which gives a break-down by cost item. The figures show a reduction in labour related costs of \$169 million (down 14 per cent to \$1 051 million) offset by an equal increase in all other areas.

Points to note from table 3.7 are:

- all labour costs fell except on-costs which increased by 29 per cent from \$148 million to \$191 million, mainly due to an actuarial re-assessment of unfunded superannuation liabilities.

- electricity for train energy remained constant at just under \$40 million but diesel increased by 28 per cent from \$81 million to \$104 million, due to an increase in Federal fuel excise and a 22 per cent increase in freight tonnage.
- expenditure on outside contract services remained constant at about \$90 million;
- 'other costs' (including printing and stationery, telecommunications, fire and accident insurance, etc) went up from \$71 million to \$107 million.

In 1993–94, labour costs accounted for 56 per cent of total costs, followed by capital charges (15 per cent), consumable items (9 per cent) and energy (8 per cent).

TABLE 3.7 NSW RAIL COSTS BY ITEM, 1989–90 TO 1993–94
(\$ million)

	1989–90	1990–91	1991–92	1992–93	1993–94
Labour costs					
Salaries & wages	836	824	746	728	690
Labour on-costs	148	124	201	192	191
Superannuation	214	164	179	160	139
Redundancy costs	22	22	27	24	31
Total labour	1 220	1 134	1 153	1 104	1 051
Train energy					
Electricity	37	39	40	39	39
Diesel & other	81	81	77	98	104
Total energy	118	120	117	137	143
Other consumable items	156	174	178	174	168
Lease costs for rolling stock & access costs	25	25	26	27	20
Contract services	90	90	91	87	94
Capital costs					
Interest	3	5	11	19	22
Depreciation	181	204	212	237	258
Total capital	184	209	223	256	280
Other taxes & charges	0	0	0	0	0
Other costs nes	71	78	78	58	107
Total	1 864	1 830	1 866	1 843	1 863

nes - not elsewhere specified

Note Figures might not add to totals due to rounding.

Source BTCE, SRA, personal communications.

SRA Cost summary

Table 3.8 gives a summary of transactions. The deficit for each area of operation equals fares plus concessions less costs; subsidies are not taken into account. The table also shows 'other revenue' and 'other subsidies' which cannot be attributed to specific operational areas (for example, other revenue includes rents, interest received and asset sales, while other subsidies include payments for superannuation and redundancy). The bottom line equals the sum of the operational deficits plus the other revenue.

TABLE 3.8 SUMMARY OF NSW RAIL TRANSACTIONS BY OPERATION, 1989-90 TO 1993-94

	(\$ million)				
	1989-90	1990-91	1991-92	1992-93	1993-94
Urban passenger					
Fares	254	279	275	265	268
Concessions	127	135	176	191	199
Subsidies	147	160	98	70	51
Costs	702	732	748	785	820
Deficit/surplus^a	-321	-318	-297	-329	-353
Country passenger					
Fares	60	51	42	41	44
Concessions	85	91	72	71	64
Subsidies	43	-2	12	9	7
Costs	238	163	155	142	141
Deficit/surplus^a	-93	-21	-41	-30	-33
Freight					
Fares	667	697	687	718	734
Concessions	25	87	128	131	124
Subsidies	52	44	9	0	0
Costs	924	935	963	916	902
Deficit/surplus^a	-232	-151	-148	-67	-44
Other revenue	118	55	80	89	104
Other subsidies	127	149	146	156	142
Total deficit/surplus^a	-528	-435	-406	-337	-326

a The deficit/surplus equals fares plus concessions less costs. Other revenue is counted in the total figure.

Note Figures might not add to totals due to rounding.

Source BTCE, SRA, personal communications.

The point to note from table 3.8 is that urban transport operations account for the vast share of the NSW rail deficit. Before income from other sources is taken into account, the NSW system sustained a gross loss of \$430 million in 1993-94 of which urban transport accounted for 82 per cent (\$353 million),

country passenger 8 per cent (\$33 million) and freight 10 per cent. However the subsidy figures probably include CSOs, in which case, as argued above, the deficit is too high.

SRA Operating transactions

A different view of rail finances is given by table 3.9 which shows cash-box revenues plus concession reimbursements less operating costs (the operating costs do not include capital charges). The figures show that, over the last five years, NSW rail finances have improved to the point where it is almost covering its operating costs. In 1989-90, the SRA's net earnings were \$344 million short of making some contribution to capital charges; in 1993-94, the shortfall was reduced to \$46 million.

TABLE 3.9 NSW RAIL OPERATING SURPLUS, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Cash-box revenue	1 099	1 082	1 084	1 113	1 150
Concession reimbursements	237	313	376	393	387
Less operating costs	1 680	1 621	1 643	1 587	1 583
Operating surplus	-344	-226	-183	-81	-46

Note Figures might not add to totals due to rounding.

Source BTCE, SRA, personal communications.

SRA Performance Indicators

In the last table on NSW, the SRA figures have been combined with data collected by the Steering Committee on National Performance Monitoring of GTEs (1995) to produce partial productivity indicators. Table 3.10 shows that, in NSW for 1993-94, on a fully distributed cost basis:

- for urban rail, average revenue per passenger was \$1.99 compared to a cost of \$3.49;
- for country passenger rail, average earnings and costs were 13 and 17 cents per passenger kilometre respectively; and
- the freight system was earning 5.30 cents per net tonne kilometre compared to costs of 5.57 cents per net tonne kilometre.

Care should be taken in interpreting the table 3.10 figures as they reflect the combined effect of the net changes in freight task, costs, revenues and workforce over a five year period. They would also have been affected by any changes in accounting methods, particularly cost allocation practices.

TABLE 3.10 NSW RAIL PERFORMANCE INDICATORS, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Urban passenger					
Revenue (\$ per passenger)	1.53	1.65	1.85	1.98	1.99
Costs (\$ per passenger)	2.83	2.91	3.07	3.42	3.49
Country passenger					
Revenue (c per pass.-km)	12.66	13.92	13.92	13.21	12.95
Costs (c per passenger-km)	20.79	15.98	18.93	16.75	16.91
Freight					
Revenue (c per ntk)	4.81	5.51	5.90	5.72	5.30
Costs (c per ntk)	6.42	6.57	6.97	6.17	5.57

Source BTCE, SRA, personal communications and Steering Committee 1995.

Summing up

In round numbers, the SRA cut its deficit by \$200 million over the study period, reflecting an increase of \$50 million in cash-box revenue, an increase of \$150 million in concession reimbursements, and a cut of \$100 million in working costs. There were offsetting increases of \$100 million in capital charges (see table 3.1).

Urban rail operations accounted for the majority of the deficit in each year of the study. In round figures, the urban rail deficit in 1993-94 was \$350 million compared to \$30 million for country services and \$40 million for freight (see table 3.8). A point of difference is that the urban deficit increased by 10 per cent over the five years while deficits for country passenger and freight fell by 65 and 81 per cent respectively.

In no year of the study period were revenues sufficient to cover working costs (table 3.9). There was a shortfall of \$340 million in 1989-90 but by 1993-94 this was cut to just under \$50 million.

A detailed examination of the SRA's revenues shows that:

- the \$50 million increase in cash box revenue over the period comprised an extra \$67 million from freight offset by a drop of \$14 million in other revenue (interest, rents, etc); the combined cash-box income from urban and country passenger remained virtually static at just over \$310 million (table 3.3); and
- the extra \$150 million in concession reimbursement went to urban passengers (\$72 million) and freight (\$99 million) with a cut of \$21 million for country passengers (table 3.4).

On the cost side, the \$97 million fall in operating expenses comprised:

- cuts of \$84 million in terminal costs, \$28 million in maintenance and \$3 million in train running (where lower crew costs were offset by increasing energy costs); and
- increases in signalling and train working costs of \$9 million and \$10 million in business management costs and overheads (table 3.6).

The major changes in individual expenditure items were falls in labour costs of \$169 million, and \$5 million for lease costs; these were offset by increases of \$25 million for train energy, \$12 million for consumables, \$4 million for contract services and \$36 million in costs 'not elsewhere specified' (table 3.7).

VICTORIA

The Public Transport Corporation (PTC) was set up on 1 July 1989-90 by merging the State Transport Authority and the Metropolitan Transport Authority. The PTC's annual report shows the aggregate results of all Victorian Government rail operations plus the costs and revenues for Melbourne trams and buses. The PTC accounts also include government payments to private bus operators in the Melbourne area which totalled \$124 million in 1991-92. The Victorian Commission of Audit (1993, Vol II, p.144) estimated that the PTC deficit in 1991-92 included \$260 million attributable to trams and urban buses (although it is not clear if this includes payments to private operators).

The figures in table 3.11 and following tables show the costs and revenues for Victorian rail operations. The figures were specially prepared by the PTC and differ from its annual reports because they exclude non-rail transactions.

Table 3.11 gives a summary of the PTC's data for the years reported and table 3.12 shows the changes over the period. Key points to note from the second table are that:

- revenue fell by \$209 million, reflecting a \$199 million cut in subsidies;
- working costs fell by \$243 million; and
- the overall deficit was reduced by \$218 million.

Interest costs were much higher in previous years but the Victorian Treasury effectively started taking over all rail debt in 1986-87, thus cutting the PTC's interest costs. The *Transport (Amendment) Act 1986* extinguished the debt and deemed it to be government equity. Further, all financial leases were assigned to the Victorian Public Authorities Finance Agency, and the liability transferred to contributed capital. The PTC now uses the assets free of charge (STA 1989).

TABLE 3.11 THE VICTORIAN RAIL DEFICIT BY ITEM, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Revenue					
Cash-box revenue	na	398	375	390	383
Concession reimbursements	na	26	28	30	31
Subsidies	na	558	507	503	359
Total revenue	na	982	910	923	773
Less					
Subsidies	na	558	507	503	359
Working costs	na	1 061	1 014	977	818
Interest	na	8	1	1	1
Depreciation	na	79	82	102	101
Total debits	na	1 706	1 604	1 583	1 279
Rail deficit/surplus	na	-724	-694	-660	-506

na Not available

Note Figures might not add to totals due to rounding.

Source BTCE, PTC, personal communications.

TABLE 3.12 COMPARISON OF VICTORIAN RAIL FINANCES, 1990-91 TO 1993-94

	(\$ million)			(per cent)
	1990-91	1993-94	Change	Change
Revenue				
Cash-box revenue	398	383	-15	-4
Concession reimbursements	26	31	5	19
Subsidies	558	359	-199	-36
Total revenue	982	773	-209	-21
Less				
Subsidies	558	359	-199	-36
Working costs	1 061	818	-243	-23
Interest	8	1	-7	-88
Depreciation	79	101	-22	28
Total debits	1 706	1 279	-427	-25
Rail deficit/surplus	-724	-506	218	-30

Note Figures might not add to totals due to rounding.

Source BTCE, PTC, personal communications.

PTC Cash-box receipts

Table 3.13 gives an analysis of cash-box receipts. Receipts from passenger operations remained virtually static over the five years but there was an increase of \$19 million per annum in fares from urban passenger services and a drop \$17 million in income from country passenger trains. Similarly, income from interstate freight fell by \$24 million while income from other intrastate bulk freight went up by the same amount.

TABLE 3.13 VICTORIAN RAIL CASH BOX RECEIPTS, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Urban passenger	na	101	112	116	120
Country passenger	na	56	50	48	39
Freight					
Interstate	na	64	55	56	40
Intrastate bulk					
coal, ores & minerals	na	8	9	9	7
other bulk	na	60	44	59	84
Other intrastate	na	26	28	28	28
Total freight	na	158	136	152	159
Interest received	na	2	2	1	1
Asset sales	na	2	1	1	1
Rents	na	23	18	16	17
Other	na	56	56	56	46
Total	na	398	375	390	383

na Not available

Note Figures might not add to totals due to rounding.

Source BTCE, PTC, personal communications.

PTC Government payments

Total government payments to the PTC over the four years fell from \$584 million to \$390 million (table 3.14). Concession reimbursements increased slightly from \$26 million to \$31 million but subsidies were cut by \$199 million from \$558 million to \$359 million.

The PTC has advised the BTCE that a significant part of the subsidies it receives from the State Government each year are for CSOs. The funds are paid to supplement PTC revenue and to fund its capital program, thereby assisting the Corporation to meet essential community service obligations (PTC Annual Report 1993-94 p.34). The following benefits are provided to the community by the Corporation;

- affordable passenger and freight services;
- concession fares in support of education and social welfare programs;

- improved access to disadvantaged groups;
- less road congestion leading to reduced accident rate and improved traffic flows and reduced construction and maintenance costs;
- reduced air pollution from vehicle exhaust emissions; and
- less energy use.

Although the payments for these CSOs are included in the subsidy figures in table 3.14, it was argued earlier that they should be classified as revenue; this would reduce the size of the PTC deficit by an equal amount. As discussed in the section on NSW, it seems possible that the SRA has classified some of its CSOs as concession reimbursements with a corresponding reduction in the size of its deficit figure. For valid comparison with the SRA, the PTC data might require adjustments which would reduce the size of its deficit.

TABLE 3.14 VICTORIAN RAIL RECEIPTS FROM GOVERNMENT, 1989–90 TO 1993–94
(\$ million)

	1989–90	1990–91	1991–92	1992–93	1993–94
Concession reimbursements					
Urban passenger	na	26	28	30	31
Country passenger	na	0	0	0	0
Freight	na	0	0	0	0
Total concessions	na	26	28	30	31
Subsidies					
Urban passenger	na	367	326	293	202
Country passenger	na	0	0	0	0
Freight	na	0	0	0	0
Superannuation	na	72	77	82	85
Redundancy costs	na	29	38	86	64
Other purposes	na	90	66	42	8
Total subsidies	na	558	507	503	359
Total receipts from government	na	584	535	533	390

na Not available

Note Figures might not add to totals due to rounding.

Source BTCE, PTC, personal communications.

PTC Costs by business group

On a fully distributed basis, table 3.15 shows that urban transport operations accounted for 43 per cent of total costs in 1993–94 (\$400 million of \$920 million), freight for 34 per cent, and country passenger services for 22 per cent. Total costs fell by \$227 million over the three years comprising cuts of \$106 million in urban rail, \$75 million in country passenger, and \$46 million in freight operations.

TABLE 3.15 VICTORIAN RAIL COSTS BY BUSINESS GROUP, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Urban passenger	na	506	484	479	400
Country passenger	na	280	277	270	205
Freight	na	361	336	331	315
Total	na	1 147	1 097	1 080	920

na Not available

Note Figures might not add to totals due to rounding.

Source BTCE, PTC, personal communications.

TABLE 3.16 VICTORIAN RAIL COSTS BY FUNCTION, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
WORKING EXPENSES					
Train running					
Train crew	na	na	na	na	na
Diesel	na	na	na	na	na
Electricity	na	na	na	na	na
Total train running	na	173	162	163	144
Road services	na	22	19	25	28
Terminal costs					
Freight handling	na	na	na	na	na
Passenger duties	na	na	na	na	na
Shunting	na	na	na	na	na
Train examiners	na	na	na	na	na
Bogie exchange	na	na	na	na	na
Total terminal costs	na	180	158	150	121
Maintenance					
Rolling stock	na	na	na	na	na
Other maintenance/access	na	na	na	na	na
Total maintenance/access	na	307	301	242	193
Signalling, train working etc	na	30	27	23	21
Business management	na	60	55	45	28
Overheads	na	289	292	329	283
TOTAL WORKING EXPENSES	na	1 061	1 014	977	818
Capital costs					
Interest	na	8	1	1	1
Depreciation and amortisation	na	79	82	102	101
Total capital costs	na	87	83	103	102
TOTAL COSTS	na	1 148	1 097	1 080	920

na Not available

Note Figures might not add to totals due to rounding.

Source BTCE, PTC, personal communications.

PTC Costs by function

The PTC was not able to give a complete break down of its costs by function but rather provided totals of sub-groups. The analysis of costs by function in table 3.16 shows that :

- capital costs increased by \$15 million over the four years, largely due to a growth in depreciation charges;
- working costs fell by \$243 million of which the major items were cuts of \$29 million in train running costs, \$59 million in terminal costs, \$114 million in maintenance, and \$32 million for business management.

PTC Costs by item

An analysis of costs by item is given in table 3.17. For 1993–94, the major items were labour which accounted for 64 per cent of the total (\$591 million out of \$920 million), followed by consumables (18 per cent), capital costs (11 per cent) and train energy (6 per cent).

Superannuation recorded in the PTC's accounts recognises the Corporation's estimated liability in respect of employees who are members of the State Superannuation Scheme and the Transport Superannuation Scheme, and the liability in respect of former employees who retain rights to pensions and/or lump sums payable by these schemes. Therefore, superannuation provisions within the PTC's accounts will be higher than for those organisations who have no liabilities in relation to the pension payments for past employees.

In 1993–94 the PTC had an abnormal gain of \$604 million comprising superannuation of \$572 million and a reduction in employee leave entitlements of \$32 million. The abnormal items relating to superannuation of \$572 million reflect the Victorian Government policy decision to pay the State Superannuation Fund, on behalf of a number of departments/authorities, the value of lump sums paid by the Fund in prior years, the downsizing of staff under departure packages, legislative changes affecting the level of benefits, the transfer of members to the new scheme and the effect of changes in actuarial assumptions. A similar abnormal gain of \$168 million was achieved in 1992–93 (PTC Annual Report 1993–94, p. 37). These abnormal gains have been excluded from the numbers supplied for this report.

TABLE 3.17 VICTORIAN RAIL COSTS BY ITEM, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Labour costs					
Salaries & wages	na	452	433	400	327
Labour on-costs	na	82	70	65	50
Superannuation ^a	na	182	173	165	144
Redundancy costs	na	31	46	93	70
Total labour	na	747	722	723	591
Train energy					
Electricity	na	na	na	na	na
Diesel & other	na	na	na	na	na
Total energy	na	58	51	53	53
Other consumable items	na	212	190	165	167
Lease costs for rolling stock & access costs	na	33	44	32	0
Contract services	na	0	0	0	0
Capital costs					
Interest	na	8	1	1	1
Depreciation and amortisation	na	79	82	102	101
Total capital	na	87	83	103	102
Other taxes & charges	na	0	0	0	0
Other cost nes	na	12	7	4	7
Total	na	1 148	1 097	1 080	920

a The superannuation figure for 1993-94 show the cost before abnormal gains.

na Not available

nes Not elsewhere specified

Note Figures might not add to totals due to rounding.

Source BTCE, PTC, personal communications.

PTC Cost summary

In commenting on a draft of this paper, the PTC advised that the analysis of its costs and revenues by area of operation should be deleted because it did not correctly reflect the results for each area. Accordingly, table 3.18 shows only totals and does not give a break down by area of operation.

TABLE 3.18 SUMMARY OF VICTORIAN RAIL TRANSACTIONS BY OPERATION, 1989-90 TO 1993-94

(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Fares & freight rates	na	398	375	390	383
Concessions	na	26	28	30	31
Subsidies	na	558	507	503	359
Working costs	na	1 061	1 014	977	818
Capital costs	na	87	83	103	102
Total deficit/surplus	na	-724	-694	-660	-506

na Not available

Note Figures might not add to totals due to rounding.

Source BTCE, PTC, personal communications.

PTC Operating transactions

The PTC did not cover all of its operating costs during the three years covered by the data. Working costs exceeded cash-box income plus concession reimbursements by \$637 million in 1990-91 falling to a shortfall of \$404 million in 1993-94 (table 3.19).

TABLE 3.19 VICTORIAN OPERATING SURPLUS, 1989-90 TO 1993-94

(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Cash-box revenue	na	398	375	390	383
Concession reimbursements	na	26	28	30	31
Less operating costs	na	1 061	1 014	977	818
Operating surplus	na	-637	-611	-577	-404

na Not available

Note Figures might not add to totals due to rounding.

Source BTCE, PTC, personal communications

Performance indicators

Table 3.20 gives performance indicators for the three year period. For 1993–94:

- urban costs averaged \$3.96 per passenger compared to revenue of \$1.50;
- country passenger costs and revenues were 33.77 and 6.43 cents per passenger kilometre respectively; and
- freight earned 3.77 cents per net tonne kilometre compared to costs of 7.48 per net tonne kilometre.

TABLE 3.20 VICTORIAN RAIL PERFORMANCE INDICATORS, 1989–90 TO 1993–94
(\$ million)

	1989–90	1990–91	1991–92	1992–93	1993–94
Urban passenger					
Revenue (\$ per passenger)	na	1.19	1.29	1.38	1.50
Costs (\$ per passenger)	na	4.74	4.44	4.52	3.96
Country passenger					
Revenue (c per pass-km)	na	6.52	6.62	6.60	6.43
Costs (c per passenger-km)	na	32.60	36.69	37.14	33.77
Freight					
Revenue (c per ntk)	na	4.27	4.19	4.13	3.77
Costs (c per ntk)	na	9.76	10.34	9.00	7.48

na Not available

Note Figures might not add to totals due to rounding.

Source BTCE, PTC, personal communications and Steering Committee 1995

Summing up

The PTC cut its deficit by about \$218 million over the four years for which it supplied data, 1990–91 to 1993–94 (table 3.12). Major changes over the period included a cut of about \$243 million in working costs and an increase of \$22 million in depreciation.

On the revenue side, cash box income fell slightly from \$398 million to \$383 million with increased revenue from urban passenger fares and intra state freight offsetting falls in income from country passenger services and interstate freight. Payments from Government dropped substantially with subsidies falling from \$558 million to \$359 million.

QUEENSLAND

Queensland Rail is a major narrow gauge system operating a full range of passenger and freight services. Prior to the advent of the NRC, it was probably the most self-contained State system in Australia with only a short length of interstate track from Brisbane to the NSW border.

Queensland Rail's operations comprise:

- major bulk shipments from inland centres to the coast, mainly for export;
- non-bulk services along the coastal link between Brisbane and Cairns, and from coastal cities to inland towns;
- country passenger services along the coastal line and to the inland; and
- an urban service in Brisbane which was electrified in the late 1980s.

During the years for which the BTCE collected data, interstate passenger and freight services to Brisbane were operated by the NSW system (SRA) although Queensland Rail was financially involved and was responsible for the infrastructure plus train control and signalling. These freight operations have now been taken over by the NRC.

There were two major changes in the accounting methods used by Queensland Rail during the period 1989–90 to 1993–94:

- First there was a move from cash accounting to accrual accounting, which had the apparent effect of increasing the interest and depreciation charges shown in the annual accounts. Figures for 1989–90 to 1991–92 are therefore not directly comparable with the costs and revenues for later years.
- Second a more transparent subsidy system was adopted. Queensland Rail's revenues have for some years included a quasi-resources tax paid as part of freight rates on some export bulk cargoes, particularly coal. With this extra revenue, there was no need for the State Government to make subsidy payments for rail operations. By 1993–94, different arrangements were in place with subsidies being shown in accounts.

Queensland Rail's overall results for the period are summarised in table 3.21 while table 3.22 gives the changes over the period. Points to note are:

- Total revenue increased by 19 per cent from \$1 145 million to \$1 359 million;
- 'subsidy' receipts went from zero to a negative \$6 million which comprised government subsidies totalling \$215 million offset by a coal royalty deduction of \$221 million (see table 3.24). To maintain consistency with other tables in this report, the \$215 million received from government is shown as a subsidy but, from an economic viewpoint, it should be counted as revenue because Queensland Rail has advised the BTCE that it is all for explicitly identified CSO activities;
- concession reimbursements increased from \$4 million to \$22 million;
- working costs went up by 7 per cent from \$948 million to \$1 013 million;
- depreciation increased sevenfold, probably reflecting the change to accrual accounting plus depreciation on investment during the period; and
- interest costs fell 30 per cent from \$189 million to \$132 million;

The bottom line result varied from a \$21 million deficit in the first year to a surplus of \$3 million in 1993–94. In between, annual results ranged for a surplus of \$49 million to a loss of \$38 million, probably reflecting the combined effects of operating performance and changes in accounting method. For the overall period, Queensland Rail made a surplus of \$38 million.

TABLE 3.21 THE QUEENSLAND RAIL DEFICIT BY ITEM, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Revenue					
Cash-box revenue	1 141	1 201	1 229	1 291	1 343
Concession reimbursements	4	5	17	18	22
Subsidies ^a	0	0	0	0	-6
Total revenue	1 145	1 206	1 246	1 309	1 359
Less					
Subsidies ^a	0	0	0	0	-6
Working costs	948	962	1019	1006	1013
Interest	189	174	154	150	132
Depreciation ^b	29	24	24	190	217
Total debits	1 166	1 160	1 197	1 346	1 356
Rail deficit/surplus	-21	45	49	-38	3

a All 'subsidies' received by Queensland rail are for explicitly identified CSO activities.

b Depreciation figures show capital works expensed up to 1991-92 and depreciation based on accrual accounting methods for 1992-93 and 1993-94. The two sets of figures are not comparable.

Notes Figures might not add to totals due to rounding.

Source BTCE, Queensland Rail, personal communications.

TABLE 3.22 COMPARISON OF QUEENSLAND RAIL FINANCES, 1989-90 TO 1993-94

	(\$ million)		(per cent)	
	1989-90	1993-94	Change	Change
Revenue				
Cash-box revenue	1141	1343	202	18
Concession reimbursements	4	22	18	450
Subsidies ^a	0	-6	-6	
Total revenue	1145	1359	214	19
Less				
Subsidies ^a	0	-6	-6	
Working costs	948	1013	65	7
Interest	189	132	-57	-30
Depreciation ^b	29	217	188	648
Total debits	1166	1356	190	16
Rail deficit/surplus	-21	3	24	114

a All 'subsidies' received by Queensland rail are for explicitly identified CSO activities.

b Depreciation figures show capital works expensed up to 1991-92 and depreciation based on accrual accounting methods for 1992-93 and 1993-94. The two sets of figures are not comparable.

Note Figures might not add to totals due to rounding.

Source BTCE, Queensland Rail, personal communications.

QR Cash-box receipts

Table 3.23 shows cash-box receipts increased 18 per cent over the period, from \$1 141 to \$1 343 million. This included a 15 per cent increase in freight revenue, from \$1 063 million to \$1 219 million, most of which came from intrastate bulk (an increase of \$138 million) and other cargo (an increase of \$18 million). Revenue from interstate freight was constant at \$17 million per annum.

Receipts from all other sources (interest, asset sales etc) increased from \$15 million to \$52 million over the period.

TABLE 3.23 QUEENSLAND RAIL CASH BOX RECEIPTS, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Urban passenger	41	43	43	44	45
Country passenger	22	20	22	24	28
Freight					
Interstate	18	17	17	17	17
Intrastate bulk	889	940	975	1 010	1 027
Other intrastate	156	169	162	169	174
Total freight	1 063	1 125	1 155	1 197	1 219
Interest received	1	1	1	2	2
Asset sales^a	0	0	0	10	15
Rents	7	8	8	8	9
Other^b	7	4	*	6	26
Total	1 141	1 201	1 229	1 291	1 343

* Less than \$0.5 million

a Gain on sale of assets

b Includes sale of materials and contributions to capital works on rail land by other organisations.

Note Figures might not add to totals due to rounding.

Source BTCE, Queensland Rail, personal communications.

QR Government Payments

Table 3.24 shows that Government payments to Queensland Rail jumped from \$4 million to a net \$16 million over the period. New arrangements in Queensland Government financial practices made the subsidy payments more transparent in 1993-94, with total subsidies of \$215 million being offset by a coal royalty deduction of \$221 million.

There was also an increase in concession reimbursements over the period comprising an increase of \$4 million for urban passengers and \$14 million for country passengers.

The Queensland response identified the subsidies for freight, urban and country services as CSOs. While the railway does not have a signed contract

with the Queensland Government, the recent change in financial arrangements required the subsidies to be discussed and negotiated with the State Treasury. Further it is on public record that the State Government reduced country services in 1993, then reviewed the decision and directed Queensland Rail to reinstate some of the terminated services. Under these circumstances, the reinstated services would have to be regarded as CSOs.

TABLE 3.24 QUEENSLAND RAIL RECEIPTS FROM GOVERNMENT, 1989-90 TO 1993-94

(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Concession reimbursements					
Urban passenger	4	5	5	5	8
Country passenger	*	*	12	12	14
Freight	*	*	0	0	0
Total concessions	4	5	17	18	22
Subsidies^a					
Urban passenger	0	0	0	0	84
Country passenger	0	0	0	0	43
Freight	0	0	0	0	88
Superannuation	0	0	0	0	0
Redundancy costs	0	0	0	0	0
Coal royalty deduction	0	0	0	0	-221
Total subsidies	0	0	0	0	-6
Total receipts from government	4	5	17	18	16

* Less than \$0.5 million.

a All 'subsidies' received by Queensland rail are for explicitly identified CSO activities.

Note Figures might not add to totals due to rounding.

Source BTCE, Queensland Rail, personal communications and Steering Committee 1995.

QR Costs by Business Group

Table 3.25 analyses Queensland Rail's costs by business group. The figures also include costs for the interstate rail services and for 'capital works expensed' (capital works treated as current expenses). After discussion with Queensland Rail, BTCE allocated the interstate costs to freight and country passenger services on an 80:20 basis while all the 'capital works expensed' were counted as a freight cost.

Care should be taken in interpreting these figures. The apparent increase in urban and country passenger costs over the five year period is due more to changes in accounting methods than actual increases in expenses. The switch to accrual accounting increased the depreciation component in the figures and may have reallocated costs between operating categories.

TABLE 3.25 QUEENSLAND RAIL COSTS BY BUSINESS GROUP, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Urban passenger	129	132	142	178	187
Country passenger	69	77	91	95	103
Freight	967	951	965	1074	1073
Total	1 166	1 160	1 197	1 346	1 362

Notes Interstate costs were allocated 20:80 to passengers and freight.
 Figures for 1989-90 to 1991-92 are not directly comparable with the results for later years because of changes in accounting methods.
 Figures might not add to totals due to rounding.

Source BTCE, Queensland Rail, personal communications.

QR Costs by function

Total reported costs increased by \$196 million over the period comprising \$65 million in working costs and \$131 million in capital charges (table 3.26). Depreciation went from \$29 million to \$217 million although much of this apparent increase was caused by the change to accrual accounting in 1992-93 with some increase being due to investment increasing the total stock of assets with a resultant increase in capital charges.

Queensland Rail has also advised the BTCE that the apparent fall in signalling and train working costs reflects a change in accounting systems. Queensland Rail has adopted better reporting systems which allow previously joint costs to be separated and excluded from signalling and train working costs.

QR Costs by item

Table 3.27 shows costs analysed by item. Apart from capital charges, increases in most cost items were small:

- labour costs went up 3 per cent over the three years from \$652 million to \$672 million;
- energy costs increased from \$83 to \$93 million (12 per cent); and
- contract services jumped by 22 per cent but this was off a small base so the increase was only \$4 million from \$18 to \$22 million.

In the last year, 1993-94, labour accounted for just under 50 per cent of costs of QR's costs, capital charges for 25 per cent, consumables 17 per cent, energy 7 per cent, and contract services 2 per cent.

TABLE 3.26 QUEENSLAND RAIL COSTS BY FUNCTION, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
WORKING EXPENSES					
Train running					
Train crew ^a	110	118	119	128	130
Diesel	41	46	42	42	44
Electricity	40	39	41	43	45
Total train running	191	202	203	213	218
Road services	*	1	1	1	6
Terminal costs					
Freight handling	84	97	91	101	100
Passenger duties ^b	31	34	34	36	38
Shunting	23	24	26	26	26
Train examiners	6	7	7	8	7
Total terminal costs	144	161	158	172	171
Maintenance					
Rolling stock	162	166	160	173	165
Other maintenance/access ^c	298	299	293	295	274
Total maintenance/access^c	460	465	453	468	439
Signalling, train working etc	42	27	22	22	22
Abnormal item: redundancy costs			71		
Business management^d	51	46	50	63	83
Corporate overheads^d	60	60	62	68	74
TOTAL WORKING EXPENSES	948	962	1 019	1 006	1 013
Capital costs					
Interest	189	174	154	150	132
Depreciation ^e	29	24	24	190	217
Total capital costs	218	198	178	340	349
TOTAL COSTS	1 166	1 160	1 197	1 346	1 362

* Less than \$0.5 million

a Includes conductors.

b Includes catering.

c includes the standard gauge link costs.

d For 1989-90 and 1990-91, business management & corporate overheads were combined; this is an break-up of the figure based on later years.

e Depreciation includes capital works expensed and loss on sale of assets. From 1993-94, depreciation figures are based on accrual accounting methods.

Note Figures might not add to totals due to rounding.

Source BTCE, Queensland Rail, personal communications.

TABLE 3.27 QUEENSLAND RAIL COSTS BY ITEM, 1989–90 TO 1993–94
(\$ million)

	1989–90	1990–91	1991–92	1992–93	1993–94
Labour costs					
Salaries & wages ^a	560	577	594	565	551
Labour on-costs	45	43	45	48	47
Superannuation	34	35	38	43	45
Redundancy costs	14	5	34	25	28
Total labour	652	660	710	681	672
Train energy					
Electricity	40	39	41	43	45
Diesel & other	44	50	45	45	48
Total energy	83	88	86	88	93
Other consumable items	224	216	218	210	236
Lease costs for rolling stock & access costs	0	0	0	0	0
Contract services^b	18	22	29	27	22
Capital costs					
Interest	189	174	154	150	132
Depreciation ^c	0	0	0	190	208
Total capital	189	174	154	340	340
Other taxes & charges	0	0	0	0	0
Other cost nes	0	0	0	0	0
Total	1 166	1 160	1 197	1 346	1 362

nes not elsewhere specified

a Includes some long service and annual leave.

b Includes payments to SRA and NRC.

c Includes loss on sale of assets. From 1993-94, depreciation figures are based on accrual accounting methods.

Note Figures might not add to totals due to rounding.

Source BTCE, Queensland Rail, personal communications.

QR Cost summary

Summarising the performance of Queensland Rail is difficult because of the two major changes implemented during the five year period covered by this study: the change to accrual accounting and the adoption of transparency in government payments. These changes increased the level of reported capital costs and possibly the proportions of costs allocated to urban and country passenger services and freight operations.

For these reasons, the figures in table 3.28 should be considered in two groups. The results for the three years 1989–90 to 1991–92 are based on the old style government cash accounting system, while the figures for 1992–93 and 1993–94 are based on accrual accounting methods.

The \$52 million of revenue received from other sources in 1993-94 comprised mainly income from interest and asset sales.

TABLE 3.28 SUMMARY OF QUEENSLAND RAIL TRANSACTIONS BY OPERATION, 1989-90 TO 1993-94

(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Urban passenger					
Fares	41	43	43	44	45
Concessions	4	5	5	5	8
Subsidies ^a	0	0	0	0	84
Costs	129	132	142	178	187
Deficit/surplus^b	-84	-85	-93	-128	-134
Country passenger					
Fares	22	20	22	24	28
Concessions	*	*	12	12	14
Subsidies ^a	0	0	0	0	43
Costs	69	77	91	95	103
Deficit/surplus^b	-48	-57	-57	-59	-60
Freight					
Fares	1 063	1 125	1 155	1 197	1 219
Concessions	*	*	0	0	0
Subsidies ^a	0	0	0	0	88
Costs	967	951	965	1074	1073
Deficit/surplus^b	96	174	190	123	146
Other revenue	15	13	9	26	52
Other subsidies^a	0	0	0	0	0
Coal royalty deduction	0	0	0	0	-221
Total deficit/surplus^a	-21	45	49	-38	3

* Less than \$0.5 million

a All 'subsidies' received by Queensland rail are for explicitly identified CSO activities.

b The deficit/surplus equals fares plus concessions less costs. Other revenue is counted in the total figure.

Note Figures might not add to totals due to rounding.

Source BTCE, Queensland Rail, personal communications.

QR Operating transactions

Table 3.29 shows Queensland Rail covered its working costs and made a contribution to capital charges in each year of the study. The operating surplus grew 79 per cent over the period, from \$197 million in 1989-90 to \$352 million in 1993-94.

TABLE 3.29 QUEENSLAND RAIL OPERATING SURPLUS, 1989–90 TO 1993–94

(\$ million)

	1989–90	1990–91	1991–92	1992–93	1993–94
Cash-box revenue	1 141	1 201	1 229	1 291	1 343
Concession reimbursements	4	5	17	18	22
Less operating costs	948	962	1 019	1 006	1 013
Operating surplus	197	243	227	303	352

Note Figures might not add to totals due to rounding.

Source BTCE, Queensland Rail, personal communications.

QR Performance indicators

Table 3.30 gives performance indicators for the study period but the cost series is of doubtful use due to the understatement of depreciation prior to 1990–91. For the last year, 1993–94, the indicators show:

- urban passenger services generated revenue of \$1.38 per passenger compared to unit costs of \$4.86;
- country passenger services earned revenue of 13.72 cents per passenger-kilometre at a cost of 33.40 cents per passenger-kilometre; and
- for freight operations, revenue average 4.87 cents per tonne kilometre compared to costs of 4.29 cents per tonne kilometre.

TABLE 3.30 QUEENSLAND RAIL PERFORMANCE INDICATORS, 1989–90 TO 1993–94

(\$ million)

	1989–90	1990–91	1991–92	1992–93	1993–94
Urban passenger					
Revenue (\$ per passenger)	1.05	1.14	1.21	1.26	1.38
Costs (\$ per passenger)	2.99	3.15	3.53	4.51	4.86
Country passenger					
Revenue (c per pass-km)	7.40	6.76	11.46	11.68	13.72
Costs (c per passenger-km)	23.76	25.78	30.68	30.75	33.40
Freight					
Revenue (c per ntk)	4.77	4.97	4.72	4.91	4.87
Costs (c per ntk)	4.34	4.20	3.94	4.40	4.29

Note Figures might not add to totals due to rounding.

Source BTCE, Queensland Rail, personal communications and Steering Committee 1995.

Summing up

In some respects, Queensland Rail's financial performance is the best of all the systems although this is somewhat disguised by its recent switch to accrual accounting and the more transparent reporting of its subsidy payments. On the other hand, not all systems have the advantage of Queensland rail's bulk coal operations.

Queensland Rail's figures show a deficit of \$21 million in 1989-90 improving to a surplus of \$3 million in 1993-94 (table 3.22). The two figures are not directly comparable, however, because the accounts for 1993-94 are based on more accurate depreciation costs and the revenue does not include the resources tax component. If current accounting methods had been used over the five year study period, then the bottom line of QR's accounts would show an improvement of about \$300 million (assuming that the 1989-90 figures include about \$150 million in resource tax and that the depreciation figure was also about \$150 million).

The strength of Queensland Rail's results is illustrated by the fact that it covered its operating costs in each year of the study and made significant contributions to capital costs (table 3.29). The surplus increased from just under \$200 million in 1989-90 to \$350 million in 1993-94. Even allowing for the resource tax component in years prior to 1993-94, it seems likely that it always covered its operating costs. It should also be noted that Queensland Rail has not been involved in any debt restructuring in recent years and that 'subsidy' payments are said to be all for identified CSOs.

SOUTH AUSTRALIA

There are three rail systems operating in South Australia: Australian National operates intrastate freight and country and interstate passenger trains; the National Rail Corporation (NRC) runs interstate freight trains, and TransAdelaide (TA) operates a multi-modal urban passenger service in Adelaide which includes rail.

Table 3.31 summarises the costs and revenues of TransAdelaide's urban rail service while table 3.32 shows the changes that occurred over the five year period. As TransAdelaide is a multi-modal operator, its annual report figures cover both bus and rail operations. The figures given here were specially compiled by TransAdelaide for this study.

The TransAdelaide service is one of the two urban rail operations for which the costs and revenues are not counted in the rail industry figures published by ABS, which are shown in an earlier section of this paper (TransPerth is the other). To avoid the problem of disaggregating road and rail data, ABS classifies the lot under the heading of 'multi-modal' transport. The deficit figure for TransAdelaide is therefore additional to the total national figure published by ABS.

The major changes that occurred over the period can be summarised as follows:

- total revenue fell by 13 per cent (\$10 million), reflecting a 25 per cent fall in cash-box revenue (down \$4 million), a 12 per cent fall in concession reimbursement (down \$400 000) and an 7 per cent cut in subsidies (\$4 million);

- on the debit side, working costs fell by 8 per cent (\$4 million) and interest costs went down by 33 per cent (\$6 million) while depreciation charges increased by 25 per cent (\$2 million). The increase on unrounded figures is closer to 20 per cent; and
- the overall TransAdelaide deficit fell from \$56 million to \$52 million.

TABLE 3.31 THE TRANSADELAIDE RAIL DEFICIT BY ITEM, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Revenue					
Cash-box revenue	16	14	13	14	12
Concession reimbursements	3	4	3	3	3
Subsidies	56	57	52	52	52
Total revenue	76	75	68	69	66
Less					
Subsidies	56	57	52	52	52
Working costs	49	47	44	46	45
Interest	18	18	15	14	12
Depreciation	8	9	10	10	10
Total debits	132	132	121	122	118
Rail deficit/surplus	-56	-57	-53	-53	-52

Note Figures might not add to totals due to rounding.

Source BTCE, TransAdelaide, personal communications.

TABLE 3.32 COMPARISON OF TRANSADELAIDE RAIL FINANCES, 1989-90 TO 1993-94

	(\$ million)			(per cent)
	1989-90	1993-94	Change	Change
Revenue				
Cash-box revenue	16	12	-4	-25
Concession reimbursements	3	3	-*	-12
Subsidies	56	52	-4	-7
Total revenue	76	66	-10	-13
Less				
Subsidies	56	52	-4	-7
Working costs	49	45	-4	-8
Interest	18	12	-6	-33
Depreciation	8	10	2	25
Total debits	132	118	-14	-11
Rail deficit/surplus	56	52	-4	-7

* Less than \$0.5 million

Note Figures might not add to totals due to rounding.

Source BTCE, TransAdelaide, personal communications.

TA Cash-box receipts

Cash-box receipts (table 3.33) fell from \$16 million to \$12 million over the five years although income from passenger fares remained virtually constant at about \$8 million. The fall in income was due to a drop in revenue from interest receipts (\$1 million), asset sales (\$2 million) and 'other' income (\$1 million). The 'other income' category accounts for about 30 per cent of TransAdelaide's cash-box revenue.

TABLE 3.33 TRANSADELAIDE RAIL CASH BOX RECEIPTS, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Urban passenger	8	8	6	7	7
Interest received	2	*	*	1	*
Asset sales	2	1	1	1	.*
Rents	0	0	0	0	0
Other	5	4	5	4	4
Total	16	14	13	14	12

* Figure less than 0.5 million.

Note Figures might not add to totals due to rounding.

Source BTCE, TransAdelaide, personal communications.

TA Government payments

Subsidies for passenger services accounted for the majority of government payments to TransAdelaide (table 3.34). Over the five year period, they fell by 11 per cent from \$56 million to \$50 million. Subsidies totalling \$3.4 million were paid in 1992-93 and 1993-94 to fund redundancy payments. This was part of a program carried out across the State Public Service rather than a TransAdelaide initiative. TransAdelaide initially paid the redundancy packages, then received reimbursement from the State Government. Concession reimbursements accounted for the remainder of Government payments, falling from \$3.3 million in 1989-90 to \$2.9 million in 1993-94, a fall of 12 per cent.

TABLE 3.34 TRANSADELAIDE RAIL RECEIPTS FROM GOVERNMENT, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Concession reimbursements					
Urban passenger	3	4	3	3	3
Subsidies					
Urban passenger	56	57	52	50	50
Redundancy	0	0	0	2	2
Total receipts from government	59	61	55	55	54

Note Figures might not add to totals due to rounding.

Source TransAdelaide, personal communications.

TA Cost by business group

Since TransAdelaide does not operate country or freight services, all its costs are attributable to urban passenger services and table 3.35 is included here only for consistency with other systems.

TABLE 3.35 TRANSADELAIDE RAIL COSTS BY BUSINESS GROUP, 1989-90 TO 1993-94

(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Urban passenger	76	74	69	70	67
Total	76	74	69	70	67

Note Figures might not add to totals due to rounding.

Source BTCE, TransAdelaide, personal communications.

TABLE 3.36 TRANSADELAIDE RAIL COSTS BY FUNCTION, 1989-90 TO 1993-94

(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
WORKING EXPENSES					
Train running					
Train crew	12	11	11	12	12
Diesel	4	4	4	4	4
Electricity	0	0	0	0	0
Total train running	15	15	15	16	15
Terminal costs	0	0	0	0	0
Maintenance					
Rolling stock	18	18	15	16	16
Other maintenance/access	1	1	1	*	*
Total maintenance/access	20	19	16	17	16
Signalling, train working etc	0	0	0	0	0
Business management	8	7	9	6	8
Corporate overheads	6	6	4	7	6
TOTAL WORKING EXPENSES	49	47	44	46	45
Capital costs					
Interest	18	18	15	14	12
Depreciation	8	9	10	10	10
Total capital costs	27	27	25	24	22
TOTAL COSTS	76	74	69	70	67

* Less than \$0.5 million

Note Figures might not add to totals due to rounding.

Source BTCE, TransAdelaide, personal communications.

TA Costs by function

TransAdelaide accountants had difficulties in giving BTCE an analysis of their costs by function and hence the figures in table 3.36 must be subject to some qualifications. The bottom line of the table shows their estimate of total costs but they were not able to give a complete disaggregation of the figures. In particular, they could not derive separate figures for 'Terminal costs' or 'Signalling, train operations etc' although the costs for these functions are included under other categories in the table.

With this qualification, the table shows that all components of working expenses remained virtually constant except for a drop of 20 per cent in maintenance costs (from \$20 million to \$16 million).

The 'Corporate overheads' figures include the cost of redundancy payouts in the last two years. Net of redundancy cost, corporate overheads were about \$5.6 million in each of the last two years.

TA Costs by item

Table 3.37 gives an analysis of TransAdelaide costs by expenditure item. Total expenditure fell by \$9 million from \$76 million to \$67 million comprising a \$4 million cut in labour costs (from \$35 million to \$31 million) and a \$5 million reduction in capital charges (from \$27 million to \$22 million).

TransAdelaide's performance in cutting costs was better than indicated by these figures because the last two years include redundancy payouts. Discounting these, total labour costs fell by 15 per cent over the five years, from \$34.7 million to \$29.4 million. This was largely due to a reduction of \$4 million in on-costs.

The cut in capital charges was due to a \$6 million fall in interest costs offset by an increase of \$2 million in depreciation.

TA Cost summary

A summary of TransAdelaide's operations is given in table 3.38. Over the five year study period, the deficit from train operations was cut from \$64 million to \$56 million and 'other' revenue fell from \$8 million to \$4 million. The net result was a drop in the deficit from \$56 million to \$52 million.

TABLE 3.37 TRANSADELAIDE RAIL COSTS BY ITEM, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Labour costs					
Salaries & wages	21	20	19	20	19
Labour on-costs	11	11	9	6	7
Superannuation	2	3	3	1	3
Redundancy costs	0	0	0	2	2
Total labour	35	35	31	29	31
Train energy					
Diesel & other	4	4	4	4	4
Total energy	4	4	4	4	4
Other consumable items	5	5	4	5	6
Lease costs for rolling stock & access costs	0	0	0	0	0
Contract services	0	0	*	*	0
Capital costs					
Interest	18	18	15	14	12
Depreciation	8	9	10	10	10
Total capital	27	27	25	24	22
Other taxes & charges	0	0	0	0	0
Other cost nes	5	4	5	8	4
Total	76	74	69	70	67

* Less than \$0.5 million

nes not elsewhere specified

Note Figures might not add to totals due to rounding.

Source BTCE, TransAdelaide, personal communications.

TABLE 3.38 SUMMARY OF TRANSADELAIDE RAIL TRANSACTIONS BY OPERATION
1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Urban passenger					
Fares	8	8	6	7	7
Concessions	3	4	3	3	3
Subsidies	56	57	52	50	50
Costs	76	74	69	70	67
Deficit/surplus^a	-64	-63	-59	-59	-56
Other revenue	8	6	6	6	4
Other subsidies	0	0	0	2	2
Total deficit/surplus^a	-56	-57	-53	-53	-52

a The deficit/surplus equals fares plus concessions less costs. Other revenue is counted in the total figure.

Note Figures might not add to totals due to rounding.

Source BTCE, TransAdelaide, personal communications.

TA Operating transactions

If capital costs are taken out of the picture, table 3.39 shows that TransAdelaide has been in a steady state position, with costs exceeding revenue by about \$30 million in each of the five years covered by the table.

TABLE 3.39 TRANSADLAIDE OPERATING SURPLUS, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Cash-box revenue	16	14	13	14	12
Concession reimbursements	3	4	3	3	3
Less operating costs	49	47	44	46	45
Operating surplus	-29	-30	-28	-30	-30

Note Figures might not add to totals due to rounding.

Source BTCE, TransAdelaide, personal communications.

TA Performance indicators

TransAdelaide's performance indicators are shown in table 3.40. The figures show that revenue per passenger has fallen slightly but so have costs. The net loss per passenger has fallen from \$7.24 in 1989-90 to \$6.45 in 1993-94. The picture is actually better than indicated by these figures because the costs for the last two years include the extra expenditure of redundancy pay-outs. If these are discounted, the unit cost figures fall to \$9.00 per passenger in 1992-93 and \$7.45 in 1993-94.

TABLE 3.40 TRANSADLAIDE RAIL PERFORMANCE INDICATORS, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Urban rail revenue					
Revenue (\$ per passenger)	1.27	1.52	1.39	1.39	1.19
Costs (\$ per passenger)	8.51	9.62	9.81	9.23	7.64

Source BTCE, TransAdelaide, personal communications and Steering Committee 1995.

Summing up

The TransAdelaide system remained in a steady state over the five years of the study; the deficit remained in the range \$50 million to \$60 million, cash box revenue averaged about \$15 million and working costs hovered just under \$50 million (table 3.31). Working costs exceeded revenues by about \$30 million dollars in each year of the study (table 3.39).

An analysis of the accounts shows that :

- revenue from fares averaged \$7 to \$8 million per annum plus \$4 million to \$5 million from other sources together with small amounts from asset sales and interest (table 3.33);
- government concession reimbursements averaged about \$3 million per annum but there was a decline of \$6 million in subsidies (table 3.34); and
- working costs fell by \$4 million, reflecting a similar cut in maintenance (table 3.36).

There was a \$4 million cut in labour costs (table 3.37).

WESTERN AUSTRALIA

Westrail resembles the systems of the eastern States in that it operates a full range of services comprising urban and country passenger trains and freight. Until recently, it was involved in interstate passenger and freight but these were transferred to AN and the NRC respectively and now it is a purely an intrastate operator.

The arrangements obtaining for urban rail services in Perth during the years covered by this study were that Westrail operated the services for TransPerth, a multi-modal urban transport body. TransPerth collected the fares and received concession reimbursements and subsidies from Government, then reimbursed Westrail for its operating costs.

For this study, BTCE obtained urban rail costs from Westrail and revenues from TransPerth and combined them in the tables given below. There were some small differences, but the figures from the two sources balanced almost exactly. The data for country passenger and freight operations were all supplied by Westrail.

The overall results are summarised in table 3.41 while the changes over the period are shown in table 3.42 and can be summarised as follows:

- Total revenue increased by 13 per cent jumping from \$363 million to \$411 million; this comprised a 14 per cent (\$38 million) increase in cash-box revenue, a 105 per cent in concession reimbursements (but this was off a low base from \$4.4 million to \$9 million), and a 6 per cent increase in subsidies from \$78 million to \$83 million;
- working costs went up by 3 per cent from \$277 million to \$286 million;
- interest costs increased by 35 per cent jumping from \$60 million to \$81 million; and
- depreciation charges went up 64 per cent from \$28 million to \$46 million.

The overall deficit increased by 9 per cent from \$78 million to \$85 million.

TABLE 3.41 THE WA RAIL DEFICIT BY ITEM, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Revenue					
Cash-box revenue	281	298	305	295	319
Concession reimbursements	4	6	5	8	9
Subsidies	78	81	103	69	83
Total revenue	363	385	413	372	411
Less					
Subsidies	78	81	103	69	83
Working costs	277	277	269	271	286
Interest	60	66	68	69	81
Depreciation	28	31	43	39	46
Total debits	442	455	483	447	496
Rail deficit/surplus	-78	-70	-70	-75	-85

Note Figures might not add to totals due to rounding.

Source BTCE, Westrail and TransPerth, personal communications.

TABLE 3.42 COMPARISON OF WA RAIL FINANCES, 1989-90 TO 1993-94

	(\$ million)			(per cent)
	1989-90	1993-94	Change	Change
Revenue				
Cash-box revenue	281	319	38	14
Concession reimbursements	4	9	5	105
Subsidies	78	83	5	6
Total revenue	363	411	48	13
Less				
Subsidies	78	83	5	7
Working costs	277	286	9	3
Interest	60	81	21	35
Depreciation	28	46	18	64
Total debits	442	496	55	12
Rail deficit/surplus	-78	-85	-7	9

Note Figures might not add to totals due to rounding.

Source BTCE, Westrail and TransPerth, personal communications.

WR Cash-box revenue

Westrail's cash-box receipts increased by 14 per cent over the period (table 3.43) from \$281 million to \$319 million. The increase comprised:

- a three fold increase in urban passenger revenue from \$5 million to \$16 million; this rather spectacular change probably resulted from the extension of the urban system;
- a 14 per cent increase in freight income from \$235 million to \$269 million; income increased from all freight operations except interstate services; and

- a drop of 29 per cent in income from country passenger services from \$21 million to \$15 million.

Income from other sources (rents, interest asset sales etc) varied slightly from \$21 million in 1989–90 to \$19 million in 1993–94.

TABLE 3.43 WA RAIL CASH BOX RECEIPTS, 1989–90 TO 1993–94
(\$ million)

	1989–90	1990–91	1991–92	1992–93	1993–94
Urban passenger	5	5	6	9	16
Country passenger	21	20	17	17	15
Freight					
Interstate	69	67	42	44	47
Intrastate bulk					
coal, ores & minerals	73	85	91	95	93
Other bulk	84	75	107	95	113
Other intrastate	9	8	16	14	17
Total freight	235	235	255	248	269
Interest received	5	3	3	1	1
Asset sales	4	3	2	4	2
Rents	7	7	6	5	5
Other	5	24	15	11	11
Total	281	298	305	295	319

Note Figures might not add to totals due to rounding.

Source BTCE, Westrail and TransPerth, personal communications.

WR Government payments

Table 3.44 shows payments from Government to Westrail and TransPerth. Total payments over the period went up 12 per cent, comprising increases of about \$5 million in concession reimbursements and \$5 million in subsidies.

There were major changes in subsidy payments with the \$5 million increase being the net result of:

- a 124 per cent increase (from \$37 million to \$83 million) in subsidies to urban rail; and
- a cut in subsidies for superannuation from \$40 million in 1989–90 to zero in 1992–93 and later years.

There were no concession reimbursements or subsidies for freight in any of the years covered by this study while country passenger services benefited only from concession reimbursements, the figure increasing slightly from \$3 to \$4 million.

In addition to the increase in subsidy, concession reimbursements for urban rail increased from \$2 million to \$5 million.

TABLE 3.44 WA RAIL RECEIPTS FROM GOVERNMENT, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Concession reimbursements					
Urban passenger	2	2	2	5	5
Country passenger	3	3	3	3	4
Freight	0	0	0	0	0
Total concessions	4	6	5	8	9
Subsidies					
Urban passenger	37	46	60	69	83
Country passenger	0	0	0	0	0
Freight	0	0	0	0	0
Superannuation	40	35	43	0	0
Redundancy costs	0	0	0	0	0
Other purposes	*	*	*	*	*
Total subsidies	78	81	103	69	83
Total receipts from government	82	87	108	77	92

* less than \$0.05 million.

Note Figures might not add to totals due to rounding.

Source BTCE, Westrail and TransPerth, personal communications.

WR Costs by corporate group

The 13 per cent increase in rail costs, from \$364 million to \$413 million (table 3.45), was the net effect of:

- a 144 per cent increase in urban rail costs from \$43 million to \$105 million;
- a 24 per cent cut in country passenger costs from \$37 million to \$28 million; and
- a marginal drop in freight costs from \$284 million to \$280 million.

TABLE 3.45 WA RAIL COSTS BY BUSINESS GROUP, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Urban passenger	43	53	68	82	105
Country passenger	37	33	29	29	28
Freight	284	287	283	268	280
Total	364	374	380	378	413

Note Figures might not add to totals due to rounding.

Source BTCE, Westrail, personal communications.

WR Costs by function

Westrail was not able to give a complete analysis of costs by function in the form requested by BTCE and hence table 3.46 shows only total figures for each of the categories maintenance and terminal costs.

When analysed by function, the increase in costs comprised:

- a 45 per cent (\$40 million) increase in capital costs from \$87 million to \$127 million, resulting from increases in both interest (\$21 million) and depreciation \$18 million.
- a 3 per cent (\$9 million) increase in working costs from \$277 million to \$286 million.

The major changes in working costs comprised increases in electricity for train running (\$5 million), terminal costs (\$4 million), maintenance (\$2 million), and business management (\$5 million), offset by a cut in corporate overheads (\$7 million).

TABLE 3.46 WA RAIL COSTS BY FUNCTION, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
WORKING EXPENSES					
Train running					
Train crew	18	18	18	15	19
Diesel	25	26	23	21	24
Electricity	0	0	1	3	5
Total train running	43	43	43	39	48
Road services	0	0	0	0	0
Terminal costs					
Freight handling	na	na	na	na	na
Passenger duties	na	na	na	na	na
Shunting	na	na	na	na	na
Train examiners	na	na	na	na	na
Bogie exchange	na	na	na	na	na
Total terminal costs	65	62	64	69	69
Maintenance					
Rolling stock	na	na	na	na	na
Other maintenance/access	na	na	na	na	na
Total maintenance/access	110	112	109	112	112
Signalling, train working etc	13	14	12	13	13
Business management	19	21	19	19	24
Corporate overheads	27	25	23	18	20
TOTAL WORKING EXPENSES	277	277	269	271	286
Capital costs					
Interest	60	66	68	69	81
Depreciation	28	31	43	39	46
Total capital costs	87	97	111	108	127
TOTAL COSTS	364	374	380	378	413

Note Figures might not add to totals due to rounding.

Source BTCE, Westrail, personal communications.

WR Costs by item

Table 3.47 gives an analysis of Westrail costs by expenditure item. The key points to note are that:

- labour costs increased from \$183 million to \$194 million (6 per cent) over the period but this was due entirely to redundancy cost going from zero to \$29 million. If redundancy costs are removed, labour costs dropped by 10 per cent;
- the increase in train energy costs was due to electricity going from zero to \$5 million; and
- expenditure on outside contract services dropped by \$3 million.

For 1993–94, labour accounted for 47 per cent of total costs, train energy for 7 per cent, consumables for 15 per cent, and capital charges 30 per cent.

TABLE 3.47 WA RAIL COSTS BY ITEM, 1989–90 TO 1993–94
(\$ million)

	1989–90	1990–91	1991–92	1992–93	1993–94
Labour costs					
Salaries & wages	161	148	144	145	140
Labour on-costs	14	13	12	13	14
Superannuation	8	8	8	8	10
Redundancy costs	0	0	9	3	29
Total labour	183	169	173	169	194
Train energy					
Electricity	0	0	1	3	5
Diesel & other	25	26	23	21	25
Total energy	25	26	25	25	30
Other consumable items	63	79	68	74	61
Lease costs for rolling stock & access costs	1	*	*	*	0
Contract services	5	2	3	2	2
Capital costs					
Interest	60	66	68	69	81
Depreciation	28	31	43	39	46
Total capital	87	97	111	108	127
Other taxes & charges	0	0	0	0	0
Other cost nes	0	0	0	0	0
Total	364	374	380	378	413

nes not elsewhere specified

* Less than \$0.5 million.

Note Figures might not add to totals due to rounding.

Source BTCE, Westrail, personal communications.

WR Cost summary

Table 3.48 gives a summary of costs and revenues by operational area together with other revenues and subsidies.

The key point to note from the 1993–94 figures is that the urban rail deficit (\$84 million) is more than four times the combined deficit for country passenger and freight operations which stand at \$9 million and \$11 million respectively.

TABLE 3.48 SUMMARY OF WA RAIL TRANSACTIONS BY OPERATION, 1989–90 TO 1993–94

(\$ million)

	1989–90	1990–91	1991–92	1992–93	1993–94
Urban passenger					
Fares	5	5	6	9	16
Concessions	2	2	2	5	5
Subsidies	37	46	61	69	83
Costs	43	53	68	82	105
Deficit/surplus^a	-36	-46	-60	-68	-84
Country passenger					
Fares	22	20	17	17	15
Concessions	3	3	3	3	4
Subsidies	0	0	0	0	0
Costs	37	33	29	29	28
Deficit/surplus^a	-13	-10	-8	-9	-9
Freight					
Fares	235	235	255	248	269
Concessions	0	0	0	0	0
Subsidies	0	0	0	0	0
Costs	284	287	283	268	280
Deficit/surplus^a	-49	-52	-28	-19	-11
Other revenue	20	38	26	21	19
Other subsidies	41	35	43	*	*
Total deficit/surplus^a	-78	-70	-70	-75	-85

a The deficit/surplus equals fares plus concessions less costs. Other revenue is counted in the total figure.

Note Figures might not add to totals due to rounding.

Source BTCE, Westrail, personal communications.

WR Operating transactions

Table 3.49 shows cash box revenue plus concession reimbursements less operating costs. The bottom line of the table shows that rail operations in Western Australia have more than covered operating costs in each year of the period, the surplus increasing from \$9 million in 1989–90 to \$42 million in 1993–94. The surplus covered about 10 per cent of capital charges in 1989–90 and 33 per cent in 1993–94.

TABLE 3.49 WA RAIL OPERATING SURPLUS, 1989-90 TO 1993-94

(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Cash-box revenue	281	298	305	295	319
Concession reimbursements	4	6	5	8	9
Less operating costs	277	277	269	271	286
Total	9	27	41	33	42

Note Figures might not add to totals due to rounding.

Source BTCE, Westrail and TransPerth, personal communications and Steering Committee 1995.

WR Performance Indicators

Table 3.50 gives performance indicators derived from the Westrail and TransPerth data plus figures published by the Steering Committee on National Performance Monitoring. For 1993-94, the performance indicators show that:

- for urban rail, revenue was 93 cents per passenger compared to a cost of \$4.59.
- revenue for country passenger services was 25 cents per passenger kilometre compared to costs of 37 cents per passenger kilometres. The increase in revenue and cost figures for country passenger services in 1993-94 was associated with a fall in the task from 161 million to 77 million passenger kilometres.
- freight operations generated revenue of 4.95 cents per net tonne kilometre while costs were 5.14 cents.

TABLE 3.50 WA RAIL PERFORMANCE INDICATORS, 1989-90 TO 1993-94

(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Urban passenger					
Revenue (\$ per passenger)	0.77	0.92	0.86	0.98	0.93
Costs (\$ per passenger)	4.85	6.50	7.01	5.75	4.59
Country passenger					
Revenue (c per pass.-km)	12.36	12.56	12.74	12.77	24.62
Costs (c per passenger-km)	18.75	18.22	17.85	18.18	36.61
Freight revenue					
Revenue (c per ntk)	4.83	5.14	5.22	5.00	4.95
Costs (c per ntk)	5.83	6.26	5.80	5.38	5.14

Source BTCE, Westrail, personal communications and Steering Committee 1995.

Summing up

The Western Australian rail industry deficit increased from \$78 million to \$85 million over the five years of the study (table 3.41). This change was the net effect of a \$48 million increase in revenue offset by \$39 million extra in capital charges and an increase of \$9 million in working costs. (These figures are the aggregate results for Westrail and TransPerth.)

The loss on freight and country passenger services was almost exactly offset by revenue from other operations in 1993–94 and the overall system deficit of \$85 million equalled the deficit on urban operations (table 3.48).

Had it not been for urban operations, the overall system would have reduced its deficit over the study period. The deficit for country passenger operations fell from \$13 million to \$9 million from 1989–90 to 1993–94, while the freight deficit was cut from \$49 million to \$11 million. For urban operations, however, the deficit increased from \$36 million to \$84 million (table 3.48). The increased deficit was at least partly caused by the extension of the urban rail system and its electrification.

Revenue received by Westrail and TransPerth covered operating costs in each year of the study period and made some contribution to capital costs. The surplus increased from \$9 million in 1989–90 to \$42 million in 1993–94 (table 3.49).

A detailed examination of the revenue accounts shows that:

- there was a \$38 million increase in cash–box receipts of which \$34 million came from freight (intrastate freight increased \$56 million and interstate fell by \$22 million) (table 3.43);
- concession reimbursements increased by \$5 million, \$3 million for urban and \$1 million for country passenger (table 3.44); and
- there was a net increase of \$5 million in subsidies, with urban rail getting an increase of \$46 million offset by a cut of \$40 million in payments for superannuation (table 3.44).

On the cost side, there was an increase of \$9 million in working expenses comprising an extra \$5 million for electricity (for the urban service) plus \$4 million for terminal costs (table 3.46).

Apart from electricity, the other major change in costs was a net \$11 million increase in labour related costs comprising a cut of \$21 million in salaries offset by increases of \$29 million in redundancy payments and \$2 million in superannuation (table 3.47).

AUSTRALIAN NATIONAL

Australian National is a Commonwealth owned system. For the years covered by this study, it operated:

- intrastate freight services in Tasmania and South Australia;
- interstate freight services on the trans Australian route in conjunction with State systems; and
- interstate passenger services with the Indian Pacific and the Ghan.

AN's interstate freight operations were being transferred to the NRC during the last year covered by this the study.

AN's transactions for the study years are summarised in table 3.51. The changes over the period are shown in table 3.52 and can be summarised as follows:

- total revenue fell by 7 per cent from \$426 million to \$397 million reflecting a drop cash-box revenue of \$6 million (2 per cent) and a minor fall in concession reimbursements from \$3.9 million to \$3.8 million. Subsidies went down from \$60 million to \$38 million, a fall of 37 per cent;
- working costs fell 11 per cent from \$352 million to \$312 million;
- interest costs jumped 80 per cent from \$30 million to \$54 million; and
- depreciation costs went up from \$33 million to \$42 million.

The overall deficit fell from \$50 million to \$48 million over the five years although it peaked at \$217 million in the middle of the study period.

TABLE 3.51 THE AN RAIL DEFICIT BY ITEM, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Revenue					
Cash-box revenue	361	337	314	331	355
Concession reimbursements	4	3	2	3	4
Subsidies	60	71	59	59	38
Total revenue	426	411	375	393	397
Less					
Subsidies	60	71	59	59	38
Working costs	352	308	444	324	312
Interest	30	44	50	51	54
Depreciation	33	34	39	40	42
Total debits	475	457	592	474	445
Rail deficit/surplus	-50	-46	-217	-81	-48

Note Figures might not add to totals due to rounding.

Source BTCE, Australian National, personal communications.

TABLE 3.52 COMPARISON OF AN RAIL FINANCES, 1989-90 TO 1993-94

	(\$ million)			(per cent)
	1989-90	1993-94	Change	Change
Revenue				
Cash-box revenue	361	355	-6	-2
Concession reimbursements	4	4	*	-3
Subsidies	60	38	-22	-37
Total revenue	426	397	-29	-7
Less				
Subsidies	60	38	-22	-37
Working costs	352	312	-40	-11
Interest	30	54	24	80
Depreciation	33	42	9	27
Total debits	475	445	-30	-6
Rail deficit/surplus	-50	-48	-2	-4

* Less than \$0.5 million.

a Percentage changes calculated from unrounded numbers.

Notes Figures might not add to totals due to rounding.

Source BTCE, Australian National, personal communications.

TABLE 3.53 AN CASH BOX RECEIPTS, 1989-90 TO 1993-94

	(\$ million)				
	1989-90	1990-91	1991-92	1992-93	1993-94
Urban passenger	0	0	0	0	0
Country passenger	39	33	24	28	40
Freight					
Interstate	180	175	172	182	192
Intrastate bulk					
coal, ores & minerals	49	48	47	46	43
other bulk	22	21	21	20	25
Other intrastate	34	31	28	28	36
Total freight	284	275	267	276	296
Interest received	13	11	14	9	9
Asset sales	6	6	3	6	7
Rents	0	0	0	3	3
Other	19	12	5	9	1
Total	361	337	314	331	355

Note Figures might not add to totals due to rounding.

Source BTCE, Australian National, personal communications.

AN Cash-box revenue

Table 3.53 shows cash-box revenue dropped a marginal 2 per cent over the study period from \$361 million to \$355 million:

- country passenger revenue stood at about \$40 million in the first and last years of the study although it fell to \$24 million in intervening years;
- freight revenue increased by 4 per cent from \$284 million to \$296 million with most of the increase coming from interstate freight; this accounted for 64 per cent of AN's freight revenue in 1993-94 and will soon be transferred to NRC; and
- revenue from other sources fell from \$19 million to \$1 million.

AN Government payments

Government payments to AN dropped by just over a third over the period from \$64 million to \$42 million (table 3.54). If subsidies for redundancy are discounted, total payments fell by 81 per cent.

Concession reimbursements remained constant at just under \$4 million, although they fell to \$2 million in the middle years, but subsidies to country passengers fell by 74 per cent from \$35 million to \$9 million.

TABLE 3.54 AN RECEIPTS FROM GOVERNMENT, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Concession reimbursements					
Urban passenger	0	0	0	0	0
Country passenger	4	3	2	3	4
Freight	0	0	0	0	0
Total concessions	4	3	2	3	4
Subsidies					
Urban passenger	0	0	0	0	0
Country passenger	35	46	42	20	9
Freight	0	3	3	3	0
Superannuation	0	0	0	0	0
Redundancy costs	0	0	0	31	30
Other purposes	25	22	14	5	0
Total subsidies	60	71	59	59	38
Total receipts from government	64	74	61	62	42

Note Figures might not add to totals due to rounding.

Source BTCE, Australian National, personal communications.

AN Costs by business group

The analysis of costs by business group supplied by AN to the BTCE comprised costs for its passenger and freight services plus separate figures for its corporate overheads. In compiling table 3.55, BTCE allocated 10 per cent of corporate overheads to passengers and 90 per cent to freight. This was somewhat arbitrary but it approximates the ratio of revenues for the two areas.

The table shows total costs declined by just under 2 per cent over the study period, from \$415 million to \$407 million, comprising a \$12 million decline in passenger costs and a \$4 million increase in freight costs. Freight varied widely during the period, jumping to \$449 million in 1991–92 before falling back to \$337 million in the last year.

AN Costs by function

AN could not give an analysis in the form requested by BTCE, so table 3.56 gives less detail than equivalent tables for other systems. Instead, many of the items in 'working costs' are included in the cost of 'other train running, etc'. AN also included an extra cost; 'abnormal and extraordinary items'.

The figures in table 3.56 show that:

- capital costs rose by \$33 million; and
- working costs fell by \$40 million (11 per cent) reflecting a \$54 million decrease in 'other train running costs etc, offset by increases in abnormal items of \$7 million and \$5 million in corporate overheads.

TABLE 3.55 AN COSTS BY BUSINESS GROUP, 1989–90 TO 1993–94
(\$ million)

	1989–90	1990–91	1991–92	1992–93	1993–94
Urban passenger	0	0	0	0	0
Country passenger	82	71	84	60	70
Freight	333	315	449	355	337
Total	415	386	533	415	407

Notes Corporate overheads allocated to passenger and freight operations on 10:90 basis.
Figures might not add to totals due to rounding.

Source BTCE, Australian National, personal communications.

TABLE 3.56 AN COSTS BY FUNCTION, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Working expenses					
Diesel	43	44	40	42	45
Other train running, terminal, maintenance & signalling ^a	275	264	249	232	221
Abnormal and extraordinary items ^b	0	-33	110	23	7
Corporate overheads	34	34	46	27	39
Total working expenses	352	308	444	324	312
Capital costs					
Interest	30	44	50	51	54
Depreciation	33	34	39	40	42
Total capital costs	63	78	89	91	96
Total costs	415	386	533	415	407

a Costs for train running (not fuel), terminals, maintenance, signalling etc.

b Includes redundancy costs & foreign exchange losses.

Note Figures might not add to totals due to rounding.

Source BTCE, Australian National, personal communications.

AN Costs by item

Table 3.57 shows that the \$8 million net fall in costs over the period comprised:

- reductions in labour costs (\$41 million), and other unspecified costs (\$29 million);
- increases in energy costs (\$2 million), lease costs (\$11 million), the purchase of contract services (\$10 million), capital costs (\$33 million) and abnormal/extraordinary items (\$7 million).

The jump in abnormal and extraordinary costs in 1991-92 comprised mainly redundancy payments of \$34 million for that year plus provision for redundancies in future years of \$73 million. (There were also adjustments to provision for workers' compensation and depreciation provisions.)

Analysis of the figures for 1993-94 shows that labour was the major cost item accounting for 49 per cent of the total, followed by capital charges (24 per cent) and energy (11 per cent). Lease costs and contract services accounted for 3 per cent and 2 per cent respectively while 'other costs nes' together accounted for 9 per cent of the total.

TABLE 3.57 AN COSTS BY ITEM, 1989–90 TO 1993–94
(\$ million)

	1989–90	1990–91	1991–92	1992–93	1993–94
Labour costs					
Salaries & wages	177	174	165	148	142
Labour on-costs	45	39	39	33	19
Superannuation	20	18	20	16	12
Redundancy costs	0	0	0	33	28
Total labour	242	231	225	230	201
Train energy					
Electricity	0	0	0	0	0
Diesel & other	43	44	40	42	45
Total energy	43	44	40	42	45
Other consumable items	0	0	0	0	0
Lease costs for rolling stock & access costs	2	3	6	6	13
Contract services	0	0	0	0	10
Capital costs					
Interest	30	44	50	51	54
Depreciation	33	34	39	40	42
Total capital	63	79	89	91	96
Other taxes & charges	0	0	0	0	0
Abnormal & extraordinary items	0	-33	110	23	7
Other cost nes	65	64	64	23	36
Total	415	386	533	415	407

nes not elsewhere specified.

Note Figures might not add to totals due to rounding.

Source BTCE, Australian National, personal communications.

AN Cost summary

Table 3.58 shows the deficit on country passenger services was cut from \$39 million to \$27 million over the period while the freight deficit fell from \$49 million to \$40 million. In 1993–94, passenger and freight services incurred deficits of \$27 million and \$40 million respectively but \$19 million in revenue from other sources gave a net deficit of \$48 million.

TABLE 3.58 SUMMARY OF AN TRANSACTIONS BY OPERATION, 1989-90 TO 1993-94

(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Country					
Fares	39	33	24	28	40
Concessions	4	3	2	3	4
Subsidies	35	46	42	20	9
Costs	82	71	84	60	70
Deficit/surplus^a	-39	-35	-58	-30	-27
Freight					
Fares	284	275	267	276	296
Concessions	0	0	0	0	0
Subsidies	0	3	3	3	0
Costs	333	315	449	355	337
Deficit/surplus^a	-49	-40	-182	-79	-40
Other revenue	38	29	23	28	19
Other subsidies	25	22	14	37	30
Total deficit/surplus^a	-50	-46	-217	-81	-48

a The deficit/surplus equals fares plus concessions less costs. Other revenue is counted in the total figure.

Note Figures might not add to totals due to rounding.

Source BTCE, Australian National, personal communications.

AN Operating transactions

Table 3.59 shows AN covered its operating costs in most years and made a small contribution to capital costs. The shortfall of \$128 million in 1991-92 was the exception because abnormal and extraordinary costs blew out to \$110 million.

TABLE 3.59 AN OPERATING SURPLUS, 1989-90 TO 1993-94

(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Cash-box revenue	361	337	314	331	355
Concession reimbursements	4	3	2	3	4
Less operating costs	352	308	444	324	312
Operating surplus	13	32	-128	10	47

Note Figures might not add to totals due to rounding.

Source BTCE, Australian National, personal communications.

AN Performance indicators

Table 3.60 shows that there was very little change in AN's performance indicators between the first and last years of the study period with losses of about 11 cents per passenger kilometre for country passenger services and about 0.5 cents per tonne kilometre on freight.

TABLE 3.60 AN PERFORMANCE INDICATORS, 1989-90 TO 1993-94
(\$ million)

	1989-90	1990-91	1991-92	1992-93	1993-94
Country passenger					
Revenue c per pass-km	12.63	13.72	15.78	16.17	17.46
Costs c per passenger-km	23.94	26.72	50.72	31.91	28.43
Freight					
Revenue c per ntk	3.5	3.5	3.4	3.3	3.2
Costs c per ntk	4.1	4.0	5.8	4.2	3.7

Source BTCE, Australian National, personal communications and Steering Committee 1995.

Summing up

AN had a blow-out in costs in 1991-92 when its accounts included abnormal and extraordinary costs totalling \$110 million. Most of this figure comprised redundancy costs for that year plus provision for redundancies in future years.

A comparison of the first and last years of the survey period shows little difference in the aggregate figures, with AN reporting a deficit of about \$50 million in both years. There was a cut of \$40 million in working costs over the period but this was offset by a fall of \$6 million in cash-box revenue and an increase of \$33 million in capital costs (interest and depreciation) (table 3.51). The results for 1993-94 show a deficit of \$27 million for AN's country services and \$40 million for freight. Revenue of \$19 million from other sources gave an overall deficit of \$48 million (table 3.58).

Both areas improved their performance over the survey period. The passenger deficit fell by 31 per cent while the freight deficit was cut by 18 per cent.

Apart from 1991-92, AN's revenues covered its operating costs and made some contribution to capital costs in each of the study years. The surplus increased from \$13 million in 1989-90 to \$47 million in 1993-94 (table 3.59).

A detailed examination of revenues shows that:

- the \$6 million fall in cash-box revenues comprised a \$12 million increase in interstate freight offset by an \$18 million fall in other revenue (asset sales, interest etc); cash from intrastate trade remained constant at about \$105 million (table 3.53);

- concession reimbursements remained constant at \$4 million but subsidy payments were cut by \$22 million comprising cuts of \$26 million and \$25 million for passengers and other purposes respectively offset by a \$30 million increase for redundancies (table 3.54).

AN's working expenses fell by \$40 million over the period but its analysis of costs was not sufficiently detailed to pin-point the functional areas of change. There was, however, a \$41 million cut in labour related costs offset by an increase of \$11 million in lease costs for rolling stock (table 3.57).

NATIONAL RAIL CORPORATION

The National Rail Corporation Ltd (NRC) is a company established under the Corporations Law for the purpose of carrying on interstate freight operations on a commercial basis at arms length from its shareholders. The Commonwealth is a shareholder together with the States of New South Wales and Victoria.

The NRC carries interstate rail freight which was previously carried by the State systems. When the NRC first began operations, it collected revenue from customers and paid the State systems for their services in moving the freight. It then began a staged process of taking over operations which is described below.

The NRC supplied cost and revenue figures for three years, from its start-up date in September 1991 to 1993-94. Because it is a new organisation, the NRC was not able to give all of the data in the format requested.

NRC's overall results are summarised in table 3.61. Due to the transitional nature of operations over these years, there may be some double counting of costs and revenues. For example, the freight rates counted as revenue by the NRC may be counted a second time by State systems as payment for carrying interstate freight on behalf of NRC. Similarly, NRC's costs include payments to state systems while their accounts include the operating costs for the same services.

There would not, however, be any duplication in the bottom line of table 3.61 which shows that the NRC made losses of \$2 million and \$14 million in 1991-92 and 1992-93 respectively, then a surplus of \$1 million in 1993-94.

TABLE 3.61 THE NRC RAIL DEFICIT BY ITEM, 1991-92 TO 1993-94
(\$ million)

	1991-92	1992-93	1993-94
Revenue			
Cash-box revenue	*	61	453
Concession reimbursements	0	0	0
Subsidies	0	0	0
Total revenue	*	61	453
Less			
Subsidies	0	0	0
Working costs	2	74	449
Interest	0	0	*
Depreciation	0	1	3
Total debits	2	75	452
Rail deficit/surplus	-2	-14	1

* Less than \$0.5 million.

Note Figures might not add to totals due to rounding.

Source BTCE, NRC, personal communications.

NRC Cash-box receipts

Table 3.62 shows that all of NRC's income came from interstate freight revenue except for a small amount of interest in 1992-93. The rapid growth of revenue over the last two years suggest that the transfer of interstate operations was carried out by stages rather than immediately the NRC began operations.

TABLE 3.62 NRC RAIL CASH BOX RECEIPTS, 1991-92 TO 1993-94
(\$ million)

	1991-92	1992-93	1993-94
Freight			
Interstate	0	61	443
Total freight	0	61	443
Interest received	0	*	9
Asset sales	0	0	0
Rents	0	0	0
Other	*	0	0
Total	*•	61	453

* Less than \$0.5 million.

Note Figures might not add to totals due to rounding.

Source BTCE, NRC, personal communications.

NRC Government payments

The National Rail Corporation does not receive any subsidy or concession reimbursement direct from government. During the establishment period National Rail will receive equity from shareholder governments and during the transition period the cost of inefficiencies is quarantined to the parties to the Shareholders' Agreement.

TABLE 3.63 NRC COSTS BY FUNCTION, 1991-92 TO 1993-94
(\$ million)

	1991-92	1992-93	1993-94
Stage 1 and 2 payments	0	54	370
NRC operating costs	2	19	78
Total working expenses	2	74	449
Capital costs			
Interest	0	0	*
Depreciation	0	1	3
Total capital costs	0	1	3
Total costs	2	75	452

* Less than \$0.5 million.

Note Figures might not add to totals due to rounding.

Source BTCE, NRC, personal communications.

TABLE 3.64 NRC COSTS BY ITEM, 1991-92 TO 1993-94
(\$ million)

	1991-92	1992-93	1993-94
Labour costs			
Salaries & wages	1	8	32
Labour on-costs	*	1	4
Superannuation	0	*	1
Total labour	1	9	37
Lease costs for rolling stock & access costs	0	*	4
Other consumable items	0	0	1
Contract services	*	*	7
Capital costs			
Interest	0	0	0
Depreciation	0	1	3
Total capital	0	1	3
Other cost nes	1	64	401
Total	2	75	452

* Less than \$0.5 million.

nes not elsewhere specified

Note Figures might not add to totals due to rounding.

Source BTCE, NRC, personal communications.

NRC Costs by function

A functional analysis of NRC cost data will not be available until 1995–96. Table 3.63 has been used instead to show the break-up between costs incurred directly by NRC and the cost of payments to State railways for services supplied.

During Stage 1 of the establishment of NRC (1 February 1993 to 31 January 1994), it collected revenue, deducted costs (excluding establishment and capital costs), and returned the residual to the state railways on the same basis as they would have received under previous revenue sharing arrangements. The loss incurred in 1992–93 is largely a function of establishment costs not deductible from revenue. From 1 February 1994 (Stage 2), rail authorities have been paid on a similar basis, but with National Rail taking on the revenue risk and the establishment costs distinction removed.

Because it is a start-up organisation, the components in each cost item were changing over the study period. When the NRC became operational, it first concentrated on setting up its overhead operations, then customer related functions such as sales and invoicing. Then it moved into direct involvement with terminals, train crewing and maintenance in that order.

NRC Costs by item

An analysis of NRC costs by item is given in table 3.64. Although National Rail has formally leased rolling stock from the rail authorities, in the period covered by this table, no explicit payments were made for the cost of locomotives, train energy or track access. 'Other costs' includes reimbursements to rail authorities as shown in the previous table and cover all services for which an explicit payment was made including terminals, train energy and wagon maintenance.

TABLE 3.65 SUMMARY OF NRC TRANSACTIONS BY OPERATION, 1991–92 TO 1993–94

	(\$ million)		
	1991–92	1992–93	1993–94
Freight			
Fares	0	61	443
Concessions	0	0	0
Subsidies	0	0	0
Costs	2	75	452
Deficit/surplus^a	-2	-14	-9
Other revenue	•	•	9
Other subsidies	0	0	0
Total deficit/surplus^a	-2	-14	1

* Less than \$0.5 million.

a The deficit/surplus equals fares plus concessions less costs. Other revenue is counted in the total figure.

Note Figures might not add to totals due to rounding.

Source BTCE, NRC, personal communications.

NRC Summary and Operations

Tables 3.65 and 3.66 follow the same format as comparable tables for other systems. They show that the NRC is a 'pure' freight operator without involvement in other areas and that its receipts cover operating costs. There were no interest costs.

TABLE 3.66 NRC OPERATING SURPLUS, 1991-92 TO 1993-94
(\$ million)

	1991-92	1992-93	1993-94
Cash-box revenue	*	61	453
Concession reimbursements	0	0	0
Less operating costs	2	74	449
Operating surplus	-2	-13	4

* Less than \$0.5 million.

Note Figures might not add to totals due to rounding.

Source BTCE, NRC, personal communications.

Summing up

The NRC is too young an organisation and its data is not yet sufficiently detailed to make any comments about its performance. After small deficits in its first two start-up years, it has reported a small surplus in 1993-94.

APPENDIX I GOVERNMENT FINANCE STATISTICS

This appendix presents Government Finance Statistics (GFS) showing the costs and revenues for each rail system for the twelve years ending 1993–94. The figures were compiled by the ABS in the course of preparing the National Accounts.

NEW SOUTH WALES

There are two major discontinuities in the NSW rail finance figures shown in Table I.1. First, the SRA adopted accrual accounting in 1988–89, with a consequent increase in depreciation and interest charges. Interest charges increased from \$351 million in 1987–88 to \$498 million in 1988–89 while depreciation went up from \$27 million to \$168 million.

Second, the State Treasury assumed responsibility for the SRA's debt in 1989–90 and subsequent years with the result that its interest costs fell substantially. Without this debt write off, the Industry Commission (1991) estimated NSW rail's interest costs, and hence its 1991–92 deficit, would rise by about \$400 million. The BTCE understands from NSW officials that the deal involved the NSW Treasury taking on responsibility for SRA's debt in return for its surplus, non-core assets (Auditor General 1990, p 240). At the time, the value of the assets was estimated to approximate the debt, although current property values are probably lower. Nevertheless, the NSW Treasury receives rents from properties that were not sold (NSW Treasury, personal communication).

VICTORIA

There is also a discontinuity in the Victorian figures given in table I.2. The PTC was set up on 1 July 1989–90 to operate all Government urban transport in Melbourne plus country services. It was created by merging the State Transport Authority and the Metropolitan Transport Trust. ABS classifies the entire PTC as a rail operation so the Victorian figures from that year also include the deficit for Melbourne's trams and buses. They also seem to include Government payments to private bus operators in the Melbourne area for which payments totalled \$124 million in 1991–92. Figures published by the

Victorian Commission of Audit (1993, Vol II, p. 144) estimate that the PTC deficit in 1991–92 included \$260 million attributable to trams and urban buses.

On the other hand, the Victorian Treasury effectively started taking over all rail debt in 1986–87, thus cutting the PTC's interest costs. The *Transport (Amendment) Act 1986* extinguished the debt and deemed it to be government equity. Further, all financial leases were assigned to the Victorian Public Authorities Finance Agency, and the liability transferred to contributed capital. The PTC now uses the assets free of charge (STA 1989). The BTCE understands from PTC officials that these changes were part of state program to cut borrowing costs by centralising Victorian Government debt.

QUEENSLAND

Figures for Queensland Rail are given in Table I.3. Queensland Rail's freight rates for certain mineral exports have included, until recently, what might be called a resources tax component. This helped Queensland Rail earn a surplus so that it did not need subsidies. Under new arrangements now being phased in, the resource tax will be collected by another department and new freight rates are negotiated at commercial levels.

A second unique feature of Queensland Rail's annual reports is that they did not include depreciation costs; possibly because its accounts followed the traditional government department practice of recording only cash transactions. Queensland Rail moved to accrual accounting in 1992–93 and its annual report for that year shows depreciation costs of \$169 million (p. 62). (Although the ABS figures in table I.3 do not reflect the change until 1993–94.)

WESTERN AUSTRALIA

Revenue and cost figures for Perth's urban rail services are included in the annual reports of both TransPerth and Westrail up to 1993–94. To avoid double counting in the National Accounts, ABS deducts the transactions from Westrail accounts but this under-states the rail deficit by a corresponding amount. Figures in annual reports indicate that the 1991–92 deficit for Western Australia should be increased by about \$60 million to account for Perth's urban rail. (Urban transport costs for Perth are given in Chapter 3 of this report.)

COMMONWEALTH

The Commonwealth figures comprise the results for AN plus those of the NRC from the time it became operational in 1991. AN operations involved inter-state passenger and freight services plus intra-state operations in Tasmania and South Australia. When NR came into existence it took over AN's inter-state freight services.

TABLE I.1 THE NSW RAIL DEFICIT, 1982-83 TO 1992-93

(\$million)

	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
INCOME												
Revenue	1 295	1 407	1 550	1 736	1 821	2 035	2 055	1 678	1 742	1 728	1 722	1 707
Interest	8	11	6	15	15	8	3	21	3	2	5	9
Total	1 303	1 418	1 556	1 751	1 836	2 043	2 058	1 699	1 745	1 730	1 727	1 716
LESS												
Subsidies	614	621	670	726	779	895	879	389	517	471	430	397
Depreciation	4	34	28	34	30	27	167	180	204	212	237	257
Operating costs	1 159	1 237	1 320	1 434	1 464	1 575	1 564	1 676	1 609	1 685	1 578	1 620
Interest costs	119	132	176	244	308	351	498	3	5	12	18	21
Total	1 896	2 024	2 194	2 438	2 581	2 848	3 108	2 248	2 335	2 380	2 263	2295
Deficit	-592	-605	-639	-687	-746	-805	-1 050	-549	-590	-649	-535	-578

Note See text in chapter 2 and appendix I for an explanation of the figures in this table.

Source ABS unpublished data.

TABLE I.2 THE VICTORIAN RAIL DEFICIT, 1982-83 TO 1992-93

(\$million)

	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
INCOME												
Revenue	572	1 036	1 158	1 023	1 243	1 201	1 233	1 313	1 387	1 333	1 353	1 312
Interest	1	3	4	6	4	3	4	2	2	2	1	1
Total	573	1 039	1 162	1 029	1 247	1 204	1 237	1 315	1 389	1 335	1 354	1 313
LESS												
Subsidies	345	464	505	635	802	722	736	798	842	799	798	764
Depreciation	0	32	76	70	77	93	99	109	94	98	119	136
Operating costs	530	1 225	1 361	1 109	1 156	1 211	1 332	1 433	1 397	1 296	1 243	1 159
Interest costs	51	66	161	237	166	50	43	22	81	52	25	2
Total	926	1 787	2 103	2 051	2 201	2 076	2 210	2 362	2 414	2 245	2 185	2 061
Deficit	-354	-748	-940	-1 022	-954	-871	-973	-1 047	-1 026	-910	-832	-747

Note See text in chapter 2 and appendix I for an explanation of the figures in this table.

Source ABS unpublished data.

TABLE I.3 THE QUEENSLAND RAIL DEFICIT, 1982-83 TO 1992-93

(\$million)

	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
INCOME												
Revenue	561	690	872	963	1 003	1 021	1 091	1 157	1 173	1 272	1 313	1 538
Interest	0	0	0	0	2	1	2	2	0	0	1	0
Total	561	690	872	963	1 005	1 022	1 093	1 159	1 173	1 272	1 314	1 538
LESS												
Subsidies	0	0	0	0	0	0	0	0	11	0	0	196
Depreciation	0	0	0	0	0	0	0	0	0	0	0	206
Operating costs	680	746	776	850	903	891	935	961	981	1 039	1 077	1 012
Interest costs	24	23	55	62	49	84	152	188	178	163	147	133
Total	704	769	831	912	952	975	1 087	1 149	1 170	1 202	1 224	1 547
Deficit	-143	-79	+41	+52	+52	+47	+6	+11	+3	+69	+90	-9

Note See text in chapter 2 and appendix I for an explanation of the figures in this table.

Source ABS unpublished data.

TABLE I.4 THE WESTERN AUSTRALIAN RAIL DEFICIT, 1982-83 TO 1992-93
(\$million)

	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
INCOME												
Revenue	228	245	256	252	254	256	286	307	302	303	292	299
Interest	2	1	2	2	2	1	3	5	3	3	1	1
Total	230	246	258	254	256	257	289	312	305	306	293	300
LESS												
Subsidies	18	51	22	25	29	20	22	33	8	8	12	5
Depreciation	1	6	9	16	14	13	15	28	31	43	48	46
Operating costs	215	210	218	199	201	202	226	235	224	226	182	213
Interest costs	8	21	21	23	26	27	26	44	54	60	69	79
Total	242	288	270	263	270	262	289	340	317	337	311	343
Deficit	-11	-42	-10	-9	-13	-5	0	-29	-12	-31	-19	-44

Note See text in chapter 2 and appendix I for an explanation of the figures in this table.

Source ABS unpublished data.

TABLE I.5 THE COMMONWEALTH (AN AND NRC) RAIL DEFICIT, 1982-83 TO 1992-93

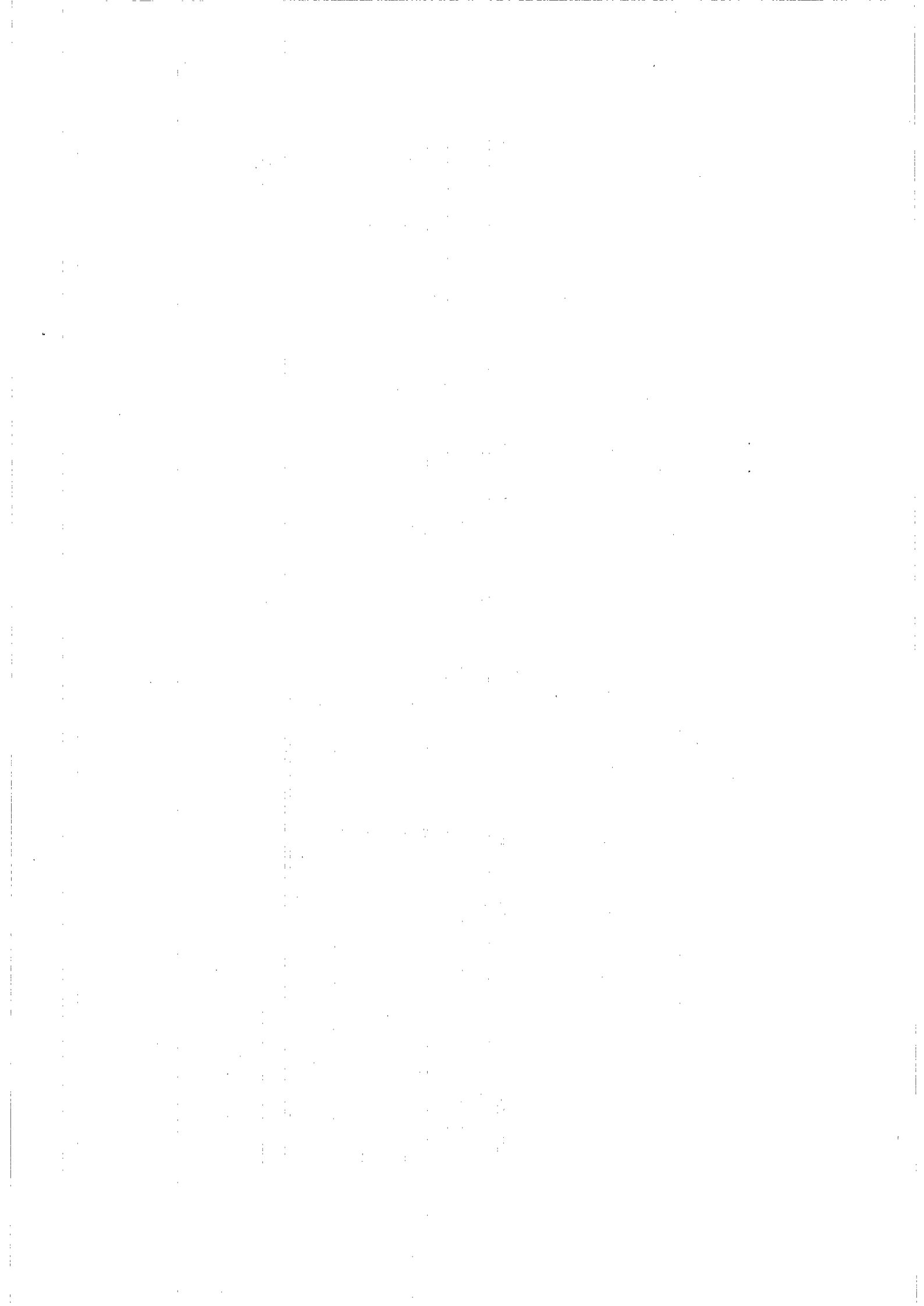
(\$million)

	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94
INCOME												
Revenue	300	318	354	343	347	357	376	393	386	356	431	811
Interest	*	0	0	0	0	3	2	13	11	14	9	18
Total	300	318	354	343	347	360	378	406	397	370	440	829
LESS												
Subsidies	106	91	101	73	64	55	51	60	71	59	59	38
Depreciation	16	18	19	22	22	27	30	33	34	39	41	44
Operating costs	288	317	297	303	308	321	331	350	340	361	374	753
Interest costs	12	16	20	20	19	20	25	20	39	50	46	48
Total	422	442	437	418	413	423	437	463	484	509	520	883
Deficit	-122	-124	-84	-74	-67	-64	-59	-58	-87	-139	-80	-55

* Less than \$0.5 million.

Note See text in chapter 2 and appendix I for an explanation of the figures in this table.

Source ABS unpublished data.



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ABBREVIATIONS

ABS	Australian Bureau of Statistics
AN	Australian National Railways Commission
AARDO	Australian Railway Research and Development Organisation
CSO	Community Service Obligation
GFS	Government Finance Statistics
IC	Industry Commission
nes	Not elsewhere specified
NRC	National Rail Corporation Ltd
PTC	Public Transport Corporation (Victoria)
QR	Queensland Rail
SRA	State Rail Authority of New South Wales
STA	State Transport Authority (Victoria)
TA	TransAdelaide
TP	TransPerth

