

Australian Road Financing Statistics 1977/78 to 1986/87

Information Paper

This paper contains revision of some data for earlier years as well as statistics for 1985-86 and 1986-87. The paper presents a broad analysis of expenditure and revenue statistics, indicating the major trends in, and patterns of, road expenditure for each level of government in each State.

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INFORMATION PAPER 33

AUSTRALIAN ROAD FINANCING STATISTICS 1977-78 to 1986-87

Bureau of Transport and Communications Economics

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FOREWORD

This publication is the latest in a series started by the former Bureau of Transport Economics to provide a consistent series of road expenditure statistics and to provide information on State road revenues. The first publication appeared in 1982 as Information Paper 3, *Australian Road Financing Statistics 1970-71 to 1979-80*. The statistics were subsequently updated in Information Papers 11, 14, 18 and 21.

This paper contains revision of some data for earlier years as well as statistics for 1985-86 and 1986-87. The paper presents a broad analysis of expenditure and revenue statistics, indicating the major trends in, and patterns of, road expenditure for each level of government in each State.

It is important that the text of this paper be read in conjunction with the tables because it canvasses definitions and qualifications which are pertinent to the proper interpretations of the statistical information. The statistics are subject to revisions as additional information becomes available.

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Canberra
August 1989

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SUMMARY

In 1986-87, \$4.07 billion was spent on building and maintaining the nation's roads system, of which the Commonwealth government spent \$1.35 billion, the State and Territories governments spent \$1.42 billion and local governments spent \$1.30 billion: respectively 33 per cent, 35 per cent and 32 per cent of the total. These shares of spending by different levels of government fluctuated by up to 6 per cent between 1977-78 and 1986-87.

Commonwealth road expenditure

Commonwealth expenditure on roads in 1977-78 was \$1.32 billion (in constant 1986-87 prices). Between 1977-78 and 1981-82, expenditure fell consistently. The introduction of the Australian Bicentennial Road Development Program in 1982 reversed this trend and significantly boosted Commonwealth expenditure on roads back to levels not seen since the mid 1970s. Since 1984-85, however, there has again been a gradual reduction of Commonwealth road funding as the government has exercised spending restraint in the face of difficult economic circumstances. Commonwealth expenditure on roads in 1986-87 was \$1.35 billion.

State government road expenditure

State government expenditure on roads remained fairly constant between 1977-78 and 1978-79, but fell back from 1978-79 until 1982-83. Between 1982-83 and 1985-86, the States' spending on roads once more increased but, as with Commonwealth spending, it has now begun to decline. The reason for this fluctuation seems to be the requirement of matching grants introduced in the successive Commonwealth *Roads Grants Acts*. Total States' spending on roads in 1986-87 was \$1.42 billion.

Local government road expenditure

Local government road expenditure increased steadily during the decade 1977-78 to 1986-87 except for a small decline in 1983-84. About \$1.3 billion was spent on roads by local governments in 1986-87.

Road expenditure by road categories

As levels of total road funding have changed, so too have the categories of road on which available funds have been spent. Spending on national roads increased while spending on rural arterial and rural local roads declined. At the same time, levels of funds for urban local roads grew, after having been cut in the late 1970s.

Funding for national roads (principally 16 000 kilometres of National Highways) began in 1974-75. Total expenditure on national roads remained fairly constant, at between \$470 million and \$550 million a year until 1982-83. In 1983-84, these national roads received a 35 per cent boost in funds through the Australian Bicentennial Road Development Program and expenditure on these roads remained fairly constant up to 1986-87.

Funding for urban arterial roads declined from 1977-78, falling from nearly \$838 million (in constant 1986-87 dollars) to less than \$630 million in 1982-83 notwithstanding the massive growth in urban traffic that has occurred since the mid 1970s. It grew consistently after that time and reached \$860 million in 1986-87.

Funding for rural arterial roads experienced similar reductions in the late 1970s and early 1980s. In part, these reductions reflect the creation in 1974 of the new national roads category out of the previously much broader rural arterial system.

The level of funds for urban local roads fluctuated throughout the 1970s and 1980s, and increased consistently after 1979-80. Rural local roads, in contrast, received a falling level of funding in the 1970s but received a boost in the early 1980s. Following the trend for rural arterial roads, funds for rural local roads began to fall after 1985-86.

Road maintenance

Total maintenance on Australian roads increased steadily after reaching a low of \$1.13 billion in 1979-80 (in constant 1986-87 prices). However, after 1982-83, spending on maintenance continued to rise, reaching \$1.4 billion in 1986-87.

This maintenance effort was, however, spread unevenly across road categories and States. In 1986-87, the maintenance effort on rural arterial roads, rural local roads and urban local roads accounted for over 40 per cent of total expenditure on each of those road categories. The maintenance effort on rural local roads and urban local roads increased from 40.3 per cent of total expenditure in 1977-78 to 46.4 per cent in 1986-87.

Structure of the paper

The paper presents statistics on road expenditure by State and Territory subdivided by level of government, by year and by Commonwealth road funding category based on the road classification developed by the National Australian Association of State Road Authorities. The paper also provides statistics on revenue raised from road users by the various State governments and the Northern Territory government.

Before 1982-83, the Commonwealth did not earmark any taxes levied on road users to meet expenditure on roads. All Commonwealth road expenditure was funded from consolidated revenue. This changed after December 1982 with the introduction of the Australian Bicentennial Road Development Program. Currently, Commonwealth road expenditure is fully funded from earmarked fuel excise receipts. Local government does not levy taxes on road users except for small amounts of revenue from parking fees.

The paper provides an overview of road expenditure and revenue at the national level, then describe the changes in road revenue and expenditure for individual States and Territories. Details of the methodology used to derive the statistical series and the sources of information and details of the method used to convert current price figures into constant price equivalents are provided in appendixes.

CHAPTER 1 ROAD FINANCING IN AUSTRALIA

INTRODUCTION

Road infrastructure is vital for the functioning of the Australian economy. The transport task performed on the road network is quite distinctive owing to the size of the country, the relatively small total population, and the concentration of 60 per cent of the population in the major metropolitan areas of Sydney, Melbourne, Brisbane, Adelaide and Perth.

The total length of roads in Australia is approximately 800 000 kilometres, of which about 32 per cent is sealed. Of the total length some 65 per cent is in the eastern States of New South Wales, Queensland and Victoria.

Australia's roads can be divided into five categories:

- . national roads (principally 16 000 kilometres of National Highways plus a small length of national development roads), comprising the National Australian Association of State Road Authorities (NAASRA) classes 1 and 2;
- . rural arterial roads (89 600 kilometres), comprising NAASRA classes 1, 2 and 3;
- . urban arterial roads (15 400 kilometres), comprising NAASRA classes 6 and 7;
- . rural local roads, comprising mainly NAASRA classes 4 and 5; and
- . urban local roads, comprising NAASRA classes 8 and 9. (Rural and urban local roads total 677 400 kilometres.)

The economic significance of Australia's road infrastructure is illustrated by the size of the resources devoted to it and by the proportion of the land transport

task which takes place on the roads system. A recent assessment of the Australian road system (BTE 1987a) indicates that:

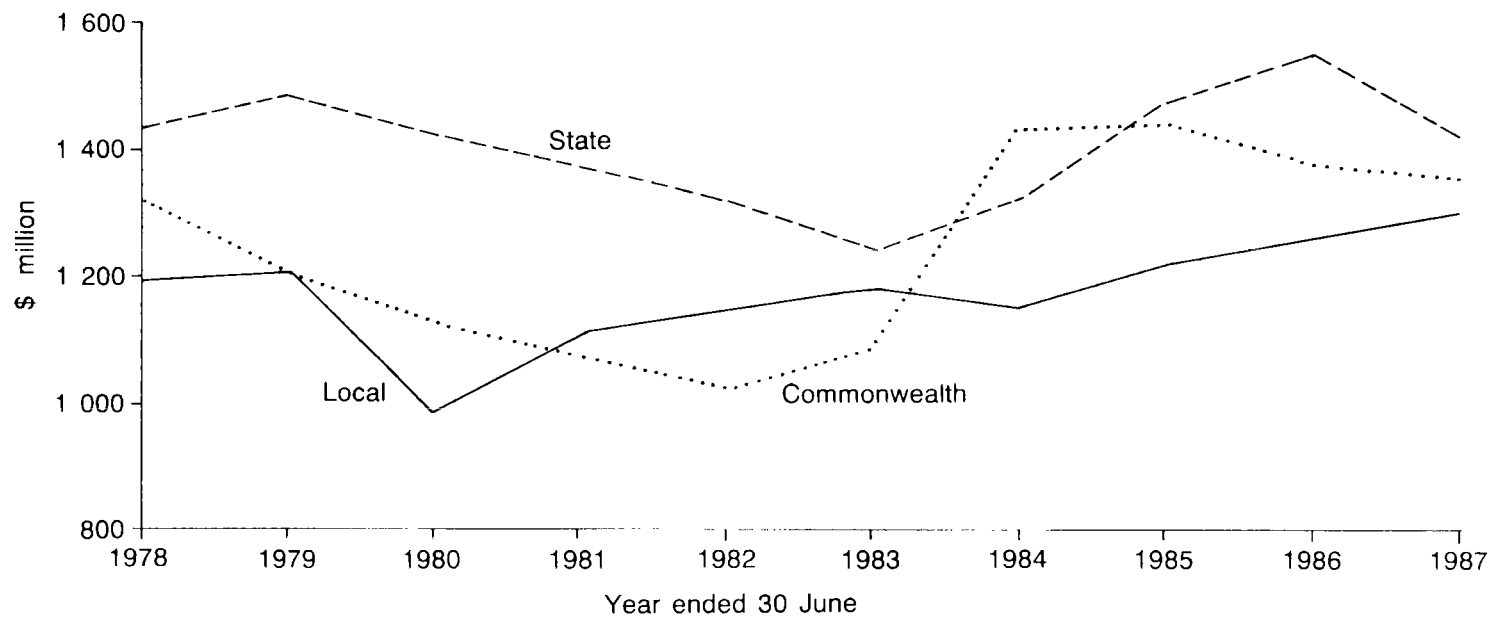
- . over 97 per cent of passenger travel (measured in person-kilometres) takes place on roads;
- . roads carry about half of all freight carried in Australia (measured in tonne-kilometres); and
- . roads carry 80 per cent of high value general freight while low value bulk commodities are transported by rail.

This chapter presents an analysis of road financing statistics between 1977-78 and 1986-87 for Australia as a whole. The chapter discusses trends in road expenditure by Australia's three levels of government and the relationship between State road revenue and State road expenditure. It also shows variations in funds devoted to road maintenance and five road categories during the period.

COMMONWEALTH ROAD EXPENDITURE

Figure 1.1 shows the Commonwealth road expenditure in the decade to 1986-87. The Commonwealth contribution to road expenditure declined by nearly 23 per cent in real terms between 1977-78 and 1981-82, immediately before the introduction of the Australian Bicentennial Road Development Program (ABRD). The introduction of the program provided a 6.5 per cent increase in funds in 1982-83, and an additional 31.8 per cent increase in 1983-84. The same level of expenditure was maintained during 1984-85. However, funds declined by 4.4 per cent in 1985-86 and by a further 1.9 per cent in 1986-87.

Commonwealth expenditure fluctuated in this way for a number of reasons. In 1982, with the introduction of the ABRD program, the petrol levy was raised by 1 cent per litre and hypothecated to roads. In 1983-84, the 'jobs on local roads' scheme was introduced. Also in 1983-84 and in subsequent years, the petrol levy was increased to 2 cents per litre although this was not indexed for inflation. Therefore, the value of each dollar spent fell in subsequent years in line with inflation. Funds for the Australian Land Transport Program were reduced in 1986-87, owing to pressure on the national economy, and revenue collected under the *Australian Bicentennial Road Development Program Act* was not directed exclusively to road projects. Indeed, other transport related projects were financed from ABRD funds.



Note Deflator used: BTCE Road Construction Price Index.

Figure 1.1 Australia: total road expenditure by level of government, 1977-78 to 1986-87 (constant 1986-87 prices)

As shown in table 1.1, the distribution of Commonwealth roads expenditure among the States has changed only marginally since 1977-78. Fluctuations in relative levels of funding have occurred because of special road building projects that have been undertaken from time to time in different States. Examples of such special projects are the rebuilding of the Tasman Bridge in the late 1970s and the construction of the second Hobart Bridge in Tasmania between 1984 and 1986. Since 1977-78, under the various Roads Grants Acts, funds have been increased annually on an approximate pro rata basis among the States. The allocation among States of ABRD grants was almost identical to that of the *Roads Grants Act 1981*. However, fluctuations in the States' shares of expenditure from 1982-83 onwards have occurred because actual expenditure of Commonwealth road grants was, in some instances, lower than the amount that had been allocated. Under these circumstances funds were carried forward to the next year.

The distribution of Commonwealth roads expenditure among road categories, in contrast, altered significantly between 1977-78 and 1986-87.

The *States Grants (Roads) Act 1977* brought:

- . a sharp cut in funds to urban arterial and local roads (22.6 per cent less than in 1976-77);
- . an overall 10.6 per cent increase in funds to all roads in rural areas; and
- . a 1.7 per cent reduction in funds in real terms.

Commonwealth road funds continued to decline until the introduction of the ABRD Act in 1982. The share of funds for local and urban roads was cut and the share for rural arterial roads and national highways was increased (table 1.10).

Funds allocated to planning and research ceased to exist as a separate category of expenditure under Commonwealth grants after 1980-81 (tables 1.5 and 1.10).

As shown in figure 1.2, changes in Commonwealth expenditure on roads have not matched the growth in private and public fixed capital expenditure that has occurred since the mid 1970s. But, when compared with Commonwealth gross fixed capital expenditure, Commonwealth road expenditure has remained far more steady.

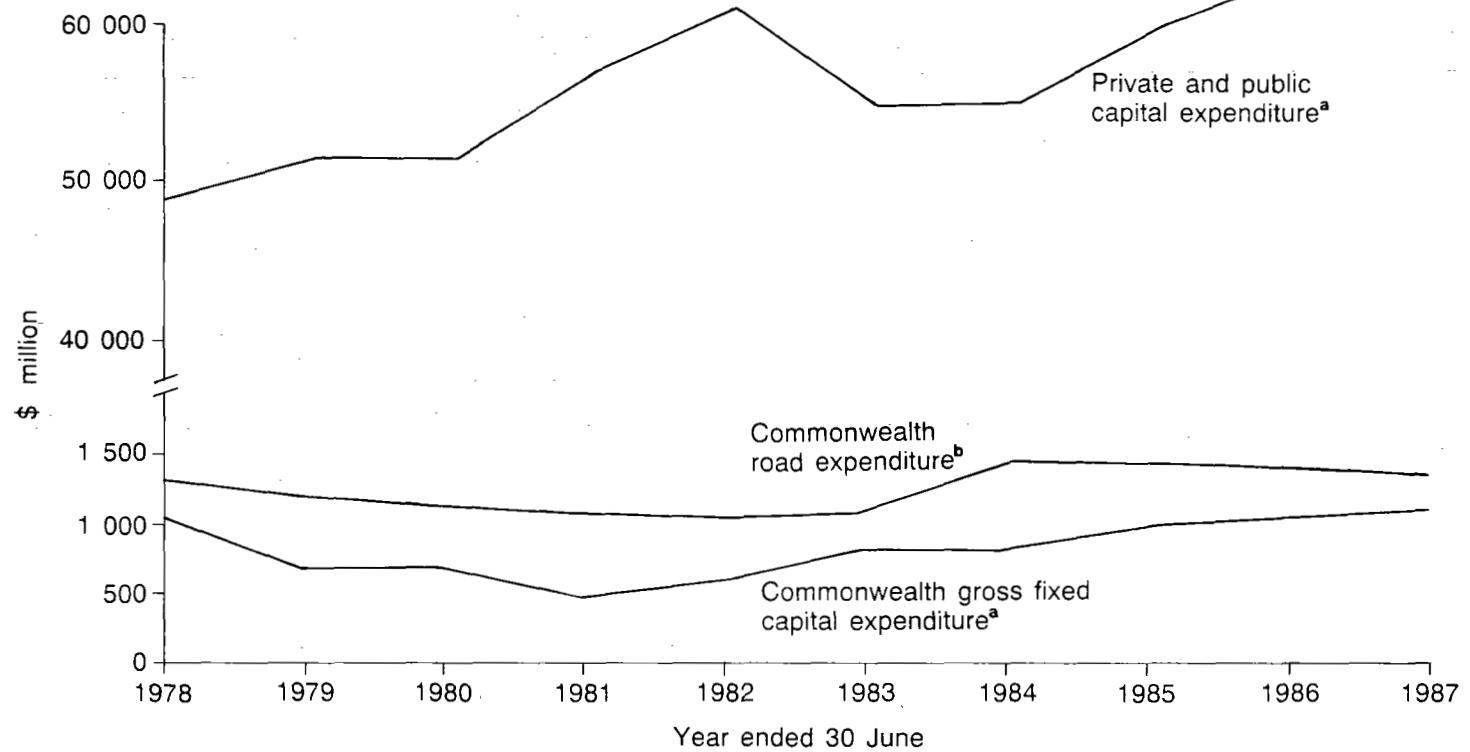
TABLE 1.1 PERCENTAGE DISTRIBUTION OF COMMONWEALTH ROAD EXPENDITURE AMONG THE STATES, 1977-78 TO 1986-87
(per cent)

Year	NSW	Vic.	Qld	WA	SA	Tas.	NT	ACT
1977-78	30.0	18.6	19.1	11.7	7.5	5.3	4.7	3.2
1978-79	29.3	18.7	19.2	11.4	7.6	4.1	6.3	3.3
1979-80	30.3	19.5	19.9	12.0	7.9	4.3	3.2	2.9
1980-81	30.1	19.5	20.1	11.9	7.9	5.5	3.2	1.8
1981-82	30.0	19.4	19.7	11.8	7.9	6.5	3.2	1.5
1982-83	29.0	18.9	20.0	11.8	7.9	7.2	3.5	1.8
1983-84	33.5	18.3	20.3	11.7	8.1	4.2	2.7	1.3
1984-85	31.9	18.0	20.2	12.4	8.2	3.8	3.4	2.2
1985-86	29.7	18.9	19.1	13.0	8.8	3.9	3.4	3.3
1986-87	32.6	18.2	19.0	11.8	8.1	3.6	3.0	3.6

STATE ROAD REVENUE

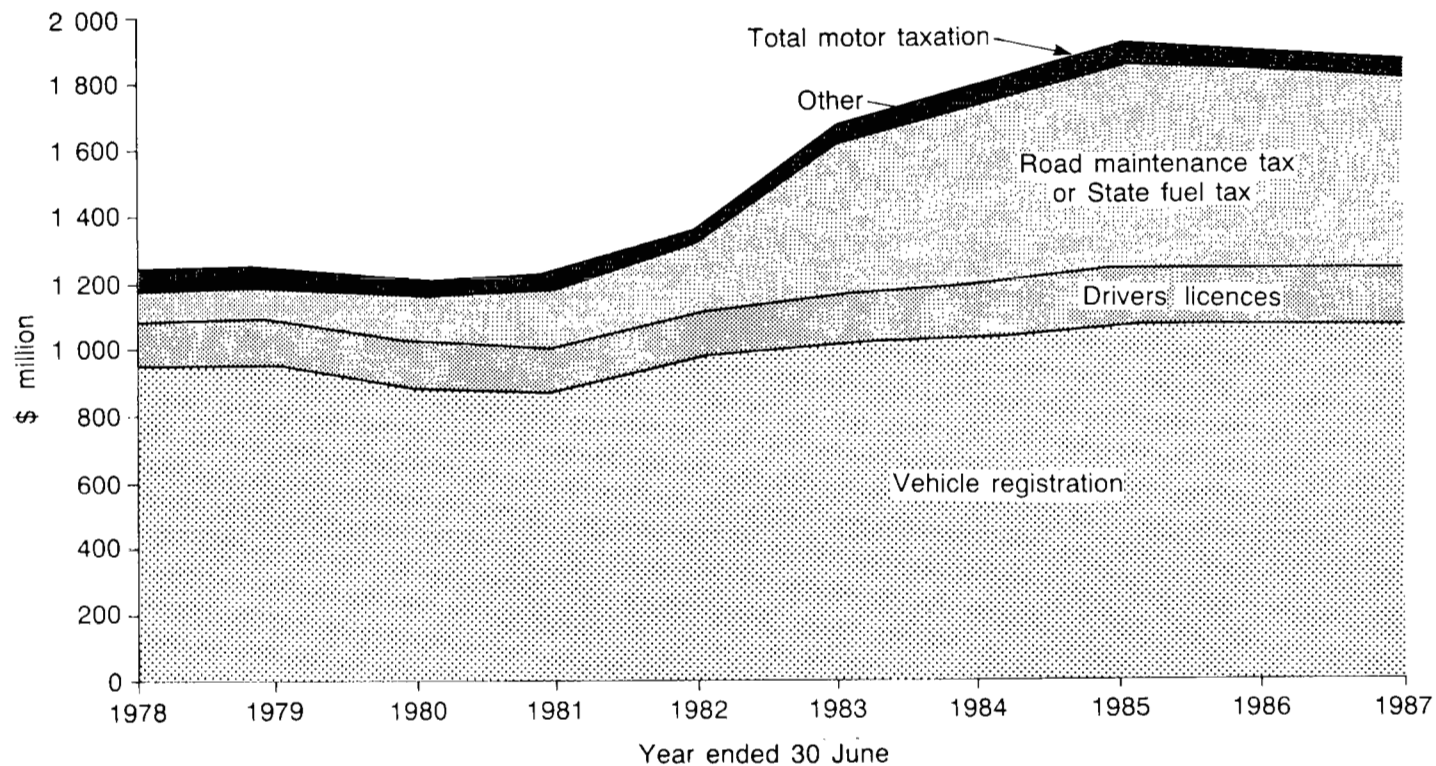
Until 1982, it was only at the State government level that specific road revenues were raised and earmarked for road expenditure. This situation changed at the Commonwealth level with the introduction of the ABRD program in 1982 and specific hypothecation of fuel excise for road works in the *Australian Land Transport (Financial Assistance) Act 1985*. These developments have been discussed at length in the report *Assessment of the Australian Road System: 1987* (BTE 1987a).

Historically, the States raised almost all their own funds spent on road works from taxes levied on motor vehicles or motorists. The traditional taxes included various motor vehicle registration charges and drivers licence fees plus a host of other charges, such as transport regulation charges and road maintenance charges. In 1979, the road maintenance charges came to an end following a major truckers strike to oppose the tax. Subsequent to the abolition of the road maintenance charges, all States except Queensland (and also the Territories) introduced State fuel franchise fees. These have grown in importance relative to



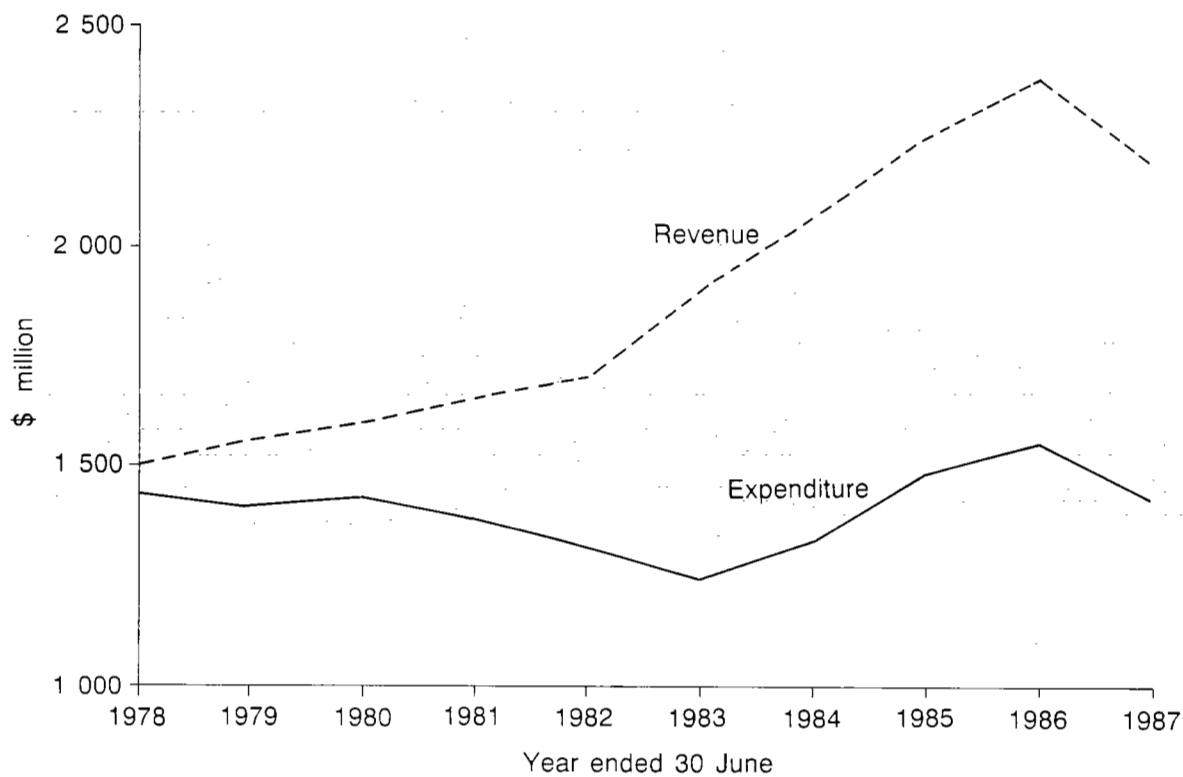
- a. Deflator used: Gross National Expenditure Deflator.
- b. Deflator used: BTCE Road Construction Price Index.

Figure 1.2 Australia: comparison of fixed capital expenditure and road expenditure, 1977-78 to 1986-87 (constant 1986-87 prices)



Note Deflator used: BTCE Road Construction Price Index.

Figure 1.3 Australia: State motor taxation, 1977-78 to 1986-87 (constant 1986-87 prices)



Note Deflator used: BTCE Road Construction Price Index.

Figure 1.4 Australia: State government road revenue and State government road expenditure, 1977-78 to 1986-87 (constant 1986-87 prices)

traditional taxes, rising from 14 per cent of net motor taxation in 1979-80 to 33 per cent in 1986-87 (figure 1.3 and table 1.11). Another source of revenue to support State expenditure on roads has been loans, which have grown in importance, especially in New South Wales and Victoria. Loans contributed only 6 per cent of total road revenues in 1977-78 but increased to 10.7 per cent in 1986-87. In some years, loans contributed more than 15 per cent of total road revenue. The details for individual States are discussed in chapters 2 to 8.

Movements in the various items of State road revenue over the decade 1977-78 and 1986-87 are presented in figure 1.3. Total State road revenues continued to increase between 1977-78 and 1985-86. However, there was a fall of 8 per cent in real terms in 1986-87 (figure 1.4).

STATE ROAD EXPENDITURE

In figure 1.4, total State road revenue raised and State road expenditure are compared. Although from 1977-78 to 1982-83 road revenue rose in real terms, road expenditure fell. With the introduction of the ABRD program and the requirement for States to match the grants provided by the Commonwealth, the States increased their expenditure from 1983-84 until 1985-86. However, there was a drop of 8 per cent in State road expenditure in 1986-87, similar to the drop in road revenue in that year. Also, the gap between road revenue raised by the States and road expenditure widened during the decade 1977-78 to 1986-87.

State government road expenditures in constant 1986-87 prices are summarised in table 1.2. The Northern Territory is not included in the table for the first two years because the Commonwealth was responsible for all road expenditure until 1978-79 in the Territory. Year by year variation in road expenditure in individual States is clearly evident. Total State road expenditure fell in real terms between 1977-78 and 1982-83. However, from 1982-83 expenditure increased until 1985-86, after which it again fell by 8 per cent in 1986-87. Expenditure declined in that year in all States except Western Australia and the Northern Territory.

State road expenditure by road category

Even though national roads are the responsibility of the Commonwealth government, the States also make some small contributions to expenditure on these roads in almost every year. Again these contributions have fluctuated according to total funds available (figure 1.5).

TABLE 1.2 AUSTRALIA: STATE GOVERNMENT ROAD EXPENDITURE BY STATE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

Year	NSW	Vic.	Qld	WA	SA	Tas.	NT	Total
1977-78	548.7	374.9	223.0	124.8	99.5	64.0	a	1 434.9
1978-79	521.7	343.2	223.4	144.9	106.2	67.5	a	1 406.9
1979-80	537.3	307.4	216.1	153.6	90.2	60.9	58.6	1 424.1
1980-81	537.7	283.3	212.2	140.8	88.8	55.7	54.4	1 372.9
1981-82	469.1	289.9	247.9	127.3	78.5	50.6	53.9	1 317.2
1982-83	428.5	283.0	223.9	133.5	82.4	53.0	39.5	1 243.8
1983-84	475.9	337.5	214.4	123.0	84.0	64.7	25.7	1 325.2
1984-85	547.5	315.7	291.5	127.4	90.8	82.0	21.8	1 476.7
1985-86	569.5	348.4	315.7	125.7	79.9	89.4	18.6	1 547.2
1986-87	468.5	324.2	293.4	138.2	77.0	74.9	43.5	1 419.7

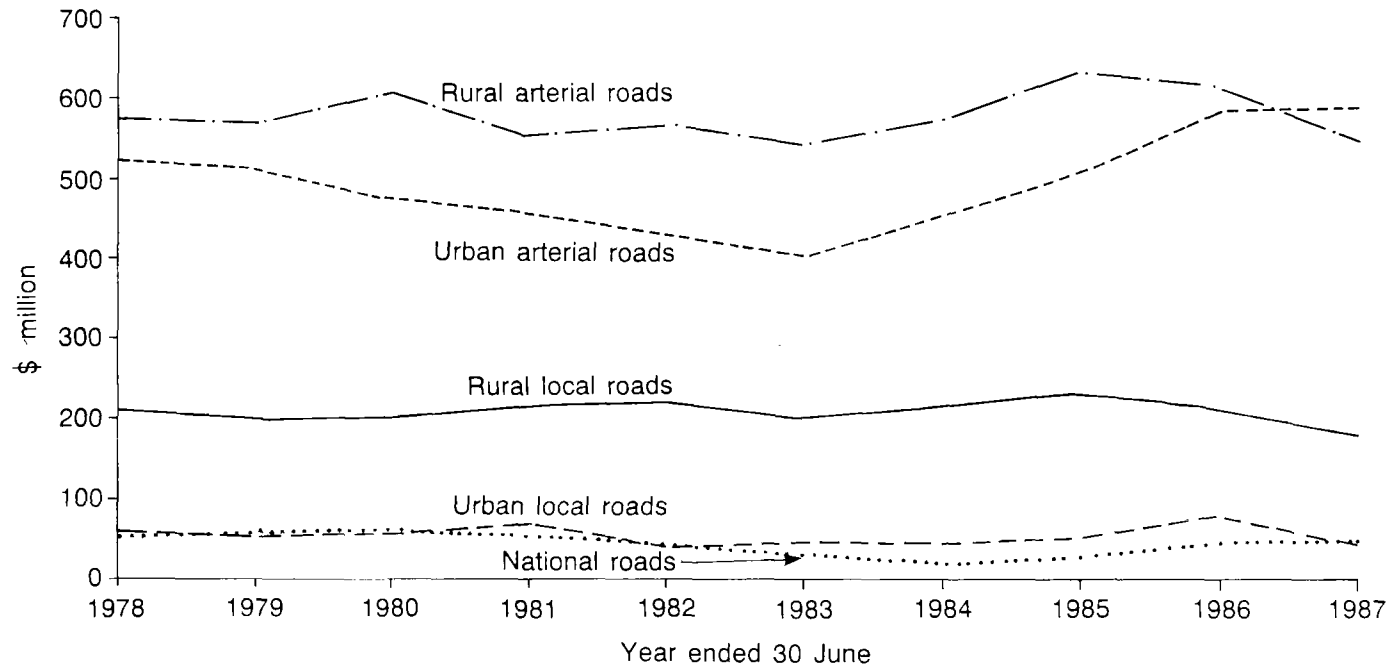
a. Included in Commonwealth expenditure for that year. The Northern Territory attained self-government in 1978-79.

Note Figures may not add to totals, owing to rounding.

Rural arterial roads attracted the major share of State funds in every year between 1977-78 and 1985-86, but not in 1986-87. In 1986-87 prices, funds varied between \$637.8 million in 1984-85 and \$543.1 million in 1982-83 - some 42 per cent of total State road expenditure.

There were no distinct trends in the level of local roads funding between 1977-78 and 1986-87. Almost 15 per cent of total State road expenditure was on this type of roads in this decade. The highest allocation of \$221.6 million occurred in 1981-82 and the lowest allocation of \$183.1 million was in 1986-87.

The pattern of funding for urban arterial roads was different again. Funds fell by 22 per cent between 1977-78 and 1982-83. From then on, however, these roads received a higher level of funding, reaching \$588.4 million in 1986-87, 13 per cent higher in real terms than the level of funding in 1977-78.



Note Deflator used: BTCE Road Construction Price Index.

Figure 1.5 Australia: total state government road expenditure by road category, 1977-78 to 1986-87 (constant 1986-87 prices)

The funding level for urban local roads fluctuated over the study period with no clear pattern emerging. The total amount allocated for urban local roads was less than 4 per cent of total funds during the decade 1977-78 to 1986-87.

While the Commonwealth stopped funding road planning and research in 1981-82, the States also reduced their level of funding, by 48 per cent in 1985-86, followed by an increase of only 10 per cent in 1986-87. Up to 1984-85, funds fluctuated between \$20 million and \$16 million per year.

LOCAL GOVERNMENT ROAD EXPENDITURE

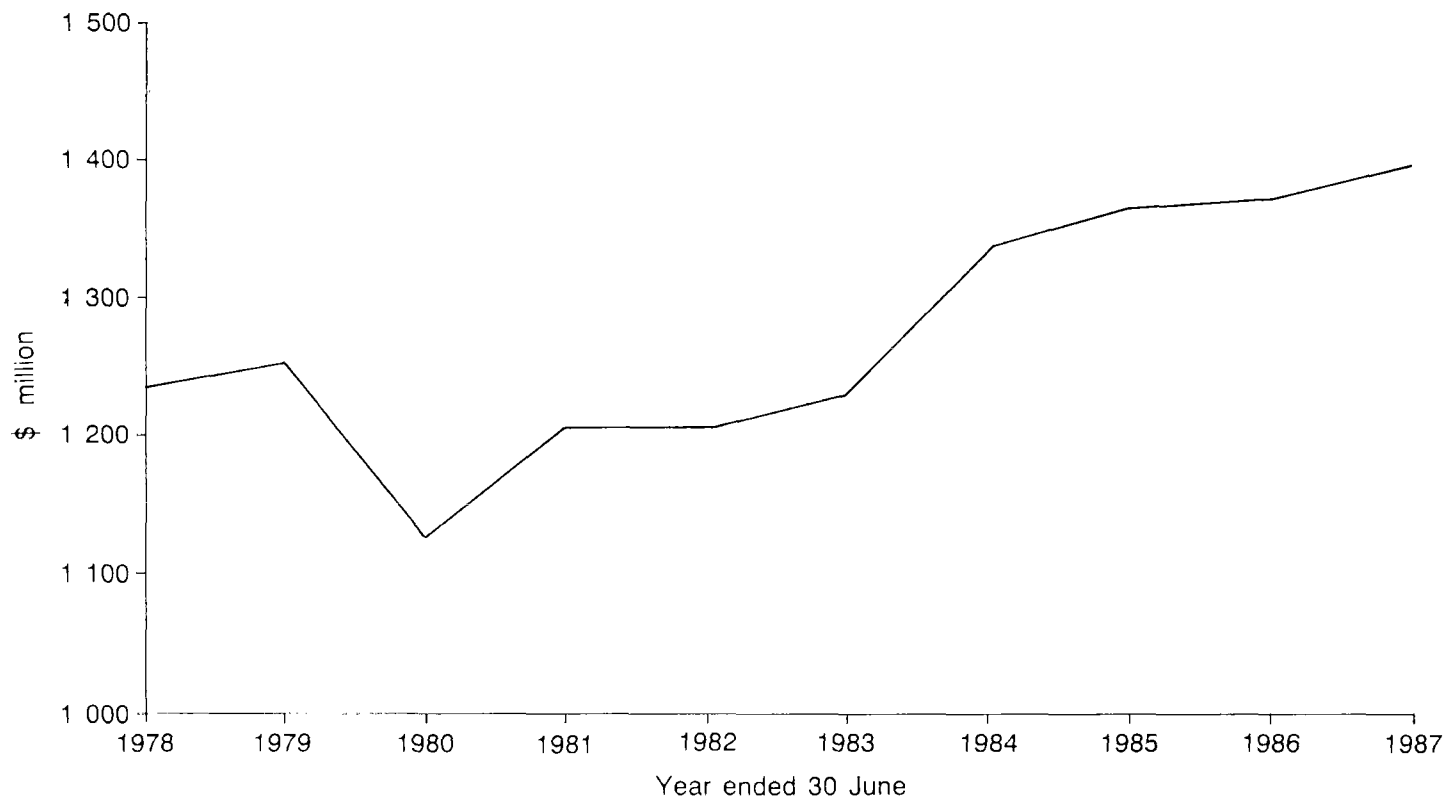
Most local government road expenditure is spent on undeclared urban and rural local roads which are not the responsibility of the States or the Commonwealth. Local governments also contribute to spending on some sub-arterial roads, but lack of data makes it difficult to quantify this contribution.

Figure 1.1 shows local government road expenditure effort in the decade 1977-78 to 1986-87. Table 1.3 presents the same information for individual States and the Northern Territory. This expenditure showed no set pattern of change over the decade, although the trend was generally upward from 1979-80, except for a small decline in 1983-84. The figures for 1979-80, however, may be too low because there is evidence that New South Wales local government road expenditure in that year is underestimated.

Table 1.13 shows the distribution of local government road expenditure between construction and maintenance in the decade 1977-78 to 1986-87. The expenditure devoted to construction fell whereas funds devoted to maintenance increased. Road construction expenditure was 53.8 per cent of total local government road expenditure in 1977-78 and 46 per cent in 1986-87.

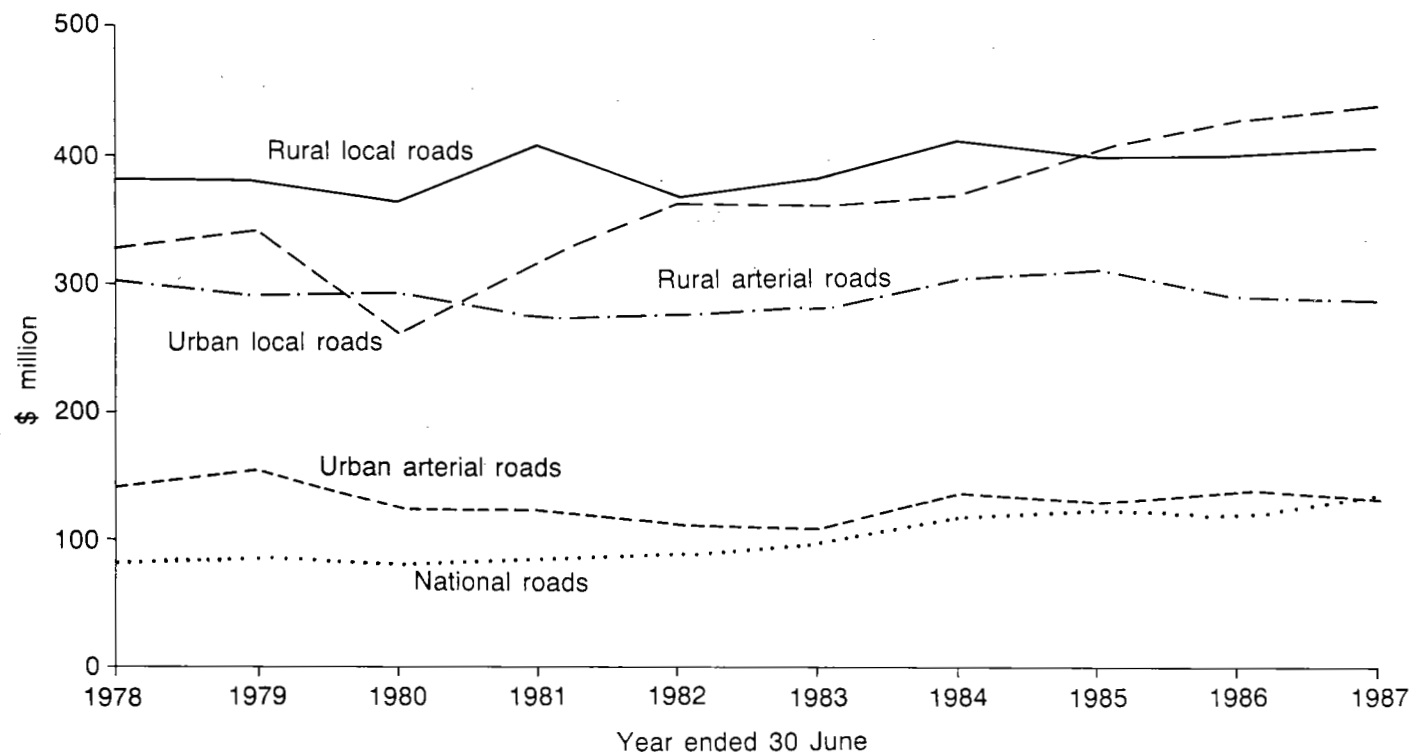
ROAD MAINTENANCE

With the development and expansion of Australia's roads system since the 1960s, the issue of road maintenance has begun to assume greater prominence. Maintenance can range from minimum expenditure, on only routine maintenance and resealing, through to major expenditure on rehabilitation and reconstruction. The maintenance estimates in this paper were compiled using a minimum expenditure concept, and include line marking, pothole repair and minor resealing works, but exclude construction activities and any rehabilitation and major resealing works.



Note Deflator used: BTCE Road Construction Price Index.

Figure 1.6 Australia: total road maintenance expenditure, 1977-78 to 1986-87 (constant 1986-87 prices)



Note Deflator used: BTCE Road Construction Price Index.

Figure 1.7 Australia: total road maintenance expenditure by road category, 1977-78 to 1986-87 (constant 1986-87 prices)

TABLE 1.3 AUSTRALIA: LOCAL GOVERNMENT ROAD EXPENDITURE BY STATE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

Year	NSW	Vic.	Qld	WA	SA	Tas.	NT	Total
1977-78	553.4	234.8	182.6	85.6	89.3	41.3	6.3	1193.3
1978-79	563.2	241.5	178.7	95.7	88.4	42.8	1.3	1211.6
1979-80	338.2 ^a	249.7	201.9	76.6	80.3	35.1	3.7	985.5
1980-81	454.7	271.3	197.1	72.1	80.4	30.7	1.1	1107.4
1981-82	502.4	252.3	201.6	80.4	80.1	29.2	3.8	1149.8
1982-83	486.1	275.9	213.9	79.5	89.5	28.5	5.8	1179.2
1983-84	455.0	274.5	231.7	71.7	79.2	29.3	5.7	1147.1
1984-85	484.3	276.3	250.9	85.7	89.0	29.2	4.3	1219.7
1985-86	497.0	291.2	256.4	89.1	89.9	33.3	4.1	1261.0
1986-87	530.1	299.0	250.9	90.7	91.9	35.4	3.2	1301.2

a. Local government expenditure for New South Wales in 1979-80 may be underestimated. See text for details.

Note Figures may not add to totals, owing to rounding.

After recording a low of \$1.13 billion in 1979-80 (in constant 1986-87 prices), total maintenance expenditure on Australian roads has increased steadily. Since 1982-83, with the injection of new funds into construction through the ABRD program, the proportion of total road funds spent on maintenance has slipped, although in absolute terms it has continued to rise, reaching \$1.4 billion in 1986-87 (figure 1.6). This maintenance effort has, however, been spread unevenly across road categories (figure 1.7) and States.

While national roads and arterial roads are still being developed, thereby increasing the maintenance requirement, local roads are, for the most part, being only routinely maintained.

National roads have received increased road funding in the past ten years. However, the maintenance component of that funding has risen more rapidly (by 62.5 per cent) so that in 1986-87 it comprised just over 20 per cent of total expenditure on national roads (table 1.14).

The maintenance effort on rural arterial and urban arterial roads again accounts for over a quarter of total expenditure on these road categories (29.8 per cent in 1986-87).

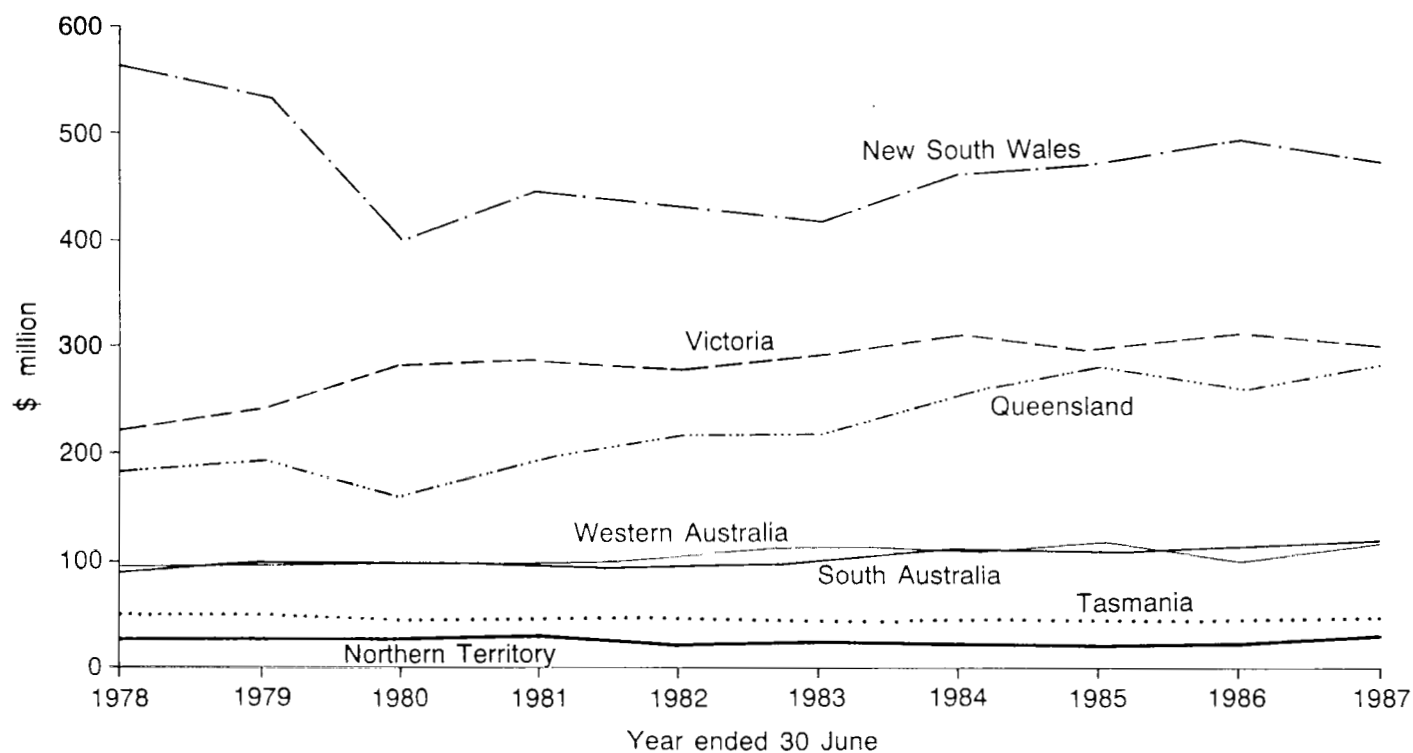
It is on local roads that the greatest and an increasing maintenance effort is being expended. By 1986-87 funds spent for construction and maintenance on these roads had risen to \$1824.8 million. It has been the maintenance component of this expenditure that has risen the most - a rise of 19.1 per cent from \$710.9 million in 1977-78 to \$846.4 million in 1986-87. Whereas maintenance accounted for 40.3 per cent of expenditure on local roads in 1977-78, in 1986-87 it made up 46.4 per cent.

The maintenance effort also varies between States (figure 1.8). In the decade to 1986-87 maintenance expenditure in New South Wales fell from 38 per cent to 33 per cent of total road expenditure at a time when funding, expressed in constant prices, also fell. Only in the Northern Territory did the relative maintenance effort also fall, although in 1986-87 it still accounted for 37 per cent of total road expenditure. In all other States, the proportion of total funds devoted to maintenance increased and in 1986-87 ranged from 30.5 per cent of expenditure in Tasmania to 42.5 per cent in South Australia.

TOTAL ROAD EXPENDITURE

In 1986-87, \$4.07 billion was spent on building and maintaining the nation's roads. The country's three levels of government were equal partners in this task. The Commonwealth government spent \$1.35 billion, the State and Territory governments spent \$1.42 billion and local governments spent \$1.30 billion, respectively 33 per cent, 35 per cent and 32 per cent of the total. These shares of spending by different levels of government fluctuated by up to 6 per cent between 1977-78 and 1986-87.

Figure 1.1 shows a comparison of the movements in the total road expenditure by Commonwealth, State and local governments in the decade 1977-78 to 1986-87. Owing to the fear of losing grants from the Commonwealth under the terms of the 1977 and subsequent States Roads Grants Acts, State road expenditure has remained higher than that of the other two participants except in 1983-84. The graph also shows that Commonwealth and State road expenditure fell in real terms until 1981-82 for the Commonwealth, and 1982-83 for the States, while local government expenditure fluctuated within a narrow range from year to year. The introduction of the ABRD program increased



Note Deflator used: BTCE Road Construction Price Index.

Figure 1.8 Australia: road maintenance expenditure by State and Territory, 1977-78 to 1986-87 (constant 1986-87 prices)

TABLE 1.4 AUSTRALIA: TOTAL ROAD EXPENDITURE BY STATE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

<i>Year</i>	<i>NSW</i>	<i>Vic.</i>	<i>Qld</i>	<i>WA</i>	<i>SA</i>	<i>Tas.</i>	<i>NT</i>	<i>ACT</i>	<i>Total</i>
1977-78	1 481.2	844.8	646.2	357.8	284.2	171.7	65.7	94.2	3 945.8
1978-79	1 446.0	815.9	639.6	381.3	288.8	160.6	79.4	88.2	3 899.8
1979-80	1 209.5	771.6	637.3	362.5	257.7	143.8	97.4	58.3	3 538.1
1980-81	1 312.7	762.3	623.1	339.6	253.0	144.9	89.6	30.8	3 555.9
1981-82	1 276.2	739.3	649.4	327.3	238.8	145.9	90.5	21.3	3 488.7
1982-83	1 229.3	763.1	654.3	340.7	258.0	159.3	82.6	24.4	3 511.7
1983-84	1 410.0	874.0	737.3	362.4	278.6	153.7	70.3	21.3	3 907.6
1984-85	1 490.2	850.7	832.9	390.9	297.2	166.2	75.2	31.5	4 134.8
1985-86	1 473.3	899.4	833.7	393.2	290.8	175.7	69.0	47.5	4 182.6
1986-87	1 439.4	868.5	801.0	387.6	278.0	158.8	87.2	49.2	4 069.7

Note Figures may not add to totals, owing to rounding.

Commonwealth road expenditure and also expenditure by the States from 1982-83. After 1979-80, local government road expenditure grew to a small extent each year until 1986-87. However, Commonwealth road expenditure declined in 1985-86 and 1986-87, and State road expenditure declined in 1986-87.

Total road expenditure by all levels of government in each of the States and Territories in the decade 1977-78 to 1986-87 is shown in table 1.4. Funding levels fell in 1986-87 in all parts of Australia except the Northern Territory and the Australian Capital Territory. During the decade to 1986-87, trends in funding in individual States paralleled the total States' funding, with the exception once again of the Northern Territory and the Australian Capital Territory.

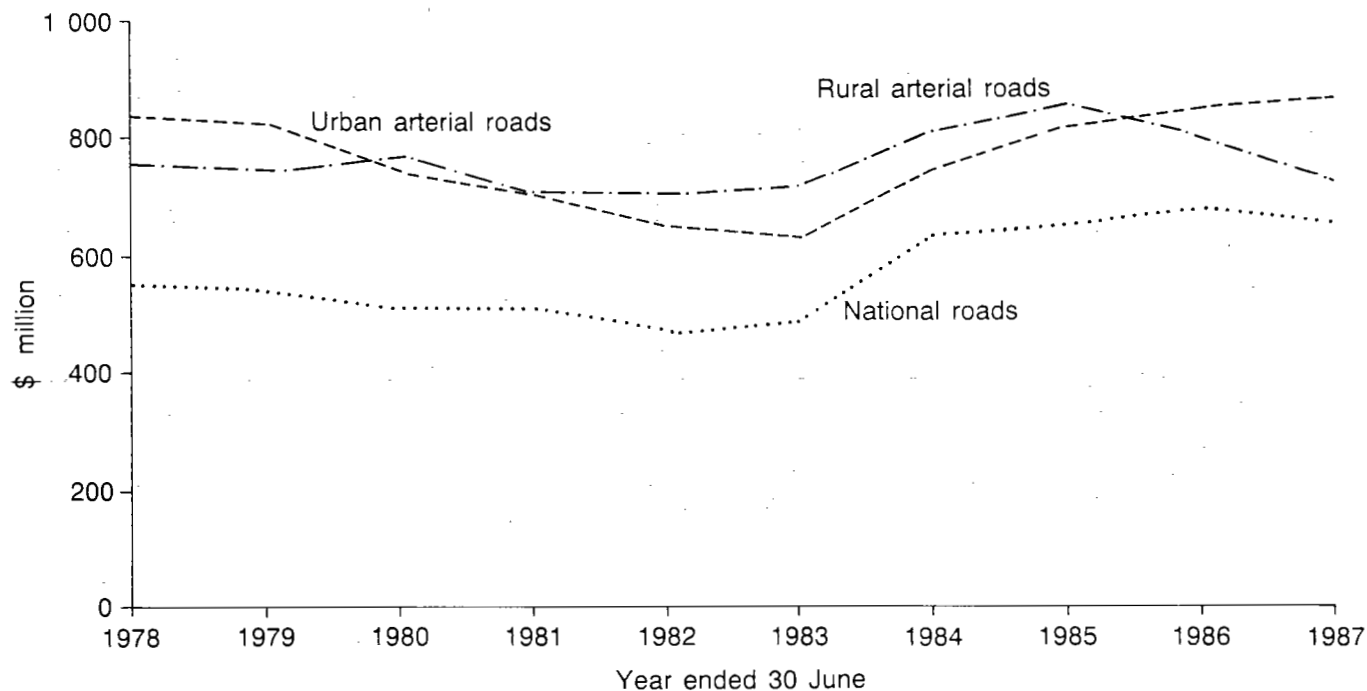
Total expenditure by road category

Figures 1.9 and 1.10 illustrate the fluctuations in total road expenditure for the five road categories.

National roads fared better in terms of the funds they received than any other category of roads in the decade 1977-78 to 1986-87, although between 1977-78 and 1981-82 funds for these roads declined by about 3 per cent per year. The introduction of the ABRD program reversed this trend and national roads received a 30 per cent increase in funds in 1983-84 and further increases of 2.4 per cent and 4.2 per cent in 1984-85 and 1985-86, respectively. Nevertheless, they received 3.8 per cent less funds in the year 1986-87. Also, maintenance expenditure on national roads increased by over 60 per cent in the decade 1977-78 to 1986-87, at an average of over 6 per cent per year.

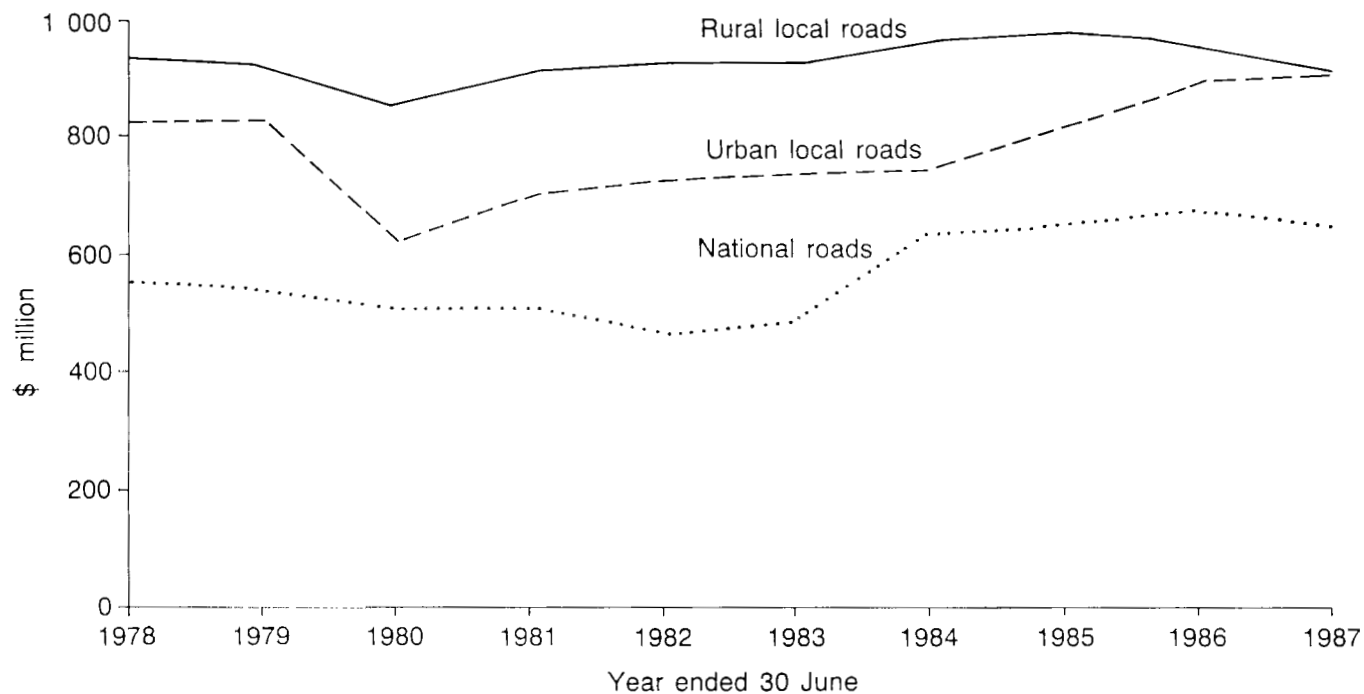
Levels of funds for rural arterial roads varied in the decade 1977-78 to 1986-87, although the variation was small. The lowest level of funding was in 1981-82 and the highest was in 1984-85. After 1984-85 funding declined, by 6.8 per cent in 1985-86 and a further 9.2 per cent in 1986-87.

Spending on rural local roads averaged \$931 million per year in the decade 1977-78 to 1986-87, with the lowest allocation \$857 million in 1979-80 (although this 1979-80 estimate is likely to be an underestimate, owing to underestimation of local government expenditure in New South Wales in that year). Expenditure on rural local roads rose from \$912 million in 1980-81 to \$985 million in 1984-85, but fell by 2.9 per cent in 1985-86 and by 3.8 per cent in 1986-87.



Note: Deflator used: BTCE Road Construction Price Index.

Figure 1.9 Australia: road expenditure on urban arterial, rural arterial and national roads, 1977-78 to 1986-87 (constant 1986-87 prices)



Note Deflator used: BTCE Road Construction Price Index.

Figure 1.10 Australia: road expenditure on rural local, urban local and national roads, 1977-78 to 1986-87 (constant 1986-87 prices)

In contrast, spending on urban arterial roads fell at an average of about 5.1 per cent per year from 1977-78 until 1982-83. After the introduction of the ABRD program, this trend was reversed and spending increased by 9.4 per cent per year after 1982-83. Generally, maintenance expenditure on urban arterial roads remained below the 1977-78 level except in 1985-86 and 1986-87.

Expenditure on urban local roads and rural local roads followed similar trends except in 1985-86 and 1986-87. Expenditure on urban local roads fell sharply from 1978-79 to 1979-80 but grew steadily at an average of more than 9.3 per cent per year from 1980-81, passing the 1977-78 level by 1985-86. With some minor fluctuations in spending levels, maintenance expenditure on urban local roads increased by 34 per cent between 1977-78 and 1986-87.

Road planning and research expenditure, at constant 1986-87 prices, declined from \$38.3 million in 1977-78 to \$11.0 million in 1986-87 (table 1.14).

TABLE 1.5 TOTAL AUSTRALIA: COMMONWEALTH ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Construction											
National roads	183.7	180.4	203.9	236.5	244.5	293.4	425.2	454.2	506.5	496.8	3 225.1
Rural arterial roads	73.2	79.6	85.6	92.6	92.5	135.9	193.5	189.2	155.7	154.6	1 252.4
Rural local roads	72.4	75.7	88.2	100.4	105.8	118.2	167.2	165.4	175.1	177.4	1 245.8
Urban arterial roads	122.0	128.1	127.2	130.4	150.6	170.8	230.3	266.3	234.5	254.5	1 814.7
Urban local roads	39.6	28.8	29.9	26.6	25.6	31.1	40.9	42.8	60.0	65.0	390.3
Construction total	490.9	492.5	534.7	586.5	619.2	749.2	1 057.0	1 117.9	1 132.0	1 148.5	7 928.4
Maintenance											
National roads	31.8	31.5	36.3	43.0	55.1	66.3	92.2	97.4	97.1	110.1	660.8
Rural arterial roads	3.6	1.0	0.8	1.0	1.5	0.6	4.8	3.5	15.2	20.0	52.0
Rural local roads	29.8	24.7	24.5	27.6	35.2	36.7	43.7	48.9	47.4	46.6	365.1
Urban arterial roads	1.3	1.8	2.8	2.8	3.3	4.0	6.5	6.3	15.0	17.5	61.3
Urban local roads	1.5	1.6	2.2	3.2	4.2	5.4	4.2	6.2	7.2	6.4	42.1
Maintenance total	68.0	60.6	66.5	77.5	99.1	113.0	151.3	162.2	182.0	200.4	1 180.6
Total construction and maintenance	558.9	553.0	601.3	664.0	718.3	862.2	1 208.3	1 280.1	1 314.0	1 348.8	9 109.0
Planning and research	8.9	6.4	7.0	6.3	0.0	0.0	0.0	0.0	0.0	0.0	28.6
Total road expenditure	567.8	559.4	608.2	670.2	718.3	862.2	1 208.3	1 280.1	1 314.0	1 348.8	9 137.6

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 1.6 TOTAL AUSTRALIA: STATE GOVERNMENT ROAD REVENUE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Revenue from road users											
Vehicle registration	457.0	492.9	503.0	550.6	678.5	779.3	847.8	932.8	993.4	1066.6	7 301.9
Drivers licence fees	60.5	73.2	77.6	83.9	94.7	116.4	132.3	149.9	154.9	172.0	1 115.4
Road maintenance tax or State fuel tax	44.3	45.6	84.1	113.8	145.5	346.7	446.4	527.2	567.8	568.8	2 890.2
Other	31.6	34.0	26.5	29.7	30.1	43.6	49.5	55.3	47.6	54.5	402.4
Total motor taxation	593.5	645.6	691.2	777.8	949.1	1 286.3	1 476.3	1 665.2	1 763.6	1 861.9	11 709.9
Less collection costs	77.5	83.3	86.7	99.1	104.4	111.7	116.8	130.9	134.5	148.5	1 093.4
Net motor taxation	515.9	562.4	604.4	678.7	844.5	1 174.7	1 359.5	1 534.3	1 629.1	1 713.4	10 616.5
Loans	43.2	66.9	132.6	142.7	113.5	95.9	128.3	213.9	322.6	234.1	1 493.7
Other	41.5	64.8	58.5	63.5	68.1	92.3	119.1	92.7	113.1	112.0	825.6
Other authorities	116.4	108.5	116.7	161.8	159.0	96.2	95.8	118.2	151.1	129.0	1 252.7
Total road revenue	716.9	802.6	912.3	1 046.6	1 185.2	1 458.9	1 702.7	1 959.1	2 215.8	2 188.3	14 188.5

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 1.7 TOTAL AUSTRALIA: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	18.5	30.8	25.9	26.4	22.6	15.7	10.9	15.9	27.5	21.2	215.4
Rural arterial roads	121.4	131.4	171.4	175.1	204.5	208.7	230.5	292.6	329.2	280.6	2 145.4
Rural local roads	53.0	55.5	67.3	84.6	101.8	101.7	115.8	142.9	131.8	100.7	955.1
Urban arterial roads	169.8	175.2	196.6	218.5	225.5	237.9	276.7	344.2	441.8	476.6	2 762.8
Urban local roads	21.1	25.9	25.5	36.7	23.5	32.5	32.8	39.4	65.4	35.9	338.7
Construction total	383.8	418.7	486.6	541.3	577.8	596.4	666.5	835.0	995.4	914.9	6 416.4
Maintenance											
National roads	3.4	9.0	7.4	9.6	6.3	10.0	5.1	10.1	15.3	22.7	98.9
Rural arterial roads	126.7	134.0	156.6	169.9	193.0	221.4	251.1	275.0	261.4	267.7	2 056.8
Rural local roads	37.4	47.5	41.8	49.6	54.0	56.2	65.8	64.0	70.9	82.4	569.6
Urban arterial roads	54.5	64.1	59.7	66.3	75.9	83.0	108.7	108.5	117.5	111.8	850.0
Urban local roads	5.1	7.8	5.6	6.0	5.4	4.0	5.4	5.6	9.0	9.2	63.1
Maintenance total	227.1	262.4	270.9	301.5	335.1	374.7	436.1	463.2	474.2	493.9	3 639.1
Total construction and maintenance	610.9	680.9	757.4	842.7	912.8	971.2	1 102.5	1 298.2	1 469.6	1 408.8	10 055.0
Planning and research	7.6	9.5	10.2	12.7	13.3	13.8	13.3	16.2	9.6	11.0	117.2
Total road expenditure	618.4	690.4	767.6	855.3	926.0	985.0	1 115.8	1 314.3	1 479.2	1 419.7	10 172.2

TABLE 1.7 (Cont.) TOTAL AUSTRALIA: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)

(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Non-road expenditure											
Loan repayments	9.4	13.8	25.8	45.1	32.9	21.6	23.4	17.5	-2.1	31.0	218.4
Interest payments	32.4	40.3	52.1	67.5	87.6	106.2	121.2	124.0	147.2	164.6	943.1
Other	64.1	63.7	74.4	92.0	123.4	315.7	416.2	524.8	567.4	611.5	2 853.2
Non-road total	105.9	117.6	152.2	204.7	244.0	443.4	560.8	666.3	712.4	807.1	4 014.7

Notes 1. See text for interpretation and qualification of figures in the table.
 2. Owing to rounding, figures may not add to totals.

TABLE 1.8 TOTAL AUSTRALIA: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.3	0.3	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.1
Rural local roads	112.9	121.7	109.8	128.6	185.3	212.5	184.0	213.8	225.4	234.6	1 728.6
Urban arterial roads	8.9	10.2	9.7	11.0	0.0	0.0	0.0	0.0	0.0	0.0	39.8
Urban local roads	154.9	171.6	141.7	177.1	209.2	234.6	244.6	281.8	324.2	364.8	2 304.5
Construction total	276.9	303.6	261.4	317.2	394.3	447.1	428.6	495.7	549.6	599.4	4 074.0
Maintenance											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.8
Rural local roads	97.7	105.1	130.3	177.4	169.4	209.5	237.0	241.3	263.2	277.7	1 908.6
Urban arterial roads	4.4	5.4	5.7	7.6	0.0	0.0	0.0	0.0	0.0	0.0	23.1
Urban local roads	134.9	149.3	133.6	187.5	244.4	277.3	300.3	348.7	392.6	424.1	2 592.7
Maintenance total	237.4	259.6	269.7	372.6	413.8	486.8	538.3	590.0	655.8	701.8	4 525.2
Total construction and maintenance	514.3	563.3	531.2	689.9	808.3	934.0	966.9	1 085.5	1 205.4	1 301.2	8 599.2
Planning and research	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total road expenditure	514.3	563.3	531.2	689.9	808.3	934.0	966.9	1 085.5	1 205.4	1 301.2	8 599.2

TABLE 1.8 (Cont.) TOTAL AUSTRALIA: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)

(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Pro rata expenditure on general administration	128.5	139.1	136.5	164.1	198.0	227.7	210.0	228.0	250.6	269.5	1 952.0
Pro rata non-road expenditure attributable to roads											
Loan repayments	45.1	50.7	51.2	62.0	71.9	80.4	71.9	80.3	90.5	95.4	699.4
Interest payments	61.5	71.8	74.1	91.9	108.8	128.1	120.4	133.0	144.1	153.8	1 087.5
Non-road total	106.6	122.5	125.3	153.9	180.7	208.5	192.3	213.3	234.6	249.2	1 786.9
Road works funded by private contributions	80.1	85.3	36.3	55.6	67.6	86.2	72.5	81.2	93.7	92.5	751.0

- Notes**
1. See text for interpretation and qualification of figures in the table.
 2. Owing to rounding, figures may not add to totals.

TABLE 1.9 TOTAL AUSTRALIA: TOTAL ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	202.2	211.2	229.8	262.8	267.1	309.1	436.0	470.1	534.0	518.0	3 440.3
Rural arterial roads	194.9	211.2	257.2	268.0	297.0	344.6	424.0	481.8	484.9	435.2	3 398.8
Rural local roads	238.4	252.9	265.3	313.5	392.9	432.4	467.0	522.1	532.3	512.7	3 929.5
Urban arterial roads	300.7	313.5	333.5	359.9	376.1	408.7	507.0	610.6	676.3	731.1	4 617.4
Urban local roads	215.6	226.2	197.1	240.5	258.3	298.2	318.3	364.0	449.6	465.7	3 033.5
Construction total	1 151.6	1 214.7	1 282.7	1 444.9	1 591.3	1 792.7	2 152.1	2 448.5	2 677.0	2 662.8	18 419.5
Maintenance											
National roads	35.2	40.5	43.8	52.6	61.4	76.3	97.2	107.4	112.4	132.8	759.6
Rural arterial roads	130.5	135.2	157.7	171.0	194.5	222.0	255.9	278.5	276.6	287.7	2 109.6
Rural local roads	164.9	177.2	196.6	254.6	258.6	302.5	346.5	354.1	381.5	406.7	2 843.2
Urban arterial roads	60.3	71.3	68.2	76.7	79.2	87.0	115.1	114.8	132.5	129.3	934.4
Urban local roads	141.5	158.6	141.3	196.7	253.9	286.6	309.9	360.5	408.8	439.7	2 697.5
Maintenance total	532.5	582.6	607.1	751.6	848.0	974.6	1 125.6	1 215.4	1 312.0	1 396.1	9 344.3
Total construction and maintenance	1 684.1	1 797.2	1 889.8	2 196.6	2 439.4	2 767.5	3 277.7	3 663.7	3 989.0	4 058.8	27 763.8
Planning and research	16.5	15.9	17.2	19.0	13.3	13.8	13.3	16.2	9.6	11.0	145.8
Total road expenditure	1 700.5	1 813.1	1 906.9	2 215.4	2 452.6	2 781.3	3 291.0	3 679.9	3 998.6	4 070.6	27 909.6

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 1.10 TOTAL AUSTRALIA: COMMONWEALTH ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)											
Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	426.2	388.0	378.3	379.6	347.8	370.5	505.0	510.3	529.8	496.8	4 332.3
Rural arterial roads	169.8	171.2	158.8	148.6	131.6	171.6	229.8	212.6	162.9	154.6	1 711.5
Rural local roads	168.0	162.8	163.6	161.2	150.5	149.2	198.6	185.8	183.2	177.4	1 700.3
Urban arterial roads	283.1	275.5	236.0	209.3	214.2	215.7	273.5	299.2	245.3	254.5	2 506.3
Urban local roads	91.9	61.9	55.5	42.7	36.4	39.3	48.6	48.1	62.8	65.0	552.1
Construction total	1 139.0	1 059.1	992.0	941.4	880.8	946.0	1 255.3	1 256.1	1 184.1	1 148.5	10 802.3
Maintenance											
National roads	73.8	67.7	67.3	69.0	78.4	83.7	109.5	109.4	101.6	110.1	870.6
Rural arterial roads	8.4	2.2	1.5	1.6	2.1	0.8	5.7	3.9	15.9	20.0	62.0
Rural local roads	69.1	53.1	45.5	44.3	50.1	46.5	51.9	54.9	49.6	46.6	511.6
Urban arterial roads	3.0	3.9	5.2	4.5	4.7	5.1	7.7	7.1	15.7	17.5	74.3
Urban local roads	3.5	3.4	4.1	5.1	6.0	6.8	5.0	7.0	7.5	6.4	54.8
Maintenance total	157.8	130.3	123.4	124.4	141.0	142.8	179.7	182.2	190.4	200.4	1 572.4
Total construction and maintenance	1 296.8	1 189.2	1 115.6	1 065.8	1 021.8	1 088.8	1 435.0	1 438.3	1 374.5	1 348.8	12 374.5
Planning and research	20.6	13.8	13.0	10.1	0.0	0.0	0.0	0.0	0.0	0.0	57.5
Total road expenditure	1 317.4	1 203.0	1 128.4	1 075.6	1 021.8	1 088.8	1 435.0	1 438.3	1 374.5	1 348.8	12 432.1

- Notes**
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

TABLE 1.11 TOTAL AUSTRALIA: STATE GOVERNMENT ROAD REVENUE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
<i>Revenue from road users</i>											
Vehicle registration	956.1	955.2	877.8	868.5	972.1	1 013.4	1 027.6	1 071.0	1 067.0	1 066.6	9 875.3
Drivers licence fees	126.6	141.9	135.4	132.3	135.7	151.4	160.4	172.1	166.4	172.0	1 494.1
Road maintenance tax or State fuel tax	92.7	88.4	146.8	179.5	208.5	450.8	541.1	605.3	609.9	568.8	3 491.7
Other	66.1	65.9	46.2	46.8	43.1	56.7	60.0	63.5	51.1	54.5	554.0
Total motor taxation	1 241.6	1 251.2	1 206.3	1 226.8	1 359.7	1 672.7	1 789.5	1 911.8	1 894.4	1 861.9	15 415.9
Less collection costs	162.1	161.4	151.3	156.3	149.6	145.3	141.6	150.3	144.5	148.5	1 510.8
Net motor taxation	1 079.3	1 089.9	1 054.8	1 070.5	1 209.9	1 527.6	1 647.9	1 761.5	1 749.8	1 713.4	13 905.1
Loans	90.4	129.7	231.4	225.1	162.6	124.7	155.5	245.6	346.5	234.1	1 945.5
Other	86.8	125.6	102.1	100.2	97.6	120.0	144.4	106.4	121.5	112.0	1 116.5
Other authorities	243.5	210.3	203.7	255.2	227.8	125.1	116.1	135.7	162.3	129.0	1 808.7
Total road revenue	1 499.8	1 555.4	1 592.1	1 650.8	1 698.0	1 897.1	2 063.9	2 249.3	2 380.0	2 188.3	18 774.7

- Notes**
1. See text for interpretation and qualification of figures in the table.
 2. The ABS Implicit Price Deflator of Gross Domestic Product (ABS 1988) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

TABLE 1.12 TOTAL AUSTRALIA: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)											
Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	42.9	66.2	48.1	42.4	32.1	19.8	12.9	17.9	28.8	21.2	332.3
Rural arterial roads	281.7	282.6	318.0	281.1	290.9	263.5	273.8	328.8	344.4	280.6	2 945.2
Rural local roads	123.0	119.4	124.9	135.8	144.8	128.4	137.5	160.6	137.9	100.7	1 312.9
Urban arterial roads	394.0	376.8	364.7	350.7	320.8	300.4	328.6	386.7	462.1	476.6	3 761.5
Urban local roads	49.0	55.7	47.3	58.9	33.4	41.0	39.0	44.3	68.4	35.9	472.9
Construction total	890.5	900.4	902.8	868.9	821.9	753.0	791.6	938.2	1 041.2	914.9	8 823.4
Maintenance											
National roads	7.9	19.4	13.7	15.4	9.0	12.6	6.1	11.3	16.0	22.7	134.1
Rural arterial roads	294.0	288.2	290.5	272.7	274.5	279.5	298.2	309.0	273.4	267.7	2 847.8
Rural local roads	86.8	102.2	77.6	79.6	76.8	71.0	78.1	71.9	74.2	82.4	800.5
Urban arterial roads	126.5	137.8	110.8	106.4	108.0	104.8	129.1	121.9	122.9	111.8	1 180.0
Urban local roads	11.8	16.8	10.4	9.6	7.7	5.1	6.4	6.3	9.4	9.2	92.7
Maintenance total	526.9	564.3	502.6	483.9	476.7	473.1	517.9	520.4	496.0	493.9	5 055.8
Total construction and maintenance	1 417.4	1 464.3	1 405.2	1 352.6	1 298.4	1 226.3	1 309.4	1 458.7	1 537.2	1 408.8	13 878.3
Planning and research	17.6	20.4	18.9	20.4	18.9	17.4	15.8	18.2	10.0	11.0	168.8
Total road expenditure	1 434.8	1 484.7	1 424.1	1 372.9	1 317.2	1 243.7	1 325.2	1 476.7	1 547.3	1 419.7	14 046.3

TABLE 1.12 (Cont.) TOTAL AUSTRALIA: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Non-road expenditure											
Loan repayments	20.2	27.5	46.6	73.6	48.7	28.9	29.4	20.7	-2.3	31.0	324.3
Interest payments	69.7	80.4	94.0	110.1	129.8	142.2	152.1	146.7	160.0	164.6	1 249.6
Other	137.8	127.1	134.3	150.1	182.8	422.6	522.2	621.1	616.7	611.5	3 526.3
Non-road total	227.7	234.7	274.9	333.9	361.5	593.6	703.6	788.5	774.3	807.1	5 100.3

- Notes**
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert road expenditure figures from current prices to constant prices.
 3. The ABS Implicit Price Deflator of Gross National Expenditure (ABS 1988) was used to convert non-road expenditure figures from current prices to constant prices.
 4. Owing to rounding, figures may not add to totals.

TABLE 1.13 TOTAL AUSTRALIA: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)											
Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.7	0.6	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	2.2
Rural local roads	261.9	261.7	203.7	206.4	263.6	268.3	218.5	240.2	235.8	234.6	2 394.8
Urban arterial roads	20.6	21.9	18.0	17.7	0.0	0.0	0.0	0.0	0.0	0.0	78.2
Urban local roads	359.4	369.0	262.9	284.3	297.6	296.2	290.5	316.6	339.1	364.8	3 180.4
Construction total	642.5	652.9	485.0	509.1	560.9	564.5	509.0	557.0	574.9	599.4	5 655.7
Maintenance											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.5	0.4	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.6
Rural local roads	226.7	226.0	241.7	284.8	241.0	264.5	281.5	271.1	275.3	277.7	2 590.3
Urban arterial roads	10.2	11.6	10.6	12.2	0.0	0.0	0.0	0.0	0.0	0.0	44.6
Urban local roads	313.0	321.1	247.9	301.0	347.7	350.1	356.7	391.8	410.7	424.1	3 463.9
Maintenance total	550.8	558.3	500.4	598.1	588.6	614.6	639.3	662.9	686.0	701.8	6 100.4
Total construction and maintenance	1 193.3	1 211.4	985.5	1 107.4	1 149.8	1 179.3	1 148.3	1 219.7	1 260.9	1 301.2	11 756.1
Planning and research	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total road expenditure	1 193.3	1 211.4	985.5	1 107.4	1 149.8	1 179.3	1 148.3	1 219.7	1 260.9	1 301.2	11 756.1

TABLE 1.13 (Cont.) TOTAL AUSTRALIA: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Pro rata expenditure on general administration	276.3	277.6	246.4	267.7	293.3	304.8	263.5	269.8	272.4	269.5	2 741.4
Pro rata non-road expenditure attributable to roads											
Loan repayments	97.0	101.2	92.4	101.1	106.5	107.6	90.2	95.0	98.4	95.4	984.9
Interest payments	132.3	143.3	133.8	149.9	161.2	171.5	151.1	157.4	156.6	153.8	1 510.8
Non-road total	229.2	244.5	226.2	251.1	267.7	279.1	241.3	252.4	255.0	249.2	2 495.7
Road works funded by private contributions	185.8	183.4	67.3	89.2	96.2	108.8	86.1	91.2	98.0	92.5	1 098.7

- Notes**
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert road expenditure figures and the figures for road works funded by private contributions from current prices to constant prices.
 3. The ABS Implicit Price Deflator of Gross National Expenditure (ABS 1988) was used to convert non-road figures from current prices to constant prices.
 4. Owing to rounding, figures may not add to totals.

TABLE 1.14 TOTAL AUSTRALIA: TOTAL ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	469.1	454.2	426.3	421.8	379.9	390.3	517.8	528.2	558.6	518.0	4 664.3
Rural arterial roads	452.2	454.2	477.2	430.2	422.5	435.1	503.6	541.3	507.2	435.2	4 658.7
Rural local roads	553.1	543.9	492.2	503.2	558.9	546.0	554.6	586.6	556.8	512.7	5 408.0
Urban arterial roads	697.7	674.2	618.7	577.7	535.0	516.0	602.1	686.1	707.4	731.1	6 346.1
Urban local roads	500.2	486.5	365.7	386.0	367.4	376.5	378.0	409.0	465.9	465.7	4 201.0
Construction total	2 671.9	2 612.3	2 379.8	2 319.3	2 263.6	2 263.5	2 555.9	2 751.1	2 800.2	2 662.8	25 278.0
Maintenance											
National roads	81.7	87.1	81.3	84.4	87.3	96.3	115.4	120.7	117.6	132.8	1 004.6
Rural arterial roads	302.8	290.8	292.6	274.5	276.7	280.3	303.9	312.9	289.3	287.7	2 911.4
Rural local roads	382.6	381.1	364.7	408.7	367.9	381.9	411.5	397.9	399.1	406.7	3 902.0
Urban arterial roads	139.9	153.3	126.5	123.1	112.7	109.8	136.7	129.0	138.6	129.3	1 299.0
Urban local roads	328.3	341.1	262.2	315.7	361.2	361.9	368.1	405.1	427.6	439.7	3 610.7
Maintenance total	1 235.5	1 252.9	1 126.3	1 206.4	1 206.3	1 230.6	1 336.8	1 365.6	1 372.4	1 396.1	12 727.8
Total construction and maintenance	3 907.4	3 864.9	3 506.1	3 525.8	3 470.0	3 494.3	3 892.8	4 116.5	4 172.6	4 058.8	38 005.8
Planning and research	38.3	34.2	31.9	30.5	18.9	17.4	15.8	18.2	10.0	11.0	226.3
Total road expenditure	3 945.5	3 899.1	3 537.8	3 556.0	3 488.8	3 511.7	3 908.6	4 134.7	4 182.6	4 070.6	38 232.1

- Notes**
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

CHAPTER 2 NEW SOUTH WALES

Tables 2.1 to 2.10 show details of Commonwealth, State and local government road expenditure, State road revenue and total road expenditure, for New South Wales, in current prices and in constant 1986-87 prices. Road financing arrangements, including legislation related to road financing, as they existed before July 1987 in New South Wales are briefly described below.

Changes in the organisational structure of the New South Wales State government have occurred since 1 July 1987, but they do not affect the analysis presented in this paper. In January 1989 the Roads and Traffic Authority of New South Wales was established to take over the functions of the former Department of Main Roads, the Traffic Authority and some functions of the Department of Motor Transport.

REVENUE

State road revenue was collected from road users mainly by the Department of Motor Transport, but to a lesser extent by the Department of Main Roads. Some taxes were collected directly by the New South Wales Department of Finance.

Road revenue in New South Wales is collected under a number of Acts, the main ones being:

- . the *Motor Traffic Act 1909*;
- . the *Transport Act 1930*;
- . the *Motor Vehicle Taxation Management Act 1949*;
- . the *Traffic Authority Act 1976*;
- . the *Sydney Harbour Bridge (Administration) Act 1932-1972*;

- . the *Business Franchise Licences (Petroleum Products) Act 1982*;
- . the *Tow Truck Act 1967*; and
- . the *Traffic Authority Act 1976*.

The major charges collected by the Department of Motor Transport were motor vehicle registration taxes, drivers licences and tow truck fees. The *Motor Vehicle Taxation Management Act* provides authority to collect motor vehicle registration taxes and drivers licence fees. These taxes were credited to the Main Roads Fund after the deduction of collection costs. The Main Roads Fund was the operating account of the Department of Main Roads, into which were directed:

- . Commonwealth road grants;
- . local government contributions for works carried out in conjunction with works on declared roads;
- . State loan funds;
- . semi-government loans;
- . unemployment and disaster relief funds; and
- . payments from other New South Wales departments for work done on their behalf.

The Department of Main Roads also collected tolls on the Sydney Harbour Bridge, and at Berowra and Waterfall. Another source of funds is the *Business Franchise Licences (Petroleum Products) Act*. This revenue is collected by the State Department of Finance. Only the receipts from fees on automotive distillate are hypothecated to road expenditure; the main portion of revenue from business franchise licence fees goes to consolidated revenue.

Since November 1980, the rates of motor vehicle taxation have been indexed to changes in the cost of road works. The first rate adjustment was made on 21 November 1981 with subsequent adjustments becoming effective on 1 July of each year. Even though provision is made in the legislation for automatic indexation, discretion is exercised in determining the size of the adjustment.

Loans for road expenditure formed a significant source of revenue in the late 1970s and early 1980s (nearly 33 per cent of total revenue). They have since declined, although they remained an important source of revenue for State road expenditure in New South Wales (table 2.7).

Figure 2.1 illustrates the gap between road revenue and State government expenditure for roads in New South Wales, especially after the introduction of the *Business Franchise Licences (Petroleum Products) Act* in 1982. The gap between State road revenue and State road expenditure widened between 1981-82 and 1986-87. There was a 19.4 per cent gap between State road revenue and State road expenditure in 1981-82 which had widened to 57.5 per cent in 1984-85. In later years the gap gradually widened to 48.4 per cent in 1986-87.

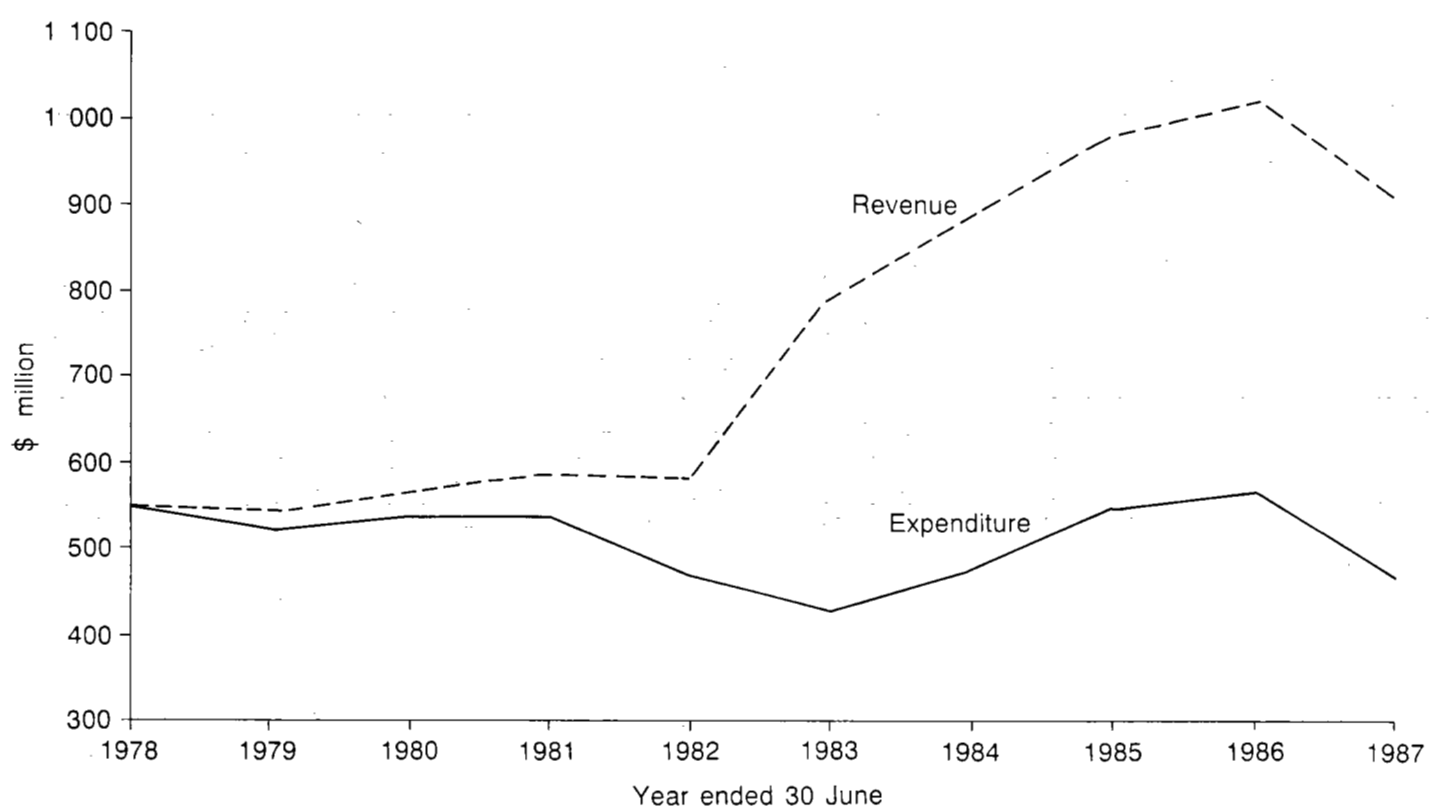
EXPENDITURE

The *Main Roads Act 1924* and the *State Roads Act 1986* gave power to the Department of Main Roads to incur expenditure on declared roads within the State. Expenditure on non-declared roads is incurred by local councils and shires.

The Traffic Authority of New South Wales controlled expenditure on the planning and management of traffic. Funds for the operation of the Traffic Authority were drawn from the Road Transport Traffic Fund and the Public Vehicle Fund. The expenditure included not only payment to the Department of Main Roads for constructing and maintaining traffic facilities, but also payment for safety measures and education programs.

From May 1986, the *State Roads Act* allowed the Commissioner of Main Roads to incur expenditure on roads for the construction and maintenance of the principal roads of the State and any related works. Before this, the Commissioner derived authority from the *Main Roads Act* of 1924. The Commissioner of Main Roads in New South Wales is responsible for the majority of State road expenditure. The remainder of the road expenditure task at the State government level is carried out by various statutory authorities and government agencies (generally from their own revenue, but in some cases from Commonwealth funds).

Local councils also play an important part in road expenditure, drawing funds from their own resources. In five of the ten years between 1977-78 and 1986-87,



Note Deflator used: BTCE Road Construction Price Index.

Figure 2.1 New South Wales: State government road revenue and State government road expenditure, 1977-78 to 1986-87 (constant 1986-87 prices)

local councils contributed more to road expenditure in the State than either the Commonwealth or the New South Wales State governments.

Changes in expenditure level

Between 1977-78 and 1986-87, the New South Wales State government spent about \$5.1 billion on roads while collecting \$5.4 billion (net of collection costs) from road related charges. It also raised about \$2 billion of additional funds from other sources. Over the same period, the Commonwealth contributed \$3.8 billion to road construction and maintenance in New South Wales while local government spent over \$4.8 billion.

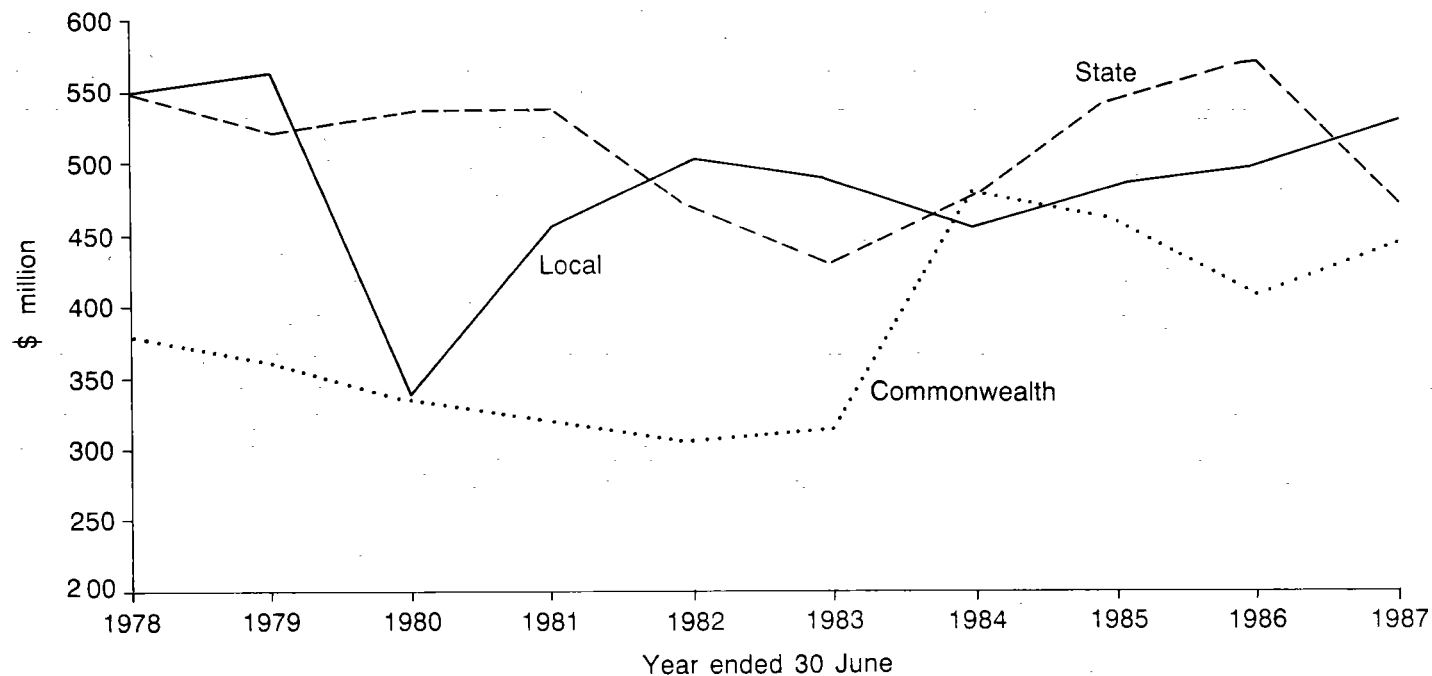
Figure 2.2 shows variations in the level of road expenditure, by the Commonwealth and New South Wales State and local governments between 1977-78 and 1986-87, in constant 1986-87 prices. Commonwealth road expenditure declined from \$379 million in 1977-78 to \$305 million in 1981-82, but increased following the introduction of the Australian Bicentennial Road Development Program in 1982-83. Expenditure reached a peak of \$479 million in 1983-84 but declined in subsequent years to \$407 million in 1985-86. It rose again to \$441 million in 1986-87.

State government road expenditure fluctuated between \$429 million in 1982-83 and \$570 million in 1985-86. The allocation of expenditure between road categories and between construction and maintenance also fluctuated between 1977-78 and 1986-87. It is significant that State government allocation to road maintenance in New South Wales declined in real terms during the analysis period. The decline in road maintenance expenditure in constant prices was about 41.9 per cent between 1977-78 and 1986-87 with some minor fluctuations in between these dates (see table 2.8).

Local government expenditure declined from a peak of \$563 million in 1978-79 to \$530 million in 1986-87. During the intervening period, it fluctuated in the range of \$339 million to \$500 million. From 1983-84 onwards, over half of road expenditure by local governments in New South Wales was for road maintenance (table 2.9).

Expenditure by road category

Figure 2.3 shows the distribution of total road expenditure by road category in New South Wales between 1977-78 and 1986-87, in constant 1986-87 prices.



Note Deflator used: BTCE Road Construction Price Index.

Figure 2.2 New South Wales: road expenditure by level of government, 1977-78 to 1986-87 (constant 1986-87 prices)

The allocation of road expenditure among road categories and between construction and maintenance fluctuated during the 1977-78 and 1986-87 period. Expenditure on national roads declined from \$183 million in 1977-78 to \$146 million in 1981-82, a real decline of 20 per cent. The ABRD program boosted spending on national roads in New South Wales by 4.7 per cent in 1982-83 and 50 per cent in 1983-84. After 1983-84, the level of funds for national roads oscillated within a narrow band, between \$230 million and \$215 million.

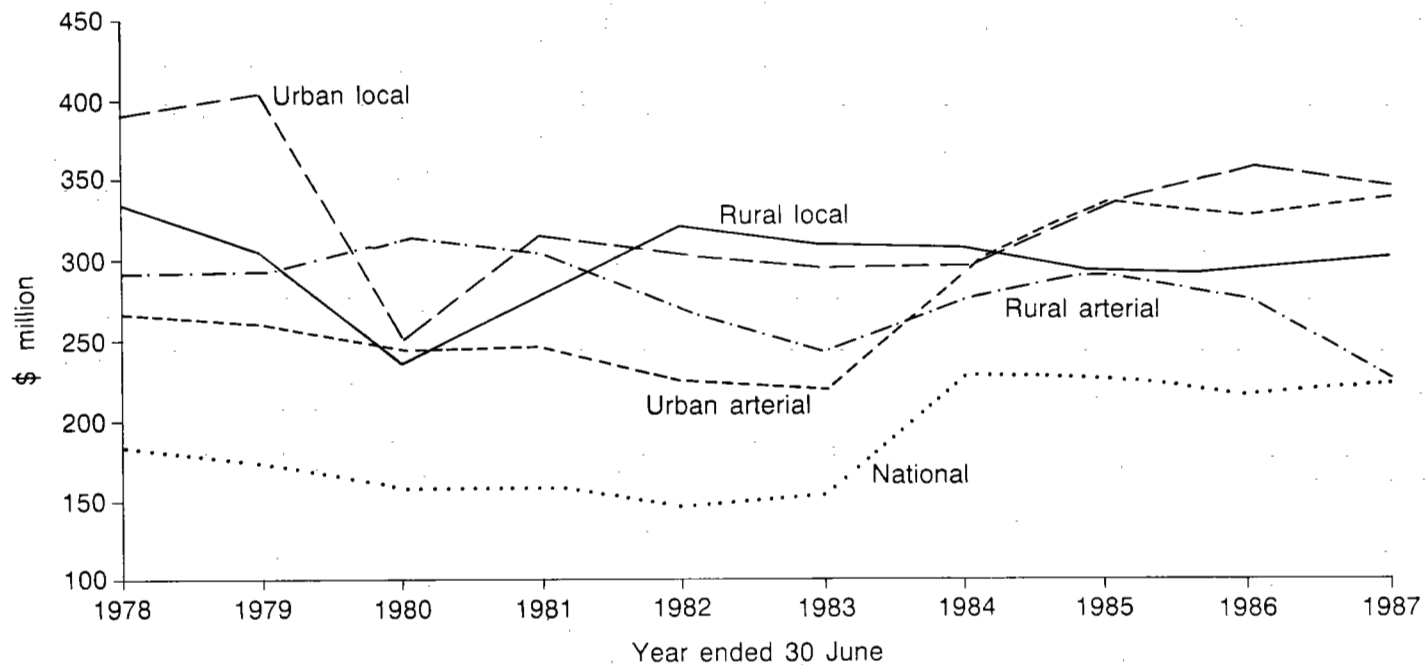
Spending on rural arterial roads exhibited an erratic trend between 1977-78 and 1986-87. In 1986-87 prices, expenditure was \$292 million in 1977-78. It reached \$314 million in 1979-80 but came down to \$244 million in 1982-83, its lowest level in ten years. The ABRD program boosted spending on rural arterial roads to \$292 million in 1984-85. Funding fell again by 5.9 per cent in 1985-86 and by another 22.7 per cent in 1986-87 so that in 1986-87 spending was still 22.6 per cent lower than in 1977-78.

The highest allocation for rural local roads of \$335 million was in 1977-78 and the lowest of \$233 million in 1979-80, a 30 per cent fall in two years. However, funds increased between 1979-80 and 1981-82. After that period funds varied within a narrow range, between \$323 million and \$292 million.

Urban arterial road funds declined more consistently than funds for any other category of roads in New South Wales until 1982-83. They reached their lowest level of funding in 1982-83 (\$219 million), a fall of 17.7 per cent from \$266 million in 1977-78. The introduction of the ABRD program in 1982 increased funds by nearly 54 per cent, to \$338 million, over a period of four years.

The trend in funding for urban local roads was similar to that for rural local roads. Funds varied from \$404 million in 1978-79 to \$250 million in 1979-80. Expenditure after 1979-80 ranged between \$296 million in 1982-83 and \$359 million in 1985-86. Urban local roads attracted the highest funding among the five categories of road in New South Wales in 1985-86 and 1986-87. Figures for 1978-79 must be treated with some caution because the 1978-79 estimates of local government expenditure in New South Wales are believed to be underestimated owing to changes in Australian Bureau of Statistics data series.

Expenditure on planning and research in New South Wales fell between 1977-78 and 1986-87 (table 2.10): planning and research received \$14.4 million in 1977-78 but only \$3.7 million in 1986-87.



Note Deflator used: BTCE Road Construction Price Index.

Figure 2.3 New South Wales: total road expenditure by road category, 1977-78 to 1986-87 (constant 1986-87 prices)

NON-ROAD EXPENDITURE

A significant feature of non-road expenditure in New South Wales during the period 1977-78 to 1986-87 was the large increase in funds required for servicing the loans raised for road expenditure (for items included and definition of non-road expenditure see appendix I). The cost of loan servicing has steadily increased from 5 per cent of total State road expenditure in 1977-78 to 25 per cent in 1986-87. Other categories of non-road expenditure have also grown each year since 1982-83. In 1981-82 non-road expenditure was only \$24 million (5 per cent of total State road expenditure) but in 1986-87 it was \$321 million or nearly 68 per cent of State road expenditure in New South Wales. In real terms, however, the loan repayment effort in New South Wales fell between 1984-85 and 1986-87.

COLLECTION COSTS

The major collection costs in New South Wales are associated with administration of the Department of Motor Transport, including a small cost involved in collecting third party insurance and stamp duty on behalf of the State Department of Finance. Only the net receipts from vehicle registration fees and drivers licence fees were passed on to the Department of Main Roads for road expenditure, after deduction of all administration costs of the Department of Motor Transport.

The cost of collecting motor vehicle taxes in New South Wales fluctuated between 17 and 20 per cent of revenue raised, between 1977-78 and 1981-82. The collection cost was reduced to about 10 per cent of revenue between 1983-84 and 1986-87, mainly due to the introduction of business franchise licence fees in August 1982 and the increase in revenue this tax has generated. The business franchise licence fee is administratively simple and cheaper to collect than the traditional motor vehicle taxes, particularly the road maintenance charges which it replaced (tables 2.2 and 2.7).

TABLE 2.1 NEW SOUTH WALES: COMMONWEALTH ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	66.9	67.6	72.9	82.6	88.5	105.3	173.0	175.1	181.3	196.4	1 209.6
Rural arterial roads	18.2	19.7	21.2	23.0	11.9	31.8	48.7	42.8	41.0	43.3	301.6
Rural local roads	20.7	22.8	30.3	32.8	36.2	38.2	56.5	50.9	55.2	52.8	396.4
Urban arterial roads	29.3	31.4	33.7	36.1	52.6	45.9	85.6	94.1	53.1	88.9	550.7
Urban local roads	7.6	8.1	8.7	9.4	10.0	11.4	18.1	17.6	19.2	18.5	128.6
Construction total	142.7	149.6	166.7	183.9	199.2	232.7	381.9	380.5	350.0	400.0	2 586.9
Maintenance											
National roads	9.4	9.9	10.1	12.4	13.7	15.2	20.3	25.4	23.6	25.9	165.9
Rural arterial roads	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	10.8
Rural local roads	7.1	6.0	0.5	0.9	1.2	1.3	1.2	2.0	2.3	2.1	24.6
Urban arterial roads	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	8.1	8.0	16.4
Urban local roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maintenance total	17.2	15.9	10.5	13.2	15.0	16.5	21.6	27.5	39.0	40.9	217.7
Total construction and maintenance	159.9	165.4	177.3	197.1	214.2	249.3	403.4	408.0	389.0	440.8	2 804.4
Planning and research	3.5	2.5	2.7	2.4	0.0	0.0	0.0	0.0	0.0	0.0	11.1
Total road expenditure	163.4	167.9	179.9	199.5	214.2	249.3	403.4	408.0	389.0	440.8	2 815.4

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 2.2 NEW SOUTH WALES: STATE GOVERNMENT ROAD REVENUE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Revenue from road users											
Vehicle registration	163.4	169.7	181.7	223.8	274.7	329.6	377.6	417.3	448.3	478.4	3 064.5
Drivers licence fees	27.5	28.2	29.0	30.3	36.3	46.9	54.4	59.1	63.8	70.4	445.9
Road maintenance tax or State fuel tax	19.0	19.5	1.2	0.0	0.0	166.6	201.7	229.0	247.3	225.4	1 109.7
Other	13.7	14.3	14.3	15.5	16.5	18.8	21.3	21.8	24.6	27.0	187.8
Total motor taxation	223.6	231.7	226.2	269.6	327.6	562.0	655.0	727.2	783.9	801.1	4 807.9
Less collection costs	38.8	42.4	45.3	51.8	56.9	60.5	64.7	74.2	71.8	81.7	588.1
Net motor taxation	184.9	189.3	180.9	217.8	270.7	501.5	590.3	653.0	712.1	719.4	4 219.9
Loans	26.0	51.5	107.0	110.1	95.2	60.4	77.0	140.7	162.4	142.1	972.4
Other	30.5	20.4	14.3	13.6	15.2	22.1	43.1	29.3	24.2	19.0	231.7
Other authorities	21.1	18.9	23.8	30.4	25.4	29.4	23.7	32.0	48.1	27.3	280.1
Total road revenue	262.5	280.1	326.1	371.8	406.5	613.4	734.1	855.0	946.9	907.8	5 704.2

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 2.3 NEW SOUTH WALES: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	2.7	3.2	2.2	3.7	0.3	0.4	0.0	1.2	0.4	0.0	14.1
Rural arterial roads	45.3	57.5	81.0	92.1	104.8	80.4	92.0	114.2	119.0	90.0	876.3
Rural local roads	12.1	9.0	14.3	18.6	15.3	16.7	21.3	23.1	24.5	14.9	169.8
Urban arterial roads	50.3	52.0	68.7	83.8	74.8	94.2	113.4	162.5	196.4	193.2	1 089.3
Urban local roads	11.9	10.0	13.5	14.5	8.7	14.0	12.5	17.0	30.7	16.5	149.3
Construction total	122.3	131.6	179.7	212.8	203.9	205.6	239.2	318.0	370.9	314.5	2 298.5
Maintenance											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	61.5	59.0	67.2	74.8	73.2	80.7	92.4	103.2	98.0	87.6	797.6
Rural local roads	15.1	11.3	10.1	11.4	11.7	11.0	12.4	13.0	10.6	9.6	116.2
Urban arterial roads	31.6	33.4	26.2	28.8	31.2	33.7	48.4	42.9	55.7	47.9	379.8
Urban local roads	3.4	4.6	3.5	2.8	4.3	3.0	4.1	4.1	6.0	5.3	41.1
Maintenance total	111.5	108.3	106.9	117.8	120.6	128.4	157.2	163.3	170.3	150.4	1 334.7
Total construction and maintenance	233.8	239.9	286.6	330.5	324.4	334.0	396.3	481.3	541.2	464.9	3 632.9
Planning and research	2.7	2.6	3.1	4.5	5.4	5.3	4.4	6.0	3.2	3.7	40.9
Total road expenditure	236.5	242.6	289.6	335.0	329.8	339.4	400.7	487.3	544.4	468.5	3 673.8

TABLE 2.3 (Cont.) NEW SOUTH WALES: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)

(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Non-road expenditure											
Loan repayments	5.7	8.0	10.7	11.7	14.2	16.6	19.3	11.1	-12.2	8.4	93.5
Interest payments	12.9	16.9	25.6	37.8	52.9	68.2	82.5	80.6	95.3	118.9	591.6
Other	25.5	15.6	7.0	7.8	16.2	186.3	214.1	278.8	320.8	321.0	1 393.1
Non-road total	44.1	40.5	43.2	57.3	83.3	271.1	316.0	370.4	403.9	448.4	2 078.2

Notes 1. See text for interpretation and qualification of figures in the table.
 2. Owing to rounding, figures may not add to totals.

TABLE 2.4 NEW SOUTH WALES: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	46.5	48.2	25.5	41.4	92.4	95.5	67.1	78.1	84.6	94.1	673.4
Urban arterial roads	2.7	2.9	2.2	3.6	0.0	0.0	0.0	0.0	0.0	0.0	11.4
Urban local roads	75.6	85.9	56.2	91.2	92.9	102.5	102.8	121.5	125.2	151.2	1 005.0
Construction total	124.8	137.1	84.0	136.3	185.4	198.0	169.9	199.6	209.8	245.3	1 690.2
Maintenance											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	42.8	44.6	44.9	67.1	70.3	83.7	101.2	92.8	103.5	110.1	761.0
Urban arterial roads	0.9	1.0	0.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6
Urban local roads	70.0	79.2	52.8	78.9	97.5	103.3	112.0	138.7	161.8	174.7	1 068.9
Maintenance total	113.7	124.8	98.4	147.0	167.8	187.0	213.2	231.5	265.3	284.8	1 833.5
Total construction and maintenance	238.5	261.9	182.3	283.3	353.2	385.0	383.1	431.0	475.1	530.1	3 523.5
Planning and research	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total road expenditure	238.5	261.9	182.3	283.3	353.2	385.0	383.1	431.0	475.1	530.1	3 523.5

TABLE 2.4 (Cont.) NEW SOUTH WALES: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Pro rata expenditure on general administration	44.8	49.9	38.9	55.2	64.1	82.0	74.0	82.7	91.6	99.2	682.4
Pro rata non-road expenditure attributable to roads											
Loan repayments	17.4	19.1	15.1	20.8	24.4	29.8	26.6	31.3	35.9	38.4	258.8
Interest payments	21.1	24.5	20.9	29.3	35.3	41.8	38.5	44.2	46.4	50.2	352.2
Non-road total	38.5	43.6	36.0	50.1	59.7	71.6	65.1	75.5	82.3	88.6	611.0
Road works funded by private contributions	29.4	33.0	23.2	26.1	28.1	37.1	33.2	33.3	39.1	46.7	329.2

- Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 2.5 NEW SOUTH WALES: TOTAL ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	69.6	70.7	75.1	86.3	88.8	105.7	173.0	176.3	181.7	196.4	1 223.6
Rural arterial roads	63.5	77.3	102.2	115.1	116.7	112.2	140.7	157.0	160.0	133.3	1 178.0
Rural local roads	79.3	80.1	70.2	92.8	143.9	150.4	144.8	152.1	167.7	165.4	1 246.7
Urban arterial roads	82.3	86.3	104.6	123.5	127.4	140.1	198.9	256.6	249.5	282.1	1 651.3
Urban local roads	95.1	104.0	78.4	115.1	111.6	127.9	133.4	156.1	171.7	182.6	1 275.9
Construction total	389.8	418.3	430.4	533.0	588.5	636.3	790.9	898.1	930.7	959.8	6 575.5
Maintenance											
National roads	9.4	9.9	10.1	12.4	13.7	15.2	20.3	25.4	23.6	25.9	165.9
Rural arterial roads	62.3	59.0	67.2	74.8	73.2	80.7	92.4	103.2	103.0	92.6	808.4
Rural local roads	64.9	62.0	55.4	79.3	83.2	95.9	114.7	107.8	134.1	138.7	936.0
Urban arterial roads	32.5	34.3	26.9	29.9	31.3	33.7	48.5	43.0	63.8	55.9	399.8
Urban local roads	73.5	83.8	56.3	81.6	101.8	106.3	116.1	142.8	150.1	163.1	1 075.4
Maintenance total	242.4	249.0	215.8	278.0	303.4	331.9	391.9	422.3	474.6	476.1	3 385.5
Total construction and maintenance	632.2	667.2	646.1	810.9	891.8	968.3	1 182.8	1 320.3	1 405.3	1 435.8	9 960.7
Planning and research	6.2	5.1	5.8	6.9	5.4	5.3	4.4	6.0	3.2	3.7	52.0
Total road expenditure	638.4	672.4	651.9	817.8	897.2	973.6	1 187.2	1 326.3	1 408.3	1 439.4	10 012.7

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 2.6 NEW SOUTH WALES: COMMONWEALTH ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	155.2	145.4	135.3	132.6	125.9	133.0	205.5	196.7	189.6	196.4	1 615.5
Rural arterial roads	42.2	42.4	39.3	36.9	16.9	40.2	57.8	48.1	42.9	43.3	410.0
Rural local roads	48.0	49.0	56.2	52.6	51.5	48.2	67.1	57.2	57.7	52.8	540.5
Urban arterial roads	68.0	67.5	62.5	57.9	74.8	58.0	101.7	105.7	55.5	88.9	740.6
Urban local roads	17.6	17.4	16.1	15.1	14.2	14.4	21.5	19.8	20.1	18.5	174.8
Construction total	331.1	321.7	309.3	295.2	283.4	293.8	453.6	427.5	366.1	400.0	3 481.6
Maintenance											
National roads	21.8	21.3	18.7	19.9	19.5	19.2	24.1	28.5	24.7	25.9	223.7
Rural arterial roads	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	5.0	12.1
Rural local roads	16.5	12.9	0.9	1.4	1.7	1.6	1.4	2.2	2.4	2.1	43.3
Urban arterial roads	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	8.5	8.0	16.8
Urban local roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maintenance total	39.9	34.2	19.5	21.2	21.3	20.8	25.7	30.9	40.8	40.9	295.2
Total construction and maintenance	371.0	355.7	328.9	316.4	304.7	314.8	479.1	458.4	406.9	440.8	3 776.7
Planning and research	8.1	5.4	5.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0	22.4
Total road expenditure	379.1	361.1	333.8	320.2	304.7	314.8	479.1	458.4	406.9	440.8	3 798.9

- Notes
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

TABLE 2.7 NEW SOUTH WALES: STATE GOVERNMENT ROAD REVENUE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Revenue from road users											
Vehicle registration	341.8	328.9	317.1	353.0	393.6	428.6	457.7	479.1	481.5	478.4	4 059.7
Drivers licence fees	57.5	54.7	50.6	47.8	52.0	61.0	65.9	67.9	68.5	70.4	596.3
Road maintenance tax or State fuel tax	39.7	37.8	2.1	0.0	0.0	216.6	244.5	262.9	265.6	225.4	1 294.7
Other	28.7	27.7	25.0	24.4	23.6	24.4	25.8	25.0	26.4	27.0	258.1
Total motor taxation	467.8	449.0	394.8	425.2	469.3	730.8	793.9	834.9	842.0	801.1	6 208.9
Less collection costs	81.2	82.2	79.1	81.7	81.5	78.7	78.4	85.2	77.1	81.7	806.7
Net motor taxation	386.8	366.9	315.7	343.5	387.8	652.1	715.5	749.7	764.9	719.4	5 402.4
Loans	54.4	99.8	186.7	173.7	136.4	78.5	93.3	161.5	174.4	142.1	1 300.9
Other	63.8	39.5	25.0	21.5	21.8	28.7	52.2	33.6	26.0	19.0	331.1
Other authorities	44.1	36.6	41.5	47.9	36.4	38.2	28.7	36.7	51.7	27.3	389.3
Total road revenue	549.2	542.8	569.1	586.4	582.4	797.7	889.8	981.6	1 017.0	907.8	7 423.8

- Notes
1. See text for interpretation and qualification of figures in the table.
 2. The ABS Implicit Price Deflator of Gross Domestic Product (ABS 1988) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

TABLE 2.8 NEW SOUTH WALES: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	6.3	6.9	4.1	5.9	0.4	0.5	0.0	1.3	0.4	0.0	25.9
Rural arterial roads	105.1	123.7	150.3	147.8	149.1	101.5	109.3	128.3	124.5	90.0	1 229.5
Rural local roads	28.1	19.4	26.5	29.9	21.8	21.1	25.3	26.0	25.6	14.9	238.4
Urban arterial roads	116.7	111.8	127.5	134.5	106.4	118.9	134.7	182.6	205.4	193.2	1 431.7
Urban local roads	27.6	21.5	25.0	23.3	12.4	17.7	14.8	19.1	32.1	16.5	210.0
Construction total	283.8	283.0	333.4	341.6	290.0	259.6	284.1	357.3	388.0	314.5	3 135.2
Maintenance											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	142.7	126.9	124.7	120.1	104.1	101.9	109.7	116.0	102.5	87.6	1 136.1
Rural local roads	35.0	24.3	18.7	18.3	16.6	13.9	14.7	14.6	11.1	9.6	176.9
Urban arterial roads	73.3	71.8	48.6	46.2	44.4	42.6	57.5	48.2	58.3	47.9	538.8
Urban local roads	7.9	9.9	6.5	4.5	6.1	3.8	4.9	4.6	6.3	5.3	59.7
Maintenance total	258.7	232.9	198.3	189.1	171.6	162.1	186.7	183.5	178.1	150.4	1 911.4
Total construction and maintenance	542.5	515.9	531.7	530.5	461.5	421.7	470.7	540.8	566.1	464.9	5 046.2
Planning and research	6.3	5.6	5.8	7.2	7.7	6.7	5.2	6.7	3.3	3.7	58.2
Total road expenditure	548.7	521.7	537.3	537.7	469.1	428.5	475.9	547.5	569.5	468.5	5 104.5

TABLE 2.8 (Cont.) NEW SOUTH WALES: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Non-road expenditure											
Loan repayments	12.3	16.0	19.9	19.1	21.0	22.2	24.2	12.5	-13.3	8.4	142.3
Interest payments	27.7	33.7	47.5	61.7	78.4	91.3	103.5	90.6	103.6	118.9	756.9
Other	54.8	31.1	13.0	12.7	24.0	249.4	268.6	313.3	348.7	321.0	1 636.7
Non-road total	94.8	80.8	80.1	93.5	123.4	362.9	396.5	416.2	439.0	448.4	2 535.7

- Notes
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert road expenditure figures from current prices to constant prices.
 3. The ABS Implicit Price Deflator of Gross National Expenditure (ABS 1988) was used to convert non-road expenditure figures from current prices to constant prices.
 4. Owing to rounding, figures may not add to totals.

TABLE 2.9 NEW SOUTH WALES: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	107.9	103.7	47.3	66.5	131.4	120.6	79.7	87.8	88.5	94.1	927.4
Urban arterial roads	6.3	6.2	4.1	5.8	0.0	0.0	0.0	0.0	0.0	0.0	22.4
Urban local roads	175.4	184.7	104.3	146.4	132.1	129.4	122.1	136.5	131.0	151.2	1 413.1
Construction total	289.6	294.8	155.8	218.8	263.7	250.0	201.8	224.3	219.5	245.3	2 363.6
Maintenance											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	99.3	95.9	83.3	107.7	100.0	105.7	120.2	104.3	108.3	110.1	1 034.7
Urban arterial roads	2.1	2.2	1.3	1.6	0.0	0.0	0.0	0.0	0.0	0.0	7.1
Urban local roads	162.4	170.3	98.0	126.6	138.7	130.4	133.0	155.8	169.2	174.7	1 459.3
Maintenance total	263.8	268.4	182.6	236.0	238.7	236.1	253.2	260.1	277.5	284.8	2 501.1
Total construction and maintenance	553.4	563.2	338.2	454.7	502.4	486.1	455.0	484.3	497.0	530.1	4 864.4
Planning and research	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total road expenditure	553.4	563.2	338.2	454.7	502.4	486.1	455.0	484.3	497.0	530.1	4 864.4

TABLE 2.9 (Cont.) NEW SOUTH WALES: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Pro rata expenditure on general administration	96.3	99.6	70.2	90.0	95.0	109.8	92.8	97.9	99.6	99.2	950.4
Pro rata non-road expenditure attributable to roads											
Loan repayments	37.4	38.1	27.3	33.9	36.1	39.9	33.4	37.0	39.0	38.4	360.6
Interest payments	45.4	48.9	37.7	47.8	52.3	56.0	48.3	52.3	50.4	50.2	489.3
Non-road total	82.8	87.0	65.0	81.7	88.4	95.9	81.7	89.3	89.5	88.6	849.9
Road works funded by private contributions	68.2	71.0	43.0	41.9	40.0	46.8	39.4	37.4	40.9	46.7	475.4

- Notes**
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert road expenditure figures and the figures for road works funded by private contributions from current prices to constant prices.
 3. The ABS Implicit Price Deflator of Gross National Expenditure (ABS 1988) was used to convert non-road expenditure figures from current prices to constant prices.
 4. Owing to rounding, figures may not add to totals.

TABLE 2.10 NEW SOUTH WALES: TOTAL ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Construction											
National roads	161.5	152.0	139.3	138.5	126.3	133.5	205.5	198.1	190.1	196.4	1 641.2
Rural arterial roads	147.3	166.2	189.6	184.8	166.0	141.7	167.1	176.4	167.4	133.3	1 639.8
Rural local roads	184.0	172.3	130.2	149.0	204.7	189.9	172.0	170.9	171.9	165.4	1 710.2
Urban arterial roads	191.0	185.6	194.1	198.2	181.2	176.9	236.2	288.3	261.0	282.1	2 194.6
Urban local roads	220.6	223.7	145.5	184.8	158.7	161.5	158.4	175.4	183.2	182.6	1 794.3
Construction total	904.4	899.6	798.5	855.5	837.1	803.4	939.3	1 009.1	973.5	959.8	8 980.3
Maintenance											
National roads	21.8	21.3	18.7	19.9	19.5	19.2	24.1	28.5	24.7	25.9	223.7
Rural arterial roads	144.5	126.9	124.7	120.1	104.1	101.9	109.7	116.0	107.7	92.6	1 148.2
Rural local roads	150.6	133.3	102.8	127.3	118.3	121.1	136.2	121.1	121.8	138.7	1 271.2
Urban arterial roads	75.4	73.8	49.9	48.0	44.5	42.6	57.6	48.3	66.7	55.9	562.7
Urban local roads	170.5	180.2	104.5	131.0	144.8	134.2	137.9	160.4	175.5	163.1	1 502.2
Maintenance total	562.4	535.5	400.4	446.2	431.6	419.1	465.4	474.5	496.4	476.1	4 707.6
Total construction and maintenance	1 466.8	1 434.8	1 198.7	1 301.6	1 268.6	1 222.6	1 404.8	1 483.5	1 470.0	1 435.8	13 687.1
Planning and research	14.4	11.0	10.8	11.1	7.7	6.7	5.2	6.7	3.3	3.7	80.6
Total road expenditure	1 481.2	1 446.0	1 209.5	1 312.7	1 276.2	1 229.3	1 410.0	1 490.2	1 473.3	1 439.4	13 767.8

- Notes**
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

CHAPTER 3 VICTORIA

Tables 3.1 to 3.10 show details of Commonwealth, State and local government road expenditure, State road revenue and total road expenditure in Victoria, in current prices and constant 1986-87 prices. Road financing arrangements, including legislation related to road financing, that existed before July 1987 in Victoria are briefly described below. There have been some changes in these arrangements since 1 July 1987 which are not discussed in this paper.

1983 RESTRUCTURING OF VICTORIAN TRANSPORT AUTHORITIES

In 1983, the Victorian government restructured the transport agencies in the State by creating four new organisations from the seven that had existed previously. The four agencies were entrusted with specific roles under a single ministry. The four agencies were:

- . the Road Construction Authority;
- . the Road Traffic Authority;
- . the State Transit Authority; and
- . the Metropolitan Transit Authority.

The Road Construction Authority was entrusted with the construction and maintenance of declared roads, and so was responsible for expenditure on roads. The Road Traffic Authority was responsible for road safety strategies and practices, vehicle registration and regulation, driver licensing and road user education. It was also responsible for the collection of revenue from road users. The State Transit Authority looked after railway operations and construction, and the Metropolitan Transit Authority took over the functions of the former Metropolitan Tramways Board and the Melbourne Underground Rail Loop Authority.

REVENUE

The collection of road revenue in Victoria was entrusted to the Road Traffic Authority in 1983 under a number of Acts and Regulations:

- . the *Motor Car Act 1958*;
- . the *Transport Act 1983*;
- . the *Transport (Amendment) Act 1985*;
- . the *Motor Car (Further Amendment) Act 1985*; and
- . the *Transport (Tow Truck) Regulation 1983*.

The fees collected by the Traffic Authority are:

- . vehicle registration fee;
- . drivers licence fee;
- . learners permit fee;
- . permit fees for carriage of specific goods on specific routes;
- . logbook fee;
- . recreation vehicle registration fee;
- . taxi licence fee;
- . tow truck licence fee; and
- . numberplate fee.

An additional source of road revenue for road works is the business franchise fee which is directly collected by the Victorian Treasury under the authority of the *Business Franchise (Petroleum Products) Act 1979*. The Act requires that at least 25 per cent of fuel taxation receipts be allocated to road works. This provision in the Act enables the Victorian State government to channel revenue to purposes other than road works.

Revenue for road works is raised from a range of other sources (other than motor vehicle taxation) by the Road Construction Authority and the Ministry of Transport. The sources are:

- . West Gate Bridge toll (abolished from 1 December 1985);
- . property enquiry fees;
- . rental income;
- . interest on investments;
- . loan raisings (taken over by the Victorian Public Authorities Finance Agency towards the end of 1985-86);
- . municipal contribution; and
- . charges to other State and Commonwealth authorities for work done on their behalf and so on.

Approximately 76 per cent of net motor vehicle tax raised by the Victorian State government went into road works in 1985-86 and 75 per cent in 1986-87. The remainder went into consolidated revenue.

In the ten years 1977-78 to 1986-87, the Victorian government's road revenue was \$4.8 billion in constant 1986-87 prices, of which motorists contributed over \$4.1 billion. Loans have been used to finance road works in Victoria, and their impact can be seen in the servicing costs reported in table 3.8. Contributions from other authorities (Urban Land Authority, Melbourne and Metropolitan Board of Works, State Electricity Commission, Port of Melbourne Authority, Road Traffic Authority, Metropolitan Transit Authority and so on) to State road revenue declined significantly from their peak in 1981-82, when they were nearly 25 per cent of the total road expenditure, to 2.5 per cent in 1986-87.

Commonwealth funds for roads go directly to the Department of Transport in Victoria which, in turn, allocates funds to various authorities. Not all of these funds are spent on roads. For example, some of the ABRD allocation to Victoria went to the Metropolitan Transit Authority in 1985-86 and 1986-87 to purchase new trams and buses.

Figure 3.1 shows the gap between State road revenue and State road expenditure in Victoria between 1977-78 and 1986-87. Although State road revenue increased, State road expenditure did not follow the same trend. The proportion of road revenue absorbed into consolidated revenue ranged from 14 per cent in 1977-78 to 33.5 per cent in 1986-87.

EXPENDITURE

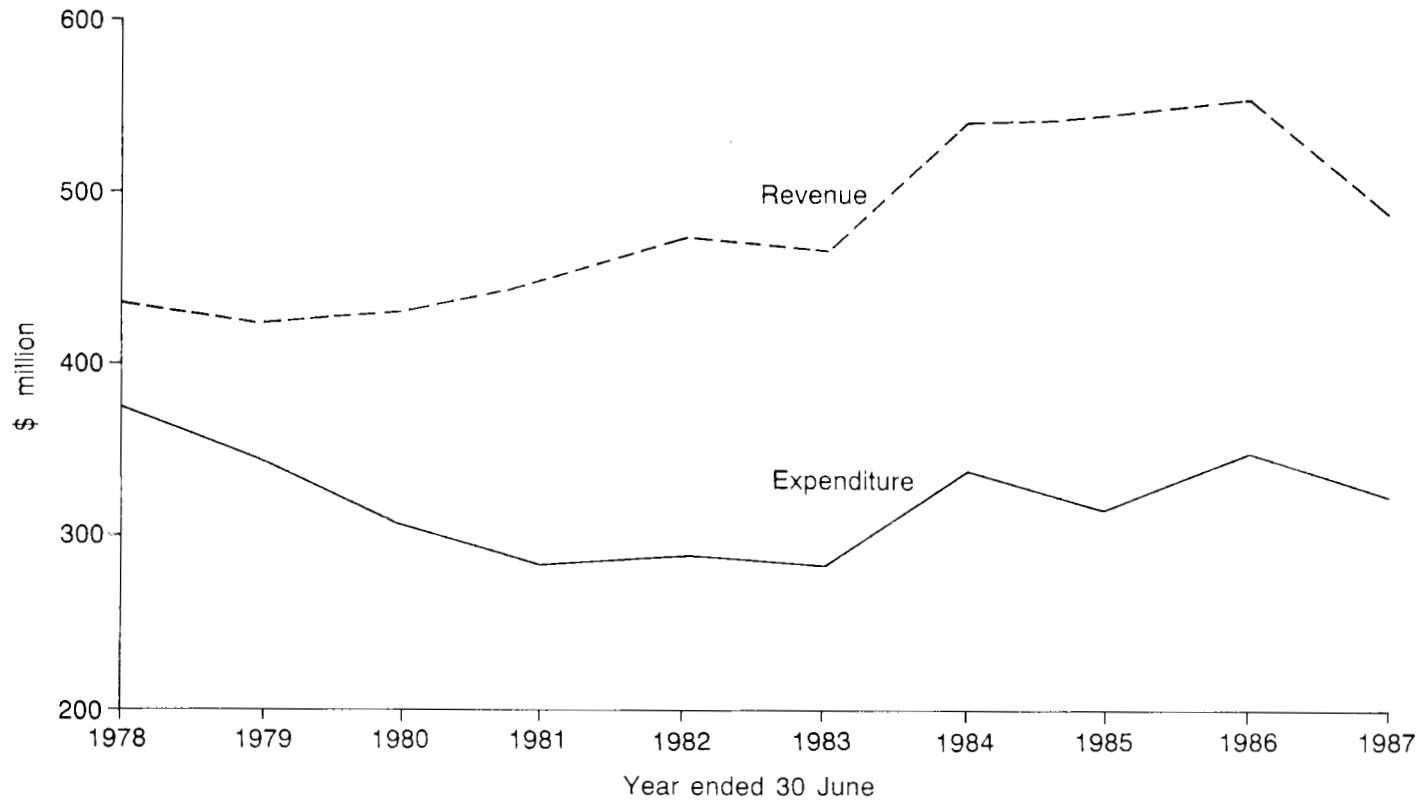
The Road Construction Authority has mainly been responsible for road construction and maintenance in Victoria since 1983. Before 1983, the Country Roads Board played a major role. Some of the other agencies that currently undertake road works include:

- . the Metropolitan Transit Authority;
- . the Road Traffic Authority;
- . the Urban Land Authority;
- . the Port of Melbourne Authority;
- . the Melbourne and Metropolitan Board of Works; and
- . the State Electricity Commission.

These agencies normally carry out work through the Road Construction Authority.

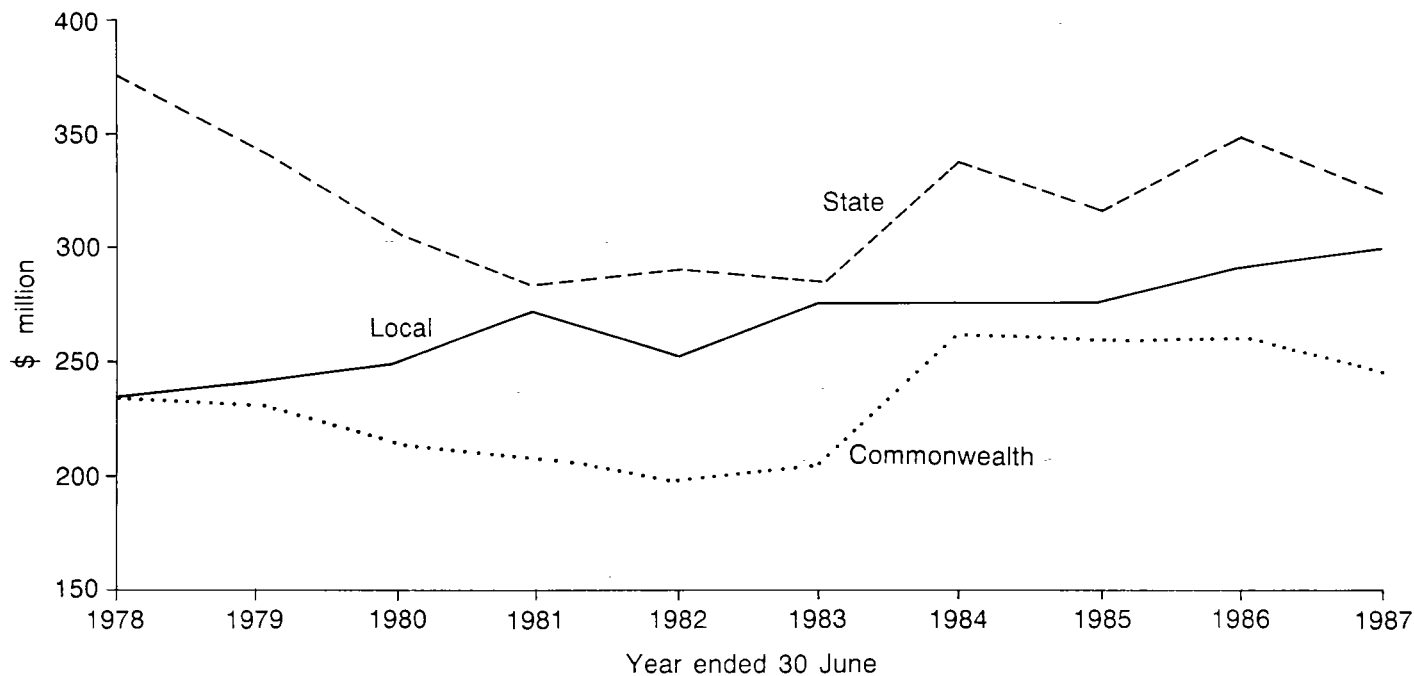
Changes in expenditure level

Figure 3.2 shows variations in levels of expenditure by the three levels of government in Victoria between 1977-78 and 1986-87. The Commonwealth contributed over \$2.3 billion (28.3 per cent) of the total of \$8.2 billion from all sources spent on roads in the State. There was a slight fall in the real level of Commonwealth funding between 1977-78 and 1981-82: a fall from \$235 million to \$197 million in 1986-87 prices. From then, funding increased and reached a high of \$262 million in 1983-84. In 1986-87, the level of funding fell by nearly 6 per cent to \$245 million. About 63 per cent of the Commonwealth's contribution to expenditure on Victorian roads was on national roads and urban arterial roads in the 1977-78 to 1986-87 period.



Note Deflator used: BTCE Road Construction Price Index.

Figure 3.1 Victoria: State government road revenue and State government road expenditure, 1977-78 to 1986-87 (constant 1986-87 prices)



Note Deflator used: BTCE Road Construction Price Index.

Figure 3.2 Victoria: road expenditure by level of government, 1977-78 to 1986-87 (constant 1986-87 prices)

This allocation of Commonwealth funds, however, has not remained stable since the late 1970s.

The Victorian State government's contribution to total road expenditure in the ten-year period 1977-78 to 1986-87 was about \$3.2 billion (or 39.2 per cent of expenditure from all sources). Expenditure fluctuated from a low of \$283 million in 1980-81 to a high of \$375 million in 1977-78. The allocation of State funds to road maintenance remained in a narrow band, between \$95 million and \$115 million per year, during this period (table 3.8), whereas in New South Wales it declined. More than half of State expenditure in Victoria went to urban roads.

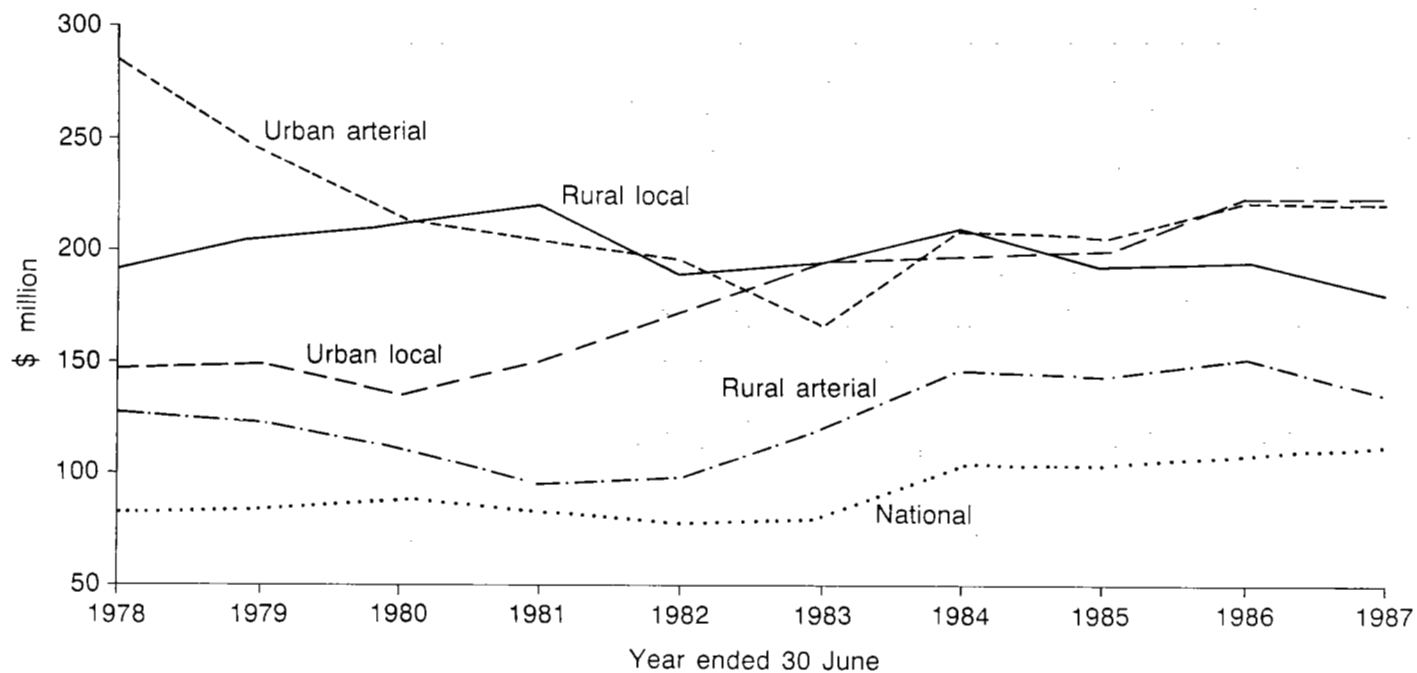
The local government contribution to expenditure on roads in Victoria was nearly \$2.7 billion (or 32.6 per cent of total road expenditure) between 1977-78 and 1986-87. Expenditure increased steadily through this period, with some small fluctuations, from \$235 million in 1977-78 to \$299 million in 1986-87. Allocations to road maintenance by Victorian local governments increased by over 70 per cent during the decade (table 3.9).

The three levels of government in Victoria spent nearly \$8.2 billion during the ten years 1977-78 to 1986-87. Annual expenditure varied from \$739 million in 1981-82 to \$899 million in 1985-86, averaging about \$859 million during the highest six-year period. Allocations among categories of roads have fluctuated slightly.

Expenditure by road category

Figure 3.3 shows the variations that have occurred in road expenditure on the five categories of roads between 1977-78 and 1986-87. The five categories are:

- . national roads;
- . rural arterial roads;
- . rural local roads;
- . urban arterial roads; and
- . urban local roads.



Note Deflator used: BTCE Road Construction Price Index.

Figure 3.3 Victoria: total road expenditure by road category, 1977-78 to 1986-87 (constant 1986-87 prices)

Expenditure on national roads fluctuated least overall, varying between \$83.5 million and \$89.1 million before 1981-82, and increasing from \$78.7 million in 1981-82 to \$111.7 million in 1986-87. Total expenditure devoted to this category of roads was only 11.3 per cent of total expenditure during the decade.

In contrast, expenditure on rural arterial roads fluctuated greatly. Expenditure in 1977-78 was \$128.5 million but this fell to \$95.5 million by 1980-81, rose again to \$150.9 million by 1985-86, and fell once more in 1986-87 to \$134.2 million. Total funding for this category of road amounted to 15.3 per cent of total expenditure in the decade to 1986-87.

Rural local roads in Victoria attracted the second highest allocation of funds between 1977-78 and 1986-87, with an average allocation of nearly \$200 million per year (over 24 per cent of the total).

Trends in expenditure on urban arterial roads and urban local roads have run counter to one another. Expenditure on urban arterial roads was \$283.5 million in 1977-78, but this fell to a low of \$165.9 million in 1982-83, and since then has fluctuated between \$206 million and \$220 million. Urban local roads were allocated only \$134.9 million in 1979-80, but this allocation rose each year to reach \$222.9 million in 1986-87. Over the decade 1977-78 to 1986-87 urban arterial roads and urban local roads have received roughly equal levels of funding, 26.4 per cent and 21.8 per cent respectively of total road expenditure.

The division of expenditure between road construction and road maintenance has also varied from year to year. However, in the ten years 1977-78 to 1986-87, funds devoted to maintenance have grown by 35.2 per cent in constant 1986-87 dollars. This growth is particularly noticeable on rural local and urban local roads (table 3.10).

Planning and research expenditure declined during the last eight years of the period, reaching its lowest level in 1986-87.

NON-ROAD EXPENDITURE

The significance of non-road expenditure is explained in appendix I. Tables 3.3, 3.4, 3.8 and 3.9 show details of non-road expenditure incurred by the Victorian State government and the local government authorities for the period 1977-78 to 1986-87.

Non-road expenditure by the Victorian State government in the last four years of the period increased through the allocation of a larger proportion of motor vehicle taxation to the Consolidated Fund. The proportion is between 45 per cent and 49 per cent of total road expenditure. In addition, debt servicing, chiefly on loans raised by the former West Gate Bridge Authority, has been significant, although this task has been taken over by the Treasury since January 1987.

COLLECTION COSTS

Collection costs in the period from 1977-78 to 1980-81 averaged about 9 per cent of gross motor taxation receipts. After 1982-83, collection costs fell to about 5 per cent of gross receipts by 1986-87, chiefly as a result of the introduction of State fuel taxes, which are much cheaper to collect than previous forms of motor taxation.

TABLE 3.1 VICTORIA: COMMONWEALTH ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	30.9	32.3	37.2	45.1	48.4	56.1	77.8	83.4	95.3	103.5	610.0
Rural arterial roads	11.5	12.3	13.2	14.3	25.1	25.8	32.1	32.3	35.0	34.5	236.1
Rural local roads	13.6	14.6	15.1	17.2	18.0	19.3	26.5	28.0	27.8	26.1	206.2
Urban arterial roads	30.0	32.0	32.7	34.4	27.5	37.7	54.5	56.0	60.9	51.9	417.6
Urban local roads	3.7	4.8	4.4	4.1	4.5	7.0	8.2	7.7	9.8	10.6	64.8
Construction total	89.6	96.0	102.6	115.1	123.6	145.9	199.2	207.4	228.8	226.5	1 534.7
Maintenance											
National roads	3.1	3.3	3.6	3.5	4.5	5.1	5.8	6.1	3.2	1.9	40.1
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.6	0.7	0.2	1.8
Rural local roads	6.2	6.5	7.5	8.9	10.2	10.4	12.4	14.4	13.7	15.4	105.6
Urban arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.9	0.2	0.3	3.7
Urban local roads	0.0	0.0	0.0	0.3	0.3	0.5	0.6	0.8	1.6	1.0	5.1
Maintenance total	9.3	9.8	11.1	12.6	15.0	15.9	21.4	22.8	19.5	18.8	156.3
Total construction and maintenance	98.9	105.8	113.7	127.8	138.5	161.8	220.6	230.2	248.3	245.3	1 690.9
Planning and research	2.4	1.7	1.8	1.7	0.0	0.0	0.0	0.0	0.0	0.0	7.6
Total road expenditure	101.3	107.5	115.5	129.4	138.5	161.8	220.6	230.2	248.3	245.3	1 698.4

- Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 3.2 VICTORIA: STATE GOVERNMENT ROAD REVENUE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Revenue from road users											
Vehicle registration	138.1	141.2	135.6	128.9	145.5	171.0	171.2	177.7	190.4	202.7	1 602.3
Drivers licence fees	19.4	27.9	28.5	31.0	25.0	32.0	36.7	41.0	38.5	33.3	313.3
Road maintenance tax or State fuel tax	9.8	9.6	49.9	68.9	88.7	109.5	151.7	192.4	210.8	214.6	1 105.9
Other	1.7	1.7	1.4	1.6	0.9	11.2	15.1	17.2	7.3	5.9	64.0
Total motor taxation	169.0	180.4	215.5	230.4	260.1	323.7	374.7	428.3	447.0	456.5	3 085.6
Less collection costs	15.5	16.5	17.0	19.6	17.1	17.6	18.9	20.0	21.2	22.6	186.0
Net motor taxation	153.5	163.9	198.5	210.8	243.0	306.1	355.8	408.3	425.8	433.9	2 899.6
Loans	0.3	1.3	2.5	5.5	1.5	10.0	26.5	17.6	26.0	3.3	94.5
Other	3.2	3.5	2.7	3.0	3.7	29.3	48.3	39.0	47.6	39.0	219.3
Other authorities	50.7	49.4	42.9	65.9	82.9	13.2	15.5	9.9	16.0	11.6	358.0
Total road revenue	207.8	218.1	246.6	285.2	331.2	358.6	446.1	474.8	515.3	487.8	3 571.5

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 3.3 VICTORIA: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	2.0	2.8	5.5	1.6	0.6	0.0	0.0	0.0	0.0	1.1	13.6
Rural arterial roads	23.0	20.9	19.2	17.7	10.7	27.7	44.3	50.6	53.0	46.8	313.9
Rural local roads	15.1	17.1	17.0	20.1	20.6	27.6	37.9	26.9	32.2	21.3	235.8
Urban arterial roads	77.0	63.1	60.7	67.3	87.4	70.4	90.5	98.3	119.2	139.3	873.2
Urban local roads	2.0	1.6	1.6	5.2	5.3	9.0	8.5	10.1	16.7	12.9	72.9
Construction total	119.0	105.4	104.1	111.8	124.6	134.8	181.1	185.8	221.1	221.5	1 509.4
Maintenance											
National roads	0.0	1.0	1.7	1.8	1.8	3.2	3.1	2.6	5.3	5.2	25.7
Rural arterial roads	20.9	24.1	27.6	27.5	33.5	41.7	47.1	44.7	55.6	52.7	375.4
Rural local roads	8.8	12.4	11.3	11.5	15.8	15.5	17.0	13.4	16.3	13.2	135.2
Urban arterial roads	10.2	13.0	16.4	19.1	22.2	23.3	29.8	27.7	30.8	28.7	221.2
Urban local roads	1.1	1.1	1.0	0.7	0.9	0.8	0.6	0.8	2.1	1.7	10.8
Maintenance total	41.1	51.5	57.9	60.6	74.3	84.5	97.5	89.3	110.1	101.4	768.3
Total construction and maintenance	160.1	157.0	162.0	172.4	198.9	219.3	278.6	275.1	331.2	322.9	2 277.5
Planning and research	1.5	2.6	3.7	4.1	4.9	4.8	5.6	5.9	1.9	1.4	36.4
Total road expenditure	161.6	159.6	165.7	176.5	203.8	224.1	284.2	281.0	333.1	324.2	2 313.8

TABLE 3.3 (Cont.) VICTORIA: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Non-road expenditure											
Loan repayments	2.7	4.6	13.8	31.9	16.5	3.1	3.1	3.6	3.2	15.6	98.1
Interest payments	17.0	20.3	23.0	24.5	27.0	27.7	28.4	32.1	38.6	26.4	265.0
Other	22.6	28.9	46.6	57.6	64.7	79.0	129.3	154.0	151.1	160.9	894.7
Non-road total	42.3	53.7	83.4	113.9	108.2	109.7	160.8	189.6	192.8	202.9	1 257.8

- Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 3.4 VICTORIA: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	21.3	24.2	22.6	29.1	30.0	32.5	32.5	35.2	37.2	40.0	304.6
Urban arterial roads	3.0	3.4	2.6	2.8	0.0	0.0	0.0	0.0	0.0	0.0	11.8
Urban local roads	30.7	33.4	25.8	30.2	40.1	53.7	54.0	56.7	69.8	76.1	470.5
Construction total	55.0	61.0	51.0	62.0	70.0	86.2	86.5	91.9	107.0	116.1	786.7
Maintenance											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	18.2	20.6	40.6	50.2	38.0	48.5	50.8	53.3	59.0	62.3	441.5
Urban arterial roads	2.0	2.3	3.1	3.8	0.0	0.0	0.0	0.0	0.0	0.0	11.2
Urban local roads	26.1	28.5	40.0	53.0	69.4	83.9	93.9	100.7	112.4	120.6	728.5
Maintenance total	46.2	51.3	83.7	107.0	107.4	132.4	144.7	154.0	171.4	182.9	1 181.0
Total construction and maintenance	101.2	112.3	134.6	169.0	177.4	218.5	231.1	245.9	278.4	299.0	1 967.4
Planning and research	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total road expenditure	101.2	112.3	134.6	169.0	177.4	218.5	231.1	245.9	278.4	299.0	1 967.4

TABLE 3.4 (Cont.) VICTORIA: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87. (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Pro rata expenditure on general administration	37.9	39.6	47.5	54.7	71.2	68.5	71.2	71.8	80.0	86.1	628.5
Pro rata non-road expenditure attributable to roads											
Loan repayments	9.3	10.3	12.2	14.7	17.3	18.4	15.6	16.2	17.6	17.3	148.9
Interest payments	14.2	16.0	18.5	22.9	27.1	29.1	25.8	26.7	30.2	31.2	241.7
Non-road total	23.5	26.3	30.7	37.6	44.4	47.5	41.4	42.9	47.8	48.5	390.6
Road works funded by private contributions	33.5	32.5	7.2	21.5	25.8	37.1	23.1	32.1	31.7	26.7	271.2

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 3.5 VICTORIA: TOTAL ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	32.9	35.1	42.7	46.7	49.0	56.1	77.8	83.4	95.3	104.6	623.6
Rural arterial roads	34.5	33.2	32.5	32.0	35.8	53.5	76.4	82.9	88.0	81.3	550.1
Rural local roads	49.9	55.9	54.7	66.4	68.6	79.4	96.9	90.1	97.2	87.4	746.5
Urban arterial roads	110.0	98.5	96.0	104.5	114.9	108.1	144.9	154.3	180.1	191.2	1 302.5
Urban local roads	36.4	39.8	31.7	39.4	49.9	69.7	70.7	74.5	96.3	99.6	608.0
Construction total	263.6	262.4	257.6	289.0	318.2	366.8	466.8	485.1	556.9	564.1	3 830.7
Maintenance											
National roads	3.1	4.3	5.3	5.3	6.3	8.2	8.9	8.6	8.5	7.1	65.6
Rural arterial roads	20.9	24.1	27.6	27.5	33.5	41.7	47.4	45.3	56.3	52.9	377.2
Rural local roads	33.1	39.5	59.4	70.5	64.0	74.4	80.2	81.2	89.0	90.9	682.2
Urban arterial roads	12.2	15.2	19.5	22.9	22.2	23.3	32.1	28.6	31.0	29.0	236.0
Urban local roads	27.2	29.6	41.0	54.0	70.6	85.2	95.1	102.3	116.1	123.3	744.4
Maintenance total	96.6	112.7	152.7	180.2	196.7	232.9	263.6	266.1	301.0	303.1	2 105.4
Total construction and maintenance	360.2	375.1	410.3	469.2	514.8	599.6	730.3	751.2	857.9	867.2	5 935.8
Planning and research	3.9	4.3	5.5	5.8	4.9	4.8	5.6	5.9	1.9	1.4	44.0
Total road expenditure	364.1	379.4	415.9	474.9	519.7	604.4	735.9	757.1	859.8	868.5	5 979.7

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 3.6 VICTORIA: COMMONWEALTH ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	71.7	69.5	69.0	72.4	68.8	70.8	92.4	93.7	99.7	103.5	811.5
Rural arterial roads	26.7	26.5	24.5	23.0	35.7	32.6	38.1	36.3	36.6	34.5	314.4
Rural local roads	31.6	31.4	28.0	27.6	25.6	24.4	31.5	31.5	29.1	26.1	286.7
Urban arterial roads	69.6	68.8	60.7	55.2	39.1	47.6	64.7	62.9	63.7	51.9	584.3
Urban local roads	8.6	10.3	8.2	6.6	6.4	8.8	9.7	8.7	10.3	10.6	88.1
Construction total	207.9	206.5	190.4	184.8	175.8	184.2	236.6	233.0	239.3	226.5	2 084.9
Maintenance											
National roads	7.2	7.1	6.7	5.6	6.4	6.4	6.9	6.9	3.3	1.9	58.4
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.7	0.7	0.2	2.0
Rural local roads	14.4	14.0	13.9	14.3	14.5	13.1	14.7	16.2	14.3	15.4	144.8
Urban arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	2.7	1.0	0.2	0.3	4.3
Urban local roads	0.0	0.0	0.0	0.5	0.4	0.6	0.7	0.9	1.7	1.0	5.8
Maintenance total	21.6	21.1	20.6	20.2	21.3	20.1	25.4	25.6	20.4	18.8	215.1
Total construction and maintenance	229.5	227.5	210.9	205.1	197.0	204.3	262.0	258.7	259.7	245.3	2 300.1
Planning and research	5.6	3.7	3.3	2.7	0.0	0.0	0.0	0.0	0.0	0.0	15.3
Total road expenditure	235.0	231.2	214.3	207.7	197.0	204.3	262.0	258.7	259.7	245.3	2 315.2

- Notes
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

TABLE 3.7 VICTORIA: STATE GOVERNMENT ROAD REVENUE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Revenue from road users											
Vehicle registration	288.9	275.4	236.6	203.3	208.5	222.4	207.5	204.0	204.5	202.7	2 253.8
Drivers licence fees	40.6	54.1	49.7	48.9	35.8	41.6	44.5	47.1	41.4	33.3	436.9
Road maintenance tax or State fuel tax	20.5	18.6	87.1	108.7	127.1	142.4	183.9	220.9	226.4	214.6	1 350.1
Other	3.6	3.3	2.4	2.5	1.3	14.6	18.3	19.7	7.8	5.9	79.5
Total motor taxation	353.6	351.4	376.1	363.4	372.6	420.9	454.2	491.7	480.1	456.5	4 120.5
Less collection costs	32.4	32.0	29.7	30.9	24.5	22.9	22.9	23.0	22.8	22.6	263.6
Net motor taxation	321.1	319.4	346.4	332.5	348.1	398.0	431.3	468.8	457.4	433.9	3 856.9
Loans	0.6	2.5	4.4	8.7	2.1	13.0	32.1	20.2	27.9	3.3	114.9
Other	6.7	6.8	4.7	4.7	5.3	38.1	58.5	44.8	51.1	39.0	259.8
Other authorities	106.1	95.7	74.9	103.9	118.8	17.2	18.8	11.4	17.2	11.6	575.5
Total road revenue	434.7	424.4	430.4	449.8	474.5	466.3	540.7	545.1	553.5	487.8	4 807.3

- Notes
1. See text for interpretation and qualification of figures in the table.
 2. The ABS Implicit Price Deflator of Domestic Product (ABS 1988) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

TABLE 3.8 VICTORIA: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	4.6	6.0	10.2	2.6	0.9	0.0	0.0	0.0	0.0	1.1	25.4
Rural arterial roads	53.4	44.9	35.6	28.4	15.2	35.0	52.6	56.9	55.4	46.8	424.2
Rural local roads	35.0	36.8	31.5	32.3	29.3	34.8	45.0	30.2	33.7	21.3	330.0
Urban arterial roads	178.7	135.7	112.6	108.0	124.3	88.9	107.5	110.4	124.7	139.3	1 230.1
Urban local roads	4.6	3.4	3.0	8.3	7.5	11.4	10.1	11.3	17.5	12.9	90.1
Construction total	276.1	226.7	193.1	179.5	177.2	170.2	215.1	208.8	231.3	221.5	2 099.9
Maintenance											
National roads	0.0	2.2	3.2	2.9	2.6	4.0	3.7	2.9	5.5	5.2	32.1
Rural arterial roads	48.5	51.8	51.2	44.1	47.7	52.7	55.9	50.2	58.2	52.7	513.0
Rural local roads	20.4	26.7	21.0	18.5	22.5	19.6	20.2	15.1	17.1	13.2	194.1
Urban arterial roads	23.7	28.0	30.4	30.7	31.6	29.4	35.4	31.1	32.2	28.7	301.1
Urban local roads	2.6	2.4	1.9	1.1	1.3	1.0	0.7	0.9	2.2	1.7	15.7
Maintenance total	95.4	110.8	107.4	97.3	105.7	106.7	115.8	100.3	115.2	101.4	1 056.0
Total construction and maintenance	371.5	337.6	300.6	276.7	282.9	276.9	330.9	309.1	346.4	322.9	3 155.5
Planning and research	3.5	5.6	6.9	6.6	7.0	6.1	6.7	6.6	2.0	1.4	52.2
Total road expenditure	374.9	343.2	307.4	283.3	289.9	283.0	337.5	315.7	348.4	324.2	3 207.6

TABLE 3.8 (Cont.) VICTORIA: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Non-road expenditure											
Loan repayments	5.8	9.2	24.9	52.0	24.4	4.1	3.9	4.3	3.5	15.6	147.8
Interest payments	36.6	40.5	41.5	40.0	40.0	37.1	35.6	38.0	42.0	26.4	377.6
Other	48.6	57.7	84.1	94.0	95.9	105.8	162.2	182.2	164.2	160.9	1 155.6
Non-road total	91.0	107.2	150.5	185.8	160.3	146.9	201.8	224.4	209.6	202.9	1 681.0

- Notes*
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert road expenditure figures from current prices to constant prices.
 3. The ABS Implicit Price Deflator of Gross National Expenditure (ABS 1988) was used to convert non-road expenditure figures from current prices to constant prices.
 4. Owing to rounding, figures may not add to totals.

TABLE 3.9 VICTORIA: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	49.4	52.0	41.9	46.7	42.7	41.0	38.6	39.6	38.9	40.0	430.9
Urban arterial roads	7.0	7.3	4.8	4.5	0.0	0.0	0.0	0.0	0.0	0.0	23.6
Urban local roads	71.2	71.8	47.9	48.5	57.0	67.8	64.1	63.7	73.0	76.1	641.2
Construction total	127.6	131.2	94.6	99.5	99.6	108.8	102.7	103.3	111.9	116.1	1 095.4
Maintenance											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	42.4	44.3	75.3	80.6	54.1	61.2	60.3	59.9	61.7	62.8	602.5
Urban arterial roads	4.6	4.9	5.8	6.1	0.0	0.0	0.0	0.0	0.0	0.0	21.4
Urban local roads	60.6	61.3	74.2	85.1	98.7	105.9	111.5	113.1	117.6	120.1	948.1
Maintenance total	107.2	110.3	155.3	171.7	152.8	167.2	171.9	173.0	179.3	182.9	1 571.6
Total construction and maintenance	234.8	241.5	249.7	271.3	252.3	275.9	274.5	276.3	291.2	299.0	2 666.5
Planning and research	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total road expenditure	234.8	241.5	249.7	271.3	252.3	275.9	274.5	276.3	291.2	299.0	2 666.5

TABLE 3.9 (Cont.) VICTORIA: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Pro rata expenditure on general administration	81.5	79.0	85.7	89.2	105.5	91.7	89.3	85.0	87.0	86.1	880.1
Pro rata non-road expenditure attributable to roads											
Loan repayments	20.0	20.6	22.0	24.0	25.6	24.6	19.6	19.2	19.1	17.3	212.0
Interest payments	30.5	31.9	33.4	37.4	40.1	39.0	32.4	31.6	32.8	31.2	340.3
Non-road total	50.5	52.5	55.4	61.3	65.8	63.6	51.9	50.8	52.0	48.5	552.3
Road works funded by private contributions	77.7	69.9	13.4	34.5	36.7	46.8	27.4	36.1	33.2	26.7	402.4

- Notes**
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert road expenditure figures and the figures for road works funded by private contributions from current prices to constant prices.
 3. The ABS Implicit Price Deflator of Gross National Expenditure (ABS 1988) was used to convert non-road expenditure figures from current prices to constant prices.
 4. Owing to rounding, figures may not add to totals.

TABLE 3.10 VICTORIA: TOTAL ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	76.3	75.5	79.2	75.0	69.7	70.8	92.4	93.7	99.7	104.6	836.9
Rural arterial roads	80.0	71.4	60.3	51.4	50.9	67.6	90.7	93.1	92.1	81.3	738.8
Rural local roads	115.8	120.2	101.5	106.6	97.6	100.3	115.1	101.2	101.7	87.4	1 047.3
Urban arterial roads	255.2	211.8	178.1	167.7	163.4	136.5	172.1	173.4	188.4	191.2	1 837.9
Urban local roads	84.5	85.6	58.8	63.2	71.0	88.0	84.0	83.7	100.7	99.6	819.1
Construction total	611.6	564.3	477.9	463.9	452.6	463.1	554.5	545.1	582.5	564.1	5 280.0
Maintenance											
National roads	7.2	9.2	9.8	8.5	9.0	10.4	10.6	9.7	8.9	7.1	90.3
Rural arterial roads	48.5	51.8	51.2	44.1	47.7	52.7	56.3	50.9	58.9	52.9	515.0
Rural local roads	76.8	84.9	110.2	113.2	91.0	93.9	95.2	91.2	93.1	90.9	940.6
Urban arterial roads	28.3	32.7	36.2	36.8	31.6	29.4	38.1	32.1	32.4	29.0	326.6
Urban local roads	63.1	63.7	76.1	86.7	100.4	107.6	112.9	114.9	121.4	123.3	970.1
Maintenance total	224.1	242.4	283.3	289.2	279.8	294.1	313.1	299.0	314.9	303.1	2 842.6
Total construction and maintenance	835.7	806.7	761.2	753.1	732.3	757.1	867.3	844.0	897.4	867.2	8 122.1
Planning and research	9.0	9.2	10.2	9.3	7.0	6.1	6.7	6.6	2.0	1.4	67.5
Total road expenditure	844.8	815.9	771.6	762.3	739.3	763.1	874.0	850.7	899.4	868.5	8 189.5

- Notes
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

CHAPTER 4 QUEENSLAND

Road expenditure in Queensland by the three levels of government and State road revenue collection details are shown in current prices and constant 1986-87 prices in tables 4.1 to 4.10. Road financing arrangements in Queensland, including legislation related to road financing, as they existed before July 1987, are briefly described below. Organisational changes since 1 July 1987 do not affect the analysis presented in this paper.

REVENUE

Queensland is unique in having one organisation for both the collection of major motor vehicle taxes and the construction and maintenance of roads. The Main Roads Department is entrusted with these tasks under the authority of the *Main Roads Act*. Some taxes are also collected from road users by the Department of Transport.

Major Acts under which taxes are collected in Queensland include:

- . the *Main Roads Act 1920-1987*;
- . the *State Transport Act 1960-1985*;
- . the *Traffic Act 1949-1985*;
- . the *Tow Truck Act 1973-1985*;
- . the *Motor Vehicle Driving Instruction School Act 1969-1985*; and
- . the *Road (Contribution to Maintenance) Act 1957-1979*.

The principal operating fund of the Main Roads Department is the Main Roads Fund, which receives all vehicle registration fees, payments from consolidated revenue, loan funds and a major part of Commonwealth roads grants.

There are a number of other funds within the Main Roads Department which also receive motor vehicle taxation or other revenue earmarked for road works. These include:

- . the Traffic Engineering Trust Fund;
- . the Roads Maintenance Account; and
- . the Commonwealth Aid, Local Authority Roads, Fund.

The Traffic Engineering Trust Fund receives 20 per cent of traffic improvement fees, which are a fixed annual fee per vehicle paid with vehicle registration fees. The balance is paid into consolidated revenue. This fund is spent on the provision of traffic facilities.

The Road Maintenance Account received all road maintenance charges collected by the Department of Transport until 1979 when the charges were abolished. Now this account receives a very small amount of funds.

The Commonwealth Aid, Local Authority Roads, Fund receives a portion of Commonwealth roads grants to Queensland. This amount is paid to local authorities for road works on categories of roads other than national roads.

Loans from the Queensland State Treasury have become an important source of revenue for road works in recent years. Loans have varied from \$14 million in 1978-79 to \$99 million in 1985-86, being 6 per cent and 26 per cent respectively of total revenue available for road works in those years.

The main sources of roads revenue for the Department of Transport are fees for the issue of drivers licences collected under the *Traffic Act*, and permit fees for goods and passenger carrying vehicles issued under the *State Transport Act*. Some fees collected by the Department of Transport are not included in the road revenue tables 4.2 and 4.7, since they are used for other purposes and are collected from users of airways and water transport modes.

In all States except Queensland and the Northern Territory the share of road revenue collected from vehicle registration fees has declined since 1978-79. This is a consequence of increased reliance on revenue generated from fuel franchises and loans. In Queensland, vehicle registration fees have been revised from time to time to compensate for the effects of inflation. There was a 44 per

cent increase in registration fees in 1981-82 and a 14 per cent increase in 1984-85. In other years increases or decreases were minimal.

Figure 4.1 shows State road revenue and road expenditure for the ten years 1977-78 to 1986-87. In the first two years of this period, road expenditure was higher than road revenue but, during the last eight years, an increasing amount of road revenue went to consolidated funds, although not to the same extent as in New South Wales and Victoria.

EXPENDITURE

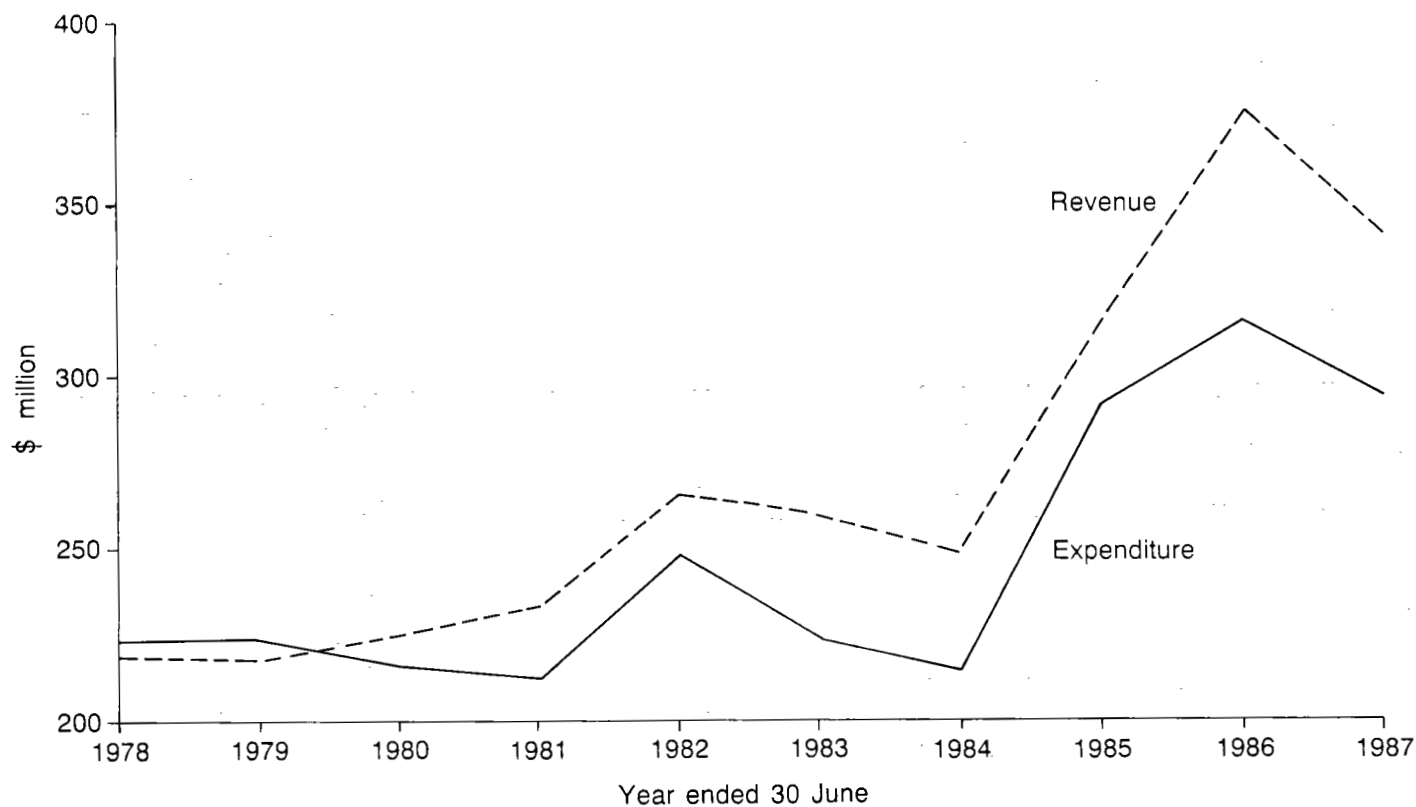
Although the Main Roads Department is the chief road construction authority in Queensland, road works and road financing by other State agencies made up about 20 per cent of total State road expenditure between 1977-78 and 1986-87. Some of the other agencies which contributed to road works include:

- . the Forestry Commission;
- . the Lands Administration Commission;
- . the Queensland Electricity Commission;
- . the Brisbane Forest Park Authority;
- . the Industry Development Authority; and
- . the Port of Brisbane Authority.

Apart from the Main Roads Department, the main agency funding road expenditure was the State Treasury. Expenditure from this source took the form of grants to local government authorities for road works.

Annual charges are made to local government authorities for benefits arising from the expenditure incurred by the Main Roads Department on the construction and maintenance of declared roads in their areas. Currently local authorities are required to meet the following proportions of expenditure:

- . 10 per cent of permanent works on main roads and urban sub-arterial roads;
- . 15 per cent of permanent works on secondary roads; and



Note Deflator used: BTCE Road Construction Price Index.

Figure 4.1 Queensland: State government road revenue and State government road expenditure, 1977-78 to 1986-87 (constant 1986-87 prices)

10 per cent of maintenance.

The State government, through the Main Roads Department, bears the full cost of maintenance on all declared roads except secondary roads, as noted above. Arrangements existing before 1984-85 are described in chapter 7 of the last issue of *Australian Road Financing Statistics* (BTE 1987b).

Changes in expenditure level

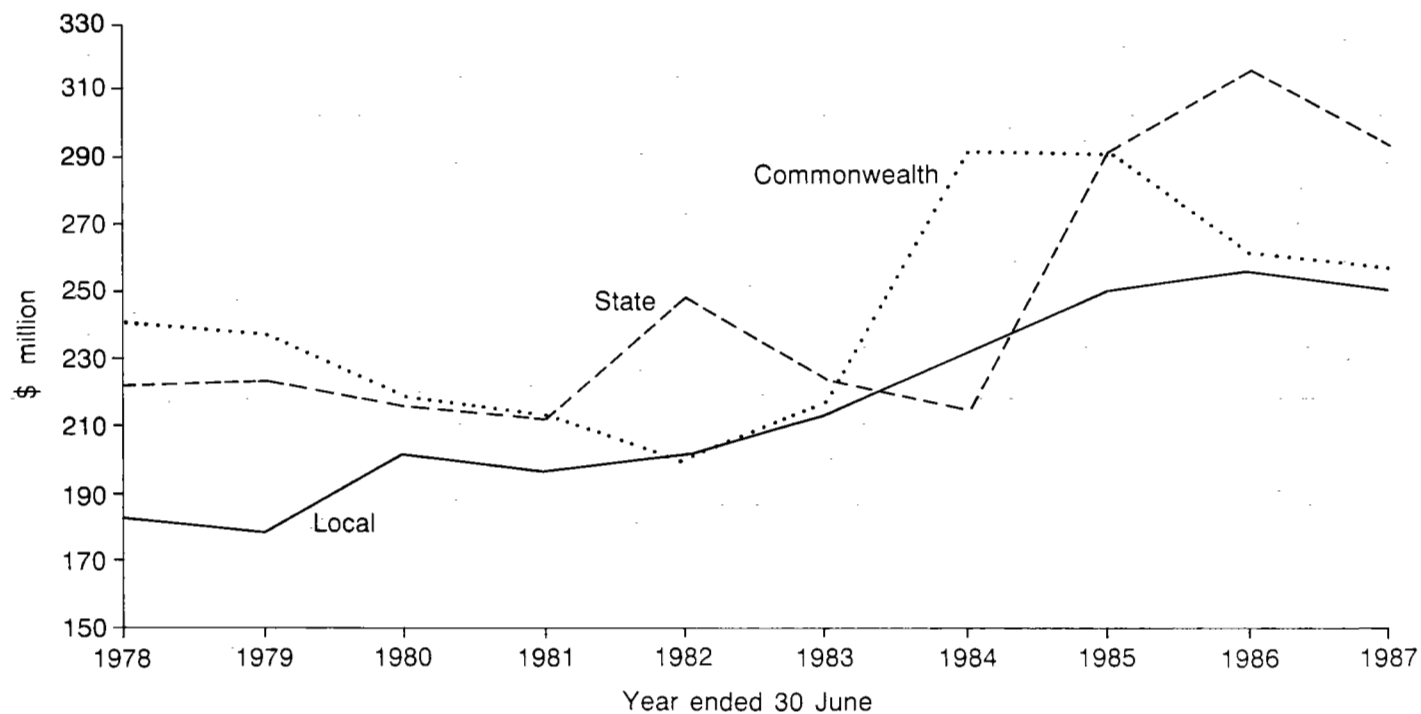
Figure 4.2 shows road expenditure by level of government in Queensland for the decade 1977-78 to 1986-87. During this period, road expenditure in Queensland totalled over \$7 billion in constant 1986-87 prices. Of this total, the Commonwealth government contributed over \$2.4 billion (34.4 per cent), the State government nearly \$2.5 billion (34.9 per cent) and local government authorities nearly \$2.2 billion (30.7 per cent).

Commonwealth expenditure fell from \$241 million in 1977-78 to \$200 million in 1981-82. A small increase of 8.3 per cent in 1982-83, following the introduction of the ABRD program, was followed by a 35 per cent increase in 1983-84. Expenditure remained at the same level in 1984-85, then fell by 10 per cent in 1985-86 and 2 per cent in 1986-87. An average of 86 per cent of funds from Commonwealth sources went to roads in the rural areas of Queensland; nearly 44 per cent went to national roads, 22 per cent to rural arterials and 20 per cent to rural local roads (table 4.6).

State government road expenditure varied from \$212 million in 1980-81 to \$316 million in 1985-86. There was a fall of 7 per cent in funds in 1986-87. The State spent an average of \$300 million during the last three years of the analysis period, more than in any other period (table 4.8).

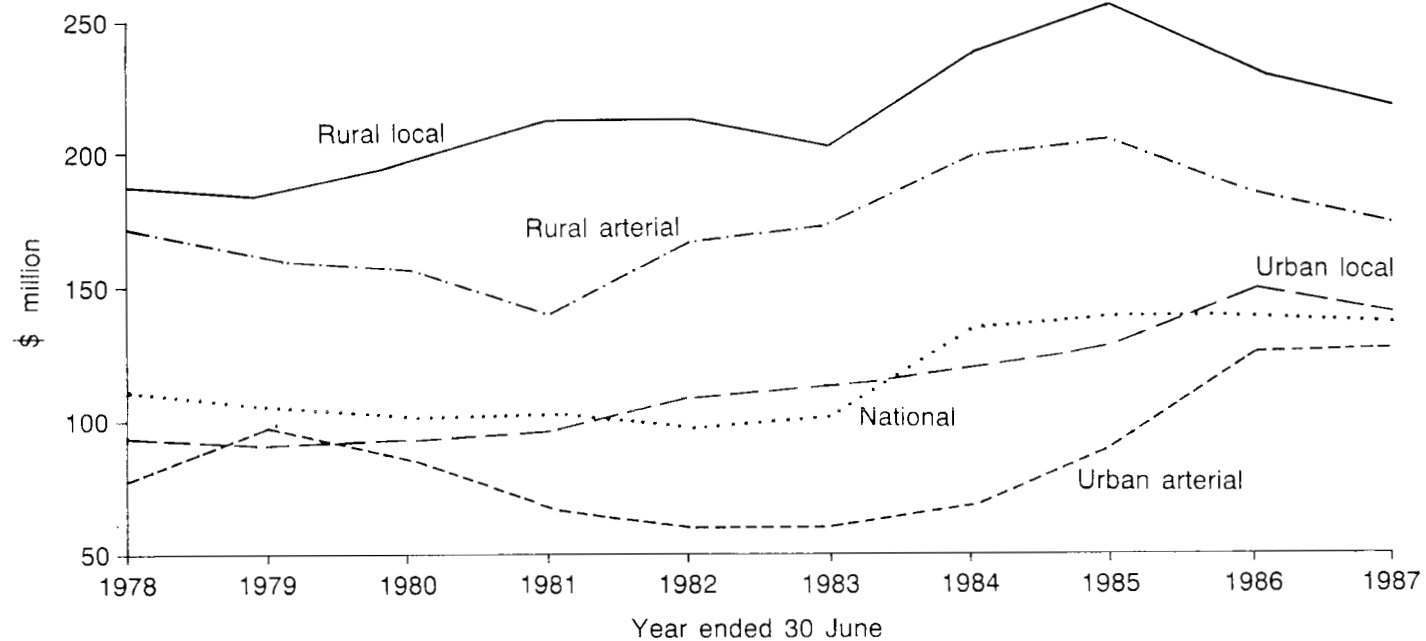
Funding for rural roads fluctuated between 70 per cent and 83 per cent of total road expenditure, while funding for urban roads varied between 17 per cent and 30 per cent of the total. Overall, maintenance funds in constant 1986-87 prices have steadily increased, from \$75 million in 1977-78 to \$115 million in 1986-87, though there were small fluctuations in the growth rate.

Local government expenditure on roads in Queensland varied between \$179 million in 1978-79 and \$256 million in 1985-86, following a generally upward trend. The allocation to maintenance fluctuated between 29 per cent and 48 per cent of total funds, with the average allocation being 44 per cent. Funds for



Note Deflator used: BTCE Road Construction Price Index.

Figure 4.2 Queensland: road expenditure by level of government, 1977-78 to 1986-87 (constant 1986-87 prices)



Note Deflator used: BTCE Road Construction Price Index.

Figure 4.3 Queensland: total road expenditure by road category, 1977-78 to 1986-87 (constant 1986-87 prices)

road maintenance have increased in real terms by 45 per cent between 1977-78 and 1986-87.

Road expenditure in Queensland by all three levels of government declined slightly, in real terms, between 1977-78 and 1980-81. Since 1981-82 this trend has been reversed and expenditure increased from \$623 million in 1980-81 to \$834 million in 1985-86. During 1986-87 there was a 4 per cent decline in funds. Maintenance expenditure has steadily increased from a low of \$160 million in 1979-80 to a high of \$286 million in 1986-87 (table 4.10).

Expenditure by road category

Allocation of road expenditure between rural roads and urban roads varied from year to year in Queensland. The split for rural and urban roads in percentage terms varied from 75 to 25 per cent for rural roads, and 66 to 34 per cent for urban roads for the years 1977-78 to 1986-87, while the average split for the decade was 72 per cent rural to 28 per cent urban.

Figure 4.3 shows the distribution of expenditure for the five categories of roads from all sources. Unlike in other States, the fluctuations are small and rural local roads fared well throughout the period.

NON-ROAD EXPENDITURE

The main items of non-road expenditure by road construction authorities in Queensland (see appendix I for explanation of non-road expenditure), as shown in tables 4.3 and 4.8, are debt servicing and the 80 per cent of traffic improvement fees paid by motorists which went to consolidated revenue. Non-road expenditure is small in Queensland, when compared with New South Wales and Victoria, being only about 11 per cent of total road expenditure.

COLLECTION COSTS

Collection costs shown in tables 4.2 and 4.7 are those incurred by the Main Roads Department and the Department of Transport. These costs have declined from 15 per cent of road users revenue in 1977-78 to about 8 per cent in 1986-87.

TABLE 4.1 QUEENSLAND: COMMONWEALTH ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	33.5	34.8	38.1	42.1	41.5	50.0	72.9	77.3	78.4	76.6	545.2
Rural arterial roads	22.8	25.0	26.7	29.5	31.1	42.5	59.6	56.3	32.3	34.2	360.0
Rural local roads	19.5	19.5	19.5	23.9	26.3	30.8	40.0	40.2	47.5	51.6	318.8
Urban arterial roads	11.2	12.2	13.5	14.6	16.8	19.7	27.1	39.1	40.3	38.7	233.2
Urban local roads	3.9	4.2	4.6	3.6	0.2	0.3	0.1	0.1	0.5	2.2	19.7
Construction total	90.9	95.6	102.3	113.8	115.9	143.2	199.6	213.0	198.9	203.2	1 476.4
Maintenance											
National roads	8.5	10.8	10.9	14.3	18.5	22.3	34.4	34.3	41.0	40.7	235.7
Rural arterial roads	0.9	1.0	0.8	0.6	0.6	0.3	3.4	2.7	5.2	10.3	25.8
Rural local roads	2.1	2.1	3.1	3.0	5.6	5.7	7.8	8.4	4.2	0.7	42.7
Urban arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.8	1.8	3.0
Urban local roads	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.5
Maintenance total	11.5	13.9	14.8	18.5	24.6	28.3	45.6	45.6	51.2	53.5	307.5
Total construction and maintenance	102.4	109.5	117.1	132.2	140.6	171.5	245.2	258.6	250.1	256.7	1 783.9
Planning and research	1.4	1.0	1.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5
Total road expenditure	103.8	110.4	118.1	133.2	140.6	171.5	245.2	258.6	250.1	256.7	1 788.4

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 4.2 QUEENSLAND: STATE GOVERNMENT ROAD REVENUE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Revenue from road users											
Vehicle registration	58.8	73.9	77.2	83.0	131.8	141.1	148.8	178.3	182.1	190.3	1 265.3
Drivers licence fees	5.6	7.6	8.4	10.2	15.3	17.7	19.8	22.3	24.7	31.9	163.5
Road maintenance tax or State fuel tax	5.4	5.5	1.4	0.2	0.1	0.1	0.0	0.1	0.0	0.0	12.8
Other	4.2	3.7	4.0	5.4	2.5	3.0	3.2	5.3	3.8	4.9	40.0
Total motor taxation	74.1	90.6	91.0	98.7	149.7	161.9	171.9	206.0	210.6	227.1	1 481.6
Less collection costs	11.4	11.8	11.1	13.3	14.5	16.6	15.3	17.3	18.3	19.1	148.7
Net motor taxation	62.7	78.8	79.9	85.4	135.2	145.3	156.6	188.7	192.3	208.0	1 332.9
Loans	12.2	7.0	17.6	21.2	13.1	19.5	12.8	35.7	92.1	64.5	295.7
Other	1.1	1.3	1.1	2.7	2.5	1.3	2.8	3.1	14.4	4.1	34.4
Other authorities	28.8	25.1	30.1	38.7	34.8	33.7	32.9	47.1	50.8	63.0	385.0
Total road revenue	104.8	112.1	128.8	148.1	185.7	199.8	205.1	274.6	349.6	339.5	2 048.1

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 4.3 QUEENSLAND: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 T 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	4.7	1.6	3.8	5.8	6.5	5.9	4.9	6.5	9.6	13.4	62.7
Rural arterial roads	31.2	27.6	33.5	30.0	50.4	55.1	47.7	62.0	88.7	68.8	495.0
Rural local roads	11.9	10.8	13.9	25.6	34.6	26.1	25.3	47.4	30.4	17.3	243.3
Urban arterial roads	13.5	22.0	21.9	15.4	17.6	19.9	18.8	39.7	70.0	75.5	314.3
Urban local roads	2.1	2.1	2.6	3.8	3.4	3.3	3.4	2.1	10.1	-0.5	32.4
Construction total	63.4	64.0	75.7	80.6	112.5	110.4	100.0	157.7	208.7	174.6	1 147.6
Maintenance											
National roads	1.0	1.4	1.5	1.7	2.0	2.6	1.0	5.8	3.9	5.6	26.5
Rural arterial roads	19.2	21.3	23.7	27.4	35.3	40.0	50.4	61.4	51.1	61.3	391.1
Rural local roads	6.7	9.4	8.9	12.8	14.9	13.8	18.7	20.8	25.8	35.6	167.4
Urban arterial roads	5.1	7.2	6.1	6.9	8.2	8.7	8.7	11.6	9.4	11.8	83.7
Urban local roads	0.1	0.1	0.1	2.0	0.0	0.0	0.1	0.1	0.1	0.5	3.1
Maintenance total	32.1	39.3	40.1	50.7	60.5	65.1	78.8	99.6	90.4	114.9	671.5
Total construction and maintenance	95.4	103.2	115.8	131.3	173.0	175.5	178.7	257.3	299.1	289.5	1 818.8
Planning and research	0.6	0.7	0.8	1.0	1.3	1.8	1.7	2.0	2.7	3.9	16.5
Total road expenditure	96.0	103.9	116.5	132.2	174.2	177.3	180.5	259.4	301.8	293.4	1 835.2

TABLE 4.3 (Cont.) QUEENSLAND: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Non-road expenditure											
Loan repayments	0.8	0.9	0.9	1.1	0.9	0.4	0.6	2.4	6.4	3.3	17.7
Interest payments	1.4	1.9	2.3	3.8	5.9	8.5	8.1	8.3	9.3	11.9	61.4
Other	4.5	6.0	6.7	8.1	13.0	15.1	14.4	15.1	18.6	23.2	124.7
Non-road total	6.7	8.8	9.9	13.1	19.9	24.0	23.1	25.8	34.3	38.3	203.8

- Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 4.4 QUEENSLAND: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Construction											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	22.3	24.0	44.4	40.5	36.1	48.9	56.1	57.2	60.1	55.9	445.5
Urban arterial roads	2.4	2.5	3.7	3.4	0.0	0.0	0.0	0.0	0.0	0.0	12.0
Urban local roads	19.0	19.6	29.6	27.0	37.2	41.3	47.9	59.0	75.3	77.2	433.1
Construction total	43.7	46.1	77.7	70.9	73.3	90.2	104.0	116.2	135.4	133.1	890.6
Maintenance											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	18.3	19.7	16.1	26.9	32.6	35.3	44.8	54.2	53.0	56.4	357.3
Urban arterial roads	1.2	1.3	1.1	1.7	0.0	0.0	0.0	0.0	0.0	0.0	5.3
Urban local roads	15.6	16.0	13.9	23.3	35.8	43.8	46.3	52.9	56.7	61.4	365.7
Maintenance total	35.0	36.9	31.1	51.9	68.4	79.1	91.1	107.1	109.7	117.8	728.1
Total construction and maintenance	78.7	83.1	108.8	122.8	141.7	169.4	195.1	223.3	245.1	250.9	1 618.9
Planning and research	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total road expenditure	78.7	83.1	108.8	122.8	141.7	169.4	195.1	223.3	245.1	250.9	1 618.9

TABLE 4.4 (Cont.) QUEENSLAND: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Pro rata expenditure on general administration	26.6	26.7	22.9	24.6	27.4	36.4	27.7	29.7	34.6	37.7	294.3
Pro rata non-road expenditure attributable to roads											
Loan repayments	9.1	10.2	11.9	12.8	14.2	15.3	14.6	16.6	18.7	20.2	143.6
Interest payments	15.0	17.3	19.5	22.7	27.0	33.3	35.0	40.5	44.5	48.2	303.0
Non-road total	24.1	27.5	31.4	35.5	41.2	48.6	49.6	57.1	63.2	68.4	446.6
Road works funded by private contributions	8.9	12.6	2.7	2.6	7.1	6.7	10.0	10.1	12.8	10.7	84.2

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 4.5 QUEENSLAND: TOTAL ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	38.2	36.4	41.9	48.0	48.0	55.9	77.7	83.8	88.0	90.0	607.9
Rural arterial roads	54.0	52.6	60.2	59.4	81.5	97.6	107.3	118.3	121.0	103.0	854.9
Rural local roads	53.8	54.4	77.8	90.0	97.0	105.8	121.4	144.8	138.0	124.8	1 007.8
Urban arterial roads	27.1	36.6	39.1	33.4	34.4	39.6	45.8	78.8	110.3	114.2	559.3
Urban local roads	25.0	25.9	36.8	34.5	40.8	44.9	51.4	61.3	85.9	78.9	485.4
Construction total	198.0	205.7	255.7	265.2	301.7	343.8	403.6	486.9	543.0	510.9	3 514.5
Maintenance											
National roads	9.5	12.2	12.4	16.0	20.5	24.9	35.3	40.1	44.9	46.3	262.1
Rural arterial roads	20.1	22.3	24.5	28.0	35.9	40.3	53.7	64.1	56.3	71.6	416.8
Rural local roads	27.1	31.2	28.1	42.8	53.1	54.8	71.3	83.3	83.0	92.7	567.4
Urban arterial roads	6.3	8.5	7.2	8.6	8.2	8.7	8.8	11.8	10.2	13.6	91.9
Urban local roads	15.6	16.2	14.0	25.8	35.8	43.8	46.4	53.0	56.8	61.9	369.3
Maintenance total	78.6	90.1	86.0	121.1	153.5	172.6	215.5	252.3	251.3	286.2	1 707.2
Total construction and maintenance	276.5	295.7	341.7	386.3	455.3	516.5	619.1	739.3	794.3	797.1	5 221.8
Planning and research	2.0	1.7	1.8	2.0	1.3	1.8	1.7	2.0	2.7	3.9	20.9
Total road expenditure	278.5	297.4	343.5	388.2	456.5	518.2	620.8	741.3	797.0	801.0	5 242.7

Notes 1. See text for interpretation and qualification of figures in the table.

2. Owing to rounding, figures may not add to totals.

TABLE 4.6 QUEENSLAND: COMMONWEALTH ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	77.7	74.8	70.7	67.6	59.0	63.1	86.6	86.9	82.0	76.6	745.0
Rural arterial roads	52.9	53.8	49.5	47.4	44.2	53.7	70.8	63.3	33.8	34.2	503.5
Rural local roads	45.2	41.9	36.2	38.4	37.4	38.9	47.5	45.2	49.7	51.6	432.0
Urban arterial roads	26.0	26.2	25.0	23.4	23.9	24.9	32.2	43.9	42.2	38.7	306.4
Urban local roads	9.0	9.0	8.5	5.8	0.3	0.4	0.1	0.1	0.5	2.2	36.0
Construction total	210.9	205.6	189.8	182.7	164.9	180.8	237.1	239.3	208.1	203.2	2 022.3
Maintenance											
National roads	19.7	23.2	20.2	23.0	26.3	28.2	51.5	38.5	42.9	40.7	314.3
Rural arterial roads	2.1	2.2	1.5	1.0	0.9	0.4	4.0	3.0	5.4	10.3	30.7
Rural local roads	4.9	4.5	5.8	4.8	8.0	7.2	9.3	9.4	4.4	0.7	58.9
Urban arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.8	1.8	3.1
Urban local roads	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.8
Maintenance total	26.7	29.9	27.5	29.7	35.0	35.7	54.2	51.2	53.6	53.5	396.9
Total construction and maintenance	237.6	235.5	217.3	212.2	200.0	216.5	291.2	290.6	261.6	256.7	2 419.1
Planning and research	3.2	2.2	2.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	9.0
Total road expenditure	240.8	237.4	219.1	213.8	200.0	216.5	291.2	290.6	261.6	256.7	2 428.2

- Notes
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

TABLE 4.7 QUEENSLAND: STATE GOVERNMENT ROAD REVENUE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Revenue from road users											
Vehicle registration	123.0	143.2	134.7	130.9	188.8	183.5	180.4	204.7	195.6	190.3	1 675.2
Drivers licence fees	11.7	14.7	14.7	16.1	21.9	23.0	24.0	25.6	26.5	31.9	210.2
Road maintenance tax or State fuel tax	11.3	10.7	2.4	0.3	0.1	0.1	0.0	0.1	0.0	0.0	25.1
Other	8.8	7.2	7.0	8.5	3.6	3.9	3.9	6.1	4.1	4.9	57.9
Total motor taxation	155.0	175.6	158.8	155.7	214.5	210.5	208.4	236.5	226.2	227.1	1 968.3
Less collection costs	23.8	22.9	19.4	21.0	20.8	21.6	18.5	19.9	19.7	19.1	206.6
Net motor taxation	131.2	152.7	139.4	134.7	193.7	188.9	189.8	216.6	206.6	208.0	1 761.7
Loans	25.5	13.6	30.7	33.4	18.8	25.4	15.5	41.0	98.9	64.5	367.3
Other	2.3	2.5	1.9	4.3	3.6	1.7	3.4	3.6	15.5	4.1	42.8
Other authorities	60.3	48.6	52.5	61.0	62.8	43.8	39.9	54.1	54.6	63.0	540.6
Total road revenue	219.2	217.2	224.8	233.4	266.0	259.8	248.6	315.3	375.5	339.5	2 699.5

- Notes
1. See text for interpretation and qualification of figures in the table.
 2. The ABS Implicit Price Deflator of Gross Domestic Product (ABS 1988) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

TABLE 4.8 QUEENSLAND: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	10.9	3.4	7.1	9.3	9.2	7.4	5.8	7.3	10.0	13.4	84.0
Rural arterial roads	72.4	59.4	62.2	48.2	71.7	69.6	56.7	69.7	92.8	68.8	671.2
Rural local roads	27.6	23.2	25.8	41.1	49.2	33.0	30.0	53.3	31.8	17.3	332.3
Urban arterial roads	31.3	47.3	40.6	24.7	25.0	25.1	22.3	44.6	73.2	75.5	409.8
Urban local roads	4.9	4.5	4.8	6.1	4.8	4.2	4.0	2.4	10.6	-0.5	45.8
Construction total	147.1	137.6	140.4	129.4	160.0	139.4	118.8	177.2	218.3	174.6	1 542.8
Maintenance											
National roads	2.3	3.0	2.8	2.7	2.8	3.3	1.2	6.5	4.1	5.6	34.4
Rural arterial roads	44.5	45.8	44.0	44.0	50.2	50.5	59.9	69.0	53.5	61.3	522.6
Rural local roads	15.5	20.2	16.5	20.5	21.2	17.4	22.2	23.4	27.0	35.6	219.6
Urban arterial roads	11.8	15.5	11.3	11.1	11.7	11.0	10.3	13.0	9.8	11.8	117.4
Urban local roads	0.2	0.2	0.2	3.2	0.0	0.0	0.1	0.1	0.1	0.5	4.7
Maintenance total	74.5	84.5	74.4	81.4	86.1	82.2	93.6	111.9	94.6	114.9	898.0
Total construction and maintenance	221.6	222.2	214.8	210.8	246.1	221.6	212.2	289.1	312.9	289.5	2 440.7
Planning and research	1.4	1.5	1.5	1.6	1.8	2.3	2.0	2.2	2.8	3.9	21.1
Total road expenditure	223.0	223.4	216.1	212.2	247.9	223.9	214.4	291.5	315.7	293.4	2 461.5

TABLE 4.8 (Cont.) QUEENSLAND: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Non-road expenditure											
Loan repayments	1.7	1.8	1.6	1.8	1.3	0.5	0.8	2.8	7.0	3.3	22.7
Interest payments	3.0	3.8	4.2	6.2	8.7	11.4	10.2	9.8	10.1	11.9	79.3
Other	9.7	12.0	12.1	13.2	19.3	20.2	18.1	17.9	20.2	23.2	165.8
Non-road total	14.4	17.6	17.9	21.4	29.5	32.1	29.0	30.5	37.3	38.3	267.9

- Notes*
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert road expenditure figures from current prices to constant prices.
 3. The ABS Implicit Price Deflator of Gross National Expenditure (ABS 1988) was used to convert non-road expenditure figures from current prices to constant prices.
 4. Owing to rounding, figures may not add to totals.

TABLE 4.9 QUEENSLAND: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	51.7	51.6	82.4	65.0	51.4	61.7	66.6	64.3	62.9	55.9	613.5
Urban arterial roads	5.6	5.4	6.9	5.5	0.0	0.0	0.0	0.0	0.0	0.0	23.3
Urban local roads	44.1	42.2	54.9	43.3	52.9	52.1	56.9	66.3	78.8	77.2	568.7
Construction total	101.4	99.1	144.2	113.8	104.3	113.9	123.5	130.6	141.6	133.1	1 205.5
Maintenance											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	42.5	42.4	29.9	43.2	46.4	44.6	53.2	60.9	55.4	56.4	474.8
Urban arterial roads	2.8	2.8	2.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0	10.3
Urban local roads	36.2	34.4	25.8	37.4	50.9	55.3	55.0	59.4	59.3	61.4	475.2
Maintenance total	81.2	79.4	57.7	83.3	97.3	99.9	108.2	120.3	114.7	117.8	959.8
Total construction and maintenance	182.6	178.7	201.9	197.1	201.6	213.9	231.7	250.9	256.4	250.9	2 165.6
Planning and research	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total road expenditure	182.6	178.7	201.9	197.1	201.6	213.9	231.7	250.9	256.4	250.9	2 165.6

TABLE 4.9 (Cont.) QUEENSLAND: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Pro rata expenditure on general administration	57.2	53.3	41.3	40.1	40.6	48.7	34.8	35.1	37.6	37.7	426.5
Pro rata non-road expenditure attributable to roads											
Loan repayments	19.6	20.4	21.5	20.9	21.0	20.5	18.3	19.6	20.3	20.2	202.3
Interest payments	32.3	34.5	35.2	37.0	40.0	44.6	43.9	47.9	48.4	48.2	412.0
Non-road total	51.8	54.9	56.7	57.9	61.0	65.1	62.2	67.6	68.7	68.4	614.3
Road works funded by private contributions	20.6	27.1	5.0	4.2	10.1	8.5	11.9	11.3	13.4	10.7	122.8

- Notes**
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert road expenditure figures and the figures for road works funded by private contributions from current prices to constant prices.
 3. The ABS Implicit Price Deflator of Gross National Expenditure (ABS 1988) was used to convert non-road expenditure figures from current prices to constant prices.
 4. Owing to rounding, figures may not add to totals.

TABLE 4.10 QUEENSLAND: TOTAL ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	88.6	78.3	77.7	77.0	68.3	70.6	92.3	94.2	92.1	90.0	829.0
Rural arterial roads	125.3	113.1	111.7	95.3	115.9	123.2	127.4	132.9	126.6	103.0	1 174.5
Rural local roads	124.8	117.0	144.3	144.5	138.0	133.6	144.2	162.7	144.4	124.8	1 378.2
Urban arterial roads	62.9	78.7	72.5	53.6	48.9	50.0	54.4	88.5	115.4	114.2	739.2
Urban local roads	58.0	55.7	68.3	55.4	58.0	56.7	61.0	68.9	89.9	78.9	650.8
Construction total	459.4	442.4	474.4	425.8	429.2	434.1	479.3	547.1	568.0	510.9	4 770.6
Maintenance											
National roads	22.0	26.2	23.0	25.7	29.2	31.4	41.9	45.1	47.0	46.3	337.8
Rural arterial roads	46.6	48.0	45.5	44.9	51.1	50.9	63.8	72.0	58.9	71.6	553.2
Rural local roads	62.9	67.1	52.1	68.7	75.5	69.2	84.7	93.6	86.8	92.7	753.3
Urban arterial roads	14.6	18.3	13.4	13.8	11.7	11.0	10.5	13.3	10.7	13.6	130.7
Urban local roads	36.2	34.8	26.0	41.4	50.9	55.3	55.1	59.6	59.4	61.9	480.6
Maintenance total	182.4	193.8	159.6	194.4	218.3	217.9	255.9	283.5	262.9	286.2	2 254.8
Total construction and maintenance	641.5	635.9	634.0	620.1	647.7	652.1	735.3	830.7	830.9	797.1	7 025.2
Planning and research	4.6	3.7	3.3	3.2	1.8	2.3	2.0	2.2	2.8	3.9	30.0
Total road expenditure	646.2	639.6	637.3	623.1	649.4	654.3	737.3	832.9	833.7	801.0	7 054.7

- Notes
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

CHAPTER 5 WESTERN AUSTRALIA

Road expenditure details for the three levels of government in Western Australia and State road revenue details are presented in current prices and in constant 1986-87 prices in tables 5.1 to 5.10.

REVENUE

In Western Australia a number of agencies are responsible for administering State legislation relating to the collection and expenditure of road related revenue:

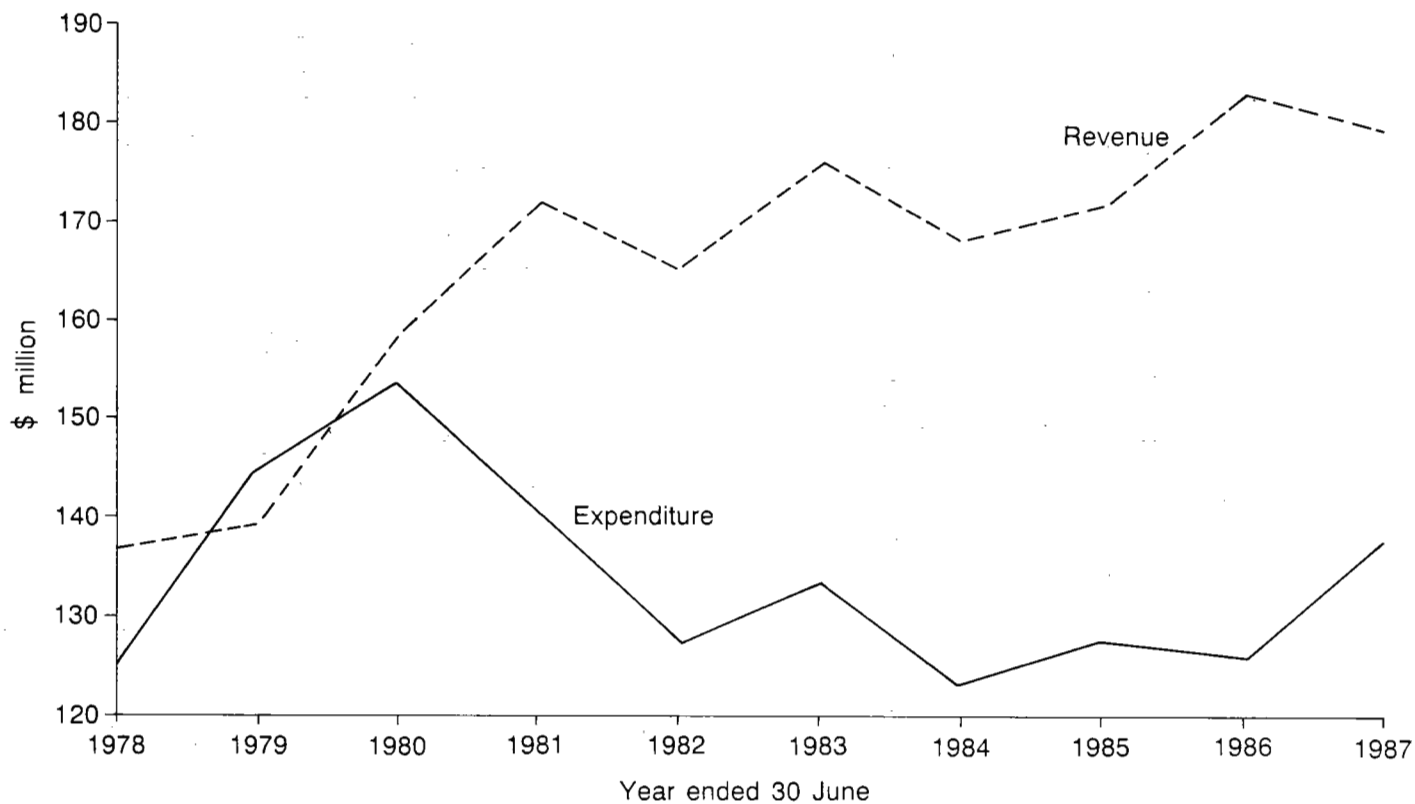
- . the Main Roads Department;
- . the Police Department;
- . the Transport Commission; and
- . the Taxi Control Board.

The Police Department is responsible for the collection of motor vehicle registration fees, drivers licence fees, *Traffic Act* licence fees and other small charges. Of these, vehicle registration and drivers licence fees are the most important sources of revenue. They account for 68 per cent of gross motor vehicle tax.

The Transport Commission is entrusted with the collection of fuel franchise licence fees, commercial goods vehicle permit fees, omnibus fees and country taxi licence fees. Fuel franchise and goods vehicle permits amount to about 30 per cent of gross motor vehicle tax.

Revenue generated by the Main Roads Department and the Taxi Control Boards includes:

- rents from property;



Note Deflator used: BTCE Road Construction Price Index.

Figure 5.1 Western Australia: State government road revenue and State government road expenditure, 1977-78 to 1986-87 (constant 1986-87 prices)

- . payments for road works carried out on behalf of other authorities; and
- . taxi licence and drivers licence fees.

These fees form a very small proportion of the total road revenue.

In addition to the above revenue sources, Treasury and other authorities contribute a small amount towards road revenue. The contribution of other authorities has been reduced in recent years while loan raising for roads has increased.

As in other States, not all the funds collected through motor vehicle taxation go into road works. Although the major part of motor vehicle registration fees is paid into the Main Roads Trust Account, drivers licence fees are paid into consolidated revenue and subsequently passed to the National Safety Council and the Police Department where they are spent on driver education and similar schemes.

Figure 5.1 shows the gap between the net road revenue raised and the State road expenditure. With the introduction of fuel franchise fees, the gap has increased considerably since 1979-80 because fuel franchise fees go directly to consolidated revenue and only a proportion of them is later transferred to the Main Roads Department for road expenditure.

EXPENDITURE

The Main Roads Trust Account is the only operating account of the Main Roads Department, which is the major road construction and maintenance agency in the State. This account receives not only State road revenue but also Commonwealth assistance for roads under various Acts.

Changes in expenditure level

Western Australia spent on average \$390 million per year from all sources (in constant 1986-87 prices) during the three years from 1984-85 to 1986-87, of which nearly 44 per cent was provided by the Commonwealth, the remainder coming from State and local government sources. Expenditure devoted to maintenance increased steadily from 1977-78 onwards. Expenditure on roads in rural areas amounted to 64 per cent of total expenditure in the decade. From 1977-78 to 1986-87, national roads received \$614 million, rural arterial roads received \$851 million, and rural local roads received \$877 million.

The Commonwealth contributed \$1.5 billion (40.5 per cent) of the \$3.6 billion spent on roads in Western Australia in the ten years 1977-78 to 1986-87. The rural roads sector (comprising national roads, rural arterial roads and rural local roads) received 76 per cent of this Commonwealth assistance for construction and maintenance, and of this, more than 50 per cent of Commonwealth funds went into the construction and maintenance of national roads. Commonwealth assistance declined from \$147 million in 1977-78 to \$120 million in 1981-82. From then funds increased to reach \$178 million in 1985-86, although this rise was followed by an 11 per cent fall to \$159 million in 1986-87 (figure 5.2).

The State government contributed \$1.3 billion (36.8 per cent) of the \$3.6 billion of total expenditure on roads in Western Australia between 1977-78 and 1986-87. Of this amount, 63 per cent was allocated to rural roads and 36 per cent to urban roads. However, total State expenditure declined from its 1979-80 level of \$154 million to \$123 million in 1983-84, which was the lowest level of funding in the ten years to 1986-87. There was a 10 per cent increase in funds in 1986-87, but funding was still lower than during the period 1977-78 to 1980-81.

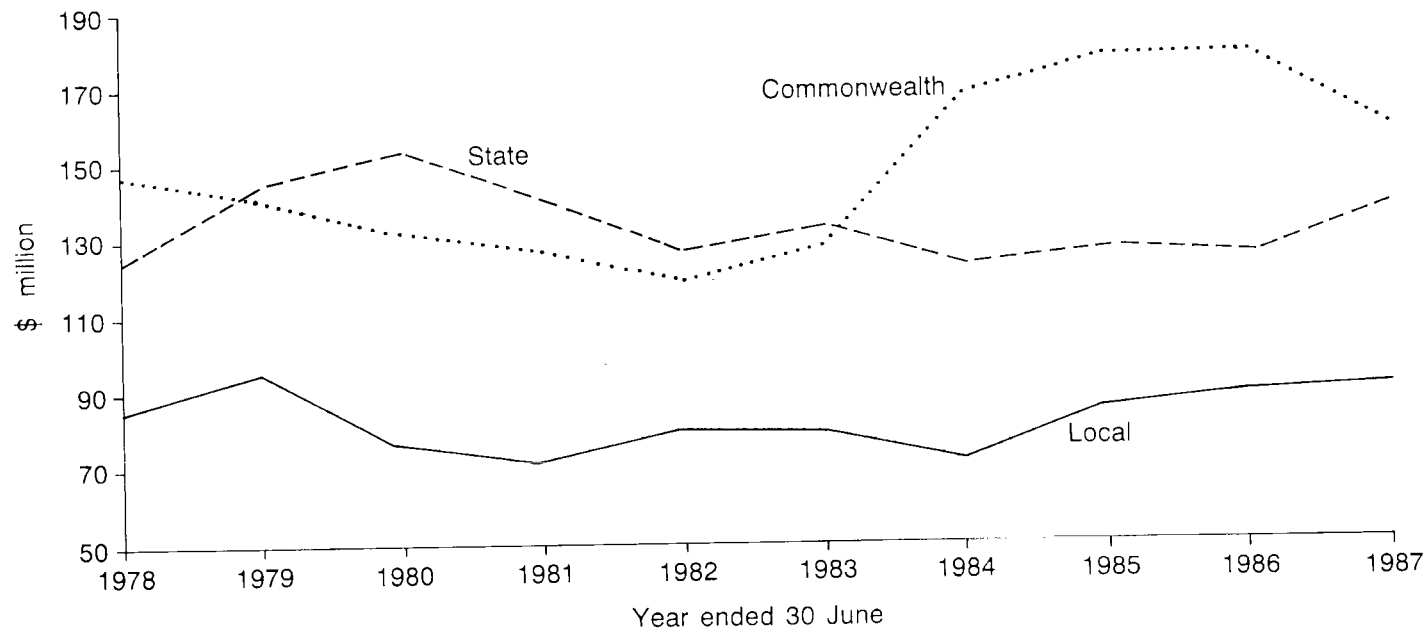
Local government expenditure on roads fluctuated over the decade. It was highest in 1978-79 at \$96 million, and lowest in 1983-84 at \$72 million. There was some growth in expenditure from 1983-84 to 1986-87. Funds increased by nearly 20 per cent in 1984-85, by 4 per cent in 1985-86 and by less than 2 per cent in 1986-87. During the decade 1977-78 to 1986-87, nearly 44 per cent of local government road expenditure went into the maintenance of roads. The remainder went into construction.

Expenditure by road category

Figure 5.3 shows the distribution of expenditure among road categories in Western Australia during the decade 1977-78 to 1986-87. Rural arterial and rural local roads together retained their share of expenditure consistently over the period. Rural local roads attracted over 24 per cent of total expenditure while rural arterial roads attracted 23 per cent.

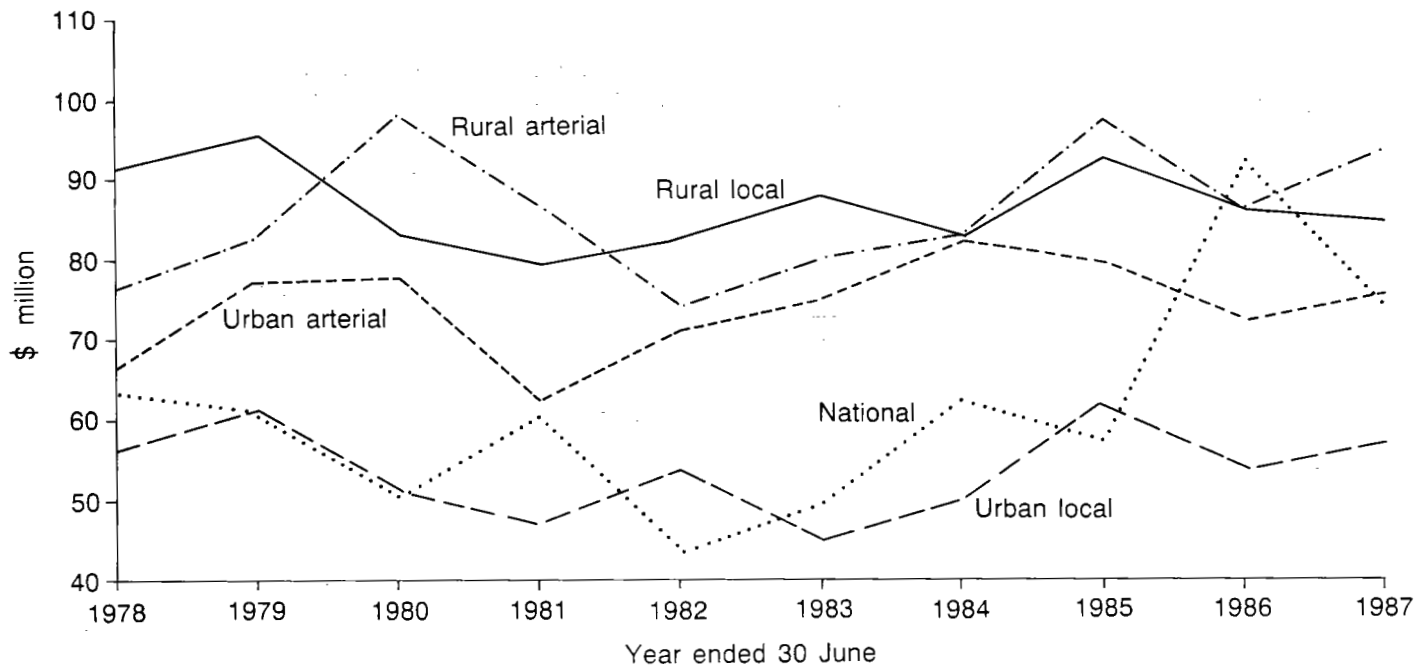
Expenditure on national roads varied between \$44 million in 1981-82 and nearly \$93 million in 1985-86. Funds for national roads declined by 20 per cent in 1986-87. In the decade to 1986-87, national roads attracted 16.8 per cent of total available funds for roads in the State.

Expenditure on urban arterial roads in Western Australia fluctuated between \$62 million in 1980-81 and \$82 million in 1983-84. While this category of roads



Note Deflator used: BTCE Road Construction Price Index.

Figure 5.2 Western Australia: road expenditure by level of government, 1977-78 to 1986-87 (constant 1986-87 prices)



Note Deflator used: BTCE Road Construction Price Index.

Figure 5.3 Western Australia: total road expenditure by road category, 1977-78 to 1986-87 (constant 1986-87 prices)

attracted 20 per cent of total roads expenditure in the State between 1977-78 and 1986-87, urban local roads attracted nearly 15 per cent of funds.

NON-ROAD EXPENDITURE

Tables 5.3, 5.4, 5.8 and 5.9 show details of non-road expenditure incurred by the Western Australian State government and the local government authorities for the years 1977-78 to 1986-87. The significance of non-road expenditure is explained in appendix I. The State government non-road expenditure consists of expenditure by the Police Department, the Transport Commissioner and the Taxi Control Board. In the first place these authorities raise the funds for this expenditure as part of road revenue through motor vehicle taxation. In the present analysis, only that portion which did not go towards road construction is designated as 'other' under non-road expenditure. This is the portion that went into consolidated revenue.

Non-road expenditure steadily increased from 1977-78 onwards. Between 1984-85 and 1986-87 it was equivalent to 27 per cent of total motor taxation. Expenditure on loan repayment and interest is very small in Western Australia.

For local government authorities the amount devoted to loan repayment and interest paid is treated here as non-road expenditure.

COLLECTION COSTS

Available statistics from Western Australia do not allow the costs of collecting road revenue to be estimated. The Main Roads Department receives all the revenue collected from the *Traffic Act* licence fees. Since the Police Department is the collection agency, it is difficult to separate the collection costs from other operational costs.

TABLE 5.1 WESTERN AUSTRALIA: COMMONWEALTH ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	18.9	19.1	20.5	24.3	19.1	25.6	34.9	44.6	68.4	50.5	325.9
Rural arterial roads	10.0	10.5	11.5	12.0	13.2	16.2	22.6	25.2	19.3	19.4	159.9
Rural local roads	11.0	12.0	13.2	13.7	14.2	12.2	20.8	19.9	19.7	21.1	157.8
Urban arterial roads	11.5	12.4	13.3	14.3	15.5	20.6	29.7	41.3	29.0	27.7	215.3
Urban local roads	2.4	2.6	2.8	3.1	3.3	3.5	4.8	5.0	4.9	5.5	37.9
Construction total	53.9	56.6	61.3	67.5	65.3	78.1	112.7	135.9	141.3	124.3	896.8
Maintenance											
National roads	4.6	4.4	5.1	5.1	11.0	13.4	16.6	11.8	13.4	15.0	100.4
Rural arterial roads	0.0	0.0	0.0	0.3	0.5	0.2	0.7	0.0	2.7	3.4	7.8
Rural local roads	4.3	3.9	4.3	5.5	7.3	9.4	11.1	10.5	11.7	12.9	80.9
Urban arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	3.3	4.7
Urban local roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maintenance total	8.9	8.3	9.4	11.0	18.8	23.0	28.4	22.3	29.1	34.4	193.8
Total construction and maintenance	62.8	64.9	70.7	78.4	84.1	101.1	141.1	158.2	170.5	158.7	1 090.6
Planning and research	0.7	0.6	0.7	0.6	0.0	0.0	0.0	0.0	0.0	0.0	2.6
Total road expenditure	63.5	65.5	71.3	79.0	84.1	101.1	141.1	158.2	170.5	158.7	1 093.2

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 5.2 WESTERN AUSTRALIA: STATE GOVERNMENT ROAD REVENUE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Revenue from road users											
Vehicle registration	39.7	43.8	50.1	50.7	57.0	63.0	72.5	78.2	85.5	94.3	634.8
Drivers licence fees	1.7	3.0	5.0	5.5	9.5	9.6	11.7	15.3	13.5	14.8	89.6
Road maintenance tax or State fuel tax	5.2	6.2	16.3	24.4	29.0	33.9	41.3	44.0	46.0	45.0	291.3
Other	9.1	10.9	2.7	3.3	4.3	5.1	3.8	4.3	4.4	5.4	53.3
Total motor taxation	55.7	63.9	74.1	84.0	99.8	111.6	129.3	141.8	149.4	159.6	1 069.2
Less collection costs	0.0	0.0	0.0	0.2	0.2	0.2	0.3	0.0	0.0	0.0	0.9
Net motor taxation	55.7	63.9	74.0	83.8	99.6	111.4	129.1	141.8	149.4	159.6	1 068.3
Loans	0.8	1.0	0.6	1.8	0.2	1.5	1.8	4.0	11.3	8.8	31.8
Other	3.0	2.9	8.7	8.1	8.3	8.5	3.3	3.3	7.7	6.9	60.7
Other authorities	5.8	4.0	7.6	15.3	7.3	9.3	4.6	0.7	2.1	4.2	60.9
Total road revenue	65.3	71.9	90.8	109.0	115.4	130.7	138.8	149.7	170.5	179.5	1 221.6

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 5.3 WESTERN AUSTRALIA: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	3.8	4.8	0.8	7.5	0.7	0.3	1.0	4.3	5.5	4.2	32.9
Rural arterial roads	12.5	15.3	24.7	25.3	16.7	22.1	20.7	32.9	32.9	32.2	235.3
Rural local roads	4.9	5.5	6.0	7.7	11.4	12.4	8.3	10.2	6.9	12.8	86.1
Urban arterial roads	15.4	19.7	25.2	21.8	31.1	35.6	31.3	19.9	30.5	35.9	266.4
Urban local roads	1.5	0.8	1.3	1.4	1.8	2.5	3.7	3.1	2.1	1.8	20.0
Construction total	37.9	46.1	57.9	63.8	61.7	72.9	64.9	70.4	77.9	86.9	640.4
Maintenance											
National roads	0.0	0.1	0.6	0.8	0.0	0.0	0.2	0.1	1.1	4.0	6.9
Rural arterial roads	10.5	12.8	16.2	16.6	21.8	25.0	26.0	28.7	27.6	30.1	215.3
Rural local roads	2.8	3.5	3.8	2.5	1.3	2.5	2.9	2.7	3.8	5.7	31.5
Urban arterial roads	1.7	3.8	3.4	2.8	3.3	3.5	8.3	9.7	8.2	9.0	53.7
Urban local roads	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.6	1.6
Maintenance total	15.1	20.3	24.0	22.8	26.5	31.1	37.5	41.3	40.8	49.4	308.8
Total construction and maintenance	53.0	66.4	81.9	86.5	88.2	104.0	102.3	111.7	118.7	136.2	948.9
Planning and research	0.8	1.0	0.9	1.2	1.3	1.7	1.3	1.7	1.5	1.9	13.3
Total road expenditure	53.8	67.4	82.8	87.7	89.5	105.7	103.6	113.4	120.2	138.2	962.3

TABLE 5.3 (Cont.) WESTERN AUSTRALIA: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)

(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Non-road expenditure											
Loan repayments	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.4	0.5	1.1	3.5
Interest payments	0.5	0.6	0.6	0.8	1.0	1.1	1.3	2.2	2.1	4.1	14.3
Other	8.2	9.8	10.5	13.8	23.5	26.0	31.1	38.4	39.7	43.9	244.9
Non-road total	8.8	10.4	11.3	14.8	24.7	27.4	32.7	41.0	42.4	49.1	262.7

Notes 1. See text for interpretation and qualification of figures in the table.
 2. Owing to rounding, figures may not add to totals.

TABLE 5.4 WESTERN AUSTRALIA: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	10.0	11.7	5.6	5.4	15.4	21.5	14.3	23.9	22.1	24.4	154.3
Urban arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urban local roads	12.2	14.9	15.1	14.7	19.3	15.9	17.3	18.7	24.7	29.1	181.9
Construction total	22.1	26.7	20.7	20.1	34.6	37.4	31.6	42.6	46.8	53.5	336.1
Maintenance											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	6.6	7.8	12.2	14.7	8.5	11.9	12.4	15.5	18.6	17.1	125.3
Urban arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urban local roads	8.1	10.0	8.4	10.1	13.4	13.7	16.4	18.3	19.8	20.1	138.3
Maintenance total	14.8	17.8	20.6	24.8	21.8	25.6	28.8	33.8	38.4	37.2	263.6
Total construction and maintenance	36.9	44.5	41.3	44.9	56.5	63.0	60.4	76.3	85.2	90.7	599.7
Planning and research	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total road expenditure	36.9	44.5	41.3	44.9	56.5	63.0	60.4	76.3	85.2	90.7	599.7

TABLE 5.4 (Cont.) WESTERN AUSTRALIA: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)

(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Pro rata expenditure on general administration	9.3	12.2	11.9	12.9	15.2	17.0	15.0	20.6	17.2	18.5	149.8
Pro rata non-road expenditure attributable to roads											
Loan repayments	5.1	6.1	6.3	7.0	8.8	9.3	9.0	9.6	11.0	11.8	84.0
Interest payments	5.9	7.7	7.1	8.1	9.8	12.0	11.2	11.8	12.5	13.2	99.3
Non-road total	11.0	13.8	13.4	15.1	18.6	21.3	20.2	21.4	23.5	25.0	183.3
Road works funded by private contributions	6.0	5.0	1.2	3.0	3.4	2.5	2.8	2.8	3.5	3.7	33.9

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 5.5 WESTERN AUSTRALIA: TOTAL ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	22.7	23.9	21.3	31.8	19.8	25.9	35.9	48.9	73.9	54.7	358.8
Rural arterial roads	22.5	25.8	36.2	37.3	29.9	38.4	43.2	58.1	52.2	51.6	395.2
Rural local roads	25.8	29.3	24.8	26.8	41.0	46.1	43.4	54.0	48.7	58.3	398.2
Urban arterial roads	26.9	32.1	38.5	36.1	46.6	56.1	60.9	61.2	59.5	63.6	481.5
Urban local roads	16.1	18.3	19.2	19.2	24.4	22.0	25.7	26.8	31.7	36.4	239.8
Construction total	113.9	129.4	139.9	151.3	161.6	188.4	209.2	248.9	266.0	264.7	1 873.5
Maintenance											
National roads	4.6	4.5	5.7	5.9	11.0	13.4	16.8	11.9	14.5	19.0	107.3
Rural arterial roads	10.5	12.8	16.2	16.9	22.3	25.2	26.7	28.7	30.3	33.5	223.1
Rural local roads	13.7	15.2	20.2	22.7	17.1	23.7	26.4	28.7	34.1	35.7	237.5
Urban arterial roads	1.7	3.8	3.4	2.8	3.3	3.5	8.3	9.7	9.6	12.3	58.4
Urban local roads	8.2	10.1	8.5	10.2	13.5	13.8	16.5	18.4	20.0	20.7	139.9
Maintenance total	38.7	46.4	53.9	58.5	67.1	79.7	94.7	97.4	108.3	121.0	766.2
Total construction and maintenance	152.7	175.8	193.8	209.9	228.8	268.2	303.8	346.2	374.4	385.6	2 639.7
Planning and research	1.5	1.5	1.6	1.8	1.3	1.7	1.3	1.7	1.5	1.9	15.8
Total road expenditure	154.2	177.3	195.4	211.6	230.1	269.8	305.1	347.9	375.9	387.6	2 655.5

- Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 5.6 WESTERN AUSTRALIA: COMMONWEALTH ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	43.9	41.1	38.0	39.0	27.2	32.3	41.4	50.1	71.5	50.5	435.1
Rural arterial roads	23.2	22.6	21.3	19.3	18.8	20.5	26.8	28.3	20.2	19.4	220.4
Rural local roads	25.5	25.8	24.5	22.0	20.2	15.4	24.7	22.4	20.6	21.1	222.2
Urban arterial roads	26.7	26.7	24.7	23.0	22.0	26.0	35.3	46.4	30.3	27.7	288.7
Urban local roads	5.6	5.6	5.2	5.0	4.7	4.4	5.7	5.6	5.1	5.5	52.4
Construction total	125.1	121.7	113.7	108.3	92.9	98.6	133.8	152.7	147.8	124.3	1 218.7
Maintenance											
National roads	10.7	9.5	9.5	8.2	15.6	16.9	19.7	13.3	14.0	15.0	132.3
Rural arterial roads	0.0	0.0	0.0	0.5	0.7	0.3	0.8	0.0	2.8	3.4	8.5
Rural local roads	10.0	8.4	8.0	8.8	10.4	11.9	13.2	11.8	12.2	12.9	107.5
Urban arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	3.3	4.8
Urban local roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maintenance total	20.6	17.8	17.4	17.7	26.7	29.0	33.7	25.1	30.4	34.4	253.1
Total construction and maintenance	145.7	139.6	131.2	125.8	119.6	127.7	167.6	177.8	178.3	158.7	1 471.9
Planning and research	1.6	1.3	1.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2
Total road expenditure	147.3	140.9	132.3	126.8	119.6	127.7	167.6	177.8	178.3	158.7	1 477.1

- Notes
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

TABLE 5.7 WESTERN AUSTRALIA: STATE GOVERNMENT ROAD REVENUE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)-----

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Revenue from road users											
Vehicle registration	83.1	84.9	87.4	80.0	81.7	81.9	87.9	89.8	91.8	94.3	862.7
Drivers licence fees	3.6	5.8	8.7	8.7	13.6	12.5	14.2	17.6	14.5	14.8	113.9
Road maintenance tax or State fuel tax	10.9	12.0	28.4	38.5	41.5	44.1	50.1	50.5	49.4	45.0	370.4
Other	19.0	21.1	4.7	5.2	6.2	6.6	4.6	4.9	4.7	5.4	82.5
Total motor taxation	116.5	123.8	129.3	132.5	143.0	145.1	156.7	162.8	160.5	159.6	1 429.9
Less collection costs	0.0	0.0	0.0	0.3	0.3	0.3	0.4	0.0	0.0	0.0	1.2
Net motor taxation	116.5	123.8	129.1	132.2	142.7	144.9	156.5	162.8	160.5	159.6	1 428.6
Loans	1.7	1.9	1.0	2.8	0.3	2.7	2.2	4.6	12.1	8.8	38.2
Other	6.3	5.6	15.2	12.8	11.9	15.9	4.0	3.8	8.3	6.9	90.6
Other authorities	12.1	7.8	13.3	24.1	10.5	12.1	5.6	0.8	2.3	4.2	92.7
Total road revenue	136.6	139.3	158.5	171.9	165.3	175.6	168.2	171.9	183.1	179.5	1 650.0

- Notes**
1. See text for interpretation and qualification of figures in the table.
 2. The ABS Implicit Price Deflator of Gross Domestic Product (ABS 1988) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

TABLE 5.8 WESTERN AUSTRALIA: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	8.8	10.3	1.5	12.0	1.0	0.4	1.2	4.8	5.8	4.2	50.0
Rural arterial roads	29.0	32.9	45.8	40.6	23.8	27.9	24.6	37.0	34.4	32.2	328.1
Rural local roads	11.4	11.8	11.1	12.4	16.2	15.7	9.9	11.5	7.2	12.8	119.9
Urban arterial roads	35.7	42.4	46.8	35.0	44.2	44.9	37.2	22.4	31.9	35.9	376.4
Urban local roads	3.5	1.7	2.4	2.2	2.6	3.2	4.4	3.5	2.2	1.8	27.5
Construction total	87.9	99.1	107.4	102.4	87.8	92.0	77.1	79.1	81.5	86.9	901.3
Maintenance											
National roads	0.0	0.2	1.1	1.3	0.0	0.0	0.2	0.1	1.2	4.0	8.1
Rural arterial roads	24.4	27.5	30.1	26.6	31.0	31.6	30.9	32.2	28.9	30.1	293.3
Rural local roads	6.5	7.5	7.1	4.0	1.8	3.2	3.4	3.0	4.0	5.7	46.2
Urban arterial roads	3.9	8.2	6.3	4.5	4.7	4.4	9.9	10.9	8.6	9.0	70.4
Urban local roads	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.6	2.1
Maintenance total	35.0	43.7	44.5	36.6	37.7	39.3	44.5	46.4	42.7	49.4	419.8
Total construction and maintenance	123.0	142.8	151.9	138.8	125.5	131.3	121.5	125.5	124.1	136.2	1 320.7
Planning and research	1.9	2.2	1.7	1.9	1.8	2.1	1.5	1.9	1.6	1.9	18.5
Total road expenditure	124.8	144.9	153.6	140.8	127.3	133.5	123.0	127.4	125.7	138.2	1 339.3

TABLE 5.8 (Cont.) WESTERN AUSTRALIA: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Non-road expenditure											
Loan repayments	0.2	0.2	0.4	0.3	0.4	0.4	0.4	0.5	0.5	1.1	4.4
Interest payments	1.1	1.2	1.1	1.3	1.5	1.5	1.6	2.6	2.3	4.1	18.2
Other	17.6	19.6	19.0	22.5	34.8	34.8	39.0	45.4	43.2	43.9	319.8
Non-road total	18.9	20.8	20.4	24.1	36.6	36.7	41.0	48.5	46.1	49.1	342.5

- Notes**
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert road expenditure figures from current prices to constant prices.
 3. The ABS Implicit Price Deflator of Gross National Expenditure (ABS 1989) was used to convert non-road expenditure figures from current prices to constant prices.
 4. Owing to rounding, figures may not add to totals.

TABLE 5.9 WESTERN AUSTRALIA: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Construction											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	23.2	25.2	10.4	8.7	21.9	27.1	17.0	26.9	23.1	24.4	207.8
Urban arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urban local roads	28.3	32.0	28.0	23.6	27.5	20.1	20.5	21.0	25.8	29.1	256.0
Construction total	51.3	57.4	38.4	32.3	49.2	47.2	37.5	47.9	49.0	53.5	463.7
Maintenance											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	15.3	16.8	22.6	23.6	12.1	15.0	14.7	17.4	19.5	17.1	174.1
Urban arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urban local roads	18.8	21.5	15.6	16.2	19.1	17.3	19.5	20.6	20.7	20.1	189.3
Maintenance total	34.3	38.3	38.2	39.8	31.0	32.3	34.2	38.0	40.2	37.2	363.5
Total construction and maintenance	85.6	95.7	76.6	72.1	80.4	79.5	71.7	85.7	89.1	90.7	827.2
Planning and research	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total road expenditure	85.6	95.7	76.6	72.1	80.4	79.5	71.7	85.7	89.1	90.7	827.2

TABLE 5.9 (Cont.) WESTERN AUSTRALIA: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Pro rata expenditure on general administration	20.0	24.4	21.5	21.0	22.5	22.8	18.8	24.4	18.7	18.5	191.5
Pro rata non-road expenditure attributable to roads											
Loan repayments	11.0	12.2	11.4	11.4	13.0	12.4	11.3	11.4	12.0	11.8	117.8
Interest payments	12.7	15.4	12.8	13.2	14.5	16.1	14.1	14.0	13.6	13.2	139.5
Non-road total	23.7	27.5	24.2	24.6	27.6	28.5	25.3	25.3	25.5	25.0	257.3
Road works funded by private contributions	13.9	10.8	2.2	4.8	4.8	3.2	3.3	3.1	3.7	3.7	53.5

- Notes**
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert road expenditure figures and the figures for road works funded by private contributions from current prices to constant prices.
 3. The ABS Implicit Price Deflator of Gross National Expenditure (ABS 1988) was used to convert non-road expenditure figures from current prices to constant prices.
 4. Owing to rounding, figures may not add to totals.

TABLE 5.10 WESTERN AUSTRALIA: TOTAL ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	52.7	51.4	39.5	51.0	28.2	32.7	42.6	54.9	77.3	54.7	485.1
Rural arterial roads	52.2	55.5	68.3	59.9	42.5	48.5	51.3	65.3	54.6	51.6	549.6
Rural local roads	59.9	63.0	46.0	43.0	58.3	58.2	51.5	60.7	50.9	58.3	549.9
Urban arterial roads	62.4	69.0	71.4	57.9	66.3	70.8	72.3	68.8	62.2	63.6	664.9
Urban local roads	37.4	39.4	35.6	30.8	34.7	27.8	30.5	30.1	33.2	36.4	335.8
Construction total	264.3	278.3	259.6	242.9	229.9	237.9	248.5	279.7	278.2	264.7	2 583.8
Maintenance											
National roads	10.7	9.7	10.6	9.5	15.6	16.9	20.0	2.1	15.2	19.0	129.2
Rural arterial roads	24.4	27.5	30.1	27.1	31.7	31.8	31.7	32.2	31.7	33.5	301.8
Rural local roads	31.8	32.7	37.5	36.4	24.3	29.9	31.4	32.2	35.7	35.7	327.6
Urban arterial roads	3.9	8.2	6.3	4.5	4.7	4.4	9.9	10.9	10.0	12.3	75.1
Urban local roads	19.0	21.7	15.8	16.4	19.2	17.4	19.6	31.9	20.9	20.7	202.6
Maintenance total	89.8	99.8	100.0	93.9	95.4	100.6	112.5	109.4	113.3	121.0	1 036.4
Total construction and maintenance	354.3	378.1	359.6	336.9	325.5	338.6	360.8	389.0	391.6	385.6	3 620.0
Planning and research	3.5	3.2	3.0	2.9	1.8	2.1	1.5	1.9	1.6	1.9	23.5
Total road expenditure	357.8	381.3	362.5	339.6	327.3	340.7	362.4	390.9	393.2	387.6	3 643.3

- Notes**
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

CHAPTER 6 SOUTH AUSTRALIA

Details of road expenditure by Commonwealth, State and local governments in South Australia, and State road revenue collections, are shown in current prices and constant 1986-87 prices in tables 6.1 to 6.10.

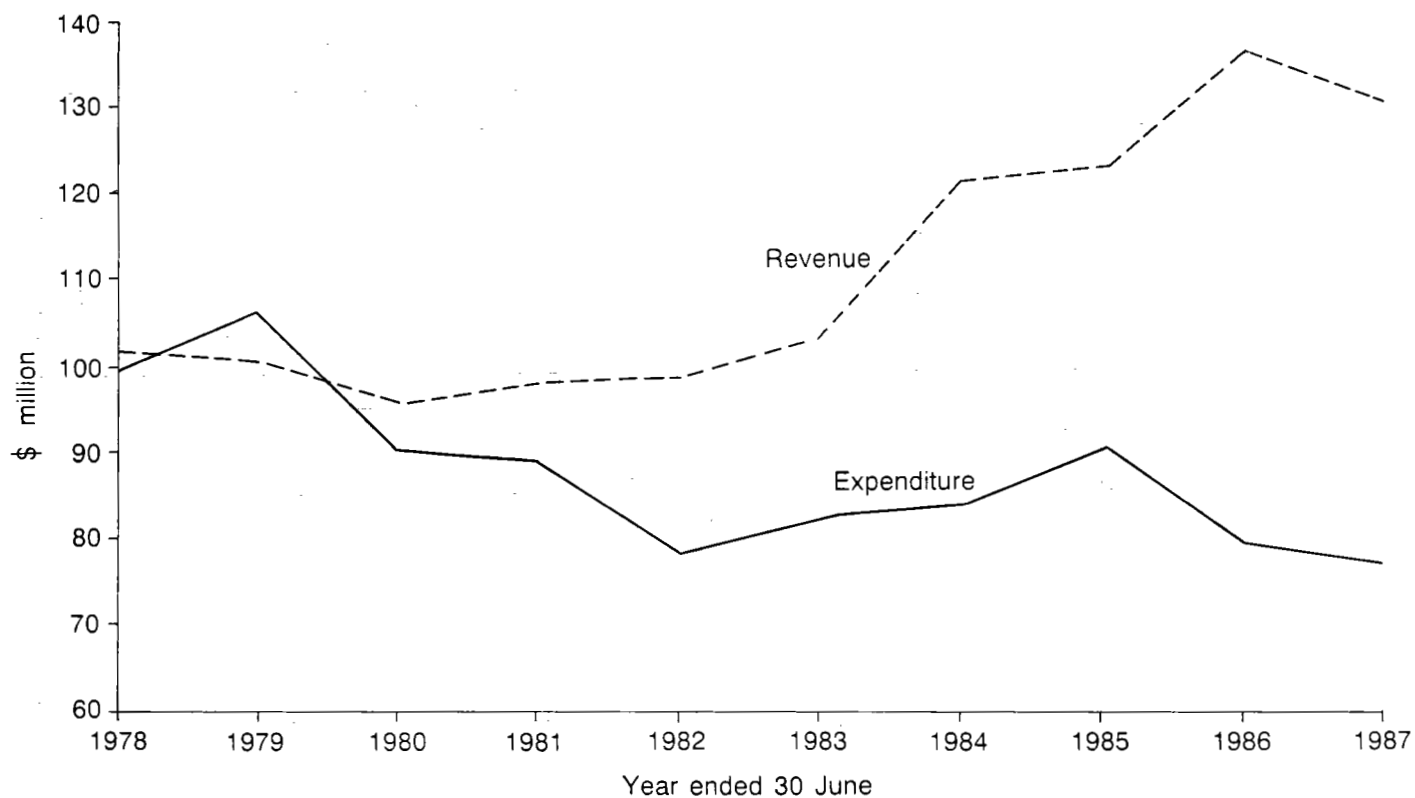
REVENUE

In South Australia, the main road revenue collecting agencies for the period 1977-78 to 1986-87 were the Department of Transport, the Treasury and the Highways Department. Major Acts under which revenue was collected included:

- . the *Motor Vehicles Act 1959*;
- . the *Highways Act 1926*; and
- . the *Business Franchise (Petroleum Products) Act 1979*.

The Motor Registration Division of the Department of Transport collected registration fees for motor vehicles and drivers licence fees. Receipts, less the cost of collection, were credited to the Highways Trust Fund under the *Highways Act*.

The fund was also credited with interest on and repayments of advances made to local government authorities for road works and purchases of machinery, contributions from authorities towards street lighting costs, contributions from the State Transport Authority for road maintenance and storm drainage works, and sundry minor receipts. From time to time, the Department also received loan funds from the State Treasury. During 1985-86, the Highways Department received \$16 million as a loan from Treasury, which was equivalent to 11.7 per cent of total road revenue for that year, but in 1986-87 the Department received no loan funds at all from Treasury (table 6.7). The Highways Trust Fund also received Commonwealth assistance for South Australian roads provided under various Commonwealth Roads Acts.



Note Deflator used: BTCE Road Construction Price Index.

Figure 6.1 South Australia: State government road revenue and State government road expenditure, 1977-78 to 1986-87 (constant 1986-87 prices)

State road revenue and State road expenditure between 1977-78 and 1986-87, in constant 1986-87 prices, is shown in figure 6.1. The gap between revenue raised and expenditure on roads continued to widen from 1979-80 until 1986-87. Only in 1978-79 was road expenditure higher than road revenue, and the gap increased after the introduction of the *Business Franchise (Petroleum Products) Act* in 1979.

EXPENDITURE

The Highways Department is the main authority carrying out road construction and maintenance in South Australia. The Department also provides grants to local government authorities for road works. It operates several vehicular ferries on the Murray River and a ship, the *MV Troubridge*, which plies between Port Adelaide, Kingscote (Kangaroo Island) and Port Lincoln. Two other State agencies, the South Australian Housing Trust and the Department of Marine and Harbors, also undertake public works in developing residential and port areas respectively.

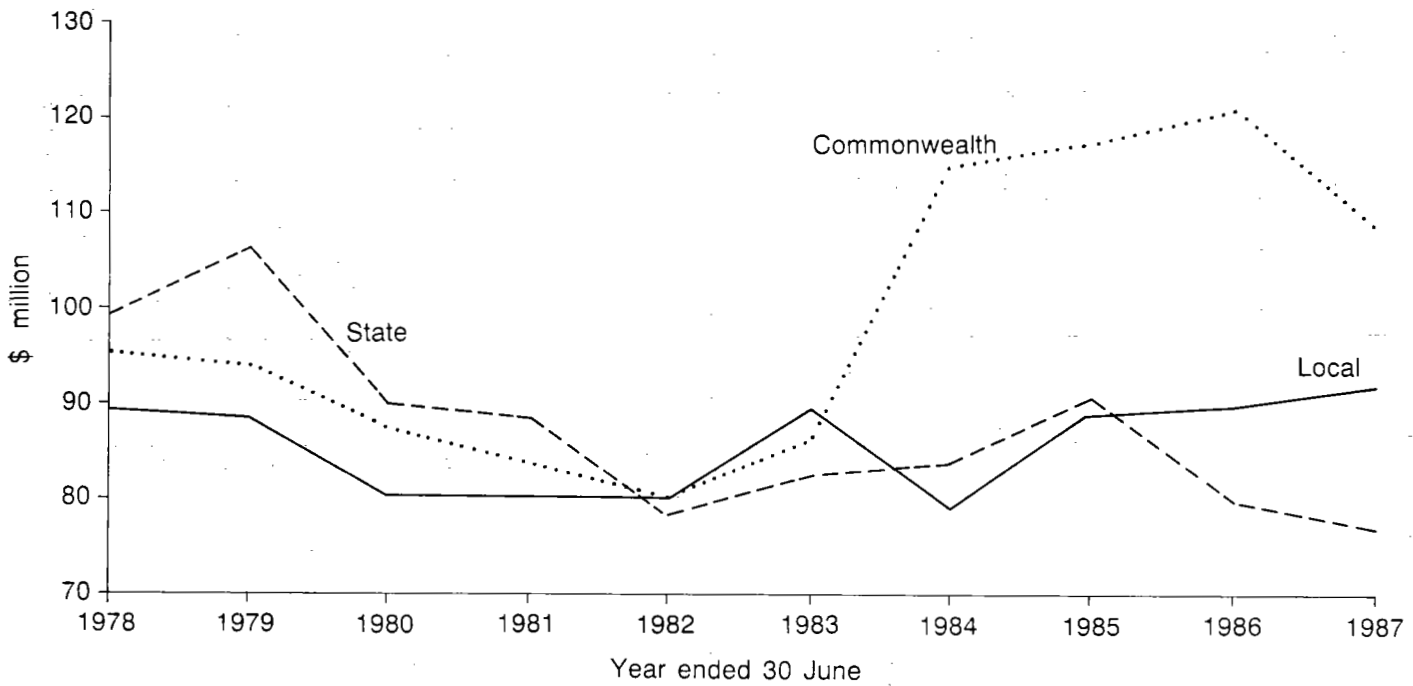
During the decade 1977-78 to 1986-87, over \$2.7 billion was spent in total on roads in South Australia by all three levels of government. The share of expenditure by the Commonwealth was about 36.3 per cent of the total, while State and local governments contributed 32.2 per cent and 31.5 per cent respectively.

Changes in expenditure level

Figure 6.2 shows the variation in levels of road expenditure by Commonwealth, State and local governments in South Australia between 1977-78 and 1986-87.

Commonwealth expenditure declined from its 1977-78 level of \$95.4 million to reach \$80.2 million in 1981-82, but after the introduction of the ABRD program, funds increased by nearly 50 per cent between 1981-82 and 1985-86 to reach \$121 million. However, there was a 10 per cent reduction in funds in 1986-87.

State government expenditure on roads declined from its 1978-79 level of \$106.2 million to \$78.5 million in 1981-82, a fall of 26 per cent. However, it recovered somewhat during the next three years to reach nearly \$91 million in 1984-85, which was still 14 per cent less than the 1978-79 level. State funds fell again by 12 per cent in 1985-86 and by a further 4 per cent in 1986-87.



Note Deflator used: BTCE Road Construction Price Index.

Figure 6.2 South Australia: road expenditure by level of government, 1977-78 to 1986-87 (constant 1986-87 prices)

Local government expenditure on roads changed less dramatically during the decade, varying between \$79 million in 1983-84 and \$92 million in 1986-87, and touching \$89 million on four occasions. Local government maintenance expenditure grew from 46 per cent of total expenditure in 1977-78 to 58 per cent in 1986-87 (table 6.9). This increase in expenditure on road maintenance since 1977-78 has been met by the Commonwealth government and local government authorities.

In South Australia, funds allocated to planning and research have consistently fallen since 1977-78 (table 6.10).

Expenditure by road category

Figure 6.3 shows changes in expenditure by road type between 1977-78 and 1986-87 in South Australia. Urban local roads had the highest priority, and received the largest expenditure for seven of the ten years in this period. In two years, national roads received more than urban local roads. Rural local and urban local roads together attracted 43 per cent of total funds during the decade 1977-78 to 1986-87.

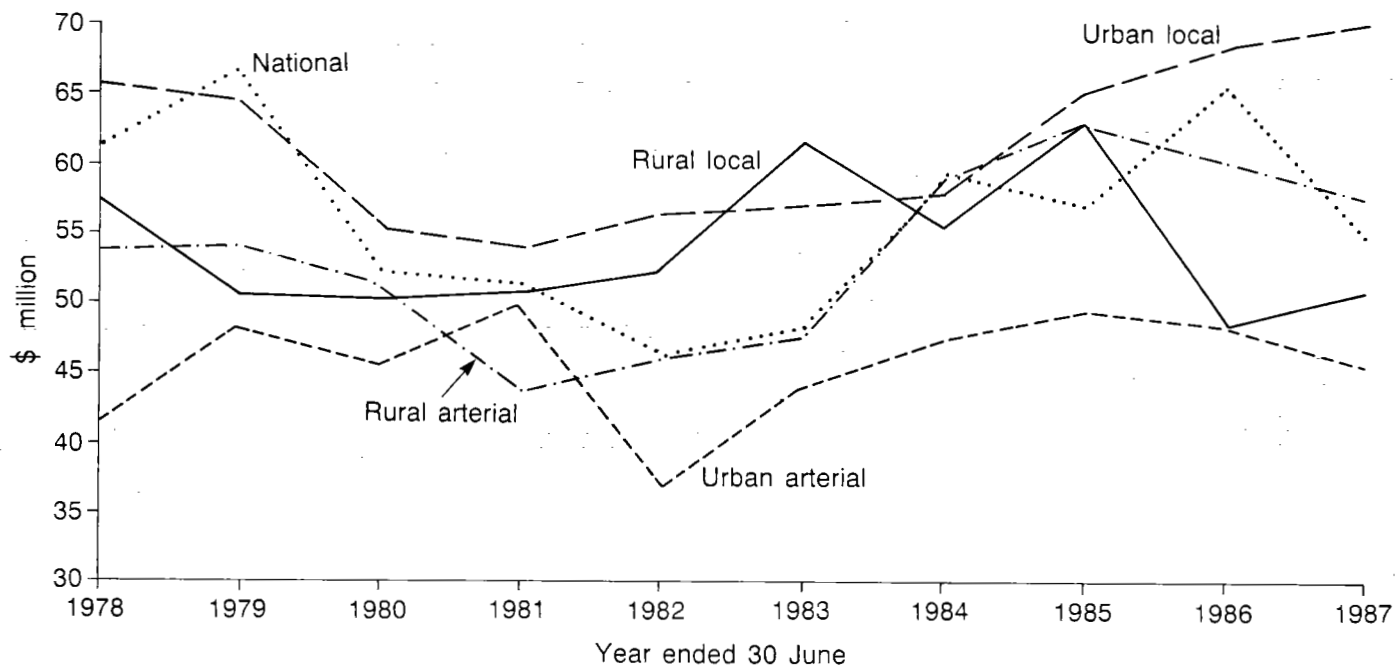
Expenditure on national roads in South Australia fell from \$66.6 million in 1978-79 to \$46.3 million in 1981-82 but recovered with the introduction of the ABRD program in 1982 to reach \$65.4 million in 1985-86. However, funding fell 16.8 per cent to \$54.4 million in 1986-87. National roads in South Australia recorded increasing expenditure on maintenance. The amount spent rose to \$18.7 million in 1986-87 from \$9.7 million in 1977-78.

Rural local roads in South Australia attracted more than 20 per cent of total available funds for a number of years. The highest allocation was in 1982-83 - nearly 23.9 per cent of total expenditure.

Expenditure on rural arterial roads fluctuated between a low of \$43.8 million in 1980-81 and a high of \$63.0 million in 1984-85.

Funds for rural local roads declined from \$57.3 million in 1977-78 to \$50.7 million in 1980-81. Funding recovered to reach a peak of \$62.7 million in 1984-85, followed by a fall of 4 per cent in 1985-86 followed by a rise in 1986-87.

Urban arterial roads received varying allocations of funds between 1977-78 and 1981-82, reaching a high point of \$49.7 million in 1980-81 followed by a low of



Note Deflator used: BTCE Road Construction Price Index.

Figure 6.3 South Australia: total road expenditure by road category, 1977-78 to 1986-87 (constant 1986-87 prices)

\$36.8 million the following year. There was a recovery of funding to \$49.3 million in 1984-85, but reductions were again recorded in 1985-86 and 1986-87 (table 6.10).

NON-ROAD EXPENDITURE

Tables 6.3, 6.4, 6.8 and 6.9 show details of non-road expenditure incurred by the South Australian State government and the local government authorities for the years 1977-78 to 1986-87. The significance of non-road expenditure is explained in appendix I. The use of road revenue by the South Australian State government for other than road expenditure is described below.

An amount of gross motor vehicle registration receipts, prescribed by regulation, is paid annually to the Police Department for traffic and road safety services. In 1986-87, this amount was over 12 per cent of gross motor vehicle registration and drivers licence fees, and in 1985-86 was over 14 per cent. Other non-road expenditures include part of the fuel franchise fee retained by Treasury for consolidated revenue and spent on shipping services by the Highways Department. Debt servicing and loan repayments were not significant before 1985-86 but in 1986-87 they were equivalent to 8 per cent of State road expenditure. Total non-road expenditure increased in the mid 1980s and was equal to nearly 60 per cent of State government road expenditure in 1986-87 (table 6.8).

COLLECTION COSTS

Collection costs are deducted before motor vehicle revenue is credited to the Highways Trust Fund in South Australia. As a proportion of gross motor vehicle taxation, costs have ranged from 14.7 per cent in 1978-79 to 10.9 per cent in 1986-87, owing mainly to increases in revenue from motor vehicle registration and drivers licences during 1986-87.

TABLE 6.1 SOUTH AUSTRALIA: COMMONWEALTH ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	17.0	17.6	19.6	21.1	23.2	26.9	39.8	34.9	42.0	34.2	276.3
Rural arterial roads	7.3	8.4	8.4	9.0	6.8	8.2	14.5	17.6	19.9	17.5	117.6
Rural local roads	3.5	3.9	3.6	4.3	3.7	4.9	8.0	8.4	8.9	8.4	57.6
Urban arterial roads	4.8	5.1	5.5	6.3	9.9	13.6	16.7	19.0	22.3	15.2	118.4
Urban local roads	2.3	2.5	2.8	2.4	2.7	2.9	3.8	5.9	7.5	8.3	41.1
Construction total	34.9	37.6	39.9	43.2	46.4	56.4	82.7	85.7	100.6	83.6	611.0
Maintenance											
National roads	2.0	2.1	2.3	3.9	4.1	5.7	7.5	12.0	7.1	17.6	64.3
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	3.5	3.5	4.4	4.5	5.7	5.8	6.6	6.6	7.8	7.9	56.3
Urban arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urban local roads	0.0	0.0	0.0	0.2	0.3	0.2	0.2	0.0	0.2	0.0	1.3
Maintenance total	5.5	5.6	6.7	8.6	10.1	11.7	14.4	18.8	15.1	25.5	122.0
Total construction and maintenance	40.4	43.2	46.6	51.7	56.4	68.1	97.1	104.5	115.7	109.1	732.8
Planning and research	0.7	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	2.2
Total road expenditure	41.1	43.7	47.1	52.2	56.4	68.1	97.1	104.5	115.7	109.1	735.0

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 6.2 SOUTH AUSTRALIA: STATE GOVERNMENT ROAD REVENUE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Revenue from road users											
Vehicle registration	42.1	45.6	38.5	40.3	44.4	51.0	53.1	55.2	60.1	71.9	502.2
Drivers licence fees	4.5	4.0	4.7	4.1	5.3	7.6	6.9	8.6	11.0	17.6	74.3
Road maintenance tax or State fuel tax	4.8	4.8	15.3	20.3	23.8	25.8	38.6	48.5	46.4	47.0	275.3
Other	1.3	1.2	1.5	1.7	1.8	2.0	2.2	2.1	1.8	1.9	17.5
Total motor taxation	52.7	55.6	59.9	66.3	75.4	86.4	100.7	114.4	119.3	138.4	869.1
Less collection costs	7.7	8.2	8.4	9.1	9.9	10.3	11.0	12.2	13.8	15.0	105.6
Net motor taxation	45.1	47.4	51.5	57.2	65.5	76.1	89.7	102.2	105.5	123.4	763.6
Loans	0.0	1.0	0.0	0.0	0.0	0.0	5.5	0.2	14.9	0.0	21.6
Other	1.1	0.9	1.1	2.7	1.6	1.1	1.8	1.4	2.1	3.2	17.0
Other authorities	2.4	2.4	2.2	2.2	1.8	2.3	3.4	3.4	4.9	4.5	29.5
Total road revenue	48.6	51.8	54.8	62.2	68.9	79.6	100.4	107.3	127.3	131.1	832.0

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 6.3 SOUTH AUSTRALIA: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	5.1	8.6	3.9	6.1	4.6	4.5	2.2	2.9	10.3	1.5	49.7
Rural arterial roads	4.7	4.2	5.4	2.8	5.7	7.1	10.2	12.8	8.9	10.3	72.1
Rural local roads	2.0	0.8	0.9	1.4	2.2	2.1	1.9	3.2	2.8	2.5	19.8
Urban arterial roads	8.1	10.4	11.8	16.1	7.4	10.7	11.8	11.7	13.8	18.5	120.3
Urban local roads	3.2	3.0	2.8	3.0	2.9	3.5	4.7	5.6	5.8	5.2	39.7
Construction total	23.1	27.0	24.7	29.5	22.8	27.9	30.8	36.2	41.5	37.9	301.4
Maintenance											
National roads	2.2	2.7	2.4	1.0	0.7	1.0	0.2	0.9	3.1	1.1	15.3
Rural arterial roads	10.7	11.9	13.4	15.0	19.8	22.4	24.8	25.6	17.5	23.0	184.1
Rural local roads	1.3	1.1	1.4	2.0	2.7	3.3	3.2	4.4	3.9	2.9	26.2
Urban arterial roads	3.9	4.8	5.3	6.3	8.6	10.3	11.3	13.2	10.0	11.7	85.4
Urban local roads	0.2	0.2	0.2	0.0	0.1	0.1	0.1	0.1	0.0	0.2	1.2
Maintenance total	18.3	20.6	22.7	24.3	32.0	37.2	39.6	44.2	34.6	38.9	312.4
Total construction and maintenance	41.4	47.6	47.4	53.8	54.8	65.1	70.4	80.4	76.1	76.9	613.9
Planning and research	1.5	1.8	1.2	1.4	0.4	0.3	0.4	0.4	0.3	0.1	7.8
Total road expenditure	42.9	49.4	48.6	55.3	55.2	65.3	70.7	80.8	76.4	77.0	621.6

TABLE 6.3 (Cont.) SOUTH AUSTRALIA: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)

(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Non-road expenditure											
Loan repayments	0.2	0.2	0.2	0.2	1.0	1.2	0.0	0.1	0.0	2.6	5.7
Interest payments	0.6	0.6	0.6	0.6	0.9	0.7	1.0	0.8	1.9	3.3	11.0
Other	3.1	3.3	3.5	4.6	5.9	8.2	24.2	34.6	32.7	39.9	160.0
Non-road total	3.9	4.1	4.3	5.5	7.9	10.1	25.1	35.5	34.5	45.8	176.7

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 6.4 SOUTH AUSTRALIA: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.3	0.3	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.1
Rural local roads	7.8	7.7	6.5	8.6	9.4	10.5	11.4	15.1	15.6	15.2	107.8
Urban arterial roads	0.7	1.4	1.2	1.3	0.0	0.0	0.0	0.0	0.0	0.0	4.6
Urban local roads	12.2	13.2	11.4	12.3	15.3	17.0	16.3	20.8	22.8	23.0	164.3
Construction total	20.9	22.4	19.2	22.4	24.7	27.5	27.7	35.9	38.4	38.2	277.3
Maintenance											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.8
Rural local roads	6.6	6.5	10.3	10.8	13.1	22.1	15.4	18.1	18.5	20.5	141.9
Urban arterial roads	0.4	0.7	0.8	1.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9
Urban local roads	10.4	11.2	12.7	15.7	18.4	21.3	23.6	25.3	29.0	33.2	200.8
Maintenance total	17.6	18.6	24.0	27.7	31.5	43.4	39.0	43.3	47.5	53.7	346.3
Total construction and maintenance	38.5	41.1	43.3	50.1	56.3	70.9	66.7	79.2	85.9	91.9	623.9
Planning and research	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total road expenditure	38.5	41.1	43.3	50.1	56.3	70.9	66.7	79.2	85.9	91.9	623.9

TABLE 6.4 (Cont.) SOUTH AUSTRALIA: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)

(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Pro rata expenditure on general administration	5.9	6.9	9.7	10.2	11.3	15.3	12.5	14.1	16.5	17.9	120.3
Pro rata non-road expenditure attributable to roads											
Loan repayments	2.5	3.0	3.4	3.6	3.7	5.2	4.1	4.6	5.0	5.4	40.5
Interest payments	2.7	3.3	4.5	5.2	5.4	7.8	6.1	6.5	7.0	7.3	55.8
Non-road total	5.2	6.3	7.9	8.8	9.1	13.0	10.2	11.1	12.0	12.7	96.3
Road works funded by private contributions	2.3	2.2	1.2	1.2	1.4	1.6	1.4	1.5	2.5	2.9	18.2

- Notes** 1. See text for interpretation and qualification of figures in the table.
 2. Owing to rounding, figures may not add to totals.

TABLE 6.5 SOUTH AUSTRALIA: TOTAL ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	22.2	26.2	23.5	27.3	27.8	31.4	41.9	37.7	52.3	35.7	326.0
Rural arterial roads	12.3	12.9	14.0	12.1	12.5	15.2	24.7	30.4	28.8	27.8	190.7
Rural local roads	13.3	12.4	11.0	14.3	15.3	17.5	21.3	26.7	27.3	26.1	185.2
Urban arterial roads	13.6	16.9	18.4	23.7	17.3	24.4	28.5	30.7	36.1	33.7	243.3
Urban local roads	17.7	18.6	16.9	17.7	20.9	23.4	24.8	32.3	36.1	36.5	244.9
Construction total	79.0	87.0	83.8	95.1	93.9	111.9	141.2	157.8	180.5	159.7	1 189.9
Maintenance											
National roads	4.2	4.8	4.7	4.8	4.8	6.7	7.7	12.9	10.2	18.7	79.5
Rural arterial roads	10.9	12.1	13.6	15.2	19.8	22.4	24.8	25.6	17.5	23.0	184.9
Rural local roads	11.4	11.1	16.1	17.3	21.5	31.2	25.3	29.1	30.2	31.3	224.5
Urban arterial roads	4.3	5.5	6.2	7.3	8.6	10.3	11.3	13.2	10.0	11.7	88.4
Urban local roads	10.6	11.4	12.9	15.9	18.8	21.6	23.9	25.6	29.2	33.4	203.3
Maintenance total	41.4	44.9	53.4	60.6	73.6	92.3	93.0	106.3	97.2	118.1	780.8
Total construction and maintenance	120.4	131.9	137.2	155.6	167.5	204.1	234.2	264.1	277.7	277.9	1 970.6
Planning and research	2.2	2.3	1.7	1.9	0.4	0.3	0.4	0.4	0.3	0.1	10.0
Total road expenditure	122.5	134.2	138.9	157.6	167.9	204.3	234.6	264.5	278.0	278.0	1 980.6

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 6.6 SOUTH AUSTRALIA: COMMONWEALTH ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Construction											
National roads	39.4	37.8	36.4	33.9	33.0	34.0	47.3	39.2	43.9	34.2	379.1
Rural arterial roads	16.9	18.1	15.6	14.4	9.7	10.4	17.2	19.8	20.8	17.5	160.4
Rural local roads	8.1	8.4	6.7	6.9	5.3	6.2	9.5	9.4	9.3	8.4	78.2
Urban arterial roads	11.1	11.0	10.2	10.1	14.1	17.2	19.8	21.3	23.3	15.2	153.4
Urban local roads	5.3	5.4	5.2	3.9	3.8	3.7	4.5	6.6	7.8	8.3	54.5
Construction total	81.0	80.9	74.0	69.3	66.0	71.2	98.2	96.3	105.2	83.6	825.8
Maintenance											
National roads	4.6	4.5	4.3	6.3	5.8	7.2	8.9	13.5	7.4	17.6	80.1
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	8.1	7.5	8.2	7.2	8.1	7.3	7.8	7.4	8.2	7.9	77.8
Urban arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urban local roads	0.0	0.0	0.0	0.3	0.4	0.3	0.2	0.2	0.2	0.0	1.7
Maintenance total	12.8	12.0	12.4	13.8	14.4	14.8	17.1	21.1	15.8	25.5	159.7
Total construction and maintenance	93.7	92.9	86.5	83.0	80.2	86.0	115.3	117.4	121.0	109.1	985.2
Planning and research	1.6	1.1	0.9	0.8	0.0	0.0	0.0	0.0	0.0	0.0	4.4
Total road expenditure	95.4	94.0	87.4	83.8	80.2	86.0	115.3	117.4	121.0	109.1	989.6

- Notes**
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

TABLE 6.7 SOUTH AUSTRALIA: STATE GOVERNMENT ROAD REVENUE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Revenue from road users											
Vehicle registration	88.1	88.4	67.2	63.6	63.3	66.3	64.4	63.4	64.6	71.9	701.3
Drivers licence fees	9.4	7.8	8.2	6.5	7.6	9.9	8.4	9.9	11.8	17.6	97.0
Road maintenance tax or State fuel tax	10.0	9.3	26.7	32.0	34.1	33.6	46.8	55.7	49.8	47.0	345.0
Other	2.7	2.3	2.6	2.7	2.6	2.6	2.7	2.4	1.9	1.9	24.4
Total motor taxation	110.3	107.8	104.5	104.6	108.0	112.4	122.1	131.3	128.1	138.4	1 167.4
Less collection costs	16.1	15.9	14.7	14.4	14.2	13.4	13.3	14.0	14.8	15.0	145.8
Net motor taxation	94.4	91.9	89.9	90.2	93.8	99.0	108.7	117.3	113.3	123.4	1 021.9
Loans	0.0	1.9	0.0	0.0	0.0	0.0	6.7	0.2	16.0	0.0	24.8
Other	2.3	1.7	1.9	4.3	2.3	1.4	2.2	1.6	2.3	3.2	23.2
Other authorities	5.0	4.7	3.8	3.5	2.6	3.0	4.1	3.9	5.3	4.5	40.3
Total road revenue	101.7	100.4	95.6	98.1	98.7	103.5	121.7	123.2	136.7	131.1	1 110.8

- Notes
1. See text for interpretation and qualification of figures in the table.
 2. The ABS Implicit Price Deflator of Gross Domestic Product (ABS 1988) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

TABLE 6.8 SOUTH AUSTRALIA: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Construction											
National roads	11.8	18.5	7.2	9.8	6.5	5.7	2.6	3.3	10.8	1.5	77.7
Rural arterial roads	10.9	9.0	10.0	4.5	8.1	9.0	12.1	14.4	9.3	10.3	97.6
Rural local roads	4.6	1.7	1.7	2.2	3.1	2.7	2.3	3.6	2.9	2.5	27.3
Urban arterial roads	18.8	22.4	21.9	25.8	10.5	13.5	14.0	13.1	14.4	18.5	173.0
Urban local roads	7.4	6.5	5.2	4.8	4.1	4.4	5.6	6.3	6.1	5.2	55.6
Construction total	53.6	58.1	45.8	47.4	32.4	35.2	36.6	40.7	43.4	37.9	431.1
Maintenance											
National roads	5.1	5.8	4.5	1.6	1.0	1.3	0.2	1.0	3.2	1.1	24.8
Rural arterial roads	24.8	25.6	24.9	24.1	28.2	28.3	29.5	28.8	18.3	23.0	255.3
Rural local roads	3.0	2.4	2.6	3.2	3.8	4.2	3.8	4.9	4.1	2.9	34.9
Urban arterial roads	9.0	10.3	9.8	10.1	12.2	13.0	13.4	14.8	10.5	11.7	115.0
Urban local roads	0.5	0.4	0.4	0.0	0.1	0.1	0.1	0.1	0.0	0.2	2.0
Maintenance total	42.5	44.3	42.1	39.0	45.5	47.0	47.0	49.7	36.2	38.9	432.2
Total construction and maintenance	96.1	102.4	87.9	86.4	78.0	82.2	83.6	90.3	79.6	76.9	863.3
Planning and research	3.5	3.9	2.2	2.2	0.6	0.4	0.5	0.4	0.3	0.1	14.1
Total road expenditure	99.5	106.2	90.2	88.8	78.5	82.4	84.0	90.8	79.9	77.0	877.3

TABLE 6.8 (Cont.) SOUTH AUSTRALIA: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Non-road expenditure											
Loan repayments	0.4	0.4	0.4	0.3	1.5	1.6	0.0	0.1	0.0	2.6	7.3
Interest payments	1.3	1.2	1.1	1.0	1.3	0.9	0.0	0.9	2.1	3.3	13.1
Other	6.7	6.6	6.3	7.5	8.7	11.0	30.4	40.9	35.5	39.9	193.5
Non-road total	8.4	8.2	7.8	9.0	11.7	13.5	31.5	42.0	37.5	45.8	214.0

- Notes**
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert road expenditure figures from current prices to constant prices.
 3. The ABS Implicit Price Deflator of Gross National Expenditure (ABS 1988) was used to convert non-road expenditure figures from current prices to constant prices.
 4. Owing to rounding, figures may not add to totals.

TABLE 6.9 SOUTH AUSTRALIA: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.7	0.6	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	2.2
Rural local roads	18.1	16.6	12.1	13.8	13.4	13.3	13.5	17.0	16.3	15.2	149.2
Urban arterial roads	1.6	3.0	2.2	2.1	0.0	0.0	0.0	0.0	0.0	0.0	8.9
Urban local roads	28.3	28.4	21.2	19.7	21.8	21.5	19.4	23.4	23.8	23.0	230.4
Construction total	48.5	48.2	35.6	36.0	35.1	34.7	32.9	40.3	40.2	38.2	389.7
Maintenance											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.5	0.4	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.6
Rural local roads	15.3	14.0	19.1	17.3	18.6	27.9	18.3	20.3	19.4	21.2	191.5
Urban arterial roads	0.9	1.5	1.5	1.6	0.0	0.0	0.0	0.0	0.0	0.0	5.5
Urban local roads	24.1	24.1	23.6	25.2	26.2	26.9	28.0	28.4	30.3	32.5	269.3
Maintenance total	40.8	40.0	44.5	44.5	44.8	54.8	46.3	48.7	49.7	53.7	467.8
Total construction and maintenance	89.3	88.4	80.3	80.4	80.1	89.5	79.2	89.0	89.9	91.9	858.0
Planning and research	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total road expenditure	89.3	88.4	80.3	80.4	80.1	89.5	79.2	89.0	89.9	91.9	858.0

TABLE 6.9 (Cont.) SOUTH AUSTRALIA: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Pro rata expenditure on general administration	12.7	13.8	17.5	16.6	16.7	20.5	15.7	16.7	17.9	17.9	166.0
Pro rata non-road expenditure attributable to roads											
Loan repayments	5.4	6.0	6.1	5.9	5.5	7.0	5.1	5.4	5.4	5.4	57.2
Interest payments	5.8	6.6	8.1	8.5	8.0	10.4	7.7	7.7	7.6	7.3	77.7
Non-road total	11.2	12.6	14.3	14.4	13.5	17.4	12.8	13.1	13.0	12.7	134.9
Road works funded by private contributions	5.3	4.7	2.2	1.9	2.0	2.0	1.7	1.7	2.6	2.9	27.1

- Notes
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert road expenditure figures and the figures for road works funded by private contributions from current prices to constant prices.
 3. The ABS Implicit Price Deflator of Gross National Expenditure (ABS 1988) was used to convert non-road expenditure figures from current prices to constant prices.
 4. Owing to rounding, figures may not add to totals.

TABLE 6.10 SOUTH AUSTRALIA: TOTAL ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	51.5	56.3	43.6	43.8	39.5	39.6	49.8	42.4	54.7	35.7	457.0
Rural arterial roads	28.5	27.7	26.0	19.4	17.8	19.2	29.3	34.2	30.1	27.8	260.1
Rural local roads	30.9	26.7	20.4	23.0	21.8	22.1	25.3	30.0	28.6	26.1	254.7
Urban arterial roads	31.6	36.3	34.1	38.0	24.6	30.8	33.8	34.5	37.8	33.7	335.3
Urban local roads	41.1	40.0	31.4	28.4	29.7	29.5	29.5	36.3	37.8	36.5	340.1
Construction total	183.3	187.1	155.5	152.6	133.6	141.3	167.7	177.3	188.8	159.7	1 646.9
Maintenance											
National roads	9.7	10.3	8.7	7.7	6.8	8.5	9.1	14.5	10.7	18.7	104.8
Rural arterial roads	25.3	26.2	25.2	24.4	28.2	28.3	29.5	28.8	18.3	23.0	257.1
Rural local roads	26.5	23.9	29.9	27.8	30.6	39.4	30.0	32.7	31.6	31.3	303.6
Urban arterial roads	10.0	11.8	11.5	11.7	12.2	13.0	13.4	14.8	10.5	11.7	120.7
Urban local roads	24.6	24.5	23.9	25.5	26.7	27.3	28.4	28.8	30.5	33.4	273.7
Maintenance total	96.1	96.8	99.1	97.3	104.7	116.5	110.5	119.4	101.7	118.1	1 060.1
Total construction and maintenance	279.4	283.9	254.5	249.8	238.3	257.7	278.1	296.7	290.5	277.9	2 706.8
Planning and research	5.1	4.9	3.2	3.0	0.6	0.4	0.5	0.4	0.3	0.1	18.5
Total road expenditure	284.2	288.8	257.7	253.0	238.8	258.8	278.6	297.2	290.8	278.0	2 725.1

- Notes
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

CHAPTER 7 TASMANIA

Details of road expenditure by Commonwealth, State and local governments in Tasmania, and State road revenue collections, are presented, in current and constant 1986-87 prices, in tables 7.1 to 7.10.

REVENUE

In Tasmania five agencies are involved in collecting road revenue:

- . the Transport Department;
- . the Police Department;
- . the Forestry Department;
- . the Treasury; and
- . the Department of Main Roads.

The Road Transport Branch and Traffic Engineering Section of the Transport Department are responsible for collecting the following items:

- . motor tax;
- . registration and drivers licence fees;
- . fire levies;
- . public vehicle fees;
- . numberplate fees; and
- . other minor miscellaneous fees and charges.

The Police Department is responsible for collecting all motor vehicle taxes from Tasmanians who do not live in major towns and these taxes are paid into the Motor Taxation Revenue Account of the Transport Department.

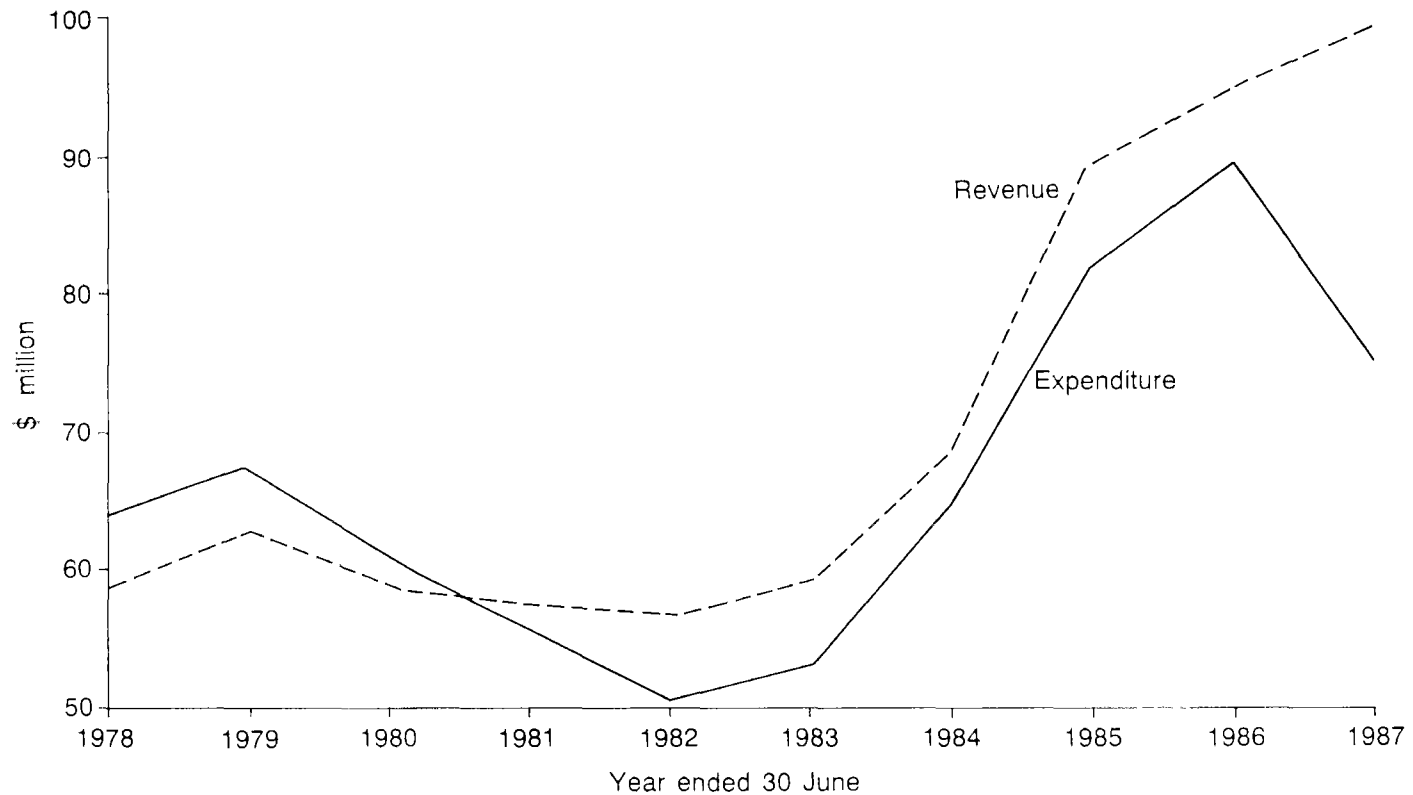
The Forestry Department imposes a road toll on trucks which use forestry roads.

Under the *Petroleum Business Franchise Licences Act 1981*, the Treasury imposes a monthly fee of \$50 plus 14.75 per cent of the value of all motor spirit and diesel fuel sold to propel motor vehicles on public streets (increased from 6.5 per cent since 1 August 1986), and a yearly fee of \$50 for petroleum product retailers. These fees first go into consolidated revenue and 50 per cent (90 per cent before the 1986-87 financial year) is subsequently transferred to the State Highways Trust Fund Account. This trust fund also receives Commonwealth road grants and small amounts from other sources within the Department of Main Roads. The trust fund is credited with the following items:

- . money received from the Commonwealth for roads;
- . motor taxes less collection costs;
- . public vehicle fees;
- . revenue from jetties;
- . contributions by municipal councils towards maintenance of subsidiary and country roads; and
- . sale and rental of properties and so on.

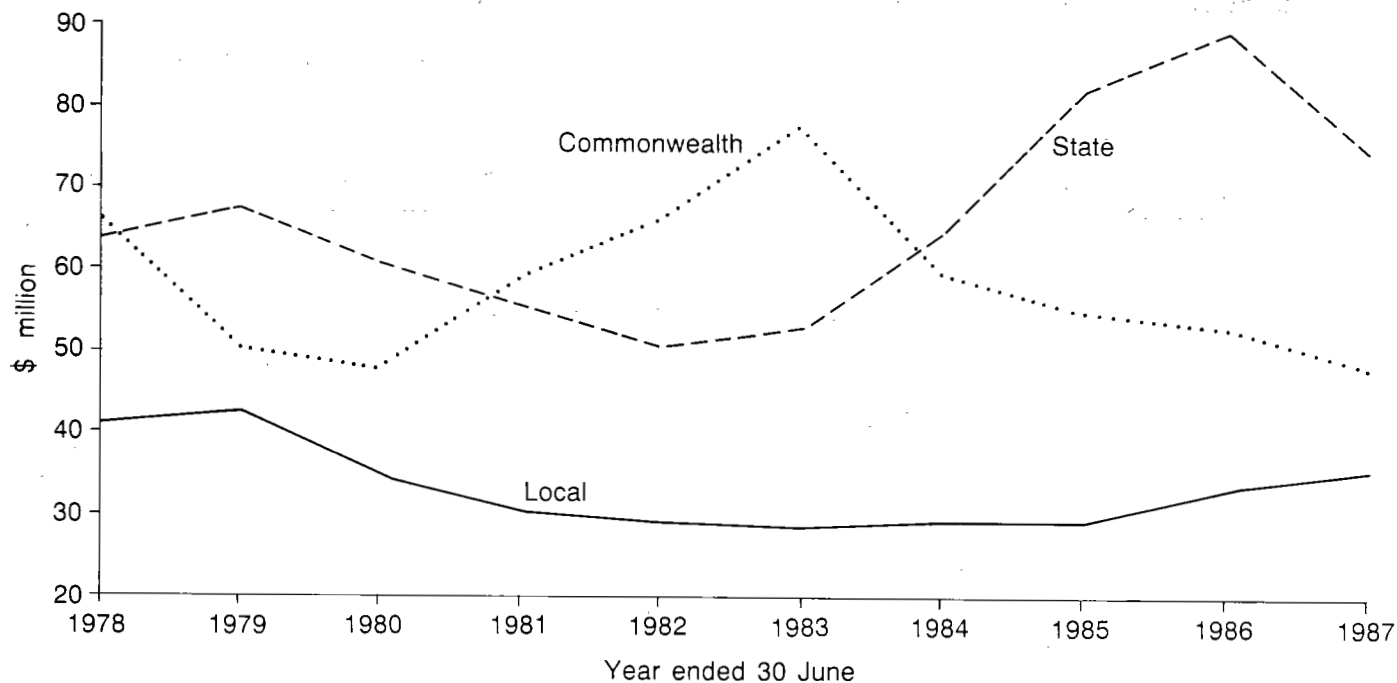
Other monies associated with the provision of roads in Tasmania include:

- . payment made to the Department of Main Roads by other agencies;
- . substantial loan funds and grants from consolidated revenue to the Department of Main Roads for administration of works relating to roads other than State highways;
- . rental of buildings and facilities;



Note Deflator used: BTCE Road Construction Price Index.

Figure 7.1 Tasmania: State government road revenue and State government road expenditure, 1977-78 to 1986-87 (constant 1986-87 prices)



Note Deflator used: BTCE Road Construction Price Index.

Figure 7.2 Tasmania: road expenditure by level of government, 1977-78 to 1986-87 (constant 1986-87 prices)

profit on contracts; and

notional costs from Commonwealth funded projects.

In addition to the loan funds made available to the Department of Main Roads, loan funds are also made available to the Forestry Department and the Hydro-electric Commission for works on roads under their control. Both agencies also maintain roads from their own general revenues. Capital repayments and interest are generally met by the State Treasury, and the loans are more in the nature of grants from Treasury to the departments and commissions. Therefore, information on costs of debt servicing by these departments and agencies is not available, as it is in other States, and is not shown in tables 7.3 and 7.8. However, loans have recently been a significant part of road revenue, comprising 20 per cent of total revenue in 1984-85, 18 per cent in 1985-86 and 15.5 per cent in 1986-87.

Figure 7.1 shows the gap between State road revenue and State road expenditure in Tasmania in the decade 1977-78 to 1986-87. State road expenditure exceeded State road revenue from 1977-78 to 1979-80, but this was reversed in 1980-81 with road revenue exceeding road expenditure by nearly \$2 million. This gap has increased to reach the biggest margin in 1986-87 with road revenue exceeding road expenditure by \$24.2 million.

EXPENDITURE

The Department of Main Roads is the principal agency responsible for road construction and maintenance in Tasmania. The Transport Department is responsible for traffic control and the provision and maintenance of traffic facilities and traffic lights. The Forestry Department and the Hydro-electric Commission contribute substantially to road funding in Tasmania. During 1985-86, 34 per cent of expenditure came from these two agencies, and in 1986-87 the percentage was 24.5. Expenditure from loan funds substantially increased between 1984-85 and 1986-87.

Changes in expenditure level

Figure 7.2 shows the contributions to spending on roads in Tasmania made by the Commonwealth, State and local governments between 1977-78 and 1986-87. Commonwealth expenditure during the decade ranged from a low of \$47.9 million

in 1979-80 to a high of \$77.8 million in 1982-83. Since then the contribution has continued to decline, reaching \$48.5 million in 1986-87. The Commonwealth contributed 36.9 per cent of total expenditure on roads in Tasmania during the ten-year period.

The State government contributed \$663 million of the total road expenditure of \$1581 million in Tasmania in the decade 1977-78 to 1986-87. The State contribution declined from its 1978-79 level of \$67.5 million to a low of \$50.6 million in 1981-82. Expenditure increased until 1985-86 reaching \$89.4 million, but declined by 16.2 per cent to \$74.9 million in 1986-87. The bulk of the State government's contribution went to rural arterial and rural local roads, which together received 76.1 per cent of total expenditure. Urban arterial roads, in contrast, attracted 21.2 per cent of available funds. Although total State expenditure on roads in Tasmania has fluctuated, the allocation to maintenance has remained fairly constant at between \$18 million and \$21 million through the decade 1977-78 to 1986-87 (table 7.8).

Local government contributed about 21.2 per cent of total road expenditure in Tasmania in the period 1977-78 to 1986-87. Yearly contributions did not vary greatly from 1980-81 to 1984-85, and stood at about \$30 million. In 1985-86 and 1986-87 local government contributions increased by 14 per cent and 6 per cent respectively, to \$35.4 million in 1986-87. An average 61 per cent of local government road expenditure went to road maintenance (table 7.9).

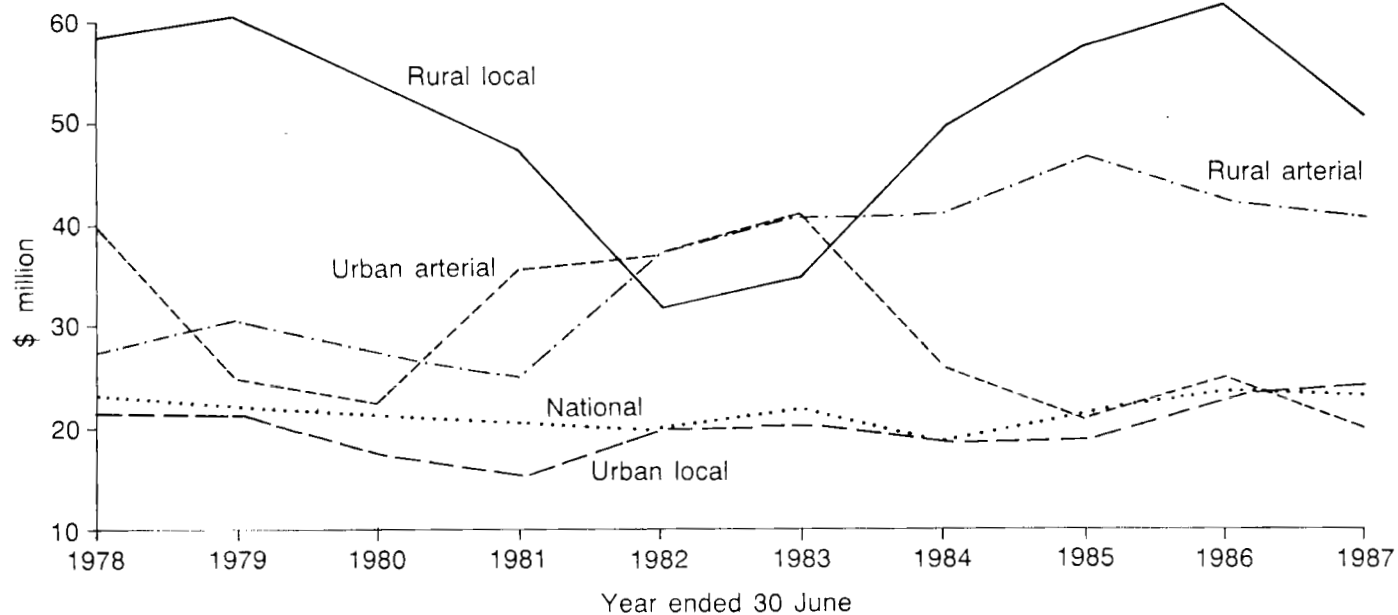
Expenditure by road category

Figure 7.3 shows the variations in road expenditure on the five categories of roads in Tasmania for the ten years 1977-78 to 1986-87.

Roads in rural areas received 70 per cent of Commonwealth road funding, with national roads receiving 36.2 per cent, rural arterial roads 15 per cent, and rural local roads 19.2 per cent. Urban roads received 30 per cent, with urban arterial roads receiving 26.1 per cent and urban local roads 3.5 per cent.

National roads received an almost constant level of expenditure, varying in constant terms between \$18.6 million in 1983-84 and \$23.6 million in 1985-86. Expenditure on maintenance increased only slightly during the period.

Rural arterial roads received a variable allocation of funds between 1977-78 and 1980-81, but attracted higher funding until 1984-85. Thereafter, rural arterial road



Note Deflator used: BTCE Road Construction Price Index.

Figure 7.3. Tasmania: total road expenditure by road category, 1977-78 to 1986-87 (constant 1986-87 prices)

funding declined by 9 per cent in 1985-86 and by 4 per cent in 1986-87, when it stood at \$40.9 million. Funds for the maintenance of this category of roads remained almost constant during the decade 1977-78 to 1986-87.

The importance of rural local roads in Tasmania is reflected in the level of expenditure on this road category. They attracted 32.0 per cent of total expenditure between 1977-78 and 1986-87, which was more than for any other category of roads in Tasmania. However, expenditure levels have fluctuated widely, from \$31.7 million in 1981-82 to \$61.7 million in 1985-86, with an average for the decade of over \$50 million. Maintenance expenditure on rural local roads fell in real terms from \$23.9 million in 1977-78 to \$19.3 million in 1986-87.

Urban arterial roads attracted an average of less than \$30 million per year during 1977-78 to 1986-87, fluctuating between \$41 million in 1982-83 and \$20 million in 1986-87. Annual maintenance expenditure on urban arterial roads was very small averaging less than \$3 million.

Urban local roads received an average of \$20 million a year during the decade 1977-78 to 1986-87, declining until 1980-81, but increasing thereafter to reach \$24.1 million in 1986-87.

Funds allocated to road planning and research have been almost nil in Tasmania except during the four years from 1977-78 to 1980-81 (table 7.10).

NON-ROAD EXPENDITURE

Tables 7.3, 7.4, 7.8 and 7.9 show details of non-road expenditure incurred by the Tasmanian State government and local governments for the years 1977-78 to 1986-87.

Non-road expenditure is explained in appendix I. The use of State road revenue by the Tasmanian State government for other than road expenditure is explained below.

The main non-road expenditures funded by revenue generated from road related charges in Tasmania are those licence fees, registration fees and business franchise fees paid to the Treasury but not transferred to the State Highways Trust Fund Account. This expenditure was equivalent to over 36 per cent of net motor vehicle taxation in 1986-87. Before 1986-87, this amount used to be a small percentage of total funds.

COLLECTION COSTS

The Tasmanian Transport Department receives the cost of administration incurred by its Road Transport Branch and Traffic Branch from the State Treasury. The Police Department includes in its departmental revenues a portion of 'traffic fees'. This amount is equal to the assessed cost of police traffic services and the various motor fee collections made in the previous year. The annual cost of motor fee collections, reported as \$60 000, has remained constant since 1969-70 and therefore can be considered as only nominal. No costs are shown in the public accounts for the collection of the fuel franchise fees in Tasmania, since the administration of this item is straightforward and the costs are considered to be very small.

TABLE 7.1 TASMANIA: COMMONWEALTH ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	8.8	9.2	10.1	11.3	12.4	15.1	12.3	16.6	18.0	19.0	132.8
Rural arterial roads	3.1	3.6	3.6	3.8	3.5	8.7	14.1	13.3	5.0	4.4	63.1
Rural local roads	2.8	2.8	3.2	3.4	3.3	5.8	7.2	8.4	6.9	7.4	51.2
Urban arterial roads	9.5	3.0	3.8	12.2	21.0	25.4	8.7	4.5	9.8	7.5	105.4
Urban local roads	1.0	1.1	1.2	1.3	1.4	1.7	1.9	0.3	2.3	1.4	13.6
Construction total	25.2	19.7	21.8	32.0	41.6	56.8	44.2	43.0	42.1	39.7	366.1
Maintenance											
National roads	0.9	1.0	1.2	1.6	1.4	1.9	2.8	2.7	3.1	3.3	19.9
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.1	0.7	0.0	1.2
Rural local roads	2.3	2.6	2.6	2.8	3.1	2.5	2.6	3.0	4.2	4.6	30.3
Urban arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.6	0.8	1.7
Urban local roads	0.0	0.0	0.0	0.0	0.3	0.4	0.0	0.0	0.0	0.0	0.7
Maintenance total	3.2	3.6	3.8	4.4	4.8	4.8	5.9	6.0	8.6	8.8	53.9
Total construction and maintenance	28.4	23.3	25.6	36.4	46.5	61.6	50.2	48.9	50.7	48.5	420.1
Planning and research	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.8
Total road expenditure	28.6	23.4	25.8	36.6	46.5	61.6	50.2	48.9	50.7	48.5	420.8

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 7.2 TASMANIA: STATE GOVERNMENT ROAD REVENUE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Revenue from road users											
Vehicle registration	14.9	16.8	17.2	21.2	21.8	20.3	20.8	21.9	23.0	23.2	201.1
Drivers licence fees	1.8	2.3	1.5	2.4	2.8	2.1	2.2	3.1	2.8	3.0	24.0
Road maintenance tax or State fuel tax	0.0	0.0	0.0	0.0	3.9	10.9	13.2	13.3	17.3	36.8	95.4
Other	1.5	2.2	2.6	2.2	4.1	3.5	3.9	4.5	5.1	7.8	37.4
Total motor taxation	18.3	21.3	21.3	25.7	32.6	36.9	40.4	42.8	48.2	70.8	358.3
Less collection costs	4.1	4.3	4.8	5.2	5.9	6.4	6.7	7.2	7.7	8.3	60.6
Net motor taxation	14.1	17.0	16.5	20.5	26.7	30.5	33.7	35.6	40.5	62.5	297.6
Loans	3.9	5.2	4.9	4.1	3.4	4.5	4.7	15.7	15.9	15.4	77.7
Other	2.5	1.7	2.1	2.5	2.7	2.5	2.5	2.0	2.8	2.9	24.2
Other authorities	7.7	8.6	10.2	9.4	6.8	8.2	15.7	25.1	29.2	18.4	139.3
Total road revenue	28.1	32.4	33.7	36.5	39.6	45.6	56.6	78.3	88.4	99.1	538.3

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 7.3 TASMANIA: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	0.1	0.0	0.0	0.0	0.0	0.0	0.6	0.2	1.5	0.8	3.2
Rural arterial roads	4.8	5.7	5.8	6.1	15.5	15.2	12.6	20.0	26.2	27.6	139.5
Rural local roads	7.1	8.4	9.5	8.6	4.1	5.4	14.7	22.8	29.3	18.5	128.4
Urban arterial roads	5.6	7.1	6.4	8.2	3.4	5.4	10.7	11.7	11.4	10.1	80.0
Urban local roads	0.5	0.2	0.2	0.2	0.0	0.0	0.0	1.5	0.0	0.0	2.6
Construction total	18.0	21.4	21.9	23.1	23.0	26.0	38.6	56.1	68.4	57.0	353.5
Maintenance											
National roads	0.2	0.1	0.2	0.0	0.0	0.5	0.0	0.0	0.0	0.0	1.0
Rural arterial roads	3.9	4.9	5.4	5.7	7.3	8.5	7.6	8.1	8.7	8.9	69.0
Rural local roads	2.7	2.7	2.9	3.3	3.6	5.2	5.6	5.9	5.7	6.5	44.1
Urban arterial roads	2.0	1.4	1.8	1.8	1.7	1.7	2.1	2.5	2.1	1.6	18.7
Urban local roads	0.3	0.2	0.2	0.2	0.0	0.0	0.6	0.4	0.6	0.9	3.4
Maintenance total	9.0	9.4	10.5	11.1	12.6	15.9	15.9	16.9	17.1	17.9	136.3
Total construction and maintenance	27.1	30.8	32.4	34.2	35.6	42.0	54.5	73.0	85.5	74.9	490.0
Planning and research	0.5	0.6	0.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	2.0
Total road expenditure	27.6	31.4	32.8	34.7	35.6	42.0	54.5	73.0	85.5	74.9	492.0

TABLE 7.3 (Cont.) TASMANIA: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Non-road expenditure											
Loan repayments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest payments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.1	0.1	0.1	0.1	0.1	1.2	3.1	4.0	4.5	22.6	35.9
Non-road total	0.1	0.1	0.1	0.1	0.1	1.2	3.1	4.0	4.5	22.6	35.9

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 7.4 TASMANIA: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	5.1	5.8	5.2	3.6	1.7	1.8	2.3	4.5	5.4	5.4	40.8
Urban arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urban local roads	3.7	4.2	3.3	2.3	4.5	5.2	5.2	4.1	6.7	8.2	47.4
Construction total	8.7	9.9	8.6	6.0	6.1	7.0	7.5	8.7	12.1	13.6	88.2
Maintenance											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	5.3	5.8	5.9	7.5	6.5	6.9	9.3	6.6	7.5	8.2	69.5
Urban arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urban local roads	3.8	4.2	4.5	5.6	7.8	8.7	7.9	10.6	12.2	13.6	78.9
Maintenance total	9.1	9.9	10.3	13.1	14.4	15.6	17.2	17.3	19.7	21.8	148.4
Total construction and maintenance	17.8	19.9	18.9	19.1	20.5	22.6	24.7	26.0	31.8	35.4	236.7
Planning and research	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total road expenditure	17.8	19.9	18.9	19.1	20.5	22.6	24.7	26.0	31.8	35.4	236.7

TABLE 7.4 (Cont.) TASMANIA: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Pro rata expenditure on general administration	4.0	3.8	5.0	6.2	7.9	7.3	8.5	8.2	9.4	9.0	69.3
Pro rata non-road expenditure attributable to roads											
Loan repayments	1.7	2.0	2.2	2.4	2.6	2.2	1.9	1.9	2.2	2.1	21.2
Interest payments	2.6	3.0	3.4	3.5	4.0	3.6	3.3	2.9	3.1	3.3	32.7
Non-road total	4.3	5.0	5.6	5.9	6.6	5.8	5.2	4.8	5.3	5.4	53.9
Road works funded by private contributions	0.0	0.0	0.8	1.2	1.2	1.1	1.8	1.4	3.8	1.6	12.9

- Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 7.5 TASMANIA: TOTAL ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	8.9	9.2	10.1	11.3	12.4	15.1	12.9	16.7	19.5	19.8	135.9
Rural arterial roads	7.9	9.3	9.3	9.9	19.0	23.9	26.7	33.3	31.2	32.0	202.5
Rural local roads	14.9	16.9	17.9	15.7	9.1	13.0	24.3	35.8	41.6	31.3	220.5
Urban arterial roads	15.1	10.1	10.2	20.4	24.4	30.8	19.4	16.2	21.2	17.6	185.4
Urban local roads	5.2	5.5	4.7	3.8	5.9	7.0	7.1	5.8	9.0	9.6	63.6
Construction total	51.9	51.0	52.3	61.1	70.7	89.8	90.3	107.8	122.6	110.3	807.8
Maintenance											
National roads	1.1	1.1	1.3	1.6	1.4	2.3	2.8	2.7	3.1	3.3	20.7
Rural arterial roads	3.9	4.9	5.4	5.7	7.3	8.5	8.0	8.3	9.4	8.9	70.3
Rural local roads	10.3	11.2	11.4	13.7	13.2	14.6	17.5	15.5	17.4	19.3	144.1
Urban arterial roads	2.0	1.4	1.8	1.8	1.7	1.7	2.4	2.5	2.7	2.4	20.4
Urban local roads	4.1	4.4	4.7	5.8	8.1	9.1	8.5	11.0	12.8	14.5	83.0
Maintenance total	21.3	22.9	24.6	28.6	31.8	36.3	39.1	40.2	45.4	48.5	338.7
Total construction and maintenance	73.3	73.9	76.9	89.7	102.6	126.2	129.4	147.9	168.0	158.8	1 146.7
Planning and research	0.7	0.7	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	2.6
Total road expenditure	74.0	74.7	77.5	90.3	102.6	126.2	129.4	147.9	168.0	158.8	1 149.4

- Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 7.6 TASMANIA: COMMONWEALTH ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	20.4	19.8	18.7	18.1	17.6	19.1	14.6	18.7	18.8	19.0	184.9
Rural arterial roads	7.2	7.7	6.7	6.1	5.0	11.0	16.7	14.9	5.2	4.4	85.0
Rural local roads	6.5	6.0	5.9	5.5	4.7	7.3	8.6	9.4	7.2	7.4	68.5
Urban arterial roads	22.0	6.5	7.1	19.6	29.9	32.1	10.3	5.1	10.3	7.5	150.2
Urban local roads	2.3	2.4	2.2	2.1	2.0	2.1	2.3	0.3	2.4	1.4	19.5
Construction total	58.5	42.4	40.4	51.4	59.2	71.7	52.5	48.3	44.0	39.7	508.1
Maintenance											
National roads	2.1	2.2	2.2	2.6	2.0	2.4	3.3	3.0	3.2	3.3	26.3
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.1	0.7	0.0	1.3
Rural local roads	5.3	5.6	4.8	4.5	4.4	3.2	3.1	3.4	4.4	4.6	43.3
Urban arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.6	0.8	1.8
Urban local roads	0.0	0.0	0.0	0.0	0.4	0.5	0.0	0.0	0.0	0.0	0.9
Maintenance total	7.4	7.7	7.1	7.1	6.8	6.1	7.0	6.7	9.0	8.8	73.7
Total construction and maintenance	65.9	50.1	47.5	58.4	66.1	77.8	59.6	54.9	53.0	48.5	581.9
Planning and research	0.5	0.4	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.6
Total road expenditure	66.4	50.3	47.9	58.7	66.1	77.8	59.6	54.9	53.0	48.5	583.3

- Notes
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

TABLE 7.7 TASMANIA: STATE GOVERNMENT ROAD REVENUE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Revenue from road users											
Vehicle registration	31.2	32.6	30.0	33.4	31.2	26.4	25.2	25.1	24.7	23.2	283.1
Drivers licence fees	3.8	4.5	2.6	3.8	4.0	2.7	2.7	3.6	3.0	3.0	33.6
Road maintenance tax or State fuel tax	0.0	0.0	0.0	0.0	5.6	14.2	16.0	15.3	18.6	36.8	106.4
Other	3.1	4.3	4.5	3.5	5.9	4.6	4.7	5.2	5.5	7.8	49.0
Total motor taxation	38.3	41.3	37.2	40.5	46.7	48.0	49.0	49.1	51.8	70.8	472.6
Less collection costs	8.6	8.3	8.4	8.2	8.5	8.3	8.1	8.3	8.3	8.3	83.2
Net motor taxation	29.5	32.9	28.8	32.3	38.3	39.7	40.8	40.9	43.5	62.5	389.2
Loans	8.2	10.1	8.6	6.5	4.9	5.9	5.7	18.0	17.1	15.4	100.2
Other	5.2	3.3	3.7	3.9	3.9	3.3	3.0	2.3	3.0	2.9	34.5
Other authorities	16.1	16.7	17.8	14.8	9.7	10.7	19.0	28.8	31.4	18.4	183.4
Total road revenue	58.8	62.8	58.8	57.6	56.7	59.3	68.6	89.9	95.0	99.1	706.5

- Notes
1. See text for interpretation and qualification of figures in the table.
 2. The ABS Implicit Price Deflator of Domestic Product (ABS 1988) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

TABLE 7.8 TASMANIA: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Construction											
National roads	0.2	0.0	0.0	0.0	0.0	0.0	0.7	0.2	1.6	0.8	3.5
Rural arterial roads	11.1	12.3	10.8	9.8	22.0	19.2	15.0	22.5	27.4	27.6	177.6
Rural local roads	16.5	18.1	17.6	13.8	5.8	6.8	17.5	25.6	30.6	18.5	170.8
Urban arterial roads	13.0	15.3	11.9	13.2	4.8	6.8	12.7	13.1	11.9	10.1	112.8
Urban local roads	1.2	0.4	0.4	0.3	0.0	0.0	0.0	1.7	0.0	0.0	4.0
Construction total	41.8	46.0	40.6	37.1	32.7	32.8	45.8	63.0	71.5	57.0	468.5
Maintenance											
National roads	0.5	0.2	0.4	0.0	0.0	0.6	0.0	0.0	0.0	0.0	1.7
Rural arterial roads	9.0	10.5	10.0	9.1	10.4	10.7	9.0	9.1	9.1	8.9	96.0
Rural local roads	6.3	5.8	5.4	5.3	5.1	6.6	6.7	6.6	6.0	6.5	60.2
Urban arterial roads	4.6	3.0	3.3	2.9	2.4	2.1	2.5	2.8	2.2	1.6	27.5
Urban local roads	0.7	0.4	0.4	0.3	0.0	0.0	0.7	0.4	0.6	0.9	4.5
Maintenance total	20.9	20.2	19.5	17.8	17.9	20.1	18.9	19.0	17.9	17.9	190.1
Total construction and maintenance	62.9	66.2	60.1	54.9	50.6	53.0	64.7	82.0	89.4	74.9	658.9
Planning and research	1.2	1.3	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	4.0
Total road expenditure	64.0	67.5	60.9	55.7	50.6	53.0	64.7	82.0	89.4	74.9	662.9

TABLE 7.8 (Cont.) TASMANIA: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Non-road expenditure											
Loan repayments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest payments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.2	0.2	0.2	0.2	0.1	1.6	3.9	4.7	4.9	22.6	38.6
Total	0.2	0.2	0.2	0.2	0.1	1.6	3.9	4.7	4.9	22.6	38.6

- Notes
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert road expenditure figures from current prices to constant prices.
 3. The ABS Implicit Price Deflator of Gross National Expenditure (ABS 1988) was used to convert non-road expenditure figures from current prices to constant prices.
 4. Owing to rounding, figures may not add to totals.

TABLE 7.9 TASMANIA: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
<i>Construction</i>											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	11.8	12.5	9.6	5.8	2.4	2.3	2.7	5.1	5.6	5.3	63.2
Urban arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urban local roads	8.6	9.0	6.1	3.7	6.4	6.6	6.2	4.6	7.0	8.3	66.5
Construction total	20.2	21.3	16.0	9.6	8.7	8.8	8.9	9.8	12.7	13.6	129.5
<i>Maintenance</i>											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	12.3	12.5	10.9	12.0	9.2	8.7	11.0	7.4	7.8	8.4	100.4
Urban arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urban local roads	8.8	9.0	8.3	9.0	11.1	11.0	9.4	11.9	12.8	13.4	104.7
Maintenance total	21.1	21.3	19.1	21.0	20.5	19.7	20.4	19.4	20.6	21.8	205.0
Total construction and maintenance	41.3	42.8	35.1	30.7	29.2	28.5	29.3	29.2	33.3	35.4	334.7
Planning and research	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total road expenditure	41.3	42.8	35.1	30.7	29.2	28.5	29.3	29.2	33.3	35.4	334.7

TABLE 7.9 (Cont.) TASMANIA: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Pro rata expenditure on general administration	8.6	7.6	9.0	10.1	11.7	9.8	10.7	9.7	10.2	9.0	96.4
Pro rata non-road expenditure attributable to roads											
Loan repayments	3.7	4.0	4.0	3.9	3.9	2.9	2.4	2.2	2.4	2.1	31.5
Interest payments	5.6	6.0	6.1	5.7	5.9	4.8	4.1	3.4	3.4	3.3	48.4
Non-road total	9.2	10.0	10.1	9.6	9.8	7.8	6.5	5.7	5.8	5.4	79.9
Road works funded by private contribution	0.0	0.0	1.5	1.9	1.7	1.4	2.1	1.6	4.0	1.6	15.8

- Notes**
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert road expenditure figures and the figures for road works funded by private contributions from current prices to constant prices.
 3. The ABS Implicit Price Deflator of Gross National Expenditure (ABS 1988) was used to convert non-road expenditure figures from current prices to constant prices.
 4. Owing to rounding, figures may not add to totals.

TABLE 7.10 TASMANIA: TOTAL ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	20.6	19.8	18.7	18.1	17.6	19.1	15.3	18.8	20.4	19.8	188.3
Rural arterial roads	18.3	20.0	17.3	15.9	27.0	30.2	31.7	37.4	32.6	32.0	262.4
Rural local roads	34.6	36.3	33.2	25.2	12.9	16.4	28.9	40.2	43.5	31.3	302.6
Urban arterial roads	35.0	21.7	18.9	32.7	34.7	38.9	23.0	18.2	22.2	17.6	263.0
Urban local roads	12.1	11.8	8.7	6.1	8.4	8.8	8.4	6.5	9.4	9.6	89.9
Construction total	120.4	109.7	97.0	98.1	100.6	113.4	107.2	121.1	128.2	110.3	1 106.1
Maintenance											
National roads	2.6	2.4	2.4	2.6	2.0	2.9	3.3	3.0	3.2	3.3	27.7
Rural arterial roads	9.0	10.5	10.0	9.1	10.4	10.7	9.5	9.3	9.8	8.9	97.4
Rural local roads	23.9	24.1	21.2	22.0	18.8	18.4	20.8	17.4	18.2	19.3	204.0
Urban arterial roads	4.6	3.0	3.3	2.9	2.4	2.1	2.9	2.8	2.8	2.4	29.3
Urban local roads	9.5	9.5	8.7	9.3	11.5	11.5	10.1	12.4	13.4	14.5	110.4
Maintenance total	49.4	49.2	45.6	45.9	45.2	45.8	46.4	45.2	47.5	48.5	468.9
Total construction and maintenance	170.1	158.9	142.7	144.0	145.9	159.3	153.7	166.2	175.7	158.8	1 575.3
Planning and research	1.6	1.5	1.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2
Total road expenditure	171.7	160.6	143.8	144.9	145.9	159.3	153.7	166.2	175.7	158.8	1 580.8

- Notes
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

CHAPTER 8 NORTHERN TERRITORY

Details of the road expenditure by the Commonwealth, State and local governments, and State road revenue for the Northern Territory are shown, in current and constant 1986-87 prices, in tables 8.1 to 8.10.

REVENUE

The Northern Territory achieved self-government in 1978-79 and assumed partial responsibility for roads from the Commonwealth government. Previously, all funds spent on roads came from Commonwealth sources. Even today, the Northern Territory revenue base is very small owing to its small population and the small number of motor vehicles registered there. A substantial amount of revenue originates as grants provided to the Territory by the Commonwealth government.

The Department of Transport and Works is responsible for collecting the motor vehicle taxes that are credited to consolidated revenue of the Northern Territory, and is also responsible for road expenditure. In 1986-87, net motor tax collected was only 15.2 per cent of total road revenue and Northern Territory road expenditure.

Figure 8.1 shows Northern Territory road revenue and road expenditure since the beginning of self-government in 1978-79. Total road revenue and road expenditure closely follow each other.

The information provided here for the Northern Territory is derived from personal communication and National Association of Australia State Road Authorities (NAASRA) sources. The figures should, therefore, be treated with some caution.

EXPENDITURE

The Northern Territory Department of Transport and Works has been responsible for road expenditure since 1979-80, and the details presented here have been

provided by the department to NAASRA. The Northern Territory government expenditure figures in tables 8.3 and 8.8 cover only eight years, since in 1979-80 the Commonwealth government did not include the Northern Territory in the road grants legislation applying to other Australian States, but made specific road grants. Before then, Commonwealth departments were responsible for road expenditure or lump sum grants were made to the Northern Territory for all purposes. Figures for road expenditure by level of government are, therefore, no more than arbitrary allocations till 1980-81.

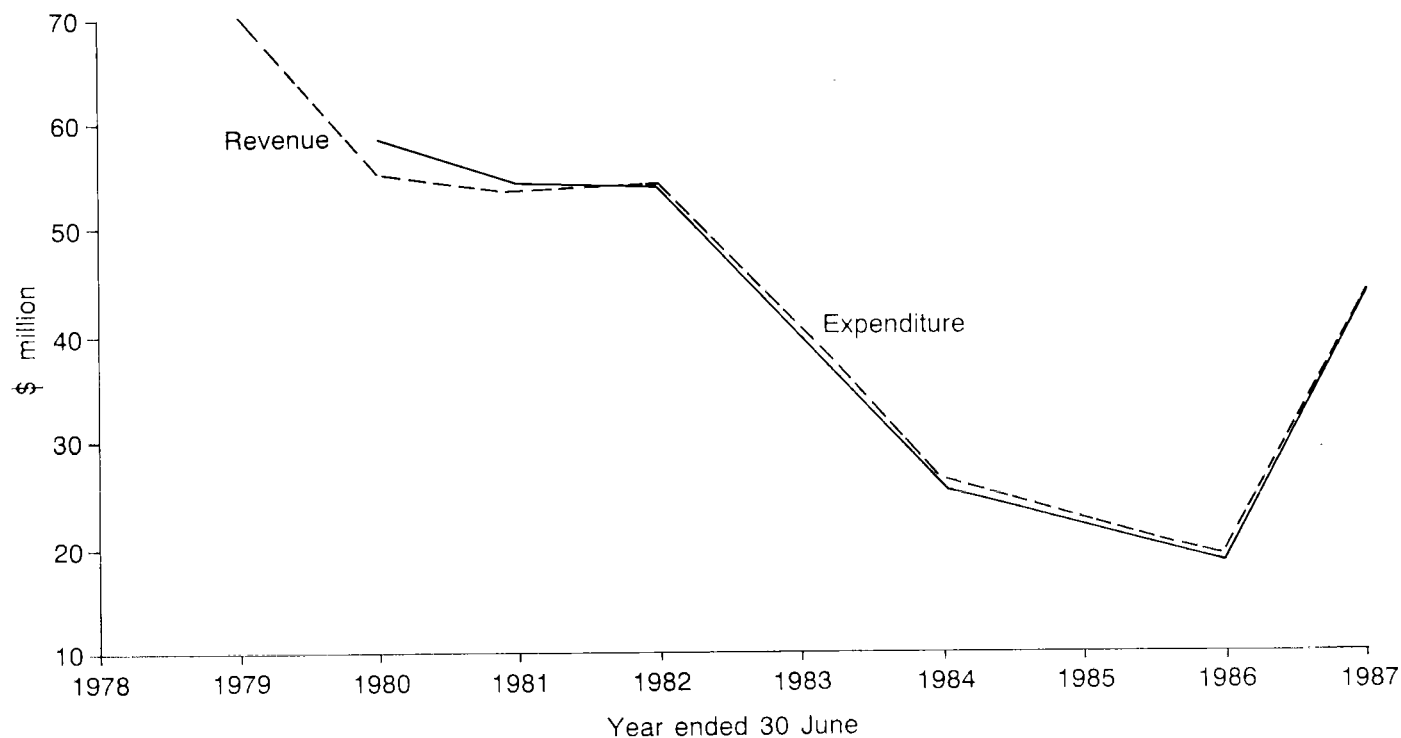
Changes in expenditure level

Figure 8.2 shows road expenditure levels by Commonwealth government, Northern Territory government and local governments between 1977-78 and 1986-87. Commonwealth government expenditure on roads in the Northern Territory declined from \$78 million in 1978-79 to \$32.7 million in 1981-82. This trend was reversed with the introduction of the ABRD program, and funding reached \$49.1 million in 1984-85, but declined to \$46.3 million in 1985-86 and \$40.5 million in 1986-87.

Over 80 per cent of Commonwealth funds went to national and rural local roads, owing to the nature of the road network in the Northern Territory. The Northern Territory road system comprises only roads in classes 1 and 3 of the NAASRA road classification. All class 1 roads in the Northern Territory form part of the National Highway system, connecting capital cities. Class 3 roads connect key towns. The lack of intermediate class 2 roads in the Northern Territory reflects the absence of any large towns other than Darwin. Thus Commonwealth funds have been used to assist the development of what in other States would be local roads.

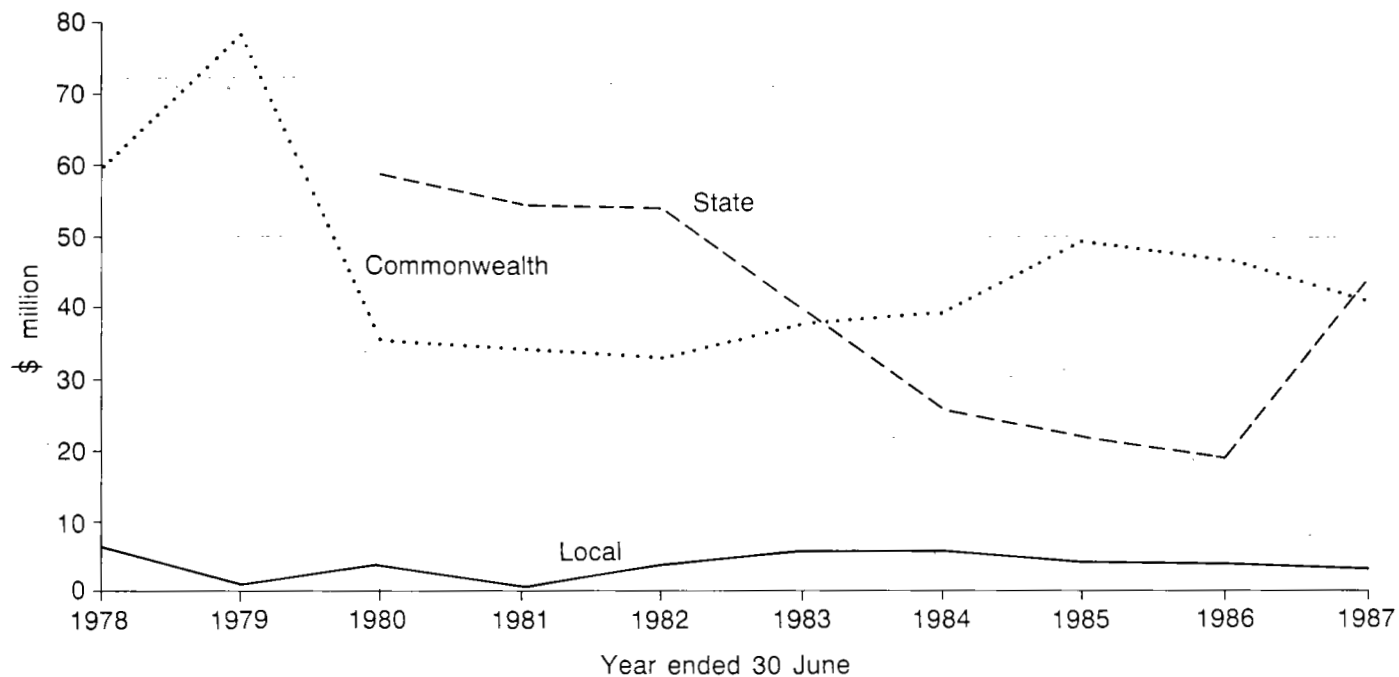
The Northern Territory State government road expenditure fell steadily from \$58.6 million in 1979-80 to \$18.6 million in 1985-86, but increased to \$43.5 million in 1986-87. During 1986-87 the Commonwealth and State governments contributed equally to road expenditure in the Northern Territory.

Local government expenditure has varied substantially in the Northern Territory, as it has in other States, and the contribution of this sector has been very small when compared with those of the Northern Territory and Commonwealth governments.



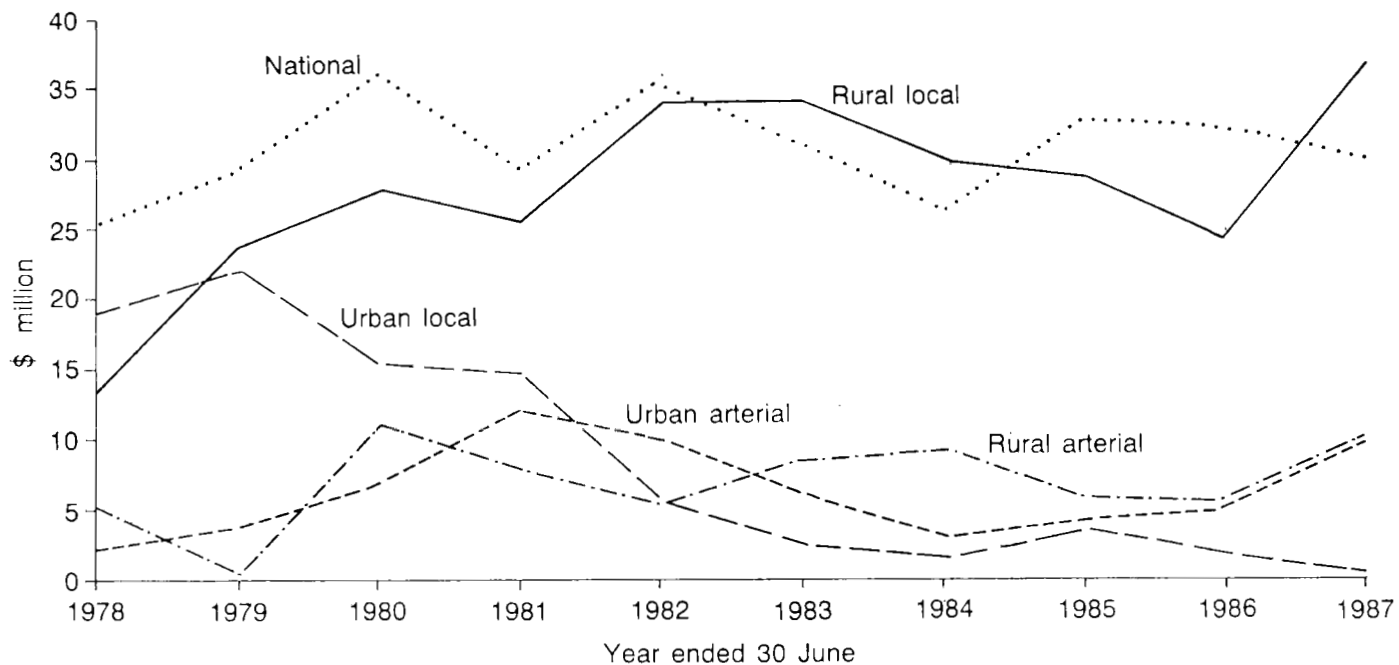
Note Deflator used: BTCE Road Construction Price Index.

Figure 8.1 Northern Territory: State government road revenue and State government road expenditure, 1977-78 to 1986-87 (constant 1986-87 prices)



Note Deflator used: BTCE Road Construction Price Index.

Figure 8.2 Northern Territory: road expenditure by level of government, 1977-78 to 1986-87 (constant 1986-87 prices)



Note Deflator used: BTCE Road Construction Price Index.

Figure 8.3 Northern Territory: total road expenditure by road category, 1977-78 to 1986-87 (constant 1986-87 prices)

Expenditure by road category

Figure 8.3 and table 8.10 show variations in the levels of expenditure on the five categories of roads in the Northern Territory.

Out of total road expenditure during the decade 1977-78 to 1986-87, national roads attracted 38.1 per cent of funds while rural arterial roads attracted only 8.7 per cent. Rural local roads accounted for 34.6 per cent, whereas the whole of the urban sector accounted for only 18.6 per cent.

National roads and rural local roads attracted the highest expenditure levels throughout the period 1979-80 to 1986-87 (except in one year for rural local roads). National roads and rural local roads attracted 38.1 per cent and 34.6 per cent respectively of total funds in the 1980s. Expenditure on national roads has remained essentially stable at between \$25 million and \$30 million a year. Funds for rural local roads have increased, starting with \$13.5 million in 1977-78 and reaching \$37 million in 1986-87.

Funds for rural arterial roads have varied from year to year because of the lack of importance of this road category in the Northern Territory road network.

TABLE 8.1 NORTHERN TERRITORY: COMMONWEALTH ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	7.7	9.8	5.6	10.0	11.4	14.4	14.5	22.5	23.1	16.9	135.9
Rural arterial roads	0.3	0.2	1.1	1.0	0.9	2.6	2.0	1.7	2.1	1.3	13.2
Rural local roads	1.4	3.9	3.3	5.0	4.1	6.6	7.7	8.9	6.9	10.0	57.8
Urban arterial roads	0.7	1.0	1.2	1.0	2.3	1.3	1.8	2.4	3.0	4.7	19.4
Urban local roads	5.7	8.2	2.5	0.0	0.4	0.3	0.0	0.0	0.2	0.0	17.3
Construction total	15.8	23.1	13.6	17.0	19.1	25.1	25.9	35.4	35.3	32.8	243.1
Maintenance											
National roads	3.3	3.8	3.2	2.3	1.9	2.7	4.8	5.0	5.7	5.7	38.4
Rural arterial roads	1.9	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	2.0
Rural local roads	4.4	7.1	2.2	1.9	1.6	1.2	1.6	3.3	2.3	2.0	27.6
Urban arterial roads	0.1	0.5	0.0	0.0	0.2	0.2	0.5	0.0	0.0	0.0	1.5
Urban local roads	0.1	1.4	0.0	0.0	0.2	0.4	0.0	0.0	1.1	0.0	3.2
Maintenance total	9.8	12.9	5.4	4.2	3.9	4.5	6.9	8.3	9.1	7.7	72.7
Total construction and maintenance	25.6	36.0	19.0	21.1	23.0	29.6	32.8	43.7	44.3	40.5	315.6
Planning and research	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total road expenditure	25.6	36.3	19.0	21.1	23.0	29.6	32.8	43.7	44.3	40.5	315.8

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 8.2 NORTHERN TERRITORY: STATE GOVERNMENT ROAD REVENUE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Revenue from road users											
Vehicle registration	0.0	1.8	2.7	2.7	3.4	3.3	3.8	4.2	4.0	5.8	31.7
Drivers licence fees	0.0	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.6	1.0	4.8
Road maintenance tax or State fuel tax	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.6	2.2
Total motor taxation	0.0	2.1	3.1	3.1	3.8	3.8	4.3	4.7	5.2	8.4	38.5
Less collection costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.8	3.5
Net motor taxation	0.0	2.1	3.1	3.1	3.8	3.8	4.3	4.7	3.5	6.6	35.0
Loans	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	34.2	28.5	30.8	34.1	27.5	17.3	14.7	14.3	36.9	238.3
Other authorities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total road revenue	0.0	36.3	31.6	33.9	37.9	31.3	21.6	19.4	17.8	43.5	273.3

- Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 8.3 NORTHERN TERRITORY: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	0.0	0.0	9.7	1.6	9.9	4.6	2.2	0.9	0.2	0.2	29.3
Rural arterial roads	0.0	0.0	1.8	1.1	0.7	1.1	3.0	0.1	0.5	4.9	13.2
Rural local roads	0.0	0.0	5.6	2.6	13.6	11.5	6.4	9.2	5.7	13.4	68.0
Urban arterial roads	0.0	0.0	2.0	5.9	3.8	1.7	0.3	0.5	0.5	4.1	18.8
Urban local roads	0.0	0.0	3.5	8.5	1.4	0.1	0.0	0.0	0.0	0.0	13.5
Construction total	0.0	0.0	22.6	19.7	29.3	18.8	11.9	10.8	6.9	22.5	142.5
Maintenance											
National roads	0.0	0.0	1.0	4.3	1.8	2.8	0.6	0.7	1.9	6.8	19.9
Rural arterial roads	0.0	0.0	3.1	2.8	2.1	3.0	3.0	3.4	2.9	4.1	24.4
Rural local roads	0.0	0.0	3.5	6.2	4.0	4.9	6.1	3.7	4.8	8.9	42.1
Urban arterial roads	0.0	0.0	0.5	0.6	0.7	1.8	0.0	0.9	1.3	1.1	6.9
Urban local roads	0.0	0.0	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Maintenance total	0.0	0.0	8.8	14.2	8.6	12.5	9.7	8.7	10.9	21.0	94.4
Total construction and maintenance	0.0	0.0	31.4	33.9	37.9	31.3	21.6	19.4	17.8	43.5	236.8
Planning and research	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Total road expenditure	0.0	0.0	31.6	33.9	37.9	31.3	21.6	19.4	17.8	43.5	237.0

TABLE 8.3 (Cont.) NORTHERN TERRITORY: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)

(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Non-road expenditure											
Loan repayments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest payments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-road total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Notes 1. See text for interpretation and qualification of figures in the table.
 2. Owing to rounding, figures may not add to totals.

TABLE 8.4 NORTHERN TERRITORY: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)

(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Construction											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	0.0	0.0	0.0	0.0	0.3	1.9	0.3	-0.2	0.4	-0.4	2.3
Urban arterial roads	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Urban local roads	1.5	0.4	0.3	-0.5	-0.1	-1.1	1.0	1.0	-0.3	0.0	2.2
Construction total	1.6	0.4	0.3	-0.5	0.2	0.8	1.4	0.8	0.1	-0.4	4.7
Maintenance											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	0.0	0.0	0.4	0.3	0.4	1.2	3.1	0.8	3.1	3.1	12.4
Urban arterial roads	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Urban local roads	0.9	0.2	1.2	1.0	2.1	2.5	0.2	2.2	0.7	0.5	11.5
Maintenance total	1.1	0.2	1.6	1.3	2.5	3.7	3.3	3.0	3.8	3.6	24.1
Total construction and maintenance	2.7	0.6	2.0	0.7	2.7	4.6	4.8	3.8	3.9	3.2	29.0
Planning and research	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total road expenditure	2.7	0.6	2.0	0.7	2.7	4.6	4.8	3.8	3.9	3.2	29.0

TABLE 8.4 (Cont.) NORTHERN TERRITORY: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Pro rata expenditure on general administration	0.0	0.0	0.6	0.3	0.9	1.2	1.1	0.8	1.3	1.1	7.3
Pro rata non-road expenditure attributable to roads											
Loan repayments	0.0	0.0	0.1	0.7	0.9	0.2	0.1	0.1	0.1	0.2	2.4
Interest repayments	0.0	0.0	0.2	0.2	0.2	0.5	0.5	0.3	0.4	0.4	2.7
Non-road total	0.0	0.0	0.3	0.9	1.1	0.7	0.6	0.5	0.5	0.6	5.1
Road works funded by private contributions	0.0	0.0	0.0	0.0	0.6	0.1	0.2	0.1	0.3	0.2	1.5

- Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 8.5 NORTHERN TERRITORY: TOTAL ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	7.7	9.8	15.3	11.6	21.3	19.0	16.7	23.4	23.3	17.1	165.2
Rural arterial roads	0.3	0.2	2.9	2.1	1.6	3.7	4.9	1.8	2.6	6.2	26.3
Rural local roads	1.4	3.9	8.9	7.6	18.0	19.9	14.4	17.9	13.0	23.0	128.0
Urban arterial roads	0.8	1.0	3.2	6.9	6.1	2.9	2.1	2.9	3.5	8.8	38.2
Urban local roads	7.2	8.6	6.4	8.0	1.7	-0.8	1.1	1.0	-0.1	0.0	33.1
Construction total	17.4	23.5	36.6	36.2	48.6	44.6	39.2	46.9	42.3	54.9	390.2
Maintenance											
National roads	3.3	3.8	4.2	6.6	3.7	5.5	5.5	5.7	7.6	12.5	58.4
Rural arterial roads	1.9	0.0	3.1	2.8	2.1	3.1	3.0	3.4	2.9	4.1	26.4
Rural local roads	4.4	7.1	6.1	8.3	6.0	7.2	10.8	7.8	10.2	14.0	81.9
Urban arterial roads	0.1	0.7	0.5	0.6	0.9	1.9	0.5	0.9	1.3	1.1	8.5
Urban local roads	1.0	1.6	1.9	1.2	2.3	2.9	0.2	2.2	1.8	0.5	15.6
Maintenance total	10.9	13.1	15.7	19.6	15.0	20.7	19.9	20.0	23.8	32.3	191.0
Total construction and maintenance	28.3	36.6	52.4	55.8	63.6	65.4	59.2	66.9	66.0	87.2	581.4
Planning and research	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Total road expenditure	28.3	36.9	52.5	55.8	63.6	65.4	59.2	66.9	66.0	87.2	581.8

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 8.6 NORTHERN TERRITORY: COMMONWEALTH ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	17.9	21.1	10.4	16.1	16.2	18.2	17.2	25.3	24.2	16.9	183.3
Rural arterial roads	0.7	0.4	2.0	1.6	1.3	3.3	2.4	1.9	2.2	1.3	17.1
Rural local roads	3.2	8.4	6.1	8.0	5.8	8.3	9.1	10.0	7.2	10.0	76.3
Urban arterial roads	1.6	2.2	2.2	1.6	3.3	1.6	2.1	2.7	3.1	4.7	25.2
Urban local roads	13.2	17.6	4.6	0.0	0.6	0.4	0.0	0.0	0.2	0.0	36.7
Construction total	36.7	49.7	25.2	27.3	27.2	31.7	30.8	39.8	36.9	32.8	338.0
Maintenance											
National roads	7.7	8.2	5.9	3.7	2.7	3.4	5.7	5.6	6.0	5.7	54.6
Rural arterial roads	4.4	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	4.5
Rural local roads	10.2	15.3	4.1	3.0	2.3	1.5	1.9	3.7	2.4	2.0	46.4
Urban arterial roads	0.2	1.1	0.0	0.0	0.3	0.3	0.6	0.0	0.0	0.0	2.4
Urban local roads	0.2	3.0	0.0	0.0	0.3	0.5	0.0	0.0	1.2	0.0	5.2
Maintenance total	22.7	27.5	10.0	6.7	5.5	5.7	8.2	9.3	9.5	7.7	113.0
Total construction and maintenance	59.4	77.2	35.3	33.9	32.7	37.4	39.0	49.1	46.3	40.5	450.7
Planning and research	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Total road expenditure	59.4	78.1	35.3	33.9	32.7	37.4	39.0	49.1	46.3	40.5	451.1

- Notes
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

TABLE 8.7 NORTHERN TERRITORY: STATE GOVERNMENT ROAD REVENUE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
<i>Revenue from road users</i>											
Vehicle registration	0.0	3.5	4.7	4.3	4.9	4.3	4.6	4.8	4.3	5.8	41.1
Drivers licence fees	0.0	0.6	0.7	0.6	0.7	0.7	0.6	0.7	0.6	1.0	6.2
Road maintenance tax or State fuel tax	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	1.6	2.2
Total motor taxation	0.0	4.1	5.4	4.9	5.4	4.9	5.2	5.4	5.6	8.4	49.3
Less collection costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8	3.6
Net motor taxation	0.0	4.1	5.4	4.9	5.4	4.9	5.2	5.4	3.8	6.6	45.7
Loans	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	66.3	49.7	48.6	48.9	35.8	21.0	16.9	15.4	36.9	339.3
Other authorities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total road revenue	0.0	70.3	55.1	53.5	54.3	40.7	26.2	22.3	19.1	43.5	385.0

- Notes**
1. See text for interpretation and qualification of figures in the table.
 2. The ABS Implicit Price Deflator of Gross Domestic Product (ABS 1988) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

TABLE 8.8 NORTHERN TERRITORY: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	0.0	0.0	18.0	2.6	14.1	5.8	2.6	1.0	0.2	0.2	44.5
Rural arterial roads	0.0	0.0	3.3	1.8	1.0	1.4	3.6	0.1	0.5	4.9	16.6
Rural local roads	0.0	0.0	10.4	4.2	19.3	14.5	7.6	10.3	6.0	13.4	85.7
Urban arterial roads	0.0	0.0	3.7	9.5	5.4	2.1	0.4	0.6	0.5	4.1	26.3
Urban local roads	0.0	0.0	6.5	13.6	2.0	0.1	0.0	0.0	0.0	0.0	22.3
Construction total	0.0	0.0	41.9	31.6	41.7	23.7	14.1	12.1	7.2	22.5	195.0
Maintenance											
National roads	0.0	0.0	1.9	6.9	2.6	3.5	0.7	0.8	2.0	6.8	25.1
Rural arterial roads	0.0	0.0	5.8	4.5	3.0	3.8	3.6	3.8	3.0	4.1	31.5
Rural local roads	0.0	0.0	6.5	10.0	5.7	6.2	7.2	4.2	5.0	8.9	53.6
Urban arterial roads	0.0	0.0	0.9	1.0	1.0	2.3	0.0	1.0	1.4	1.1	8.6
Urban local roads	0.0	0.0	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.6
Maintenance total	0.0	0.0	16.3	22.8	12.2	15.8	11.5	9.8	11.4	21.0	120.8
Total construction and maintenance	0.0	0.0	58.3	54.4	53.9	39.5	25.7	21.8	18.6	43.5	315.7
Planning and research	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Total road expenditure	0.0	0.0	58.6	54.4	53.9	39.5	25.7	21.8	18.6	43.5	316.0

TABLE 8.8 (Cont.) NORTHERN TERRITORY: STATE GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

<i>Categories</i>	<i>1977-78</i>	<i>1978-79</i>	<i>1979-80</i>	<i>1980-81</i>	<i>1981-82</i>	<i>1982-83</i>	<i>1983-84</i>	<i>1984-85</i>	<i>1985-86</i>	<i>1986-87</i>	<i>Total</i>
Non-road expenditure											
Loan repayments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest payments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-road total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

- Notes*
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert road expenditure figures from current prices to constant prices.
 3. The ABS Implicit Price Deflator of Gross National Expenditure (ABS 1988) was used to convert non-road expenditure figures from current prices to constant prices.
 4. Owing to rounding, figures may not add to totals.

TABLE 8.9 NORTHERN TERRITORY: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	0.0	0.0	0.0	0.0	0.4	2.4	0.4	-0.2	0.4	-0.4	3.0
Urban arterial roads	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Urban local roads	3.5	0.9	0.6	-0.8	-0.1	-1.4	1.2	-1.1	-0.3	0.0	4.6
Construction total	3.7	0.9	0.6	-0.8	0.3	1.0	1.7	0.9	0.1	-0.4	7.9
Maintenance											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural local roads	0.0	0.0	0.7	0.5	0.6	1.5	3.7	0.9	3.2	3.1	14.2
Urban arterial roads	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Urban local roads	2.1	0.4	2.2	1.6	3.0	3.2	0.2	2.5	0.7	0.5	16.4
Maintenance total	2.6	0.4	3.0	2.1	3.6	4.7	3.9	3.4	4.0	3.6	31.1
Total construction and maintenance	6.3	1.3	3.7	1.1	3.8	5.8	5.7	4.3	4.1	3.2	39.3
Planning and research	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total road expenditure	6.3	1.3	3.7	1.1	3.8	5.8	5.7	4.3	4.1	3.2	39.3

TABLE 8.9 (Cont.) NORTHERN TERRITORY: LOCAL GOVERNMENT ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Pro rata expenditure on general administration	0.0	0.0	1.1	0.5	1.3	1.6	1.4	0.9	1.3	1.1	9.2
Pro rata non-road expenditure attributable to roads											
Loan repayments	0.0	0.0	0.2	1.1	1.3	0.3	0.1	0.1	0.1	0.2	3.5
Interest payments	0.0	0.0	0.4	0.3	0.3	0.7	0.6	0.4	0.4	0.4	3.5
Non-road total	0.0	0.0	0.5	1.5	1.6	0.9	0.8	0.6	0.5	0.6	6.9
Road works funded by private contributions	0.0	0.0	0.0	0.0	0.8	0.1	0.2	0.1	0.3	0.2	1.8

- Notes
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert road expenditure figures and the figures for road works funded by private contributions from current prices to constant prices.
 3. The ABS Implicit Price Deflator of Gross National Expenditure (ABS 1988) was used to convert non-road expenditure figures from current prices to constant prices.
 4. Owing to rounding, figures may not add to totals.

TABLE 8.10 NORTHERN TERRITORY: TOTAL ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	17.9	21.1	28.4	18.6	30.3	24.0	19.8	26.3	24.4	17.1	227.8
Rural arterial roads	0.7	0.4	5.4	3.4	2.3	4.7	5.8	2.0	2.7	6.2	33.6
Rural local roads	3.2	8.4	16.5	12.2	25.6	25.1	17.1	20.1	13.6	23.0	164.9
Urban arterial roads	1.9	2.2	5.9	11.1	8.7	3.7	2.5	3.3	3.7	8.8	51.6
Urban local roads	16.7	18.5	11.9	12.8	2.4	-1.0	1.3	1.1	-0.1	0.0	63.6
Construction total	40.4	50.5	67.9	58.1	69.1	56.3	46.6	52.7	44.2	54.9	540.8
Maintenance											
National roads	7.7	8.2	7.8	10.6	5.3	6.9	6.5	6.4	7.9	12.5	79.8
Rural arterial roads	4.4	0.0	5.8	4.5	3.0	3.9	3.6	3.8	3.0	4.1	36.1
Rural local roads	10.2	15.3	11.3	13.3	8.5	9.1	12.8	8.8	10.7	14.0	114.0
Urban arterial roads	0.2	1.5	0.9	1.0	1.3	2.4	0.6	1.0	1.4	1.1	11.4
Urban local roads	2.3	3.4	3.5	1.9	3.3	3.7	0.2	2.5	1.9	0.5	23.2
Maintenance total	25.3	28.2	29.1	31.5	21.3	26.1	23.6	22.5	24.9	32.3	264.8
Total construction and maintenance	65.7	78.7	97.2	89.6	90.5	82.6	70.3	75.2	69.0	87.2	805.9
Planning and research	0.0	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
Total road expenditure	65.7	79.4	97.4	89.6	90.5	82.6	70.3	75.2	69.0	87.2	806.7

- Notes
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

CHAPTER 9 AUSTRALIAN CAPITAL TERRITORY

Details of Commonwealth road expenditure in the Australian Capital Territory are shown, in current prices and constant 1986-87 prices, in tables 9.1 to 9.4. Road financing arrangements, including legislation related to road financing, as they existed before July 1987 in the Australian Capital Territory, are briefly described below.

Significant changes have occurred in the administration of the Territory since 1 July 1987 which are not considered in this paper. These changes include: self-government in the Australian Capital Territory in 1989; transfer of responsibility for road construction and maintenance to the Australian Capital Territory Administration; abolition of the National Capital Development Commission; introduction of the Business Franchise Licence (Petroleum Products) fee; and establishment of the National Capital Planning Authority.

REVENUE

In the Australian Capital Territory, the Commonwealth government was responsible for the collection of all taxes and for all expenditure on roads during the period 1977-78 to 1986-87. There are, therefore, no detailed data for road revenue for the Australian Capital Territory.

EXPENDITURE

Expenditure for roads declined in the Australian Capital Territory, from \$94.2 million in 1977-78 to \$49.2 million in 1986-87 (in constant 1986-87 prices). During the intervening years, funds fell as low as \$21.3 million in 1981-82 and 1983-84, varying with the intensity of land development.

TABLE 9.1 AUSTRALIAN CAPITAL TERRITORY: COMMONWEALTH ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	1.1
Rural local roads	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.8	2.2	0.0	3.8
Urban arterial roads	25.0	32.1	23.5	11.4	5.0	6.6	6.4	10.0	16.1	19.9	156.0
Urban local roads	12.9	5.5	3.0	2.7	3.1	4.1	4.0	6.3	15.6	18.5	75.7
Construction total	37.9	37.6	26.5	14.1	8.1	11.0	10.9	17.1	35.0	38.4	236.6
Maintenance											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.9	1.1	2.4
Rural local roads	0.0	0.0	0.0	0.0	0.5	0.6	0.5	0.8	1.2	1.0	4.6
Urban arterial road	1.2	1.8	2.8	2.8	3.0	3.8	3.2	5.0	3.9	3.3	30.8
Urban local roads	1.4	1.6	2.2	2.2	3.1	3.9	3.3	5.2	4.4	5.4	32.7
Maintenance total	2.7	3.4	4.9	5.1	6.9	8.3	7.0	11.0	10.4	10.8	70.5
Total construction and maintenance	40.6	41.0	31.4	19.2	15.0	19.3	17.9	28.0	45.4	49.2	307.0
Planning and research	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total road expenditure	40.6	41.0	31.4	19.2	15.0	19.3	17.9	28.0	45.4	49.2	307.0

Notes 1. See text for interpretation and qualification of figures in the table.
 2. Owing to rounding, figures may not add to totals.

TABLE 9.2 AUSTRALIAN CAPITAL TERRITORY: TOTAL ROAD EXPENDITURE, 1977-78 TO 1986-87 (CURRENT PRICES)
(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	1.1
Rural local roads	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.8	2.2	0.0	3.8
Urban arterial roads	25.0	32.1	23.5	11.4	5.0	6.6	6.4	10.0	16.1	19.9	156.0
Urban local roads	12.9	5.5	3.0	2.7	3.1	4.1	4.0	6.3	15.6	18.5	75.7
Construction total	37.9	37.6	26.5	14.1	8.1	11.0	10.9	17.1	35.0	38.4	236.6
Maintenance											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.9	1.1	2.4
Rural local roads	0.0	0.0	0.0	0.0	0.5	0.6	0.5	0.8	1.2	1.0	4.6
Urban arterial roads	1.2	1.8	2.8	2.8	3.0	3.8	3.2	5.0	3.9	3.3	30.8
Urban local roads	1.4	1.6	2.2	2.2	3.1	3.9	3.3	5.2	4.4	5.4	32.7
Maintenance total	2.7	3.4	4.9	5.1	6.9	8.3	7.0	11.0	10.4	10.8	70.5
Total construction and maintenance	40.6	41.0	31.4	19.2	15.0	19.3	17.9	28.0	45.4	49.2	307.0
Planning and research	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total road expenditure	40.6	41.0	31.4	19.2	15.0	19.3	17.9	28.0	45.4	49.2	307.0

Notes 1. See text for interpretation and qualification of figures in the table.
2. Owing to rounding, figures may not add to totals.

TABLE 9.3 AUSTRALIAN CAPITAL TERRITORY: COMMONWEALTH ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	1.2
Rural local roads	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.9	2.3	0.0	4.2
Urban arterial roads	58.0	69.0	43.6	18.3	7.1	8.3	7.6	11.2	16.8	19.9	260.0
Urban local roads	29.9	11.8	5.6	4.3	4.4	5.2	4.8	7.1	16.3	18.5	107.9
Construction total	87.9	80.9	49.2	22.6	11.5	13.9	12.9	19.2	36.6	38.4	373.2
Maintenance											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.9	1.1	2.6
Rural local roads	0.0	0.0	0.0	0.0	0.7	0.8	0.6	0.0	1.3	1.0	4.3
Urban arterial roads	2.8	3.9	5.2	4.5	4.3	4.8	3.8	5.6	4.1	3.3	42.2
Urban local roads	3.2	3.4	4.1	3.5	4.4	4.9	3.9	5.8	4.6	5.4	43.4
Maintenance total	6.3	7.3	9.1	8.2	9.8	10.5	8.3	11.5	10.9	10.8	92.6
Total construction and maintenance	94.2	88.2	58.3	30.8	21.3	24.4	21.3	31.5	47.5	49.2	466.6
Planning and research	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total road expenditure	94.2	88.2	58.3	30.8	21.3	24.4	21.3	31.5	47.5	49.2	466.6

- Notes
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

TABLE 9.4 AUSTRALIAN CAPITAL TERRITORY: TOTAL ROAD EXPENDITURE, 1977-78 TO 1986-87 (CONSTANT 1986-87 PRICES)

(\$ million)

Categories	1977-78	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	Total
Construction											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	1.2
Rural local roads	0.0	0.0	0.0	0.0	0.0	0.4	0.6	0.9	2.3	0.0	4.2
Urban arterial roads	58.0	69.0	43.6	18.3	7.1	8.3	7.6	11.2	16.8	19.9	260.0
Urban local roads	29.9	11.8	5.6	4.3	4.4	5.2	4.8	7.1	16.3	18.5	107.9
Construction total	87.9	80.9	49.2	22.6	11.5	13.9	12.9	19.2	36.6	38.4	373.2
Maintenance											
National roads	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rural arterial roads	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.9	1.1	2.6
Rural local roads	0.0	0.0	0.0	0.0	0.7	0.8	0.6	0.0	1.3	1.0	4.3
Urban arterial roads	2.8	3.9	5.2	4.5	4.3	4.8	3.8	5.6	4.1	3.3	42.2
Urban local roads	3.2	3.4	4.1	3.5	4.4	4.9	3.9	5.8	4.6	5.4	43.4
Maintenance total	6.3	7.3	9.1	8.2	9.8	10.5	8.3	11.5	10.9	10.8	92.6
Total construction and maintenance	94.2	88.2	58.3	30.8	21.3	24.4	21.3	31.5	47.5	49.2	466.6
Planning and research	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total road expenditure	94.2	88.2	58.3	30.8	21.3	24.4	21.3	31.5	47.5	49.2	466.6

- Notes**
1. See text for interpretation and qualification of figures in the table.
 2. The BTCE Road Construction Price Index (BTCE 1989) was used to convert figures from current prices to constant prices.
 3. Owing to rounding, figures may not add to totals.

APPENDIX I METHODOLOGY AND INFORMATION SOURCES

This appendix briefly outlines the methodology used in the preparation of this statistical series, and provides details of the information sources used in the compilation of the statistics. The methodology is consistent with that used in the earlier issues of *Australian Road Financing Statistics* (BTE 1982, 1984, 1985, 1986, 1987b).

DEFINITION OF ROAD EXPENDITURE AND ATTRIBUTION

In this paper, road expenditure is defined as expenditure by public authorities on the provision of all roads, bridges and similar structures which are used by the general public. The major types of road expenditure comprise land acquisition, construction, maintenance, planning and research, and administration.

Expenditure in the form of loan repayments or interest payments is not considered as road expenditure even though it represents a cost of financing the road system. The inclusion of loan repayments would constitute double counting from a resource viewpoint. Interest payments are considered as a cost of borrowing, not as road expenditure. However, loan repayments and interest payments are shown in the State and local government road expenditure tables under separate headings (non-road expenditure items) to indicate the total fiscal effort.

Under this broad definition, road expenditure for each level of government is measured by the expenditure on roads from its own resources. The decision as to which level of government road expenditure should be attributed to depends on how funds are spent. For example, Commonwealth specific purpose road grants to State and local governments are attributed to Commonwealth government road expenditures. Similarly, State road grants to local government authorities are treated as State government road expenditure. However, road expenditures derived from the Commonwealth general purpose grants are treated as expenditures of the recipient since they are regarded as constituting discretionary funds on the part of the recipient.

Therefore, Commonwealth road expenditure includes:

- . road grants to the States and the Northern Territory and roads expenditure in the Australian Capital Territory;
- . disaster relief grants;
- . Commonwealth grants for unemployment relief where these are tied to specific roads projects (for example, Community Employment Program grants);
- . expenditure by Commonwealth authorities (for example, the Snowy Mountains Hydro-Electricity Authority; and
- . expenditure on the reconstruction of the Tasman Bridge and the construction of the Second Hobart Bridge and grants provided for road works under the Steel Regions Assistance Program.

Road expenditure by authorities other than the State road authorities is allocated to those authorities, not to the source from which the funds originated. For example, road expenditure by State housing authorities from Commonwealth funds is classified as State road expenditure. These Commonwealth funds were not tied to roads but were available for general housing purposes including land servicing. Grants to disaster or flood relief are usually tied to repair or replacement of particular road infrastructure actually damaged or destroyed and are not free to be spent as the recipient may wish. Thus, grants which are spent on roads are classified as specific purpose road grants and considered as road expenditure of the donor.

Road expenditure by the private sector is not included in this paper.

SOURCES OF INFORMATION

A number of sources of information were used to derive the Commonwealth, State and local government road financing statistics. Where source data were inconsistent, reconciliation of figures was attempted.

Commonwealth

The main source of information for the Commonwealth road expenditure statistics was the information supplied to the National Association of Australian State Road

Authorities (NAASRA) by the State road authorities. The NAASRA information provided details of Commonwealth road expenditure in each State and the amount of expenditure for each road category.

Road expenditure statistics for the Australian Capital Territory were compiled from information supplied by the former National Capital Development Commission, through the Australian Capital Territory Administration. Reconciliation of figures was necessary owing to inconsistent data. Further details concerning Commonwealth road expenditure under specific roads legislation were obtained from the Commonwealth budget papers.

State governments

The annual reports of the State road authorities and State auditor-general reports provided most of the information required on State road revenue and expenditure. In some cases, annual reports of other State authorities were used, and direct contact was made with particular authorities to obtain additional information.

Data supplied by State road authorities to NAASRA were used to establish expenditure by road category, with the NAASRA data being reconciled with information obtained from the annual reports of the State road authorities. The NAASRA data also provided information on road expenditure by other State authorities and instrumentalities (for example, housing authorities, forestry commissions, water boards and so on) for which road expenditure is ancillary to their main function.

Local government

The main source of information on local government road expenditure was the magnetic tapes supplied by the Australian Bureau of Statistics. The Australian Municipal Information System series were used for prior to 1979-80, and the Standardised Local Government Finance Statistics were used from 1979-80.

TREATMENT OF PARTICULAR ITEMS

Non-road expenditure

As already noted, the road expenditure figures do not include any expenditure associated with loan repayments or interest payments. Road works undertaken

by local government for which payment is received from private developers or general administration expenses of local government are also excluded from road expenditure. However, these items are separately included in the tables for State and local government expenditure under the general heading of 'non-road expenditure'.

State government figures

The item 'other' included under the heading 'non-road expenditure' in the State expenditure tables represents use of motor vehicle taxes for non-road expenditure, for example, subsidies to public transport, expenditure on road safety programs, police traffic control and ambulance services, and retention of any revenue from these taxes in consolidated revenue.

For all States, total road revenue should, in theory, equal the sum of total road expenditure and total non-road expenditure. However, by and large, State road authorities do not exactly match revenue and expenditure each year, the difference being represented by an increase or decrease in unspent fund balances, outstanding debits and credits or in overdrafts. Apart from these balancing items, all items of revenue recorded in the tables are matched by items of road expenditure or items of non-road expenditure, or both.

Two items of interest in the revenue figures are 'motor taxation' and 'collection costs'. Motor taxation includes only specific taxes or charges related to the use and operation of motor vehicles. It includes State fuel taxes (business fuel franchise levies and fees) but excludes third party insurance premiums, stamp duty on motor vehicles and traffic fines and so on. The specific charges included in the tabulations are noted in the chapters relating to individual States.

The item 'collection costs' includes only the costs of collecting those charges included in 'motor taxation'. However, in some cases the State auditor-general reports and State road authority annual reports do not separate the costs of collecting these charges from the costs of collecting other charges or from other administrative costs. In these cases estimates were made with the assistance of officers from the State government authorities. Specific problems encountered are noted in the relevant chapters.

Local government figures

Information on local government road expenditure until 1978-79 was obtained mainly from the Australian Municipal Information System series. Data for the

years from 1979-80 were obtained from the Standardised Local Government Finance Statistics series.

The main items included in local government expenditure on roads from the Australian Municipal Information System collection and the Standardised Local Government Finance Statistics are:

- . expenditure from general revenue on roads, streets, and so on;
- . plus expenditure from local funds on roads, streets, and so on;
- . plus cost of street lighting;
- . less street construction contributions (mainly from private developers);
- . less reimbursements from other bodies (mainly from State governments) for road works done on their behalf by local government authorities;
- . less specific government grants on roads.

An important issue was encountered with the item 'street construction contributions'. These contributions are mainly made by land developers to local government authorities for road works undertaken by the authorities. Street construction contributions, along with road works undertaken by private developers (whether required to do so or not by local government) have been classified as private road expenditure since this expenditure is paid for by private developers, and ultimately by land buyers, not by ratepayers through general rates.

In some States, street construction contributions are not made because private developers actually construct the roads, with the result that no expenditure figures are available. Therefore, omitting street construction contributions (mainly from private developers) provides a consistent accounting for each State. However, it is recognised that local government bodies claim that street construction contributions are a tax or levy which, instead of being imposed on ratepayers, are recouped from developers and ultimately the specific purchasers of the serviced land.

While the figures for street construction contributions are not included in the road expenditure figures for local government, they are shown separately for

completeness. Owing to the different practices and requirements in each State, interstate comparisons for this item are not valid.

It should be noted that Commonwealth and State government data include some road expenditure which is ultimately recovered from private sources. For example, government housing authorities may recoup the costs of some road works from the sale of serviced land. Forestry commissions may recoup costs of road works from logging companies either directly or indirectly through logging royalties. It has not been possible to obtain details of amounts recovered by Commonwealth and State governments from private sources but the amounts involved would be small. This is not the case with local government road works where private contributions constitute a significant share of total local government expenditure on road works.

A further three expenditure items are presented separately. They are 'loan repayments', 'interest payments' and 'general administration'.

The first two are treated in a way similar to that for the equivalent State government non-road expenditure items. However, there is an added difficulty with local government loan repayments and interest. In general, local governments raise loans annually to cover certain expenditures, and some road works are financed from these loans. Therefore the loans and interest paid by local governments are not solely devoted to roads. Although expenditure on roads from loans can be accurately stated, estimating the share of interest payments and loan repayments to be attributed to roads is difficult because of varying annual interest rates and repayment periods.

The third item, general administration, requires some elucidation. All the administration costs of a State road authority are attributed to roads, but in a multipurpose authority such as most local government authorities administration costs are not totally attributable to roads. The figures for road expenditure of local government already include administration costs of road construction and maintenance where so identified by local government authorities. However, it could be claimed that some part of general administration costs should also be included (particularly for rural shires where roads are the major expenditure item). This share would vary from council to council, particularly between urban and rural councils.

The approach taken in this paper to apportioning these loan repayments, interest payments and general administration costs to road expenditure was very simple. In each case they were apportioned according to the share of the total

expenditure of local government represented by that of local government road expenditure in each State in each year whether road funding came from own or other sources. This share averaged around 30 per cent. It is recognised that this approach is arbitrary but the information to enable an accurate apportionment is not available.

Apart from the above problems concerning bifurcation of particular expenditure items, the Australian Municipal Information System series has a number of deficiencies when used for the purpose of analysing road expenditure, for which it was not primarily intended. One particular shortcoming is that it does not enable an accurate split of road expenditure from local government's own resources into construction and maintenance expenditure. In order to overcome this shortcoming two further sources of information were used to estimate the construction-maintenance split for years prior to 1979-80. The first was information provided by State road authorities to NAASRA. The second was a survey of local government authorities undertaken by the Bureau of Transport Economics in 1980.

The Standardised Local Government Finance Statistics (SLGFS) series, introduced by the Australian Bureau of Statistics for 1979-80, has partly overcome some shortcomings of the Australian Municipal Information System (AMIS) statistics. In terms of scope, detail and data consistency, the SLGFS series represents a marked improvement over the AMIS collection. In particular, the SLGFS series provides details of road construction and maintenance expenditure classified by sources of funding, which were not available in the AMIS collection.

The AMIS and SLGFS series for 1979-80 show different apportionments of road expenditure between construction and maintenance.¹ The SLGFS series, published for 1979-80 and onwards, separately identifies the construction-maintenance split for both tied and untied funds. The SLGFS figures are

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1. The reason for the difference in the construction-maintenance ratio before and after 1979-80 is likely to lie in the difference in the construction-maintenance split of tied and untied funds. For example, Commonwealth road grants for local roads were predominantly spent on construction while road expenditure from other sources was spent mainly on road maintenance. Since the AMIS series does not differentiate road expenditure from tied and untied sources the construction-maintenance split from untied sources shown here for years prior to 1979-80 is in fact the split for total road expenditure. Thus it overstates the share of road expenditure from own resources (untied) spent on construction.

therefore better estimates of the construction-maintenance split for 1979-80 than those obtained from the AMIS series. However, for the years prior to 1979-80 there is no reliable information available to improve the accuracy of figures.

The use of the SLGFS series for 1979-80 and onwards has allowed the statistics on 'road works funded from private contributions' to be refined. Figures for 1979-80 and subsequent years include the SLGFS items 'charges' and 'contributions and donations'. In this respect, a distinction can be drawn between the contributions of private land developers for roads for public use and funding from landholders for roads on private land. The latter have been excluded in the same manner as 'reimbursements' by State road authorities. Some caution must be exercised in comparing the 'road works funded by private contributions' item on an interstate basis because of differences in policies adopted in each State concerning the charges imposed on land developers.

The treatment of general administration has not altered with the change from the AMIS to the SLGFS series. However, it is possible that there are inconsistencies in the treatment of 'general administration' and 'unclassified other' in the SLGFS series. In particular, it is suspected that some expenditure classified as 'unclassified other' should be included in the item 'general administration' in the SLGFS figures for New South Wales and Queensland. The item 'unclassified other' does not, by definition, include road or related expenditure. However, the figure for this item is large for New South Wales for the year 1979-80 and counterbalances the figure for road expenditure in the SLGFS series for that year, which is lower than that in the AMIS collection. The results of the survey of local government undertaken by the Bureau of Transport Economics in 1980 are closer to the SLGFS figure for New South Wales local government road expenditure from own resources. The 1979-80 local government road expenditure figures for New South Wales should be treated with caution, because the figures obtained seem to be lower than for the previous years as well as the subsequent years.

A major problem with both the AMIS and SLGFS series is that neither provide any data to enable an estimate to be made of local government expenditure on arterial roads. Local government authorities share responsibilities for a large length of arterial roads in most States, predominantly urban arterial roads, but their actual financial expenditure on these roads is unknown. Clearly, though, some expenditure by local government, allocated to local roads in the statistics, should be classed as expenditure on arterial roads, particularly for urban roads. For the years up to 1980-81, estimates were made on the basis of the Bureau of Transport Economics survey. It is possible that arterial road expenditure was

larger than was indicated by the Bureau survey results. For later years no estimates could be made and all local government road expenditure is allocated to local roads from 1981-82 onwards.

In view of these problems it should be emphasised that, even taking into account the greater detail provided by the SLGFS series, the local government expenditure statistics should be treated with some caution.

APPENDIX II CONSTANT PRICE ESTIMATES

Current price data were normalised into constant prices through the use of three indices. Table II.1 provides details and compares these indices. To convert all road expenditure figures to constant prices, the Bureau of Transport and Communications Economics road construction input-price index was used (BTCE 1989). The index used to deflate State road revenue was the Australian Bureau of Statistics implicit price deflator for expenditure on gross domestic product. For items classified as non-road expenditure the Australian Bureau of Statistics implicit price deflator for gross national expenditure was used.

TABLE II.1 COMPARISON OF CURRENT PRICE DEFLATORS, 1977-78
TO 1986-87

Year	<i>BTCE road construction index overall activity</i>	<i>Implicit price deflator</i>	
		<i>Expenditure on gross domestic product</i>	<i>Gross national expenditure</i>
1977-78	43.1	47.8	46.5
1978-79	46.5	51.6	50.1
1979-80	53.9	57.3	55.4
1980-81	62.3	63.4	61.3
1981-82	70.3	69.8	67.5
1982-83	79.2	76.9	74.7
1983-84	84.2	82.5	79.7
1984-85	89.0	87.1	84.5
1985-86	95.6	93.0	92.0
1986-87	100.0	100.0	100.0

Sources ABS (1988), BTCE (1989).

REFERENCES

ABS Australian Bureau of Statistics

AGPS Australian Government Publishing Service

BTE Bureau of Transport Economics; Federal Bureau of Transport Economics

BTCE Bureau of Transport and Communications Economics

ABS (1988), *National Income and Expenditure: 1986-87*, catalogue no. 5204.0, AGPS, Canberra.

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ABBREVIATIONS

ABS	Australian Bureau of Statistics
AMIS	Australian Municipal Information System
ABRD	Australian Bicentennial Road Development Program
BTE	Bureau of Transport Economics; Federal Bureau of Transport Economics
BTCE	Bureau of Transport and Communications Economics
NAASRA	National Association of Australian State Road Authorities
SLGFS	Standardised Local Government Finance Statistics