

# **1976-77** **ANNUAL REPORT**

OF THE COMMISSIONER FOR MAIN ROADS N.S.W.



DEPARTMENT OF MAIN ROADS N.S.W.





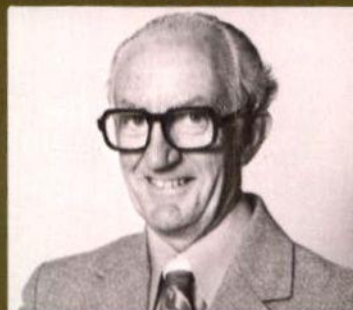
**A. F. Schmidt,**  
B.E., F.I.E.Aust., F.C.I.T., F.R.I.P.A.  
COMMISSIONER FOR MAIN ROADS



**B. J. Sexton, B.E., F.I.E.Aust., F.C.I.T.**  
DEPUTY COMMISSIONER FOR MAIN ROADS



**D. C. Jacob, B.E., M.I.E.Aust., M.A.I.T.T.**  
ENGINEER-IN-CHIEF



**N. B. Herrick, A.A.S.A.**  
SECRETARY



**E. C. Cooper**  
CHIEF ACCOUNTANT



**G. C. Sheldon, LL.B.**  
CHIEF LEGAL OFFICER



# 1976-77 ANNUAL REPORT

OF THE COMMISSIONER FOR MAIN ROADS N.S.W.

## CONTENTS

Submission.....	1
General Review .....	2
Finance.....	4
Tollworks .....	6
Sydney Harbour Bridge.....	7
Statement of Receipts and Payments.....	8
Freeway Construction.....	11
Road Construction .....	11
Bridge Construction.....	18
Maintenance of Roads and Bridges.....	19
That Was the Year That Was.....	20
Advance Planning.....	22
Urban Road Planning.....	22
Country Road Location .....	23
Traffic Management.....	23
Survey and Acquisition of Land .....	25
Plant and Motor Vehicles .....	25
Materials Testing and Research .....	26
Weight of Loads.....	28
Technical Computing.....	28
Graphic Services .....	28
Library Service .....	28
Legislation.....	29
Elimination of Railway Level Crossings.....	29
Public Relations.....	30
Employment .....	30
Bituminous Surfacing .....	32
Road Classifications and Distances.....	33
Landscaping.....	33
Staff Training .....	34
Suggestions Committee .....	35
Missions Abroad.....	35
Office Premises and Housing for Staff.....	36
Army Supplementary Reserve Unit.....	36
Australian Road Research Board .....	38
National Association of Australian State Road Authorities.....	39
Visitors from Overseas .....	39
Senior Officers .....	40
Acknowledgements .....	Back Cover

SYDNEY, NEW SOUTH WALES  
OCTOBER 1977

THE HONOURABLE,  
THE MINISTER FOR TRANSPORT AND  
THE MINISTER FOR HIGHWAYS,  
SYDNEY

Section 6 of the Main Roads Act, 1924,  
requires that the Commissioner for  
Main Roads shall present an annual  
report and statement of accounts to  
Parliament through the Minister.

I now have pleasure in submitting  
through you the fifty-second Annual  
Report, including statement of  
accounts.

The report covers the period from 1 July  
1976 to 30 June 1977 though a few  
matters referred to are carried beyond  
the latter date for convenience and  
completeness of record.

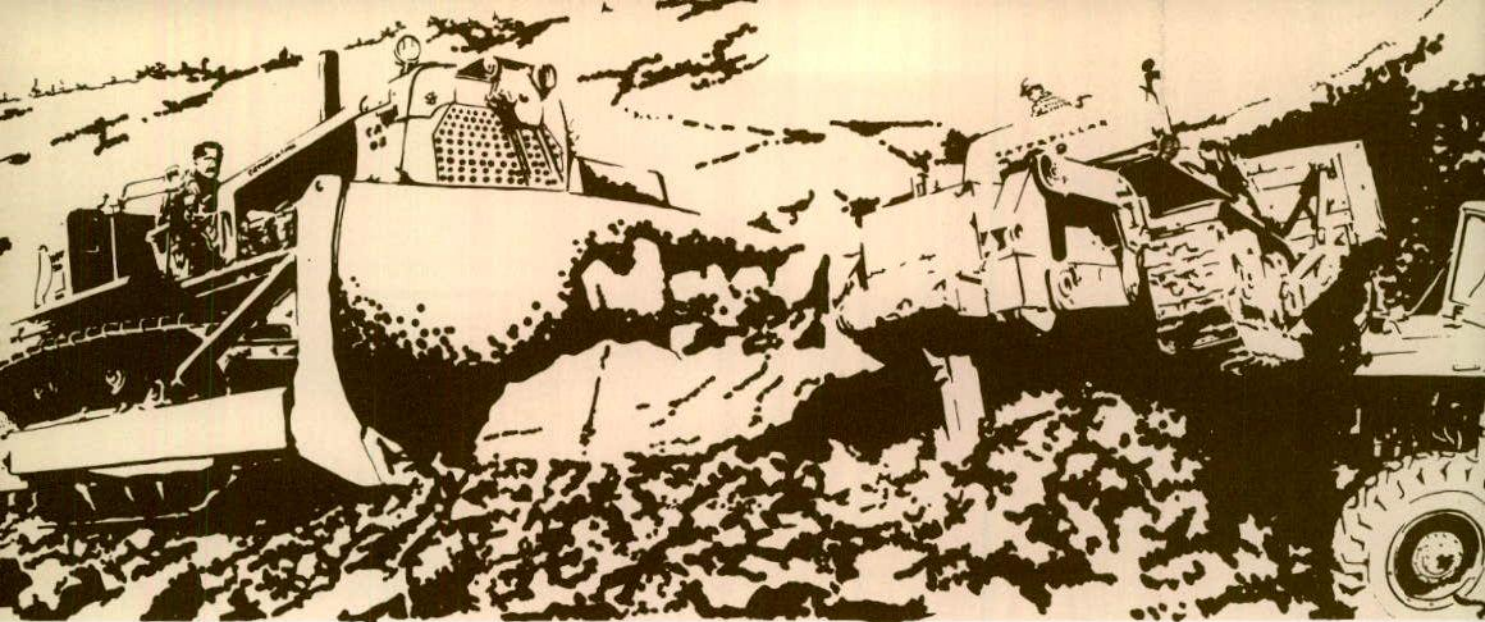


A. F. SCHMIDT  
COMMISSIONER FOR MAIN ROADS



DEPARTMENT OF MAIN ROADS N.S.W.





## GENERAL REVIEW

From time immemorial man has shown a preference for a personalised form of transport. From about the year 5000 B.C., when the wheel was invented, this transport has gradually developed into today's motor vehicle powered by the internal combustion engine.

There is sufficient evidence that the internal or external combustion engine will power road vehicles, similar to what we are using today, well into the foreseeable future even though fears are being expressed that fossil fuels will be well on the way to exhaustion by the year 2000.

These vehicles, whatever their power source, will still need roads for their movement and the planning and development of roads for the future needs of the State's main roads system is an on-going function.

In planning and developing the roads for the future the Department of Main Roads employs people in an extensive range of skilled occupations. These people are engaged in planning and implementing programmes of road building and maintenance works to meet the needs of the State.

Planned road improvements must ensure that the works provide the capacity to serve the greatest number of people in the community; that the works are socially and environmentally acceptable; that the new work provides a road which is safer for the road user; that the methods of construction will provide a long-lasting community asset; that the cost of construction is minimal for the type of work being undertaken; and the national estate is benefited because of the works.

An assessment of road needs is an expression of the work needed to improve the existing road system to standards consistent with present and estimated future requirements for the safe and free flow of vehicular traffic.

There will always be a differential between assessment and achievement. This differential is brought about by budget constraints, physical constraints such as topography, floods and other natural phenomena, constraints imposed by environmental and ecological sensitivity and there are others.

In planning for road needs the Department therefore plans for the possible and determines its priorities in this light.

Programmes of road improvements embrace both bridges and roads.

Over many years crossings of major waterways were made by vehicular ferries which ceased running during flood periods and immobilised transport.

Flood free bridges have now replaced ferries on our major arterial roads and are part of the 5,596 bridges on the Main Roads System in New South Wales.

A great number of these bridges were constructed prior to the 1940's, and because of the trend towards heavier loads and increasing traffic volumes many of them are now structurally deficient or functionally obsolete.

Adverse environmental conditions have resulted in an accelerated deterioration of these structures and a rapid reduction in their life expectancy.

Because only limited funds can be made available for bridge construction, the maximum finance available must be expended on the maintenance of these older bridges.

In addition to the upkeep of bridges, it is the Department's function to maintain road communication between centres of population and to develop or assist in developing acceptable road improvements for commercial and personal transport.

This communication has been achieved by means of the main roads system. The system has developed and changed markedly over the last 30 years partly by evolution and partly by conscious planning.

Travel habits and demand as well as vehicle numbers and performance have dictated the need for planning.

The main roads system has become more highly structured with the principal arterial roads assuming ever-increasing importance in the carriage of people and goods.

The carriage of goods in Australia is an immense infrastructure of freight movements involving transport by road, rail, sea and air.

The 1975-76 Annual Report of the Commonwealth Department of Transport notes that the annual freight task in Australia is of the order of 170 000 million tonnes/kilometre. The Report states that road transport carries more than four times as much freight as rail and twenty times as much as sea transport.

So that this road freight may move safely, efficiently and at least cost to the shipper and the shopper, the Department of Main Roads spent \$309,864,301 on the principal roads in New South Wales in the last financial year. In addition private operators, both big and small, provided the immense capital investment needed for the vehicles and equipment to cater for these important intra-regional, inter-regional and interstate freight movements.

The Department of Main Roads is deeply involved in the





consideration of the transport requirements of the Botany Bay port development and the surrounding sub-region.

In this area, the Department of Main Roads is undertaking a substantial programme of road improvements to service the Port area. Some of these improvements have been completed, others are in hand and others are in the design stage.

The Maritime Services Board has estimated that container shipping will commence to use the Port in March 1979 and approved roadworks have been programmed to be completed by that date.

There are other roadworks which have been approved for construction in the Botany Bay sub-region and which will assist in the movement of traffic. Constraints imposed by time and funds will prohibit these additional works being completed by March 1979 but it is the planned objective to have them completed by the time the final berth becomes operational.

The cost of roadworks in the Port area will be almost \$20 million and a proportion of this amount will be provided by the Commonwealth Government.

Existing traffic, together with Port traffic and traffic generated by other industrial developments in the area including Kingsford-Smith (Sydney) Airport, dictates the need to provide at least one additional major road link to cater for eventual traffic requirements for the Botany Bay sub-region.

Planning and design investigations for a number of roadway alternatives within the Kyeemagh-Chullora transportation corridor are being carried out by the Department for the State Government.

One of the most significant changes in the administration of the Department flowed from the establishment of the Traffic Authority of New South Wales in 1976.

The result of this change has been to amalgamate in one department all significant activities in the construction and maintenance of roads and traffic facilities.

The Department is now the principal construction agency for the installation of traffic advisory and control facilities, such as traffic signals, signs, road markings and the like.

Because of the technical expertise and experience available in the Department of Main Roads, the Traffic Authority has delegated to the Department powers to investigate, design, construct, operate and maintain traffic facilities on all public roads in New South Wales subject to the policies, priorities and programmes set down by the

Traffic Authority. These powers are exercised by the Department's Divisional Engineers.

The Traffic Facilities Fund has been established to provide for the expenditure necessary in providing and maintaining traffic control facilities throughout the State. The Department of Main Roads administers that part of this Fund which is required to meet expenditures on council roads.

Councils carry out the bulk of the work of construction and maintenance on trunk and main roads and they are encouraged to assign priorities to needed improvements several years ahead.

The Department provides funds generally in accordance with the agreed priority programmes and grants are made available subject to a set of commonsense conditions which include certain statutory requirements.

Departmental officers attend Council meetings on request. Joint inspections are made to clarify problems and assistance is freely given to assist Councils in achieving desired standards.

The Department sees Councils as partners in a sphere of common interest.

To build many of the roadworks required the Department employed 10,148 people at the close of the 1976-77 financial year.

This number of people is 669 more than the number employed at the close of the preceding financial year. The increase in employment was brought about by a reassessment of funds available to the Department with a consequent adjustment of work priorities. A great many of these people are employed in rural areas.

The year has been both challenging and frustrating. The dedication of all the people in the Department's service has been of the highest order.

Very serious problems were imposed on the Department of Main Roads in maintaining and improving the main roads system to world standard as demanded by the community and the sustained effort given over the year demonstrates the outstanding personal pride which people employed in the Department have in the performance of their duties.

Much of this pride is generated by people participation in the work and activities of the Department. This participation ranges in a variety of ways through self managing work group to participation in Committee recommendations which assist in the process of decision making.



# FUNDS 1976-77

## RECEIPTS

COMMONWEALTH GRANTS: \$137,365,958

STATE MOTOR VEHICLE TAXATION: \$106,098,521

CHARGES FOR HEAVY VEHICLES: \$19,809,661

LOANS: \$19,000,000

ROADTRANSPORT & TRAFFIC FUND, PUBLIC VEHICLES FUND: \$7,229,609

OTHER: \$22,786,448

## PAYMENTS

CONSTRUCTION, RECONSTRUCTION AND PROPERTY  
ACQUISITIONS OF ROADS AND BRIDGES: \$162,817,148

MAINTENANCE AND MINOR IMPROVEMENT OF ROADS AND  
BRIDGES: \$96,741,748

CONSTRUCTION AND MAINTENANCE OF LOCAL ROADS: \$21,875,700

ADMINISTRATION AND MISCELLANEOUS: \$28,428,705

## FINANCE

The continuing overall escalation in costs since 1972-73 has reduced the real value of the total funds available to the Department for maintenance and new construction works.

Over this five year period, road industry costs have increased significantly more than the Consumer Price Index as set out in the table below.

Year	Consumer Price Index	Department's Road Cost Index
1972-73	100.00	100.00
1973-74	113.00	113.90
1974-75	131.51	146.00
1975-76	148.61	168.90
1976-77	166.84	185.80 (Est.)

### STATE REVENUE

#### Motor Vehicle Taxation

The revenue for Main Roads works from motor vehicle taxation during the year 1976-77 totalled \$106,098,521 which was \$20,144,218 or 23.4% more than the previous year. This increase was due to the 33½% increase in the rates from 1 November 1976. The previous rates had been in force since 1 January 1972.

Despite this increase in the rates, the real value of revenue from motor vehicle taxation, when expressed in terms of 1972-73 values, has declined from \$74 million in 1972-73

to \$57 million in 1976-77, as illustrated in the bar chart on page 5. The average revenue per vehicle from motor vehicle taxation also indicates a similar trend, declining from \$37.04 per vehicle in 1972-73 to \$24.87 per vehicle in 1976-77.

Since 1972-73, the number of registered motor vehicles in New South Wales has increased by 14.2%, which meant additional State funds had to be expended on Main Roads construction and maintenance works. To provide for these additional funds and for increases in road industry costs, it is estimated that an additional \$53 million would have been required from motor vehicle taxation in 1976-77 to match the real value of the amount of taxation received in 1972-73.

#### Road Maintenance (Contribution) Act, 1958

The charges on heavy commercial vehicles under this Act yielded \$19,809,661, which was \$458,115 or 2.3% less than in 1975-76. Revenue from this source is applied wholly to maintenance works.

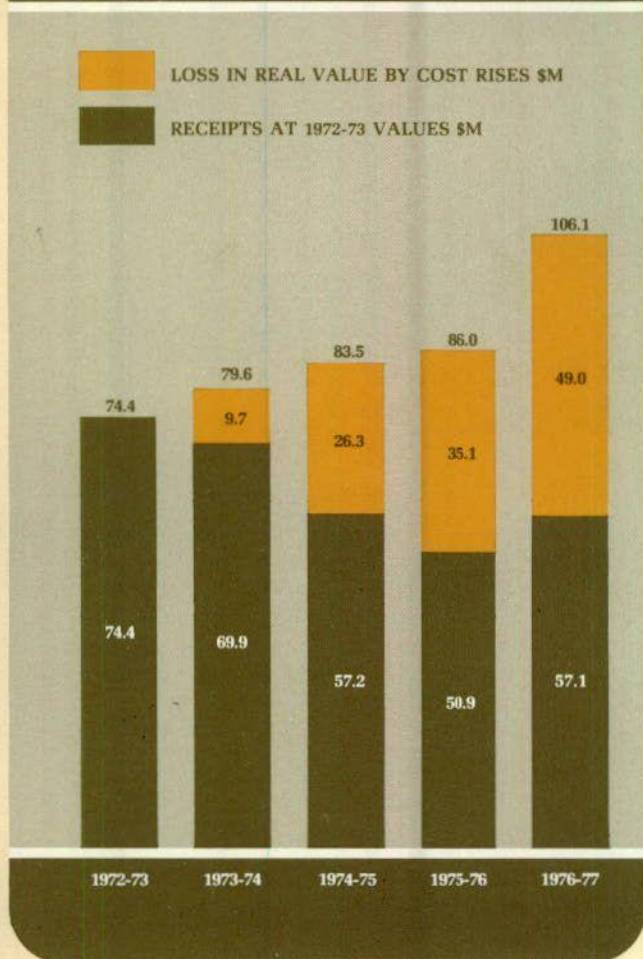
In 1972-73 values the revenue from this source has declined from \$18.3 million in 1972-73 to \$10.7 million in 1976-77.

#### Loan Funds

During 1976-77, \$11 million were borrowed from private lenders for construction works. In addition, an amount of \$8 million was made available to the Department from repayable State Government loan funds.



## STATE MOTOR VEHICLE TAXATION



Payments during 1976-77 for interest, exchange, etc., sinking fund and repayment of principal increased by \$4,234,681 to \$15,145,646. The capital debt, less reserves for repayment of loans, increased from \$109,685,679 to \$122,881,036.

The Department has increased its borrowings from \$8.5 million in 1972-73 to \$19 million in 1976-77. This increase has partly offset the loss in real value of other State revenues.

### Traffic Facilities

Following the passing of the Traffic Authority Act, 1976, the responsibility for the construction and maintenance of traffic facilities on all roads in New South Wales was transferred from the Department of Motor Transport to the Department of Main Roads.

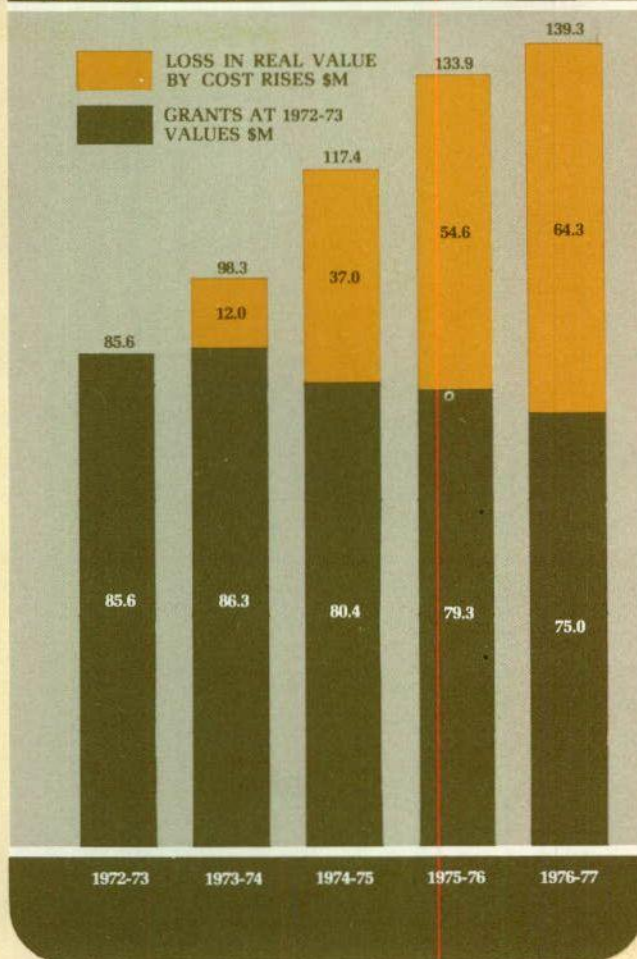
The funds made available for these works during 1976-77 totalled \$21,318,726.

## COMMONWEALTH GRANTS

Commonwealth grants to this State for roads in 1976-77 amounted to \$139.3 million, an increase of \$5.4 million (4%) on the previous year.

In terms of 1972-73 values, the real value of Commonwealth Road Grants has declined from \$86 million in

## COMMONWEALTH GRANTS



1972-73 to \$75 million in 1976-77. The bar chart above shows the difference in real values.

The increase in Commonwealth grants in 1976-77 was applied mainly to National Roads while the grants for Urban Arterial Roads were actually reduced by \$7.6 million. Other road categories received slightly increased grants or the grants were maintained at the 1975-76 level with no allowance being made for cost rises.

## PAYMENTS

Total payments from the County of Cumberland, Country, Commonwealth and the Traffic Facilities Funds amounted to \$309,864,301 or \$29,588,223 more than in 1975-76.

Construction, reconstruction and acquisition of property for roadworks accounted for the major portion of the expenditure and the amount expended on these works was \$162,817,148 or 52.5% of the total expenditure.

Expenditure on maintenance and minor improvements on roads and bridges was \$96,135,387 or 31% of the total expenditure.

An amount of \$21,780,891 was expended from Commonwealth grants on the construction and maintenance of Councils' Local Roads.

Expenditure on construction and maintenance of traffic facilities was \$19,521,365.





Facilities at the Waterfall and Berowra Toll Plazas include both manual and automatic collection.

## TOLLWORKS

### BEROWRA TO CALGA

The total number of vehicles which used the Tollwork during the year was 6,791,038. The average daily traffic increased from 18,566 to 18,605.

Receipts from toll collections increased by \$316,533 (6.5%) over the previous year from \$4,863,070 to \$5,179,603.

The cost of operations, administration and capital debt charges increased by \$550,759 (15.6%) over the previous year from \$3,523,147 to \$4,073,906.

The Capital Debt stood at \$28,840,981 as at 30 June 1977.

### WATERFALL TO BULLI PASS

During the year, 3,181,608 vehicles travelled on the Tollwork between Waterfall and Bulli Pass at an average of 8,716 vehicles each day.

Receipts from toll collections increased by \$139,855 (11.6%) over the previous financial year from \$1,205,967 to \$1,345,822. The cost of operations, administration and capital debt charges amounted to \$4,372,031, an increase of \$812,363 (22.82%) over the previous financial year.

The Capital Debt stood at \$24,953,977 as at 30 June 1977.



# SYDNEY HARBOUR BRIDGE

## INCOME

TOLLS: \$5,133,643

OTHER: \$831,647

## EXPENDITURE

LOAN CHARGES: \$1,579,724

MAINTENANCE: \$1,592,857

TOLL COLLECTIONS: \$1,036,819

TRAFFIC FACILITIES: \$959,206

OTHER: \$376,507

# SYDNEY HARBOUR BRIDGE

## CAPITAL INDEBTEDNESS

After taking into account sinking fund payments to the Treasury and setting aside revenue for repayment of private loans, the capital debt in respect of the Sydney Harbour Bridge and approaches (including the Cahill Expressway and Warringah Freeway) fell from \$13,989,661 at the end of the previous financial year to \$13,326,489 as at 30 June 1977.

## INCOME AND EXPENDITURE

The toll income from road vehicles amounted to \$5,133,643 which was \$28,244 more than in 1975-76. The amount received from the Public Transport Commission in respect of railway and omnibus usage in 1976-77 was \$351,975 compared with \$321,450 in 1975-76.

Expenditure during the year was \$5,545,113 or \$82,106 less than in 1975-76. This decrease was due mainly to reduced loan charges.

The sources of income and the main items of expenditure are illustrated in the above diagram.

## TRAFFIC

The road vehicle crossings of the bridge during the 1976 calendar year totalled 53,158,600 of which 27,301,000 were northbound and 25,857,600 southbound vehicles.

The Average Annual Daily Traffic Volume on the Sydney Harbour Bridge increased only slightly over the volume of the previous year to 146,040 vehicles per day. The highest daily volume of 179,070 vehicles was recorded on the Thursday before Easter, 15 April 1976.

Average peak hour volumes in the direction of major flow were 9,580 vehicles in the morning and 9,160 vehicles in the evening peak periods. The morning peak hour volume decreased by 4% and the evening peak hour volume by

5% over the previous year. The highest hourly volumes recorded in the direction of major flow were 10,920 vehicles in the morning and 10,350 vehicles in the evening peak periods.

Average traffic volumes in the direction of minor flow during the peak hours were 3,410 vehicles per hour in the morning and 3,680 in the evening peak periods. The highest hourly volumes recorded in the direction of minor flow were 3,740 vehicles in the morning and 4,380 in the evening peak periods.

## MAINTENANCE

Throughout the year the fifth cycle of repainting of the Sydney Harbour Bridge was continued.

An area of 29 900 m<sup>2</sup> was painted during the year, completing approximately 264 800 m<sup>2</sup> of the fifth cycle of repainting. The area of steelwork which is covered in a complete cycle of repainting is 485 000 m<sup>2</sup>.

During 1976-77 the area repainted was substantially less than previous years due to extra attention given to relatively inaccessible areas. An improved system of surface preparation and treatment was developed to provide a longer service life and to extend the time between repainting cycles.

Routine maintenance and inspection of steelwork, cranes, lifts and other mechanical equipment were continued through the year. Improvements were made to access ways and security barriers.

Painting of ancillary buildings was carried out and routine maintenance and inspection of power supply, lighting and all electrical equipment were continued.

General repairs to the road pavement and concrete paved areas, and extensive cleaning and repairs to the pedestrian stairway on the southern approach and the western wall in the northern approach were carried out.



# STATEMENT OF RECEIPTS AND PAYMENT

## for the Year Ended 30 June 1977

### Receipts

Motor vehicle taxation.....	
Charges on commercial vehicles under the Road Maintenance (Contribution) Act, 1958.....	
Levy upon Councils in accordance with Section II of the Main Roads Act, 1924.....	
State Government Loans – Repayable.....	
Loan Borrowings under Section 42A of the Main Roads Act, 1924.....	
State Treasury Advance – Repayable.....	
Contributions by Councils towards maintenance and construction of Main and Secondary Roads.....	
Contributions by other departments and bodies towards maintenance and construction of Main and Secondary Roads.....	
State Government Grant for Relief of Unemployment.....	
Commonwealth/State Government Grant for restoration of flood damage.....	
State Government Grant for Upgrading Cane Roads.....	
Sydney Harbour Bridge Account for freeway approaches.....	
Transport (Planning and Research) Act, 1974.....	
National Roads Act, 1974.....	
Roads Grants Act, 1974.....	
Road Transport and Traffic Fund and Public Vehicles Fund.....	
Ministry of Transport Vote.....	
Other.....	

### Total Receipts

### Payments

Construction and reconstruction of roads and bridges.....	
Construction and maintenance of local roads.....	
Land acquisition.....	
Maintenance and minor improvements of roads and bridges.....	
Restoration of flood damage (Proclaimed Natural Disasters).....	
Purchase of land and buildings for works operations.....	
Administrative expenses.....	
Purchase of land and buildings for administration.....	
Planning and research.....	
State Treasury Loans –	
Sinking fund payments.....	
Interest, exchange, management and flotation expenses.....	
Loan Borrowings under Section 42A of the Main Road Act, 1924 –	
Repayment of principal.....	
Interest.....	
Other.....	
Transfers to reserve for loan repayments.....	
Net transactions of operating and suspense accounts.....	

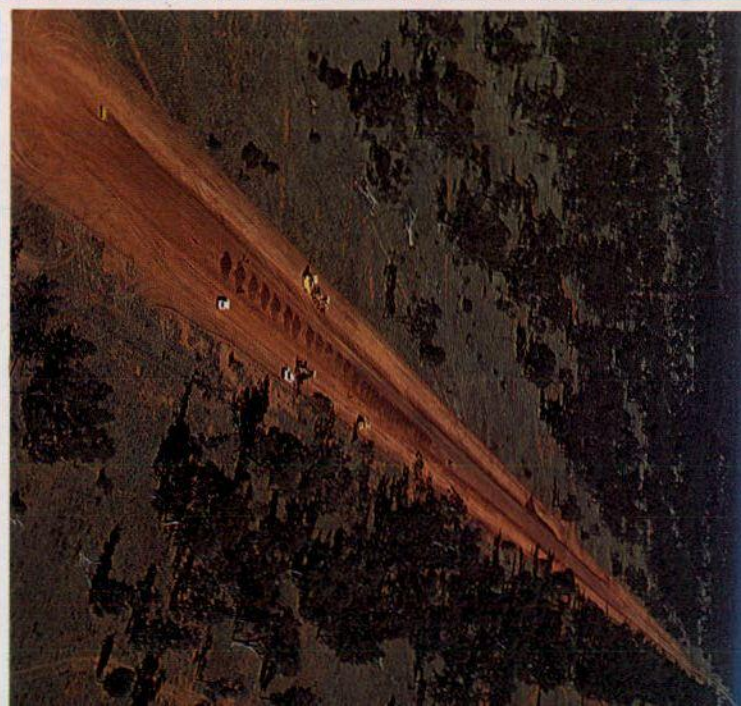
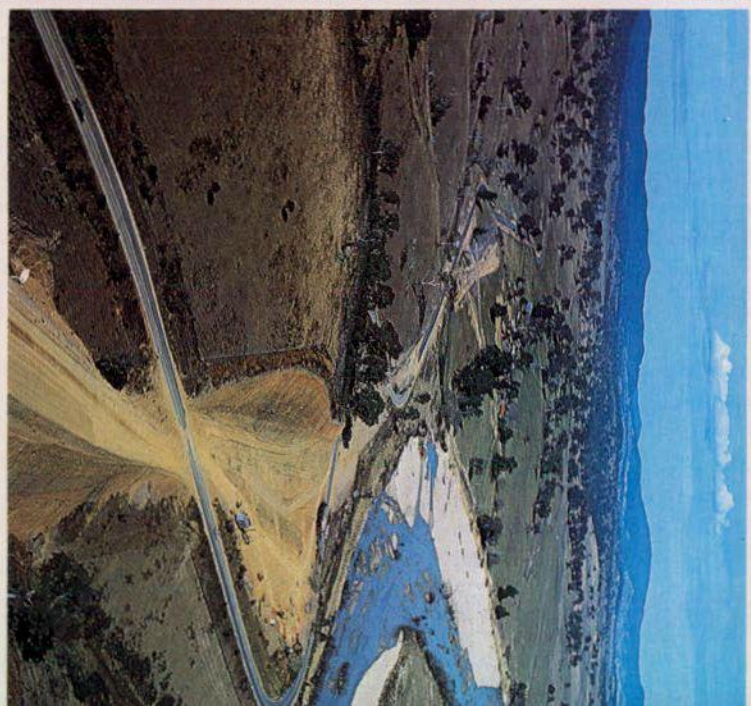
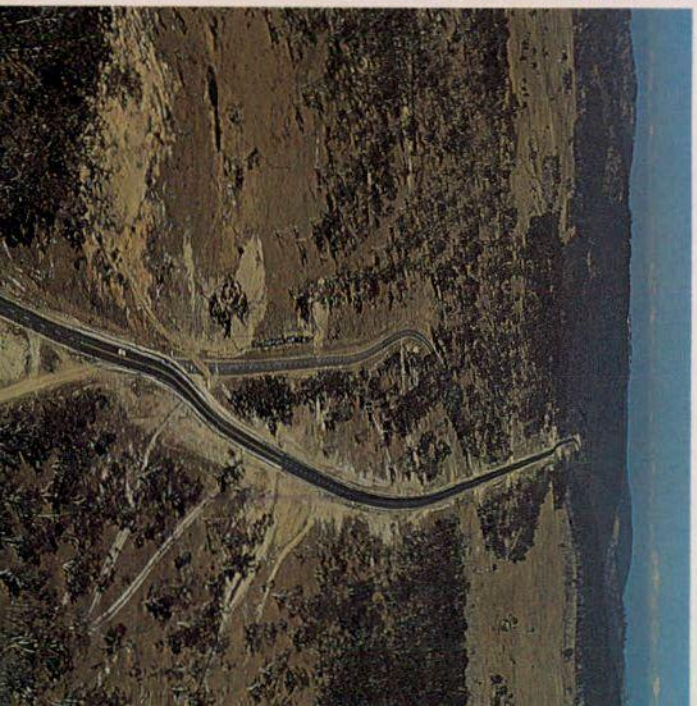
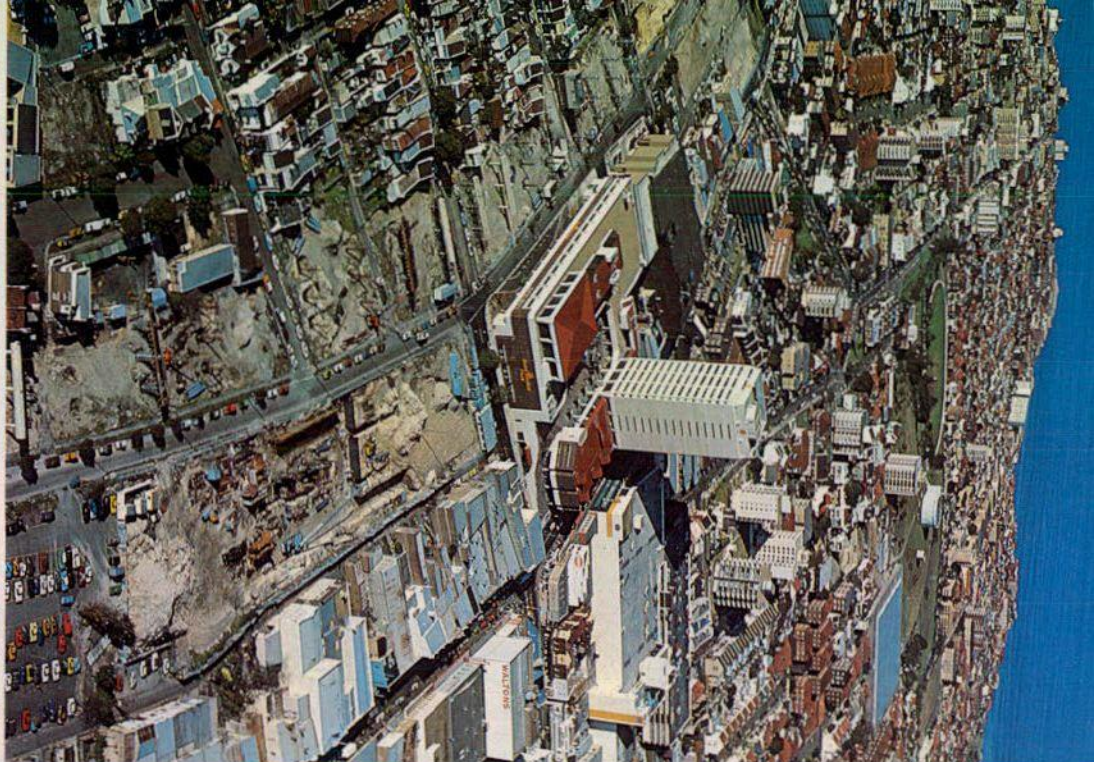
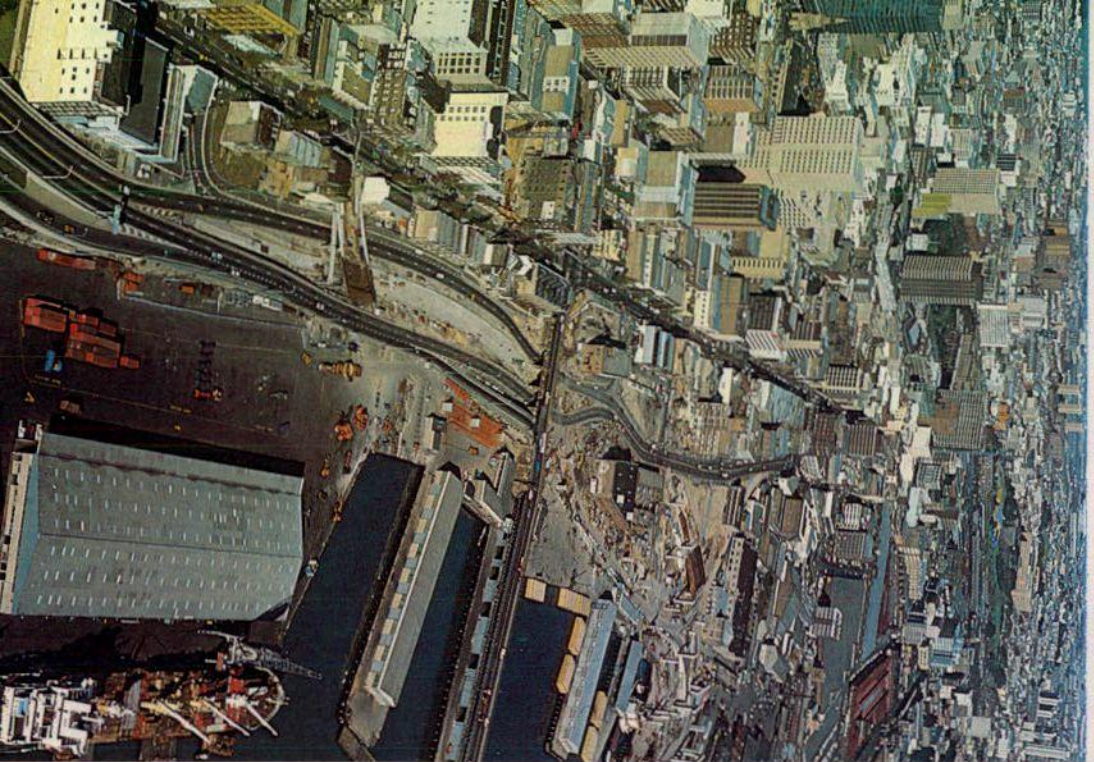
### Total Payments

\* Includes \$2,990,000 of 1977-78 Loan Allocation received prior to 30 June 1977.



County of Numberland Fund \$	Country Fund \$	Commonwealth Fund \$	Traffic Facilities Fund \$	Total 1976-77 \$	1975-76 \$
9,645,608	73,107,313		3,345,600	106,098,521	85,954,303
3,961,932	15,847,729			19,809,661	20,267,776
56,559				56,559	104,468
1,000,000	7,000,000			8,000,000	7,250,000
6,290,000*	7,700,000			13,990,000	8,000,000
				—	6,000,000
745,267	153,125			898,392	1,130,976
80,950	833,094			914,044	1,119,252
	100,000			100,000	348,679
	11,806,380			11,806,380	13,223,400
	300,000			300,000	—
354,230				354,230	6,711
		1,761,326	24,168	1,785,494	1,597,079
		56,733,883	654,803	57,388,686	49,200,000
		74,800,000	3,391,778	78,191,778	83,605,370
			7,229,609	7,229,609	—
			2,500,000	2,500,000	—
1,055,575	596,271		1,214,997	2,866,843	1,902,643
33,190,121	117,443,912	133,295,209	18,360,955	312,290,197	279,710,657
16,046,210	33,478,312	90,809,024	6,174,086	146,507,632	142,671,436
	94,809	21,780,891		21,875,700	21,332,098
4,341,084	2,156,537	9,811,895		16,309,516	17,779,776
15,204,631	48,728,304	8,040,381	11,984,140	83,957,456	60,323,486
	12,184,292			12,184,292	13,181,743
223,655	383,695	208,400	200,916	1,016,666	1,093,364
2,308,810	7,897,882	4,640,887	1,125,972	15,973,551	13,770,121
228,981	371,004			599,985	1,131,264
425,457	647,720	2,084,456	36,251	3,193,884	2,226,731
62,760	180,553			243,313	236,383
291,610	1,811,387			2,102,997	1,545,047
241,351	517,144			758,495	515,358
1,397,599	1,824,940			3,222,539	2,320,960
328,615	465,057			793,672	976,767
41,100,763	110,741,636	137,375,934	19,521,365	308,739,698	279,104,534
249,787	230,363	—	—	480,150	381,825
1,808,785	1,164,332 CR	—	—	644,453	789,719
43,159,335	109,807,667	137,375,934	19,521,365	309,864,301	280,276,078







# FREEWAY CONSTRUCTION

## F1 – Warringah Freeway

Construction of the second stage of the Warringah Freeway between Miller Street and Willoughby Road was continued during the year.

The construction of a prestressed concrete dual carriageway bridge over Brook Street was completed in August 1976. While construction continued Brook Street was open to traffic at all times.

Work is proceeding on the construction of a pedestrian overbridge over the freeway linking Willoughby Road and Slade Street Naremburn and is scheduled for completion in November 1977.

During May 1977 a major traffic route alteration was put into operation following the closure of Chandos Street Cammeray to southbound traffic. Southbound freeway traffic was diverted from Brook Street on to a loading ramp on to the Warringah Freeway.

## F3 – Sydney-Newcastle Freeway

### (a) North Western Freeway Section

Work on the section of the North Western Freeway between Erskine Street City and Harris Street Pyrmont continued during the year.

Work on columns and headstocks has advanced to a stage to permit contracts to be entered into for the fabrication of steel girders and concrete deck construction for a section of the westbound viaduct to Harris Street.

During the year the extension of Pyrmont Street to Quarry Street and the construction of the service road between

Sussex Street and Day Street were completed and opened to traffic.

Work is continuing on the deviation of Day Street and it is expected that northbound traffic will be diverted on to the deviation between Liverpool and Druitt Streets during October 1977.

### (b) Ourimbah-Doyalson Section

Work on site investigations and the establishment of a site office continued during the year for the section of the freeway, the National Route linking Brisbane to Sydney, from Ourimbah to Doyalson.

## F4 – Western Freeway

Construction of the Western Freeway continued between Wentworth Road Homebush and Wentworth Street Clyde. Due to fund restrictions work was limited to the construction of Haslam Creek bridges, major public utility adjustments and earthworks.

## F5 – South Western Freeway

The section from Yanderra to Aylmerton was completed and opened to traffic on 24 May 1977.

Work continued by direct control on the section from Kenny Hill (54.4 km south of Sydney) to the Nepean River at Pheasants Nest (77.2 km south of Sydney).

Work commenced on the section from the Nepean River at Pheasants Nest to Avon Dam Road and work continued from Avon Dam Road to Yanderra partly by contract and partly by direct control.

# ROAD CONSTRUCTION

## COUNTY OF CUMBERLAND

The progressive improvement of State Highways and Main Roads throughout the County of Cumberland was continued during the year. Principal works that were carried out during the year are listed below.

### Princes Highway – State Highway No. 1

Improvements have been carried out on the drainage system of the Sutherland By-pass. The final asphalt surfacing has yet to be completed.

A short length of Bulli Pass was reconstructed to provide four lanes over an area subject to slip.

### Hume Highway – State Highway No. 2

Replacement of broken concrete slabs was completed at various locations between Chelmsford Avenue Croydon and Prospect Creek at Lansvale.

Reconstruction of the damaged bitumen pavement between Prospect Creek at Lansvale and Hinkler Avenue Liverpool was commenced.

Reconstruction of the intersection of the Hume Highway and Cowpasture Road at Leppington was completed.

Also completed was the reconstruction of the intersection of the Hume Highway and Bringelly Road at Leppington.

Work continued on major improvements to the junction area at the intersection of the Hume Highway and Main Road No. 178 at Narellan. The work commences on the Highway approximately 54.7 km south of Sydney and extends southward for approximately 1 km. When completed, the junction will feature a bridge to carry northbound traffic over the intersection, two lane carriageways in each direction and island medians to improve the traffic flow.

### Great Western Highway – State Highway No. 5

Replacement of broken concrete slabs on Parramatta Road at various locations between Burwood Road Burwood and Church Street Parramatta was completed.

#### ◀ Opposite page

Top left: Construction of the new Bondi Junction By-pass will allow through traffic to pass to the north of the shopping and commercial centre in Oxford Street. Work was commenced in February 1977 and includes the provision of a 456 m long viaduct between Vernon and Adelaide Streets.

Bottom left: Work is proceeding on construction of the North Western Freeway in the Darling Harbour area.

Top right: Reconstruction 12-16 km east of Coolabah on the Coolabah-Brewarrina Road (Trunk Road No. 70).

Centre right: Taking the twists out of the Princes Highway just south of Bega.

Bottom right: Recently completed reconstruction and bituminous surfacing on the New England Highway, approximately 20 km north of Glen Innes.



Reconstruction of the damaged bitumen pavement on the westbound lanes between Beresford Road and Greystanes Road at Greystanes was completed.

Construction of the northern side strip between Charles Hackett Drive and Neale Street at St. Marys was completed.

Construction of side strips between York Street and Old Bathurst Road at Emu Plains was completed.

Work continued on the construction of a climbing lane at Pritchard Street Wentworth Falls.

Asphaltic concrete strengthening and reshaping was carried out on the sections between 35.2 km to 96.7 km west of Parramatta. Heavy patching work was also carried out on sections between 35.2 km to 96.7 km west of Parramatta.

Work commenced on the widening of formation to 13.4 m and pavement to 7.4 m on a section of the highway between 35.5 km and 74.3 km west of Parramatta.

#### **Pacific Highway – State Highway No. 10**

Reconstruction of the damaged bitumen pavement between Hornsby Street and Cam Street at Waitara was commenced.

#### **Pennant Hills Road and Woodville Road – State Highway No. 13**

The relocation of the junction of Villawood Road opposite Llewellyn Avenue on Woodville Road at Villawood was completed.

Reconstruction of the southbound side strip between Hewitt Avenue and Redgrave Road at Normanhurst was completed.

#### **Castle Hill Road – Main Road No. 156**

Widening to four lanes between New Line Road and Victoria Road was completed at West Pennant Hills, and work continued with the widening to four lanes between Rogans Hill and Glen Road at Castle Hill.

#### **Lane Cove Road, Ryde Road and Mona Vale Road – Main Road No. 162**

Reconstruction of the intersection with Waterloo Road at North Ryde commenced as part of the widening of Waterloo Road.

Reconstruction to provide six lanes between Highlands Avenue Pymble and Cowan Road St. Ives is continuing. On this section work was completed on the southbound carriageway between Hope Street and Bromley Avenue and construction of the northbound carriageway between Bromley Avenue and Hope Street and the retaining wall between Highlands Avenue and Bromley Avenue is continuing. Work was completed between Hope Street and Cowan Road.

Reconstruction to provide six lanes between Killeaton Street and Richmond Avenue St. Ives is continuing.

Property and public utility adjustments were completed between Ayres Road and Richmond Avenue. Construction of the northbound carriageway on this section is well advanced.

#### **Condamine Street, Pittwater Road and Barrenjoey Road – Main Road No. 164**

Reconstruction and widening to six lanes of Condamine Street from Kenneth Road to Campbell Parade was continued.

Construction in cement concrete of the eastern shoulder of Pittwater Road between Long Reef Beach access road and Lismore Avenue was completed.

Reconstruction of Barrenjoey Road to provide six lanes through Mona Vale Shopping Centre was completed. This

included improvement and channelisation of the intersection with Mona Vale Road (Main Road No. 162) and the intersection with Pittwater Road (Main Road No. 174).

#### **Forest Road – Main Road No. 168**

Reconstruction to six lanes of Forest Road between Mavis Avenue and Collaroy Avenue, Peakhurst was completed. This work includes the reconstruction of the intersection with Stoney Creek Road.

The reconstruction of Forest Road between Lime Kiln Road and Kims Avenue Lugarno was completed.

#### **Bondi Junction By-pass – Main Road No. 172**

The construction of a new by-pass road between Moncur Road and Bondi Road at Bondi Junction was commenced in February 1977 and is planned for completion to fit in with the completion of the Eastern Suburbs railway bus-rail terminal under construction at Bondi Junction.

Work is in hand on the construction of a four lane viaduct structure 456 m in length, between Vernon and Adelaide Streets. Work commenced on public utility adjustments and reinforced earth and mass concrete walling.

The work is being undertaken by both contract and direct control and a new site office has been established in Saber Street Woollahra.

#### **Campbelltown Road and Appin Road – Main Road No. 177**

Work commenced on a deviation between F5 and Campbelltown to provide an improved alignment and approaches to the replacement structure at Bow Bowling Creek.

Work continued on the construction of the southbound carriageway of the Moore-Oxley Streets deviation to provide a by-pass of Queen Street Campbelltown.

The construction of the intersection with Main Road No. 610 was completed.

#### **Windsor Road – Main Road No. 184**

Widening continued to six lanes between Daking Street and Briens Road Northmead.

Construction of the approaches to the new bridge over South Creek at Windsor continued.

#### **Joseph Street – Main Road No. 190**

Reconstruction to provide dual carriageways from the Bankstown Municipal Boundary (Lewis Street) northwards to Amy Street, Regents Park was continued. Work commenced on the construction of dual carriageways between Amy Street and Leila Street at Lidcombe.

#### **Delhi Road, Millwood Avenue and Fullers Road – Main Road No. 191**

Construction of a third lane on Delhi Road between the Lane Cove River and the Crematorium was completed.

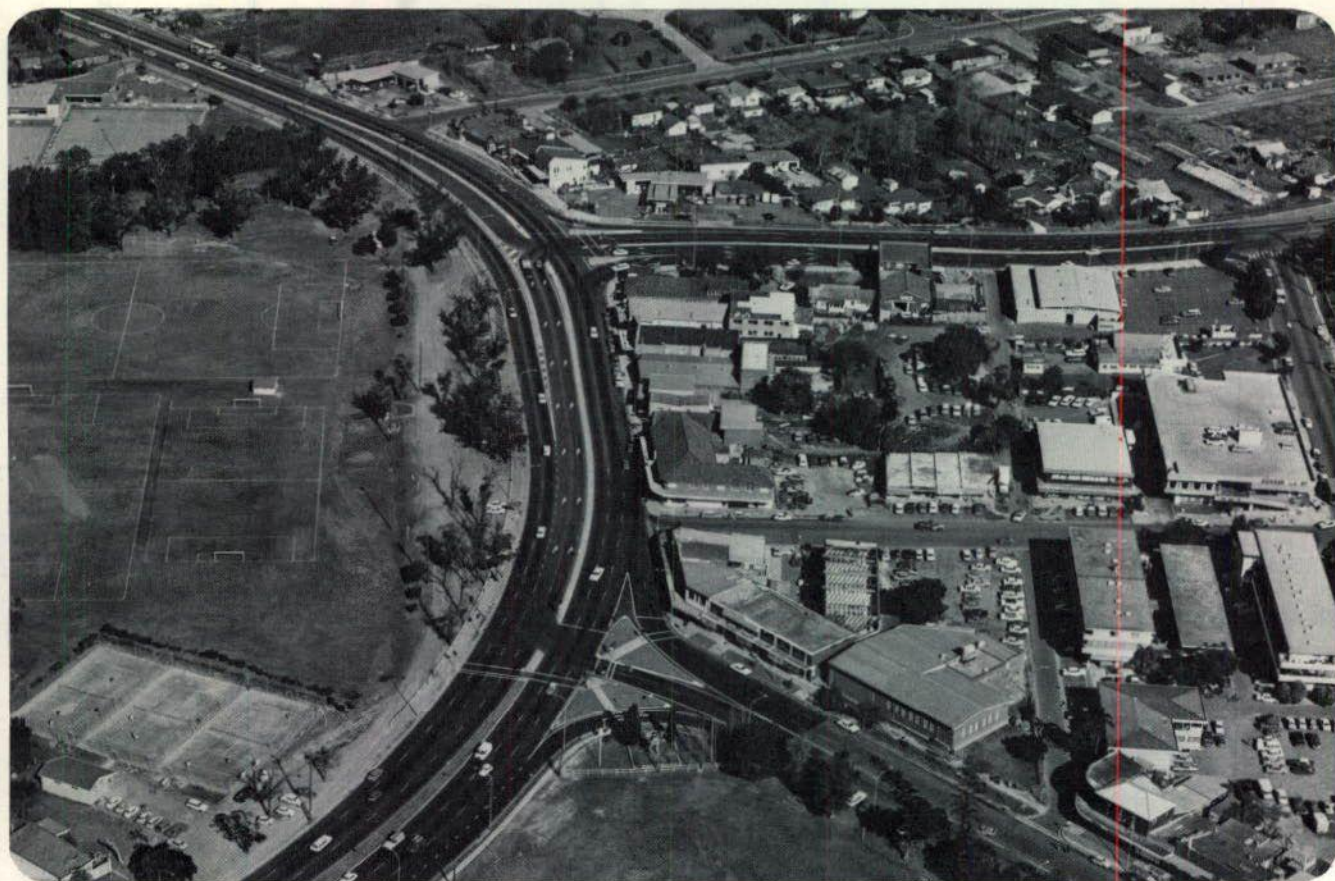
The reconstruction of the intersection of Millwood Avenue and Fullers Road was completed.

#### **Aston Street and Rydalmere Avenue – Main Road No. 309**

Reconstruction to provide dual carriageways between Eleanor Street and Hassall Street at Rosehill was commenced.

Widening to six lanes between the bridge on Aston Street over Parramatta River and Kissing Point Road (Main Road No. 574) was completed. This work is part of the major work on constructing a new route, the North Parramatta By-pass, (County Road No. 5037) between Rydalmere and Northmead.





Reconstruction of Barrenjoey Road through Mona Vale Shopping Centre has been completed. This work included improvements and channelisation at the intersections with Mona Vale Road (in the background) and with Pittwater Road (in the foreground).

### **The Boulevard and Kings Georges Road — Main Road No. 315**

Resheeting with asphaltic concrete between Redmyre Road and Carrington Avenue was completed.

Minor kerb and gutter, asphalt, landscaping and traffic facilities work were carried out to complete the reconstruction of the junction with Punchbowl Road.

Pavement over the new railway bridge and associated medians, kerb and guttering were carried out to complete the construction of the approaches to the new bridge over the railway at Wiley Park.

Reconstruction of the intersection with Canterbury Road extending southwards to Paton Avenue is nearing completion. Southbound pavement widening to Stern Place is also well in hand.

### **Marlborough Road and Richmond Road — Main Road No. 318**

Reconstruction and widening to four lanes between Parramatta Road (State Highway No. 5) and Arthur Street (Secondary Road No. 2057) at Flemington was completed. This work included the construction of the approaches to the new railway overbridge at Flemington.

### **Warringah Road — Main Road No. 328**

Reconstruction and widening to provide six lanes between Daines Parade and Pittwater Road was completed.

Construction of a New Jersey type median barrier at the reverse curves on the north approach to Roseville Bridge was completed.

### **Epping Road — Main Road No. 373**

Construction of dual carriageways between Delhi Road (Main Road No. 191) and Shrimptons Creek (including the new interchange at the intersection of Epping Road and

Lane Cove Road (Main Road No. 162) at North Ryde) was continued.

### **Heathcote Road — Main Road No. 512**

Work continued on the construction of climbing lanes between the Princes Highway and New Illawarra Road. Approximately 245 m of climbing lane east of the intersection with New Illawarra Road was completed and opened to traffic.

### **Elizabeth Drive — Main Road No. 515**

Reconstruction and widening to six lanes between Copeland Street (Main Road No. 608) and Maxwells Avenue Mt. Pritchard was continued.

### **Copeland Street — Main Road No. 608**

Work continued with the reconstruction and widening to a six lane divided carriageway between Hoxton Park Road and Hinkler Avenue at Liverpool.

### **The Horsley Drive — Main Road No. 609**

The reconstruction and widening to four lanes between Fairfield Street and Alan Street at Fairfield was commenced. The work is being carried out in conjunction with the widening of the existing railway overbridge at Fairfield.

## **COUNTRY**

Major works completed or in progress on State Highways include those listed below.

### **Princes Highway — State Highway No. 1**

Work was completed on the reconstruction of the deviation at Jaspers Creek 32.2 km to 34.3 km south of Kiama. Work is almost complete on the reconstruction at Meroo



Meadow from 35.9 km to 39.1 km south of Kiama including the approaches to the new Tullian Creek Bridge.

The final seal was placed on the climbing lane for south-bound traffic between 97.4 km and 99.2 km south of Batemans Bay, which was completed to prime stage and opened to traffic.

Work continued on the reconstruction of the section 2.7 km to 9.0 km south of Bega.

Work on the construction of a climbing lane between 54.1 km and 55.3 km south of Bega continued.

### **Hume Highway – State Highway No. 2**

Work was completed on the reconstruction, to an improved alignment, between Razorback Range and Picton 76.3 km to 81.6 km south of Sydney.

The pavement through the Picton subway was widened and the adjoining length of highway reconstructed and strengthened.

Construction was completed of a major junction of the Hume Highway with the F5 – South Western Freeway at Yanderra. Included in the construction of the junction was a 1.1 km deviation of the highway which now also serves as a local access road.

Work was commenced on the reconstruction between the South Western Freeway at Aylmerton and Mittagong (14.0 km to 20.1 km north of Mittagong) to provide four lanes on an improved alignment and grading.

Work is proceeding on the construction of dual carriageways between Exeter Road and Paddys River 29.3 km and 39.8 km south of Mittagong.

The construction of dual carriageways on an improved alignment between Paddys River and Uringalla Creek 40.9 km to 44.4 km south of Mittagong continued and the work is nearing completion.

Construction of dual carriageways is continuing in association with the construction of dual carriageway bridges over the Main Southern Railway Line, the Mulwaree Ponds and the Crookwell Railway Line at North Goulburn. These bridges are now complete and dual carriageways are available to traffic.

Work commenced on the construction of the approaches to the new bridge over Fish River near Yass. The new structure over the Fish River is complete.

Work continued on the extension of dual carriageways between 6.4 km and 10.6 km west of Yass. Both carriageways are now open to traffic between 8.2 km and 10.6 km west of Yass.

Work was completed on the construction of the approaches to the new bridge over Connors Creek, 35.8 km west of Yass. This work forms part of the ultimate north-bound carriageway over this length.

Work continued on the construction of the approaches to the new bridge over the Murrumbidgee River at Gundagai. Stage I of the work, which included the whole of the southern approaches, and part of the northern approaches utilising the ultimate onloading ramp from Gundagai and Sheridan Street, was opened to traffic on 25 March 1977. Work is now in progress on Stage II, which will complete the deviation around Gundagai.

Widening and strengthening of the pavement on the existing alignment and grade is being carried out between 28.0 km and 37.0 km south of Gundagai.

Realignment and reconstruction is progressing on the section between 3.6 km to 7.7 km south of Tarcutta which includes approaches to the new bridge over Comatawa Creek. This section is within the overall length between 3.6 km and 20.4 km south of Tarcutta which is programmed for reconstruction.

Reconstruction of the section between 53.5 km and 60.8 km south of Holbrook was completed with the exception of some minor works.

### **Federal Highway – State Highway No. 3**

Work is continuing on the construction of dual carriageways between 14.3 km and 22.2 km south of Goulburn.

The section of the southbound carriageway between 17.1 km and 19.5 km south of Goulburn, including the new bridge over Wologorong Creek 18.8 km south of Goulburn, is open to two-way traffic.

### **Snowy Mountains Highway – State Highway No. 4**

Remedial culvert and drainage work to alleviate flooding along the Blowering Dam deviation, 9 km east of Tumut, was completed.

Reconstruction between 14.0 km and 17.7 km west of Tumut was completed.

### **Great Western Highway – State Highway No. 5**

Work continued on the construction of the approaches to the new bridge over the Lett River.

Work commenced on the approaches to the Marrangaroo Creek Bridge 2.3 km to 6.1 km west of Lithgow. Work continued on the reconstruction and sealing of the Diamond Swamp section 31.9 km to 34.5 km west of Lithgow.

### **Mid Western Highway – State Highway No. 6**

Construction of the approaches to the Evans Plains Creek Bridge 9.6 km west of Bathurst was completed. Pavement widening and strengthening 28.3 km to 33.8 km west of Bathurst is in progress.

Construction of a deviation of the route of the highway to by-pass the historic town of Carcoar was completed.

Work is in progress on pavement widening and strengthening 10.3 km to 12.7 km east of Cowra. Work is nearing completion on widening the formation, and strengthening the pavement 14.6 km to 15.3 km and sealing 13.2 km to 14.6 km east of Cowra.

Work is nearing completion of the reconstruction of the highway between Fitzroy and Carleton Streets in Cowra.

Widening formation and pavement strengthening 29.0 km to 32.0 km east of Grenfell was commenced. The section 49.2 km to 51.1 km was completed and work is in progress 52.6 km to 54.5 km west of Grenfell.

### **Mitchell Highway – State Highway No. 7**

Work is in progress on widening formation and pavement strengthening 2.4 km to 5.2 km east of Orange.

Work was temporarily suspended on the reconstruction and bituminous surfacing 13.4 km to 20.3 km north of Molong. Pavement strengthening and widening at various locations 49.9 km to 55.5 km north of Molong were completed. Reconstruction and bituminous surfacing 57.9 km to 63.1 km north of Molong is in progress.

Reconstruction and bituminous surfacing of the pavement at the level crossing at Trangie is nearing completion.

Reconstruction of the narrow pavement was completed between 60.0 km and 75.8 km east of Nyngan and between 6.1 km and 11.3 km north of Bourke.

Reconstruction and bituminous surfacing was completed from 18.7 km to 20.9 km and is in progress between 16.8 km and 18.7 km south of Bourke.

### **Barrier Highway – State Highway No. 8**

Reconstruction and widening of Marshall Street Cobar between Barton and Bathurst Streets including major drainage improvements was completed.

Construction of the approaches to the four new bridges over the Darling River Flood Plain between 1.7 km and 6.4 km east of Wilcannia continued.

The formation between 2.8 km and 9.2 km east of Broken



Hill was reconstructed and sand primed. The final seal will be completed on construction of the two new bridges over Willa Willyong Creek.

### **New England Highway – State Highway No. 9**

Construction of dual carriageways 9.8 km to 12.1 km west of Hexham (Three Mile Creek) is nearing completion.

Widening of the existing formation to 13.4 m on selected sections of existing alignment 25.7 km to 27.4 km west of Maitland was completed.

Reconstruction of the 6.9 km deviation at Muscle Creek near Muswellbrook was completed.

Construction of the approaches to two temporary Bailey bridges at the Aberdeen Railway Overbridge site 15.5 km north of Muswellbrook was completed. Work was completed on widening of the shoulders and extension of culverts 16.6 km to 23.7 km and 26.9 km to 31.4 km north of Muswellbrook. Work commenced on the widening of shoulders and the extension of culverts 31.4 km to 34.0 km and 58.2 km to 62.3 km north of Muswellbrook.

Construction of the approaches to the new bridge over Campbells Creek from 62.8 km to 64.3 km north of Muswellbrook was undertaken and opened to traffic in June. Improvements to widen the formation of the highway on the Liverpool Range were carried out in conjunction with bridge approaches.

Work was completed with culvert extensions and shoulder widening on selected lengths 4.8 km to 17.7 km north of Tamworth. Major reconstruction to provide dual carriageways on the first Moonbi Range 24.9 km to 30.1 km north of Tamworth continued. Earthworks were completed from 27.7 km to 30.1 km and a major 17 m deep granite rock cut at 27.2 km commenced.

Work was completed on pavement and formation widening between 62.3 km and 70.4 km north of Tamworth. The work included the construction of climbing lanes over particular sections. Work was completed on the access to the Thunderbolts Rock Reserve, 82 km north of Tamworth. Work was commenced on the construction of a deviation between Uralla and Barleyfields, 90.2 km to 94.1 km north of Tamworth.

Reconstruction and bituminous surfacing between 3.8 km and 5.8 km and between 17.7 km and 22.8 km north of Glen Innes was completed.

Work commenced on reconstruction and bituminous surfacing between 5.8 km and 9.6 km north of Glen Innes.

Work continued on reconstruction and bituminous surfacing between 3.3 km to 8.6 km south of Tenterfield.

### **Pacific Highway – State Highway No. 10**

The restoration of a slip at 71.6 km north of Sydney near Mooney Creek was completed.

Construction of a slow speed lane for northbound traffic at Wallarah Hill 34.7 km to 36.9 km north of Gosford was completed.

Construction of approaches to the bridge over Traynors Creek 3.7 km north of Bulahdelah continued.

Work was completed on the reconstruction and widening of distressed pavement from 12.0 km to 15.0 km north of Taree.

Construction continued on a deviation in the approaches to a new bridge at Two Mile Creek 23.0 km to 24.8 km north of Taree.

Reconstruction and widening of distressed pavement between Passionfruit Creek and Kew 39.6 km to 50.0 km north of Taree was completed.

Construction continued on a deviation over the Cooperabung Mountain between 96.5 km and 100.5 km north of Taree.

Reconstruction between 14.0 km and 19.5 km north of

Kempsey with continuously reinforced concrete pavement and sealed shoulders was completed.

The reconstruction and widening of distressed pavement at Eungai 33.5 km to 37.8 km north of Kempsey was commenced.

Reconstruction of a deviation at Double Crossing Creek between 19.0 km and 24.0 km north of Coffs Harbour continued.

Construction of the approaches to the new bridge over Swan Creek 4.0 km to 6.3 km north of Grafton was commenced.

Construction of the approaches to a new railway overbridge at Bangalow was completed.

Construction of a new carriageway for northbound traffic at Oak Avenue between 14.8 km and 19.8 km north of Murwillumbah was completed.

### **Oxley Highway – State Highway No. 11**

Reconstruction east of Walcha was completed from 103.9 km to 111.1 km west of Wauchope. A dust-free road surface between Walcha and the coast was completed and the short sections with a prime seal will receive final bitumen seals in the next spraying season.

Reconstruction is continuing from 40.1 km to 42.2 km west of Tamworth, including extension and enlargement by contract of an existing reinforced concrete box culvert at Long Hollow Gully, 40.8 km west of Tamworth.

Reconstruction is continuing from 42.4 km to 44.4 km west of Tamworth including the approaches to the new bridge and reinforced concrete box culvert at Menedebri Creek.

The approaches to Coxs Creek bridge 66.8 km to 68.0 km east of Coonabarabran were commenced and completed to primer seal stage.

Widening of the pavement in the section 15.3 km to 18.2 km east of Coonabarabran was completed.

### **Gwydir Highway – State Highway No. 12**

Restoration and widening of existing pavement for short distances totalling 5.0 km between 16.8 km and 38.8 km east of Glen Innes is continuing and 4.5 km of this length was completed.

Minor realignment and widening of the existing pavement to 6.7 m between 3.7 km and 5.7 km west of Glen Innes was completed.

Strengthening and widening of the existing pavement east of Inverell is continuing. Work is in hand on the sections 11.7 km to 13.5 km and 14.8 km to 17.4 km east of Inverell.

Strengthening and widening the existing pavement of 3.7 m width to 6.7 m width between 27.6 km and 41.4 km west of Warialda commenced.

Reconstruction and bituminous surfacing between 59.6 km and 64.4 km west of Moree is continuing.

### **Sturt Highway – State Highway No. 14**

Reconstruction of the section 33.4 km to 41.0 km east of Wagga Wagga was completed during the year. Reconstruction of the adjoining section 23.2 km to 33.4 km east of Wagga Wagga, is continuing.

Reconstruction and bituminous surfacing on improved alignment and widening of formation was completed from 25.9 km to 28.9 km east of Balranald. Work was commenced on the section from 28.9 km to 33.8 km east of Balranald.

Restoration and bituminous surfacing of stabilised pavement from 27.2 km to 31.4 km west of Hay was completed.

Widening and strengthening of the narrow pavement on the sections from 45.5 km to 46.7 km and 47.9 km to 48.7 km



west of Hay was completed. The shoulders in between these two lengths were widened and shoulder sealing was completed throughout from 45.5 km to 48.7 km west of Hay.

Widening of formation and sealing of shoulders was completed between 0.2 km and 2.0 km west of Hay.

Final seal of the section 73.4 km to 78.9 km east of Euston was completed.

Reconstruction was completed between 0.0 km and 2.8 km east of Euston. Final seal of the section 27.3 km and 32.5 km west of Euston was completed.

Reconstruction commenced between 38.2 km and 47.5 km east of Mildura. Reconstruction between 34.0 km and 38.2 km east of Mildura was completed.

#### **Barton Highway – State Highway No. 15**

Work continued during the year on a programme of pavement strengthening and formation widening. The work undertaken includes formation widening between 22.7 km and 24.2 km south of Yass to provide a pavement width of 7.4 m, and shoulder widening and drainage improvement between 33.8 km and 36.6 km south of Yass. This work is a continuing programme throughout the length of the Barton Highway to provide improved traffic facility.

#### **Bruxner Highway – State Highway No. 16**

Construction of the Ballina Street deviation in Lismore continued.

Strengthening and widening the existing pavement of 3.7 m width to 6.7 m width between 9.6 km and 14.3 km west of Tenterfield commenced.

Reconstruction and bituminous surfacing between 51.5 km and 57.3 km west of Tenterfield is continuing. Reconstruction and bituminous surfacing between 58.0 km and 62.8 km west of Tenterfield was completed.

Construction work was effected on several sections of the deviation between Yetman and Boggabilla. Approximately 60% of the deviation has been completed to sub-grade level. Widening and bituminous surfacing of the 7 km of existing pavement from Boggabilla to its junction with the deviation has been completed.

#### **Newell Highway – State Highway No. 17**

Restoration of the existing pavement between 14.6 km and 15.4 km south of Moree was completed.

Work continued on the reconstruction and bituminous surfacing between 0.4 km and 8.4 km west of Boggabilla. The final seal was completed on the approaches to the Namoi River bridge 1.9 km to 2.5 km south of Narrabri. Work commenced on the construction of the approaches to the Narrabri Creek and Rivulet bridges, at 0.2 km to 0.7 km south of Narrabri.

Pavement widening and improvement of alignment commenced between the southern approach to Fitzgeralds Bridge and the junction of Main Road No. 377 (section II, 5.0 km to 7.1 km south of Forbes). Section I, 3.0 km to 5.0 km south of Forbes was completed.

Pavement strengthening and widening 16.1 km to 21.6 km north of Forbes was completed.

Reconstruction and bituminous surfacing between Baker Street and Hartigan Avenue in Parkes was commenced. Reconstruction of the section of the highway in Clarinda Street Parkes, was completed. Reconstruction and bituminous surfacing 31.7 km to 34.8 km north of Parkes is partially complete.

Approaches to the new box culvert at Turn Back Jimmy Creek were constructed between 13.7 km and 14.7 km north of Jerilderie. Formation widening, shoulder and pavement edge reconstruction, plus shoulder sealing was

completed from 22.9 km to 39.3 km north of Jerilderie.

Reconstruction and bituminous surfacing was completed from 5.8 km to 8.9 km north of Finley.

#### **Castlereagh Highway – State Highway No. 18**

Reconstruction is continuing between 80.5 km and 103.0 km north of Walgett.

#### **Monaro Highway – State Highway No. 19**

Work commenced on the reconstruction of the section 78.7 km to 82.0 km south of Canberra, which includes the approaches to a new bridge over the Bredbo River at Bredbo.

Reconstruction of the section 82.0 km to 89.0 km south of Canberra continued and the whole of the work was completed to prime stage and opened to traffic.

Gravelling and sealing the length between 17.1 km and 34.3 km south of Bombala commenced. Approximately 40 per cent of the work has been completed.

#### **Riverina Highway – State Highway No. 20**

Work was completed on the reconstruction and bituminous surfacing from 4.3 km to 6.7 km west of Finley.

Reconstruction of shoulders and pavement edges, including shoulder sealing, was completed from 9.1 km to 28.0 km east of Deniliquin.

Reconstruction of Chanter Street Berrigan was completed.

#### **Cobb Highway – State Highway No. 21**

Construction and bituminous sealing of the southern approach to the existing bridge over the Lachlan River at Booligal from 76.8 km to 77.7 km north of Hay was completed.

Reconstruction of failed pavement at the channelised intersection with State Highway No. 20 (Riverina Highway) at 2.5 km north of Deniliquin commenced.

Reconstruction from 11.1 km to 33.0 km south of State Highway No. 8 continued.

#### **Charlestown to Sandgate – State Highway No. 23**

Strengthening and resheeting of Blue Gum Road Jesmond 8.6 km to 9.4 km north of Charlestown commenced.

#### **Mount Lindesay Highway – State Highway No. 24**

Reconstruction and bituminous surfacing between 9.4 km and 11.1 km north of Woodenbong is continuing.

#### **Illawarra Highway – State Highway No. 25**

Reconstruction to improve the alignment and grading between Wells Creek and the Hume Highway 58.9 km to 63.9 km from State Highway No. 1 continued.

Opposite page ►

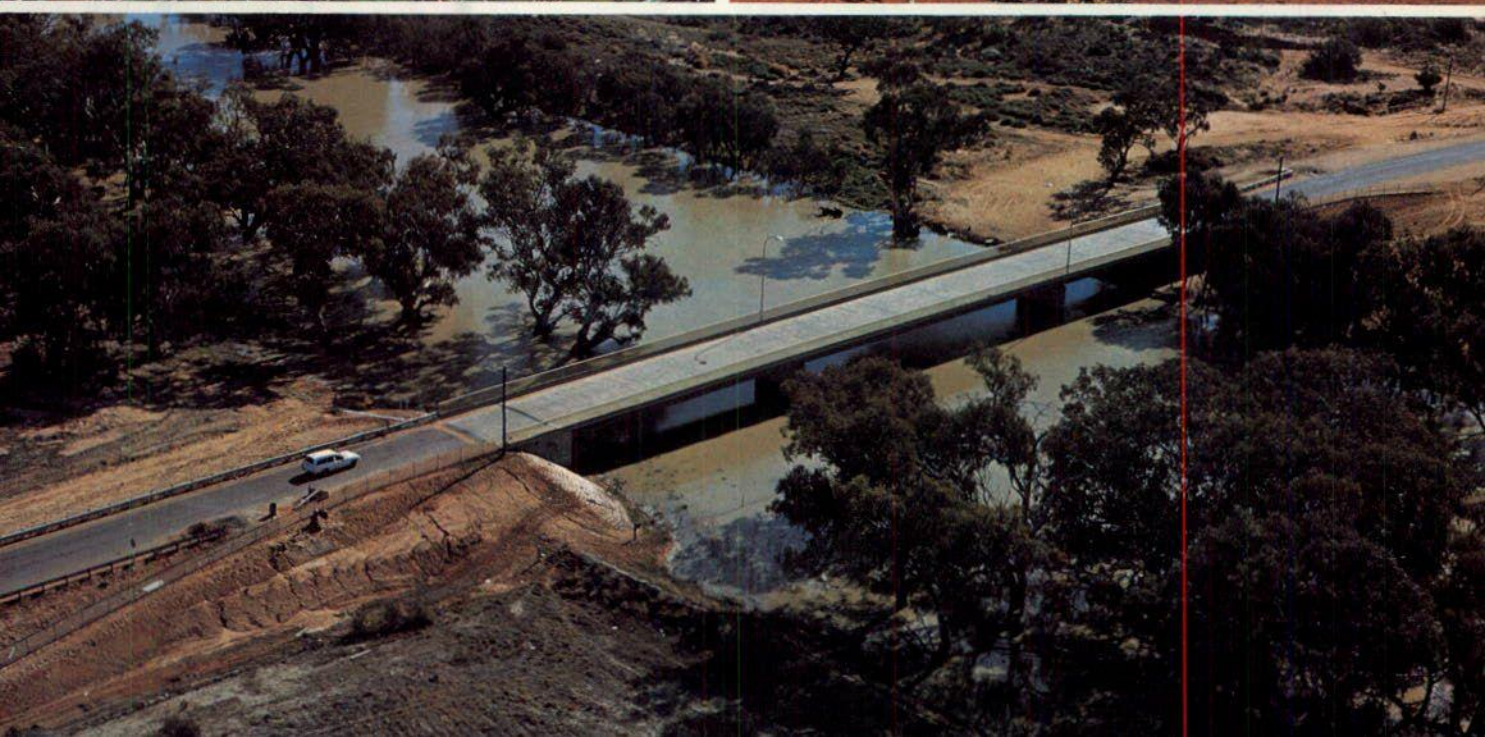
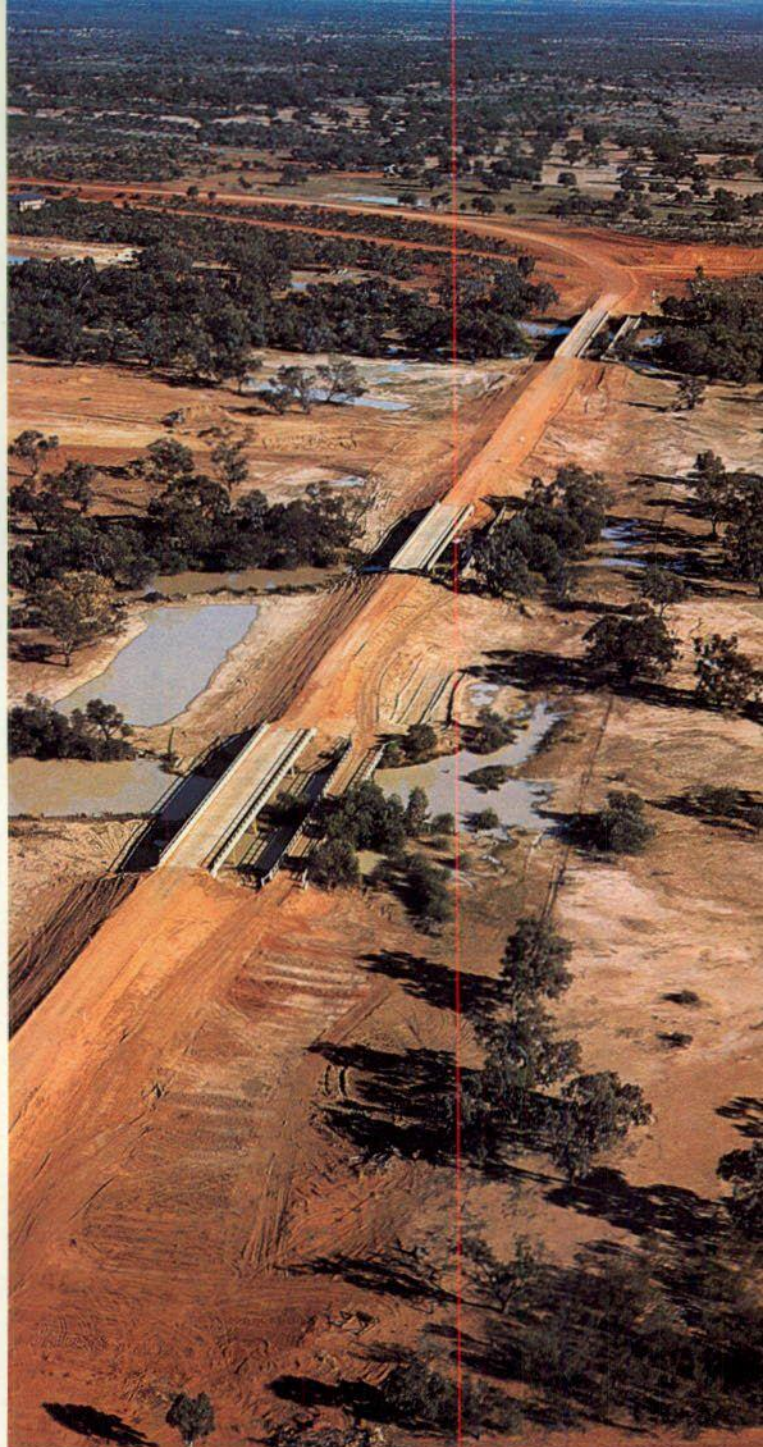
Top left: On the Pacific Highway north of Grafton a new prestressed concrete girder bridge over Swan Creek has been opened to traffic.

Centre left: A new prestressed concrete girder bridge across the railway lines at Marlborough Road Homebush provides better access to the Farm Produce Market at Flemington.

Right: At Wanaaring three new bridges have been built over the Paroo River and the flood channels known as the Paroo By-washes on the road to Bourke (Main Road No. 405).

Bottom: This new two lane bridge over the Darling River at Menindee on the Trunk Road No. 68 has eliminated the need for road traffic to share an old road-rail bridge.







# BRIDGE CONSTRUCTION

During the year 39 bridges, one pedestrian structure and 32 bridge size box culverts (i.e. with a waterway width of six metres or more) were made available to traffic. In addition, widening works were completed on four structures, two bridges and two box culverts of which one bridge was widened for extra lanes.

The 73 structures, completed and opened to traffic during 1976-77, are situated on the various road classifications as set out in the table alongside.

At the end of the year 83 bridges, 23 culverts and three pedestrian structures were under construction or completed but not opened to traffic. In addition, widening of 12 structures was in hand, three for the provision of extra lanes. Of these 121 bridgeworks, 40 were completed but were not opened to traffic because associated roadworks were incomplete.

Of the 40 bridgeworks completed but not opened to traffic, 19 bridges were built by the Department (15 by contract) and seven bridges by Councils (5 by contract). Six of the culverts were built by the Department (5 by contract) and eight culverts by Councils (3 by contract).

	Bridges	Bridge Size Culverts	Pedes- trian Struc- tures	Widen- ing Extra Lanes	Total
Freeways	8	—	—	—	8
State Highways	12	12	—	—	24
Trunk Roads	8	4	—	—	12
Main Roads	7	15	1	1	24
Developmental Works, Developmental Roads and Unclassified Roads	3	1	—	—	4
County Roads	1	—	—	—	1
Tourist Roads	—	—	—	—	—
<b>TOTAL</b>	<b>39</b>	<b>32</b>	<b>1</b>	<b>1</b>	<b>73</b>

## PRINCIPAL BRIDGEWORKS COMPLETED AND OPENED TO TRAFFIC

### F5 — South Western Freeway

Construction by contract of twin single prestressed concrete plank bridges over the Main Southern Railway Line north of Yanderra was completed. Each new structure is 15.5 m long and provides two traffic lanes.

Construction by contract of twin single span prestressed concrete girder bridges over the Main Southern Railway Line south of Yanderra was completed. Each new structure is 20.7 m long and provides two traffic lanes.

Construction by contract of twin three span steel arch framed girder bridges over State Highway No. 2 south of Yanderra was completed. Each new structure is 48.2 m long and provides two traffic lanes.

Construction of a four span prestressed concrete beam bridge over the Freeway on Main Road No. 179 at 59.3 km south of Sydney was completed. The new structure is 104.2 m long and provides two traffic lanes.

### F6 — Southern Freeway

Construction by contract of a two span reinforced concrete bridge to carry Harvey Street over the Southern Freeway at Dapto was completed. The new structure is 46.9 m long and provides two traffic lanes and two footways.

### Hume Highway — State Highway No. 2

Construction by contract of a four span continuous reinforced concrete bridge over Jones Creek on the Sheridan Street interchange in Gundagai was completed. The new bridge is 28.6 m long and provides three traffic lanes and two breakdown lanes.

Construction by contract of a 27 span composite steel trough girder and reinforced concrete bridge — Sheahan Bridge — over the Murrumbidgee River at Gundagai was completed and opened to traffic on 25 March 1977. The new structure is 1 133.6 m long and provides two traffic lanes.

### Pacific Highway — State Highway No. 10

Construction by contract of a five span prestressed concrete girder bridge over Swan Creek 5.8 km north of Grafton was completed. The new structure is 128.6 m long and provides two traffic lanes and replaces two old timber beam bridges 92.4 m and 28.3 m long.

### Oxley Highway — State Highway No. 11

Construction by contract of a six span prestressed concrete plank bridge over Coxs Creek 67 km east of Coonabarabran was completed. The new structure is 73.2 m long and provides two traffic lanes and replaces a narrow timber beam bridge 52.0 m long.

### Trunk Road No. 51

Construction by contract of a seven span continuous steel girder and reinforced concrete bridge over the Shoalhaven River (Warri Bridge) 12.8 km north of Braidwood was completed. The new structure is 196 m long and provides two traffic lanes and a footway and replaces an old single lane timber truss bridge 148 m long.

### Trunk Road No. 68

Construction by contract of a six span prestressed concrete girder bridge over Mooni River at Gundabloui 48 km north of Collarenebri was completed. The new structure is 128 m long and provides two traffic lanes and eliminates an open causeway.

Construction by contract of a three span steel box girder and reinforced concrete bridge over the Darling River at Menindee was completed. The new structure is 118.4 m long and provides two traffic lanes and eliminates the use by road traffic of the railway bridge.

### Trunk Road No. 74

Construction by contract of a four span prestressed concrete girder bridge over Blicks River near Dundurabbin 86 km south of Grafton was completed. The new structure is 91.4 m long, provides two traffic lanes and replaces a 96 year old single lane timber truss bridge 69 m long.

### Trunk Road No. 89

Construction by contract of a 17 span prestressed concrete plank bridge over Backwater Cowal 4.4 km south of Narromine was completed. The new structure is 93.5 m long and provides two traffic lanes.



### **Trunk Road No. 91**

Construction by contract of a three span steel girder and reinforced concrete bridge over Honeysuckle Creek 25.4 km from State Highway No. 1 was completed. The new structure is 64.0 m long and provides two traffic lanes and replaces a timber beam bridge 30 m long.

### **Main Road No. 206**

Construction by contract of a six span prestressed concrete plank bridge over Tucklan Creek 9.6 km west of Dunedoo was completed. The new structure is 65.1 m long and provides two traffic lanes and eliminates a concrete causeway.

### **Main Road No. 271**

Construction by contract of an eight span prestressed concrete low level bridge over Moruya River 3.9 km west of Moruya was completed. The 85.4 m long structure provides two traffic lanes and replaces a low level single lane timber beam bridge 86.3 m long washed away by floods in 1974.

### **Main Road No. 315**

Construction by contract of a seven span prestressed and reinforced concrete bridge over King Georges Road near South Hurstville Public School was completed. The new structure is 69.8 m long and provides a single lane walkway.

### **Main Road No. 318**

Construction by contract of a three span prestressed concrete girder bridge over the railway at Marlborough Road, Homebush West was completed. The new structure is 72.4 m long and provides two traffic lanes and one footway.

### **Main Road No. 405**

Construction by contract of a nine span composite steel girder and reinforced concrete bridge over the Paroo River at Wanaaring was completed. The new bridge is 109.7 m long and provides two traffic lanes and replaces a timber beam bridge 103 m long.

### **Secondary Road No. 2084**

Construction by contract of a four span prestressed concrete girder bridge over the railway at Seven Hills was completed. The new structure is 83.2 m long and provides four traffic lanes and eliminates a level crossing.

### **County Road No. 5037**

Construction by contract of a single span reinforced and prestressed concrete bridge over Belmore Street, Dundas was completed. The new bridge is 29.3 m long and provides for six traffic lanes on the route of the North Parramatta By-pass.

## **MAINTENANCE OF ROADS AND BRIDGES**

### **ROADS**

Further damage to that sustained to many road pavements in 1976 was caused during wet weather and repeated flooding in the first half of 1977. Prolonged inundation softened the foundations of roads and when continued to be used by trucks, even when partly covered by water, extensive damage occurred.

In the Metropolitan Division, work continued on resheeting and strengthening deteriorated asphalt pavements and heavy patching was carried out preparatory to asphalt resheeting on many main roads. An extensive programme of jointing and mudjacking of old and sometimes broken slabs was carried out. Work included slabs on the Hume Highway, King Georges Road, Parramatta Road, Canterbury Road and Fitzgerald Avenue.

In Country Divisions, intensive maintenance of shoulders and edges caused by narrow pavements and increased volumes of heavy traffic meant that an increased proportion of funds was channelled towards maintenance works with a corresponding decrease in the amount of funds available for new construction and reconstruction works.

Roadside improvement works were continued during the year and tree planting was carried out within road reserves on a number of highways in the State. Maintenance of trees and grass on landscaped areas of freeway type roads was continued and rest areas were maintained on country highways.

During the winter months snow clearing was undertaken by the Department's forces on the Snowy Mountains Highway (State Highway No. 4), the Kosciuszko Summit Road (Main Road No. 286) and the Yarrangobilly Caves Road

(Main Road No. 324). Maintenance and snow clearing of certain unclassified roads in the Kosciuszko National Park were also undertaken on behalf of the National Parks and Wildlife Service, thus providing access to the snowfields.

### **BRIDGES**

At 1 July 1976 there were 5,596 bridges with a total length of 186.2 km of all types on classified roads in this State.

Bridge maintenance during 1976-77 was carried out by the Department and Councils, the Department generally undertaking the work on State Highways, Ex-National Bridges and Special Subsidy Works.

The work generally consisted of the replacement of worn out decking and longitudinal sheeting on timber bridges together with repair or replacement of damaged trusses, and members such as piles, girders and bracings. Major flood conditions experienced throughout the year added greatly to maintenance commitments and caused extensive damage to several bridges.

Repainting of steel structures, timber trusses and handrails was carried out, whilst regular inspections of timber, steel and concrete bridges continued.

There were 11 vehicular ferry crossings in which the Department was financially involved; of these, three were operated by the Department's own organisation, three by contract to the Department and five by contract to Councils.

Funds provided for bridge maintenance and the care-taking and operation of vehicular ferries by the Department in 1976-77 totalled \$8,554,000.

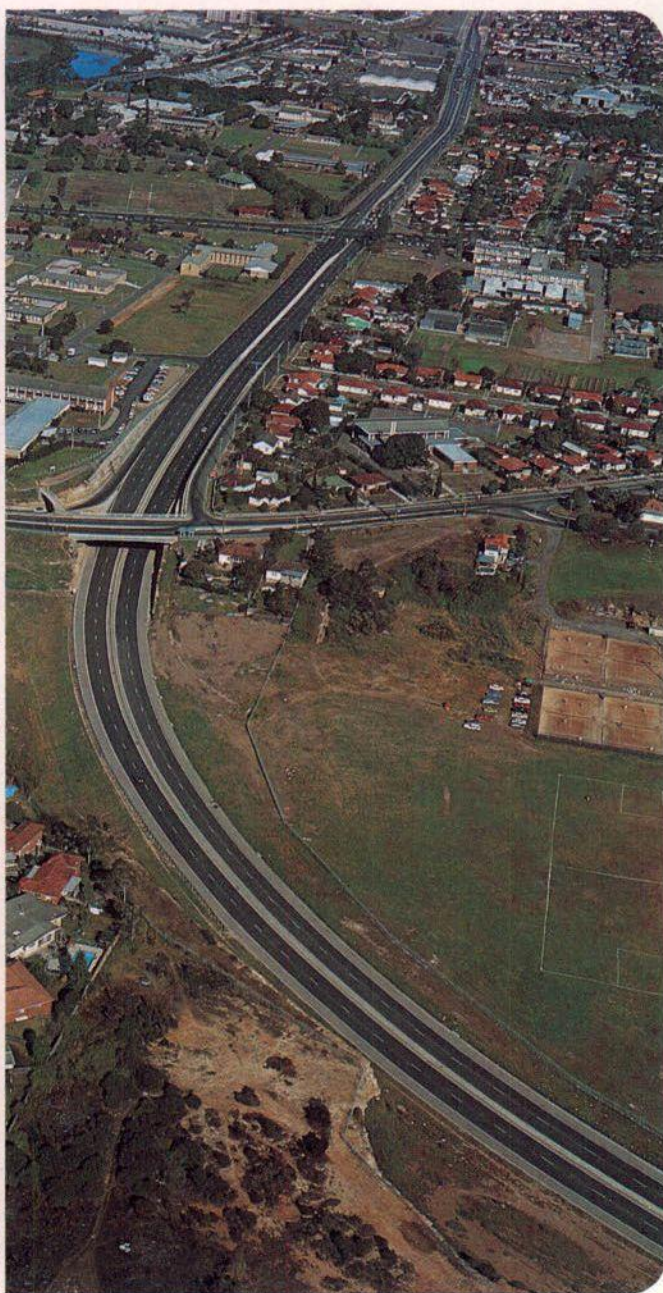
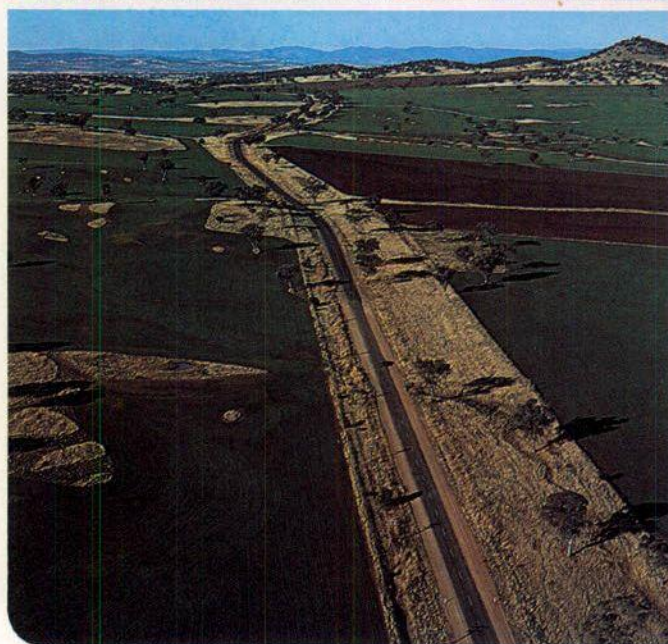
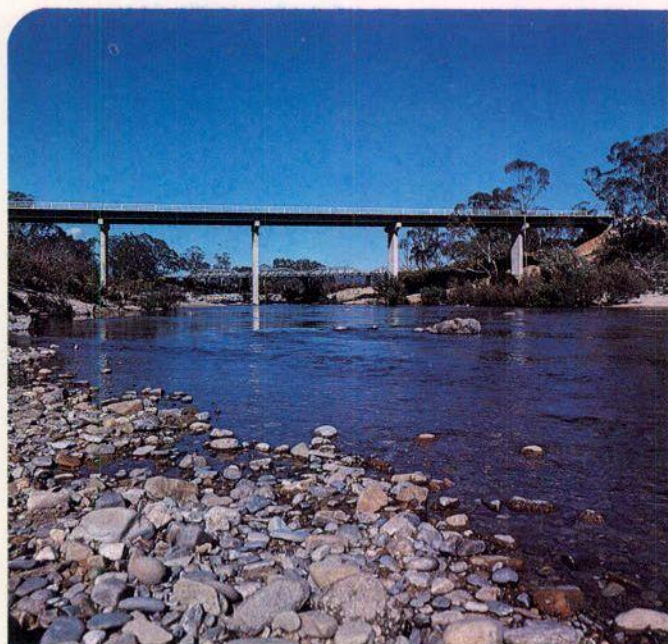


# THAT WAS THE YEAR THAT WAS

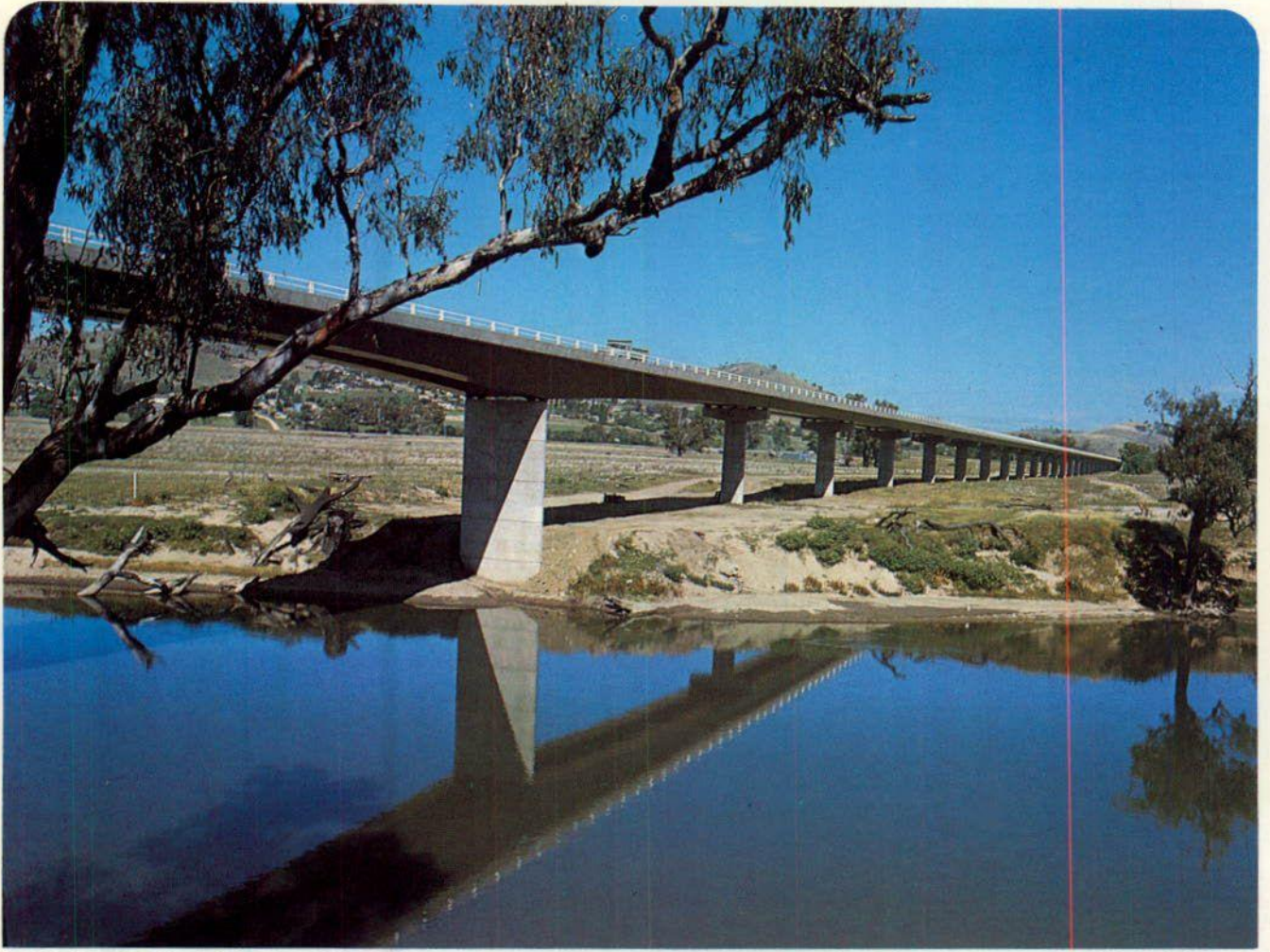
The photographs on these pages show some of the major works that were completed during the past twelve months.

Warri Bridge (below left), which crosses the pleasant waters of the Shoalhaven River near Braidwood, highlights the Department's efforts to blend man-made structures with the natural environment. It was officially opened by the Commissioner for Main Roads, Mr. A. F. Schmidt, on Friday 19 November 1976. At bottom left is an aerial view of the Oxley Highway east of Gunnedah. With the completion of a section east of Walcha on 7 June 1977, the entire length of this Highway has now been sealed. This means that road-users can now travel on a dust free surface between Nevertire in the central west and Port Macquarie on the coast. In the centre below is an aerial view of section of the North Parramatta By-pass which was opened to traffic on 6 June 1977.

On the right can be seen section of the longest bridge ever built by the Department and the second longest road bridge in New South Wales. Sheahan Bridge, over the Murrumbidgee River at Gundagai, was officially opened to traffic on 25 March 1977 by the Premier, the Hon. N. K. Wran, Q.C., M.L.A. The new structure is 1 134 m long and has 27 spans. Three spans cross the main river channel while 24 spans form a viaduct over the flood plain. The photograph bottom right shows part of the Department's \$21.8 million investment in the F5-South Western Freeway — between Yanderra and Aylmerton. This 13.5 km length was opened to traffic on 24 May 1977 and provides much safer and easier driving conditions (with less vehicle wear and less road-user cost) than the adjacent Hume Highway.









# ADVANCE PLANNING

An essential part of the Department's activities in planning for the future needs of the State's Main Roads System is connected to taking and updating the roads and structure data inventory.

During the year two field survey teams equipped with instrumented vehicles commenced field surveys of classified roads in the State on an on-going basis. The extent of the field surveys is being co-ordinated with the requirements of the current Australian Roads Survey to provide information to the Commonwealth Bureau of Roads as to conditions at 30 June 1977, for the preparation of the Report on Roads in Australia 1978. The requirements of the proposed National Association of Australian State Road Authorities data bank and the Department's own data bank are also being taken into account in assessing the extent of the field surveys. Office updating of other

information required by the Commonwealth Bureau of Roads in respect of classified roads was also commenced during the year and a review commenced of the functional classification of roads in both urban and rural areas.

Work continued to develop a satisfactory alternative method of distributing moneys to councils, under the Roads Grants Act, for the construction and maintenance of rural local roads.

Work continued on the preparation of priority lists of works, to provide a pool of warranted projects from which future programmes of works can be selected, and means for objectively assessing the relative rating of such works.

A preliminary study was carried out, by consultants to the Department, for the development of meaningful techniques for incremental planning.

## URBAN ROAD PLANNING

### COUNTY OF CUMBERLAND

The Department's conceptual planning for development of the Main Roads System in the County of Cumberland was based on the County Road System depicted in the County of Cumberland Planning Scheme. Since the promulgation of the Scheme, investigation of each road proposed in the conceptual plan has proceeded and outline plans have been produced so that approximate limits of rights-of-way necessary to contain the future roads could be determined. Reservations, for each road, have then been sought in local Council Planning Schemes as these were being prepared. Also, since the promulgation of the County Scheme, the conceptual plan has been revised from time to time to meet changing needs and conditions, as have many of the outline design plans applicable to each road.

In 1974 the Sydney Area Transportation Study produced its findings on the future needs of Sydney's transport system up to the year 2000. The Study's recommendations are being studied by the Department so far as Main Roads are concerned.

In February 1977 the Government announced that reservations for certain lengths of future freeways would be deleted from planning schemes. Current planning work includes the development of proposals for connecting the non-abandoned lengths of freeway to the existing Arterial Road System.

The Urban Transport Advisory Committee is in the process of reviewing all corridors reserved in planning schemes for future transport improvements. The Department has been engaged in providing data on each road corridor to the Committee's investigatory staff.

A Commonwealth/State Committee was set up towards the end of 1976 to investigate major airport needs for Sydney. The Department is assisting the Committee in the determination of the road access requirements for the various airport sites under consideration.

Two major investigations completed during the year related to proposals for the replacement of the bridge over the Illawarra railway line at Sutherland and a new road from Chullora to Smithfield. In the former case, Council had asked the Department to investigate the possibilities of four bridge locations with various combinations of approach road alignments. In the latter case, after lengthy investigation, it was decided to abandon the concept of such a route.

Enquiries from owners, potential buyers and potential sellers, of property within the County of Cumberland, seeking information as to the effect of the Department's

road proposals on property totalled 105,000 during the year. In addition, 260 applications for development on the reservations for future roads proposed by the Department were referred to the Department for its views.

Each year the Department receives requests from Councils for State classification of individual Council roads and streets. Investigations were completed for two such applications in the County of Cumberland during 1976-77. A further six are under consideration.

### NEWCASTLE AND DISTRICT ARTERIAL MAIN ROADS SYSTEM

The Department's proposals for developing the Main Roads System in the Newcastle area are based on the County Road System depicted in the Northumberland County District Planning Scheme gazetted in 1960. Many of these County Road reservations will be used ultimately for future main roads. The Urban Transport Study Group is carrying out a transportation study for the Newcastle area. As such a study includes a review of the conceptual framework of the arterial road system the Department itself is not currently reviewing its plans at this level. The major planning work during the year has been concerned with developing outline designs for the Sydney-Newcastle Freeway north of Swansea.

### WOLLONGONG AND DISTRICT ARTERIAL MAIN ROADS SYSTEM

The Department's proposals for satisfying future road needs in the Wollongong-Shellharbour area are included in the Illawarra Planning Scheme gazetted in 1968. As with Newcastle, the Urban Transport Study Group is also carrying out a transportation study for the Wollongong area. Consequently planning activity by the Department during the last twelve months has not been seriously concerned with conceptual planning for the Main Roads System. Investigations have proceeded into the most suitable location of the Southern Freeway south of Yallah and the Warilla-Oak Flats Main Road.

### MAPPING

The Department's cartographic group produces road maps of various kinds primarily for internal use.

It also produces artwork for brochures and manuals. Currently, strip maps of the highway system are being updated and metric versions produced. Data gathering and drafting work was completed for four of the State's highways during the year.



# COUNTRY ROAD LOCATION

The continuing process of designing and building roads and bridges involves the examination of existing facilities to ascertain their suitability for continued use, the costs of further maintenance, the requirements of present and future traffic, and the options for improvements. Aerial photography, ground surveys, and photogrammetric mapping are employed to produce the base plans for road and bridge investigations and preliminary designs.

During 1976-77 rural road location investigations were concentrated on the major highways, particularly those designated National Highways under Commonwealth legislation. On the Hume Highway, a deviation route was adopted for the length between Tumblong and the junction with the Snowy Mountains Highway, while investigations were continuing into the future locations in the vicinity of Mittagong and Berrima, between Goulburn and Yass, and in the Jugiong-Coolac area.

On the Sydney-Brisbane National Highway, the Department and the Commonwealth Bureau of Roads completed a joint study on the route between Wyong and Newcastle.

This resulted in the decision that the major route is to be located west of Lake Macquarie. Detailed location investigations are now proceeding on this section. The effect of future coal mining is a factor requiring careful study.

Another joint study is being carried out by the Department and the Commonwealth Bureau of Roads into the future connections between Canberra and the Hume Highway.

Aerial route photography during the year covered 840 km of State Highways. Project photography with a flight length of 375 km was also flown. Photogrammetric mapping was completed for 18 projects with a total area of 13 718 ha. The cost of aerial photography and photogrammetric mapping carried out for the Department by contract was \$129,856.

A total of 17,400 land development control enquiries were dealt with during the year. This is a free service to the public enabling those involved in land transactions to ascertain the effect, if any, of road proposals on properties.

## TRAFFIC MANAGEMENT

The establishment of the Traffic Authority of New South Wales on 1 June 1976 brought about substantial changes in the administration of traffic control throughout the State. Traffic engineering activities previously undertaken by the Department of Motor Transport (traffic signals, regulatory signs and road markings) were transferred to the Department of Main Roads on 1 July 1976.

### GENERAL OPERATION AND MAINTENANCE

The Department's staff undertook all routine operation, maintenance and emergency repair work of traffic facilities including traffic signals in the Sydney and Newcastle areas. In other areas, signal maintenance was carried out by the local electricity supply authority for the Department while maintenance of other traffic facilities was undertaken by the Department itself or by Council as mutually convenient.

During the year, more than 15,500 road signs were manufactured by the Department, including this attractive style of direction sign which features State Route Numbers.



### SIGNS AND MARKINGS

The Department maintained approximately 32 000 km of longitudinal traffic lines on classified roads and 1 500 km on unclassified roads. Raised pavement markers continued to be used to augment painted lines and to simulate traffic lines on freeways. Approximately 93 000 m<sup>2</sup> of transverse lines, zebra crossings and road symbols were marked and maintained during the year. Increased quantities of hot applied thermoplastic material, instead of conventional linemarking paint, were used throughout the year.

### PRIORITY ROADS

Priority road conditions were established on 424 km of arterial routes by installation of "Give Way" and "Stop" signs. The Department now has 60% of the main road system in the Sydney Metropolitan Area operating under priority road conditions. It is expected to complete this work in the Sydney Metropolitan Area during 1977-78 as well as extending these conditions to Newcastle and Wollongong areas and to rural highways and main roads in the State.

### CLEARWAYS AND TRANSIT LANES

Peak hour clearways were introduced on 3.8 km of arterial roads in the Sydney Metropolitan Area. Transit lanes were established on Military/Spit Roads (North Sydney to Mosman, p.m. northbound) and on Victoria Road (Drummoyne to White Bay, a.m. citybound). Extensions of the transit lane through Mosman were made in Sydney Road Balgowlah and Frenchs Forest Road Seaforth for a.m. citybound traffic. Tidal flow arrangements were undertaken as trials along Military Road Neutral Bay and Miller Street Cammeray. A "Bus Only" lane was marked in Mount Street North Sydney on the approach to the loading ramps to the Sydney Harbour Bridge.

### SPEED ZONING

During the year new speed zones were established over the following length 24 km (60 km/h), 25 km (80 km/h), 14 km (100 km/h) and 11 km (110 km/h).



## TRAFFIC SIGNALS

There are now 1,372 sets of traffic signals in service throughout the State.

	Vehicle Actuated	Pedestrian Actuated	Inner City	TOTAL
Sydney	880	205	113	1,198
Newcastle	56	20	—	76
Wollongong	40	7	—	47
Country Centres	37	14	—	51
<b>TOTAL</b>	<b>1,013</b>	<b>246</b>	<b>113</b>	<b>1,372</b>

During the year 120 sets of traffic signals were brought into service. In addition 50 installations were under construction or let to contract at the close of the year.

Because of changed traffic factors or road reconstruction, 32 sets of traffic signals were reconstructed. Twelve sets were removed from service.

Of the traffic signals commissioned during the year 15 sets were installed by the Department's staff which also carried out two of the six major reconstructions of existing signals and the 26 minor reconstructions. The remainder of the installations and reconstructions were carried out by contract to the Department's specifications.

Temporary signals were installed at four locations to assist in controlling traffic movements at works in progress.

This large number of traffic signals has resulted from the needs of traffic on arterial roads, both catering for through traffic and traffic wishing to join the arterial road. Where signals are close together either in a central business district or continuous along an arterial road, there is a need to co-ordinate their operation.

In the inner and near city area of Sydney, there are 149 signal sites controlled by a computer based system. Other computer based systems are located at Newtown (19 sites), St. Leonards (10 sites), Strathfield (12 sites), Punchbowl (11 sites) and Lewisham (13 sites).

During the year four computers were delivered and six are on order. The new computers will form the basis for the installation of additional regional master computers at Silverwater, Turrumurra, Sylvania, Liverpool, Newcastle and the upgrading of the existing computer or other equipment at Newtown, Punchbowl, St. Leonards, Lewisham, Wollongong, Rushcutters Bay, Rozelle and Dee Why.

Small master controlled systems are installed at 69 sites and flexilink (cableless) systems are installed at 88 sites. Flexilink co-ordinated systems were installed at 45 sites in Sydney and seven in the Wollongong area.

Co-ordinated systems except flexilink cableless type require the installation of cables, ducts and pits to inter-connect each site in the system. The rising cost of installing such cables has been of some concern and it is proposed, for all future systems, to utilise telephone lines rented from Telecom Australia in lieu of installing dedicated cables. This has involved the development of new techniques using serial data transmission. Development work, over a period of about two years has included awarding a contract for the modification of 240 local controllers. The first co-ordinated system utilising telephone lines is expected to be commissioned in September 1977. It is anticipated that further systems will be commissioned progressively over the next three to four years, eventually extending this control to about 1,000 signal sites.

It is indicative of the Department's expertise in the co-ordination of traffic signals, that an officer of the Department was invited to assist the Malaysian Government during the year. The assistance was in the evaluation of tenders for that Government's proposed area-wide traffic control system for the City of Kuala Lumpur.

## DIVIDED ROADS AND CHANNELISED INTERSECTIONS

The construction of medians to separate opposing flows of traffic continued throughout the year. There are now 589.9 km of main roads which have been provided with this safety facility.

Intersections are channelised with medians and islands to separate and direct traffic flows. This year saw the completion of channelisation at 42 intersections. In addition a further 30 intersections were reconstructed to provide significant improvements.

## OTHER TRAFFIC MANAGEMENT PROJECTS

The number of lengths of climbing lanes throughout the State is now 220, an increase of 13 over the previous year.

Bus bays on main roads now total 156, an increase of 28.

Many miscellaneous traffic safety management projects ranging from minor realignment of crests and curves to erection of guardrail on bridge approaches were completed during the year.

The installation of emergency telephones on the F4 — Western Freeway between Prospect and Emu Plains is now nearing completion.



Almost 150 sets of traffic signals in the Inner City Area of Sydney are controlled by computer through the Traffic Control Centre in Brisbane Street, Surry Hills. Specially trained traffic police operate the control console and, by means of 25 remote-controlled cameras, watch the movement of traffic.



# SURVEY AND ACQUISITION OF LAND

In the improvement of the existing road system and the provision of additions to it, it is first necessary to acquire the land needed to accommodate the improved or new facility. The cost of acquisition of additional land, especially in urban areas, represents a considerable proportion of the total expenditure on the whole work.

During the year the cost of purchasing property required for road and bridge works throughout the State amounted to \$13.67 million and funds were provided as follows:

<b>State Sources —</b>	
County of Cumberland	\$3.13 million
Country	\$1.37 million
<b>Commonwealth Sources —</b>	
Urban Arterial	\$7.80 million
National Roads	\$1.37 million

When the right-of-way has been determined, action is taken to negotiate the purchase of affected properties. This involves land surveys, preparation of plans for registration at the Registrar-General's Department, valuation of properties, negotiations to determine satisfactory settlements and conveyancing procedures. Settlement was finalised in respect of the purchase of 888 properties during the year. These settlements were negotiated by 40 staff valuers and comprised 38 settlements in advance of road

requirements because of hardship, 547 when required for roadworks, 115 for realignment purposes and 188 resumptions.

Because of the large expenditures involved the Department is unable to purchase properties ahead of the time they are needed for current works programmes. However, where hardship can be established as a dominant factor, the Department will negotiate to purchase in advance of requirements.

The Department maintains an information service relating to approved road plans and their effect on properties and during the year 5,877 enquiries were answered.

No less than 101 separate surveys were undertaken by the Department's own land survey staff and by contract surveys. These surveys covered proposals over 9 km of road in the County of Cumberland and 172 km outside the County of Cumberland.

In the year under review, 170 plans, comprising 362 sheets, were prepared for lodgement at the Registrar-General's Department. Included in these plans were those required in connection with nine re-alignment proposals affecting 6.1 km of road within the County of Cumberland and one proposal affecting 0.5 km outside the County of Cumberland.

## PLANT AND MOTOR VEHICLES

New plant to the value of \$4.83 million and motor vehicles costing \$4.48 million were purchased during the year to replace existing items and to provide for some additional requirements.

In addition to the use of its own plant, the Department made extensive use of hired equipment.

Facilities were provided for the maintenance of plant and vehicles and for general mechanical and electrical engineering services.

### ELECTRICAL

Work completed through the year comprised many small and moderate sized projects such as the upgrading and extending of power supplies, electrical reticulation and services in the Port Macquarie Divisional Office; Yass, Bellambi and Picton Works Offices; Central Asphalt Depot; and the Day Street Annexe to Head Office. Street lighting was designed and installed in sections of the Warringah and South Western Freeways and various other locations throughout the County of Cumberland. Development work included electronic recording for Deflectographs; fog detection and visibility measurement; and automatic toll machines. Electrical installations in Central Asphalt Plant and in a number of divisional offices, works offices, depots and camps have been inspected and documented.

### CENTRAL WORKSHOP

A total of 10,264 jobs were completed by Central workshop during the year for a total value of approximately \$6,750,663.

The Workshop's activities included property repairs, furniture manufacture, general building and carpentry work — 22 per cent; manufacture of signs, sign structures and other traffic facilities — 17 per cent; manufacture and repair of plant and overhaul of ferries — 22 per cent;

plumbing and electrical services to Metropolitan, Parramatta and Freeway Divisions and general transport services — 15 per cent; structural steelwork and reinforcing steel for bridges — 12 per cent; and special projects and other miscellaneous work — 12 per cent.

### Building Work

The transfer of buildings from Waterfall to Wyong for the establishment of a new works office at Wyong was completed.

The workshop undertook adjustments to an historical School of Arts building at Windsor which is used as a factory. The work became necessary because of road widening and involved construction of retaining walls and the careful underpinning of the structure.

A prefabricated building at Lithgow was dismantled and re-erected at Bowenfels. Work is also in progress on the construction of a new laboratory building at Bowenfels and installation of equipment.

Work was commenced on alterations to offices at Milsons Point, formerly occupied by the Metropolitan Division, to accommodate sections of the Materials and Research Laboratory.

The laboratory attached to the Central Asphalt Depot was relocated and work commenced on a new workshop facility with Central Workshop assisting in the construction of the floor and internal structure.

Other building work included an exhibit for the Royal Easter Show, miscellaneous alterations to buildings or fittings at Head Office, Parramatta Divisional Office, toll facilities at Waterfall and Berowra and at Central Workshop.

Renovations and maintenance were carried out on Departmental properties in the Sydney Metropolitan Area, including tenanted houses acquired for future road construction. Inspections were carried out on country staff residences in seven divisions in accordance with a continuous programme.



### Manufacture of Signs and Other Traffic Facilities

A total of 15,549 road signs were manufactured during the year.

Many medium sized sign structures of the single post type were manufactured in accordance with a new standardised modular design.

Special large sign support structures were designed and manufactured for erection of large freeway signs.

An additional movable median was installed on the southern end of the Sydney Harbour Bridge. This median has the driving unit incorporated within the profile of the median without the need for a raised structure and it is remotely controlled from the Traffic Supervisor's Cabin at the toll barriers.

### Plant

A new design was completed for a centre articulated linemarking with hydrostatic transmission. Manufacture of a prototype to this design is nearing completion.

A tunnel washing machine was designed and built. This machine consists of a high pressure water detergent spray boom, hand lance and tanks mounted on a truck chassis which is equipped with dual steering and a low speed hydrostatic drive.

Two special truck mounted emulsion sprayers are nearing completion, following the design, construction and development of two earlier machines.

Plant and motor vehicle repairs were carried out for the Warringah Freeway construction office, together with a number of large plant repair jobs for other works offices.

The workshop service exchange system continued to handle a wide range of exchange components for the Department's plant fleet. The volume of work increased by approximately 25 per cent and the total number of jobs completed in this section during the year was 1,581.

One large vehicular ferry was overhauled at the Mortlake Slipway. Central Workshop personnel assisted and supervised the overhaul of a further six ferries throughout the State.

### Structural Steelwork

Steel girders and handrails for bridges totalling approximately 273 tonnes were fabricated for a number of bridges.

The final six girders were fabricated for the bridge which will carry Pennant Hills Road over Parramatta By-pass (County Road 5037) at North Parramatta. These are trough type girders approximately 27.4 m long.

Fabrication was almost completed on a steel pedestrian footbridge which will cross the Warringah Freeway at Naremburn. The bridge consists of two spans, each approximately 28 m and weighing 12.6 tonnes, supported on a column mounted on the centre median of the roadway.

A total of 1 181 tonnes of steel reinforcement was cut and bent to shape for use in concrete bridges and culverts throughout the State.

Reinforcing steel cages continued to be produced for use by the Benoto Pile Boring Organisation. Using a machine developed for producing the spiral reinforcing and special transporting cradles, cages were supplied economically for use on the North Western Freeway.

### Miscellaneous Work

Apprentice training areas were established in five sections of the workshop to enable training objectives to be met in accordance with specially prepared training programmes.

Machine-shop facilities were improved by the purchase of a vertical boring and turning machine (1.68 m diameter capacity) and a small automatic lathe with programme control of the pegboard type.

Sixty-nine bitumen sprayer tests were conducted on machines owned by contractors, councils and the Department for the purpose of issuing or renewing sprayer certificates.

Two auction sales were conducted to dispose of worn plant, trucks and miscellaneous items and realised a total of \$320,182.

### FIELD WORKSHOPS

The Department's field workshops throughout the State now number forty. These workshops carry out repairs to the Department's plant and motor vehicles.

Plant Inspectors carry out regular inspections of plant, vehicles and the field repair facilities. They also fill a role of training and assisting in newer and more difficult aspects of plant maintenance and repair.

## MATERIALS TESTING AND RESEARCH

Testing of materials, and research into their properties and behaviour when used in road and bridgeworks, continued to be an important aspect of the Department's work, to ensure that the most appropriate materials and practices are adopted taking into account the varying conditions encountered throughout the State. This work enables the Department to keep abreast of modern techniques and developments affecting materials, and at the same time to contribute to the advancement of road materials technology.

Monitoring of the structural condition and roughness of sealed pavements on classified roads has continued. A second statewide roughness survey is nearing completion, the previous one having been carried out in 1972-73. The structural condition of the Hume Highway, south of Urin-galla Creek, and of the full lengths of the Federal and Barton Highways, has been surveyed with the Deflectograph. This structural survey is now proceeding on the more

important roads in the Illawarra Division.

Information on the structural condition of pavements is used to assist in planning and programming road maintenance and reconstruction. The information also is of direct use in determining whether a particular section is suitable to receive an overlay, and if so, the information is then used in determining the required thickness of the overlay.

So that data on the structural condition of greater lengths of road may become available more speedily and be monitored more frequently, the Department has ordered a second Deflectograph. Delivery of this machine, which consists of a special truck, ballasted to provide a load of 8.2 tonnes on the rear axle, with an automated Benkelman Beam mounted ahead of each rear wheel to measure and record the deflection of the pavement surface, is expected in September 1977.

Measurement of pavement surface friction is an important



aspect of the Department's research and monitoring operations. To increase its capacity for this type of work the Department has placed an order for a Sideways-force Coefficient Routine Investigation Machine (SCRIM). This vehicle is capable of measuring the sideways-force coefficient of friction in one or both wheel paths while travelling at normal road speeds. A graphical printout is produced showing coefficient of friction, road speed, distance and road features. Delivery of this machine is expected in late 1977.

Publication of the Department's standard test methods has continued. These test methods which make up the Department's Materials Testing Manual are produced in three volumes to which new test methods can be added progressively. As well as being distributed throughout the Department's laboratories, the Materials Testing Manual has been sought by local government, government departments, educational and private bodies concerned with testing of materials.

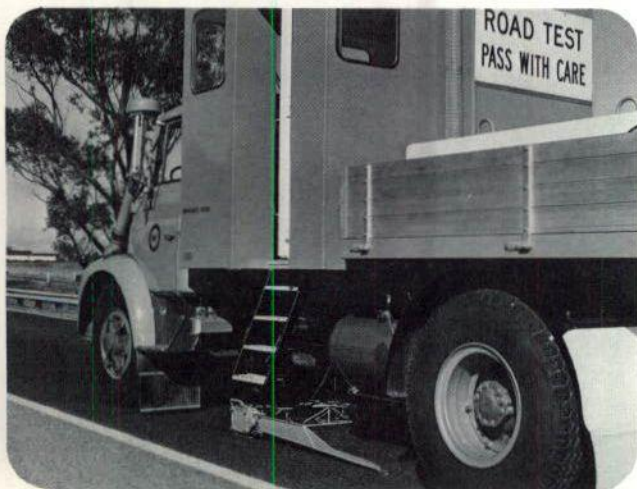
## MATERIALS AND RESEARCH LABORATORY

At the Materials and Research Laboratory, a total of approximately 65,400 tests were carried out during the year, mainly involving soils, gravels, aggregates, concrete, tar, bitumen, bituminous mixes, paints, steel and elastomeric bridge bearings. To a more limited extent, tests were also performed on adhesives, retro-reflective materials, oil, water, additives for bitumen and concrete, aggregate precoating materials and joint fillers. This was in addition to the monitoring, geological and other technical services provided by the Laboratory.

A 5kN Testing Machine was installed for accurate testing, at low loads and small rates of strain, of joint seals, plastics and fabrics which are being used to an increasing extent in road and bridge works. Repeat-load triaxial testing equipment was put into operation early in the year. This enables tests to be carried out on soils and gravels under conditions of moisture and load approximating those likely to be encountered in a finished road pavement or sub-grade.

The demand for the specialised services and testing facilities of the Materials and Research Laboratory continued. In addition to pavement condition monitoring, these services include geological, seismic and resistivity surveys, vibration monitoring, calibration of concrete prestressing equipment and laboratory equipment generally. Detailed investigations into the behaviour of surfacing aggregates continued. This included testing on the Depart-

**The Department's Deflectograph is a specially imported vehicle which enables measurements of road pavement deflections to be taken more accurately and more rapidly than in the past.**



ment of Main Roads flat bed machine and the British Standard polishing machine to determine the relationships between results from these machines and the performance of the aggregates on the road.

The geology, soil mechanics and pavement monitoring sections of the laboratory have been moved from their location in the McDougall Street annexe, into part of the area vacated by the Metropolitan Divisional Office which is immediately adjacent to the existing Materials and Research Laboratory. Arrangements are in hand to relocate further sections of the Materials and Research Laboratory into this area, reallocating space to provide additional accommodation where required and to facilitate the operations of the Materials and Research Laboratory.

## DIVISIONAL AND FIELD TESTING

In addition to the Materials and Research Laboratory the Department currently operates 26 laboratories at Divisional or Works Offices. These laboratories provide decentralised testing facilities for quality control of materials from the Department's and Councils' road works. Staff from these laboratories are also engaged in the location of deposits of natural materials and testing of precast concrete products in their particular areas. A suitably equipped mobile laboratory also operates full time with the Mobile Asphalt Unit to check the quality of raw materials and of the bituminous mixes produced.

Construction has commenced on a new laboratory at Bowenfels for the Central Mountains Division.

A total of 46,200 samples of soils, gravels, binders, aggregate and concrete were processed at divisional and field laboratories involving some 204,000 individual tests. In addition test loads were performed on about 1,200 precast concrete pipes, culverts and other products for road or bridgework.

Extensive use of the Benkelman Beam to determine the structural condition of existing pavements has continued. Greater use was also made of this instrument in various areas to check the standard of sub-grades and pavements on new construction. In the Metropolitan Division, where there is a constant need to check the stability of pavements prior to the application of asphaltic concrete, a truck has been specially fitted to facilitate the work. A similar truck has been acquired for the Parramatta Division, but this has still to be fitted out.

With the increasing difficulty in locating natural gravels capable of supporting present day traffic volumes, the use of lime modification or stabilisation to improve the properties of available materials has continued in many areas.

Tuition has been given by divisional laboratory staff where requested by Councils to council staff engaged in materials testing, including assistance in commissioning new equipment acquired by Councils such as the Benkelman Beam and *in situ* CBR equipment.

Investigations into soil suction and soil moisture conditions proceeded in a number of areas to establish data for inclusion in future pavement thickness designs. Divisional laboratory staff carried out minor seismic surveys in some areas with equipment on loan from the Materials and Research Laboratory to determine the type of material likely to be encountered in earthworks.

The publication of further standard test methods and the supply of suitable equipment to divisional laboratories has enabled divisional testing organisations to be more self sufficient in testing of aggregates and pavement materials. This has been further encouraged by the loan of particular items such as seismic equipment or blast monitoring equipment from the Materials and Research Laboratory.



# WEIGHT OF LOADS

Road pavements and bridges are liable to serious damage from overloaded vehicles and the Department employs Inspectors to enforce the mass restrictions provided in Ordinance No. 30C of the Local Government Act, 1919, in order to reduce such damage as far as possible.

During the year 61,857 vehicles were stopped for checking and of these vehicles 12,197 or 19.2% were found to be overloaded. The incidence of grossly excessive overloading detected has increased, as in preceding years.

Draft legislation designed to provide control over grossly overloaded vehicles has been prepared and submitted to the Government for consideration.

In January 1977 the Department commenced the change-over from manual to computerised processing of breach reports for overloading offences under Ordinance No. 30C of the Local Government Act, 1919. After the processing system has been fully computerised summonses, other legal documents and letters to drivers advising them of penalties imposed will be produced automatically by the computer.

As from January 1977, all offences under Ordinance No. 30C have been listed at Central Court of Petty Sessions in the first instance although no objections are raised by

the Department to cases being adjourned and heard at Courts closest to where the offences occurred if drivers apply to Central Court for such transfers. As only a very small percentage of cases for offences under Ordinance No. 30C are defended, the savings in legal costs to the Department under the new system are considerable.

The formation and levelling of the site for the major weighbridge on the Great Western Highway at Mt. Boyce was completed. The weighbridge will be capable of weighing the largest vehicles operating in New South Wales.

Permits for non-divisible loads which exceed Ordinance limits are issued in special circumstances and during the year 4,346 such permits were issued for the movement of a total of 287 461 tonnes.

Period permits which are issued to allow restricted travel, within a short radius of a particular location for overweight plant items increased in number from 900 in the previous year, to 1,430.

Following an extensive period of testing under field conditions, the Department has called quotations for the supply of 74 portable electronic weighing devices with orders for additional machines to be placed over the next two years.

# TECHNICAL COMPUTING

Following installation of the Control Data Cyber 172 computer and Calcomp plotter in April 1976, the year ended with consolidation and familiarisation of the new equipment.

In July 1976, the 17 members of the staff and the Gerber plotter were relocated. Programme conversion to the new computer was completed by October 1976 when the IBM 1130 and System 7 computers were removed from the old computer site.

Two interactive terminals were installed in the Engineer-in-Chief's Branch in August 1976 for computer aided programming of roadworks and bridgeworks. Later in the year

the computer was also being used for programming minor traffic improvements.

In September 1976 a Bendix Graphic Digitiser was installed and used in connection with traffic sign design. Programmes are being developed to extend digitiser use to other areas.

Since installation of the Cyber computer the technical computing service to the Engineer-in-Chief's branch has been greatly improved and turnaround times reduced for users. However the problems associated with remoteness from the technical computer still remain. To overcome these problems plans are in hand to install more interactive terminals in Head Office and Divisional Offices.

# GRAPHIC SERVICES

Graphic Services refers to the production of printed matter, including plans and drawings by photographic, offset and chemical printing processes together with duplicating and electrostatic copying. These services were provided by the Print Room which has a staff of 43 in the composing, platemaking, printing, binding and photographic sections.

During the year, a vacuum frame for producing contact prints of negatives and engineering drawings up to 1000 mm x 1500 mm and an automatic film processor for developing the prints were installed in the photographic section. The film processor has reduced the processing

time of prints from 45 minutes to 5 minutes.

In the composing section, a new composer-phototypesetter was installed which supplemented existing composing and phototypesetting equipment.

Work was commenced on the construction of an extension to the Print Room to give floor space for the installation of an additional small offset printing press.

The major items of output during the year were: printing — 10,800,000 sheets; duplicating — 3,590,000 sheets; plan printing — 158,000 sheets; photography (negatives and prints) (a) 35 mm — 44,000 frames, and (b) other than 35 mm — 23,700 frames.

# LIBRARY SERVICE

The technical library service comprises the Head Office Library and seventeen branch libraries in Divisional Offices located throughout the State and in the Materials and Research Laboratory at Milsons Point.

During the year 3,204 books, pamphlets and standards were added to the collection bringing the total library

holdings to 51,806. The periodicals to which the Department subscribes have been increased to 513 with the addition of 22 new titles during the year.

The Library circulated 15,389 new periodicals to the staff, lent 5,658 items from stock and issued four Library Bulletins during 1975-76.



# LEGISLATION

Ordinance No. 30C made under the Main Roads Act, 1924 and the Local Government Act, 1919 was amended by proclamation in the Government Gazette dated 1 April 1977.

The amendment permits higher axle loads for an omnibus that is fitted with no more than 2 axles, while

(a) it is being operated under a motor omnibus service

licence issued under the Transport Act, 1930, or operated by the Public Transport Commission of New South Wales and

(b) it is being operated within the Metropolitan Transport District, the Newcastle and District Transport District or the Wollongong Transport District, as referred to in the Transport Act, 1930.

## ELIMINATION OF RAILWAY LEVEL CROSSINGS

The policy of eliminating and improving railway level crossings on the State's main roads system was maintained during the year. Grade separation structures were completed and opened at Seven Hills (overbridge) and Wagga Wagga (underpass).

Flashing lights and warning bells were installed at 10 level crossings some of which were previously protected by manned gates.

Details of the construction of bridges that were completed to eliminate level crossings are listed below.

At Wagga Wagga the Edward Street underpass was completed and was opened to traffic on 11 December 1976, thus eliminating the Edward Street level crossing.

Construction of an overbridge and approaches at Seven Hills were completed and were opened on 24 December 1976, thus eliminating the level crossing on Secondary Road No. 2084.

A new road bridge over the Darling River at Menindee was opened on 11 February 1977. This eliminated the need for

road vehicles on Trunk Road No. 68 to use the rail bridge to cross the river.

Type 'F' flashing lights and warning bells were installed at level crossings on State Highway No. 6 (Mid Western Highway) at Blayney; two crossings on State Highway No. 7 (Mitchell Highway) at Trangie; Main Road No. 101 (West Maitland - Weismantels) at Paterson; Main Road No. 126 (Wallabadah - Quirindi) at Quirindi; and Trunk Road No. 90 (Bucketts Way) at Gloucester.

On unclassified roads type 'F' flashing lights were installed at Dapto, Wellington, Berrico, and Orange.

Widening of level crossings on State Highway No. 21 (Cobb Highway) at Hay and Trunk Road No. 55 at Mudgee were also completed.

These works were carried out by the Public Transport Commission, the Department and Councils working in close co-operation. Apportionment of costs were in accordance with the situation at individual sites.

Another level crossing has been eliminated with the completion of this bridge over the Main Western Railway Line adjacent to Seven Hills railway station.





# PUBLIC RELATIONS

The Public Relations Section is responsible for informing the public of the activities and policies of the Department and it does this in many different ways. The Section's wide range of activities include:

- the preparation and issue of regular statements to press, radio and television about new undertakings;
- the planning, printing and distribution of brochures and maps, including the Department's quarterly journal 'Main Roads' and the Annual Report;
- the screening and loan of movie films for schools, colleges, and other interested groups;
- the maintenance of a photographic record of major Departmental projects and the supply of prints for sale;
- the design and presentation of displays at both city and country centres to keep the community aware of new works which are planned or in progress;
- the reporting to newspapers and other media of road blockages due to flooding, snowfalls, landslides, accidents or roadworks;
- the provision of guest speakers to address meetings of community service organisations, church groups, historical societies and other associations;
- and the provision of 'guides' for visitors to the Model Room Display Area on the Third Floor, Head Office.

It also undertakes to find the answers to a multitude of questions posed by the public – by letter, by telephone and by personal enquiry – concerning roads and bridges throughout the State.

# EMPLOYMENT

At 30 June 1977, 11,594 wages employees (including contractors' employees and truck owner-drivers) were engaged on the maintenance and construction of Main Roads and on the construction of Developmental Roads by the Department of Main Roads and Councils. This compared with a total of 10,635 as at 30 June 1976.

In addition, there were 3,952 salaried officers employed by the Department at the end of June 1977.

An analysis of the figures is set out below.

## Departmental staff and employees –

Salaried officers –			
Male	3,247		
Female	705		
		3,952	
Wages employees –			
Male	6,134		
Female	62		
		6,196	10,148
Departmental contracts –			
Contractors' employees engaged on contracts under direct supervision by the Department (other than haulage and minor contracts)			
	199		
Haulage contracts –			
Trucks	1,009		
Minor contracts –			
Plant, etc.	403		
		1,611	
Council employees engaged on subsidised roadworks			
		2,756	
Council-owned and contract trucks engaged on subsidised roadworks			
	1,031	5,398	
Grand Total			15,546

In all of these activities, 1976-77 was again a busy year. During this period a total of 77 press releases were issued and films from the Department's collection were lent to 277 borrowers.

The Department's display at the 1977 Royal Easter Show was focussed on the theme 'Presenting the Better Alternatives' and highlighted the differences between the efficient and attractive roads and bridges being built today and the inadequate ones that still need to be replaced or upgraded. Exhibitions were also arranged at Broken Hill and Wagga Wagga in September 1976, Wollongong in October 1976, Newcastle in February 1977 and Armidale in March 1977. Panels of photographs and diagrams were also forwarded for display at the Australian Road Research Board Conference in Perth, W.A. in August 1976.

On 25 March 1977, a special function was arranged for the official opening by the Premier, the Hon. N. K. Wran, Q.C., M.L.A., of the Sheahan Bridge over the Murrumbidgee River at Gundagai – the longest structure ever built by the Department.

The Department published revised editions of 'Four Maps of New South Wales' and 'Sydney and Suburbs' and 'Sydney and Surrounding Districts'. For the first time maps of 'Wollongong and Suburbs' and 'Wollongong and Surrounding Districts' were also produced. With the maps of 'Newcastle and Suburbs' and 'Newcastle and Surrounding Districts' continuous cartographic coverage is now provided, at the same scale and showing the same type of information, from Raymond Terrace in the north to Nowra in the south.

The Department has not been involved in any major industrial disputes during the year. Relations with union officials, employees and staff have been generally harmonious.

Opposite page ►

Top left: A scale model of the proposed interchange which will carry Epping Road (the vertical route) over Lane Cove Road (the horizontal route) at North Ryde, looking north-west.

Top right: Construction in progress on the overbridge at the intersection of Epping Road and Lane Cove Road, looking southeast.

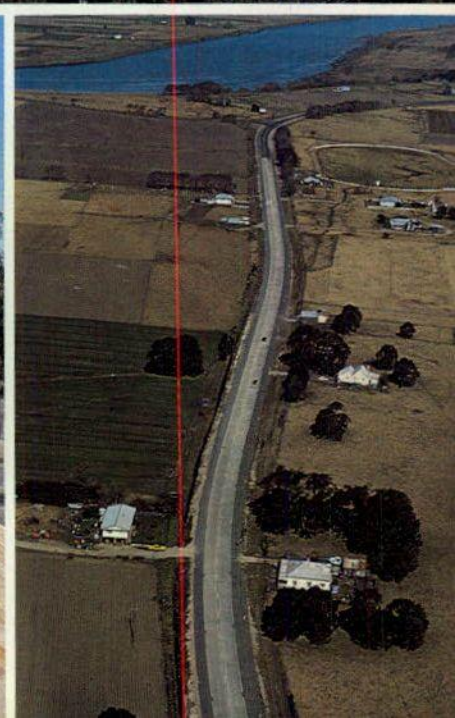
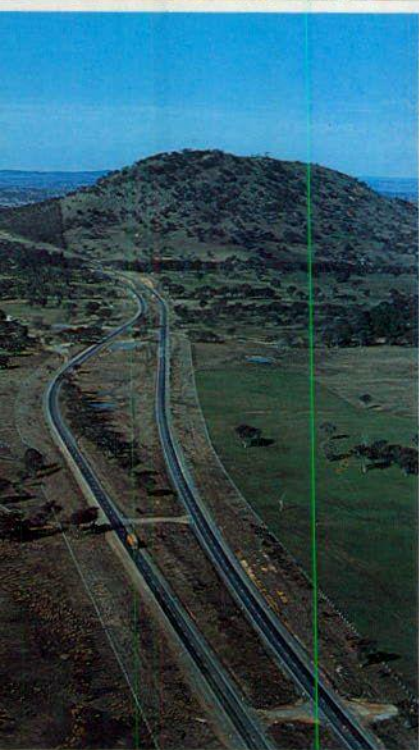
Centre left: Dual carriageways on the Hume Highway, approximately 10 km south of Yass.

Centre right: A striking comparison between the old and new bridges over Honeysuckle Creek on Trunk Road No. 91, 23 km west of the Princes Highway near Wyndham.

Bottom left: The attractive new footbridge which now spans the busy King Georges Road at South Hurstville.

Bottom right: Completed reconstruction on the Pacific Highway at Clybucca Flat, north of Kempsey, showing the Macleay River in the background. This is the first continuous reinforced concrete pavement built by the Department.







# BITUMINOUS SURFACING

## ASPHALT PRODUCTION AND LAYING

Asphalt used by the Department during the year totalled 482 238 tonnes of which 337 579 tonnes were supplied from the Central Asphalt Depot plant, 32 873 tonnes from the Mobile Asphalt Plant, 27 240 tonnes from the Bellambi plant and 84 546 tonnes from contract sources.

Approximately 11 000 tonnes were placed by contractors and approximately 80 000 tonnes used by maintenance gangs on repair work. The balance of 391 239 tonnes were spread and compacted on the roads by the Department's own paving units.

### Central Asphalt Depot

Production at the Central Asphalt Depot in 1976-77 was 337 579 tonnes; an increase in production of 124 240 tonnes over the previous year's figures of 213 339 tonnes.

The two old 'Standard' Asphalt plants were used only as stand-by plants for emergencies. The whole of the production was from the new Barber-Greene plant capable of producing up to 400 tonnes per hour.

The asphalt produced by Central Asphalt Depot was supplied to various work sites up to 150 km from Sydney. Haulage was by 30 Departmental trucks and up to 80 contract trucks.

Six Departmental pavers were used to place the asphalt on the road, four under direct Central Asphalt Depot control and one each based with Metropolitan Division and Parramatta Division.

### Mobile Asphalt Plant

The Mobile Asphalt Unit is an Armstrong Holland plant capable of mixing up to 35 tonnes per hour.

The unit operated from a base at Mittagong; the asphalt produced was used on the South Western Freeway between Yanderra and Mittagong and on various sections of the Hume Highway between Goulburn and Mittagong. The unit moved to work on the Hume Highway near Holbrook in April 1977.

### Bellambi Asphalt Plant

The Bellambi Asphalt Unit based at the Bellambi Works Office is an Armstrong Holland plant capable of mixing up to 25 tonnes per hour.

Asphalt produced was used on construction and maintenance by the Illawarra Division but some mix was also supplied to work on the Hume Highway to assist Mobile Asphalt Unit production.

## SPRAYED BITUMINOUS SURFACING

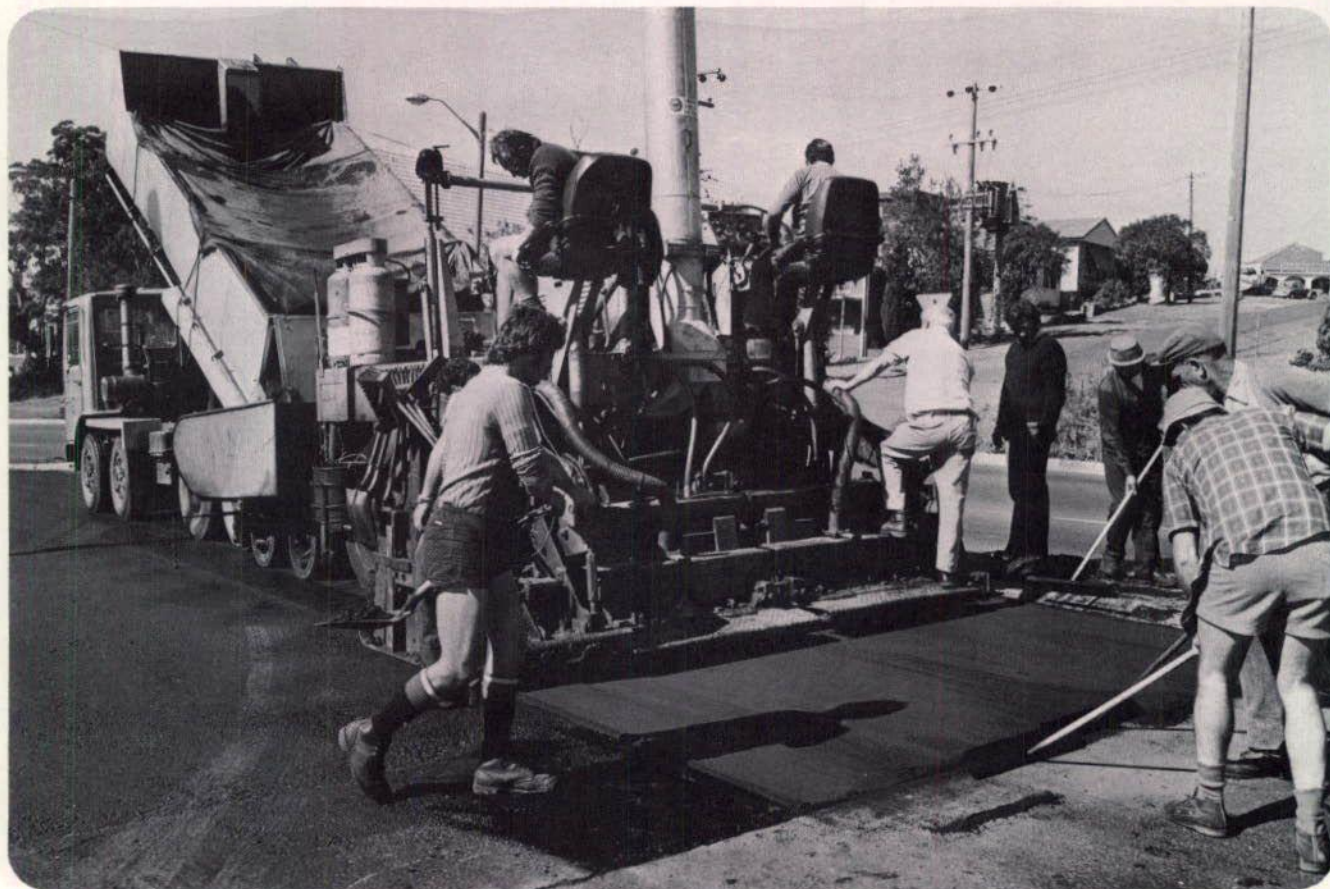
During the year the Department operated nine full units on works under its direct control. One of these units was based at the Central Asphalt Depot for work in Divisions around Sydney.

A further nine small trailer mounted bitumen spraying units were used in country divisions for priming, primer-sealing and patching works.

The Department by direct control sprayed 10 480 548 litres of bitumen and 414 254 litres were supplied and sprayed by contract on Departmental works.

This, together with 22 824 928 litres of bitumen used in the manufacture of asphalt, comprised the total quantity of 33 719 730 litres of bitumen used by the Department during the year.

Bituminous surfacing goes on throughout the State during the whole year, to provide better travelling conditions for all road users.





## BITUMINOUS SURFACING FIGURES

The total length of dust free surface on the Freeways, State Highways, Trunk Roads, Main Roads, Secondary Roads, Tourist Roads, Developmental Roads and on the Unclassified Roads for which the Commissioner for Main Roads is responsible, is now 24 853 km.

Bituminous surfacing work was carried out on:

Freeways	15 km
State Highways	1 199 km
Trunk Roads	242 km
Main Roads	607 km
Secondary Roads	25 km
Tourist Roads	6 km
Developmental Roads	4 km
Unclassified Roads	3 km

The total length of surfacing completed was 2 101 km which involved 4 398 lane km or the equivalent of 2 199 km of normal two lane road.

The Department was the authority for 1 227 km (2 568 lane km) of surfacing of which 1 152 km (2 382 lane km) were done by direct control and 75 km (186 lane km) by contract.

Councils were the constructing authority for 874 km (1 831 lane km) surfacing of which 182 km (372 lane km) were done by direct control and 692 km (1 458 lane km) by contract.

The work comprised:

Asphalt Surfacing	231 km
Slurry Seal	0 km
Bitumen Enrichment	51 km
Sprayed Seal	1 748 km
Primer-Seal	63 km
Prime	8 km

The bituminous surfacing work done during the year is divided into four categories:

1. Initial Treatment — of 121 km (270 lane km) of road not previously provided with a dust free surface.
2. Heavier Treatment — either sprayed seals or plant mix surfacing provided on 59 km (118 lane km) of road previously provided with a light treatment such as prime or primer-seal.
3. Restoration — of bituminous surfacing following reconstruction:
  - (a) to widen and/or strengthen the pavement on 258 km (530 lane km),
  - (b) to provide additional lanes or dual carriageway on 42 km (118 lane km),
  - (c) to improve alignment and/or grading on 108 km (237 lane km).
4. Maintenance Re-surfacing — of 1 513 km (3 125 lane km) of road pavement.

## ROAD CLASSIFICATIONS AND DISTANCES

The total distance of Freeways, State Highways, Trunk Roads, Main Roads, Secondary Roads, Tourist Roads, Developmental Roads and Unclassified Roads for which the Commissioner for Main Roads is responsible is 42 771 km.

The distances of roads within the various classifications as at 30 June 1977 were:

Freeways	127 km
State Highways	10 478 km
Trunk Roads	7 075 km
Main Roads	18 305 km
Secondary Roads	287 km
Tourist Roads	403 km
Developmental Roads	3 618 km
Unclassified Roads	2 398 km
(in the unincorporated area of the Western Division)	
Unclassified Roads	80 km
(in the incorporated area of New South Wales)	
<b>Total</b>	<b>42 771 km</b>

The lengths of the various types of surfaces of Main Roads throughout the State as at 30 June 1977 were:

Natural Surface	927 km
Formed only	6 573 km
Gravel	10 418 km
Primed only	16 km
Primer Seal	251 km
Sprayed Seal	21 883 km
Enrichment Reseal	364 km
Slurry Seal	14 km
Bituminous Plant Mix	2 173 km
Cement Concrete	152 km
<b>Total</b>	<b>42 771 km</b>

## LANDSCAPING

The solution of road problems often involves the adoption of a new alignment which encroaches on areas of natural vegetation or other established areas and consequently alters the surrounding landform. It is through an awareness of this aspect of its activities that the Department undertakes to restore and in some cases improve, the landscape and establish an environment that is aesthetically acceptable to the community.

During the past 12 months grass cover on roadside verges of the South Western Freeway and the Hume Highway has continued to give satisfactory results.

Tree planting was restricted, because of lack of finance, principally to the National Highways and Freeways of the State. Despite this limitation some 15,000 trees and shrubs

were planted of which the most significant projects are detailed below.

<b>F5 South Western Freeway</b>	
Section Kennys Hill to Menangle	300
Section Yanderra to Yerrinbool	2,900
Section Yerrinbool to Aylmerton	3,500
<b>Hume Highway — State Highway No. 2</b>	
Bowning	1,300
Gundagai	700
Holbrook	400
<b>Federal Highway — State Highway No. 3</b>	
Yarra	1,200
<b>New England Highway — State Highway No. 9</b>	
Tenterfield	350



# STAFF TRAINING

Under the guidance of the Department's Steering Committee on Training, activities concerning staff training and development continued to grow and diversify during 1976-77.

A total of 840 officers attended formal training courses conducted by the Department. These courses included residential training; full-time courses of from one to three weeks' duration; courses requiring part-time attendance over several months; and shorter sessions, some of less than one day's duration. The formats for the various courses were determined by the demands of the different work situations from which trainees were drawn.

In addition, a further 12 senior officers attended courses at the Australian Administrative Staff College and at the Institute of Administration, University of New South Wales.

Staff were also sponsored in full-time degree courses at the Universities of Sydney, New South Wales, Newcastle and Wollongong, and the New South Wales Institute of Technology. Courses studied under these sponsorships included Civil, Electrical and Mechanical Engineering, Science, Surveying and Business Administration. Two officers are currently being sponsored in post-graduate studies of Highway Engineering and Traffic Engineering at the University of New South Wales.

A further 380 officers undertook part-time studies at various educational institutions in a wide range of courses.

## APPRENTICES

Forty-three apprentices were indentured during the year, bringing the total number employed to 192 in 13 different trades. During the year the Department's apprentices throughout the State won awards in the boilermaking, sheet metalwork, plumbing, plant mechanics and welding trades.

## INDUCTION TRAINING

Formal induction courses were held throughout the year at Head Office for newly recruited staff. An induction course was conducted for junior professional staff on 1 December 1976 and was attended by 36 graduand engineers and surveyors.

Special induction sessions were arranged for 89 officers who joined the Department from the Department of Motor Transport.

## TECHNICAL TRAINING

### Field Engineers (Roads)

This week-long residential course on road construction and maintenance methods was once again conducted by the Department at the Residential Centre, Institute of Administration, University of New South Wales. It was attended by 28 engineers.

### Road Design Draftsmen

During the year, the final group of trainees from 1975-76 completed the last week of this three week course and a further two courses, each attended by 20 draftsmen, were conducted. The objective of these courses is to consolidate and expand trainees' knowledge of the many aspects of road design.

### Workshop Supervisors

A series of five courses, attended by 56 officers, was conducted during the year for workshop supervisors. The

courses included such topics as hydrostatic transmissions, registration inspections of motor vehicles, workshop processes and metrication.

## Measurement of Paint Film Thickness

Two of these courses, the first of their type conducted by the Department, were held during the year. They were attended by 24 officers, including engineers, superintending officers and foremen engaged in supervision of painting and repainting steel bridges.

## Divisional Training Conferences

The practice of holding training conferences in divisional offices throughout the State was continued. A series of conferences on traffic matters commenced during the year will continue. These conferences include topics of special State-wide interest with information being provided, where appropriate, by speakers from Head Office.

## Plant Operator Instruction

Over the past 12 months the Department's plant instructors continued the task of instructing those operators who needed training in, or a review of, plant operating techniques. During the year 431 plant operators were instructed, 36 at the Central Workshop and the remainder in the field.

## Potential Cost Clerks

One course, of two weeks' duration, was attended by 15 clerical officers who were otherwise qualified for promotion as cost clerks. The course comprised aspects of staff supervision and office management together with departmental administrative procedures as applied in the works office situation. Follow-up tuition in procedures was given at field offices throughout the year by experienced clerical instructors.

## Training in Costing Procedures

As a result of the institution of a revised costing system throughout the Department, formal instructional briefings were held for appropriate officers. A team of qualified clerical instructors visited field offices to give on-the-job instruction as required.

## Classes in General Office Administration

Twelve clerical officers commenced classes of instruction at Head Office during the year in preparation for clerical grade examinations.

## Field Engineers

A week long residential course in works management and administration was conducted by the Department at the Residential Centre, Institute of Administration, University of New South Wales. Twenty-eight engineers attended the course which covered the detailed procedures of works office administration, together with job management techniques associated with road construction and maintenance.

## Divisional Office Administration

This course was attended by 17 engineers recently appointed to divisional offices throughout the State. The programme and content were designed to introduce members to divisional office practices and procedures and to familiarise them with their role in overall departmental administration.

## Legal Branch Staff

A part-time course of 10 half-day sessions was attended by 24 officers from the Legal Branch. This was



the first formal training programme for the Department's Legal Branch: the course was aimed at acquainting those attending with the field operations of the Department, with emphasis on the potential legal implications.

### **Survey Draftsmen**

The Department commenced its first training course for survey draftsmen during 1976-77. The course was made up of two groups, each of 20 draftsmen and was designed to familiarise them with other areas of departmental operations relevant to survey drafting.

### **Valuers**

Phase one of the training programme for valuers was concluded early this year: phase two was completed later in the year. A part-time course of five half-days (spread over a period of four months), was also conducted by specialists from other departments and instrumentalities whose operations impinged on the work of the valuers. Two groups, each of 24 officers undertook this training.

### **Assistant Valuers**

During the year a part-time course was held for nine assistant valuers to expand their knowledge of departmental procedures and sources of information. Sessions were conducted mainly by senior members of the staff.

## **PERSONAL SKILLS TRAINING**

### **Correspondence Preparation**

Six one-day courses were held in Head Office, Parramatta Divisional Office and at Metropolitan Divisional Office to improve the standard of departmental correspondence. In all, 89 officers attended these courses.

### **Methods of Instruction Training**

Two courses were held during the year to assist 16 officers required to present sessions at departmental courses. In addition, a three-day course was conducted for five officers of the Central Workshop who instruct apprentices.

# **SUGGESTIONS COMMITTEE**

The Department's Suggestions Committee has been in operation in varying forms since 1927. The present committee which consists of a Chairman, Secretary and three committee members, reviews the suggestions submitted by employees and makes recommendations for their adoption, if warranted.

# **MISSIONS ABROAD**

The Assistant Chief Engineer (Bridges) of the Department, Mr. L. H. Evans, represented the Department at the 10th Congress of the International Association for Bridge and Structural Engineering held in Tokyo, Japan from 6 to 11 September 1976. The Association organises a congress every four years to further its aims of promoting international collaboration between engineers and researchers, promoting the exchange of technical data and scientific knowledge and publishing experience and results of research.

Following the congress Mr. Evans spent three weeks in Japan examining recent developments in bridge design and construction, inspecting road tunnel and bridge projects and holding discussions with senior technical officers of road authorities and associated organisations. He was

### **Public Service Board Courses**

A total of 15 officers attended a variety of courses conducted by the New South Wales Public Service Board. These courses included dictation techniques, 16 mm film projection, records management, aerial photography interpretation and a training officers' workshop. In addition, 11 officers attended seminars in administration conducted by the Board in conjunction with the Royal Institute of Public Administration. Topics of these seminars included communication in management, industrial relations, public relations, finance, people in organisations and computers.

### **First Aid Classes**

During the year the Department sponsored 84 officers and employees to undertake studies toward St. John Ambulance qualifications in first aid.

### **Film and Television School**

Following the purchase by the Department of a colour video-cassette system, four officers attended week-long courses in the operation of portable television equipment and associated editing techniques.

## **TRAINING IN STAFF SUPERVISION**

Nine supervisory training courses, each of one week's duration, were conducted during the year and were attended by a total of 129 staff. Five of the courses were attended by road and bridge foremen, together with technical supervisory staff; one was for field engineers and the remaining three for supervisory staff of various designations within the Department.

## **MANAGEMENT TRAINING**

Two courses of this type were conducted during the year, one in October 1976 and another in May 1977, on a residential basis and each was attended by 15 officers.

These courses were designed to provide members with an introduction to management concepts and techniques and contained a practical element to relate the learning to trainees' work situations. They were intended to form a basis for more advanced management training.

During the year, 63 suggestions were received ranging from ideas on improving technical and administrative efficiency to the modification of plant and ancillary equipment in the Department's field operations.

Depending on their merit, various monetary awards were made to the authors of the suggestions.

away from Australia for approximately four weeks.

The Australasian Corrosion Association held its 16th Annual Conference in Auckland, New Zealand from 22 to 26 November 1976. The Assistant Bridge Engineer (Operations) in the Department, Mr. S. F. S. Pollard, who at the time was the Senior Vice-President of the New South Wales Branch of the Association, attended the conference.

After the conference Mr. Pollard spent a week in New Zealand inspecting emergency bridging equipment and holding discussions with senior technical officers of road authorities on this matter, which is of vital concern to the Department. He was away from Australia for approximately two weeks.



# OFFICE PREMISES AND HOUSING FOR STAFF

## HEAD OFFICE

Alterations were carried out in various sections of Head Office so that new plant could be installed, security improved and partitioning re-arranged to accommodate increased staff.

Work was commenced on the northern wall of the Day Street Premises to obtain a presentable facade to what was, prior to demolition of the old building, an internal wall.

Refurbishing of a resumed property in Palmer Street to accommodate surveyor's field hands, a radio repair room and a bulk paper storage area was recently completed. Work was nearly completed on restoring three houses acquired adjacent to this building.

Negotiations for the leasing of office premises to accommodate the relocation of Brisbane Street Traffic Control Centre to Oxford Street were completed.

## DIVISIONAL OFFICES

Purchase of a property at the rear of the Parramatta Divisional Office was completed.

Five floors of the Legal and General Building, North Sydney were fitted out to accommodate the Metropolitan, Inner and Outer Freeway Construction Divisions.

The first stage of the extension of the Materials and Research Laboratory into the area previously occupied by the Metropolitan Divisional Office was completed.

Contracts have been exchanged for the purchase of a property opposite the Divisional Office at Bega which will be consolidated with adjoining lands to provide a future rebuilding site.

A prefabricated building was relocated from the former Divisional Office at Lithgow to the Bowenfels Works Office to accommodate surveyors and their vehicles. A new testing laboratory building together with a separate garage building was also being erected.

An air conditioning system was installed in the main office building at Port Macquarie Divisional Office.

Improvements were carried out to the car parking area at Grafton Divisional Office.

Extensive alterations were nearly completed at Tamworth Divisional Office to provide additional accommodation for staff.

A temporary office building was erected at the rear of the main office building at Wollongong to accommodate additional staff.

Alterations and extensions were commenced to accommodate survey staff at Goulburn.

## WORKS OFFICES

Construction of a new 1 125 m<sup>2</sup> workshop at Granville to serve the Central Asphalt Division was well advanced.

Separate contracts were let for an office/testing room building, garage building and store extension at Waratah Works Office for personnel transferred from the Department of Motor Transport.

A new building to replace the workshop at Yass and extensions to the Bega Works Office were both nearing completion and an extension to the workshop building at Bellambi was completed during the year.

A new petrol, oil and lubrication store was provided at Nyngan Works Office.

## HOUSING FOR STAFF

During the year residential properties were purchased for staff housing at Tamworth, Grafton, Broken Hill, Parkes, Corral and Glen Innes.

A total sum of \$440,000 was expended on staff housing during 1976-77. Two of the properties were acquired as replacements for older premises considered to be unsuitable for Departmental requirements. Nine staff residences were disposed of being unsuitable for, or surplus to the Department's requirements.

# ARMY SUPPLEMENTARY RESERVE UNIT

During the year the 21 Construction Regiment RAE (SR) celebrated the 25th anniversary of its formation. Since formation it has served the dual roles of providing an active reserve for regular army engineer units and as a unit for training skilled civilian personnel.

The Department sponsors a Construction Squadron, a Plant Troop of a Plant Squadron (Heavy) and part of the Regimental Headquarters. Departmental engineers at present fill the posts of Regimental Commanding Officer and Officers-in-Command of 101 Construction Sqn and 108 Plant Sqn (Heavy).

The Annual Camp was held at the School of Military Engineering, Casula over a four-week period with Departmental personnel attending from 5 to 18 March 1977. Regular army instructors from the School provided a nucleus of instructors for the training programme as well as guiding instructors from the Regiment.

Training was inspected by the Commissioner, Deputy Commissioner and senior officers of the Department together with senior officers of the Metropolitan Water

Sewerage and Drainage Board and the Department of Public Works which are the other sponsoring authorities. Some bridge training was also provided for 1 PC and R Squadron which is sponsored by the Maritime Services Board.

Service in the Regiment provides training in management for Departmental personnel and contributes significantly to overall Departmental morale.

Opposite page ►

Recently completed divided carriageways on the Pacific Highway between Oakdale Road and Oxford Street, Gateshead (south of Newcastle), showing additional storage lanes for right turning vehicles.







# AUSTRALIAN ROAD RESEARCH BOARD

The Australian Road Research Board (ARRB) is a co-operative venture between eight State and Commonwealth Government departments interested in roads and road transport. The six State Road Authority representatives on ARRB, together with the Commonwealth Department of Construction, also meet together as the National Association of Australian State Road Authorities (NAASRA). Thus, whilst ARRB has no formal direct links with NAASRA there are strong informal ones through common direction and an interlocking common link at the technical level. The Board operates as a non-profit public company (registered in Victoria) with its charter defined by its memorandum and articles of association as required by the relevant Companies Act. A Board of Directors, comprising the executive heads of the sponsoring road authorities – which for this year had as its Chairman Mr D. H. Aitken, Commissioner of Main Roads, Western Australia – provides regular guidance and reviews ARRB policy. Activities of the Board, under its Executive Director Dr. M. Lay, are thus directed to objectives incorporated in legal documents which included:

- (i) correlating and co-ordinating road research activities;
- (ii) providing, by means of conferences or symposia, opportunities for the presentation and discussion of the results of research;
- (iii) undertaking research studies; and
- (iv) publishing results of road research, including those presented at conferences convened by the Board.

The Eighth ARRB Conference held in Perth in August 1976, was one such opportunity for Australian and overseas roading personnel to exchange information. In the published proceedings from this conference, exchange between road research scientists, practising engineers and managers, and associated specialists was widely distributed. Included among the 650 delegates to the Conference, was a group of 37 from Thailand who continued from the Conference on a study tour of Australian highways.

The Commissioner, Mr A. F. Schmidt, as a director of ARRB, chaired a session at the Eighth Conference for the inaugural presentation of the Directors' prize to the author whose paper was judged the best in translating research into practice. This first award was presented to Mr B. L. Phillips, of the Country Roads Board, Victoria, for his paper 'Synthetic Aggregates for Road Surfacing'.

Preliminary arrangements are in hand for the Ninth Conference to be held in Brisbane from 20-25 August 1978.

In conjunction with the ARRB, the Road Engineering Association of Asia and Australia (REAAA), conducted a two part Highway Engineering Workshop in Singapore and Malaysia as a follow on from the Eighth ARRB Conference. ARRB is an Institutional Member and occupies a role of second vice-president in the Association.

In association with the Commonwealth Bureau of Transport Economics, the Board organised a local workshop of New Techniques for Transport Analysis. A workshop on the Geology of Quarries was conducted in February 1977. Both of these meetings involved representatives from appropriate associate industries, commercial interests and representatives from member authorities as well as Board staff.

Local government involvement continued through the 14th Regional Symposium at Burnie, Tasmania. During the year the Deputy Director, Dr. J. B. Metcalf attended and presented papers at a 'Low-cost Roads' Conference organised by the Department of Highways, Indonesia.

Following the acceptance of Australia as a participant

member of the OECD programme of co-operation in the field of road research, the Executive Director of ARRB, as the alternate Australian delegate, attended the 18th Steering Committee Meeting in Paris in May 1977.

Such a Committee formulates a three-year programme which attempts to identify methods which have been scientifically validated and proven successful in certain countries and which could be recommended for general and immediate application for member countries. Through this research programme, Australia has access to reasoned and reliable data for policy makers. Involvement on the Steering Committee should allow the monitoring of international trends and the input of Australian experience.

Broad examples of fields in which groups in the OECD programme are currently enquiring, involve: energy problems and urban and suburban transport; use of waste materials and by-products in road construction; and management of urban freight distribution.

As an indication of input from Australia, a paper arising from the recently completed NAASRA study into Economics of Road Vehicle Limits (ERVL) is expected to be presented at a proposed OECD symposium on 'Heavy Freight Vehicles and Their Effects' to be held in Paris in November 1977.

Improvements to research documentation and retrieval has continued, including organising of a workshop in September 1976, involving librarians, information officers and committee members who were responsible for the transfer of the Australian Road Index (ARI) from NAASRA control to an ARRB operation. Apart from representatives of Directors' organisations, participants included representatives from organisations such as the New South Wales and Victorian Railways and Road Safety, as well as Commonwealth representatives from the CSIRO and Bureau of Transport Economics.

The Index was developed as a computer based index to Australian Roads and Road Transport literature. It is updated quarterly and cumulated annually and offers instant Australian bibliographic reference to librarians and researchers.

Following active pursuit, through the Department of Foreign Affairs, the Commonwealth Government sought and was granted membership of the OECD programme of co-operation in the field of road research. This became effective from 1 January 1977. Access to International Road Research Documentation (IRRD) tapes had previously been on a trial basis before this membership was granted. Australia is thus now in a position to assist in the promotion of international co-operation in the fields of road construction, safety and traffic, and be involved in detailed research activities by the contributing nations through this OECD research programme. Input to the ARI is part of Australia's contribution to the IRRD.

The Index is now being produced directly from the ARRB computer to a phototypesetter. This change, in accordance with IRRD specifications, thus ensures that the Australian Road Index data base is completely compatible with the international data base, IRRD.

Broad ranging articles on road research and development continue to be produced quarterly in the ARRB Journal. Feasibility studies and research projects conducted during the year by ARRB staff and University researchers, included such diverse areas as Truck Suspension Performances, Horizontal Curve Design Revision, Assessment of Community response to Freeway and Arterial Road Noise, together with more conventional research into topics such as Shrinkage and Creep in high strength concrete in association with member authorities.



Instruments developed in ARRB laboratories for particular purpose applications, were utilised in a number of these studies.

The Federal Government, through the House of Representatives Standing Committee on Road Safety, received submissions from ARRB for two enquiries, into safety aspects of heavy vehicles (trucks and buses), and motor cycles. ARRB research projects and symposium proceedings provide the material for such submissions.

As a means of guiding those interested in conducting research for the Board in appropriate areas, and to allow forward planning of research on a regular rolling-programme basis, further development of a draft Research Charter is proceeding. A revised Research Contract has been developed for use in 1977-78. This will serve to concentrate research contract awards to clearly specified projects compatible with the objectives of the Board in matters affecting the provision, up-keep, use production and development of roads.

## NATIONAL ASSOCIATION OF AUSTRALIAN STATE ROAD AUTHORITIES

The National Association of Australian State Road Authorities (NAASRA) is an organisation of the central road authorities in the six States together with the Department of Construction, which is the road constructing authority for the Northern Territory and the Australian Capital Territory. The present members are the Department of Main Roads, New South Wales; Country Roads Board, Victoria; Main Roads Department, Queensland; Highways Department, South Australia; Main Roads Department, Western Australia; Department of Main Roads, Tasmania; and the Commonwealth Department of Construction.

The Association was established in 1934 and serves as a centre for pooling technical and administrative experience. This co-operation has permitted the Association to inaugurate, co-ordinate, and rationalise road research projects and to promote the development of improved methods of administration, planning, design, construction, maintenance and operation of roads on a national basis and also to ascertain and publish facts about Australia's principal roads and their financing.

Three meetings of the Association were held during the year and were attended by the administrative heads of the above member authorities. The annual meeting of the Association was held in the office of the Country Roads Board, Victoria; one meeting was held in Perth and another hosted by the Commonwealth Department of Construction in Melbourne. The Commonwealth Department of Transport and the Commonwealth Bureau of Roads were represented at those sessions which were of particular interest to the Commonwealth Government.

The Principal Technical Committee (comprising the Chief Engineers nominated by the member authorities) and the Secretarial and Accounts Committee, each met during the year and were assisted by meetings of a number of Technical Committees dealing with specialist activities. Representatives from the Commonwealth Department of Transport; the Commonwealth Bureau of Roads; and the

Australian Road Research Board also attended a number of these meetings.

During the year the Association was involved in two seminars – one on subsoil drainage and the other on photogrammetry. Both seminars were hosted by the Department of Main Roads, New South Wales.

A study being undertaken on Community and Environmental Aspects of Urban Highway Proposals was completed and the report by the sub-committee was published subsequently.

Other publications issued during the year were the NAASRA Bridge Design Specification, which replaces the 1970 edition of Highway Bridge Design Specification; a revised edition of the Guide to Publications and Policies of NAASRA; Guidelines for the Preparation of Computer Programs for Engineering Tasks; a Standard Lubricant Chart, Part 3 of a series of publications on Pavement Materials; and a revised edition of Australian Roads. One more brochure on the theme "The Role of Roads in the Movement of People and Goods" was also issued, under the title of "Roads and Public Utilities". NAASRA publications continue to attract wide interest both within Australia and overseas.

During the year the Association applied for, and was accepted as an Institutional Member of the Road Engineering Association of Asia and Australasia. REAAA, with its Secretariat based in Kuala Lumpur, Malaysia, embraces the Asian and Pacific regions.

The recommendations of the NAASRA study on the Economics of Road Vehicle Limits were accepted by the Australian Transport Advisory Council at its February meeting and now await legislation by the individual States.

Studies on Road Maintenance Standards, Costing and Management and on the establishment of a NAASRA data bank are continuing. A report by the NAASRA Transport Planning Committee has been completed and is being published.

## VISITORS FROM OVERSEAS

Mr. Sathien Vongvichien, Chief, Aids Control Office, Department of Highways and Colombo Plan visitor from Thailand, spent two days discussing highway planning, design, construction and administration techniques.

Mr. Chamlong Saligupta, Deputy Director General for Engineering, Department of Railways, Thailand, spent

three days discussing highway planning, road location and design, and materials and research.

In addition, the Department received various visits for one or two days from overseas delegates to the Eighth Australian Road Research Board Conference in Perth.



# SENIOR OFFICERS

## HEAD OFFICE

### Engineer-in-Chief's Branch

Deputy Engineer-in-Chief	E. M. Brown
Chief Engineer (Bridges)	L. H. Evans
Chief Engineer (Rural)	H. B. Korff
Chief Engineer (Roadworks)	L. R. Browne
Chief Engineer (Urban)	M. B. Fairlie
Highways Engineer	V. R. Minus
Mechanical Engineer	L. A. S. Flack
Engineer for Programmes and Budgets	K. J. Paynter
Road Design Engineer	V. P. O'Grady
Field Inspecting Engineer	E. B. Henning
Executive Engineer	G. A. Thompson
Assistant Chief Engineer (Bridges)	S. Kaldor
Bridge Engineer (Design)	B. J. Pearson
Advance Planning Engineer	D. H. L. Francis
Traffic Engineer	K. W. Dobinson
Urban Investigations Engineer	K. M. Anderson
Engineer for Standard Specifications and Technical Instructions	T. P. Desmarchelier
Rural Investigations Engineer	R. A. Dunstan
Engineer for Country Council Works	B. Moon
Materials and Research Engineer	A. Leask
Asphalt Engineer	K. T. Jones
Engineer for Computer Services	J. C. Webb
Principal Surveyor and Property Officer	A. T. Lenehan
Principal Architect	G. A. McKenzie

### Secretarial Branch

Deputy Secretary	M. A. Lloyd
Assistant Secretaries	C. W. Mathews
	J. H. Tarleton

### Accounts Branch

Deputy Chief Accountant	E. J. Hanlon
Group Accountants	C. R. Filewood
	A. R. Clarke
	R. S. J. Price

### Legal Branch

Assistant Chief Legal Officer	H. Mudie
-------------------------------	----------

## DIVISIONS

The Divisional Engineers and the headquarters of the Divisions as at 30 June 1977 were as follows:

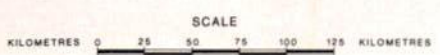
Division	Headquarters	Divisional Engineer
Metropolitan	Milsons Point	J. A. Neeson
Parramatta	Parramatta	B. H. Butcher
Central Mountains	Lithgow	C. Castleden
Illawarra	Wollongong	B. N. Loder
Hunter Valley	Newcastle	W. J. Brecht
Lower North Coast	Port Macquarie	D. F. Watson
North Eastern	Grafton	L. R. James
Upper Northern	Glen Innes	A. N. Griffin
North Western	Tamworth	D. J. Rae
Central Western	Parkes	W. L. Gordon
Central Northern	Bourke	M. R. Foster
Murray Darling	Broken Hill	W. H. Lake
Central Murray	Deniliquin	P. M. B. Pope
South Western	Wagga Wagga	R. A. Dubedat
South Coast	Bega	J. Kelly
Southern	Goulburn	P. Moore
Inner Freeway Construction	Milsons Point	K. Edgar
Outer Freeway Construction	Milsons Point	J. B. Anderson





**CLASSIFICATION  
OF MAIN ROADS IN  
NEW SOUTH WALES**  
WITH LOCAL GOVERNMENT AREA BOUNDARIES  
as at 30th June, 1977

- LEGEND**
- State Highways
  - Trunk Roads
  - Main Roads



Divisional Boundaries  
Divisional Headquarters



## ACKNOWLEDGEMENTS

In concluding this report of the activities of the Department of Main Roads for the financial year ended 30 June 1977, I extend appreciation to the Hon. P. F. Cox, M.L.A., Minister for Transport and Highways, for his consideration and support.

I wish to recognise the co-operation of Municipal and Shire Councils throughout the State. I desire also to record appreciation for the co-operation and assistance of Government Departments, State Instrumentalities, the Executive Committees of the Local Government and Shires Associations and the Road Authorities of other States.

For their assistance in reporting the work being carried out by Councils and by the Department in improving the Main Roads of the State, I again thank the press, broadcasting and television organisations and other media throughout the State.

In conclusion, I desire to express appreciation of the loyalty and able assistance which has been given so willingly by officers and employees of the Department, in service to the people of New South Wales through the extension, improvement and maintenance of the State's Main Roads System.

A. F. Schmidt  
COMMISSIONER FOR MAIN ROADS



DEPARTMENT OF MAIN ROADS N.S.W.

## 1976-77 ANNUAL REPORT

OF THE COMMISSIONER FOR MAIN ROADS N.S.W.



DEPARTMENT OF MAIN ROADS N.S.W.



**1976-77**  
**SUPPLEMENT to the**  
**ANNUAL REPORT**  
OF THE COMMISSIONER FOR MAIN ROADS N.S.W.



DEPARTMENT OF MAIN ROADS N.S.W.



# Department of Main Roads, New South Wales

## SUPPLEMENT TO THE FIFTY-SECOND ANNUAL REPORT OF THE COMMISSIONER FOR MAIN ROADS

FOR THE YEAR ENDED 30 JUNE 1977

### CONTENTS

	Page
<b>County of Cumberland Road Construction</b>	
Freeways .. .. .	7
State Highways .. .. .	7
Ordinary Main Roads .. .. .	7
Secondary Roads .. .. .	9
Tourist Roads .. .. .	10
County Roads .. .. .	10
<b>Country Road Construction</b>	
Freeways .. .. .	11
State Highways .. .. .	11
Trunk Roads .. .. .	15
Ordinary Main Roads .. .. .	17
Developmental Roads .. .. .	20
Tourist Roads .. .. .	20
<b>Bridge Construction</b>	
Principal Bridgeworks completed during the Year and opened to traffic .. .. .	21
Principal Bridgeworks completed during the Year but not opened to traffic .. .. .	22
Principal Bridgeworks in progress at the beginning of the Year but not completed .. .. .	23
Principal Bridgeworks commenced during the Year but not completed .. .. .	23
Bridges completed and opened to traffic on Unclassified Urban and Rural Local Roads .. .. .	24
<b>Maintenance of Bridges and Ferries</b>	
Freeways .. .. .	25
State Highways .. .. .	25
Trunk Roads .. .. .	26
Main Roads .. .. .	27
Developmental Road .. .. .	28
Secondary Road .. .. .	28
Unclassified Roads .. .. .	28
Ferries .. .. .	28
<b>Traffic Engineering</b>	
Median Strips .. .. .	29
Channelisation of Intersections .. .. .	29
Bus Bays .. .. .	30
Climbing Lanes .. .. .	30
Traffic Signals .. .. .	31
Priority Roads .. .. .	34
Clearways .. .. .	36
Speed Zones .. .. .	36
Linemarking .. .. .	36
Signs .. .. .	36
<b>Widening of Metropolitan Main Roads</b> .. .. .	37
<b>Bituminous Surfacing Completed During the Year</b>	
Scheduled according to Road Classifications .. .. .	38
Scheduled according to work by Department and Councils .. .. .	40
<b>Types of Road Surfaces as at 30 June 1977</b>	
Scheduled according to Road Classifications .. .. .	42
Scheduled according to Department's Divisions .. .. .	42
<b>Road Traffic Surveys</b> .. .. .	43
Traffic Volumes at Permanent and Semi-Permanent Counting Stations for the calendar year ended December 1976 .. .. .	43



1. Statement of Receipts and Payments for the Five Years ended 30 June 1977	
(A) Commonwealth Aid Roads Fund	51
(B) County of Cumberland Main Roads Fund	52
(i) General Purposes	52
(ii) Special Purposes	53
(iii) Reserve for Loan Repayments	53
(C) Country Main Roads Fund	54
(i) General Purposes	54
(ii) Special Purposes	54
(iii) Reserve for Loan Repayments	55
(D) Total State Road Funds	55
(i) General Purposes	55
(ii) Special Purposes	56
(E) Traffic Facilities Fund	57
2. Sydney Harbour Bridge Account	58
Sydney Harbour Bridge Loan Reserve Account	58
Balance Sheet as at 30 June 1977	59
3. Summary of Loan Liabilities to the State Treasury as at 30 June 1977	60
4. Loan Borrowings Under Section 42A of the Main Roads Act	60
5. Commonwealth Aid Roads Fund – Summary of Payments from Grants under the National Roads Act on Construction and Reconstruction Works	
(A) Schedule 1 – Construction of National Roads	61
(i) County of Cumberland Area	61
(ii) Country Urban Area	61
(iii) Country Rural Area	62
(B) Schedule 3 – Construction on Export and Major Commercial Roads	66
(i) County of Cumberland Area	66
(ii) Country Urban Area	66
(iii) Country Rural Area	66
6. Commonwealth Aid Roads Fund – Summary of Payments from Grants under the Roads Grants Act on Construction and Reconstruction Works	
(A) Schedule 2 – Rural Arterial Roads	67
(i) Country Rural Area	67
(B) Schedule 3 – Rural Local Roads	73
(i) Country Rural Area	73
(C) Schedule 5 – Urban Arterial Roads	74
(i) County of Cumberland Area	74
(ii) Country Urban Area	76
(D) Schedule 6 – Urban Local Roads	77
(i) County of Cumberland Area	77
(ii) Country Urban Area	78
(E) Schedule 3 – Rural Local Roads – Construction and Maintenance Works	79
7. County of Cumberland Main Roads Fund – General Purposes – Summary of Payments from Department's Funds on Construction and Reconstruction Works	
(i) Freeways	85
(ii) State Highways	85
(iii) Ordinary Main Roads	86
(iv) Secondary Roads	89
(v) Tourist Roads	91
(vi) Roads other than Main Roads	91



**7A. County of Cumberland Main Roads Fund – Special Purposes – Summary of Payments from Department's Funds on Construction and Reconstruction Works**

(i) Freeways	92
(ii) Ordinary Main Roads	92
(iii) Roads other than Main Roads	93

**8. Country Main Roads Fund – General Purposes – Summary of Payments from Department's Funds on Construction and Reconstruction Works**

(i) Freeways	94
(ii) State Highways	94
(iii) Trunk and Ordinary Main Roads	102
(iv) Tourist Roads	111
(v) Roads other than Main Roads	111

**8A. Country Main Roads Fund – Special Purposes – Summary of Payments from Department's Funds on Construction and Reconstruction Works**

(i) Freeways	112
(ii) State Highways	112
(iii) Trunk and Ordinary Main Roads	113
(iv) Roads other than Main Roads	114

**9. Commonwealth Aid Roads Fund – Summary of Payments from Grants under the National Roads Act on Maintenance and Minor Improvement Works**

(A) County of Cumberland Area	115
(i) Freeways	115
(ii) State Highways	115
(iii) Ordinary Main Roads	115
(B) Country Urban Area	115
(i) State Highways	115
(C) Country Rural Area	115
(i) Freeways	115
(ii) State Highways	115

**9A. Commonwealth Aid Roads Fund – Summary of Payments from Grants under the National Roads Act on Maintenance and Minor Improvement Works on Export and Major Commercial Roads**

(A) Country Urban Area	117
(i) Trunk and Ordinary Main Roads	117
(B) Country Rural Area	117
(i) Trunk and Ordinary Main Roads	117

**10. County of Cumberland Main Roads Fund – Summary of Payments from Department's Funds on Maintenance and Minor Improvement Works**

(i) Freeways	118
(ii) State Highways	118
(iii) Ordinary Main Roads	119
(iv) Secondary Roads	120
(v) Tourist Roads	120

**11. Country Main Roads Fund – Summary of Payments from Department's Funds on Maintenance and Minor Improvement Works**

(i) Freeways	121
(ii) State Highways	121
(iii) Trunk and Ordinary Main Roads	124
(iv) Tourist Roads	127



## 12. Traffic Facilities Fund

(A) Summary of Payments from Grants under the National Roads Act for Construction and Maintenance .. . . .	129
(i) Freeways .. . . .	129
(ii) State Highways .. . . .	129
(B) Summary of Payments from Grants under the Roads Grants Act for Minor Traffic Engineering and Road Safety Improvements .. . . .	131
(i) Freeways .. . . .	131
(ii) State Highways .. . . .	131
(iii) Trunk and Ordinary Main Roads .. . . .	135
(iv) Developmental Roads .. . . .	140
(v) Secondary Roads .. . . .	140
(vi) Roads other than Main Roads .. . . .	140
(C) Summary of Payments from State Funds on Construction and Reconstruction Works .. . . .	143
(i) Freeways .. . . .	143
(ii) State Highways .. . . .	143
(iii) Ordinary Main Roads .. . . .	144
(iv) Secondary Roads .. . . .	146
(v) Roads other than Main Roads .. . . .	147
(D) Summary of Payments from State Funds on Maintenance and Minor Improvement Works .. . . .	148
(i) Freeways .. . . .	148
(ii) Main Roads .. . . .	148
(iii) Roads other than Main Roads .. . . .	149
(iv) Divisions .. . . .	154

13. Proclamation of Main Roads 1976-1977 .. . . .	156
---	-----

14. Declaration of Secondary Roads .. . . .	157
---	-----

15. Distances of Freeways, State Highways, Trunk Roads, Ordinary Main Roads, Secondary Roads, Tourist Roads and Developmental Roads in New South Wales for the five years ended 30 June 1977 .. . . .	157
---	-----

16. Distribution between the Department and Councils of responsibility for care and control of roads at 30 June 1977 in accordance with the Provisions of the Main Roads Act, 1924 .. . . .	158
---	-----



# COUNTY OF CUMBERLAND ROAD CONSTRUCTION

Reference should be made to Appendices Nos. 1(B), 4, 5(A), 5(B), 6(C), 6(D), 7, 7(A), 9A and 10 for details of expenditure on road construction in the County of Cumberland during the year.

The principal works that were undertaken are listed below.

## FREEWAYS

### F1 – Warringah Freeway

Construction of the second stage of the Warringah Freeway between Miller Street and Willoughby Road was continued during the year.

The construction of a prestressed dual carriageway bridge over Brook Street was completed in August 1976. Construction provided for Brook Street to be open at all times to traffic.

Work is proceeding on the construction of a pedestrian overbridge over the Freeway linking Willoughby Road and Slade Street Naremburn. This work is being carried out by direct control and is scheduled for completion in November 1977.

During May 1977 a major traffic route alteration was put into operation following the closure of Chandos Street Cammeray to southbound traffic. Southbound Freeway traffic was diverted from Brook Street on to a loading ramp and directed through a major cutting through Chandos Street on to the Warringah Freeway.

### F3 – North Western Freeway

Work on the section of the North Western Freeway between Erskine Street City and Harris Street Pyrmont continued during the year.

Work on columns and headstocks has advanced to a stage to permit contracts to be granted for the fabrication of steel girders and concrete deck construction for a section of the westbound viaduct to Harris Street.

During the year the extension of Pyrmont Street to Quarry Street and the construction of the service road between Sussex Street and Day Street were completed and opened to traffic.

Work is continuing on the deviation of Day Street and it is expected that northbound traffic will be diverted on to the deviation between Liverpool and Druitt Streets during October 1977.

### F4 – Western Freeway

Construction of the Western Freeway continued between Wentworth Road Homebush and Wentworth Street Clyde. Work was limited to the construction of Haslam Creek bridges, major public utility adjustments and earthworks.

## STATE HIGHWAYS

### SH1 – Princes Highway

Improvements have been carried out on the drainage system of the Sutherland By-pass. The final asphalt surfacing has yet to be completed.

A short length of Bulli Pass was reconstructed to provide four lanes over an area of instability.

### SH2 – Hume Highway

Reconstruction of the intersection of the Hume Highway and Cowpasture Road at Leppington was completed.

Also completed was the reconstruction of the intersection of the Hume Highway and Bringelly Road at Leppington.

Replacement of broken concrete slabs was completed between Chelmsford Avenue Croydon and Prospect Creek at Lansvale.

Reconstruction of the damaged bitumen pavement between Prospect Creek at Lansvale and Hinkler Avenue Liverpool was commenced.

Work continued on major improvements to the junction area at the intersection of the Highway and MR178 at Narellan. The work commences on the Highway approximately 54.7 km south of Sydney and extends southward for approximately 1 km. When completed, the junction will feature a bridge to carry northbound traffic over the intersection, two lane carriageways in each direction and island medians to improve the traffic flow.

### SH5 – Great Western Highway

Reconstruction of the damaged bitumen pavement on the westbound lanes between Beresford Road and Greystanes Road at Greystanes was completed.

Construction of the northern side strip between Charles Hackett Drive and Neale Street at St. Marys was also completed.

Construction of the side strips between York Street and Old Bathurst Road at Emu Plains was completed.

Replacement of broken concrete slabs on Parramatta Road between Burwood Road, Burwood and Church Street, Parramatta was completed.

### SH10 – Pacific Highway

Reconstruction of the damaged bitumen pavement between Hornsby Street and Cam Street at Waitara was commenced.

### SH13 – Pennant Hills Road-Woodville Road

Reconstruction of the southbound side strip between Hewitt Avenue and Redgrave Road at Normanhurst was completed.

The relocation of the junction of Villawood Road opposite Llewellyn Avenue on Woodville Road at Villawood was completed.

## ORDINARY MAIN ROADS

### MR154 – Macquarie Street

Construction of the side strips between James Street and Drummond Street at Windsor was completed.

Liverpool City Council commenced construction of the approaches to the new bridge over Thompsons Creek at Bringelly.

### MR155 – Mulgoa Road

Penrith City Council completed the reconstruction between Batt Street and Rodley Avenue to provide a pavement 7.4 m wide on an improved alignment.

### MR156 – Castle Hill Road

Hornsby Shire Council completed the widening to four lanes between New Line Road and Victoria Road at West Pennant Hills, and continued with the widening to four lanes between Rogans Hill and Glen Road at Castle Hill.

### MR158 – Marsden Road

The Department completed the widening to four lanes between Morris Street and Illarangi Street at Dundas.

### MR159 – Pittwater Road

Manly Council completed the closure of Collingwood Street and Golf Parade at Pittwater Road Manly.



**MR162 – Lane Cove Road-Mona Vale Road**

The Department commenced the reconstruction of the intersection with Waterloo Road at North Ryde to provide for the widening of Waterloo Road, which is being carried out by Ryde Municipal Council.

Reconstruction to provide six lanes between Highlands Avenue Pymble and Cowan Road St. Ives is continuing.

On this section work was completed between Hope Street and Cowan Road and on the southbound carriageway between Hope Street and Bromley Avenue. Construction of the northbound carriageway between Bromley Avenue and Hope Street and the retaining wall between Highlands Avenue and Bromley Avenue is continuing.

Reconstruction to provide six lanes between Killeaton Street and Richmond Avenue St. Ives is continuing.

Property adjustment work and public utility adjustments have been completed between Ayres Road and Richmond Avenue. Construction of the northbound carriageway on this section is well in hand.

**MR164 – Condamine Street-Pittwater Road-Barrenjoey Road**

Warringah Council continued the reconstruction and widening to six lanes of Condamine Street from Kenneth Road to Campbell Parade.

Warringah Council completed the construction in cement concrete of the eastern shoulder of Pittwater Road between Long Reef Beach access road and Lismore Avenue.

Reconstruction of Barrenjoey Road to provide six lanes through Mona Vale Shopping Centre was completed. This included improvement and channelisation of the intersection with Mona Vale Road (MR162).

**MR165 – Victoria Road**

The Department completed the replacement of broken concrete slabs between Bellevue Avenue and Glenayr Avenue at West Ryde.

Reconstruction of the intersection with McArthur Street at Parramatta was completed.

**MR166 – Burns Bay Road**

Widening to provide a right turn storage lane at the intersection with Penrose Street is continuing.

**MR168 – Forest Road**

Hurstville Council completed the reconstruction of Forest Road between Lime Kiln Road and Kims Avenue Lugarno.

Hurstville Council completed the reconstruction to six lanes of Forest Road between Mavis Avenue and Collaroy Avenue Peakhurst. This work includes the reconstruction of the intersection with Stoney Creek Road.

**MR170 – Botany Road**

Reconstruction between Beauchamp Road and Bunnerong Road continued.

**MR171 – Bunnerong Road**

Work in connection with construction from Flint Street to Beauchamp Road commenced with the pavement widening of both carriageways.

**MR172 – Bondi Junction By-Pass**

The construction of a new by-pass road between Ocean Street and Bondi Road at Bondi Junction was commenced in February 1977 and is planned for completion to fit in with the bus/rail terminal under construction at Bondi Junction.

Work is well advanced on the construction of a four lane viaduct structure 456 m in length between Vernon and Adelaide Streets. Work commenced on public utility adjustments and reinforced earth and mass concrete walling.

The work is being undertaken by both contract and direct control and a new office has been established at the site of the work in Saber Street, Woollahra.

**MR177 – Campbelltown-Bulli Road**

Work continued on the construction of the southbound carriageway of the Moore/Oxley Streets Deviation to bypass Queen Street, Campbelltown.

Wollondilly Shire Council completed the construction of the intersection with MR610.

Work commenced on a deviation between F5 and Campbelltown to provide an improved alignment and approaches to the replacement structure at Bow Bowling Creek.

**MR178 – Campbelltown-Camden Road**

Council continued with the reconstruction and widening together with the provision of kerb and guttering through Narellan from 57.7 km to 58.3 km from Sydney, together with replacement of the existing culvert.

**MR183 – Gardeners Road**

Construction of dual carriageway between Slattery Place and Isaac Smith Street continued and is nearing completion.

**MR184 – Windsor Road**

The Department continued with widening to six lanes between Daking Street and Briens Road Northmead.

Construction of the approaches to the new bridge over South Creek at Windsor continued.

**MR190 – Rookwood Road-Joseph Street**

The Department commenced the reconstruction to provide dual carriageways from Boardman Street to Lloyd Avenue at Yagoona.

Auburn Municipal Council continued with the reconstruction to provide dual carriageways from the Bankstown Municipal Boundary (Lewis Street) northwards to Amy Street, Regents Park and commenced the construction of dual carriageways between Amy Street and Leila Street at Lidcombe.

**MR191 – Delhi Road-Millwood Avenue-Fullers Road**

Ryde Municipal Council completed the construction of a third lane on Delhi Road between the Lane Cove River and the Crematorium.

Willoughby Council completed the reconstruction of the intersection of Millwood Avenue and Fullers Road.

**MR194 – General Holmes Drive**

Rockdale Council completed the work of providing kerb and gutter and sealing the eastern kerbside lane between Cooks River and Bestic Street.

Major patching work between Joyce Drive and Millpond Drive was completed.

**MR200 – Devlin Street**

The Department completed the replacement of broken concrete slabs between Victoria Road (MR165) and Church Street.

**MR309 – Aston Street-Rydalmere Avenue**

Reconstruction to provide dual carriageways between Eleanor Street and Hassall Street at Rosehill was commenced.

Widening to six lanes between the bridge on Aston Street over Parramatta River and Kissing Point Road (MR574) was completed. This work is part of the major work on constructing a new route (CR5037) between Rydalmere and Northmead.

**MR315 – The Boulevard-King Georges Road**

Resheeting with asphaltic concrete between Redmyre Road and Carrington Avenue was completed by Strathfield Municipal Council.



Minor kerb and gutter, asphalt, landscaping and traffic facilities work were carried out to complete the reconstruction of the junction with Punchbowl Road.

Pavement over the new railway bridge and associated medians and kerb and guttering were carried out to complete the construction of the approaches to the new bridge over the railway at Wiley Park.

Reconstruction of the intersection with Canterbury Road, extending southwards to Paton Avenue is nearing completion. Southbound pavement widening to Stern Place is also well in hand.

#### **MR318 – Marlborough and Richmond Roads**

Strathfield Municipal Council completed the reconstruction and widening to four lanes between Parramatta Road (SH5) and Arthur Street (SR2057) at Flemington. This work included the construction of the approaches to the new railway overbridge at Flemington.

#### **MR328 – Warringah Road**

Reconstruction and widening to provide six lanes between Daines Parade and Pittwater Road was completed.

Traffic lights have been installed at Willandra Crescent.

Construction of a New Jersey type median barrier at the reverse curves on the northern approach to Roseville Bridge was completed.

#### **MR339 – Old South Head Road**

Woollahra Council completed work on improvements to the intersection with New South Head Road at Vaucluse.

#### **MR344 – Wentworth Avenue**

Construction of dual carriageways between Bay Street and Southern Cross Drive has been completed to interim four lane stage.

#### **MR386 – Bobbin Head Road**

Ku-ring-gai Council has completed the widening of Bobbin Head Road between Berrillee Road and Warrangi Street.

#### **MR373 – Epping Road**

The Department continued with the construction of dual carriageways between Delhi Road (MR191) and Shrimptons Creek, including the new interchange at the intersection of Epping Road and Lane Cove Road (MR162) at North Ryde.

#### **MR397 – Wakehurst Parkway**

Reconstruction of a channelised intersection with Frenchs Forest Road is almost complete.

#### **MR512 – Heathcote Road**

Work continued on the construction of climbing lanes between Princes Highway and New Illawarra Road. Approximately 245 m of climbing lane east of the intersection with New Illawarra Road was completed and opened to traffic.

#### **MR515 – Elizabeth Drive**

The Department continued the reconstruction and widening to six lanes between Copeland Street (MR608) and Maxwells Avenue Mt. Pritchard.

#### **MR523 – Pyrmont Bridge Road**

Leichhardt Council completed the work of heavy patching and resheeting with asphaltic concrete between Parramatta Road and Booth Street.

#### **MR537 – Rooty Hill Road**

The Department completed the construction of the western side strip between Short Street and Spencer Street at Rooty Hill.

#### **MR570 – Hawkesbury Road**

Work commenced on the reconstruction and bituminous surfacing of the section from Davesta Street to Paterson Road.

#### **MR608 – Copeland Street**

Work continued with the reconstruction and widening to a six lane divided carriageway between Hoxton Park Road and Hinkler Avenue at Liverpool.

#### **MR609 – The Horsley Drive**

The Department commenced the reconstruction and widening to four lanes between Fairfield Street and Alan Street at Fairfield. The work is being carried out in conjunction with the widening of the existing railway overbridge at Fairfield.

## **SECONDARY ROADS**

#### **SR2014 – Bexley Road**

Canterbury Council completed work on the reconstruction and bituminous surfacing of side strips between Canterbury Road and Northcote Street.

#### **SR2028 – Carlton Crescent**

Ashfield Council completed the reconstruction of Carlton Crescent from Lackey Street to Smith Street.

#### **SR2036 – Belgrave Street and Gerard Street**

North Sydney Council completed the reconstruction of the intersection with Waters Road.

#### **SR2046 – James Street and Lilyfield Road**

Leichhardt Council completed the reconstruction and channelisation of the intersection with Mary Street and Perry Street.

#### **SR2049 – Parkes Street**

Parramatta City Council commenced construction of the extension of Parkes Street between Station Street and Wigram Street at Harris Park.

#### **SR2052 – Pittwater Road**

Hunters Hill Council completed the reconstruction of the western kerbside lane from Harvard Street to Cambridge Street.

#### **SR2059 – Gipps Street**

Concord Municipal Council completed the reconstruction between Burwood Road and Loftus Street Concord.

#### **SR2063 – Londonderry Road**

Penrith City Council continued with the widening of the pavement to 7.4 m between Windsor Road (MR154) and the Windsor Municipal Boundary.

#### **SR2070 – Northwood Road and River Road West**

Lane Cove Council completed the reconstruction of Blaxlands Corner at Lane Cove.

#### **SR2071 – Smithfield Road and Jersey Road**

The Department completed construction of the southern approach to the new bridge over Prospect Creek Smithfield. The northern approach was completed by Holroyd Municipal Council.

Holroyd Municipal Council completed the reconstruction of the eastern shoulder between Bates Avenue and Old Prospect Road at South Wentworthville.

#### **SR2074 – Anzac Parade**

Randwick Council completed the widening of the southbound carriageway between Storey Street and Gale Road Maroubra.



**SR2075 – Captain Cook Drive**

Sutherland Council continued the reconstruction and widening of Captain Cook Drive between Fenton Avenue and Elouera Road.

**SR2081 – Rutledge Street and First Avenue**

Ryde Municipal Council commenced construction of the approaches to the new railway overbridge at Eastwood.

**SR2084 – Seven Hills Road**

Blacktown Municipal Council completed construction of the approaches to the railway overbridge at Seven Hills.

Blacktown Municipal Council commenced the reconstruction and channelisation of the intersection of Seven Hills Road and Abbott Road at Seven Hills.

**SR2087 – Pemberton Street**

Strathfield Municipal Council continued with the reconstruction and widening to four lanes between the Hume Highway (SH2) and Ada Street at Strathfield.

**SR2088 – The Horsley Drive**

Fairfield Municipal Council completed the reconstruction and widening to four lanes between Gipps Street and Market Street at Smithfield.

**SR2090 – Juno Parade**

Bankstown Municipal Council commenced the reconstruction and widening to four lanes between Wentworth Street and Roberts Road at Lakemba.

**SR2092 – Centennial Avenue**

Lane Cove Council completed the reconstruction and widening of Centennial Avenue between Epping Road and Mowbray Road.

**SR2094 – Brunner Road**

Bankstown Municipal Council completed the reconstruction of damaged pavement between the Hume Highway (SH2) and Rookwood Road (MR190) at Greenacre.

**TOURIST ROADS****TR4006 – The River Road**

Baulkham Hills Shire Council continued the reconstruction and widening to 6.2 m between Wisemans Ferry and Lower Portland.

**COUNTY ROADS****CR5016 – Stacey Street**

The Department completed the reconstruction and widening to four lanes between the Hume Highway (SH2) and Old Kent Road at Bankstown.

**CR5033 – Old Windsor Road**

Baulkham Hills Shire Council completed the reconstruction and bituminous surfacing between Seven Hills Road (SR2084) and Meurants Lane at Parklea.

**CR5037 – North Parramatta By-Pass**

The Department completed construction along this new route between Kissing Point Road (MR574) and Pennant Hills Road (SH13) and continued construction between Pennant Hills Road and North Rocks Road.



# COUNTRY ROAD CONSTRUCTION

Reference should be made to Appendices Nos. 1(C), 4, 5(A), 5(B), 6(A), 6(B), 6(C), 6(D), 6(E), 8, 8A, 9(B), 9(C), 9A and 11 for details of expenditure on road construction in the Country during the year.

The principal works that were undertaken are listed below.

## FREEWAYS

### F3 – Sydney to Newcastle Freeway

Work on the establishment of a site office and site investigations continued during the year for the section of the Freeway from Ourimbah to Doyalson.

### F5 – South Western Freeway

Work continued on the section from Kenny Hill (54.4 km) to the Nepean River at Pheasants Nest (77.2 km south of Sydney).

Work commenced on the section from the Nepean River at Pheasants Nest to Avon Dam Road partly by contract and partly by direct control.

Work continued partly by contract and partly by direct control on the section from Avon Dam Road to Yanderra.

The section from Yanderra to Aylmerton was completed during the year and opened to traffic on 24 May 1977.

### F6 – Southern Freeway

Work proceeded on the section between Northcliffe Drive (MR613) Berkeley and Emerson Road Dapto including the approaches to the new Mullet Creek bridges.

## STATE HIGHWAYS

### SH1 – Princes Highway

Work was completed on the reconstruction of the deviation at Jaspers Creek 148.4 km to 150.5 km south of Sydney.

Work is almost complete on the reconstruction at Meroo Meadow from 152.1 km to 155.3 km south of Sydney including the approaches to the new Tullian Creek Bridge.

The final seal was placed on the climbing lane for southbound traffic between 97.4 km and 99.2 km south of Batemans Bay, which was completed to prime stage and opened to traffic.

Work continued on the reconstruction of the section 2.7 km to 9.0 km south of Bega.

Work on the construction of a climbing lane between 54.3 km and 55.3 km south of Bega continued and completion to prime stage is expected in July 1977.

### SH2 – Hume Highway

Work was completed on the reconstruction to an improved alignment between Razorback Range and Picton 76.3 km to 81.6 km south of Sydney.

The pavement through the Picton subway was widened and the adjoining length of highway reconstructed and strengthened.

Work was commenced on the reconstruction between the F5 at Aylmerton and Mittagong to provide four lanes on an improved alignment and grading between 117.0 km and 123.1 km south of Sydney.

Work is proceeding on the construction of dual carriageways between Exeter Road and Paddys River 154.3 km and 164.8 km south of Sydney.

The construction of dual carriageways on an improved alignment between Paddys River and Uringalla Creek 165.9 km to 169.4 km south of Sydney continued and the section is nearing completion.

The Department completed construction of a major junction of the highway with the South Western Freeway at Yanderra, approximately 103 km south of Sydney. Also

included with the construction of the junction was a 1.1 km deviation of the highway which now serves as a local access road following the opening of the freeway to traffic on 24 May 1977.

Construction of dual carriageways is continuing between 81.9 km and 85.4 km south of Mittagong. This work is in association with the construction of dual carriageway bridges over the Main Southern Railway Line, the Mulwaree Ponds and the Crookwell Railway Line at North Goulburn. These bridges are now complete and dual carriageways are available to traffic over these bridges and between 83.8 km and 85.4 km south of Mittagong.

Reconstruction of Cowper Street was commenced by Goulburn City Council between 0.9 km and 1.8 km south of Goulburn. The section 0.9 km to 1.4 km was completed with an asphaltic concrete surface except for a 100 m section on the southbound and northbound carriageways. On the section 1.4 km to 1.8 km, excavation and gravel sub-base was completed. It is anticipated work will be completed by November 1977.

Restoration of failing cement concrete pavement (Auburn Street) from 0.6 km north of Goulburn to 0.4 km south of Goulburn is currently being carried out under contract and the work, which consists of cement grouting and replacement of failed slabs, is nearing completion.

Work has commenced on the construction of the approaches to the new bridge over Fish River at 45.1 km west of Goulburn. The bridgework is now complete.

Work continued on the extension of dual carriageways between 6.4 km and 10.6 km west of Yass. The new bridge over Derringullen Creek at 7.2 km on the northbound carriageway associated with the work was completed. Both carriageways are now open between 8.2 km and 10.6 km west of Yass.

Work was completed on the construction of the approaches to the new bridge over Connors Creek, 35.8 km west of Yass. This work forms part of the ultimate northbound carriageway over this length.

Work continued on the construction of the approaches to the new bridge over the Murrumbidgee River at Gundagai. Stage 1 of the work, which included the whole of the southern approaches, and part of the northern approaches utilising the ultimate onloading ramp from Sheridan Street, was opened to traffic on 25 March 1977. Work is now in progress on Stage II, which will complete the deviation around Gundagai.

Work continued throughout the year on the programme of pavement strengthening and widening of the highway between 47.9 km and 138.9 km south of the Barton Highway intersection, within the Shires of Harden and Gundagai. The programme will be continued for some years to provide improved travelling conditions and increase traffic safety in the interim period preceding reconstruction of the highway.

Widening and strengthening of the pavement on the existing alignment and grade is being carried out between 28 km and 37 km south of Gundagai.

Realignment and reconstruction is progressing on the section between 3.6 km and 7.7 km south of Tarcutta which includes approaches to the new bridge over Comatawa Creek. This section is within the overall length between 3.6 km and 20.4 km south of Tarcutta which is programmed for reconstruction.



Reconstruction of the section between 53.5 km and 60.8 km south of Holbrook has been completed with the exception of minor works.

### **SH3 – Federal Highway**

Work is continuing on the construction of dual carriageways between 14.3 km and 22.2 km south of Goulburn.

The section of the southbound carriageway between 17.1 km and 19.5 km and including the new bridge over Wologorong Creek at 18.8 km is open to two-way traffic.

### **SH4 – Snowy Mountains Highway**

Reconstruction between 14.0 km and 17.7 km west of Tumut was completed.

Remedial culvert and drainage work to alleviate flooding along the Blowering Dam deviation, 9 km east of Tumut, was completed.

### **SH5 – Great Western Highway**

Work continued on the construction of a climbing lane at Pritchard Street Wentworth Falls.

Asphaltic concrete strengthening and reshaping was carried out on the sections between 35.2 km to 96.7 km west of Parramatta.

Heavy patching work was also carried out on sections between 35.2 km to 96.7 km west of Parramatta.

Work commenced on the widening of formation to 13.4 m and the pavement to 7.4 m on sections of the highway between 35.5 km and 74.3 km west of Parramatta.

Work commenced on approaches to Marrangaroo Creek Bridge 2.3 km to 6.1 km west of Lithgow.

Work continued on reconstruction and sealing at Diamond Swamp section 31.9 km to 34.5 km west of Lithgow.

Work continued on the construction of the approaches to a new bridge over the Lett River.

### **SH6 – Mid Western Highway**

Construction of approaches to Evans Plains Creek Bridge 9.6 km west of Bathurst was completed.

Pavement widening and strengthening 28.3 km to 33.8 km west of Bathurst is in progress.

Reconstruction of the section of the highway in Martha Street Blayney was completed.

Reconstruction of the section of the highway in Adelaide Street Blayney, is in progress.

Construction of the deviation of the route of the highway near the town of Carcoar was completed.

Waugoola Shire Council has work in progress on pavement widening and strengthening 10.3 km to 12.7 km east of Cowra. Council is also nearing completion of widening the formation and strengthening the pavement 14.6 km to 15.3 km and sealing 13.2 km to 14.6 km east of Cowra.

Cowra Municipal Council is nearing completion of the reconstruction of the highway between Fitzroy and Carleton Streets in Cowra.

Weddin Shire Council commenced widening the formation and strengthening the pavement 29.0 km to 32.0 km east of Grenfell. Council also completed the section 49.2 km to 51.1 km and has work in progress 52.6 km to 54.5 km west of Grenfell.

### **SH7 – Mitchell Highway**

Work is in progress on widening the formation and strengthening the pavement 2.4 km to 5.2 km east of Orange.

Orange City Council commenced preliminary works for the reconstruction of the central 6 m of pavement from the level crossing in Summer Street to Lone Pine Avenue. Council also completed reconstruction of the central 3.6 m of pavement and asphaltic concrete surfacing from Woodward Street to Clinton Street Orange.

Preliminary work only was commenced on the construction of approaches to a new bridge at Erambie, 28.1 km to 29.4 km west of Orange.

Work has been temporarily suspended on the reconstruction and bituminous surfacing 13.4 km to 20.3 km north of Molong.

Pavement strengthening and widening at various locations 49.9 km to 55.5 km north of Molong was completed.

Reconstruction and bituminous surfacing 57.9 km to 63.1 km north of Molong is in progress.

Reconstruction and bituminous surfacing of the pavement of the level crossing at Trangie is nearing completion.

Reconstruction of narrow pavement was completed between 60 km and 75.8 km east of Nyngan and between 6.1 km and 11.3 km north of Bourke.

Reconstruction and bituminous surfacing was completed from 18.7 km to 20.9 km and is in progress between 16.8 km and 18.7 km south of Bourke.

### **SH8 – Barrier Highway**

Cobar Shire Council completed reconstruction and widening of Marshall Street between Barton and Bathurst Streets including major drainage improvements.

Construction of approaches to the four new bridges over the Darling River Flood Plain between 1.7 km and 6.4 km east of Wilcannia continued.

Reconstruction and raising the formation between 2.8 km and 9.2 km east of Broken Hill has been sand primed and is awaiting construction of two new bridges over Willa Willa Creek.

Reconstruction and bituminous surfacing between 2.2 km and 2.8 km east of Broken Hill was commenced.

### **SH9 – New England Highway**

Construction of dual carriageways 9.8 km to 12.1 km west of Hexham (Three Mile Creek) is nearing completion.

Reconstruction between Farley Road Rutherford and Anambah Road, 2.7 km to 4.7 km west of Maitland continued.

Reconstruction commenced from Rutherford Aerodrome to Lochinvar 8.2 km to 10.0 west of Maitland.

Construction of approaches to new bridge over Redhouse Creek near Braxton 21.4 km west of Maitland was completed.

Widening of existing formation to 13.4 m on selected sections of existing alignment 25.7 km to 27.4 km west of Maitland was completed.

Reconstruction of the deviation at Muscle Creek 38.9 km to 45.8 km west of Singleton was completed.

Construction of approaches to two temporary Bailey bridges at the Aberdeen railway overbridge site at 15.5 km north of Muswellbrook were completed.

Work was completed on widening of shoulders and extension of culverts 16.6 km to 23.7 km and 26.9 km to 31.4 km north of Muswellbrook. Work commenced on widening of shoulders and extension of culverts 31.4 km to 34.0 km and 58.2 km to 62.3 km north of Muswellbrook.

Construction of approaches to the new bridge over Campbells Creek from 62.8 km to 64.3 km north of Muswellbrook was undertaken and opened to traffic during June. Improvements to widen the formation of the highway from 55.0 km to 56.6 km and from 68.5 km to 70.0 km on the Liverpool Range were carried out in conjunction with bridge approaches.

Work was completed with culvert extensions and shoulder widening on selected lengths 4.8 km to 17.7 km north of Tamworth. Major reconstruction to provide dual carriageways on the first Moonbi Range 24.9 km to 30.1 km



north of Tamworth continued. Earthworks were completed from 27.7 km to 30.1 km and a major 17 m deep granite rock cut at 27.2 km commenced.

Work was completed on pavement and formation widening between 62.3 km and 70.4 km north of Tamworth. The work included the construction of climbing lanes over particular sections.

Work was completed on the access to the Thunderbolts Rock Reserve, 82 km north of Tamworth.

Work was commenced on construction of a deviation between Uralla and Barleyfields, 90.2 km to 94.1 km north of Tamworth.

The Department has completed reconstruction and bituminous surfacing between 3.8 km and 5.8 km north of Glen Innes.

Work commenced on reconstruction and bituminous surfacing between 5.8 km and 9.6 km north of Glen Innes.

Reconstruction and bituminous surfacing between 17.7 km and 22.8 km north of Glen Innes was completed.

Work continued on the reconstruction and bituminous surfacing between 83.8 km and 89.1 km north of Glen Innes (3.3 km to 8.6 km south of Tenterfield).

Tenterfield Shire Council has commenced reconstruction of Rouse Street (SH9) between Molesworth and Petrie Streets, a total length of 0.4 km.

The Department has commenced construction of the approaches to the new bridge over Browns Creek between 8.1 km and 10.5 km north of Tenterfield.

#### **SH10 – Pacific Highway**

The Department completed the restoration of a slip at 71.6 km north of Sydney.

Construction of the approaches to the duplicate bridge at Ourimbah Creek, 1.8 km to 2.9 km north of SH26 is nearing completion.

Construction of a slow speed lane for northbound traffic at Wallarah Hill 34.7 km to 36.9 km north of Gosford was completed.

Construction of divided carriageways between Oakdale Road and Oxford Street Gateshead, 12.2 km to 13.3 km south of Newcastle was completed.

Construction of approaches to the bridge over Traynors Creek 3.7 km north of Bulahdelah continued.

Taree Municipality commenced reconstruction of a short length of highway between the proposed new duplicate bridges over Browns Creek and the railway line at Chatham.

Work was completed on the reconstruction and widening of distressed pavement from 12 km to 15 km north of Taree.

Construction continued on a deviation in the approaches to a new bridge at Two Mile Creek 23.0 km to 24.8 km north of Taree.

Reconstruction and widening of distressed pavement between Passionfruit Creek and Kew 39.6 km to 50 km north of Taree was completed.

A short length of approaches was constructed to a new bridge size reinforced concrete box culvert over Walkers Creek 53.4 km north of Taree.

Widening of the approaches to the bridge at Herons Creek 55.4 km north of Taree was commenced.

Construction continued on a deviation over the Cooperabung Mountain between 96.5 km and 100.5 km north of Taree.

The reconstruction between 14.0 km and 19.5 km north of Kempsey with continuously reinforced concrete pavement and sealed shoulders was completed.

The reconstruction and widening of distressed pavement at Eungai 33.5 km to 37.8 km north of Kempsey was commenced.

Work was completed on the reconstruction of damaged pavement between 65.2 km and 66.0 km north of Kempsey

(between Woodbell Street and Beer Parade Nambucca Heads).

Reconstruction of a deviation at Double Crossing Creek between 19 km and 24 km north of Coffs Harbour continued.

Construction of the approaches to the new bridge over Swan Creek 4.0 km to 6.3 km north of Grafton was commenced.

Construction of the approaches to a new railway overbridge at Bangalow was completed.

Construction of a new carriageway for northbound traffic at Oak Avenue between 14.8 km and 19.8 km north of Murwillumbah was completed.

#### **SH11 – Oxley Highway**

The reconstruction east of Walcha was virtually all completed from 103.9 km to 111.1 km west of Wauchope. A dust free road surface between Walcha and the coast has now been provided and the short sections with a prime seal will receive final bitumen seals in the next spraying season. The construction Works Office established originally at Walcha to administer the building of the highway east of Walcha has been closed upon completion of work, with the remaining short length of final seal and ancillary work to be administered from Armidale Works Office.

Parry Shire Council is continuing with reconstruction from 40.1 km to 42.2 km west of Tamworth, including extension and enlargement by contract of an existing reinforced concrete box culvert at Long Hollow Gully, 40.8 km west of Tamworth.

Contract works at the culvert at Long Hollow Gully have now been completed and the roadworks are in hand by Council's own forces.

Parry Shire Council is also continuing with reconstruction from 42.4 km to 44.4 km west of Tamworth including approaches to the new bridge and reinforced concrete box culvert at Menedebri Creek. The new bridge and culvert were constructed by the Department by contract, and the associated roadworks are now nearing completion by Council's own forces.

Liverpool Plains Shire Council completed widening the formation and seal 16.0 km to 18.8 km east of Gunnedah and commenced similar work 2.7 km to 4.9 km east of Gunnedah.

The approaches to Cox's Creek bridge 66.8 km to 68 km east of Coonabarabran were commenced and completed to primer seal stage.

The reconstruction of the section 61.3 km to 64.7 km east of Coonabarabran continued.

Widening of pavement in the section 15.3 km to 18.2 km east of Coonabarabran was completed.

#### **SH12 – Gwydir Highway**

The Department is continuing restoration and widening the existing pavement for short distances totalling 5.0 km between 16.8 km and 38.8 km east of Glen Innes. Now 4.5 km of this length has been completed.

Glen Innes Municipal Council is continuing reconstruction and bituminous surfacing between 0.2 km and 1.4 km east of Glen Innes. The rural section of this reconstruction has been completed to primer stage.

Severn Shire Council has completed minor realignment and widening of the existing pavement to 6.7 m between 3.7 km and 5.7 km west of Glen Innes.

Macintyre Shire Council is continuing strengthening and widening the existing pavement east of Inverell. Council is at present working on the sections 11.7 km to 13.5 km and 14.8 km to 17.4 km east of Inverell.

Yallaroi Shire Council has commenced strengthening and widening the existing pavement of 3.7 m width to 6.7 m width between 27.6 km and 41.4 km west of Warialda.

The Department is continuing reconstruction and bituminous surfacing between 59.6 km and 64.4 km west of Moree.



#### **SH14 – Sturt Highway**

Reconstruction of the section 33.4 km to 41.0 km east of Wagga Wagga was completed during the year. Reconstruction of the adjoining section 23.2 km to 33.4 km east of Wagga Wagga is continuing.

The deviation between Dobney Avenue and the junction with TR78 west of Wagga Wagga was completed by Wagga Wagga City Council, except bituminous concrete surfacing.

Reconstruction and bituminous surfacing on improved alignment and widening of formation was completed from 25.9 km to 28.9 km east of Balranald. Work was commenced on the section from 28.9 km to 33.8 km east of Balranald.

Reinstatement and bituminous surfacing of stabilised pavement from 27.2 km to 31.4 km west of Hay was completed.

Widening and strengthening of narrow pavement on the sections from 45.5 km to 46.7 km and 47.9 km to 48.7 km west of Hay was completed. The shoulders in between these two lengths were widened and shoulder sealing was completed throughout from 45.5 km to 48.7 km west of Hay.

Widening of formation and sealing of shoulders was completed between 0.2 km and 2 km west of Hay.

Reconstruction was completed between 0.0 km and 2.8 km east of Euston. Final seal of the section 73.4 km to 78.9 km east of Euston was completed. Final seal of the section 27.3 km and 32.5 km west of Euston was completed.

Reconstruction between 34 km and 38.2 km east of Mildura was completed. Reconstruction commenced between 38.2 km and 47.5 km east of Mildura.

#### **SH15 – Barton Highway**

Work continued during the year on a programme of pavement strengthening and formation widening. The work undertaken in the current financial year includes formation widening between 22.7 km and 24.2 km south of Yass to provide a pavement width of 7.4 m, and shoulder widening and drainage improvement between 33.8 km and 36.6 km south of Yass. This work is a continuing programme throughout the length of the Barton Highway to provide an improved traffic facility.

#### **SH16 – Bruxner Highway**

Tenterfield Shire Council commenced strengthening and widening the existing pavement of 3.7 m width to 6.7 m width between 9.6 km and 14.3 km west of Tenterfield.

Tenterfield Shire Council is continuing reconstruction and bituminous surfacing between 51.5 km and 57.3 km west of Tenterfield.

The Department completed reconstruction and bituminous surfacing between 58.0 km and 62.8 km west of Tenterfield.

Ashford Shire Council commenced construction and bituminous surfacing between 15.6 km and 18.4 km west of Yetman. This is part of the deviation between Yetman and Boggabilla. Ashford Shire Council is continuing with the construction and bituminous surfacing between 1.6 km and 15.6 km west of Yetman.

Yallaroi Shire Council is continuing construction and bituminous surfacing of the Yetman-Boggabilla deviation, 18.4 km to 42.7 km west of Yetman.

Boolooroo Shire Council completed widening and reconstruction between 0.0 km and 7.0 km east of Boggabilla.

Lismore City Council continued construction of the Ballina Street deviation in Lismore.

#### **SH17 – Newell Highway**

Restoration of the existing pavement between 14.6 km and 15.4 km south of Moree was completed.

The Department is reconstructing existing failed pavement edges for lengths totalling 5.1 km between 4.0 km and 46.0 km north of Moree.

Work continued on the reconstruction and bituminous surfacing between 0.4 km and 8.4 km west of Boggabilla.

The final seal was completed by the Department on the approaches to the Namoi River Bridge 1.9 km to 2.5 km south of Narrabri.

Work commenced on the construction of the approaches to the Narrabri Creek and Rivulet Bridge, at 0.19 km to 0.68 km south of Narrabri.

Jemalong Shire Council commenced pavement widening and improvement of the alignment between the southern approach to Fitzgeralds Bridge and the junction of MR377 (Section II, 5.0 km to 7.1 km south of Forbes). Section I, 3.0 km to 5.0 km south of Forbes was completed.

Pavement strengthening and widening 16.1 km to 21.6 km north of Forbes was completed.

Reconstruction and bituminous surfacing between Baker Street and Hartigan Avenue in Parkes was commenced by the Department in conjunction with Parkes Municipal Council.

Reconstruction of the section of the highway in Clarinda Street Parkes was completed. Reconstruction and bituminous surfacing 31.7 km to 34.8 km north of Parkes is partially completed.

Approaches to the new box culvert at Turn Back Jimmy Creek were constructed between 13.7 km and 14.7 km north of Jerilderie.

Formation widening, shoulder and pavement edge reconstruction, plus shoulder sealing were completed from 22.9 km to 39.3 km north of Jerilderie.

Reconstruction and bituminous surfacing was completed from 5.8 km to 8.9 km north of Finley.

#### **SH18 – Castlereagh Highway**

Reconstruction is continuing between 80.5 km and 103 km north of Walgett.

#### **SH19 – Monaro Highway**

Work commenced on the reconstruction of the section 78.7 km to 82.0 km south of Canberra, which includes the approaches to a new bridge over the Bredbo River at Bredbo.

Reconstruction of the section 82 km to 89 km south of Canberra continued and the whole of the work was completed to prime stage and opened to traffic.

Bibbenluke Shire Council commenced gravelling and sealing the length between 17.1 km and 34.3 km south of Bombala. Approximately 40 per cent of the work has been completed.

#### **SH20 – Riverina Highway**

Work was completed on the reconstruction and bituminous surfacing from 4.3 km to 6.7 km west of Finley.

Reconstruction of shoulders and pavement edges, including shoulder sealing, was completed from 9.1 km to 28.0 km east of Deniliquin.

Berrigan Shire Council completed reconstruction of Chanter Street Berrigan.

#### **SH21 – Cobb Highway**

Construction and bitumen sealing of the southern approach to the existing bridge over the Lachlan River at Booligal from 76.8 km to 77.7 km north of Hay was completed.

Deniliquin Municipal Council commenced reconstruction of failed pavement at the channelised intersection with SH20 (Riverina Highway) at 2.5 km north of Deniliquin.

Reconstruction from 11.1 km to 33.0 km south SH8 was continued.

#### **SH23 – Charlestown to Sandgate**

Strengthening and resheeting of Blue Gum Road, Jesmond 8.6 km to 9.4 km north of Charlestown was commenced, by Newcastle City Council.



### **SH24 – Mount Lindesay Highway**

The Department is continuing reconstruction and bituminous surfacing between 9.4 km and 11.1 km north of Woodenbong.

### **SH25 – Illawarra Highway**

Reconstruction to an improved alignment and grading between Wells Creek and the Hume Highway 58.9 km to 63.9 km from SH1 continued and the section is almost complete.

## **TRUNK ROADS**

### **TR51 – Canberra-Batemans Bay**

Eurobodalla Shire Council continued construction of climbing lanes between 20.3 km and 21.4 km west of Batemans Bay.

Tallaganda Shire Council continued the construction of the approaches to the new Warri Bridge over the Shoalhaven River at 13.0 km north of Braidwood.

Tallaganda Shire Council completed reconstruction of the junction of TR79 and TR51 (Doughboy junction) at 47.6 km east of Queanbeyan (27.4 km north of Braidwood).

Tallaganda Shire Council commenced pavement strengthening, drainage improvement and formation widening from 34.8 km to 35.8 km north of Braidwood.

Yarrowlumla Shire Council completed formation widening and drainage improvement works between 4.6 km and 6.4 km east of Queanbeyan.

### **TR52 – Queanbeyan-Crookwell**

Queanbeyan City Council commenced reconstruction to dual carriageway of "Yass Road" between TR51 and the A.C.T. Border, north of Queanbeyan.

Goodradigbee Shire Council continued the reconstruction and bituminous surfacing between 0 km and 4 km south of Gundaroo, gravelling being carried out during the financial year.

Gunning Shire Council reconstructed the northern approach to Yass River Bridge at 32.1 km south of Gunning.

Gunning Shire Council completed reconstruction to basecourse stage on the section 25.9 km to 26.7 km south of Gunning.

### **TR54 – Goulburn-Ilford**

Crookwell Shire Council completed the sealing of approaches to box culverts at Binda Vale Creek at 19.0 km north of Crookwell.

Abercrombie Shire Council completed reconstruction and bituminous surfacing between 48.0 km and 49.0 km south of Bathurst.

Turon Shire Council continued reconstruction and bituminous surfacing of a deviation at Sofala including the junction of MR216.

Rylstone Shire Council continued reconstruction and bituminous surfacing from 11.8 km to 13.8 km west of Ilford.

### **TR55 – Marrangaroo to Mullaley**

Coolah Shire Council completed reconstruction and bituminous surfacing between 14.6 km and 15.8 km north of Coolah.

Coonabarabran Shire Council continued the reconstruction of the section 29.8 km to 34.4 km north of Coolah.

Liverpool Plains Shire Council is proceeding with construction of the section between 25.1 km to 27.6 km south of Mullaley.

### **TR56 – Yass-Forbes**

Boorowa Shire Council completed reconstruction and bituminous surfacing from 42.8 km to 45.2 km (northern boundary) north of Boorowa.

Forbes Municipal Council commenced reconstruction and bituminous surfacing from Berkley Street to Iron Bridge at Forbes.

### **TR57 – Old Junee-Temora-Condobolin-Nyngan**

Temora Municipal Council completed the reconstruction and bituminous surfacing of the section between 50.7 km and 51.6 km north of TR78.

Bland Shire Council completed the reconstruction and bituminous surfacing between 30.6 km and 45.9 km north of West Wyalong.

Lachlan Shire Council continued the reconstruction and sealing from 3.2 km to 6.4 km south of Tottenham. Council is also proceeding with construction of approaches to new bridge over Wallamundry Creek 11.5 km south of Condobolin.

### **TR61 – Orange-Cobar**

Canobolas Shire Council completed reconstruction and bituminous surfacing from 1.3 km to 2.5 km west of Orange City Boundary. Work on the section 2.5 km to 4.8 km west of Orange City Boundary was continued.

### **TR62 – Scone-Coolah**

Scone Shire Council commenced reconstruction of the section 40.5 km to 41.9 km west of Scone.

### **TR63 – Tamworth-Bingara-Warialda-Yetman**

Parry Shire Council commenced preliminary works on the section 20.7 km to 21.9 km north of Tamworth.

Parry Shire Council completed reconstruction of the section 30.1 km to 30.7 km north of Tamworth.

Barraba Shire Council substantially completed major restoration works to pavement failures 15.3 km to 17.9 km south of Barraba.

Barraba Shire Council completed construction of the approaches to the new bridge over Sheepstation Creek at Cobbadah 18.5 km north of Barraba except for final seal.

Yallaroi Shire Council completed strengthening and widening between 16.0 km and 17.4 km south of Warialda.

Yallaroi Shire Council completed the reconstruction of approaches to Oakey Creek 15 km south of Warialda.

Yallaroi Shire Council continued the reconstruction and bituminous surfacing between 45.1 km and 49.2 km north of Warialda.

Ashford Shire Council completed the construction and bituminous surfacing of the approaches to Ottleys Creek at 32.6 km north of Warialda.

### **TR65 – Lismore-Ewingsdale**

Byron Shire Council completed reconstruction from 23.4 km to 24.9 km east of Lismore.

### **TR66 – Broken Hill to TR68 near Menindee**

The Department commenced reconstruction of the section 3.5 km to 4.1 km east of Broken Hill.

### **TR67 – Ivanhoe-Swan Hill**

Balranald Shire Council completed reconstruction and surfacing from 37.0 km to 39.0 km north of Balranald and commenced reconstruction from 39.0 km to 42.0 km north of Balranald.

### **TR68 – South Australian Border near Renmark to Queensland Border near Mungindi**

Central Darling Shire Council completed construction of approaches to the new bridge over the Darling River at Menindee.

Bourke Shire Council commenced reconstruction of the section 6.0 km to 7.5 km east of Bourke.

Walgett Shire Council completed construction of the approaches to the new bridge over the Mooni River at Gundabloui between 46.4 km and 50.0 km north of Collarenebri.



**TR70 – Coolabah to Queensland Border near Hebel**

Bogan Shire Council completed reconstruction and bituminous surfacing between 7.2 km and 16.0 km north of Coolabah.

Brewarrina Shire Council continued reconstruction between 26.2 km and 34.3 km north of Brewarrina.

**TR72 – Willow Tree-Quirindi-Gunnedah-Narrabri**

Tamarang Shire Council continued reconstruction from 13.7 km to 15.2 km north of Quirindi including approaches to the recently completed new bridge over Quipolly Creek at 14.6 km.

**TR73 – Walcha-Uralla-Bundarra-Inverell**

Uralla Shire Council completed the reconstruction of the section 28.5 km to 30.9 km north-west of Uralla.

Guyra Shire Council continued the reconstruction and bituminous surfacing between 19.0 km and 23.8 km south of Inverell.

Inverell Municipal Council continued the reconstruction and bituminous surfacing between 2.8 km and 3.9 km south of Inverell.

**TR74 – Armidale-Grafton**

Armidale City Council completed reconstruction of the section between Taylor and Douglas Streets, Armidale.

Dumaresq Shire Council continued with reconstruction between 76.2 km and 78.0 km east of Armidale.

Nymboida Shire Council completed the construction of the deviation from 84.8 km to 88.5 km south of Grafton.

**TR75 – Kempsey-Wollomombi**

Kempsey Shire Council continued construction of a deviation in approach to a new bridge over Hickeys Creek at Willawarrin 28.4 km to 30.1 km west of Kempsey.

Kempsey Shire Council continued reconstruction from 55.0 km to 56.8 km west of Kempsey, the eastern ascent of Tynes Hill.

**TR76 – Raleigh-Ebor**

Bellingen Shire Council commenced reconstruction between 18.1 km and 19.3 km west of Bellingen on the Dorrigo Mountain Pass.

**TR77 – Craboon-Gilgandra**

Coolah Shire Council commenced construction of the approaches to a proposed new bridge over Merrygoen Creek at Mendooran to replace a timber truss bridge which is subject to a load restriction.

Gilgandra Shire Council completed reconstruction and bituminous surfacing 32.3 km to 34.1 km east of Gilgandra.

**TR78 – Cowra-Hume Highway near Ettamogah**

Waugoola Shire Council continued with reconstruction and bituminous surfacing from 3.1 km to 3.9 km south of Cowra.

Burrangong Shire Council completed pavement strengthening and widening of shoulders from 39.4 km to 40.6 km north of Young.

Burrangong Shire Council completed pavement strengthening and improvement from 3.5 km to 9.3 km south of Young.

Cootamundra Shire Council completed reconstruction and sealing from 5.2 km to 6.4 km south of Cootamundra.

Illabo Shire Council completed reconstruction and bituminous surfacing of the section 20.4 km to 23.7 km north of June.

June Municipal Council continued with reconstruction and bituminous surfacing of the section 1.4 km to 2.8 km west of June.

Mitchell Shire Council commenced reconstruction and bituminous surfacing of the section 14.2 km to 15.9 km north of Wagga Wagga.

Wagga Wagga City Council completed reconstruction and bituminous surfacing between 0.6 km and 2.4 km south of the Sturt Highway.

Hume Shire Council commenced reconstruction and bituminous surfacing of the section from 10.6 km to 12.7 km north of Albury.

**TR80 – Narrandera-Mossiel**

Leeton Shire Council continued reconstruction and bituminous surfacing between 7.4 km and 11.5 km east of Leeton.

Wade Shire Council commenced the reconstruction and bituminous surfacing of the section 9.9 km to 12.4 km east of Griffith.

Wade Shire Council continued the reconstruction and bituminous surfacing between 1.2 km and 2.7 km west of Griffith.

**TR82 – Newcastle-Jesmond**

Newcastle City Council continued the reconstruction and widening between Lloyd and Croudace Streets, Lambton, 4.4 km to 5.3 km from SH10 – Pacific Highway. Newcastle City Council commenced the construction of dual carriageways between Lawson and Samdon Streets, Hamilton.

**TR83 – Grafton-Woodenbong**

Richmond River Shire Council completed reconstruction between 93.7 km and 95.4 km north of Grafton.

Kyogle Shire Council continued reconstruction between 4.8 km and 7.2 km north of Kyogle.

**TR84 – Bowning-Temora**

Goodradigbee Shire Council commenced a programme of formation widening over short lengths to improve conditions for traffic.

**TR85 – Gilmore-Jingellic**

Tumut Shire Council continued the reconstruction and bituminous surfacing between 19.0 km and 23.2 km south of Gilmore.

**TR86 – Riverina Highway-Corowa**

Corowa Shire Council continued reconstruction and bituminous surfacing from 0.0 km to 3.0 km south of the Riverina Highway towards Corowa.

**TR89 – Narromine-Tomingley**

Timbregongie Shire Council completed construction of the approaches to Backwater Cowal Bridge 4.1 km to 4.9 km south of Narromine.

**TR90 – Pacific Highway near Karuah to Pacific Highway near Taree**

Great Lakes Shire Council commenced construction of the approaches to the bridge over Camerons Creek 15.9 km to 16.9 km from SH10.

Great Lakes Shire Council commenced reconstruction of failed sections north of Stroud Road, 39.2 km to 60.2 km south of Taree.

Gloucester Shire Council completed construction from 1.4 km to 5.5 km east of Gloucester.

Manning Shire Council commenced reconstruction from 69.2 km to 71.9 km north of Gloucester.

**TR91 – Princes Highway near Pambula-Bombala**

Imlay Shire Council completed reconstruction of the length between 24.3 km and 26.7 km west of Pambula which includes the approaches to a new bridge over Honeysuckle Creek.

Bibbenluke Shire Council completed reconstruction between 21.1 km and 22.6 km east of Bombala and continued reconstruction of the section 22.6 km to 25.6 km.



**TR95 – Picton-Wollongong**

The Department commenced the deviation at Maldon to include the new interchange with the South Western Freeway (F5) and the approaches to the new Maldon Bridge. The deviation extends 35.0 km to 44.5 km from Wollongong.

The Department continued strengthening and widening the existing formation from 7.0 km to 21.5 km west of Wollongong.

The Department continued reconstruction to provide four lanes between the junction with MR513 and the start of the Wollongong by-pass.

**ORDINARY MAIN ROADS****MR101 – Maitland-TR90 at Weismantels**

Maitland City Council completed reconstruction of a flood damaged embankment at Mindaribba from 9.98 km to 10.4 km east of Maitland.

**MR105 – Scone-SH9 at Nemingha**

Scone Shire Council completed reconstruction of sections at 13.7 km and 16.9 km east of Scone where the road formation was damaged during the 1971-72 floods.

Nundle Shire Council continued construction of a deviation from 41.2 km to 43.6 km south of Tamworth to avoid Chaffey Dam currently under construction.

**MR106 – Nundle-SH9**

Nundle Shire Council completed reconstruction of the section from 7.8 km to 9.2 km west of Nundle and commenced the reconstruction of the section from 28.5 km to 30.5 km west of Nundle.

**MR111 – SH10 north of Bulahdelah-Forster-SH10 near Purfleet**

Great Lakes Shire Council completed road widening work between Beach and Mark Streets Forster.

**MR127 – Narrabri-Wee Waa-Walgett**

Namoi Shire Council commenced the construction of the approaches to a recently completed 18 cell reinforced concrete box culvert at 7.7 km west of Wee Waa.

Namoi Shire Council continued reconstruction of the section 8.6 km to 10.4 km west of Wee Waa.

**MR128 – Singleton-MR101 at Gostwyck**

Singleton Shire Council commenced reconstruction between 15.2 km and 15.7 km from Singleton.

**MR129 – Quirindi-Coonabarabran-Coonamble-Quambone**

Tamarang Shire Council continued reconstruction of the section 43.7 km to 49.2 km west of Quirindi.

**MR132 – Barraba-Bundarra**

Barraba Shire Council completed construction of the section from 14.8 km to 17.9 km east of Barraba and commenced construction of a section 17.9 km to 19.9 km east of Barraba.

Uralla Shire Council completed reconstruction of the section 1.3 km to 2.3 km west of Bundarra.

**MR134 – Bingara-Ashford**

Bingara Shire Council continued reconstruction and bituminous surfacing between 17.8 km and 24.0 km north-east of Bingara.

**MR135 – Ebor-Intersection at TR73 at Gilgai**

Guyra Shire Council completed the reconstruction and bituminous surfacing between 26.6 km and 27.5 km west of Guyra.

Guyra Shire Council continued reconstruction and bituminous surfacing between 30.4 km and 32.03 km west of Guyra.

Macintyre Shire Council commenced reconstruction and bituminous surfacing between 40.2 km and 43.4 km east of Inverell.

**MR136 – Inverell-Deepwater**

Macintyre Shire Council continued reconstruction and bituminous surfacing between 12.1 km and 16.9 km north-east of Inverell.

Seyern Shire Council continued reconstruction and bituminous surfacing between 29.6 km and 38.6 km west of Deepwater.

**MR137 – Inverell-Bonshaw**

Macintyre Shire Council continued construction and bituminous surfacing of the approaches to Swanbrook Creek, 5.6 km north of Inverell.

Ashford Shire Council commenced reconstruction and bituminous surfacing between 17.2 km and 19.5 km north of Ashford.

Ashford Shire Council completed reconstruction and bituminous surfacing between 28.9 km and 31.0 km north of Ashford.

Ashford Shire Council continued reconstruction and bituminous surfacing between 31.0 km and 33.0 km north of Ashford.

**MR151 – Coffs Harbour-TR74 near Grafton**

Coffs Harbour Shire Council continued reconstruction between 21.4 km and 25.0 km north of Coffs Harbour including the approaches to new bridges.

**MR181 – Wisemans Ferry-MR503 near Singleton**

Colo Shire Council commenced reconstruction and bituminous surfacing between 1.6 km and 4.4 km north of Webbs Creek Ferry.

**MR187 – Inverell-TR63 south of Yetman**

Macintyre Shire Council commenced construction and bituminous surfacing of approaches to a 2 cell reinforced concrete box culvert at 15.9 km north of Inverell.

**MR201 – TR54-Wyangla Dam**

Crookwell Shire Council completed reconstruction and bituminous surfacing between 29.1 km (Junction Point Road) and 35.4 km north of Crookwell.

**MR206 – Dunedoo-Dubbo**

Coolah Shire Council completed reconstruction and bituminous surfacing of approaches to new bridge over Tucklan Creek, 9.7 km west of Dunedoo.

Talbragar Shire Council continued construction of approaches to Plain Creek Bridge from 20.4 km to 21.9 km east of Dubbo. The bridge was completed by Council contract.

**MR209 – Muswellbrook-Denman-Sandy Hollow-Merriwa**

Denman Shire Council completed construction of the bridge and approaches over Ramrod Creek, 2.6 km south of Muswellbrook.

**MR211 – Wagga Wagga-Holbrook**

Kyeamba Shire Council completed reconstruction and bituminous surfacing between 14.1 km to 16.0 km from Wagga Wagga south to Holbrook.

**MR213 – from MR503 near Singleton to MR209 near Denman**

Denman Shire Council continued reconstruction and bituminous surfacing between 12.0 km to 13.4 km west of Jerrys Plains.



**MR217 – Wyong-Toronto-Wallsend**

Newcastle City Council commenced reconstruction, widening and surfacing of Thomas Street between Newcastle Road and Irving Street Wallsend.

**MR220 – Cessnock-Toronto**

Greater Cessnock City Council completed construction of the bridge and approaches over Brunkerville Creek 22.9 km to 24.5 km from Cessnock.

**MR225 – McGraths Hill-Gosford**

Gosford Shire Council continued reconstruction of the section 35.7 km to 40.6 km west of Gosford.

**MR232 – Moree-Boonangar**

Boomi Shire Council commenced reconstruction between 74.0 km and 75.2 km north of Moree.

**MR233 – TR55-SH17 at Parkes**

Molong Shire Council completed reconstruction and bituminous surfacing from 66.5 km to 68.2 km south of Wellington.

**MR237 – Nashdale near Orange-Grenfell**

Boree Shire Council completed reconstruction and bituminous surfacing from 24.6 km to 32.9 km west of Orange. Boree Shire Council completed construction of a reinforced concrete box culvert over Grove Creek, 47 km west of Orange.

Waugoola Shire Council completed reconstruction and bituminous surfacing from 36.5 km to 37.5 km east of Grenfell.

Jemalong Shire Council completed reconstruction and bituminous surfacing from 34.1 km to 36.5 km east of Grenfell.

Weddin Shire Council completed construction of a 5 cell reinforced concrete box culvert at 24.7 km east of Grenfell. Weddin Shire Council completed reconstruction and bituminous surfacing from 23.6 km to 26.5 km east of Grenfell.

**MR238 – Parkes-Canowindra**

Goobang Shire Council commenced reconstruction and bituminous surfacing between Muginoble and Jemalong Shire Boundary, 6.8 km to 12.6 km south of Parkes.

**MR241 – Gunning-Temora**

Burrangong Shire Council completed reconstruction and bituminous surfacing from 6.4 km to 10.9 km east of Young including approaches to Wambanumba Creek Bridge.

**MR243 – Gundagai-SH17 near Narrandera**

Gundagai Shire Council completed realignment of a short section adjacent to the northern abutment of the new bridge over the Murrumbidgee River at Gundagai.

**MR246 – TR54 near Trunkay Creek**

Lyndhurst Shire Council continued reconstruction and bituminous surfacing from 22.0 km to 27.8 km west of Bathurst.

**MR248 – Taralga-Boorowa**

Boorowa Shire Council completed reconstruction and bituminous surfacing from 12.6 km to 15.1 km east of Boorowa.

**MR255 – Oberon to Meadow Flat**

Oberon Shire Council completed construction of a twin cell reinforced concrete box culvert over Kings Stockyard Creek including reconstruction of approaches.

**MR256 – Oberon-Goulburn**

Oberon Shire Council completed reconstruction and bituminous surfacing between 34.1 km and 39.5 km south of Oberon. A further section between 39.5 km and 41.5 km is under construction.

**MR272 – Tilba Tilba-Bega**

Mumbulla Shire Council continued construction of the deviation from 2.5 km to 7.5 km north of Bermagui to replace a section of the main road subject to storm damage.

Mumbulla Shire Council completed reconstruction between 18.3 km and 19.8 km north of Bega, including the approaches to a new reinforced concrete box culvert over Booths Creek.

**MR282 – Tumbarumba-Hume Highway near Mullengandra**

Tumbarumba Shire Council continued reconstruction and bituminous surfacing from 31.9 km to 33.8 km south of Tumbarumba and commenced work on the section from 33.8 km to 36.1 km south of Tumbarumba.

**MR284 – TR85 near Tumbarumba-SH2 near Little Billabong**

Holbrook Shire Council continued the construction of the approaches to the new bridge over Little Billabong Creek, 0.08 km east of the Hume Highway and commenced work on the section 0.08 km to 5.3 km east of the Hume Highway towards Tumbarumba.

**MR289 – MR101 near Dungog-TR90 near Stroud**

Dungog Shire Council commenced reconstruction and bituminous surfacing from 3.3 km to 4.6 km east of MR101.

**MR310 – Cowra-Cudal**

Cowra Municipal Council completed reconstruction and bituminous surfacing from the township towards the Municipal boundary on the section 2.9 km to 3.9 km north of SH6.

**MR319 – Barham-Maude**

Wakool Shire Council commenced construction of the approaches to the new bridge over Barber Creek, 8.05 km north of Barham.

Windouran Shire Council completed reconstruction and bituminous surfacing of the section 16.4 km to 20.1 km north of Moulamein.

**MR320 – SH1 at Cobargo-Bermagui**

Mumbulla Shire Council continued construction between 0.8 km and 2.5 km east of Cobargo forming the approaches to the new bridge over Narira Creek.

**MR321 – From SH17 at 15.4 km north of Jerilderie to SH6 at 13.6 km west of Rankin Springs**

Murrumbidgee Shire Council completed reconstruction and bituminous surfacing of the section 68.2 km to 77.6 km north of SH17.

Murrumbidgee Shire Council commenced work on the approaches to the new bridge over the Murrumbidgee River at Darlington Point 89 km north of SH17.

Murrumbidgee Shire Council completed a deviation from 0.0 km to 1.2 km north of SH14 to form a staggered intersection of MR321 and SH14.

**MR323 – From SH17 at Jerilderie to MR131 near Oaklands**

Jerilderie Shire Council completed reconstruction and bituminous surfacing of the section 27.8 km to 32.4 km west of SH17.

**MR325 – Belmont to Charlestown and Boolaroo**

Lake Macquarie Municipal Council completed the construction of a 1.1 km deviation from MR217 through Lake Macquarie Park at Cockle Creek to the Esplanade at Speers Point.



**MR331 – Jingellic-Holbrook-Berrigan**

Culcairn Shire Council completed reconstruction and bituminous surfacing of the section 1.5 km to 5.3 km west of Walbundrie.

Corowa Shire Council continued reconstruction and bituminous surfacing of the section 12.9 km to 14.5 km east of Daysdale.

**MR336 – Gosford-The Entrance**

Gosford Shire Council reconstructed the pavement between 3.7 km and 4.2 km from Gosford.

Wyong Shire Council completed reconstruction and bituminous surfacing between 3.4 km and 4.1 km from MR335 at Gosford Shire Boundary.

**MR341 – Moama-Barham**

Murray Shire Council commenced reconstruction and bituminous surfacing of the section 70.5 km to 74.2 km west of Moama.

**MR347 – Melrose-Collie**

Timbregongie Shire Council completed reconstruction and bituminous surfacing from 23.4 km to 32.0 km south of Trangie.

Warren Shire Council continued reconstruction of the section 6.4 km to 8.7 km south from Collie towards Trangie.

**MR350 – Forbes-Tullamore**

Goobang Shire Council completed construction of a reinforced concrete box culvert and approaches to eliminate a causeway at "Murderer's Waterhole" 14.4 km north of Forbes.

Goobang Shire Council completed reconstruction and bituminous surfacing from 16.1 km to 21.1 km north of Trundle.

**MR357 – Manilla-Boggabri**

Manilla Shire Council continued reconstruction of the section from 12.9 km to 16.6 km west of Manilla.

**MR358 – Merriwa-Willow Tree**

Merriwa Shire Council continued reconstruction of a section from 9.9 km to 12.1 km north of Merriwa.

Murrurundi Shire Council commenced the reconstruction of the section 25.7 km to 29.0 km south of Willow Tree.

**MR359 – Molong-TR61**

Molong Shire Council completed reconstruction and bituminous surfacing from 10.5 km to 13.3 km south of Molong.

**MR362 – Koreelah-Urbenville**

Tenterfield Shire Council completed reconstruction and bituminous surfacing between 0.5 km and 1.0 km, and between 10.4 km and 12.5 km west of Urbenville.

**MR363 – From MR550 north of Barooga to Berrigan**

Berrigan Shire Council commenced work on the section 8.0 km to 9.1 km north of MR550.

Berrigan Shire Council completed reconstruction and bituminous surfacing of the section 11.5 km to 12.3 km north of MR550.

**MR368 – From SH6 at Rankin Springs to Hillston**

Carrathool Shire Council completed reconstruction including curve improvement between 2.2 km to 3.9 km north of Rankin Springs.

Carrathool Shire Council completed work on the improvement of drainage at causeways between 0.0 km and 8.8 km north of Rankin Springs.

**MR377 – TR61-Forbes-Condobolin**

Boree Shire Council continued reconstruction and bituminous surfacing 53.1 km to 61.1 km south of Orange.

Jemalong Shire Council continued the construction of a reinforced concrete box culvert at 12.7 km and approaches 11.2 km to 13.4 km west of Forbes to replace a narrow timber bridge on a poor alignment.

**MR383 – Coonamble-Pilliga**

Coonamble Shire Council continued reconstruction between 16 km and 21 km north of Coonamble.

**MR386 – From TR67 at 11 km north of Swan Hill to MR319 near Moulamein**

Wakool Shire Council commenced the reconstruction of the section 36.2 km to 39.0 km west of MR319.

**MR396 – Coolah-Coonabarabran**

Coonabarabran Shire Council continued the approaches to Merryula Creek Bridge and reconstruction from 24.9 km to 25.3 km north of Binnaway.

**MR398 – Grenfell-Coolamon**

Weddin Shire Council continued reconstruction and bituminous surfacing from 43.5 km to 44.3 km south of Grenfell, and commenced reconstruction and bituminous surfacing from 44.3 km to 46.5 km south of Grenfell.

Narraburra Shire Council continued reconstruction and bituminous surfacing of the section 19.0 km to 23.8 km south of Arianah Park.

Coolamon Shire Council continued reconstruction and bituminous surfacing between 29.2 km to 33.0 km north of Coolamon.

**MR399 – Qld Border-MR143**

Tweed Shire Council completed reconstruction between 18.4 km and 19.8 km north of Murwillumbah.

**MR405 – North Bourke-South Australian Border-Hawker Gate**

Bourke Shire Council continued construction of approaches to new bridges on the Paroo River, 190 km west of Bourke.

**MR421 – Cobar-Bourke**

Cobar Shire Council completed reconstruction of the intersection of MR407 and MR421 in Cobar, commenced reconstruction of the section 9.7 km to 14.7 km north of Cobar and commenced the construction of culverts north of 14.7 km.

**MR435 – Wilcannia-Willaroy**

Central Darling Shire Council continued reconstruction of the formation from 42.2 km to 70.7 km north of Wilcannia.

**MR501 – Lake Cargelligo-Booligal**

Carrathool Shire Council completed reconstruction and bituminous surfacing of the section 11.6 km to 14.5 km east of TR80 at Hillston.

**MR503 – Windsor-Singleton**

The Department commenced construction of the approaches to the new bridge over Howes Creek between 10.9 km and 11.7 km north of Windsor.

The Department completed reconstruction and widening between 17.6 km and 18.3 km north of Windsor and commenced reconstruction and widening between 18.3 km and 19.6 km north of Windsor.

The Department completed replacement of timber structures at Mellong and Kangaroo Waterholes, 91.5 km and 92.8 km south of Singleton.

Singleton Shire Council continued reconstruction and bituminous surfacing from 21.7 km to 23.6 km south of Singleton.

**MR504 – Gosford-The Entrance Road-Avoca Beach**

Gosford Shire Council continued reconstruction of MR504 between 0.0 km and 1.0 km towards Kincumber.



**MR507 – Mungindi-Goondiwindi**

Boolooroo Shire Council continued reconstruction between 51.8 km and 66.8 km west of Goondiwindi.

**MR513 – Princes Highway at Bulli Pass-TR95 near Brokers Nose**

The Department continued construction to provide four lanes between Bellambi Creek and the junction with TR95 including a deviation at Cataract Creek.

**MR514 – From Hay to Penarie**

Hay Shire Council commenced reconstruction and bituminous surfacing of a further section of gravelled road from 68.8 km to 73.0 km west of Hay.

**MR516 – Mort Street, Lithgow**

Lithgow City Council completed reconstruction and widening from Lithgow Street to Burns Lane.

**MR518 – Williamtown to Pacific Highway**

Port Stephens Shire Council completed construction of a 5.4 km deviation commencing at the Highway and replacing a section inundated by the Grahamstown Water Supply Scheme.

**MR522 – SH1 near Shellharbour Railway Station-Wentworth Road, Wollongong**

Work on the provision of dual carriageways between Warrawong and Shellharbour is almost complete.

Wollongong Council completed the second carriageway in King Street Warrawong at the northern end of the work and Shellharbour Council commenced the Shellharbour by-pass which will complete the southern extension.

**MR526 – SH7-Mount Canobolas**

Orange City Council completed reconstruction and bituminous surfacing from McKay Crescent to Laurel Street Orange.

**MR544 – TR63-MR142**

Lismore City Council continued reconstruction between 10 km and 12 km west of Lismore.

**MR552 – From SH21 at Deniliquin to SH17 at Jerilderie**

Conargo Shire Council commenced reconstruction and bituminous surfacing between 18.0 km and 20.8 km north of SH21 at Deniliquin.

Jerilderie Shire Council commenced reconstruction and bituminous surfacing on a new alignment between 0.0 km and 2.5 km west of SH17 at Jerilderie.

**MR553 – Moonaran-Somerton**

Manilla Shire Council completed reconstruction of the section 2.4 km to 8.0 km west of TR63.

**MR565 – Bellinfonte-Guntawang**

Mudgee Shire Council continued work on the reconstruction and bituminous surfacing of the section 1.0 km to 5.8 km from the intersection with MR233 at Guntawang.

**MR572 – SH7-Eumungerie**

Talbragar Shire Council completed reconstruction and bituminous surfacing from 12.4 km to 20.0 km west of SH17 at Eumungerie.

**MR573 – SH7 near Orange-Mitchell Highway near Wellington**

Orange City Council commenced preliminary works on pavement strengthening 2.2 km to 3.2 km from Orange to Stuart Town.

Wellington Shire Council continued the construction of the approaches to Stoney Creek Bridge 55.5 km to 56.8 km north of Orange, and commenced reconstruction and sealing 56.8 km to 59.7 km north of Orange.

## DEVELOPMENTAL ROADS

**DR1171 – Welaregang-Tintaldra-Greg Greg Bridge**

Tumbarumba Shire Council completed construction of the section 0.0 km to 4.8 km east of MR281.

**DR1268 – Jinden Creek-Kybeyan River Bridge**

Monaro Shire Council commenced widening of the formation over the lengths 1.5 km to 4.5 km north of Badja River and 2.5 km to 13.0 km south of Badja River.

Tallaganda Shire Council completed reconstruction to gravel standard between 66.6 km and 69.1 km south of Braidwood.

Tallaganda Shire Council completed modification of the existing road between Jinden Creek and 66.6 km south of Braidwood.

**DR1315**

Goodradigbee Shire Council completed construction to the end of its proclaimed length.

**DR3223**

Canobolas Shire Council continued reconstruction of the road to the Macquarie River at Dixons Long Point (section 3.1 km to 4.6 km from the Macquarie River).

**DR3163 – Dungog to Gresford**

Dungog Shire Council completed construction of the section 12.9 km to 14.8 km from Dungog.

## TOURIST ROADS

**TR4051 – Pine Avenue-Ballina Street**

Ballina Shire Council commenced the final section of TR4051 linking Ballina with Byron Bay.







#### **TR68 over Darling River**

The Department completed construction by contract of a three span steel box girder and reinforced concrete bridge over the Darling River at Menindee. The new structure is 118.4 m long and provides two traffic lanes and eliminates the use by road traffic of the railway bridge.

#### **TR74 over Blicks River**

The Department completed construction by contract of a four span prestressed concrete girder bridge over Blicks River near Dunderabbin 86 km south of Grafton. The new structure is 91.4 m long, provides two traffic lanes and replaces a 96 year old single lane timber truss bridge 69 m long.

#### **TR89 over Backwater Cowal**

Timbregongie Shire Council completed construction by contract of a 17 span prestressed concrete plank bridge over Backwater Cowal 4.4 km south of Narromine. The new structure is 93.5 m long and provides two traffic lanes.

#### **TR91 over Honeysuckle Creek**

Imlay Shire Council completed construction by contract of a three span steel girder and reinforced concrete bridge over Honeysuckle Creek 25.4 km from SH1. The new structure is 64.0 m long and provides two traffic lanes and replaces a timber beam bridge 30 m long.

#### **MR206 over Tucklan Creek**

Coolah Shire Council completed construction by contract of a six span prestressed concrete plank bridge over Tucklan Creek 9.6 km west of Dunedoo. The new structure is 65.1 m long and provides two traffic lanes and eliminates a concrete causeway.

#### **MR271 over Moruya River**

Eurobodalla Shire Council completed construction by contract of an eight span prestressed concrete low level bridge over Moruya River 3.9 km west of Moruya. The 85.4 m long structure provides two traffic lanes and replaces a low level single lane timber beam bridge 86.3 m long washed away by floods in 1974.

#### **MR315 - Pedestrian Bridge**

The Department completed construction by contract of a seven span prestressed and reinforced concrete bridge over King Georges Road near South Hurstville Public School. The new structure is 69.8 m long and provides a single lane walkway.

#### **MR318 over Main Southern Railway**

The Department completed construction by contract of a three span prestressed concrete girder bridge over the railway at Marlborough Road, Homebush West. The new structure is 72.4 m long and provides two traffic lanes and one footway.

#### **MR405 over Paroo River**

The Department completed construction by contract of a nine span composite steel girder and reinforced concrete bridge over the Paroo River at Wanaaring. The new bridge is 109.7 m long and provides two traffic lanes and replaces a timber beam bridge 103 m long.

#### **SR2084 over Railway, Seven Hills**

Blacktown Municipal Council completed construction by contract of a four span prestressed concrete girder bridge over the railway at Seven Hills. The new structure is 83.2 m long and provides four traffic lanes and eliminates a level crossing.

#### **CR5037 (Parramatta By-pass) over Belmore Street**

The Department completed construction by contract of a single span reinforced and prestressed concrete bridge over Belmore Street Dundas. The new bridge is 29.3 m long and provides for six traffic lanes.

## **PRINCIPAL BRIDGEWORKS COMPLETED DURING THE YEAR BUT NOT OPENED TO TRAFFIC**

#### **F1 - Warringah Freeway at West Street**

The Department completed construction by contract of a two span prestressed concrete girder bridge over the Warringah Freeway at West Street, North Sydney. The new structure is 58 m long and provides two traffic lanes and two footways.

#### **F1 - Warringah Freeway over Brook Street**

The Department completed construction by contract of twin single span prestressed concrete girder bridges over Brook Street, Naremburn. Each new structure is 27 m long and provides four traffic lanes.

#### **F4 - Western Freeway over Haslams Creek**

The Department completed construction by contract of a two span steel truss services bridge over Haslams Creek Stormwater Channel. The new structure is 68.3 m long and provides two traffic lanes.

#### **F4 - Western Freeway - Pedestrian Bridge at Melton Street**

The Department completed construction by its own forces of an 11 span prestressed concrete suspended girder (main spans) and prestressed concrete slab (approach slabs) pedestrian bridge over the Freeway at Melton Street, Auburn. The new structure is 117.9 m long and provides a single lane walkway.

#### **F5 - Southern Freeway over Access Road to Herne Estate**

The Department completed construction by contract of twin three span prestressed concrete plank bridges to carry loading ramps to and from the Southern Freeway over the access road from Gladstone Avenue to Herne Estate, Wollongong. The new structures are 30.6 m and 30.4 m long and each provides three traffic lanes.

#### **SH2 - Hume Highway over Eastbound Unloading Ramp**

The Department completed construction by contract of a single span prestressed concrete plank structure over Eastbound Unloading Ramp to Sheridan Street, Gundagai. The new structure is 75.4 m long and provides two traffic lanes.

#### **SH2 - Hume Highway over Derrigullen Creek**

The Department completed construction by contract of a three span prestressed concrete girder bridge over Derrigullen Creek, 6.6 km south of Yass. The new structure is 57.9 m long and provides two traffic lanes and will be for northbound traffic on a proposed section of dual carriageway.

#### **SH2 - Hume Highway over Fish River**

The Department completed construction by contract of a four span prestressed concrete girder bridge over the Fish River 45.1 km west of Goulburn. The new structure is 85.3 m long and provides two traffic lanes and replaces a timber beam bridge 75.2 m long.

#### **SH16 - Bruxner Highway over Seereys Creek**

Ashford Shire Council completed by contract the construction of a 12 span prestressed concrete plank bridge over Seereys Creek, 16.9 km west of Yetman. The new bridge is 73.2 m long and provides two traffic lanes.

#### **SH16 - Bruxner Highway over Ottleys Creek**

Yallaroi Shire Council completed construction by contract of a 10 span prestressed concrete plank bridge over Ottleys Creek 17.7 km west of Yetman. The new structure is 61 m long and provides two traffic lanes.



#### **TR72 over Quipolly Creek**

Tamarang Shire Council completed construction by contract of a five span prestressed concrete girder bridge over Quipolly Creek 14.7 km north of Quirindi. The new structure is 75 m long and provides two traffic lanes and replaces a timber beam bridge 23.8 m long.

#### **TR75 over Hickeys Creek**

Kempsey Shire Council completed construction by contract of a three span prestressed concrete girder bridge over Hickeys Creek 31.8 km west of Kempsey. The new structure is 64 m long and provides two traffic lanes and will replace a one lane timber bridge, 43.3 m long which is subject to flooding.

#### **MR405 over Paroo Bywashes Nos. 1 and 2**

The Department completed construction by contract of two composite steel girder and reinforced concrete bridges over the Paroo Bywashes Nos. 1 and 2 at Wanaaring and each having 5 spans. The new bridges are 61 m long and each provides two traffic lanes and replaces two timber beam bridges 62 m and 55 m long respectively.

#### **CR5037 over Lake Parramatta Access Road**

The Department completed construction by contract of a single span reinforced concrete bridge to carry the County Road over the Lake Parramatta access road. The new bridge is 13 m long and provides six traffic lanes.

### **PRINCIPAL BRIDGEWORKS IN PROGRESS AT THE BEGINNING OF THE YEAR BUT NOT COMPLETED**

#### **F3 - North Western Freeway over Darling Harbour Viaduct**

The Department continued construction by its own forces of the first stage of a complex viaduct structure to carry the North Western Freeway from the City over Darling Harbour Goods Yard to Pyrmont. The whole complex will comprise 116 spans, mainly composite steel and concrete with some reinforced concrete and prestressed concrete. The Department commenced fabrication by contract during the year of a number of steel girders. The main structure will be 806.2 m long and will provide up to 11 traffic lanes with four freeway lanes at the western end. The first stage of construction will provide six traffic lanes.

#### **F4 - Western Freeway over Haslams Creek Stormwater Channel**

The Department continued construction by its own forces of a three span prestressed concrete girder bridge to carry eastbound freeway traffic over Haslams Creek Stormwater Channel. The new structure will be 69.5 m long and will provide two traffic lanes.

#### **F5 - South Western Freeway at Minto Road**

The Department continued construction by its own forces of a four span prestressed concrete bridge over the Freeway at Minto Road, Glenlee. The new bridge will be 80.1 m long and will provide two traffic lanes.

#### **F6 - Southern Freeway over Mullet Creek**

The Department continued construction by contract of twin 10 span prestressed concrete voided slab deck bridges over Mullet Creek at Kembula Grange, 91.4 km south of Sydney. Each new structure will be 250 m long and will provide six traffic lanes.

#### **F6 - Southern Freeway over Northcliffe Drive**

The Department continued construction by contract of twin three span prestressed concrete voided deck bridges over Northcliffe Drive at Berkeley. Each new structure will be 67.2 m long and will provide six traffic lanes.

#### **SH2 - Hume Highway over Yass River at Yass**

The Department continued construction by contract of a three span composite steel trough girder bridge over the Yass River (Hume Bridge) at Yass. The new structure will be 101.1 m long and will provide two traffic lanes and two footways and will replace a timber and steel bridge 86 m long.

#### **SH2 - Hume Highway at Narellan Interchange (North-bound Carriageway)**

The Department continued construction by its own forces of a three span prestressed concrete girder bridge for northbound traffic over MR178 at Narellan. The new structure will provide three traffic lanes.

#### **SH8 - Barrier Highway over Darling River Flood Plain**

The Department continued construction by contract of four prestressed concrete bridges over the Darling River Flood Plain at 1.6 km, 3.7 km, 5.9 km and 6.4 km east of Wilcannia, having five, four, eight and eight spans respectively. The new structures will be 30.5 m, 24.4 m, 48.8 m and 48.8 m long respectively, will provide two traffic lanes and will replace causeways.

#### **SH17 - Newell Highway over Narrabri Creek**

The Department continued construction by contract of a nine span prestressed concrete girder bridge over Narrabri Creek at Narrabri. The new structure will be 178.8 m long, will provide two traffic lanes and will replace a timber truss bridge 120 m long.

#### **MR154 over Narellan Creek**

Camden Municipal Council continued construction by contract of a four span, prestressed concrete plank bridge over Narellan Creek, 1.6 km from SH2. The new structures will be 42.9 m long, will provide two traffic lanes and will replace an old timber bridge, 8.2 m long.

#### **MR600 over Fernbank Creek**

Hastings Shire Council continued construction by its own forces of a seven span prestressed concrete girder bridge over Fernbank Creek 8 km north of Port Macquarie. The new structure will be 75.5 m long, will provide two traffic lanes and will replace a timber beam bridge 18.3 m long.

#### **CR5037 at Pennant Hills Road**

The Department continued construction by its own forces of a single span steel girder and reinforced concrete bridge over the County Road at Pennant Hills Road near Burnside Homes, North Parramatta. The new structure will be 29.6 m long and will provide six traffic lanes.

### **PRINCIPAL BRIDGEWORKS COMMENCED DURING THE YEAR BUT NOT COMPLETED**

#### **F5 - South Western Freeway over Nepean River, Douglas Park**

The Department commenced construction by contract of twin six span precast and post tensioned concrete box girder bridges over the Nepean River at Douglas Park. The new bridges are 236.5 m and 286 m long respectively and provide six traffic lanes.



#### **F5 - South Western Freeway over Main Southern Railway**

The Department commenced construction by its own forces of the foundations and piers for the twin single span prestressed concrete plank bridges over the Main Southern Railway at Yanderra. The new bridges will be 15.3 m long and will provide up to seven traffic lanes and will replace a brick arch bridge 28 m long. Completion of the bridges will be undertaken by contract to the Department.

#### **F5 - South Western Freeway over Nepean River, Menangle**

The Department commenced construction by contract of a twin four span prestressed concrete box girder bridge over the Nepean River near Menangle, 61.3 km south of Sydney. Each new structure will be 186 m long and will provide six lanes for traffic.

#### **F5 - South Western Freeway at Moreton Park Road**

The Department commenced construction by contract of a four span prestressed concrete voided slab bridge over the Freeway at Moreton Park Road, 63.9 km south of Sydney. The new structure will be 78 m long and will provide two traffic lanes and one footway.

#### **F5 - South Western Freeway over Moreton Park Road**

The Department commenced construction by its own forces of a four span prestressed concrete spine beam bridge over Moreton Park Road Deviation, 69.2 km south of Sydney. The new structure will be 97.6 m long and will provide two traffic lanes and one footway.

#### **F6 - Southern Freeway at Kanahooka Road**

The Department commenced construction by contract of a three span prestressed concrete voided slab bridge over the Freeway at Kanahooka Road at Dapto. The new structure will be 78.6 m long and will provide four traffic lanes.

#### **SH7 - Mitchell Highway over Molong Creek**

The Department commenced construction by contract of a four span steel girder and reinforced concrete bridge over Molong Creek 5.6 km south of Molong. The new structure will be 61 m long, will provide two traffic lanes and will replace a timber beam bridge 40.5 m long.

#### **TR77 over Merrygoen Creek**

Coolah Shire Council commenced construction by contract of a three span steel beam and reinforced concrete bridge over Merrygoen Creek at Mendooran. The new structure will be 64.6 m long, will provide two traffic lanes and will replace a timber beam bridge 40 m long.

#### **MR172 - Viaduct between Vernon and Adelaide Streets**

The Department commenced construction of a 26 span prestressed concrete viaduct at Bondi Junction. This work is being undertaken by both contract and direct control. The new structure will be 456.6 m long and will provide six traffic lanes.

#### **MR321 over Murrumbidgee River**

The Department commenced construction by contract of a nine span prestressed concrete girder bridge over the Murrumbidgee River at Darlington Point. The new structure will be 171.5 m long, will provide two lanes and one footway, and will replace a steel truss span with a lift span and timber beam approach span bridge 206 m long.

#### **MR321 over Flood Channel to Murrumbidgee River**

The Department commenced construction by contract of a seven span prestressed concrete girder bridge over the flood channel to the Murrumbidgee River at Darlington Point. The new structure will be 96 m long and will provide two traffic lanes and a footway, and will replace a timber beam bridge 96 m long.

#### **MR373 over Lane Cove Road (MR162)**

The Department commenced construction by contract of a three span prestressed concrete girder bridge over Lane Cove Road (MR162) at Epping Road at Ryde. The new structure will be 101.8 m long and will provide six lanes.

#### **MR609 over Railway at Horsley Drive**

The Department commenced widening by contract of the existing five span prestressed concrete girder bridge over the railway line in Horsley Drive, Fairfield. The structure when widened will provide five traffic lanes and one footway.

#### **MR617 over Main Southern Sewer**

The Department commenced construction by its own forces of a single span rigid frame structure over the Southern Suburbs Sewer in General Holmes Drive, Botany. This section of the bridgework will be 27.6 m long and will complement the northern section of the structure which will be 241.7 m long and will be constructed by contract to the Department.

#### **SR2061 over Main Northern Railway**

The Department commenced construction by contract of a three span reinforced and prestressed concrete bridge over the Main Northern Railway Line at Eastwood. The new bridge will be 42.7 m long and will provide for six traffic lanes, and will replace an existing brick and steel bridge 24.0 m long.

#### **CR5037 (Parramatta By-pass) over North Rocks Road**

The Department commenced construction by its own forces of a three span reinforced and prestressed concrete bridge over North Rocks Road. The new structure will be 35.5 m long and will provide six traffic lanes.

### **BRIDGES COMPLETED AND OPENED TO TRAFFIC ON UNCLASSIFIED URBAN AND RURAL LOCAL ROADS**

Bridgeworks carried out by Council during 1976-77 from funds available under the Roads Grants Act, 1974:

- (a) New structures where no previous structure existed - 10.
- (b) Replacement structures - 37.



# MAINTENANCE OF BRIDGES AND FERRIES

During the year the following major maintenance and repair work to bridges and ferries were carried out.

## FREEWAYS

### **F3 – Sydney-Newcastle Freeway over Hawkesbury River at Peats Ferry**

This bridge is 615 m long and has 12 steel girder spans. Repairs to joints, patch painting and works associated with fire prevention inside the steel box girders were completed.

## STATE HIGHWAYS

### **SH1 – Princes Highway over Georges River at Tom Uglys Point**

This bridge is 499 m long and has six steel truss spans and three 27 m steel plate girder spans. Painting of the steel girder spans was completed.

### **SH1 – Princes Highway over Clyde River at Batemans Bay**

This bridge is 307 m long and has two concrete slab spans, four steel girder spans, five steel truss spans and one steel truss lift span. Repainting of steelwork by Departmental contract was completed.

### **SH1 – Princes Highway over Tuross River at Bodalla**

This bridge is 192 m long and has four steel beam spans and four steel truss spans. Repainting of steelwork by Departmental contract was completed.

### **SH2 – Hume Highway – Prince Alfred Bridge over Murrumbidgee River at Gundagai**

This bridge is 927 m long and has 78 timber beam spans and three 31 m iron truss spans. Repairs to sub-structure, deck and truss spans which are regularly required each year were continued and truss repainting was commenced.

The new bridge over the Murrumbidgee River on a deviation of SH2 at Gundagai was opened to traffic on 25 March 1977.

### **SH5 – Great Western Highway over Knapsack Gully at Emu Plains**

This bridge is 118 m long and has seven sandstone arch spans. Restoration of the sandstone surface which was commenced in 1975-76 was completed.

### **SH9 – New England Highway – Long Bridge over Flood Plain at Maitland**

This bridge is 267 m long and has 25 steel beam spans. Repainting of steelwork was commenced and will be completed in 1977-78.

### **SH9 – New England Highway – Dunolly Bridge over Hunter River at Singleton**

This bridge is 196 m long and has two steel truss spans, one steel beam span and eight timber beam spans. Structural timber repairs were carried out.

### **SH9 – New England Highway over Hunter River at Aberdeen**

This bridge is 162 m long and has three 47 m lattice steel truss spans and two steel girder spans. Repainting by Departmental contract which was commenced in 1975-76 was completed.

### **SH9 – New England Highway over Railway Line at Aberdeen**

This bridge is 25 m long and has three steel girder spans. Two temporary Bailey bridges were erected by the Department alongside the bridge to maintain the traffic facility until repairs to the deck are completed. Repairs to the deck of the existing bridge will be carried out during 1977-78.

### **SH9 – New England Highway over the MacDonald River at Bendemeer**

This bridge is 92 m long and has one 31.7 m timber truss span and six timber beam spans. Repairs to and repainting of the truss span was commenced.

### **SH10 – Pacific Highway over Entrance to Lake Macquarie at Swansea**

This bridge is 174 m long and has one steel lift span and 12 steel beam spans. The centre locks, gates and the electrical control box operating the lift span were repaired.

### **SH10 – Pacific Highway over Wollomba River at Nabiac**

This bridge is 204 m long and has two 37 m steel truss spans and seven steel girder spans. Painting by contract which commenced in 1975-76 was completed and general repairs by Departmental forces were carried out.

### **SH10 – Pacific Highway over Dawson River at Cundletown**

This bridge is 110 m long and has one 37 m steel truss span and five reinforced concrete beam spans. Painting by contract and general repairs by Departmental forces were completed.

### **SH10 – Pacific Highway over Lansdowne River at Coopersnook**

This bridge is 102 m long including two 37 m steel truss spans and a 20 m bascule lift span. Painting by contract and general repairs by Departmental forces were completed.

### **SH10 – Pacific Highway over Nambucca River at Macksville**

This bridge is 218 m long and has two 43 m steel truss spans and seven steel girder spans. General repairs and repainting which were commenced in 1975-76 were completed.

### **SH10 – Pacific Highway – Martin Bridge over Manning River at Taree**

This bridge is 475 m long and has eleven 37 m long truss spans, a 19 m long former lift span and three steel girder spans. General repairs by Departmental forces were commenced in preparation for repainting by contract in 1977-78.

### **SH10 – Pacific Highway over Clarence River at Harwood**

This bridge is 888 m long and has one 38 m lift span, six 43 m steel truss spans and 27 steel girder spans. Repainting of the steelwork by Departmental contract was continued.

### **SH10 – Pacific Highway over Clarence River (North Arm) at Mororo**

This bridge is 198 m long and has two 37 m steel truss spans, one 17 m steel girder lift span and 10 steel girder spans. Repairs and painting of steelwork which were commenced in 1975-76, were continued.



**SH10 – Pacific Highway over Richmond River at Wardell**

This bridge is 225 m long and has seven concrete beam spans and one steel truss span. Repainting of steelwork by Departmental contract was commenced.

**SH10 – Pacific Highway over Tweed River at Barney's Point**

This bridge is 191 m long and has one 19 m lift span, two 43 m steel truss spans and eight steel girder spans. Repainting of steelwork by Departmental contract was commenced.

**SH13 – Lennox Bridge over Parramatta River at Parramatta**

This bridge is 28 m long being a stone arch widened in reinforced concrete. The deteriorated paintwork on the concrete handrails has been removed and the rails have been restored to their natural condition.

**SH11 – Oxley Highway over Castlereagh River at Coonabarabran**

This bridge is 61 m long and has seven timber girder spans. Repairs to footway, piers and deck which were commenced in 1975-76 were completed.

**SH12 – Gwydir Highway over Mehi River 126.97 km west of Moree**

This bridge is 38.7 m long and has five timber beam spans. Replacement of sheeting, decking and capwales was carried out.

**SH14 – Sturt Highway over Gum Creek 22.7 km and 23.3 km east of Hay**

These bridges are both 19.2 m long with two timber beam spans and topped mid span. Replacement of timber decking, sheeting, kerbs and painting of superstructure were completed.

**SH14 – Sturt Highway over Murray River at Mildura**

This bridge is 250 m long and has a 20 m lift span, four 37 m steel truss spans and 11 steel beam spans. Replacement of timber decking and longitudinal sheeting of the approach spans was completed.

**SH16 – Bruxner Highway over Plumbago Creek at Drake**

This bridge is 37.5 m long and has four timber beam spans. Replacement of decking, sheeting and one girder was commenced.

**SH16 – Bruxner Highway over Sandy Creek 32.7 km east of Tenterfield**

This bridge is 82 m long, and has one 27 m timber truss span and six timber beam spans. Replacement of girders, decking and headstocks was commenced.

**SH16 – Bruxner Highway over Snake Creek 22.2 km east of Tenterfield**

This bridge is 28.35 m long and has three timber beam spans. Replacement of decking, sheeting, piles and abutment was commenced.

**SH16 – Bruxner Highway over Swamp Oak Creek 12.9 km east of Tenterfield**

This bridge is 32 m long and has four timber beam spans. Replacement of decking, sheeting and repairs to abutments and handrails was completed.

**SH16 – Bruxner Highway over Barney Downs Creek 9.7 km east of Tenterfield**

This bridge is 37.5 m long and has four timber beam spans. Replacement of sheeting and decking was carried out.

**SH16 – Bruxner Highway over Reedy Creek 65.1 km west of Tenterfield**

This bridge is 54.25 m long and has five timber beam spans. Replacement of decking, sheeting, five girders and 30 m of kerb was carried out.

**SH17 – Newell Highway over Murrumbidgee River at Narrandera**

This bridge is 101 m long and has two 9 m timber beam spans and three 27 m timber truss spans. Replacement of bottom chords, cross girders and one truss principal and repairs to decking and handrails were carried out.

**SH18 – Castlereagh Highway over Pagan Creek 6 km north of Walgett**

This bridge is 155 m long and has 20 timber beam spans. Major structural repairs to decking, longitudinal sheeting, girders and substructure which were commenced in 1975-76 were continued.

**SH19 – Monaro Highway over Bombala River at Bibbenluke**

This bridge is 88 m long and has three 11 m timber beam spans and two 27 m timber truss spans. Major repairs to girders, truss members and decking were carried out.

**SH21 – Cobb Highway over Flood Channel in the northern approach to the bridge over the Murray River at Moama**

This bridge is 124 m long and has 27 timber beam spans. Repairs to decking and sheeting were completed.

**SH22 – Silver City Highway over Tuckers Creek at Curlwaa**

This timber bridge is 88.7 m long and has twelve 7 m timber beam spans. Replacement of piles, girders, capwales and decking was carried out.

**SH22 – Silver City Highway – Abbotsford Bridge over Murray River at Curlwaa**

This bridge is 235 m long and has a 20 m lift span, four 37 m steel truss spans and eight steel beam spans. Patch painting of steelwork, handrails and kerb and the replacement of the timber decking of the lift span were carried out.

## **TRUNK ROADS**

**TR57 – over Lachlan River at Condobolin**

This bridge is 55 m long and has three timber beam spans and one truss span. Following the damage of the truss span and one approach span, a temporary Bailey bridge of 37 m span was erected to maintain the traffic facility.

**TR63 – over Namoi River at Manilla**

This bridge is 306 m long and has five 38.4 m main steel truss spans and six 18.6 m steel truss spans. Repainting of the steel truss spans by Departmental contract was carried out.

**TR63 – over Myall Creek, 8.7 km north of Bingara**

This bridge is 145 m long and has three 28 m timber truss spans and six timber beam spans. Replacement of two girders and truss and pier members was completed.

**TR67 – over Murray River at Swan Hill**

This bridge is 117 m long and has four timber beam spans, two 28 m timber truss spans and a 19 m steel truss lift span. Replacement of sections of the top and bottom chords and repairs to cross girders, girders, piles and kerbs and the painting of the superstructure, commenced in 1975-76, were completed.

**TR75 – over Five Day Creek at Comara**

This bridge is 72 m long and has six timber beam spans and one 23 m timber truss span. Extensive structural repairs were commenced.



**TR86 – Oedings Approach Bridge No. 3 to the Murray River at Corowa**

This bridge is 67 m long and has 11 timber beam spans. Replacement of two piles and one headstock was carried out.

**TR94 – over Wakool River Flood Channel at Gee Gee**

This bridge is 113.8 m long and has 15 timber beam spans. Replacement of a number of girders, splicing of a number of piles and painting of the superstructure were carried out.

## MAIN ROADS

**MR102 over Hunter River at Morpeth**

This bridge is 282 m long and has three timber truss spans and 17 timber beam spans. Major structural timber repairs other than truss repairs, commenced in 1975-76, were completed.

**MR105 – over Pages River at Gundy**

This bridge is 87.5 m long, and has one 31.7 m timber truss span and five timber girder spans. Replacement of girders and repairs to the truss were commenced.

**MR111 – Forster-Tuncurry Bridge over Wollomba River**

This bridge is 609 m long and has 47 prestressed concrete beam spans and one steel beam span. Repainting of handrailing, commenced in 1975-76, was completed.

**MR127 – over Coghill Creek 27 km south of Wee Waa**

This bridge is 110.9 m long and has 12 timber girder spans. Extensive repairs to the deck were carried out by Namoi Shire Council.

**MR127 – Dangar Bridge over Barwon River 5.5 km west of Walgett**

This bridge is 119 m long and has seven timber beam spans and two timber truss spans. Replacement of decking, longitudinal sheeting, girders and substructure was carried out.

**MR137 – over Severn River at News Crossing 65.5 km north of Inverell**

This is a low level bridge, 83 m long, and has eight timber beam spans. Replacement of all decking, sheeting and kerbs, commenced in 1975-76, was completed.

**MR165 – over Iron Cove at Drummoyne**

This bridge is 468 m long and has four 19 m steel girder spans and seven 52 m steel truss spans. Replacement of asphaltic concrete running surface and treatment of the steel decking were carried out on the western side traffic lane.

**MR181 – over McDonald River at St. Albans**

This bridge is 116 m long and has four timber beam spans and two timber truss spans. Replacement of decking, sheeting, seven top chords and stringers was carried out.

**MR197 – Approach Bridge No. 1 to the Murray River at Howlong**

This bridge is 94 m long and has nine timber beam spans. Replacement of concrete and timber piles, girders, corbels and decking and the construction of a new span, commenced in 1975-76, were completed.

**MR197 – Approach Bridge No. 2 to the Murray River at Howlong**

This bridge is 54 m long and has seven timber beam spans. Replacement of sheeting, girders and two piles was carried out.

**MR197 – Approach Bridge No. 4 to the Murray River at Howlong**

This bridge is 26 m long and has three timber beam spans. Erection of a new span on the Victorian side was carried out.

**MR198 – over Kinchela Creek at Kinchela**

This bridge is 90 m long and has seven timber beam spans and one 21 m timber truss span. Major structural repairs were completed.

**MR199 – Captain Cook Bridge over Georges River at Taren Point**

This bridge is 507 m long and has seven box girder spans. Repairs to the southern abutment, commenced in 1975-76, were completed.

**MR200 – Ryde Bridge over Parramatta River at Uhrs Point**

This bridge is 346 m long with three 43 m steel truss spans and eight steel girder spans. The removal of the lift span counterweights, commenced in 1975-76, was completed during the year. The lift span is now fixed in the closed position.

**MR208 – over Hunter River at Muswellbrook**

This bridge is 162 m long and has two steel lattice girder spans and nine timber beam spans. Major structural timber repairs, commenced in 1975-76, were completed.

**MR209 – Lower Wybong Bridge over Wybong Creek at Hollydeen**

This bridge is 89 m long and has two timber truss spans and four timber beam spans. Repairs to timber trusses were carried out.

**MR222 – over the Wakool River at Tooleybuc**

This bridge is 89.4 m long and has two timber truss spans, a lift span and three timber beam spans. Replacement of top and bottom chords of trusses, cross girder and sheeting was carried out.

**MR226 – over Murray River at Cobram**

This bridge is 184.8 m long and has one steel lift span, two DeBurgh type trusses and 10 timber beam spans. Replacement of a top chord in truss span, a girder and some capwales was carried out.

**MR233 – Yamble Bridge over Cudgegong River, 24 km west of Gulgong**

This bridge is 118 m long and has one timber truss span and seven timber beam spans. Replacement of decking, girders and corbel was carried out.

**MR244 – over the Murrumbidgee River at Carrathool**

This bridge is 115.6 m long and has a bascule and lift span, two timber truss spans and four timber beam spans. Replacement of the top chord of the trusses, stringers, cross girders, piles, decking, sheeting, and painting of steel cylinders and timber superstructure were carried out.

**MR278 – over Murrumbidgee River at Taemas**

This bridge is 214 m long and has two 14 m steel beam spans and four 46 m steel truss spans. Repainting of the superstructure was carried out.

**MR301 – Dunmore Bridge over Paterson River at Woodville**

This bridge is 130 m long and has three timber truss spans, one steel lift span (not in operation) and one timber beam span. Repairs to structural timbers were commenced and will be completed in 1977-78.



**MR321 – over Murrumbidgee River at Darlington Point**

This bridge is 206 m long and has 15 timber beam spans, one 28 m timber truss span, one 21 m steel bascule span and a 20 m steel lift span. Replacement of piles, girders, corbels, cross girders, decking and sheeting, commenced in 1975-76, was continued.

**MR367 – over Barwon River at Mungindi**

This bridge is 62 m long and has one 28 m timber truss span and four timber beam spans. Replacement of sheeting, decking and truss and footway members, commenced in 1975-76, was completed.

**MR404 – Bridge No. 1 over Cuttaburra Creek, 136 km north west of Bourke**

This bridge is 78 m long and has 10 timber beam spans on a steel substructure. Replacement of decking, longitudinal sheeting and girders was carried out.

**MR503 – over Colo River, 24 km north of Windsor**

This low level structure is 75 m long with seven timber beam spans. Replacement of decking and sheeting was carried out.

**MR572 – White Bridge over Macquarie River at Narromine**

This bridge is 161 m long and has 11 timber beam spans and two truss spans. Replacement of decking, sheeting, kerbs, handrails, piles, girders and pile braces was commenced.

**MR599 – Northbridge Suspension Bridge over Long Bay at Northbridge**

This bridge is 152 m long and has two 21 m concrete beam spans and one 111 m concrete arch span. Repairs to the stone parapet were commenced.

## DEVELOPMENTAL ROAD

**DR1165 – Minore Bridge over Macquarie River at Rawsonville**

This bridge is 111 m long and has six timber beam spans and two truss spans. Replacement of decking, sheeting, kerbs, piles, girders and handrailing and repainting of the trusses, kerbs and handrailing were carried out.

## SECONDARY ROAD

**SR2034 – over Woronora River at Woronora**

This bridge is 86 m long and has eight 11 m timber beam spans. Replacement of a girder, four corbels and four supplementary steel piles was carried out.

## UNCLASSIFIED ROADS

**Unclassified Road – Ash Island Bridge over Hunter River at Hexham**

This bridge is 171 m long and has 13 steel beam spans. Repainting of steelwork was commenced and will be completed in 1977-78.

**Unclassified Road – Luskintyre Bridge over Hunter River, 3 km west of Lochinvar**

This bridge is 279 m long and has two steel truss spans and 15 timber beam spans. Structural timber repairs other than deck repairs on steel truss spans, commenced in 1975-76, were completed and the steelwork was repainted by Departmental contract.

**Unclassified Road – over Gwydir River at Pallamallawa on the Pallamallawa-Biniguy Road**

This bridge is 93.2 m long and has two 28 m timber truss spans and four timber beam spans. Replacement of three cross girders, truss chords, 12 piles and pedestrian refuge was commenced.

**Unclassified Road – over Mann River, 48.3 km east of Glen Innes on the Old Glen Innes-Grafton Road**

This is a low level bridge, 64.9 m long, and has seven timber beam spans. Replacement of the decking and the majority of the sheeting was carried out.

**Unclassified Road – Fladbury Bridge over Severn River, 29 km north of Glen Innes on the Glen Innes to Emmaville Road**

This is a low level bridge, 130.3 m long, and has 14 timber beam spans. Replacement of decking, sheeting, kerbs and corbels was commenced.

**Unclassified Road – over Goobang Creek at Condobolin**

This bridge is 62 m long and has four timber beam spans and one truss span. Replacement of girders, wales, piles, sheeting and decking was commenced.

**Unclassified Road – Pyrmont Bridge over Darling Harbour at Pyrmont**

This bridge is 370 m long and has twelve 25 m timber spans and two 34 m steel truss swing spans. Replacement of timber stringers and truss members and four timber piles, commenced in 1975-76, was completed.

## FERRIES

**Ferry over Richmond River at Woodburn – MR147**

This vessel is a 12 car steel hull ferry. Strengthening of the deck of the ferry was carried out so that the ferry service could carry the tri-axle semi-trailers used for the haulage of the cane harvest.

**Ferry over the Clarence River at Bluff Point – MR152**

This ferry is an eight car steel hull ferry. Replacement of flaps on the ferry was carried out so that the ferry service could carry the tri-axle semi-trailers used for the haulage of the cane harvest.

**Ferry over Hawkesbury River at Sackville – MR182**

This vessel is a 12 car steel hull ferry. A major overhaul of this vessel was carried out by the Department's own forces.

**Ferry over Murray River at Wymah – MR369**

This vessel is a two car timber hull ferry. A major hull overhaul was carried out by the Department's own forces.



# TRAFFIC ENGINEERING

## MEDIAN STRIPS

The location and lengths of divided carriageways constructed on Main Roads are listed below.

Road No.	Location	Length in km		
		Less than 1.5 m in width	1.5 m to 3 m in width	3 m and greater in width
F5	South Western Freeway — Yanderra to Alpine, 102.08 km to 115.52 km from Sydney			13.44
SH2	Hume Highway, 0.85 km to 1.35 km south of Goulburn	0.50		
SH2	Hume Highway, 8.99 km to 10.33 km south of Yass			1.34
SH2	Hume Highway, southern approach to Gundagai Bridge, 1.24 km to 2.30 km south of Gundagai			1.06
SH10	Pacific Highway from Macquarie Street to Oxford Street, Gateshead			0.70
SH10	Pacific Highway between Beeton Parade (south) and Railway Parade, Taree			0.29
TR95	Mt. Ousley Road, 78.80 km to 79.80 km from Sydney		1.00	
MR162	Mona Vale Road between Highlands Avenue and Cowan Road			0.67
MR174	Pittwater Road between Darley Street and Mona Vale Road			0.45
MR183	Gardeners Road, Tunstall Avenue to Isaac Smith Street			0.6
MR190	Joseph Street from Lewis Street to Amy Street			0.21
MR328	Warringah Road between Daines Parade and Pittwater Road			1.12
MR336	The entrance to Gosford Road near Bateau Bay Road			0.34
MR344	Wentworth Avenue, Southern Cross Drive to Bay Street	0.60		
SR2084	Seven Hills Road approaches to Seven Hills overbridge		0.37	0.08

### SUMMARY

	Length in km		
	Median less than 1.5 m in width	1.5 m but less than 3.0 m in width	3.0 m and greater in width
Total constructed in 1976-77	1.1	1.4	19.3
Total constructed in 1975-76	1.4	0.7	39.8
Totals as at 30.6.77	122.0	125.0	342.7
Totals as at 30.6.76	120.9	123.6	323.4

## CHANNELISATION OF INTERSECTIONS

Channelisation was completed at 42 intersections during the year while 30 intersections were reconstructed and improved. Work is in progress at a further 19 intersections and designs have been completed for 26 channelised intersections.

Details of intersections which have been channelised in permanent materials are listed below.

F5	South Western Freeway and Hume Highway deviation at Yanderra.	SH5	Great Western Highway and Reservoir Road, Prospect.
F5	South Western Freeway and Hume Highway at Aylmerton.	SH5	Great Western Highway and Ponds Road, Prospect.
SH2	Hume Highway, The Boulevard and Meredith Street, Bankstown.	SH7	Mitchell Highway and MR347, Trangie.
SH2	Hume Highway and Cowpasture Road, Lepington (painted medians).	SH9	High Street and Parallel Street, Maitland.
SH2	Hume Highway and Bringelly Road, Lepington.	SH10	Pacific Highway and Sydney Street, Gateshead.
SH2	Sydney Road and Long Street, North Goulburn.	SH10	Byron Street and TR65, Bangalow.
SH2	Clinton and Auburn Streets, Goulburn.	SH14	Edward Street and Lake Albert Road, Wagga Wagga.
SH2	New Deviation and Middle Street, South Gundagai.	SH21	Cobb Highway and Shaw Street, Moama.
SH2	New Deviation and South Street, South Gundagai.	SH23	Hugo Avenue and Rankin Drive, Birmingham Gardens.
		TR78	Olympic Way and Oura Road, North Wagga Wagga.
		MR158	Marsden Road and MR574 (Steward Street), Eastwood.
		MR160	Old Northern Road, Crane Road and Castle Street, Castle Hill.
		MR164 & MR174	Pittwater Road and Barrenjoey Road, Mona Vale.
		MR168	Forest Road at Stoney Creek Road, Peakhurst.



MR190	Rookwood Road and Boardman Street, Chullora.
MR192	Dennes Street, Moon Street and Farquhar Street, Wingham.
MR217	Five Islands Road and The Esplanade, Boolaroo.
MR223	Lambton Road, Curley Road and Brown Road, Broadmeadow.
MR309	Rydalmere Avenue and MR574 (Kissing Point Road), Dundas.
MR397	Wakehurst Parkway and Frenchs Forest Road.
MR515	Elizabeth Drive and MR608 (Copeland Street), Liverpool.
MR526	Racecourse Road and Barretts Lane Road, Orange.
SR2019	Clark Road at Kurraba Road and Rawson Street, Neutral Bay.
SR2027	Morwick Street, Railway Parade and Wentworth Road, Burwood.
SR2046	Lilyfield Road and James Street at SR2056 - Mary Street and Perry Street, Leichhardt.
SR2057	Church Street and Railway Overbridge approach, Lidcombe.
SR2068	The River Road, Marco Avenue and Sphinx Avenue, Revesby.
SR2070	Northwood Road and River Road West at Kenneth Street and Longueville Road (Blaxlands Cnr), Lane Cove.
SR2084	Seven Hills Road and Artillery Crescent, Seven Hills.
UNCL.	Henley Marine Drive, Arthur Street and Timbrell Drive, Rodd Point.
UNCL.	Bonds Road, Romilly Street and Talbot Street, Peakhurst.
UNCL.	Kendall Avenue and Uriara Street, Queanbeyan.
UNCL.	Epsom Road, Rothschild Avenue and Joyn-ton Avenue, Waterloo.

## BUS BAYS

The number of bus bays, and their locations, which have been provided on Main Roads are listed below.

SH5	Great Western Highway at Hazelbrook School, Hazelbrook.
SH10	20.0 km, 23.0 km, 36.1 km, 36.9 km, 47.9 km, 49.6 km, 51.1 km, 54.6 km, 55.5 km, 61.1 km, 70.3 km, 73.3 km, 73.9 km, 75.4 km, 76.9 km and 79.2 km north of Coffs Harbour, Ulmarra.
SH16	28.8 km, 29.7 km and 29.9 km west of Ballina.
TR68	Brewarrina Road, east of Tarcoon Street, Bourke.
TR74	103.5 km from Grafton.
MR325	The Esplanade near Albert Street, Speers Point.
MR534	Cabramatta Road at High Street, at Water Street and at Harrington Street.
UNCL.	Blakey Street, south of SH8, Cobar.

## SUMMARY

Total constructed, 1976-77	28
Total constructed, 1975-76	10
Total as at 30.6.77	156
Total as at 30.6.76	128

## CLIMBING LANES

The number and location of climbing lanes which have been constructed for slow moving vehicles on hills are listed below.

SH1	Princes Highway, southbound 43 km south of Nowra.
SH1	Princes Highway, northbound 44.5 km south of Nowra.
SH9	New England Highway at Black Hill, 3.5 km south of Muswellbrook, southbound.
SH9	New England Highway, approaches to Rose Valley Creek, 35.5 km to 36.2 km north of Tamworth.
SH9	New England Highway, approaches to Carlisle Gully, 62.5 km to 64.75 km north of Tamworth.
SH10	Pacific Highway at Wallarah Hill, 35.0 km to 36.0 km north of Gosford, northbound.
SH16	Bruxner Highway, 42.5 km to 43.1 km west of Ballina.
SH19	Monaro Highway, 82.25 km to 86.25 km south of Canberra.
SH19	Monaro Highway, 85.4 km to 86.4 km south of Canberra.
TR84	14.5 km east of Murrumburrah.
MR177	Appin Road between Appin and Bulli Pass, eastbound.
MR512	Heathcote Road, Woronora River to Princes Highway.
MR512	Heathcote Road, approach to New Illawarra Road.

## SUMMARY

Total constructed, 1976-77	13
Total constructed, 1975-76	11
Total as at 30.6.77	220
Total as at 30.6.76	207



## TRAFFIC SIGNALS

The number of Traffic Signal Installations completed and their locations are listed below.  
(Notations - V for vehicle actuated and P for pedestrian actuated, C for constructed, R for reconstructed and RM for removal from services.)

### LOCATION AND DATE SIGNALS PUT INTO SERVICE

Road No.	Location	Type	Date
F1 & SR2093	Brook Street and F1 on-loading ramp	V,C	27.5.77
F6 & F8	F6 and F8 Wollongong By-pass Road, Gwynneville	V,C	1.11.76
SH1 & MR227	Princes Highway and The Kingsway, Kirrawee	V,C	28.1.77
SH1	Princes Highway and Old Princes Highway, Engadine	V,C	11.3.77
SH1	Princes Highway, Smith and Union Streets, Tempe	V,C	5.4.77
SH1	Lysaght Street and Princes Highway, Fairy Meadow	V,C	21.2.77
SH1	Elliotts Road and Princes Highway, Fairy Meadow	V,C	14.3.77
SH1	Daisy Street and Princes Highway, Fairy Meadow	V,C	17.3.77
SH1 & MR513	Mt. Ousley Road and Princes Highway, Fairy Meadow	V,C	11.3.77
SH2	Hume Highway and Holden Street, Ashfield	V,C	11.11.76
SH2 & SR2065	Hume Highway and Victoria Street, Ashfield	V,C	11.11.76
SH2	Hume Highway, Weldon Street and Claremont Road, Burwood	V,C	6.8.76
SH2	Hume Highway and Wallis Avenue, Strathfield	V,C	25.2.77
SH2	Hume Highway, P.T.C. Workshop		
	South-West Waterloo Road, Chullora	V,C	10.12.76
SH2 & SR2090	Hume Highway and Boronia Road, Greenacre	V,C	7.10.76
SH2	Hume Highway, Jacob Street and Beresford Avenue, Bankstown	V,C	13.9.76
SH2	Hume Highway, Meredith Street and The Boulevard, Bankstown	V,C	9.8.76
SH2	Hume Highway and Miller Road, Bass Hill	V,C	12.10.76
SH2	Hume Highway and Mannix Street, Liverpool	V,C	20.6.77
SH2	Hume Highway and Bigge Street, Liverpool	V,C	20.6.77
SH2	Hume Highway, Reilly Street and Congressional Avenue, Liverpool	V,C	14.7.76
SH2	Auburn Street and Clinton Street, Goulburn	V,C	23.7.76
SH5	Great Western Highway and Toongabbie Road, Prospect	V,C	16.6.77
SH10	Pacific Highway and Berry Street, North Sydney	V,C	15.11.76
SH10	Pacific Highway and Railway Street, Chatswood	V,C	24.2.77
SH10	Pacific Highway, William Street, and Wyvern Avenue, Chatswood	V,C	16.11.76
SH10	Pacific Highway, Grosvenor Road and Burleigh Street, Lindfield	V,C	16.9.76
SH10	Pacific Highway and Marian Street, and Buckingham Street, Killara	V,C	2.12.76
SH10	Pacific Highway and Ashley Street, Hornsby	V,C	6.4.77
SH10	Mann Street, Erina Street East, Gosford	V,C	26.10.76
SH10	Mann Street and William Street Pedestrian Plaza, Gosford	P,C	26.10.76
SH10	Pacific Highway and Sydney Street, Gateshead	V,C	6.4.77
SH10	Hunter Street and Stewart Avenue, Newcastle West	V,C	22.6.77
SH10	Maitland Road, Carrington and Silsoe Streets, Mayfield	V,C	27.6.77
SH13	Pennant Hills Road and Normanhurst Road, Normanhurst	V,C	27.6.77
SH13 & SR2035	Pennant Hills Road and Boundary Road, Pennant Hills	V,C	17.11.76
SH13 & MR139	Pennant Hills Road and Beecroft Road East, Beecroft	V,C	5.5.77
SH13 & MR156	Pennant Hills Road and Castle Hill Road, Pennant Hills	V,C	8.3.77
SH13	Pennant Hills Road and Jenkins Road, Carlingford	V,C	14.2.77
SH13	Pennant Hills Road and Adderton Road, Carlingford	V,C	15.2.77
SH13 & CR5037	Pennant Hills Road and North Parramatta By-Pass, Ramp 1	V,C	6.6.77
SH13	Woodville Road and Orchardleigh Street, Guildford	V,C	31.8.76
SH14	Lake Albert Road, Edward and Tarcutta Streets, Wagga Wagga	V,C	8.12.76
SH23 & MR605	Rankin Drive, Moore Street and Hugo Avenue, Birmingham Gardens	V,C	4.4.77
TR82	Brisbane and Broadmeadow Roads, Broadmeadow	V,C	21.7.76
MR139	Blaxland Road and Lovell Road, Eastwood	V,C	1.4.77
MR159	Pittwater Road at Collingwood Street, Manly	P,C	9.5.77
MR160	Old Northern Road, Castle Street, and Crane Road, Castle Hill	V,C	20.9.76
MR164	Miller Street and McLaren Street, North Sydney	V,C	18.8.76
MR164	Miller and Ridge Streets, North Sydney	V,C	31.3.77
MR164	Military Road and Cowles Road, Spit Junction	V,C	20.10.76
MR164	Condamine Street and Balgowlah Road, Balgowlah	V,C	28.3.77
MR164 & MR159	Condamine Street and Old Pittwater Road, North Manly	V,C	24.1.77
MR164	Pittwater Road and South Creek Road, Dee Why	V,C	23.9.76
MR164	Pittwater Road and Ocean Grove, Collaroy	V,C	30.11.76
MR164	Pittwater Road and McTier Street, Narrabeen	V,C	25.5.77
MR164	Pittwater Road and Garden Street, North Narrabeen	V,C	11.10.76
MR164 & MR162	Pittwater Road and Mona Vale Road, Mona Vale	V,C	1.10.76
MR164 & MR174	Barrenjoey Road and Pittwater Road, Mona Vale	V,C	11.10.76
MR164	Barrenjoey Road, Park Street and Golf Avenue, Mona Vale	V,C	18.12.76
MR165	Victoria Road and Crown Street, Henley	V,C	21.4.77
MR167	New Canterbury Road and Duntroon Street, Hurlstone Park	V,C	4.1.77
MR167	Canterbury Road and Wonga Street, Canterbury	V,C	20.9.76
MR168	Forest Road and Croydon Road, Hurstville	V,C	16.12.76
MR168 & SR2041	Forest Road and Stoney Creek Road, Riverwood	V,C	7.6.77



# LOCATION AND DATE SIGNALS PUT INTO SERVICE – continued

Road No.	Location	Type	Date
MR170	Botany and Epsom Roads, Zetland	V,C	29.3.77
MR170	Botany Road and Collins Street, Beaconsfield	V,C	13.5.77
MR170	Botany Road and Harcourt Parade, Rosebery	V,C	25.8.76
MR170	Botany Road and Banksia Street, Botany	V,C	12.10.76
MR171	Anzac Parade and High Street, Kensington	V,C	5.8.76
MR171	Anzac Parade and Barker Street, Kingsford	V,C	25.11.76
MR171	Anzac Parade, north of Rainbow Street, Kingsford	P,C	19.1.77
MR171 & MR317	Bunnerong Road and Fitzgerald Avenue, Pagewood	V,C	1.8.77
MR183	Gardeners Road east of Doncaster Avenue, Kingsford	P,C	13.5.77
MR184	Windsor Road, Junction Road and Linton Street, Baulkham Hills	V,C	11.1.77
MR184	Church Street and Barney Street, Parramatta	V,C	19.7.76
MR227	The Kingsway, Gympsea Bay Road, Milburn Avenue, Gympsea	V,C	23.2.77
MR326	Turton and Georgetown Roads, Georgetown	V,C	6.7.76
MR328	Archer Street and Boundary Street, Roseville	V,C	25.11.76
MR328	Warringah Road, Currie Road and Brown Street, Forestville	V,C	8.12.76
MR328	Warringah Road and Willandra Road, Beacon Hill	V,C	11.8.76
MR339	Old South Head Road and Dover Road, Rose Bay	V,C	3.12.76
MR373	Epping Road and Pembroke Street, Epping	V,C	16.6.77
MR395	Lyons Road and Brent Street, Russell Lea	V,C	25.8.76
MR508 & MR168	Henry Lawson Drive, Forest Road and Jacques Avenue, Peakhurst	V,C	27.8.76
MR522	Shellharbour Road and Queen Street, Warilla	V,C	10.5.77
MR522	Shellharbour and Lakes Entrance Roads, George Street, Warilla	V,C	29.4.77
MR527	Hillsborough and Macquarie Roads, Warners Bay	V,C	30.5.77
MR599	Eastern Valley Way and Smith Street, Middle Cove	V,C	2.5.77
SR2007	Gleeson and Burrows Avenues, Sydenham	V,C	5.4.77
SR2014	Harrow Road and Watkin Street, Rockdale	V,C	5.1.77
SR2019	Ben Boyd Road and Kurraba Road, Neutral Bay	V,C	26.8.76
SR2036	Belgrave Street and Young Street, Cremorne	V,C	15.11.76
SR2036	Ourimbah Road and MacPherson Street, Spit Junction	V,C	20.10.76
SR2046	Lilyfield Road and Mary Street and James Street, Lilyfield	V,C	11.2.77
SR2050	Belmore Road and Hannons Road, Riverwood	V,C	20.12.76
SR2066	O'Connell Street and Victoria Road, Parramatta	V,C	23.11.76
SR2066	Marsden Street and Campbell Street, Parramatta	V,C	9.12.76
SR2068	River Road and Uranus Road, Revesby	V,C	28.4.77
SR2070	River Road West, Longueville Road and Northwood Road, Lane Cove	V,C	23.9.76
SR2070	Northwood Road and Kenneth Street, Northwood	V,C	23.9.76
SR2073	Wigram Road and Minogue Crescent, Glebe	V,C	10.3.77
SR2075	President Avenue and Kareena Road, Miranda	V,C	11.3.77
SR2075	Captain Cook Drive and Cawarra Road, Caringbah	V,C	27.5.77
SR2077	Abercrombie Street and Lawson Street, Chippendale	V,C	22.9.76
SR2092	Mowbray Road and Archer Street, Chatswood	V,C	16.12.76
SR2092 & SR2093	Mowbray Road and Alpha Road, Willoughby	V,C	15.9.76
UNCL.	Burwood Road and Leylands Parade, Belmore	V,C	29.11.76
UNCL.	Haldon Street and The Boulevarde, Lakemba	V,C	2.12.76
UNCL.	Broadarrow Road and Hannons Road, Narwee	V,C	20.12.76
UNCL.	Comenarra Parkway and Fox Valley Road, Wahroonga	V,C	11.1.77
UNCL.	Huntley Street and Euston Road, Alexandria	V,C	7.9.76
UNCL.	Phillip Street and Moorehead Street, Redfern	V,C	10.2.77
UNCL.	Illawarra Road, Addison Road and Agar Street, Marrickville	V,C	20.8.76
UNCL.	Lancaster Street, Newtown Road and Monash Street, Blacktown	V,C	13.5.77
UNCL.	Victoria Street and Shaftesbury Road, Burwood	V,C	6.8.76
UNCL.	Jenkins Road, Oakes Road and North Rocks Road, Carlingford	V,C	9.7.76
UNCL.	Clyde Street and Mona Street, Granville	V,C	6.1.77
UNCL.	North Rocks Road at Deaf and Blind School, North Rocks	V,C	10.8.76
UNCL.	Smith Street and George Street, Parramatta	V,C	23.11.76

## LOCATION AND DATE SIGNALS RECONSTRUCTED

Road No.	Location	Type	Date
SH1 & MR168	Princes Highway and Forest Road, Arncliffe	V,R	20.11.76
SH1	Princes Highway at entrance to South Side Plaza, Rockdale	V,R	4.12.76
SH1	Princes Highway and Jubilee Avenue, Carlton	V,R	6.4.77
SH1	Balgownie Road and Princes Highway, Fairy Meadow	V,R	22.3.77
SH1	Cabbage Tree Lane and Princes Highway, Fairy Meadow	V,R	24.3.77
SH10 & MR328	Boundary Street and Pacific Highway, Roseville	V,R	5.11.76
SH10	Kissing Point Road and Pacific Highway, Turrumurra	P,R	13.5.77
MR164 & SR2051	Spit Road and Parriwi Road (North), The Spit	V,R	1.9.76
MR164	King Street and Condamine Street, Manly Vale	V,R	3.1.77



## LOCATION AND DATE SIGNALS RECONSTRUCTED - continued

Road No.	Location	Type	Date
MR165 & MR395	Victoria Road and Lyons Road, Drummoyne	V,R	28.5.76
MR172 & MR593	Oxford and South Dowling Streets, Darlinghurst	V,R	11.11.76
MR199	Rocky Point Road and Grey Avenue, Kogarah	V,R	11.1.77
MR199 & MR194	Rocky Point Road and Ramsgate Road, Ramsgate	V,R	3.9.77
MR315	Punchbowl and Burwood Roads, Belfield	V,R	4.5.77
MR315	King Georges Road and Lakemba Street, Wiley Park	V,R	25.7.76
MR315	King Georges Road and The Boulevarde, Wiley Park	V,R	12.12.76
MR315 & MR167	King Georges Road and Canterbury Road, Wiley Park	V,R	30.6.77
MR373 & MR166	Epping Road and Centennial Avenue, Lane Cove	V,R	28.6.77
SR2041	Stoney Creek and Preddeys Roads, Bexley	V,R	16.3.77
SR2064 & SR2056	Elizabeth Street and Frederick Street, Ashfield	V,R	20.11.76
SR2064	Elizabeth Street and Bland Street, Ashfield	V,R	10.12.76
SR2093 & SR2091	Brook Street and Chandos Street, Naremburn	V,R	27.5.77

## LOCATION AND DATE SIGNALS REMOVED FROM SERVICE

Road No.	Location	Type	Date
F8 & SH1	F8, Wollongong By-pass Road and Princes Highway, Fairy Meadow	V,R	25.3.77
SH1	Princes Highway, south of Lysaght Street, Fairy Meadow	P,RM	22.2.77
SH2	Hume Highway, west of Jacobs Street, North Bankstown	P,RM	13.9.76
SH2	Hume Highway, west of Rookwood Road, Bankstown	P,RM	9.8.76
SH2	Hume Highway, west of Arundel Road, Bass Hill	P,RM	12.10.76
SH10	Pacific Highway, north west of Grosvenor Road, Lindfield	P,RM	16.9.76
SH10	Pacific Highway, north of The Crescent, Gateshead	P,R	Feb. 1977
SH10	Pacific Highway and Oxford Street, Gateshead	V,R	Feb. 1977
SH13	Woodville Road at Old Guildford Public School, Guildford	P,RM	31.8.76
TR82 & MR223	Newcastle Road, Croudace and Dent Streets, Lambton	V,R	June 1977
MR180	Old Northern Road, north east of Showground Road, Castle Hill	P,RM	20.9.76
MR164 & SR2051	Spit Road and Parriwi Road (South), Mosman	V,RM	1.9.76
MR166	Forest Road, north of Croydon Road, Hurstville	P,RM	16.12.76
MR190	Rookwood Road and Bruncker Road, Yagoona	V,R	24.3.77
MR220	Vincent and Cooper Streets, Cessnock	V,R	18.6.77
MR315	King Georges Road, north of Maher Street, South Hurstville	P,RM	1.12.76
MR326	Park Avenue and Northcott Drive, Kotara	V,R	31.10.76
MR326 & MR188	St. James and Bridges Roads, New Lambton	V,R	29.5.77
MR328	Warringah Road, north of Brown Street, Forestville	P,RM	8.12.76
MR336	Mann and Donnison Streets, Gosford	V,R	15.10.76
MR339	Old South Head Road, north east of Beaumont Street, Rose Bay	P,RM	3.12.76
MR527 & MR223	Macquarie and Cardiff Roads, Cardiff	V,R	11.10.76

## SUMMARY

Traffic Signals	Vehicle Actuated	Pedestrian Actuated	Total
Total constructed, 1976-77	116	4	120
Total constructed, 1975-76	109	9	118
Total removed from service, 1976-77	1	11	12
Total removed from service, 1975-76	2	9	11
Net Total, 1976-77	115	-7	108
Net Total, 1975-76	107	0	107
Total vehicle actuated signal as at 30.6.77			1126
Total vehicle actuated signal as at 30.6.76			1011
Total pedestrian actuated signal as at 30.6.77			246
Total pedestrian actuated signal as at 30.6.76			253
Total Traffic Signals, 30.6.77			1372
Total Traffic Signals, 30.6.76			1264
Total Traffic Signals Reconstructed			
1976-77			32
1975-76			43



## TEMPORARY SIGNALS AT WORKS IN PROGRESS

Road No.	Location	Date
F5	South Western Freeway over Main Southern Railway Line, Campbelltown	1.11.76
SH10	Pacific Highway at Heron's Creek Bridge, 56.6 km north of Taree	28.2.77
SH18	Castlereagh Highway at both ends of Bridge over Namoi River, Walgett	15.11.76
SH20	Riverina Highway at Howlong Bridge over Murray River, Howlong	1.11.76

## NUMBER OF TRAFFIC SIGNALS CO-ORDINATED

Cable-less co-ordinated systems installed at:

(a) Waterloo	4 sites
(b) Fairy Meadow	7 sites
(c) Mosman	11 sites
(d) Carlingford	2 sites
(e) Granville	2 sites
(f) Mona Vale	3 sites
(g) Lewisham	9 sites
(h) Concord West	7 sites
(i) North Ryde	5 sites
(j) Liverpool	2 sites

## PRIORITY ROADS

The length and location of classified roads and other principal traffic routes which have been converted to priority road conditions are listed below.

Road No.	Location	km
SH1	Princes Highway from May Street, St. Peters to Rocky Point Road, Kogarah	8.7
SH1	Princes Highway from Farrell Road, Bulli to Huntley Road, Yallah	27.0
SH2	Hume Highway from Parramatta Road to Greenhills Street at Croydon Park	2.7
SH2	Hume Highway from Greenhills Street at Croydon Park to Woodville Road, Villawood	12.0
SH7	Mitchell Highway from Molong/Canobolas Shire boundary 19 km west of Orange to Molong/Wellington Shire boundary, 59 km north of Orange	38.0
SH10	Pacific Highway from Boundary Street, Chatswood to Pennant Hills Road at Peaces Corner, Waitara	13.0
SH10	Pacific Highway from Alison Road, Wyong to Parbury Road, Swansea	36.0
MR159	Sydney Road/Belgrave Street/Pittwater Road from Condamine Street, Balgowlah to William Street, Brookvale	6.3
MR166	Centennial Avenue/Burns Bay Road from Epping Road, Lane Cove to Gladesville Bridge Ramp, Gladesville	4.0
MR167	Milperra Road from Henry Lawson Drive, Milperra to The River Road, Bankstown	4.0
MR168	Forest Road from Princes Highway, Arncliffe to Boundary Road, Peakhurst	9.6
MR170	Regent Street/Botany Road from Cleveland Street, Redfern to Bourke Street, Zetland	2.6

## PRIORITY ROADS - continued

Road No.	Location	km
MR171	Flinders Street/Anzac Parade, from Oxford Street, Taylor Square to Kingsford Junction, Kingsford	6.3
MR172	Bondi Road/Campbell Parade from Oxford Street, Bondi Junction to Queen Elizabeth Drive, North Bondi	3.0
MR174	McCarrs Creek Road/Pittwater Road from Terrey Hills to Mona Vale	14.4
MR183	Canal Road/Ricketty Street/Kent Road/Gardeners Road from Princes Highway, St. Peters to Bunnerong Road at Kingsford Junction	5.6
MR184	Windsor Street/Richmond Road from East Market Street, Richmond to George Street, Windsor	6.0
MR194 & SR2080	General Holmes Drive/Grand Parade/Sandringham Street from Botany Road, Mascot to Rocky Point Road, Ramsgate	10.5
MR194	Mill Pond Drive from General Holmes Drive to Botany Road, Mascot	0.2
MR220	Palmers Road/Awaba Road from MR392, Freeman's Waterhole to The Boulevard, Toronto	13.0
MR227	Port Hacking Road from Princes Highway, Sylvania to Kingsway, Miranda	3.8
MR227	Kingsway from Princes Highway, Gympie to Cronulla Street, Cronulla	7.7
MR318	Richmond Road/Marlborough Road from Arthur Street to Parramatta Road at Homebush West	1.0
MR325	Redhead Road/Dudley Road from John Fisher Road, Belmont North to Dudley Road at Charlestown	12.0
MR325	The Esplanade from T.C. Firth Avenue, Boolaroo to intersection with Croudace Street at Warners Bay	5.0
MR325	Warners Bay Road from intersection with MR527, Croudace Street at Warners Bay to Pacific Highway at Gateshead	6.0
MR328	Warringah Road from Frenchs Forest Road, Beacon Hill to Pittwater Road, Brookvale	1.7
MR373	Epping Road from Blaxland Road, Epping to Divisional Boundary at Lane Cove River, East Ryde	7.0
MR395	Great North Road/Lyons Road from Parramatta Road, Five Dock to Victoria Road, Drummoyne	3.8
MR400	Military Road/Bradleys Head Road from Spit Junction to Bradleys Head	3.4
MR523	Pymont Bridge Road from Parramatta Road, Camperdown to Union Street, Pymont	2.5
MR525	Liberator General San Martin Drive at Terrey Hills	12.1
MR527	Croudace Street/Macquarie Road from Pacific Highway, Belmont to the intersection with MR223, Cardiff	13.0
MR530	Howard Avenue/The Strand/Griffin Road/Adams Street/Oliver Street from Pittwater Road, Dee Why to Pittwater Road, Queenscliff	5.2
MR549	Georges River Road/Milton Street from Hume Highway to Greenhills Street at Croydon	1.0
MR549	Georges River Road from Greenhills Street at Croydon Park to Coronation Parade, Belfield	2.0



# **PRIORITY ROADS — continued**

Road No.	Location	km
MR599	Eastern Valley Way/Sailors Bay Road/Strathallen Avenue/Miller Street from Boundary Street, East Roseville to Falcon Street, Cammeray .. .. .	6.4
SR2008	O'Riordan Street from Botany Road, Zetland to Joyce Drive, Mascot ..	3.5
SR2013	Ramsay Street/Marion Street/Leichhardt Street/Styles Street/Collins Street from Great North Road to Johnston Street, Annandale .. .. .	3.3
SR2014	Frederick Street/Watkin Street/Harrow Road/Bexley Road/Beamish Street/Brighton Avenue from Rawson Street, Rockdale to Georges River Road, Croydon Park .. .. .	8.9
SR2018	Old Canterbury Road from Griffiths Street, Dulwich Hill to Parramatta Road, Leichhardt .. .. .	2.4
SR2021	William Street from Kingsgrove Road, South Belmore to Homer Street, Earlwood .. .. .	2.4
SR2033	Gladesville Road/Ryde Road from Durham Street, Hunters Hill to Pittwater Road, Gladesville .. .. .	1.7
SR2040	Milton Street from Georges River Road to Council Boundary, south of Palace Street, Ashfield .. .. .	0.3
SR2040	Milton Street/King Street/Jeffrey Street from Council Boundary, south of Palace Street, Ashfield to Canterbury Road, Canterbury .. .. .	1.8
SR2041	Stoney Creek Road from Forest Road, Bexley to Forest Road, Riverwood .. .. .	5.6
SR2046	Tebbutt Street/Foster Street/Darley Road/James Street from Parramatta Road, Leichhardt to Lilyfield Road, Lilyfield .. .. .	1.7
SR2046	Brenan Street/Railway Parade from Balmain Road to The Crescent at Lilyfield .. .. .	1.3
SR2056	Wattle Street/Dobroyd Parade/Lilyfield Road/Mary Street/Perry Street/Balmain Road/Darling Street from Parramatta Road, Haberfield to Elliott Street, Balmain .. .. .	5.6
SR2056	Frederick Street/Thomas Street/Milton Street, north from Parramatta Road, Ashfield to Liverpool Road (Hume Highway) at Croydon .. .. .	1.7
SR2059	Fairlight Street/Queens Road/Gipps Street from Great North Road, Five Dock to Divisional Boundary near Taylor Street, Canada Bay .. .. .	1.8
SR2082	Henry Street from Penrith By-pass between Riley Street and Colless Street, Penrith .. .. .	1.5
SR2085	Blacktown Road from Wall Park Avenue, Seven Hills to Great Western Highway at Prospect .. .. .	3.0
SR2086	Allen Street/Wollongong Road from Princes Highway, Arncliffe to Forest Road, Bexley .. .. .	2.4
SR2087	Pemberton Street from Arthur Street, Homebush West to Liverpool Road (Hume Highway), South Strathfield .. .. .	2.0
SR2089	Ocean Avenue from New South Head Road, Edgecliff to William Street, Double Bay .. .. .	0.8

# **PRIORITY ROADS — continued**

Road No.	Location	km
SR2089	William Street from Ocean Avenue to New South Head Road at Double Bay .. .. .	0.6
SR2095	Westbourne Street from Victoria Road to Bayswater Road at Drummoyne .. .. .	0.3
SR2095	Bayswater Road from Westbourne Street to Lyons Road at Drummoyne .. .. .	0.4
SR2095	Marlborough Street from Westbourne Street to Lyons Road at Drummoyne .. .. .	0.4
UNCL.	Frenchs Forest Road from Wakehurst Parkway to Sydney Road at Seaforth .. .. .	1.4
UNCL.	Balmain Road from Perry Street, Lilyfield to Parramatta Road, Petersham .. .. .	1.8
UNCL.	Darley Road from Alison Road to Carrington Road, Randwick .. .. .	2.1
UNCL.	Rainbow Street from Anzac Parade, Kingsford to Denning Street, Coogee .. .. .	2.7
UNCL.	Clovelly Road from Darley Road, Randwick to Clovelly Bay .. .. .	2.2
UNCL.	York Road/Avoca Street from Oxford Street, Woollahra to Anzac Parade, Kingsford .. .. .	5.6
UNCL.	Campbell Parade/Military Road from Queen Elizabeth Drive, North Bondi to Old South Head Road, Vaucluse .. .. .	4.4
UNCL.	Ocean Street from Oxford Street, Woollahra to New South Head Road, Edgecliff .. .. .	1.3
UNCL.	Harris Street from Broadway, Ultimo to Miller Street, Pyrmont .. .. .	2.4
UNCL.	Cronulla Street from Kingsway, Miranda to Waratah Street, Cronulla .. .. .	0.6
UNCL.	Homebush Road/Water Street from Broughton Road, Strathfield to Punchbowl Road, Belfield .. .. .	4.0
UNCL.	Merrylands Road from Greystanes Road, Greystanes to Pitt Street, Mombri Street, Loftus Street and Merrylands Road to Woodville Road, Merrylands .. .. .	7.0
UNCL.	Balmoral Street/Reservoir Road from Newton Road, Blacktown to Great Western Highway .. .. .	3.0
UNCL.	Lytton Street/Lancaster Street from Richmond Road to Newton Road, Blacktown .. .. .	2.0
UNCL.	Newton Road from Lancaster Street to Main Street at Blacktown .. .. .	2.0
UNCL.	Main Street/Blacktown Road from Newton Road, Blacktown to Wall Park Avenue, Seven Hills .. .. .	1.0
UNCL.	Douglas Road, Quakers Hill from Railway Road to Quakers Road .. .. .	1.0
UNCL.	Quakers Road/Davis Road from Douglas Road, Quakers Hill to Richmond Road, Blacktown .. .. .	4.0
UNCL.	Turner Street from Sunnyholt Road to Northcott Road at Lalor Park .. .. .	1.0
UNCL.	Northcott Road from Turner Street, Lalor Park to Johnson Avenue, Seven Hills .. .. .	2.5
UNCL.	Johnson Avenue from Northcott Road to Seven Hills Road, Seven Hills .. .. .	0.5
UNCL.	Sackville Street from Sunnyholt Road to Wheeler Street at Blacktown .. .. .	1.0
UNCL.	Wheeler Street from Sackville Street, Blacktown to Northcott Road, Lalor Park .. .. .	1.0



CLEARWAYS

	Location	A.M. 6.30-9.30	P.M. 3.30-6.30	Both A.M. & P.M.
MR167	Milperra/Canterbury Road between Chapel Road and Henry Lawson Drive .. .. .			1.5 km
MR190	St. Hilliers Road between Rawson Street and Parramatta Road			1.0 km
SR2080	Sandringham Street from Rocky Point Road to Grand Parade (Eastbound) .. .. .	1.3 km		
SR2080	Sandringham Street from Rocky Point Road to Grand Parade (Westbound) .. .. .		1.3 km	
	TOTAL: .. .. .	1.3 km	1.3 km	2.5 km

SPEED ZONES

Lengths of speed zoning and extension of speed zones are listed below.

Particulars	New Speed Zone (km)	Extension of Speed Zone (km)
Total 60 km/h speed zone, 1976-77 .. .. .	24	10
Total 80 km/h speed zone, 1976-77 .. .. .	25	8
Total 100 km/h speed zone, 1976-77 .. .. .	14	0
Total 110 km/h speed zone, 1976-77 .. .. .	11	0

LINEMARKING

The length of longitudinal linemarking and the area of other marking undertaken during the year.

Particulars	Unit	New	Remarking
Longitudinal lines marked, 1976-77 .. .. .	km	1529	34504
Transverse lines and zebra crossings, symbols marked, 1976-77 ..	m <sup>2</sup>	6906	86110

SIGNS

The number of new and replacement signs erected during the year are listed below.

Particulars	New	Replacement
Total number of signs erected, 1976-77 .. .. .	20,500	22,400



# WIDENING OF METROPOLITAN MAIN ROADS

During the year ended 30 June 1977 —

1. Sixty plans (in 122 sheets) were prepared and lodged at the Registrar General's Department, preparatory to acquisition for road widening purposes within the Metropolitan area.
2. Six realignment schemes, involving 6.83 km of road, were gazetted during the year, together with 38 resumptions of land necessary to implement widening schemes.
3. The principal routes in the Metropolitan Area (excluding Freeways), on which property was being acquired during the year, are as follows:
 

SH2	Hume Highway. Improvement of intersection with Hector Street, Bass Hill. Municipality of Bankstown.	MR183	Gardeners Road. Between Bunnerong Road and Slattery Place. Municipalities of Botany and Randwick.
SH5	Great Western Highway. Between Millen Street and French Street. City of Penrith.	MR190	St. Hilliers Road. Between Hall Street and Parramatta Road (SH5). Municipality of Auburn.
SH10	Pacific Highway. Asquith to Mt. Ku-ring-gai. Shire of Hornsby.	MR190	Joseph Street. Between Georges Avenue and New Street. Municipality of Auburn.
SH13	Pennant Hills Road. Intersection with MR158 — Marsden Road. City of Parramatta.	MR190	Rookwood Road. Between Lewis Street and McMillan Street. Municipality of Bankstown.
MR160	Old Northern Road, Dural. Shire of Hornsby.	MR309	Rydalmere Avenue. Intersections with MR165 — Victoria Road and MR574 — Kissing Point Road. City of Parramatta.
MR162	Lane Cove Road, Ryde Road and Mona Vale Road. Ryde to St. Ives. Municipalities of Ryde and Ku-ring-gai.	MR315	Punchbowl Road. Between Juno Parade and Coronation Parade. Municipality of Strathfield.
MR164	Military Road. Laycock Street to Wycombe Road. Municipality of North Sydney.	MR315	King Georges Road. Between Lakemba Street and Roselands Avenue. Municipality of Canterbury.
MR167	Canterbury Road. Intersection with SR2061 — Fairfield Road. Municipality of Bankstown.	MR318	Marlborough Road and Richmond Road. Flemington. Municipality of Strathfield.
MR169	Bay Street. Between Moate Avenue and The Grand Parade. Municipality of Rockdale.	MR515	Elizabeth Drive. Between Copeland Street and Cabramatta Creek. City of Liverpool.
MR172	Oxford Street. Bondi Junction By-Pass. Municipality of Woollahra.	MR515	Elizabeth Drive. Between Cabramatta Creek and Edensor Park. City of Liverpool and Municipality of Fairfield.
MR173	New South Head Road. Intersection with Ocean Street. Municipality of Woollahra.	MR608	Copeland Street. City of Liverpool.
		SR2061	Davies Road, Padstow. Municipality of Bankstown.
		SR2081	Rutledge Street and First Avenue. Railway overbridge, Eastwood. Municipality of Ryde.
		CR5015	Briens Road. Between Windsor Road and Kleins Road. City of Parramatta.
		CR5016	Dilke Road, Padstow. Municipality of Bankstown.



# BITUMINOUS SURFACING COMPLETED DURING THE YEAR ENDED 30 JUNE 1977

## SCHEDULED ACCORDING TO ROAD CLASSIFICATIONS

TABLE 1 - ROAD KILOMETRES

Nature of Work	Free-ways	State H'ways	Trunk Roads	Main Roads	Second. Roads	Tourist Roads	Develop. Roads	Unclass. Roads	All Rds Sub-Tot
1. Initial Surfacing									
A. Prime	0.00	2.55	0.00	4.07	0.00	0.00	0.00	0.00	6.62
B. Primer Seal	0.00	7.50	0.00	0.70	0.00	0.00	0.00	0.00	8.20
C. Sprayed Seal	0.00	22.64	21.52	47.39	0.00	0.00	0.00	1.20	92.75
D. Enrichment Reseal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E. Slurry Seal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F. Plant Mix (Bitumen Binder)	13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.50
G. Plant Mix (Tar Binder)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub Total	13.50	32.69	21.52	52.16	0.00	0.00	0.00	1.20	121.07
2. Surfacing Lengths Primed Before Year									
A. Prime	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B. Primer Seal	0.00	0.00	0.00	8.60	0.00	0.00	0.00	0.00	8.60
C. Sprayed Seal	0.00	22.23	13.66	14.11	0.00	0.00	0.00	0.00	50.00
D. Enrichment Reseal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E. Slurry Seal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F. Plant Mix (Bitumen Binder)	0.00	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.31
G. Plant Mix (Tar Binder)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub Total	0.00	22.54	13.66	22.71	0.00	0.00	0.00	0.00	58.91
3. Restoration After Widening/Strengthening									
A. Prime	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B. Primer Seal	0.00	21.39	0.00	0.24	0.00	0.00	0.00	0.00	21.63
C. Sprayed Seal	0.00	137.98	13.73	47.59	4.97	0.00	4.40	0.00	208.67
D. Enrichment Reseal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E. Slurry Seal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F. Plant Mix (Bitumen Binder)	0.00	8.81	6.21	8.59	2.84	0.00	0.00	0.74	27.19
G. Plant Mix (Tar Binder)	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.20
Sub Total	0.00	168.18	20.14	56.42	7.81	0.00	4.40	0.74	257.69
4. Restoration After Adding Lanes									
A. Prime	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B. Primer Seal	0.00	0.54	0.94	0.00	0.00	0.00	0.00	0.00	1.48
C. Sprayed Seal	0.00	13.09	0.00	2.90	0.34	0.00	0.00	0.00	16.33
D. Enrichment Reseal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E. Slurry Seal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F. Plant Mix (Bitumen Binder)	0.00	7.67	0.00	12.23	3.43	0.00	0.00	0.00	23.33
G. Plant Mix (Tar Binder)	0.00	0.85	0.00	0.00	0.00	0.00	0.00	0.00	0.85
Sub Total	0.00	22.15	0.94	15.13	3.77	0.00	0.00	0.00	41.99
5. Restoration After New Alignment/Grade									
A. Prime	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B. Primer Seal	0.00	10.97	2.81	3.30	0.00	0.00	0.00	0.00	17.08
C. Sprayed Seal	0.00	47.74	8.34	6.81	0.00	0.24	0.00	0.00	63.13
D. Enrichment Reseal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E. Slurry Seal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F. Plant Mix (Bitumen Binder)	0.00	22.29	1.49	2.38	0.00	0.00	0.00	0.00	26.16
G. Plant Mix (Tar Binder)	0.00	1.82	0.00	0.00	0.00	0.00	0.00	0.00	1.82
Sub Total	0.00	82.82	12.64	12.49	0.00	0.24	0.00	0.00	108.19
6. Maintenance Resurfacing									
A. Prime	0.00	0.00	0.00	1.40	0.00	0.00	0.00	0.00	1.40
B. Primer Seal	0.00	5.72	0.00	0.00	0.00	0.00	0.00	0.00	5.72
C. Sprayed Seal	0.00	759.29	168.74	381.33	3.23	4.66	0.00	0.00	1317.25
D. Enrichment Reseal	0.00	45.90	1.93	2.92	0.00	0.00	0.00	0.00	50.75
E. Slurry Seal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F. Plant Mix (Bitumen Binder)	1.95	59.52	2.16	61.99	10.48	0.50	0.00	1.40	138.00
G. Plant Mix (Tar Binder)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub Total	1.95	870.43	172.83	447.64	13.71	5.16	0.00	1.40	1513.12
7. Surfacing Sub Totals									
A. Prime	0.00	2.55	0.00	5.47	0.00	0.00	0.00	0.00	8.02
B. Primer Seal	0.00	46.12	3.75	12.84	0.00	0.00	0.00	0.00	62.71
C. Sprayed Seal	0.00	1002.97	225.99	500.13	8.54	4.90	4.40	1.20	1748.13
D. Enrichment Reseal	0.00	45.90	1.93	2.92	0.00	0.00	0.00	0.00	50.75
E. Slurry Seal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F. Plant Mix (Bitumen Binder)	15.45	98.60	9.86	85.19	16.75	0.50	0.00	2.14	228.49
G. Plant Mix (Tar Binder)	0.00	2.67	0.20	0.00	0.00	0.00	0.00	0.00	2.87
Total	15.45	1198.81	241.73	606.55	25.29	5.40	4.40	3.34	2100.97



# BITUMINOUS SURFACING COMPLETED DURING THE YEAR ENDED 30 JUNE 1977

## SCHEDULED ACCORDING TO ROAD CLASSIFICATIONS

TABLE 2 - LANE KILOMETRES

Nature of Work	Free-ways	State H'ways	Trunk Roads	Main Roads	Second. Roads	Tourist Roads	Develop. Roads	Unclass. Roads	All Rds Sub-Tot
1. Initial Surfacing									
A. Prime	0.00	5.10	0.00	8.14	0.00	0.00	0.00	0.00	13.24
B. Primer seal	0.00	15.00	0.00	1.40	0.00	0.00	0.00	0.00	16.40
C. Sprayed seal	0.00	45.28	43.04	95.51	0.00	0.00	0.00	2.40	186.23
D. Enrichment reseal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E. Slurry seal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F. Plant Mix (bitumen binder)	54.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.00
G. Plant mix (tar binder)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub total	54.00	65.38	43.04	105.05	0.00	0.00	0.00	2.40	269.87
2. Surfacing Lengths Primed Before Year									
A. Prime	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B. Primer seal	0.00	0.00	0.00	17.20	0.00	0.00	0.00	0.00	17.20
C. Sprayed seal	0.00	45.05	27.32	28.22	0.00	0.00	0.00	0.00	100.59
D. Enrichment reseal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E. Slurry seal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F. Plant mix (bitumen binder)	0.00	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.62
G. Plant mix (tar binder)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub total	0.00	45.67	27.32	45.42	0.00	0.00	0.00	0.00	118.41
3. Restoration After Widening/Strengthening									
A. Prime	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B. Primer seal	0.00	26.58	0.00	0.48	0.00	0.00	0.00	0.00	27.06
C. Sprayed seal	0.00	272.14	30.78	94.66	9.94	0.00	8.80	0.00	416.32
D. Enrichment reseal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E. Slurry seal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F. Plant mix (bitumen binder)	0.00	17.84	14.74	43.79	8.06	0.00	0.00	1.48	85.91
G. Plant mix (tar binder)	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.40
Sub total	0.00	316.56	45.92	138.93	18.00	0.00	8.80	1.48	529.69
4. Restoration After Adding Lanes									
A. Prime	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B. Primer seal	0.00	2.16	3.76	0.00	0.00	0.00	0.00	0.00	5.92
C. Sprayed seal	0.00	24.24	0.00	4.65	1.36	0.00	0.00	0.00	30.25
D. Enrichment reseal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E. Slurry seal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F. Plant mix (bitumen binder)	0.00	25.60	0.00	44.02	11.68	0.00	0.00	0.00	81.30
G. Plant mix (tar binder)	0.00	0.85	0.00	0.00	0.00	0.00	0.00	0.00	0.85
Sub total	0.00	52.85	3.76	48.67	13.04	0.00	0.00	0.00	118.32
5. Restoration After a New Alignment/Grade									
A. Prime	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B. Primer seal	0.00	24.94	5.62	6.60	0.00	0.00	0.00	0.00	37.16
C. Sprayed seal	0.00	98.98	17.94	19.62	0.00	0.24	0.00	0.00	136.78
D. Enrichment reseal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
E. Slurry seal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F. Plant mix (bitumen binder)	0.00	50.52	3.49	5.68	0.00	0.00	0.00	0.00	59.69
G. Plant mix (tar binder)	0.00	3.64	0.00	0.00	0.00	0.00	0.00	0.00	3.64
Sub total	0.00	178.08	27.05	31.90	0.00	0.24	0.00	0.00	237.27
6. Maintenance Resurfacing									
A. Prime	0.00	0.00	0.00	2.80	0.00	0.00	0.00	0.00	2.80
B. Primer seal	0.00	11.44	0.00	0.00	0.00	0.00	0.00	0.00	11.44
C. Sprayed seal	0.00	1544.35	337.48	761.41	8.46	9.32	0.00	0.00	2659.02
D. Enrichment reseal	0.00	91.80	3.86	5.84	0.00	0.00	0.00	0.00	101.50
E. Slurry seal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F. Plant mix (bitumen binder)	7.80	149.60	7.18	150.10	31.37	1.00	0.00	2.80	349.85
G. Plant mix (tar binder)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub total	7.80	1797.19	348.52	920.15	37.83	10.32	0.00	2.80	3124.61
7. Surfacing Sub Totals									
A. Prime	0.00	5.10	0.00	10.94	0.00	0.00	0.00	0.00	16.04
B. Primer seal	0.00	80.12	9.38	25.68	0.00	0.00	0.00	0.00	115.18
C. Sprayed seal	0.00	2030.04	456.56	1004.07	17.76	9.56	8.80	2.40	3529.19
D. Enrichment reseal	0.00	91.80	3.86	5.84	0.00	0.00	0.00	0.00	101.50
E. Slurry seal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F. Plant mix (bitumen binder)	61.80	244.18	25.41	243.59	51.11	1.00	0.00	4.28	631.37
G. Plant mix (tar binder)	0.00	4.49	0.40	0.00	0.00	0.00	0.00	0.00	4.89
Total	61.80	2455.73	495.81	1290.12	68.87	10.56	8.80	6.68	4398.17



# BITUMINOUS SURFACING COMPLETED DURING THE YEAR ENDED 30 JUNE 1977

## SCHEDULED ACCORDING TO WORK BY DEPARTMENT AND COUNCILS

TABLE 1 - ROAD KILOMETRES

	Department		Council	
	Direct Control	Contract	Direct Control	Contract
1. Initial Surfacing				
A. Prime	0.00	0.00	0.00	6.62
B. Primer seal	2.13	2.54	0.00	3.53
C. Sprayed seal	16.96	2.45	8.88	64.46
D. Enrichment reseal	0.00	0.00	0.00	0.00
E. Slurry seal	0.00	0.00	0.00	0.00
F. Plant mix (bitumen binder)	0.00	13.50	0.00	0.00
G. Plant mix (tar binder)	0.00	0.00	0.00	0.00
Sub total	19.09	18.49	8.88	74.61
2. Surfacing Lengths Primed Before Year				
A. Prime	0.00	0.00	0.00	0.00
B. Primer seal	0.00	0.00	0.00	8.60
C. Sprayed seal	22.23	0.00	4.65	23.12
D. Enrichment reseal	0.00	0.00	0.00	0.00
E. Slurry seal	0.00	0.00	0.00	0.00
F. Plant mix (bitumen binder)	0.31	0.00	0.00	0.00
G. Plant mix (tar binder)	0.00	0.00	0.00	0.00
Sub total	22.54	0.00	4.65	31.72
3. Restoration After Widening/Strengthening				
A. Prime	0.00	0.00	0.00	0.00
B. Primer seal	17.35	0.00	0.00	4.28
C. Sprayed seal	127.84	1.53	24.17	55.13
D. Enrichment reseal	0.00	0.00	0.00	0.00
E. Slurry seal	0.00	0.00	0.00	0.00
F. Plant mix (bitumen binder)	11.14	5.76	1.74	8.55
G. Plant mix (tar binder)	0.20	0.00	0.00	0.00
Sub total	156.53	7.29	25.91	67.96
4. Restoration After Adding Lanes				
A. Prime	0.00	0.00	0.00	0.00
B. Primer seal	0.00	0.00	0.00	1.48
C. Sprayed seal	12.71	0.00	2.08	1.54
D. Enrichment reseal	0.00	0.00	0.00	0.00
E. Slurry seal	0.00	0.00	0.00	0.00
F. Plant mix (bitumen binder)	13.47	0.21	2.98	6.67
G. Plant mix (tar binder)	0.85	0.00	0.00	0.00
Sub total	27.03	0.21	5.06	9.69
5. Restoration After New Alignment/Grade				
A. Prime	0.00	0.00	0.00	0.00
B. Primer seal	9.58	0.00	2.81	4.69
C. Sprayed seal	48.37	0.50	6.34	7.92
D. Enrichment reseal	0.00	0.00	0.00	0.00
E. Slurry seal	0.00	0.00	0.00	0.00
F. Plant mix (bitumen binder)	19.67	3.43	1.30	1.76
G. Plant mix (tar binder)	1.82	0.00	0.00	0.00
Sub total	79.44	3.93	10.45	14.37
6. Maintenance Resurfacing				
A. Prime	0.00	0.00	0.00	1.40
B. Primer seal	0.00	5.72	0.00	0.00
C. Sprayed seal	708.01	27.41	122.51	459.32
D. Enrichment reseal	45.90	0.00	0.00	4.85
E. Slurry seal	0.00	0.00	0.00	0.00
F. Plant mix (bitumen binder)	93.64	11.46	4.10	28.80
G. Plant mix (tar binder)	0.00	0.00	0.00	0.00
Sub total	847.55	44.59	126.61	494.37
7. Surfacing Sub Totals				
A. Prime	0.00	0.00	0.00	8.02
B. Primer seal	29.06	8.26	2.81	22.58
C. Sprayed seal	936.12	31.89	168.63	611.49
D. Enrichment reseal	45.90	0.00	0.00	4.85
E. Slurry seal	0.00	0.00	0.00	0.00
F. Plant mix (bitumen binder)	138.23	34.36	10.12	45.78
G. Plant mix (tar binder)	2.87	0.00	0.00	0.00
Total	1152.18	74.51	181.56	692.72
Total by Department	1226.69			
Total by Councils	874.28	2100.97		
Total by Direct Control	1333.74			
Total by Contract	767.23	2100.97		



# BITUMINOUS SURFACING COMPLETED DURING THE YEAR ENDED 30 JUNE 1977

## SCHEDULED ACCORDING TO WORK BY DEPARTMENT AND COUNCILS

### TABLE 2 - LANE KILOMETRES

	Department		Council	
	Direct Control	Contract	Direct Control	Contract
1. Initial Surfacing				
A. Prime	0.00	0.00	0.00	13.24
B. Primer seal	4.26	5.08	0.00	7.06
C. Sprayed seal	34.65	4.90	17.76	128.92
D. Enrichment reseal	0.00	0.00	0.00	0.00
E. Slurry seal	0.00	0.00	0.00	0.00
F. Plant mix (bitumen binder)	0.00	54.00	0.00	0.00
G. Plant mix (tar binder)	0.00	0.00	0.00	0.00
Sub total	38.91	63.98	17.76	149.22
2. Surfacing Lengths Primed Before Year				
A. Prime	0.00	0.00	0.00	0.00
B. Primer seal	0.00	0.00	0.00	17.20
C. Sprayed seal	45.05	0.00	9.30	46.24
D. Enrichment reseal	0.00	0.00	0.00	0.00
E. Slurry seal	0.00	0.00	0.00	0.00
F. Plant mix (bitumen binder)	0.62	0.00	0.00	0.00
G. Plant mix (tar binder)	0.00	0.00	0.00	0.00
Sub total	45.67	0.00	9.30	63.44
3. Restoration After Widening/Strengthening				
A. Prime	0.00	0.00	0.00	0.00
B. Primer seal	18.02	0.00	0.00	9.04
C. Sprayed seal	250.61	2.91	49.63	113.17
D. Enrichment reseal	0.00	0.00	0.00	0.00
E. Slurry seal	0.00	0.00	0.00	0.00
F. Plant mix (bitumen binder)	28.69	11.52	3.66	42.04
G. Plant mix (tar binder)	0.40	0.00	0.00	0.00
Sub total	297.72	14.43	53.29	164.25
4. Restoration After Adding Lanes				
A. Prime	0.00	0.00	0.00	0.00
B. Primer seal	0.00	0.00	0.00	5.92
C. Sprayed seal	23.86	0.00	3.21	3.18
D. Enrichment reseal	0.00	0.00	0.00	0.00
E. Slurry seal	0.00	0.00	0.00	0.00
F. Plant mix (bitumen binder)	48.60	0.21	7.19	25.30
G. Plant mix (tar binder)	0.85	0.00	0.00	0.00
Sub total	73.31	0.21	10.40	34.40
5. Restoration After New Alignment/Grade				
A. Prime	0.00	0.00	0.00	0.00
B. Primer seal	22.16	0.00	5.62	9.38
C. Sprayed seal	100.24	1.00	14.46	21.08
D. Enrichment reseal	0.00	0.00	0.00	0.00
E. Slurry seal	0.00	0.00	0.00	0.00
F. Plant mix (bitumen binder)	42.98	9.16	3.52	4.03
G. Plant mix (tar binder)	3.64	0.00	0.00	0.00
Sub total	169.02	10.16	23.60	34.49
6. Maintenance Resurfacing				
A. Prime	0.00	0.00	0.00	2.80
B. Primer seal	0.00	11.44	0.00	0.00
C. Sprayed seal	1430.83	62.10	245.76	920.33
D. Enrichment reseal	91.80	0.00	0.00	9.70
E. Slurry seal	0.00	0.00	0.00	0.00
F. Plant mix (bitumen binder)	234.27	23.76	11.85	79.97
G. Plant mix (tar binder)	0.00	0.00	0.00	0.00
Sub total	1756.90	97.30	257.61	1012.80
7. Surfacing Sub totals				
A. Prime	0.00	0.00	0.00	16.04
B. Primer seal	44.44	16.52	5.62	48.60
C. Sprayed seal	1885.24	70.91	340.12	1232.92
D. Enrichment reseal	91.80	0.00	0.00	9.70
E. Slurry seal	0.00	0.00	0.00	0.00
F. Plant mix (bitumen binder)	355.16	98.65	26.22	151.34
G. Plant mix (tar binder)	4.89	0.00	0.00	0.00
Total	2381.53	186.08	371.96	1458.60
Total by Department	2567.61			
Total by Councils	1830.56	4398.17		
Total by Direct Control	2753.49			
Total by Contract	1644.68	4398.17		



**TYPES OF ROAD SURFACES AS AT 30 JUNE 1977**  
**SCHEDULED ACCORDING TO ROAD CLASSIFICATIONS**

COUNTY OF CUMBERLAND	Cement Concrete	Bitumen Concrete		Bitumen Other	Gravel	Formed only	Natural Surface	Total
		Pre-1977	Tar Binder					
Freeways .. .. .	0.00	85.91	0.00	0.00	0.00	0.00	0.00	85.91
State Highways .. .	25.20	211.59	0.00	51.44	25.79	0.00	0.00	314.02
Trunk Roads .. .	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Main Roads .. .	53.22	568.09	0.00	109.86	354.59	0.42	0.21	1086.39
Secondary Roads ..	12.42	186.70	0.00	30.61	52.65	0.33	4.52	287.23
Tourist Roads .. .	0.00	7.97	0.00	0.50	52.49	9.77	13.68	85.34
Developmental Roads	0.00	0.00	0.00	0.00	8.69	5.98	6.89	30.08
Unclassified Roads	0.00	16.22	0.00	2.14	18.50	3.81	0.00	40.67
Total .. .	90.84	1076.48	0.00	194.55	512.71	20.31	25.30	1929.64

**COUNTRY**

Freeways .. .	0.00	25.98	0.00	15.45	0.00	0.00	0.00	41.43
State Highways .. .	42.47	453.51	2.67	76.83	8666.16	324.38	597.98	10164.00
Trunk Roads .. .	6.39	13.22	0.20	9.86	4468.32	1720.35	856.20	7074.54
Main Roads .. .	12.43	271.12	0.00	31.84	8466.27	5898.59	2501.71	17218.28
Secondary Roads ..	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tourist Roads .. .	0.00	1.16	0.00	0.00	226.42	79.62	0.13	317.87
Developmental Roads	0.00	0.00	0.00	0.00	141.87	2310.09	928.57	3587.69
Unclassified Roads	0.00	0.00	0.00	0.00	46.70	64.72	1679.28	2438.28
Total .. .	61.29	764.99	2.87	133.98	22015.74	10397.75	6563.87	40842.09

**NEW SOUTH WALES**

Freeways .. .	0.00	111.89	0.00	15.45	0.00	0.00	0.00	127.34
State Highways .. .	67.67	665.10	2.67	128.27	8691.95	324.38	597.98	10478.02
Trunk Roads .. .	6.39	13.22	0.20	9.86	4468.32	1720.35	856.20	7074.54
Main Roads .. .	65.65	839.21	0.00	141.70	8820.86	5899.01	2501.71	18304.67
Secondary Roads ..	12.42	186.70	0.00	30.61	52.65	0.33	0.00	287.23
Tourist Roads .. .	0.00	9.13	0.00	0.50	278.91	89.39	1.06	403.21
Developmental Roads	0.00	0.00	0.00	0.00	150.56	2316.07	937.09	3617.77
Unclassified Roads	0.00	16.22	0.00	2.14	65.20	68.53	1679.28	2478.95
Total .. .	152.13	1841.47	2.87	328.53	22528.45	10418.06	6573.32	42771.73

**TYPES OF ROAD SURFACES AS AT 30 JUNE 1977**  
**SCHEDULED ACCORDING TO DEPARTMENT'S DIVISIONS**

DIVISION	Natural Surface	Formed Only	Gravel	Primed Only	Primer Sealed	Sprayed Sealed	Enrich Reseal	Slurry Sealed	Plant Mix			Cement Concrete	Total
									Bitumen Binder	Tar Binder	Pre-1977		
ALL ROADS NEW SOUTH WALES													
Metropolitan .. ..	0.85	0.00	0.00	0.00	0.00	25.76	0.00	1.13	122.36	0.00	473.42	56.44	679.96
Parramatta (C. of C.)	3.88	8.20	12.72	0.00	2.32	351.67	0.00	0.00	41.08	0.00	429.70	34.40	883.97
Parramatta (Country)	21.73	3.51	36.80	0.00	0.00	241.84	0.00	0.00	1.17	0.00	108.51	0.00	413.56
Central Mtns. (C of C.)	20.57	1.25	7.59	0.00	0.00	86.64	0.00	0.00	19.43	0.00	33.61	0.00	169.09
Central Mtns. (Country)	4.26	5.79	573.66	2.01	7.80	1002.06	0.00	1.72	7.91	0.00	4.79	24.69	1634.69
Illawarra (C. of C.) ..	0.00	0.00	0.00	0.00	0.00	45.19	0.00	0.00	11.68	0.00	139.75	0.00	196.62
Illawarra (Country)	0.00	0.00	174.88	1.60	2.03	442.27	0.00	0.00	83.43	0.20	283.52	0.00	987.93
Hunter Valley .. ..	6.04	0.00	179.58	0.00	0.34	1234.19	0.00	0.84	31.84	2.67	239.72	5.01	1700.23
Lower North Coast ..	24.44	137.29	327.41	0.00	2.13	880.15	0.00	0.00	0.00	0.00	1.76	5.49	1378.67
North Eastern .. ..	1.35	0.00	408.02	0.00	0.00	1683.20	0.00	0.00	0.60	0.00	0.00	23.52	2116.69
Upper Northern .. ..	75.45	0.00	1062.57	1.40	32.97	1717.40	0.00	0.75	0.00	0.00	0.00	0.48	2891.02
North Western .. ..	7.92	48.89	1151.41	0.46	22.72	1914.42	0.00	1.83	1.04	0.00	0.53	0.12	3149.34
Central Western .. ..	54.86	114.43	1248.60	0.00	29.93	2542.88	31.68	0.00	1.36	0.00	1.49	0.30	4025.53
Central Northern ..	0.00	1971.34	2065.82	1.38	121.12	1297.38	290.03	0.00	0.00	0.00	0.00	0.00	5747.07
Murray Darling .. ..	661.10	4038.17	490.49	4.34	0.49	1123.00	29.77	0.00	0.00	0.00	0.00	0.00	6347.36
Central Murray .. ..	12.07	147.30	912.06	0.00	0.19	1917.75	0.00	0.00	0.00	0.00	0.00	0.00	2989.37
South Western .. ..	19.51	43.37	637.57	0.21	7.61	2949.00	10.95	7.42	0.00	0.00	20.08	0.00	3695.72
South Coast .. ..	11.26	44.12	424.56	2.55	5.56	945.28	0.00	0.00	0.00	0.00	50.41	0.32	1484.06
Southern .. ..	1.61	9.66	704.32	2.30	15.62	1483.24	1.93	0.00	6.63	0.00	54.18	1.36	2280.85
Total .. ..	926.90	6573.32	10418.06	16.25	250.83	21883.32	364.36	13.69	328.53	2.87	1841.47	152.13	42771.73

Bituminous work carried out by Councils on Urban and Rural Local Roads from funds available under the Roads Grants Act, 1974 as at 30 June 1977 and not accounted for in the above tabulations:

1. Length of initial seal .. .	368.57 km
2. Length of surfacing over primed or primer seal .. .	46.21 km
3. Length of restoration surfacing .. .	196.74 km
4. Length of maintenance resurfacing .. .	627.09 km



# ROAD TRAFFIC SURVEYS

## Traffic Volume Surveys

Detailed traffic volume surveys were completed during the year for the Hunter Valley, Central Mountains, Upper Northern, North Western, Central Western and Southern Divisions, in the Colo Shire portion of the Parramatta Division, and in the urban areas of the Illawarra Division. A similar survey was commenced in the County of Cumberland. This survey will be completed during 1977-78.

## Publication of Traffic Volume Data

The 1975 survey results for the County of Cumberland and data collected during the 1974 surveys of the Hunter Valley, Illawarra, North Eastern and South Western Divisions were published during the year. Survey results for Central Murray, Central Northern and Murray Darling Divisions were being printed at the end of June 1977.

## Permanent and Semi-Permanent Counting Stations

During 1976 a total of 160 permanent counting stations were in operation. The 84 semi-permanent stations established in late 1975 and early 1976 to provide the necessary information on seasonal traffic variations on roads in Divisions being surveyed in 1976 were removed in January 1977. A total of 149 medium term (semi-

permanent and monthly count) stations were established in the County of Cumberland to provide information on seasonal patterns.

Of the 50 pulse channelling units received during the year, 17 have been installed at permanent counting stations equipped with inductive loop detectors. These electronic devices combine the counts from a number of traffic lanes thus reducing the amount of recording equipment at each site.

Annual Average Daily Traffic Volumes at permanent and semi-permanent counting stations for the calendar year 1976 are listed below. Corresponding volumes for 1975 and the percentage change are also shown.

## Review of Traffic Volume Surveys

The review of all aspects of traffic counting, commenced in the latter half of 1975-76, continued. Items included in the review include the objectives of routine traffic surveys, the type of traffic data required by users, the organisation of field work associated with traffic surveys, traffic counting equipment, data processing techniques and the content and format of publications. The objective of the review is to ensure that the information required by users is obtained and disseminated as rapidly as possible without sacrificing accuracy.

## TRAFFIC VOLUMES AT PERMANENT AND SEMI-PERMANENT COUNTING STATIONS FOR THE CALENDAR YEAR ENDED DECEMBER 1976

Local Government Area	Location	Annual Average Daily Traffic		% change
		1975	1976	
<b>F3 – Sydney-Newcastle Freeway</b>				
Hornsby	Berowra – north of Toll Plaza	18,440	18,700	+ 1
<b>F4 – Western Freeway</b>				
Penrith	Regentville – east of Nepean River Bridge	12,180	13,230	+ 9
<b>F5 – South Western Freeway</b>				
Campbelltown	Leumeah – north of Campbelltown Road Overbridge	22,300	23,040	+ 3
<b>F6 – Southern Freeway</b>				
Wollongong	Waterfall-Bulli Pass Tollwork	8,460	8,490	0
Wollongong	Gwynneville – at Gipps Street Overbridge	28,960	31,310	+ 8
Wollongong	Unanderra, north of Northcliffe Drive Interchange	12,130	18,390	+ 52
<b>Bradfield Highway</b>				
Sydney	Sydney Harbour Bridge	145,350	146,040	0
<b>Southern Cross Drive</b>				
Botany	Eastlakes – at Gardeners Road Overpass	36,740	36,860	0
<b>SH1 – Princes Highway</b>				
Rockdale	Tempe – bridge over Cooks River	51,100	49,720	-3
Sutherland	Sylvania – bridge over Georges River	56,160	53,920	-4
Sutherland	Loftus – south of MR393 (Farnell Avenue)	31,040	30,960	0
Wollongong	Austinmer – north of Sublime Point Lookout	11,530*		
		3,730†	3,950	+ 6
Wollongong	South of Smith Street	22,700	22,940	+ 1
Wollongong	Figtree at bridge over American Creek	26,370	21,610	-18
Kiama	Kiama – north of Marks Street	8,530	8,470	-1
Shoalhaven	Falls Creek – 3.0 km north of MR312 (Huskisson Road)	6,310	6,240	- 1
Eurobodalla	Batemans Bay – bridge over Clyde River	5,710	5,330	-7
Mumbulla	Bega – 0.6 km north of SH4 (Snowy Mountains Highway)	1,520	1,550	+ 2
Imlay	Eden – 3.2 km north of MR561 (Eden Road)	2,260	2,280	+ 1
Imlay	Eden – south of Quarantine Bay Road	1,900	1,680	-12
Imlay	Narrabarba – at Old Road Creek Bridge	970	1,120	+ 15

\*Before opening the Waterfall-Bulli Pass Tollwork

†After opening the Waterfall-Bulli Pass Tollwork



Local Government Area	Location	Annual Average Daily Traffic		% change
		1975	1976	
<b>SH2 — Hume Highway</b>				
Ashfield	Summer Hill — east of Bruce Street	22,840	23,350	+ 2
Bankstown	Lansdowne — east of SH13 (Woodville Road)	39,200	38,650	- 1
Liverpool	Cross Roads — east of Box Road	39,510	40,650	+ 3
Camden	Narellan — 2.4 km north of MR178 (Camden Road)	5,110	4,870	- 5
Mittagong	3.2 km north of MR260 (Bowral Road)	10,790	10,370	- 4
Mulwaree	Goulburn — 6.45 km east of Goulburn Post Office		9,600	
Mulwaree	Yarra — 3.2 km south of SH3 (Federal Highway)	4,140	4,310	+ 4
Goodradigbee	Yass — 7.2 km west of MR278 (Tumut Road)	5,770	6,550	+ 14
Gundagai	Gundagai — 1.6 km south of MR279		4,040	
Holbrook	Holbrook — 3.2 km north of MR331 (Jingellic Road)	2,820	3,090	+ 10
<b>SH3 — Federal Highway</b>				
Mulwaree	Yarra — 1.6 km south of SH2 (Hume Highway)	4,010	4,410	+ 10
<b>SH4 — Snowy Mountains Highway</b>				
Mumbulla	Bega — west of SH1 (Princes Highway)	780	820	+ 5
Snowy River	East of MR286 (Cooma-Berridale Road)	2,430	2,530	+ 4
Snowy River	Adaminaby — 1.3 km west of Rosedale Road	820	800	- 2
<b>SH5 — Great Western Highway</b>				
Ashfield	East of Dalhousie Street	40,100		
Parramatta	Clyde — at railway level crossing	50,050	48,580	- 3
Blacktown	Wallgrove — at Eastern Creek Bridge	30,690	30,530	- 1
Penrith	Bridge over Nepean River	20,460	21,280	+ 4
City of Blue Mountains	Wentworth Falls — 4.5 km east of railway station		10,250	
Turon	Meadow Flat — at Blaxland Shire boundary	4,920	4,860	- 1
<b>SH6 — Mid Western Highway</b>				
Bathurst	Bathurst — 0.7 km west of SH5 (Great Western Highway)		2,660	
Waugoola	Cowra — bridge over Waugoola Creek	1,960	2,120	+ 8
Weddin	Marsden — east of SH17 (Newell Highway)	480	520	+ 8
Bland	Wyalong — east of TR57 (Temora Road)	1,860	2,020	+ 9
Hay	Hay — 2.4 km east of SH21 (Cobb Highway)	610	760	+ 25
<b>SH7 — Mitchell Highway</b>				
Bathurst	Bathurst — at city boundary, 1.6 km west of Stewart Street		3,980	
Canobolas	Orange — 2.4 km east of MR245 (Piesle Street)	4,480	4,650	+ 4
Canobolas	Orange — 2.3 km north of TR61 (Condobolin Road)	2,220	2,260	+ 2
Talbragar	Dubbo — 5.2 km east of SH17 (Newell Highway)	2,420	2,570	+ 6
Talbragar	Dubbo — 3.2 km west of post office		3,350	
Darling	Bourke — 8.1 km south of TR68 (Mungindi Road)	250	250	0
<b>SH8 — Barrier Highway</b>				
Cobar	Cobar — 1.9 km east of TR61 (Nymagee Road)	460	430	- 7
Western Division	Broken Hill — 25.8 km east of SH22 (Silver City Highway)	370	340	- 8
<b>SH9 — New England Highway</b>				
Newcastle	Hexham — north of SH10 (Pacific Highway)	22,180	22,700	+ 2
Maitland	East Maitland — at Wallis Creek Bridge		23,590	
Patrick Plains	Singleton — 4.8 km east of MR128 (Glendonbrook Road)	5,890	5,820	- 1
Scone	Scone — 3.0 km north of TR62 (Merriwa Road)		3,330	
Peel	Tamworth — 4.8 km south of SH11 (Oxley Highway)	2,480	2,530	+ 2
Tamworth	Tamworth — at bridge over Peel River		25,380	
Cockburn	Tamworth — 1.0 km north of MR105 (Nundle Road)	4,340	4,560	+ 5
Severn	Glen Innes — at Redbank Creek Bridge	1,910	2,140	+ 12
<b>SH10 — Pacific Highway</b>				
Hornsby	Wahrooga — north of SH13 (Pennant Hills Road)	33,920	34,840	+ 3
Hornsby	Berowra — north of Toll Plaza	5,040	4,780	- 5
Hornsby	Brooklyn — at Hawkesbury River Bridge	4,240	3,940	- 7
Gosford	Mt. White — south of Tollwork Interchange	3,670	3,410	- 7
Gosford	Narara — 1.3 km north of Manns Road		9,520	



Local Government Area	Location	Annual Average Daily Traffic		% change
		1975	1976	
<b>SH10 – Pacific Highway – continued</b>				
Lake Macquarie	Swansea – 3.2 km south of Lake Macquarie Bridge	10,770	11,480	+ 7
Lake Macquarie	Charlestown – south of Smart Street	37,330	36,190	- 3
Newcastle	Tighes Hill – south of Ingall Street		21,540	
Newcastle	Hexham – at Hunter River Bridge	13,450	13,480	+ 1
Port Stephens	Karuah – at Karuah River Bridge	6,200	5,850	- 6
Manning	Nabiac – bridge over Wollomba River	4,250	4,330	+ 2
Hastings	Blackmans Point – bridge over Hastings River	4,120	4,220	+ 2
Nambucca	Macksville - north of MR533 (Taylors Arm Road)	4,130	4,410	+ 7
Ulmarra	South Grafton – 5.2 km south of SH12 (Gwydir Highway)	3,260	3,290	+ 1
Maclean	Harwood – on Harwood Bridge	3,720	3,840	+ 3
Tintenbar	Ballina – south of SH16 (Bruxner Highway)	3,170	3,120	- 2
Tweed	Tweed Heads South – south of Kirkwood Road	13,960	15,270	+ 9
<b>SH11 – Oxley Highway</b>				
Hastings	Wauchope – 3.2 km west of MR575 (Beechwood Road)	1,150	1,190	+ 3
Cockburn	Bendemeer – east of SH9 (New England Highway)		510	
Peel	Tamworth – 2.1 km south of MR130 (Quirindi Road)	1,810	1,970	+ 9
Coonabarabran	Coonabarabran – 0.3 km north of MR396 (Binnaway Road)	2,110	2,200	+ 4
<b>SH12 – Gwydir Highway</b>				
Severn	Gibraltar Range – at Tick Gate	420	440	+ 5
Boooroo	Moree – 3.1 km east of SH17 (Newell Highway)	1,160	1,240	+ 7
Boomi	Moree – at Tarren Creek Bridge		500	
<b>SH13 – Woodville Road, Church Street and Pennant Hills Road</b>				
Fairfield	Villawood – north of SH2 (Hume Highway)	33,910	33,580	-10
<b>SH14 – Sturt Highway</b>				
Kyeamba	Alfred Town – east of MR384 (Kyeamba Road)	1,670	1,690	+ 1
Hay	Hay – 0.8 km west of SH21 (Cobb Highway)	1,070	1,200	+ 12
Wentworth	Monak – 17.7 km east of SH22 (Silver City Highway)	1,210	1,380	+ 14
<b>SH15 – Barton Highway</b>				
Goodradigbee	Yass – south of SH2 (Hume Highway)	3,420	3,540	+ 4
<b>SH16 – Bruxner Highway</b>				
Tintenbar	Ballina – 3.2 km west of SH10 (Pacific Highway)	2,690	2,800	+ 4
Gundurimba	McKees Hill Post Office	2,660	2,730	+ 3
Tenterfield	0.8 km west of SH9 (New England Highway)	280	270	- 4
<b>SH17 – Newell Highway</b>				
Boooroo	Camurra – 10.5 km north of MR232	1,410	1,640	+ 16
Boooroo	Moree – south of DR1289 (Burrington Road)		1,920	
Coonabarabran	Coonabarabran – north of SH11 (Oxley Highway)		1,080	
Talbragar	Dubbo – 4.0 km north of MR206 (Dunedoo Road)	3,280	3,670	+ 12
Goobang	Parkes – 3.2 km north of MR233 (Parkes Road)	1,950	2,120	+ 9
Narrandera	Narrandera – 3.2 km east of TR80 (Griffen Road)	1,410	1,630	+ 16
Berrigan	Finley – 1.9 km south of SH20 (Riverina Highway)	1,950	2,230	+ 14
<b>SH18 – Castlereagh Highway</b>				
Gilgandra	Gilgandra – 6.5 km north of SH11 (Oxley Highway)		760	
Coonamble	Coonamble – 4 km south of MR205	600	650	+ 8
<b>SH19 – Monaro Highway</b>				
Monaro	Bunyan – bridge over Cooma Creek	2,060	2,140	+ 4
Monaro	Nimmitabel – 1.3 km north of SH4 (Snowy Mountains Highway)	1,090	1,120	+ 3
Bombala	Bombala – 2.3 km north of Bombala River Bridge	620	700	+ 13
<b>SH20 – Riverina Highway</b>				
Hume	Albury – 6.4 km west of SH2 (Hume Highway)	1,510	1,610	+ 7
Deniliquin	Deniliquin – 1.9 km east of SH 21 (Cobb Highway)	1,070	1,120	+ 5
<b>SH21 – Cobb Highway</b>				
Murray	Deniliquin – 5.0 km south of SH20 (Riverina Highway)	1,110	1,170	+ 5



Local Government Area	Location	Annual Average Daily Traffic		% change
		1975	1976	
<b>SH22 – Silver City Highway</b>				
Western Division	Broken Hill – 9.7 km south of MR577 (Eyre Street)	260	290	+ 12
<b>SH23</b>				
Newcastle	New Lambton Heights – north of Ridgeway Road		22,300	
<b>SH25 – Illawarra Highway</b>				
Shellharbour	Macquarie Pass – east of Old South Road	2,100	2,210	+ 5
<b>SH26 – Calga-Ourimbah Road</b>				
Gosford	Peats Ridge – south of MR590 (Mangrove Mountain Road)	14,480	14,440	0
<b>TR51 – Batemans Bay-Canberra</b>				
Eurobodalla	Nelligen – 0.2 km north of bridge over Clyde River	1,430	1,530	+ 7
Yarrowlumla	Bungendore – east of MR268 (Targo Road)		2,220	
<b>TR52 – Crookwell-A.C.T. Boundary</b>				
Yarrowlumla	Sutton – north of SH3 (Federal Highway)		830	
<b>TR54 – Goulburn-Bathurst-Ilford</b>				
Mulwaree	Goulburn – 8.7 km north of SH2 (Hume Highway)		990	
Abercrombie	Perthville – north of MR252 (Burruga Road) Ilford – west of TR55 (Mudgee Road)		1,520	
<b>TR55 – Marrangaroo-Mullaley</b>				
Blaxland	Marrangaroo – north of SH5 (Great Western Highway)		3,330	
Cudgegong	Mudgee – 0.8 km south of railway level crossing	1,960	2,100	+ 7
Liverpool Plains	Tambar Springs – north of DR1232 (Garrawilla Road)		200	
<b>TR56 – Forbes-Yass</b>				
Jemalong	Forbes – at Lachlan River Bridge		1,620	
Boorowa	Boorowa – west of Kenyu Road		770	
<b>TR57 – Nygau-Junee</b>				
Condobolin	Condobolin – at Nerathong Creek Bridge, 2.7 km south of MR230		140	
<b>TR61 – Orange-Cobar</b>				
Canobolas	Orange – at Canobolas Shire boundary	2,000	2,060	+ 3
Goobang	Parkes – at Billabong Creek Bridge		1,380	
<b>TR62 – Scone-Coolah</b>				
Coolah	Coolah – 0.5 km east of TR55 (Binnia Street)		390	
<b>TR63 – Tamworth-Yetman</b>				
Cockburn	Tamworth – 8.0 km north of Tamworth Post Office		1,920	
Yallaroi	Warialda – 1.1 km north of SH12, Geddes Street		540	
<b>TR65 – Ewingsdale-Lismore</b>				
Byron	Bangalow – 6.4 km west of SH10 (Pacific Highway)	2,060	2,190	+ 6
<b>TR72 – Willow Tree-Narrabri West</b>				
Murrurundi	Willow Tree – 0.8 km north of SH9 (New England Highway)		1,530	
Namoi	Narrabri – 3.0 km west of SH17 (Newell Highway)		1,140	
<b>TR73 – Inverell-Walcha</b>				
Macintyre	Gilgai – north of MR135 (Guy Road)		1,180	
<b>TR74 – Armidale-South Grafton</b>				
Dumaresq	Armidale – 5.0 km east of SH9 (New England Highway)		960	
Ulmarra	South Grafton – 1.0 km south of MR151 (Grafton-Coffs Harbour Road)	590	590	0
<b>TR76 – Raleigh-Ebor</b>				
Bellingen	Fernmount – 8.4 km west of SH10 (Pacific Highway)	1,970	1,940	-2



Local Government Area	Location	Annual Average Daily Traffic		% change
		1975	1976	
<b>TR77 – Gilgandra-Carboon</b>				
Gilgandra	Gilgandra – east of SH11 (Oxley Highway)		470	
<b>TR78 – Olympic Way</b>				
Harden	Wombat – north of MR379 (Murrumburrah Road)		1,470	
Mitchell	Wagga Wagga – 1.6 km north of MR240 (Coolamon Road)	2,200	2,320	+ 5
<b>TR82 – Hamilton-Jesmond</b>				
Newcastle	Hamilton – Donald Street at railway overbridge	18,430	18,920	+ 3
<b>TR83 – Grafton-Woodenbong</b>				
Grafton	Grafton – at bridge over Clarence River	15,620	15,700	+ 0.5
Copmanhurst	Koolkhan – 0.5 km south of MR150 (Copmanhurst Road)	1,240	1,220	- 2
Kyogle	Kyogle – 0.8 km south of Boorabee Street	2,000	1,780	- 11
<b>TR84 – Bowning-Temora</b>				
Cootamundra	Wallendbeen – east of TR78 (Olympic Way)		1,180	
<b>TR90 – The Bucketts Way</b>				
Stroud	Weismantels – south of MR101 (Dingaree Road)		670	
<b>TR95 – Picton-Wollongong</b>				
Wollondilly	Maldon – west of Railway Level Crossing 438	2,240	1,890	- 16
<b>MR101 – West Maitland-Weismantels</b>				
Port Stephens	Paterson – west of Woodville Road	1,330	1,390	+ 4
<b>MR104 – East Maitland-Raymond Terrace</b>				
Port Stephens	Raymond Terrace – south of MR601 (Seaham Road)	2,240	2,330	+ 4
<b>MR105 – Scone-Nemingha</b>				
Cockburn	Nemingha – 1.6 km east of SH9 (New England Highway)		930	
<b>MR108 – Adamstown-Newcastle-Stockton-Nelson Bay</b>				
Newcastle	Stockton – at bridge over Hunter River	9,190	9,480	+ 3
Port Stephens	Williamtown – 0.3 km north of MR302 (Hexham Road)		6,500	
<b>MR111 – Khappinghat Creek-Tuncurry-Bulahdelah</b>				
Stroud	Forster – at Wallis Lake Bridge		8,630	
<b>MR127 – Narrabri-Walgett</b>				
Namoi	Narrabri – 9.6 km west of SH17 (Newell Highway)		930	
<b>MR129 – Quirindi-Quambone</b>				
Tamarang	Quirindi – west of TR72 (Gunnedah Road)		270	
Coonabarabran	Coonabarabran – 0.8 km west of SH11 (Birch Street)		690	
<b>MR130 – Tamworth-Quirindi</b>				
Peel	Werris Creek – north of DR1275 (Werris Creek Station Road)		1,180	
<b>MR134 – Bingara-Ashford</b>				
Bingara	Bingara – north of TR63 (Warialda Road)		340	
<b>MR137 – Inverell-Bonshaw</b>				
Ashford	Ashford – south of Duff Street		500	
<b>MR147 – Woodburn-Lismore</b>				
Woodburn	Woodburn – ferry over Richmond River	220	220	0
<b>MR149 – Casino-Coraki-Buckendoon</b>				
Woodburn	Coraki – ferry over Richmond River	150	140	- 7
<b>MR152 – Lawrence-Yamba</b>				
Maclean	Bluff Point – ferry over Clarence River	300	340	+ 13



Local Government Area	Location	Annual Average Daily Traffic		% change
		1975	1976	
<b>MR162 – Mona Vale Road</b>				
Ryde	North Ryde – De Burghs Bridge over Lane Cove River	34,160	35,530	+ 4
Ku-ring-gai	Pymble – south of Orana Avenue	19,360	19,110	-1
<b>MR164 – Spit Road</b>				
Mosman	Spit Junction – west of Gurrigal Street		39,420	
Manly	The Spit – south of the Spit Bridge over Middle Har- bour	53,200	52,630	-1
<b>MR165 – Victoria Road</b>				
Leichhardt	Rozelle – Glebe Island Bridge over Johnstons Bay	50,670	51,020	+ 1
Drummoyne	Gladesville – south of bridge over Parramatta River	75,870	75,640	0
<b>MR166 – Huntleys Point-Lane Cove</b>				
Lane Cove	Hunters Hill – Figtree Bridge over Lane Cove River	37,780	35,930	-5
<b>MR167 – Canterbury Road-Newbridge Road</b>				
Canterbury	Wiley Park – east of Belemba Avenue	33,450	32,440	-3
Bankstown	Milperra – at bridge over Georges River	44,140	43,840	-1
<b>MR172 – Oxford Street</b>				
Woollahra	Woollahra – west of Ocean Street	47,130	45,780	-3
<b>MR173 – Woolloomooloo-South Head</b>				
Kings Cross	Kings Cross Tunnel		34,740	
<b>MR177 – Appin Road</b>				
Campbelltown	Leumeah – south of Leumeah Road	13,140	13,240	+ 1
Wollondilly	Appin – north of MR610 (Maldon Road)	7,160	6,930	-3
<b>MR181 – McGraths Hill-Singleton</b>				
Baulkham Hills	Webbs Creek – ferry over Hawkesbury River	210	230	+ 10
Colo	St. Albans – at MacDonald River Bridge		140	
<b>MR182 – Windsor-Sackville Reach</b>				
Baulkham Hills	Sackville Reach – ferry over Hawkesbury River	360	370	+ 3
<b>MR184 – Parramatta-Mount Victoria</b>				
Colo	Kurrajong – east of MR519 (Colo Road)		5,720	
<b>MR186 – Newcastle-Waratah West</b>				
Newcastle	Glebe – west of Henry Street		13,770	
Newcastle	Waratah – north of MR188, Lorna Street		17,270	
<b>MR194 – General Holmes Drive</b>				
Botany	Southern end of tunnel	57,210	56,850	-1
<b>MR199 – Rocky Point Road-Taren Point Road</b>				
Sutherland	Taren Point – south of Captain Cook Bridge over Georges River	44,810	44,760	0
<b>MR200 – Concord Road</b>				
Ryde	Uhrs Point – north of Ryde Bridge over Parramatta River	41,980	42,400	+ 1
<b>MR206 – Dubbo-Dunedoo</b>				
Talbragar	Dubbo – 3.2 km east of SH17 (Newell Highway)		870	
<b>MR208 – Muswellbrook-Mudgee</b>				
Cudgegong	Budgee Budgee – west of MR214 (Cassilis Road)		570	
<b>MR209 – Muswellbrook-Merriwa</b>				
Muswellbrook	Denman – 1 km north of post office		1,100	
<b>MR215 – Ilford-Bylong</b>				
Rylstone	Ilford – 0.8 km east of TR55 (Mudgee Road)		470	
<b>MR217 – Wyong-Birmingham Gardens</b>				
Lake Macquarie	Boolaroo – north of Cockle Creek Railway Station	17,010	16,980	0
Lake Macquarie	Morisset – at Dora Creek Bridge	4,490	5,000	+ 11

Local Government Area	Location	Annual Average Daily Traffic		% change
		1975	1976	
<b>MR218 – Wollombi-West Maitland</b>				
Cessnock	Wollombi – 3 km east of MR181 (Singleton Road)		370	
Cessnock	Neath – at Railway Level Crossing 488P		8,060	
<b>MR220 – Toronto-Brunkerville-Cessnock-Glendonbrook</b>				
Cessnock	Brunkerville – 1.6 km north of MR392 (Morisset Road)	3,780	3,830	+ 1
<b>MR223 – Lookout Road</b>				
Newcastle	New Lambton Heights - north of Ridgeway Road	21,970	22,300	+ 2
Lake Macquarie	Glendale – west of MR217 (Lake Road)	17,630	16,590	-6
Cessnock	Buchanan – west of Wallis Creek Bridge		6,910	
<b>MR225 – Wisemans Ferry-Central Mangrove</b>				
Baulkham Hills	Wisemans Ferry – ferry over Hawkesbury River	530	550	+ 4
Gosford	Central Mangrove – west of MR590		850	
<b>MR230 – Lake Cargelligo-Condobolin</b>				
Condobolin	Condobolin – west of TR57 (Girral Road)		1,380	
<b>MR232 – Moree-Boonangar</b>				
Boomi	Boomi – south of MR507 (Caloona Road)		130	
<b>MR233 – Gulgong-Parkes</b>				
Molong	Baldry – south of MR234 (Cumnock Road)		140	
<b>MR239 – Henry Lawson Way</b>				
Burrangong	Maimuru – at railway level crossing		1,130	
<b>MR241 – Temora-Gunning</b>				
Gunning	Dalton – south of MR251 (Narrawa Road)		250	
<b>MR248 – Goulburn-Boorowa</b>				
Crookwell	Winduella – north of Grabben Gullen Road		130	
<b>MR253 – Hartley-Bathurst</b>				
Blaxland	Hampton – north of MR558 (Oberon Road)		870	
<b>MR256 – Goulburn-Oberon</b>				
Oberon	Oberon – west of MR253 (Carrington Avenue)		710	
<b>MR260 – Moss Vale-Mittagong</b>				
Bowral	Bowral – south of MR263 (Kangaloon Road)	6,270	6,130	-2
<b>MR261 – Moss Vale-Bomaderry</b>				
Wingecarribee	Fitzroy Falls – at bridge over Yurrunga Creek	1,310	1,090	-17
<b>MR270 – Queanbeyan-Braidwood</b>				
Yarrowlumla	Captains Flat – at railway level crossing		420	
<b>MR286 – Mount Kosciusko Road</b>				
Snowy River	Jindabyne – 10.0 km west of Jindabyne	1,060	1,160	+ 9
<b>MR295 – Five Islands Road</b>				
Wollongong	Cringila – east of Lake Avenue	35,910	34,840	-3
<b>MR309 – Rydalmere Avenue-Aston Street</b>				
Parramatta	Camellia – north of River Road	26,810	25,740	-4
<b>MR310 – Cowra-Cudal</b>				
Waugoola	Canowindra – 10.0 km south of MR237 (Blatchford Street)		770	
<b>MR316 – Newcastle-Mayfield West</b>				
Newcastle	Wickham – north of Greenway Street		18,810	
<b>MR325 – Belmont-Charlestown-Boolaroo</b>				
Lake Macquarie	Redhead – north of Collier Street		5,060	
Lake Macquarie	Mount Hutton – south of Wilsons Road		4,950	
<b>MR326 – Adamstown Heights-Mayfield</b>				
Newcastle	Waratah – north of Kahibah Road		20,410	



Local Government Area	Location	Annual Average Daily Traffic		% change
		1975	1976	
<b>MR328 – Warringah Road</b>				
Warringah	Forestville – west of Melwood Avenue	50,580	50,410	0
<b>MR332 – Berowra Waters Road</b>				
Hornsby	Berowra Waters – ferry over Berowra Creek	330	370	+ 12
<b>MR335 – Wyong-Entrance Road</b>				
Wyong	The Entrance – north of MR335 (Wyong Road)		17,890	
<b>MR336 – Gosford-The Entrance</b>				
Gosford	East Gosford – 0.3 km east of Russell Street	25,930	22,470	-13
<b>MR348 – Tullamore-Peak Hill</b>				
Goobang	Tullamore - north of MR348 (Peak Hill Road)		250	
<b>MR349 – Gosford-Patonga</b>				
Gosford	Woy Woy – at Woy Woy Creek Bridge		10,760	
<b>MR357 – Boggabri-Manilla</b>				
Manilla	Manilla – 3.2 km west of post office		260	
<b>MR373 – Epping Road</b>				
Hornsby	Epping – bridge over Terrys Creek	33,560	31,260	-7
<b>MR377 – Boree-Condobolin</b>				
Jemalong	Eugowra – east of MR238 (Parkes Road)		630	
<b>MR503 – Wilberforce-Singleton</b>				
Patrick Plains	Howes Valley – 5.6 km north of post office	1,310	1,360	+ 4
Colo	Wilberforce – 0.8 km north of MR182 (Sackville Road)		3,420	
<b>MR504 – Moirs Corner-Avoca Beach</b>				
Gosford	Kincumber – 1.6 km west of Bridge Street		4,410	
<b>MR513 – Bulli Pass-Brokers Nose</b>				
Wollongong	Bulli Pass – at County of Cumberland boundary	12,770	13,720	+ 7
<b>MR522 – Shellharbour-Port Kembla North</b>				
Wollongong	Windang – at Lake Illawarra Bridge		29,150	
<b>MR527 – Belmont-Cardiff</b>				
Lake Macquarie	North Belmont – north of Belmont Crescent		7,720	
<b>MR532 – Silverwater Road</b>				
Parramatta	Silverwater – north of Silverwater Bridge over Parramatta River	33,620	34,780	+ 3
<b>MR556 – Gladstone-Smithtown-Seven Oaks</b>				
Macleay	Smithtown – bridge over Macleay River	1,230	1,290	+ 5
<b>MR590 – Peats Ridge-Bucketty</b>				
Gosford	Central Mangrove – north of MR225 (Central Mangrove Road)		1,500	
<b>MR604 – Newcastle-Adamstown Heights</b>				
Newcastle	Broadmeadow – west of Samdon Street		23,610	
Newcastle	Adamstown – south of MR188 (Glebe Road)	10,790	10,790	0
<b>Tourist Road No. 4043 – Alpine Way-Penderlea-Kosciusko National Park</b>				
Snowy River	Kosciusko National Park – 18 km west of MR286 at entrance to park		550	
<b>Tourist Road No. 4053 – Coonabarabran-Gumin</b>				
Coonabarabran	At Timor Rock		170	
<b>Other than Main Roads</b>				
Concord	Mortlake – ferry over Parramatta River	320	300	-6
Sydney	Pymont – bridge over Darling Harbour	51,450	49,480	-4
Wakool	Speewa – ferry over Murray River	70	70	0
Ulmarra	Ulmarra – ferry over Clarence River	40	40	0
Bankstown	Padstow – at Alfords Point Bridge	9,800	10,140	+ 3

# APPENDIX No. 1

Statement of Receipts and Payments for the Five Years ended 30 June 1977

	1972/73 \$	1973/74 \$	1974/75 \$	1975/76 \$	1976/77 \$
<b>(A) COMMONWEALTH AID ROADS FUND</b>					
<b>Receipts</b>					
Grants under the Commonwealth Aid Roads Act, 1969 —					
Schedule 2 — urban arterial roads	46,520,000	55,120,000			
Schedule 3 — rural arterial roads	14,780,000	17,520,000			
Schedule 4 — rural roads other than arterial roads	3,493,632	3,668,240			
Schedule 5 — planning and research	1,280,000	1,470,000			
Grants under the Transport (Planning and Research) Act, 1974 —					
Schedule 1			1,240,843	1,597,079	1,761,326
Grants under the National Roads Act, 1974 —					
Schedule 1 — construction			27,930,000	39,930,000	47,152,209
Schedule 2 — maintenance			7,270,000	7,200,000	7,070,809
Schedule 3 — construction and maintenance of export and commercial roads				2,070,000	2,510,865
Grants under the Roads Grants Act, 1974 —					
Schedule 2 — rural arterial roads			12,190,000	15,430,000	15,430,000
Schedule 3 — rural local roads			11,145,000	16,638,856	18,170,000
Schedule 4 — minor traffic engineering and road safety improvements			249,998	3,025,133	
Schedule 5 — urban arterial roads			46,590,000	44,260,000	36,600,000
Schedule 6 — urban local roads			2,180,000	4,251,381	4,600,000
<b>Total receipts</b>	<b>66,073,632</b>	<b>77,778,240</b>	<b>108,795,841</b>	<b>134,402,449</b>	<b>133,295,209</b>
Balance brought forward	768,451	4,460,794	3,523,820	2,565,333 <sup>11</sup>	5,004,123 <sup>12</sup>
	<b>66,842,083</b>	<b>82,239,034</b>	<b>112,319,661</b>	<b>136,967,782</b>	<b>138,299,332</b>
<b>Payments</b>					
Commonwealth Aid Roads Act, 1969 —					
Construction and reconstruction of roads and bridges —					
Urban arterial roads — work by councils	2,027,734	1,538,239	330,822		
— work by department	31,622,063	38,146,654	3,192,998		
Rural arterial roads — work by department	14,780,000	17,520,000			
Other rural roads — work by councils	3,291,758	3,008,477			
— work by department	62,559	520,862			
Construction and maintenance of unclassified roads in the unincorporated area of the Western Division —					
Other rural roads — work by department	162,605	139,101			
Land acquisitions	9,154,630	16,372,061			
Planning and research	1,280,000	1,470,000			
Transport (Planning and Research) Act, 1974 —					
Planning and research			974,218	1,639,295	2,064,456
National Roads Act, 1974 —					
Construction and reconstruction of roads and bridges —					
Work by councils			160,811	235,571	562,669
Work by department			26,091,822	35,635,056	48,353,111
Property acquisitions			930,920	1,269,703	1,658,292
Maintenance and minor improvement of roads and bridges —					
Work by councils			31,276	62,816	83,639
Work by department			6,959,109	6,964,040	7,956,742
Purchase of land and buildings for works operations			23,580	160,813	208,400
Corridor studies			33,272	25,887	
Administrative expenses			1,369,230	1,771,800	2,358,658

<sup>11</sup>An amount of \$464,513 included in the balance carried forward at 30 June 1975 was refunded to the Commonwealth Government

<sup>12</sup>An amount of \$1,160,410 included in the balance carried forward at 30 June 1976 was brought forward on 1 July 1976 in the Traffic Facilities Fund (see Appendix 1(E))





**APPENDIX No. 1 — continued**  
Statement of Receipts and Payments for the Five Years ended 30 June 1977

	1972/73 \$	1973/74 \$	1974/75 \$	1975/76 \$	1976/77 \$
<b>(B) COUNTY OF CUMBERLAND MAIN ROADS FUND — continued</b>					
<b>(II) Special Purposes</b>					
<b>Receipts</b>					
Loan funds — State Government	750,000	800,000	2,000,000		1,000,000
Loan funds — borrowings under Section 42A of the Main Roads Act	6,200,000	5,000,000	7,931,513	5,000,000	6,290,000
Sydney harbour bridge account for freeway approaches	334,315	6,560	3,038	6,711	354,230
Commonwealth/State government grant for relief of unemployment	276,300	70,888	226,047	146,270	
Commonwealth government grant for traffic engineering and road safety improvement and access to Kingswood arms depot		190,000	29,047		
Contributions from other departments and bodies		18,566			
<b>Total receipts</b>	<b>7,560,615</b>	<b>5,944,238</b>	<b>10,189,645</b>	<b>5,152,981</b>	<b>7,644,230</b>
Net transactions of operating accounts, suspense accounts and transfers to and from the general purposes account in respect of finance for reserve accounts	3,429,926	1,398,061	1,120,060	285,390	3,084,279
Balance brought forward	8,740,218	11,093,437	10,999,774	10,397,617	8,035,379
	<u>19,730,759</u>	<u>18,435,736</u>	<u>20,069,359</u>	<u>15,835,988</u>	<u>12,595,330</u>
<b>Payments</b>					
Construction and reconstruction of roads and bridges — Work by department	8,306,908	7,122,963	9,242,578	7,410,926	4,655,000
Maintenance and minor improvement of roads and bridges —					
Work by councils	34,455	80,049	2,366		
Work by department	81,480	9,427	209,696	160,254	
Payment of sinking fund — State Government loans	17,000	18,320	19,390	21,120	62,760
Repayment of principal on loans raised under Section 42A of the Main Road Act	197,479	205,183	197,712	208,309	241,351
<b>Total payments</b>	<b>8,637,322</b>	<b>7,435,962</b>	<b>9,671,742</b>	<b>7,800,609</b>	<b>4,959,111</b>
Balance carried forward	11,093,437	10,999,774	10,397,617	8,035,379	7,636,219
	<u>19,730,759</u>	<u>18,435,736</u>	<u>20,069,359</u>	<u>15,835,988</u>	<u>12,595,330</u>
<b>(III) Reserve for Loan Repayments</b>					
<b>Receipts</b>					
Transfer from —					
General purposes account	290,850	436,275	24,375	206,287	251,287
Special purposes account	283,977	651,363	624,896	708,521	2,155,271
Interest on investments	388,685	758,834	633,642	579,774	668,309
Discount on inscribed stock purchased below par		2,870			
<b>Total receipts</b>	<b>963,512</b>	<b>1,849,482</b>	<b>1,282,913</b>	<b>1,494,582</b>	<b>3,034,867</b>
Balance brought forward —					
Investments	1,298,200	2,578,200	4,798,200	5,978,200	7,478,200
Cash	742,076	425,588	55,050	157,963	152,545
	<u>3,003,788</u>	<u>4,853,250</u>	<u>6,136,163</u>	<u>7,630,745</u>	<u>10,665,612</u>
<b>Payments</b>					
<b>Total payments</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
Balance carried forward —					
Investments	2,578,200	4,798,200	5,978,200	7,478,200	10,653,200
Cash	425,588	55,050	157,963	152,545	12,412
	<u>3,003,788</u>	<u>4,853,250</u>	<u>6,136,163</u>	<u>7,630,745</u>	<u>10,665,612</u>

\*Debit

\*Includes \$2,990,000 of 1977/78 loan allocation received prior to 30 June 1977



**APPENDIX No. 1 — continued**  
Statement of Receipts and Payments for the Five Years ended 30 June 1977

	1972/73 \$	1973/74 \$	1974/75 \$	1975/76 \$	1976/77 \$
<b>(C) COUNTRY MAIN ROADS FUND</b>					
<b>(I) General Purposes</b>					
<b>Receipts</b>					
Motor vehicle taxation and fees	53,268,646	57,006,498	59,702,711	61,124,099	73,107,313
Charges on commercial vehicles under the Road Maintenance (Contribution) Act	14,652,750	15,755,867	16,615,594	16,214,221	15,847,729
State treasury advance — repayable				6,000,000	
Contributions from councils	89,141	256,467	117,490	456,707	153,126
Contributions from other departments and bodies	159,488	199,202	180,354	160,793	403,094
Other	219,695	369,053	444,921	452,972	596,270
<b>Total receipts</b>	<b>68,389,720</b>	<b>73,587,087</b>	<b>77,061,070</b>	<b>84,408,792</b>	<b>90,107,532</b>
Balance brought forward	3,227,760	4,911,217	8,181,988	9,115,673	12,140,436
	<u>71,617,480</u>	<u>78,498,304</u>	<u>85,243,058</u>	<u>93,524,465</u>	<u>102,247,968</u>
<b>Payments</b>					
Construction and reconstruction of roads and bridges —					
Work by councils	8,847,895	8,468,980	11,368,385	15,650,013	6,603,207
Work by department	19,185,984	18,449,227	18,908,835	18,056,021	11,509,875
Property acquisitions	1,779,912	2,396,484	2,568,141	2,034,533	2,156,537
Maintenance and minor improvement of roads, bridges and ferries —					
Work by councils	9,213,809	9,657,163	12,437,685	14,818,766	19,447,856
Work by department	13,193,488	17,457,449	20,505,230	23,775,134	28,667,181
Maintenance and construction of unclassified roads in the Western Division —					94,809
Work by department					94,809
Purchase of land and buildings for works operations	309,628	181,702	440,306	451,010	383,695
Planning and research	223,616	168,183	607,883	357,718	647,720
Administrative expenses	6,187,337	6,625,803	5,922,760	6,087,460	7,897,882
Purchase of land and buildings for administration	484,358	195,676	324,619	853,576	317,004
Interest, exchange, management and flotation expenses on State Loans	949,127	959,949	971,626	1,305,457	1,811,387
Interest on loans raised under Section 42A of the Main Roads Act	1,124,976	1,119,715	1,118,692	1,311,638	1,824,940
Other	469,305	473,675	864,465	754,852	465,057
Repayment of temporary advance from State Treasury	—	—	—	—	—
<b>Total payments</b>	<b>61,949,435</b>	<b>66,154,006</b>	<b>76,038,627</b>	<b>85,456,178</b>	<b>81,881,150</b>
Transfer to country reserve for loan repayments	338,176	507,264		175,538	230,363
Transfer to and refund from special purposes accounts in respect of finance for operating accounts, suspense accounts and reserve accounts	4,418,652	3,655,046	88,758	4,247,667*	54,661*
Balance carried forward	4,911,217	8,181,988	9,115,673	12,140,436	20,191,146
	<u>71,617,480</u>	<u>78,498,304</u>	<u>85,243,058</u>	<u>93,524,465</u>	<u>102,247,968</u>
<b>(II) Special Purposes</b>					
<b>Receipts</b>					
Loan funds — State Government	750,000	700,000		7,250,000	7,000,000
Loan funds — borrowings under Section 42A of the Main Roads Act	800,000		68,487	3,000,000	7,700,000
Commonwealth/State Government Grant for restoration of flood damage		1,500,000	8,267,000	13,223,400	11,806,380
Commonwealth/State Government Grant for relief of unemployment	1,809,958	118,531	285,520	202,409	100,000
State Government Grant for upgrading of cane roads					300,000
Commonwealth government grant for traffic engineering and road safety improvement		310,000	12,953		
Contributions from other departments and bodies	400,000	315,848	420,683	825,916	430,000
<b>Total receipts</b>	<b>3,559,958</b>	<b>2,944,379</b>	<b>9,054,643</b>	<b>24,501,725</b>	<b>27,336,380</b>
Net transactions of operating accounts, suspense accounts and transfers to and from the general purposes account in respect of finance for reserve accounts	6,866,697	4,828,500	2,808,902	3,844,201	1,109,642
Balance brought forward	6,438,302	13,033,703	17,083,758	14,918,717	11,033,031
	<u>16,864,957</u>	<u>20,806,582</u>	<u>23,329,499</u>	<u>35,576,241</u>	<u>39,479,053</u>
*Credit					
*Debit					

**APPENDIX No. 1 — continued**  
Statement of Receipts and Payments for the Five Years ended 30 June 1977

	1972/73	1973/74	1974/75	1975/76	1976/77
	\$	\$	\$	\$	\$
<b>(C) COUNTRY MAIN ROADS FUND — continued</b>					
<b>(II) Special Purposes — continued</b>					
<b>Payments</b>					
Construction and reconstruction of roads and bridges —					
Work by councils	73,442	8,753*	16,631	36,043	574,791
Work by department	1,658,453	968,161	193,521	10,000,000	14,790,439
Maintenance and minor improvement of roads and bridges —					
Work by councils	1,509,812	308,640	6,104*		
Work by department	220,808	296,431	784,970	803,111	813,267
Restoration of flood damage		1,763,522	7,027,441	13,181,743	12,184,292
Repayment of principal and payment of sinking fund —					
State Government Loans	181,823	192,811	201,524	215,263	180,553
Repayment of principal on loans raised under Section 42A of the Main Roads Act	186,916	202,012	212,799	307,050	517,144
<b>Total payments</b>	<b>3,831,254</b>	<b>3,722,824</b>	<b>8,410,782</b>	<b>24,543,210</b>	<b>28,860,486</b>
Balance carried forward	13,033,703	17,083,758	14,918,717	11,033,031	10,618,567
	<u>16,864,957</u>	<u>20,806,582</u>	<u>23,329,499</u>	<u>35,576,241</u>	<u>39,479,053</u>
<b>(III) Reserve for Loan Repayments</b>					
<b>Receipts</b>					
Transfer from —					
General purposes account	338,176	507,264		175,538	230,363
Special purposes account	49,249	49,069	49,069	49,249	49,249
Interest on investments	73,874	165,580	211,988	212,758	248,678
Discount on inscribed stock purchased below par		540			
<b>Total receipts</b>	<b>461,299</b>	<b>722,433</b>	<b>261,057</b>	<b>437,545</b>	<b>528,288</b>
Balance brought forward —					
Investments	545,000	1,145,000	2,280,000	2,560,000	2,930,000
Cash	575,180	436,479	23,912	4,969	72,514
	<u>1,581,479</u>	<u>2,303,912</u>	<u>2,564,969</u>	<u>3,002,514</u>	<u>3,530,802</u>
<b>Payments</b>					
<b>Total payments</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
Balance carried forward —					
Investments	1,145,000	2,280,000	2,560,000	2,930,000	3,530,000
Cash	436,479	23,912	4,969	72,514	802
	<u>1,581,479</u>	<u>2,303,912</u>	<u>2,564,969</u>	<u>3,002,514</u>	<u>3,530,802</u>
<b>(D) TOTAL STATE ROAD FUNDS</b>					
<b>(I) General Purposes</b>					
<b>Receipts</b>					
Motor vehicle taxation and fees	74,414,599	79,599,223	83,506,708	85,954,303	102,752,921
Charges on commercial vehicles under the Road Maintenance (Contribution) Act	18,315,937	19,694,834	20,769,493	20,267,776	19,809,861
Levy upon councils under Section 11 of the Main Roads Act	311,130	167,237	155,903	104,468	56,559
State treasury advance — repayable	—	—	—	6,000,000	—
Contributions from councils	424,647	380,533	435,735	1,130,976	898,392
Contributions from other departments and bodies	250,785	306,095	204,276	293,336	484,044
Other	1,335,642	1,111,460	1,861,786	1,902,643	1,651,846
<b>Total receipts</b>	<b>95,052,740</b>	<b>101,259,382</b>	<b>106,833,901</b>	<b>115,653,502</b>	<b>125,653,423</b>
Balance brought forward	5,885,703	6,517,292	10,765,012	17,635,312	19,718,613
	<u>100,938,443</u>	<u>107,776,674</u>	<u>117,698,913</u>	<u>133,288,814</u>	<u>145,372,036</u>

\*Credit



**APPENDIX No. 1 — continued**  
Statement of Receipts and Payments for the Five Years ended 30 June 1977

	1972/73 \$	1973/74 \$	1974/75 \$	1975/76 \$	1976/77 \$
<b>(D) TOTAL STATE ROAD FUNDS — continued</b>					
<b>(I) General Purposes — continued</b>					
<b>Payments</b>					
Construction and reconstruction of roads and bridges —					
Work by councils	9,304,015	8,824,905	13,242,297	17,555,496	9,708,169
Work by department	24,707,736	21,561,994	21,607,377	22,680,368	19,796,123
Property acquisitions	8,835,582	9,282,605	6,628,119	6,393,938	6,497,621
Maintenance and minor improvement of roads, bridges and ferries —					
Work by councils	10,204,573	10,844,393	13,816,767	16,887,480	22,266,762
Work by department	17,904,734	23,793,764	28,752,520	35,445,785	41,052,907
Maintenance and construction of unclassified roads in the Western Division —					
Work by department	—	—	—	—	94,809
Purchase of land and buildings for works operations	852,476	907,200	775,155	932,551	607,350
Planning and research	393,447	298,710	1,001,329	587,436	1,073,177
Administrative expenses	9,949,459	11,183,658	8,828,943	9,500,375	10,206,692
Purchase of land and buildings for administration	573,042	240,093	552,563	1,131,264	599,985
Interest, exchange, management and flotation expenses on State Loans	1,150,497	1,164,339	1,191,276	1,545,047	2,102,987
Interest on loans raised under Section 42A of the Main Roads Act	1,819,833	1,803,635	1,883,528	2,320,960	3,222,539
Other	713,321	703,938	1,078,365	976,767	793,671
Repayment of temporary advance from State Treasury	—	—	—	—	—
<b>Total payments</b>	<b>86,408,715</b>	<b>90,609,234</b>	<b>99,558,239</b>	<b>115,957,467</b>	<b>118,022,802</b>
Transfer to reserve for loan repayments	629,026	943,539	24,375	381,825	480,150
Transfer to and refund from special purposes accounts in respect of finance for operating accounts, suspense accounts and reserve accounts	7,383,410	5,456,889	480,987	2,769,091*	1,330,185*
Balance carried forward	6,517,292	10,765,012	17,635,312	19,718,613	28,199,269
	<u>100,938,443</u>	<u>107,776,674</u>	<u>117,698,913</u>	<u>133,288,814</u>	<u>145,372,036</u>
<b>(II) Special purposes</b>					
<b>Receipts</b>					
Loan funds — State government	1,500,000	1,500,000	2,000,000	7,250,000	8,000,000
Loan funds — borrowings under Section 42A of the Main Roads Act	7,000,000	5,000,000	8,000,000	8,000,000	13,990,000 <sup>1</sup>
Sydney Harbour Bridge account for freeway approaches	334,315	6,560	3,038	6,711	354,230
Commonwealth/State government grant for restoration of flood damage	—	1,500,000	8,267,000	13,223,400	11,806,380
Commonwealth/State government grant for relief of unemployment	1,886,256	47,643	511,567	348,679	100,000
State government grant for upgrading of cane roads	—	—	—	—	300,000
Commonwealth government grant for traffic engineering and road safety improvement and access to Kingswood arms depot	—	500,000	42,000	—	—
Contributions from other departments and bodies	400,000	334,414	420,683	825,916	430,000
<b>Total receipts</b>	<b>11,120,573</b>	<b>8,888,617</b>	<b>19,244,288</b>	<b>29,654,706</b>	<b>34,980,610</b>
Net transactions of operating accounts, suspense accounts and transfers to and from the general purposes account in respect of finance for reserve accounts	10,296,623	6,226,561	3,928,962	3,558,811*	1,974,637*
Balance brought forward	15,178,520	24,127,140	28,083,532	25,316,334	19,068,410
	<u>36,595,716</u>	<u>39,242,318</u>	<u>43,398,858</u>	<u>51,412,229</u>	<u>52,074,383</u>

\*Credit

\*Debit

<sup>1</sup>Includes \$2,990,000 of 1977/78 loan allocation received prior to 30 June 1977

**APPENDIX No. 1 — continued**  
Statement of Receipts and Payments for the Five Years ended 30 June 1977

	1972/73	1973/74	1974/75	1975/76	1976/77
	\$	\$	\$	\$	\$
<b>(D) TOTAL STATE ROAD FUNDS — continued</b>					
<b>(II) Special Purposes — continued</b>					
<b>Payments</b>					
Construction and reconstruction of roads and bridges —					
Work by councils	73,442	8,753*	16,631	36,043	574,791
Work by department	9,965,361	8,091,144	9,436,099	17,410,926	19,445,439
Maintenance and minor improvement of roads and bridges —					
Work by councils	1,544,267	388,689	3,738*	—	—
Work by department	302,288	305,858	974,666	963,365	613,267
Restoration of flood damage	—	1,763,522	7,027,441	13,181,743	12,184,292
Repayment of principal and payment of sinking fund —					
State government loans	198,823	211,131	220,914	236,383	243,313
Repayment of principal on loans raised under Section 42A of the Main Roads Act	384,395	407,195	410,511	515,359	758,495
<b>Total payments</b>	<b>12,468,576</b>	<b>11,158,786</b>	<b>18,082,524</b>	<b>32,343,819</b>	<b>33,819,597</b>
Balance carried forward	24,127,140	28,083,532	25,316,334	19,068,410	18,254,786
	<u>36,595,716</u>	<u>39,242,318</u>	<u>43,398,858</u>	<u>51,412,229</u>	<u>52,074,383</u>

**(E) TRAFFIC FACILITIES FUND**

**Receipts**

Motor vehicle taxation	3,345,600
Road transport and traffic fund and public vehicles fund	7,229,609
Ministry of transport vote	2,500,000
Grants under the National Roads Act, 1974 —	
Schedule 1 — construction	125,612
Schedule 2 — maintenance	529,191
Grants under the Roads Grants Act, 1974 —	
Schedule 4 — minor traffic engineering and road safety improvements	3,391,778
Grants under the Transport (Planning and Research) Act, 1974	24,168
Other	1,214,997
<b>Total receipts</b>	<b>18,360,955</b>
Balance brought forward	1,160,410 <sup>1</sup>
	<u>19,521,365</u>

**Payments**

Maintenance and operations	11,984,140
Construction	6,174,086
Administrative expenses	1,125,972
Establishment of transferred Department of Motor Transport organisation	200,916
Planning and research	36,251
<b>Total payments</b>	<b>19,521,365</b>

\*Credit

<sup>1</sup>The balance brought forward at 1 July 1976 was part of the balance carried forward at 30 June 1976 in the Commonwealth Aid Roads Fund (see Appendix 1(A))



**APPENDIX No. 2**  
**SYDNEY HARBOUR BRIDGE ACCOUNT**  
Statement of Income and Expenditure for the Five Years ended 30 June 1977

	1972/73	1973/74	1974/75	1975/76	1976/77
	\$	\$	\$	\$	\$
<b>Income</b>					
Road tolls on vehicles	4,691,485	4,833,400	4,982,997	5,105,399	5,133,643
Railway passenger tolls (net)	282,408	259,667	314,855	321,450	351,975
Omnibus passengers tolls	24,744	26,096	670	526	458
Net rent from tenanted properties	254,204	273,791	242,162	315,484	196,674
Interest on investments	—	—	—	225,000	262,500
Sale of assets	—	—	—	—	40
<b>Total income</b>	<b>5,252,841</b>	<b>5,392,954</b>	<b>5,540,684</b>	<b>5,967,859</b>	<b>5,965,290</b>
<b>Expenditure</b>					
Loan charges — State loans					
Interest	755,070	740,650	704,940	665,130	697,970
Exchange	3,430	3,250	2,240	2,660	—
Sinking fund	444,480	470,150	490,430	522,690	—
Management expenses	2,540	2,720	2,520	2,800	1,500
Flotation expenses	45,130	41,990	34,720	24,360	21,330
	<b>1,250,650</b>	<b>1,258,760</b>	<b>1,234,850</b>	<b>1,217,640</b>	<b>720,800</b>
Loan charges — borrowings under Section 42A of the Main Roads Act					
Interest	478,952	465,312	466,830	461,261	498,629
Repayment on principal	183,251	191,715	165,292	111,819	116,823
Transfer to reserve for loan repayments	243,472	240,872	243,472	243,472	243,472
	<b>905,675</b>	<b>897,899</b>	<b>875,594</b>	<b>816,552</b>	<b>858,924</b>
Maintenance, lighting and cleaning bridge and approaches	998,359	1,133,566	1,399,506	1,599,129	1,592,857
Provision of traffic facilities	367,778	467,266	613,856	573,617	959,206
Cost of collecting road tolls	533,854	601,174	786,609	989,967	1,036,819
Alterations to toll gates and archways	9,369	4,233	13,197	13,257	—
Administrative expenses	197,136	242,226	354,358	415,545	375,390
Other	—	—	—	1,511	1,117
	<b>2,106,496</b>	<b>2,448,465</b>	<b>3,167,526</b>	<b>3,593,026</b>	<b>3,965,389</b>
<b>Total expenditure</b>	<b>4,262,821</b>	<b>4,605,124</b>	<b>5,277,970</b>	<b>5,627,218</b>	<b>5,545,113</b>
Excess of income over expenditure	990,020	787,830	262,714	340,641	420,176
Less — transfers to County of Cumberland main roads fund (special purposes account) for Warringah Freeway construction	334,315	6,560	3,038	6,711	354,230
Surplus for the year	655,705	781,270	259,676	333,930	65,946
Accumulated surplus brought forward	2,019,096	2,674,801	3,456,071	3,715,747	4,049,677
Accumulated surplus carried forward	<b>2,674,801</b>	<b>3,456,071</b>	<b>3,715,747</b>	<b>4,049,677</b>	<b>4,115,623</b>

\*Of this sum, \$3,000,000 has been invested under Section 9 of the Sydney Harbour Bridge (Administration) Act, 1932

**SYDNEY HARBOUR BRIDGE LOAN RESERVE ACCOUNT**

<b>Income</b>					
Transfers from the Sydney Harbour Bridge account	243,472	240,872	243,472	243,472	243,472
Interest on investments	98,582	124,678	173,338	215,764	275,618
Discount received on inscribed stock	—	240	—	—	—
<b>Total income</b>	<b>342,054</b>	<b>365,790</b>	<b>416,810</b>	<b>459,236</b>	<b>519,090</b>
Balance brought forward	1,646,143	1,913,197	2,278,987	2,770,797	3,230,033
	<b>1,988,197</b>	<b>2,278,987</b>	<b>2,695,797</b>	<b>3,230,033</b>	<b>3,749,123</b>
<b>Expenditure</b>					
Premium and brokerage on stock purchased					
Conversion of loans	75,000	—	75,000*	—	—
<b>Total expenditure</b>	<b>75,000</b>	<b>—</b>	<b>75,000*</b>	<b>—</b>	<b>—</b>
Balance carried forward	1,913,197	2,278,987	2,770,797	3,230,033	3,749,123
	<b>1,988,197</b>	<b>2,278,987</b>	<b>2,695,797</b>	<b>3,230,033</b>	<b>3,749,123</b>

\*Credit

**APPENDIX No. 2 — continued**  
**SYDNEY HARBOUR BRIDGE ACCOUNT**  
Balance Sheet as at 30 June 1977

Previous Year \$		\$	\$	\$
	<b>Funds Employed</b>			
	<b>Accumulated funds and reserves</b>			
	Surpluses from bridge operations and other sources —			
26,681,034	Applied to capital works		27,035,264	
12,621,808	Applied to loan repayments		12,765,891	
4,049,877	Appropriation account		4,115,623	
3,230,033	Capital redemption reserve		3,749,123	
<u>46,582,552</u>				47,665,901
	<b>Long term liabilities</b>			
9,450,670	General loan account		9,423,410	
7,769,024	Loans raised under Section 42A of the Main Roads Act		7,652,201	
<u>17,219,694</u>				17,075,611
<u>63,802,246</u>	<b>Total funds</b>			<u>64,741,512</u>
	<b>Represented by</b>			
	<b>Fixed assets</b>			
19,060,785	Bridge construction	19,060,785		
26,109,073	Warringah Freeway approach	26,463,303		
8,977,270	Cahill Expressway	8,977,270		
2,011,340	Conversion of tram tracks	2,011,340		
364,068	Widening western approach	364,068		
<u>56,522,536</u>			56,876,766	
140,016	Furniture and equipment (less depreciation)		114,105	
<u>56,662,552</u>				56,990,871
	<b>Investments</b>			
3,122,300	Securities of public authorities			3,672,300
	<b>Current assets</b>			
65,190	Stores and materials	66,942		
309,105	Sundry debtors and accrued interest	338,480		
4,045,055	Cash	4,037,333		
<u>4,419,350</u>			4,442,755	
	<b>Less — current liabilities</b>			
	Sundry creditors —			
136,728	Private lenders for interest	138,114		
265,228	Other	226,300		
<u>401,956</u>			364,414	
<u>63,802,246</u>				<u>4,078,341</u>
				<u>64,741,512</u>



### APPENDIX No. 3

Summary of Loan Liabilities to the State Treasury as at 30 June 1977

Particulars	County of Cumberland Main Roads Fund			Country Main Roads Fund		Develop- mental Roads Fund	Total \$
	Section 13(4C) of Main Roads Act, 1924	Sydney- Newcastle Tollwork	Waterfall to Bull Pass Tollwork	Section 21(3, 3A and 3B) of Main Roads Act, 1924	Sydney- Newcastle Tollwork	Section 21(8) of Main Roads Act, 1924	
	\$	\$	\$	\$	\$	\$	
<b>Gross liability assumed:</b>							
Prior to 1 July 1976	3,850,000	12,200,000	3,400,000	22,685,305	16,750,000	3,448,039	62,334,344
During 1976/77	1,000,000	—	—	7,000,000	—	—	8,000,000
<b>Total to 30 June 1977</b>	<b>4,850,000</b>	<b>12,200,000</b>	<b>3,400,000</b>	<b>29,685,305</b>	<b>16,750,000</b>	<b>3,448,039</b>	<b>70,334,344</b>
<b>Repayments of principal and sinking fund contribution:</b>							
Prior to 1 July 1976							
By department	181,020	283,650	26,380	5,253,052	569,810	47,001	6,360,913
By Commonwealth government under financial agreement and federal aid roads and works agreement	111,871	216,709	23,816	1,548,151	366,039	397,086	2,663,672
<b>Total prior to 1 July 1976</b>	<b>292,891</b>	<b>500,359</b>	<b>50,196</b>	<b>6,801,203</b>	<b>935,849</b>	<b>444,087</b>	<b>9,024,585</b>
During 1976/77							
By department	62,760	229,260	69,750	179,773	293,000	780	835,323
By Commonwealth government under financial agreement	9,957	33,194	9,488	44,986	44,201	9,210	151,036
<b>Total during 1976/77</b>	<b>72,717</b>	<b>262,454</b>	<b>79,238</b>	<b>224,759</b>	<b>337,201</b>	<b>9,990</b>	<b>986,359</b>
To 30 June 1977							
By department	243,780	512,910	96,130	5,432,825	862,810	47,781	7,196,236
By Commonwealth government under financial agreement and federal aid roads and works agreement	121,828	249,904	33,304	1,593,137	410,240	406,296	2,814,709
<b>Total to 30 June 1977</b>	<b>365,608</b>	<b>762,814</b>	<b>129,434</b>	<b>7,025,962</b>	<b>1,273,050</b>	<b>454,077</b>	<b>10,010,945</b>
<b>Net liability at 30 June 1977</b>	<b>4,484,392</b>	<b>11,437,186</b>	<b>3,270,566</b>	<b>22,659,343</b>	<b>15,476,950</b>	<b>2,994,962</b>	<b>60,323,399</b>

\*State Treasury has paid \$1,944,475 to 30 June 1977 in connection with the sinking fund liabilities.

### APPENDIX No. 4

Summary of Loan Liabilities as at 30 June 1977

Particulars	County of Cumberland Main Roads Fund		County of Cumberland Waterfall to Bull Pass Tollwork		Sydney-Newcastle Tollwork		Country Main Roads Fund		Sydney Harbour Bridge Account	Total \$
	County of Cumberland Main Roads Fund	Waterfall to Bull Pass Tollwork	County of Cumberland	Country	County of Cumberland	Country	County Main Roads Fund	Warringah Freeway		
	\$	\$	\$	\$	\$	\$	\$	\$		
<b>LOAN BORROWINGS UNDER SECTION 42A OF THE MAIN ROADS ACT</b>										
<b>Gross liability assumed:</b>										
Prior to 1 July 1976	17,855,000	27,500,000	4,500,000	1,500,000	20,400,000	9,320,000	81,075,000			
During 1976/77	3,200,000	100,000	—	—	7,700,000	—	11,000,000			
<b>Total to 30 June 1977</b>	<b>21,055,000</b>	<b>27,600,000</b>	<b>4,500,000</b>	<b>1,500,000</b>	<b>28,100,000</b>	<b>9,320,000</b>	<b>92,075,000</b>			
<b>Repayment of principal and sinking fund contribution:</b>										
Prior to 1 July 1976										
Principal	1,788,100	1,383,412	80,000	197,746	1,296,543	1,550,976	6,296,776			
Sinking fund	2,855,862	3,274,641	1,500,242	438,066	2,564,448	3,230,033	13,863,293			
During 1976/77										
Principal	241,350	457,630	10,000	29,024	517,144	116,823	1,371,971			
Sinking fund	249,787	526,169	1,590,602	49,249	230,363	243,472	2,889,642			
Net interest on investment	245,192	281,146	141,971	36,282	212,394	275,617	1,192,602			
<b>Total to 30 June 1977</b>	<b>5,380,291</b>	<b>5,922,998</b>	<b>3,322,815</b>	<b>750,367</b>	<b>4,820,892</b>	<b>5,416,921</b>	<b>25,614,284</b>			
<b>Net liability at 30 June 1977</b>	<b>15,674,709</b>	<b>21,677,002</b>	<b>1,177,185</b>	<b>749,633</b>	<b>23,279,108</b>	<b>3,903,079</b>	<b>66,460,716</b>			

# **APPENDIX No. 5** **COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the National Roads Act on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(A) SCHEDULE 1 - CONSTRUCTION OF NATIONAL ROADS</b>					<b>\$</b>
<b>(I) COUNTY OF CUMBERLAND AREA</b>					
<b>(a) FREEWAYS</b>					
<b>South Western Freeway</b>					
Campbelltown	F5 &				
	178	53.43 km to 55.04 km south of Sydney	Interchange	Department	48,884
	F5	Cross Roads to Campbelltown	Divided two lane carriageway	"	55,445
	F5	MR178 to Nepean River, 55.04 to 61.15 km south of Sydney	"	"	2,721,784
	F5	Glenlee (Minto) Rd, 57.5 km south of Sydney	Prestressed concrete bridge	"	268,931
	F5	MR179, 4.83 km south of Campbelltown	Prestressed concrete bridge underpass	"	394,060
	F5	Sydney water supply line, 57.3 km south of Sydney	Prestressed concrete bridge	"	2,587
	F5	Twin Bridges at Menangle over Nepean River	Reinforced concrete bridges	"	8,994
	F5	South Western Freeway	Design by consultants	"	21,417
	F5	Bridge over F5 on MR179	"	"	178
Liverpool	F5	MR177, 39.7 km from Sydney	Underpass sub-structure	"	116
<b>Total Freeways</b>					<b>3,522,394</b>
<b>(b) STATE HIGHWAYS</b>					
<b>Hume Highway</b>					
Camden	2	Northbound carriageway over MR178	Interchange structure	Department	298,600
"	2	Bridge over Nepean River at Camden	Northern approach	"	172,843
Liverpool	2 & 177	Cross Roads, Liverpool to bridge over F5	Reconstruction and widening and intersection at Cross Roads	"	2,701
<b>Total State Highways</b>					<b>474,144</b>
<b>(c) TRUNK AND ORDINARY MAIN ROADS</b>					
Camden	178	6.44 km to 8.53 km west of Campbelltown	Reconstruction including intersection with SH2	Department	149,226
"	178	F5 near Campbelltown to SH2 near Narellan	Reconstruction and dual carriageway	"	341,406
Liverpool	177 & 2	The Cross Roads, Casula	Restoration of failed pavement	"	289,080
<b>Total Trunk and Ordinary Main Roads</b>					<b>779,712</b>
<b>(II) COUNTRY URBAN AREA</b>					
<b>(a) STATE HIGHWAYS</b>					
<b>Hume Highway</b>					
Camden	2	Bridge over Nepean River at Camden	Southern approach	Department	143,036
"	2	3.2 km to 4.5 km south of Camden	Dual carriageway	"	7,853
					<b>150,889</b>
<b>New England Highway</b>					
Greater Cessnock	9	Culvert at Redhouse Creek, 23.8 km south of Singleton	Approaches	Department	1,475
"	9	Redhouse Creek, 23.8 km south of Singleton	Multi cell reinforced concrete box culvert	"	1,172
Maitland	9	Four mile creek, 7.7 km south of Maitland	Abutment piles	"	40
"	9	25.9 km to 28.16 km west of Newcastle	Dual carriageway	"	827,010
"	9	8.2 km to 10.0 km west of Maitland	Reconstruction and bituminous surfacing	"	131,130
"	9	2.65 km to 4.68 km west of Maitland	"	"	132,279
"	9	Intersection of Ledsam St and Regent St, Maitland	Channellisation	Council	44,758
"	9	25.9 km to 28.2 km west of Newcastle	Divided carriageway	"	39,163
Newcastle	9	16.0 km to 18.7 km north of Newcastle	Pavement strengthening and asphaltic concrete surfacing	Department	79,443
					<b>1,256,470</b>
<b>Pacific Highway</b>					
Wyong	10	Kangy Creek, 3.0 km south of Tuggerah	Reinforced concrete bridge	Department	375
					<b>375</b>
<b>Total - State Highways</b>					<b>1,407,734</b>



**APPENDIX No. 5 — continued**  
**COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the National Roads Act on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(A) SCHEDULE 1 — CONSTRUCTION OF NATIONAL ROADS — continued</b>					<b>\$</b>
<b>(III) COUNTRY RURAL AREA</b>					
<b>(a) FREEWAYS</b>					
<b>Sydney-Newcastle Freeway</b>					
Gosford	F3	38 km to 64 km north of Sydney	Asphaltic concrete surfacing	Department	1,297,762
"	F3	Bridge over Mooney Mooney Creek, south of Gosford	Foundation test boring	"	1,674
Wyong	F3	Bridge at 89.01 km north of Sydney	"	"	230
"	F3	Bridge over Wyong River	"	"	5,857
"	F3	Bridge over Sparks Rd	"	"	3,431
"	F3	Bridge over Buddonderry Creek	"	"	485
"	F3	Sparks Rd to Great North Railway at Doyalson	"	"	8,837
"	F3	Wyee Link Road Bridge	"	"	9,090
"	F3	Wallarah Creek Bridge	"	"	1,755
"	F3	Ourimbah to Doyalson and Wyee	Freeway location investigation	"	1,009
"	F3	Bridge over Cobbs Rd	Foundation test boring	"	1,697
"	F3	Bridges over Deep Creek, 89.35 km and 89.50 km north of Sydney	"	"	1,493
"	F3	Bridge over MR217 at Wyong	"	"	924
"	F3	Bridge over St. Johns Rd	"	"	1,415
"	F3	Cobbs Rd to Sparks Rd — cut and fill locations	"	"	12,130
"	F3	Bridge over Great Northern Railway Line	"	"	6,971
					<b>1,354,560</b>
<b>South Western Freeway</b>					
Mittagong	F5	Yerrinbool to Aylmerton	Divided two lane carriageway	Department	1,551,363
"	F5	Yanderra to Yerrinbool	"	"	5,498,783
"	F5	Twin bridges over southern railway and south bound loading ramp near Yanderra	Construction of piers	"	102,334
"	F5	Yerrinbool to Aylmerton	Divided two lane carriageway	"	44,355
"	F5	Yanderra to Yerrinbool	"	"	769,828
Wollondilly	F5	86.7 km to 89.6 km south of Sydney (Pheasants Nest to Yanderra)	Earthworks, drainage and structures	"	1,244,486
"	F5	77.3 km to 102.7 km Pheasants Nest to Yanderra, south of Sydney	Dual two lane carriageway	"	367,140
"	F5	Moreton Park Rd over F5, 69.2 km south of Sydney	Deviation bridge	"	191,795
"	F5	Twin bridges at Menangle over Nepean River	Reinforced concrete bridges	"	6,782
"	F5	Twin bridges at Douglas Park over Nepean River	"	"	62,363
"	F5	Avon Dam Rd over F5, 87.4 km south of Goulburn	Watermains bridge (Bridge No. 516)	"	2,498
"	F5	Moreton Park Rd over F5, 69.2 km south of Sydney	Deviation bridge	"	17,675
"	F5	Menangle to Douglas Park, 61.15 km to 70.48 km south of Sydney	Divided two lane carriageway	"	3,000,868
"	F5	Douglas Park to Pheasants Nest, 70.48 km to 76.6 km south of Sydney	"	"	841,879
"	F5	Nepean River to Douglas Park	Design by consultants	"	10*
"	F5	Pheasants Nest Bridge over Nepean River	Foundation test boring	"	11,827
"	F5	Pheasants Nest to Yanderra, 77.3 km to 102.7 km south of Sydney	Divided dual carriageway	Department	153,430
					<b>13,867,393</b>
<b>Total Freeways</b>					<b>15,221,953</b>

\*Credit

# **APPENDIX No. 5 — continued** **COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the National Roads Act on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(A) SCHEDULE 1 — CONSTRUCTION OF NATIONAL ROADS — continued</b>					<b>\$</b>
<b>(IH) COUNTRY RURAL AREA — continued</b>					
<b>(b) STATE HIGHWAYS</b>					
<b>Hume Highway</b>					
Albury	2	59.45 km to 60.8 km south of Holbrook	Reconstruction and bituminous surfacing	Department	416,802
Camden	2	Cowper Dr, Camden to MR259	Kerb and gutter and sidestrip sealing	Council	3,337
Goodradigbee	2	Bridge over Connors Creek, 35.2 km south of Yass	Approaches	Department	356,002
"	2	Yass to Bowning, 5.6 km to 12.1 km south of Yass	Divided two lane carriageways	"	812,036
"	2	Connors Creek, 35.4 km south of Yass	Demolition of old bridge	"	3,657
"	2	Derringullen Creek, 7.6 km south of Yass	Reinforced concrete girder bridge	"	309,413
"	2	Connors Creek, 35.4 km south of Yass	Prestressed concrete bridge	"	877
Goulburn City	2	Fitzroy Bridge over Mulwaree Ponds at North Goulburn	Reinforced concrete bridge	"	29,307
"	2	Bradley St to Clinton St, Goulburn	Restoration of cement concrete pavement	Council	94,506
"	2	82.1 km to 85.6 km south of Mittagong	Dual carriageway	Department	1,272,950
"	2	Mundy St to Mary St, Goulburn	Reconstruction and bituminous surfacing	Council	112,035
"	2	Intersection of Clinton, Auburn and Cowper Sts, Goulburn	Chanellisation	"	29,681
"	2	1.12 to 3.2 km south of Goulburn (Clinton St to Finley Rd)	Reconstruction and bituminous surfacing	"	44,618
"	2	Main Southern Railway, 2.3 km north of Goulburn	Overbridge	Department	25,199
Gundagai	2	28.0 km to 37.0 km south of Gundagai	Reconstruction	"	411,058
"	2	Selected lengths, 34.75 km north to 36.97 km south of Gundagai	Reconstruction and bituminous surfacing	"	546,456
"	2	84.3 km to 95.3 km south of Gundagai	Bituminous concrete surfacing of pavement	"	176,753
"	2	Bridge over Murrumbidgee River at Gundagai	Approaches	"	2,724,337
"	2	Jones Creek, 101.5 km south of Yass	Twin prestressed concrete bridges	"	840
"	2	Murrumbidgee River at Gundagai	Reinforced concrete bridge	"	678,106
"	2	Jones Creek at Sheridan St, Gundagai	Reinforced concrete steel deck bridge	"	80,531
"	2	Sheridan St, Gundagai	Tunnel over northbound unloading ramp	"	427,723
"	2	Cooneys Creek to North Gundagai	Investigation and preliminary engineering	"	5,554
Gunning	2	Fish River, 45.0 km south of Goulburn	Prestressed concrete girder bridge	"	326,665
"	2	23.7 km to 66.7 km south of Goulburn	Widening and improvements of formation and pavement reconstruction	"	435,583
"	2	Bridge over Fish River, 45.0 km south of Goulburn	Approaches	"	248,552
Holbrook	2 & 284	Little Billabong, 43.9 km to 44.9 km south of Tarcutta	Improvement to intersection	"	32,761
Hume	2	56.0 km to 59.7 km south of Holbrook	Reconstruction and bituminous surfacing	"	247,813
"	2	Main Southern Line, 54.1 km south of Holbrook near Ettamogah	Railway overbridge	"	1,984
"	2	Crookwell railway line at North Goulburn	Railway overpass	"	144
Kyeamba	2	3.6 km to 20.4 km south of Tarcutta	Second carriageway	"	775,334
"	2	Bridge over Tarcutta Creek, 0.6 km south of Tarcutta	Formation and widening of flood channel and levee banks	"	12,838
"	2	Comatawa Creek, 4.0 km south of Tarcutta	Reinforced concrete steel deck bridge	"	55,717
Mittagong	2	117 km to 123.1 km south of Sydney	Divided carriageway	"	32,778
"	2	126.1 km to 128.8 km south of Sydney	Reconstruction of pavement and overtaking lane	"	5,664
"	2 & 260	123.8 km south of Sydney	Improvement of intersection	"	521
"	2	Mittagong to Exeter Rd, 0 km to 31.5 km south of Mittagong	Investigation of Mittagong and Berrima by-pass and relocation	"	12,212
Mulwaree	2	56.5 km to 66.6 km south of Mittagong	Divided two lane carriageways	"	16
"	2	78.4 km to 81.1 km south of Mittagong	Reconstruction and bituminous surfacing	"	23



# **APPENDIX No. 5 — continued** **COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the National Roads Act on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(A) SCHEDULE 1 — CONSTRUCTION OF NATIONAL ROADS — continued</b>					<b>\$</b>
<b>(III) COUNTRY RURAL AREA — continued</b>					
<b>(b) STATE HIGHWAYS — continued</b>					
<b>Hume Highway — continued</b>					
Mulwaree	2	67.1 km to 74.7 km south of Mittagong	"	Department	12,020
"	2	9 km south of Goulburn	Establishment of rest area at Yarra	"	4,079
Wingecarribee	2	Bridge over Medway Rivulet, 142.8 km to 143.39 km south of Sydney	Approaches	"	3,653
"	2	Hanging Rock-Uringalla Creek, 165.1 km to 165.9 km south of Sydney	Dual carriageway	"	1,567,061
"	2	154.3 km to 164.8 km south of Sydney	"	"	2,954,799
"	2	Main Southern Railway, Picton	Pedestrian overbridge	"	248
Wollondilly	2	88.87 km to 96.6 km south of Sydney	Reconstruction and asphaltic concrete surfacing	"	1,159*
"	2	Selected lengths, Camden to Mittagong, 62.76 km south of Camden	Heavy patching of damaged pavement	"	266,977
"	2	Selected lengths, Mittagong to 46.7 km south of Mittagong	"	"	380*
"	2	74 km to 75.6 km south of Sydney	Reconstruction and bituminous surfacing	"	77,417
"	2	76.4 km to 78.4 km south of Sydney	"	"	1,887,642
"	2	Southern approach to Picton Sub-way	Improvement to alignment	"	221,055
Yass	2	Yass River (Hume Bridge) at Yass	Steel girder and reinforced concrete bridge	"	528,047
"	2	Hume Bridge over Yass River at Yass	Supply and delivery of steel piles	"	3,204
"	2	Bridge over Yass River, 88.2 km to 89.3 km south of Goulburn	Approaches	"	90,661
"	2	Hume Bridge over Yass River at Yass	Design by consultants	"	99
					<u>18,365,826</u>
<b>Federal Highway</b>					
Gunning	3	Collector to A.C.T. border	Corridor study to review location	Department	471
Mulwaree	3	22.2 km to 80.0 km south of Goulburn	Strengthening and heavy patching	"	140,194
"	3	14.3 km to 22.2 km south of Goulburn	Second carriageway	"	1,170,009
					<u>1,310,674</u>
<b>New England Highway</b>					
Cockburn	9	Laheys Creek, 27.92 km north of Tamworth	3 cell reinforced concrete box culvert	Department	167*
"	9	62.4 km to 69.4 km north of Tamworth	Provision of slow vehicle lane for northbound traffic	"	299,775
"	9	24.9 km to 29.9 km north of Tamworth	Reconstruction to provide additional carriageways	"	845,755
"	9	4.84 km to 16.6 km north of Tamworth	Asphaltic concrete surfacing and widening and culvert extension and widening	"	77,516
"	9	31.91 km to 33.8 km north of Tamworth	Slow vehicle lane	"	56,766*
"	9	33.8 km to 36.2 km north of Tamworth	Widening, reconstruction and bituminous surfacing of climbing lane	"	123,383
Denman	9	35.4 km north of Singleton	Scour correction	"	19,606
"	9	38.9 km to 45.8 km north of Singleton	Reconstruction and bituminous surfacing	"	301,086
Dumaresq	9	7.05 km to 10.99 km north of Armidale	"	"	9,473
Glen Innes	9	2.4 km to 6.0 km north of Glen Innes	"	"	226,213
"	9	2.4 km to 3.8 km north of Glen Innes	Strengthening and widening existing pavement	"	119
Guyra	9	Through Guyra Township	Amplification of drainage system	Council	7,499
Murrurundi	9	63.06 km to 64.52 km north of Muswellbrook	Reconstruction and bituminous surfacing	Department	233,271
"	9	Campbells Creek, 1.6 km south of Murrurundi	Prestressed concrete bridge	"	24,123
Muswellbrook	9	Muscle Creek, 5.3 km south of Muswellbrook	Reinforced concrete box culvert	"	10,163

\*Credit

**APPENDIX No. 5 — continued**  
**COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the National Roads Act on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(A) SCHEDULE 1 — CONSTRUCTION OF NATIONAL ROADS — continued</b>					\$
<b>(III) COUNTRY RURAL AREA — continued</b>					
<b>(b) STATE HIGHWAYS — continued</b>					
<b>New England Highway — continued</b>					
Parry	9	141.7 km to 143.3 km north of Muswellbrook	Pavement strengthening	Department	43,656
Patrick Plains	9	Selected lengths between Maitland and Muswellbrook	Widening of pavement	..	82,278
..	9	23.35 km to 24.6 km north of Maitland	Reconstruction and bituminous surfacing (inc. passing lane)	..	169
Peel	9	83.3 km to 88.2 km north of Murrurundi	Widening of shoulders	..	41
Scone	9	Aberdeen overbridge, 16.2 km north of Muswellbrook	Approaches	..	69,969
..	9	26.9 km to 27.5 km north of Muswellbrook	Installation of larger culverts	..	25,113
Severn	9	17.7 km to 22.8 km north of Glen Innes	Reconstruction and bituminous surfacing	..	161,026
..	9	Southern approach to Severn River Bridge	..	..	2,579
..	9	6.0 km to 9.6 km north of Glen Innes	Reconstruction and realignment	..	324,820
..	9	26.2 km to 26.6 km north of Glen Innes	Improvement of curve	..	191,330
..	9	Bridge over Hogues Creek, 21.9 km north of Glen Innes	Widening	..	48,339
Singleton	9	Dunolly Bridge at Singleton	Foundation test boring	..	2,965
..	9	67.9 km to 77.1 km north of Maitland (Liddell deviation)	Repair of guardrail	..	9,578
..	9	45.33 km to 46.46 km north of Maitland	Asphaltic concrete surfacing	Council	44,758
Tamarang	9	48.7 km to 57.8 km north of Murrurundi	Reconstruction and bituminous surfacing	Department	1,109
..	9	Wiles Gully, 45.67 km north of Murrurundi	Three cell reinforced concrete box culvert	..	1
Tamworth	9	Kent St to Gipp St, West Tamworth	Reconstruction and bituminous surfacing	Council	90,511
..	9	Brisbane St and Marius St, Tamworth	Improvement of intersection	..	44,758
Tenterfield	9	Molesworth St to Petre St, Tenterfield	Reconstruction	..	50,353
..	9	3.2 km to 15.3 km south of Tenterfield	Reconstruction, widening and climbing lanes	Department	487,574
..	9	8.5 km to 9.5 km north of Tenterfield	Approaches	..	98,370
..	9	Browns Creek Bridge	Deviation	..	2,056
Uralla	9	13.5 km to 15.8 km north of Tenterfield	..	..	269,169
..	9	90.0 km to 94.84 km north of Tamworth	..	..	25,412
..	9	Uralla Creek Bridge, 89.24 km to 89.94 km north of Tamworth	Approaches	..	4,196,983
<b>Pacific Highway</b>					
Wyong	10	13.71 km to 14.83 km north of Gosford	Reconstruction and bituminous surfacing	..	481,350
..	10	12.2 km to 32.2 km north of SH26	Widening existing pavement	..	205,171
..	10	Wallarah Hill, 34.1 km to 36.2 km north of Gosford	Slow vehicle lane	..	143,033
..	10	Bridge over Kangy Angy Creek, 16.6 km north of Gosford	Approaches	..	5,149
..	10	117.95 km to 125.81 km north of Sydney	Resheeting and widening with asphaltic concrete	..	13,656
..	10	Lucca Rd, 56.23 km south of Newcastle	Improvement of intersection	..	11,105
..	10	Ourimbah Creek, 13.9 km north of Gosford	Steel girder and reinforced concrete bridge	..	1,041
..	10	Kangy Creek, 3.0 km south of Tuggerah	Reinforced concrete bridge	..	25,058
..	10	Southern approach to Ourimbah Creek, 13.6 km north of Gosford	Reinforced concrete box culvert	..	19,536
..					905,099
<b>Barton Highway</b>					
Goodradigbee	15	5 km to 29 km south of Yass	Pavement strengthening and drainage improvement	..	275,143
Yarrowlumla					
Goodradigbee	15	Hume Highway to A.C.T. border	Corridor study to review location	..	4,786
..					279,929



**APPENDIX No. 5 — continued**  
**COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the National Roads Act on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(A) SCHEDULE 1 — CONSTRUCTION OF NATIONAL ROADS — continued</b>					<b>\$</b>
<b>(III) COUNTRY RURAL AREA — continued</b>					
<b>(b) STATE HIGHWAYS — continued</b>					
<b>State Highway No. 26</b>					
Gosford	26	72.42 km to 73.87 km north of Sydney	Additional southbound lane	Department	75,451
Wyong	26	98.1 km to 98.9 km north of Sydney	Widening to four lanes	..	56,145
..	26	Bridge over Ourimbah Creek Rd, 98.2 km north of Sydney	Widening	..	55,121
					<u>186,717</u>
<b>Total State Highways</b>					<u><b>25,245,228</b></u>
<b>(B) SCHEDULE 3 — CONSTRUCTION ON EXPORT AND MAJOR COMMERCIAL ROADS</b>					
<b>(I) COUNTY OF CUMBERLAND AREA</b>					
<b>(a) TRUNK AND ORDINARY MAIN ROADS</b>					
Botany	170	Bridges over southern sewer main on loading ramp	Design by consultants	Department	19,910
..	616	Bridge over Bunnerong Outfall Canal at Matraville	..	..	11,373
..	616	Beauchamp Rd and Denison St from Botany Rd to Wentworth Ave	Reconstruction and widening	..	43,632
..	617	Approaches to railway overbridge	Six lane carriageway	..	37,897
..	617	MR170 to MR194	..	..	3,586
..	617	Bridge over sewer main at Chelmsford Ave, Botany	Design by consultants	..	2,016
..	617	Bridge over Southern Suburbs sewer main	..	..	12,817
..	617	MR194 to MR170	Foundation test boring	..	2,897
..	617	Southern Suburbs sewer outfall on southbound carriageway	Overpass	..	37,123
<b>Total Trunk and Ordinary Main Roads</b>					<u>171,251</u>
<b>(II) COUNTRY URBAN AREA</b>					
<b>(a) TRUNK AND ORDINARY MAIN ROADS</b>					
Wollongong	95	MR513 to F6 at Gwynneville	Dual carriageway	Department	2,869,651
..	95	0 km to 14.5 km west of MR513	Reconstruction and pavement strengthening	..	382,146
<b>Total Trunk and Ordinary Main Roads</b>					<u>3,271,797</u>
<b>(III) COUNTRY RURAL AREA</b>					
<b>(a) TRUNK AND ORDINARY MAIN ROADS</b>					
Wollondilly	95	Bridge over Nepean River at Maldon	Approaches	Department	395,676
..	95	Wollondilly Bridge over Nepean River at Maldon	Site preparation miscellaneous work at abutments	..	52,092
..	95	Southern Railway Line, 5.1 km east of Picton	Railway overbridge	..	101,639
..	95	Bridge over Main Southern Railway Line, 5.15 km east of Picton	Design by consultants	..	3,805
..	95	Bridge over Main Southern Railway Line, 5.15 km east of Picton	Erection and dismantling of Bailey bridging (temporary access)	..	12,642
<b>Total Trunk and Ordinary Main Roads</b>					<u>565,854</u>
<b>SUMMARY</b>					
Construction and reconstruction					
Freeways			18,744,347		
State Highways			27,127,106		
Trunk and Ordinary Main Roads			4,788,614		50,660,067
Property acquisitions					
Freeways			981,018		
State Highways			741,526		
Trunk and Ordinary Main Roads			—		1,722,544
Treeplanting					167,344
Adjustments to properties					70,823
Works office establishment					216,736
<b>Total as shown in Receipts and Payments Statements — Appendix No. 1 (a)</b>					<u><b>52,837,514</b></u>

# **APPENDIX No. 6** **COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the Roads Grants Act on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(A) SCHEDULE 2 — RURAL ARTERIAL ROADS</b>					<b>\$</b>
<b>(I) COUNTRY RURAL AREA</b>					
<b>(a) STATE HIGHWAYS</b>					
<b>Princes Highway</b>					
Bega	1	Bega River at North Bega	Prestressed concrete bridge	Department	40,344
Imlay	1	13.2 km to 17.5 km south of Bega	Reconstruction and bituminous surfacing	..	13,188
..	1	55.1 km to 56.1 km south of Bega	Slow vehicle lane	..	154,338
Mumbulla	1	127.8 km to 131.0 km south of Batemans Bay (Brogo pass)	Drainage improvement and pavement strengthening	..	163,121
Shoalhaven	1	Selected lengths within the shire	Heavy patching	..	82,415
..	1	Parma Creek, 11 km south of Nowra	Deviation	..	6,959
..	1	Curumbene Creek, 10.3 km south of Nowra	Prestressed concrete bridge	..	25,650
					<u>486,015</u>
<b>Snowy Mountains Highway</b>					
Tumut	4	37.6 km to 39.6 km west of Tumut	Widening of shoulders	Department	38,339
..	4	14.09 km to 17.70 km west of Tumut	Reconstruction and bituminous surfacing	..	559,530
..	4	Bridge over Nacka Nacka Creek, 28.2 km west of Tumut	Approaches	..	65,501
..	4	29.93 km to 39.74 km west of Tumut	Widening selected lengths	..	46*
					<u>663,324</u>
<b>Mid Western Highway</b>					
Cowra	6	Fitzroy St to Carleton St, Cowra including Shell Corner	Reconstruction improvement and alignment	Council	87,196
Lyndhurst	6	Martha St, Blayney	Reconstruction and realignment	Department	196,799
..	6	33.15 km to 37.97 km west of Bathurst	Widening formation	..	28,650*
..	6	12.6 km to 16.1 km west of Blayney — Carcoar deviation	Reconstruction and pavement widening	..	171,859
..	6	33.15 km to 37.97 km west of Bathurst	Pavement strengthening	..	37,247
..	6	28.32 km to 33.15 km west of Bathurst	..	..	90,666
Waugoola	6	10.3 km to 12.7 km east of Cowra	Pavement widening and strengthening	Council	74,561
					<u>629,680</u>
<b>Barrier Highway</b>					
Central Darling	8	1 km to 7 km east of Wilcannia	Approaches to bridges over Darling River flood plain	Department	70,471
..	8	Darling River flood plain, 3.7 km east of Wilcannia	Reinforced concrete bridge	..	76,314
..	8	Darling River flood plain, 1.6 km east of Wilcannia	..	..	100,355
..	8	Darling River flood plain, 5.9 km east of Wilcannia	..	..	134,237
..	8	Darling River flood plain, 6.4 km east of Wilcannia	..	..	133,395
Cobar	8	81.4 km to 108.5 km and 130.0 km to 131.4 km west of Nyngan	Reconstruction and widening	..	132,658
..	8	0.06 km to 2.52 km west of Cobar	Reconstruction and bituminous surfacing	Council	7,393
					<u>654,823</u>
<b>Pacific Highway</b>					
Gosford	10	Showground Rd, 3.5 km north of Gosford	Improvement to intersection	Department	24,118
..	10	71.5 km to 71.7 km north of Sydney	Restoration of slip	..	69,599
..	10	Cheero Point, 52.6 km north of Sydney	..	..	6,616
					<u>100,333</u>

\*Credit



**APPENDIX No. 6 — continued**  
**COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the Roads Grants Act on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(A) SCHEDULE 2 — RURAL ARTERIAL ROADS — continued</b>					<b>\$</b>
<b>(I) COUNTRY RURAL AREA — continued</b>					
<b>(a) STATE HIGHWAYS — continued</b>					
<b>Oxley Highway</b>					
Coonabarabran	11	12.2 km to 16.16 km south of Coonabarabran	Approaches to bridge over Belar Creek	Department	7,033
"	11	61.14 km to 67.32 km east of Coonabarabran	Reconstruction and realignment	"	13,846
Liverpool Plains	11	13.0 km to 20.63 km and 1.5 km to 12.4 km east of Gunnedah	Widening of shoulders	Council	45,744
"	11	55 km to 73.8 km west of Tamworth	"	"	71,705
Peel	11	42.45 km to 44.41 km west of Tamworth	Reconstruction and bituminous surfacing	"	44,231
"	11	Bridge over Bective Creek, 25.98 km west of Tamworth	Approaches	"	79,718
"	11	Menedebri Creek, 44.3 km west of Tamworth	Prestressed concrete bridge	Department	4,411
Walcha	11	54.71 km to 58.73 km east of Walcha	Reconstruction and bituminous surfacing	"	60,406
Warren	11	East of Warren	Heavy patching and pavement strengthening	"	46,787
					<b>373,881</b>
<b>Gwydir Highway</b>					
Glen Innes	12	0.44 km to 5.18 km east of Glen Innes	Reconstruction and bituminous surfacing	Council	83,173
Inverell	12	Ferguson St railway level crossing at Glen Innes	Installation of "F" type flashing lights	"	19,247
Macintyre	12	10.2 km to 27.4 km east of Inverell	Strengthening of existing pavement	"	77,314
"	12	14.8 km to 17.4 km west of Inverell	Reconstruction and widening	"	18,956
Severn	12	16.8 km to 17.8 km and 37.4 km to 38.8 km east of Glen Innes	Pavement strengthening and widening	Department	327,140
Yallaroi	12	39.61 km to 53.53 km east of Moree	Pavement restoration	Council	22,708
"	12	0.8 km to 5 km east of Wyallda	Widening and improvement	"	84,063
					<b>632,601</b>
<b>Bruce Highway</b>					
Ashford	16	0 km to 4.83 km west of Yetman	Reconstruction and bituminous surfacing	Council	58,132
"	16	1.2 km to 14.9 km west and 4.0 km to 12.4 km east of Bonshaw	Pavement strengthening and sub-soil drainage	Department	43,116
"	16	Seerys Creek, 16.9 km west of Yetman	Prestressed concrete bridge	Council	8,100
"	16	Unnamed creek, 60.19 km west of Bonshaw	Reinforced concrete box culvert	"	8,481
Casino	16	1. Hickey St to Canterbury St, 2. Walker St to Hickey St	1. Reconstruction, 2. Culvert crossing	"	12,637
Lismore	16	Hunter St to Brenster St, Lismore	Reconstruction and bituminous surfacing	"	50,550
"	16	Ballina St, Lismore, 31.3 km to 31.9 km west of Ballina	"	"	36,556
Tenterfield	16	51.5 km to 57.24 km west of Tenterfield	"	"	62,749
"	16	60.02 km to 62.8 km west of Tenterfield	"	Department	141,561
"	16	40.2 km to 43.5 km east of Bonshaw	"	"	107,256
"	16	32.2 km to 37 km east of Bonshaw	"	"	24,394*
"	16	22.53 km to 32.20 km east of Bonshaw	"	"	2,042
Yallaroi	16	32 km to 42.7 km west of Yetman	"	Council	88,318
					<b>595,104</b>
<b>Castlereagh Highway</b>					
Coonamble	18	Coonamble to Walgett	Heavy patching of selected lengths	Department	4,812*
Walgett	18	80.45 km to 93.32 km north of Walgett	Reconstruction and bituminous surfacing	"	738,992
					<b>734,180</b>

\*Credit

**APPENDIX No. 6 — continued**  
**COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the Roads Grants Act on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(A) SCHEDULE 2 — RURAL ARTERIAL ROADS — continued</b>					<b>\$</b>
<b>(i) COUNTRY RURAL AREA — continued</b>					
<b>(a) STATE HIGHWAYS — continued</b>					
<b>Monaro Highway</b>					
Bibbenluke	19	17.07 km to 34.3 km south of Bombala	Gravel and seal	Council	296,979
"	19	Little Plains Creek, 19.3 km south of Bombala	Prestressed concrete bridge	"	14,681
Monaro	19	Jacks Gully at Bredbo	Reinforced concrete box culvert	Department	17,667
"	19	101.64 km to 103.74 km south of Canberra	Improved drainage and widening formation	"	103,351
"	19	89.0 km to 92.35 km south of Canberra	Reconstruction and bituminous surfacing	"	12,861
"	19	37.0 km to 53.6 km north of Bibbenluke Shire boundary	Drainage improvement and pavement strengthening	"	81,258
					<b>526,797</b>
<b>Riverina Highway</b>					
Berrigan	20	5.0 km to 6.9 km west of Finley	Reconstruction of failed pavement	Department	26,658
					<b>26,658</b>
<b>Cobb Highway</b>					
Central Darling	21	4.83 km to 12.87 km south of SH8 near Wilcannia	Reconstruction and bituminous surfacing	Department	12,340
"	21	0 km to 4.83 km south of SH8 near Wilcannia	"	"	9,007*
Deniliquin	21	1.28 km to 2.3 km south of Deniliquin	"	Council	19,337
Hay	21	76.8 km to 77.7 km north of Hay	Approaches to bridge at Booligal	Department	161,967
					<b>184,637</b>
<b>Illawarra Highway</b>					
Wingecarribee	25	Selected lengths, 6.1 km to 28.6 km east of Moss Vale	Heavy patching	Department	23,303
"	25 & 264	44.4 km west of SH1	Improvement of intersection	"	81,553
"	25	58.9 km to 62.83 km west of SH1	Reconstruction and approaches to bridges over Wells and Black Bobs Creeks	"	288,522
					<b>393,378</b>
<b>Total State Highways</b>					<b>6,001,411</b>
<b>(b) TRUNK AND ORDINARY MAIN ROADS</b>					
Abercrombie	54	48.0 km to 49.1 km south of Bathurst	Reconstruction and bituminous surfacing	Council	48,154
Armidale	74	Taylor St to Douglas St, Armidale	"	"	16,205
Ashford	137	17.16 km to 19.15 km north of Ashford Myall Creek	Approaches	"	50,550
"	137	Waterhole Creek, 19.3 km north of Ashford	Reinforced concrete box culvert	"	50,550
Bellingen	76	Dorrigo Mountain pass, 0.35 km to 2.06 km north of Thora	Improvement of alignment	"	65,707
"	76	21.7 km to 22.3 km west of Bellingen	"	"	9,816
Bibbenluke	91	22.65 km to 25.65 km east of Bombala	Reconstruction and bituminous surfacing	"	92,253
"	93	Saucy Creek, 10.6 km south east of Bombala	Reinforced concrete bridge	"	1,617*
Bingara	134	14.68 km to 20.07 km north east of Bingara	Reconstruction and bituminous surfacing	"	63,187
Bland	57	1.8 km to 5.9 km north of West Wyalong	"	"	90,628
Boorowa	56	42.2 km to 45.23 km north of Boorowa	"	"	45,580
Boree	377	57.7 km to 61.7 km west of Orange	"	"	75,673
Bourke	405	Paroo River and Bywash Nos. 1 and 2 bridges	Approaches	"	160,495
"	405	Paroo River, 187.0 km west of Bourke	Prestressed concrete bridge	Department	1,063
Brewarrina	70	26.6 km to 30.5 km north of Brewarrina	Gravelling and primer sealing	Council	65,715

\*Credit



**APPENDIX No. 6 — continued**  
**COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the Roads Grants Act on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(A) SCHEDULE 2 — RURAL ARTERIAL ROADS — continued</b>					<b>\$</b>
<b>(i) COUNTRY RURAL AREA — continued</b>					
<b>(b) TRUNK AND ORDINARY MAIN ROADS — continued</b>					
Burrangong	78	3.5 km to 8.9 km south of Young	Reconstruction and bituminous surfacing	Council	44,231
"	241	6.4 km to 15.0 km east of Young	"	"	63,416
Byron	65	23.49 km to 26.63 km east of Lismore	"	"	44,681
Canobolas	61	3.65 km to 9.08 km west of Orange	"	"	116,674*
Casino	83	Bent St to Queensland Rd, Casino	"	"	31,594
Central Darling	68	Bridge over Darling River at Menindee	Approaches	"	124,633
"	68	Darling River at Menindee	Steel and concrete bridge	Department	175,749
Coffs Harbour	151	Nana Creek, 26.0 km north of Coffs Harbour	Reinforced concrete box culvert	Council	151,483
"	151	Nana Creek, 57.3 km south of Grafton	Approaches	"	59,611
"	151	64.1 km to 65.8 km south of Grafton	Reconstruction and bituminous surfacing	"	81,928
Colo	181	0 km to 2.0 km north of Webbs Creek Ferry, Colo	"	"	43,526
"	181	1.6 km north of Webbs Creek Ferry to Singleton	"	"	51,813
"	503	Howes Creek, 11.0 km north of Windsor	Prestressed concrete bridge	Department	67,843
"	503	Currency Creek, 8.7 km north of Windsor	"	"	3,753
"	503	Bridge over Roberts Creek, 16.4 km to 17.8 km north of Windsor	Deviation for approaches	"	139,578
"	503	17.54 km to 18.02 km north of Windsor	Reconstruction and bituminous surfacing	"	152,488
"	503	Various locations, 22.0 km to 26.0 km north of Windsor	Strengthening of pavement	"	148,173
"	503	Bridge over Currency Creek, 8.6 km to 9.0 km north of Windsor	Approaches	"	56,108
"	503	Bridge over Howes Creek, 10.9 km to 11.7 km north of Windsor	"	"	22,506
Conargo	552	Bridge over irrigation channel, 17.6 km north of Deniliquin	Widening	Council	56,868
Coolah	77	Merrygoen Creek at Mendooran	Steel and concrete bridge	"	130,854
"	206	Tucklan Creek, 9.66 km west of Dunedoo	Reinforced concrete bridge	"	10,409*
"	206	Sandy Creek, 24.8 km west of Dunedoo	6 span prestressed concrete bridge	"	18,956
"	206	Tucklan Creek, 9.55 km to 9.9 km west of Dunedoo	Approaches	"	33,157
Coonabarabran	55	29.44 km to 34.8 km north of Coolah	Reconstruction and bituminous surfacing	"	112,142
Cootamundra	78	4.5 km to 6.5 km south of Cootamundra	Reconstruction and widening	"	64,193
Copmanhurst	83	39.0 km to 48.0 km north of Grafton	Restoration of damaged pavement	"	27,802
Crookwell	54	24.38 km to 26.4 km north of Crookwell	Reconstruction and bituminous surfacing	"	72,033
Culcairn	331	53.0 km to 58.6 km west of Holbrook Shire boundary	"	"	82,473
Denman	213	12.0 km to 13.38 km west of Jerry Plains	"	"	76,725
Dumaresq	74	76.54 km to 78.63 km (Ebor) east of Armidale	"	"	109,945
Dungog	289	3.2 km to 4.6 km east of MR101	"	"	61,923
Eurobodalla	51	20.3 km to 21.4 km west of Batemans Bay	Construction of climbing lanes	"	61,923
"	271	Kiora Bridge over Moruya River, 3.94 km west of Moruya	Prestressed concrete bridge	"	139,011
Gloucester	90	1.4 km to 3.4 km east of Gloucester	Reconstruction and bituminous surfacing	"	45,495
Gosford	225	38.4 km to 43.3 km north of Wisemans Ferry at Greens Pinch	"	"	63,187
Great Lakes	90	15.92 km to 16.92 km north of SH10, Camerons Creek	Approaches	"	37,912
Gundurimba	544	9.96 km to 11.85 km west of Lismore	Reconstruction and bituminous surfacing	"	88,462
Gunning	52	Bridge over Yass River, 32.1 km south of Gunning	Reconstruction of approaches	"	38,923
Guyra	73	19.0 km to 23.0 km south of Inverell	Reconstruction and bituminous surfacing	"	18,446
"	135	30.42 km to 32.03 km west of Guyra	"	"	60,660

\*Credit

**APPENDIX No. 6 — continued**  
**COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the Roads Grants Act on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(A) SCHEDULE 2 — RURAL ARTERIAL ROADS — continued</b>					<b>\$</b>
<b>(I) COUNTRY RURAL AREA — continued</b>					
<b>(b) TRUNK AND ORDINARY MAIN ROADS — continued</b>					
Hastings	112	13.0 km to 14.65 km south of SH11	Reconstruction and bituminous surfacing	Council	78,352
"	600	Fernbank Creek, 5.28 km north of SH11	Prestressed concrete bridge	"	237,583
Holbrook	284	46.2 km to 61.3 km west of Tumbarumba	Reconstruction and bituminous surfacing	"	55,260
Illabo	78	19.6 km to 22.2 km north of Junee	"	"	78,820
Imlay	91	24.3 km to 26.7 km west of Pambula	"	"	90,989
"	91	Honeysuckle Creek, 25.4 km east of SH1	Steel girder bridge	"	85,646
"	275	Candelo Creek at Candelo	Prestressed concrete bridge	"	67,460
Inverell	73	2.77 km to 3.88 km south of Inverell	Reconstruction and bituminous surfacing	"	70,517
Jemalong	377	Reinforced concrete box culvert, 11.2 km to 13.4 km west of Forbes	Approaches	"	72,898
Junee	78	1.35 km to 2.87 km west of Junee	Reconstruction and bituminous surfacing	"	20,957
Kempsey	75	Belgrave St, Kempsey	Installation of "F" type flashing lights and warning bells	Department	60,347
Kyeamba	78	Bridge over Yerong Creek, 1.21 km north of Yerong Creek Village	Approaches	Council	78,016
Kyogle	83	4.8 km to 7.2 km north of Kyogle	Reconstruction and bituminous surfacing	"	132,693
Lachlan	57	3.2 km to 6.4 km north of Tottenham	"	"	88,462
"	57	11.8 km south of Condobolin at Wallamundry Creek	Prestressed concrete bridge	"	82,143
Leeton	80	7.36 km to 13.5 km east of Leeton	Reconstruction and bituminous surfacing	"	77,088
Liverpool Plains	55	22.86 km to 27.20 km south of SH11 at Mullaley	"	"	89,094
Lockhart	78	31.7 km to 33.1 km south of SH14	"	"	21,058
"	78	Yerong Creek, 1.21 km north of Yerong Creek Village	Approaches	"	46,413*
"	78	"	Prestressed concrete bridge	"	2,502*
Macleay	75	Hickeys Creek, 31.78 km west of Kempsey Municipal boundary	"	"	89,793
"	75	Hickeys Creek Bridge, 31.8 km west of Kempsey	Approaches	"	152,097
Merriwa	214	7.6 km to 9.66 km south of TR62	Reconstruction and bituminous surfacing	"	73,507
"	214	4.0 km to 6.9 km south of TR62	Reconstruction and bituminous surfacing	"	31,897
"	358	Coulsons Creek double crossing, 10.9 km north of Merriwa	Reinforced concrete box culvert construction	"	128,870
Mitchell	78	12.36 km to 15.74 km north of Wagga Wagga	Reconstruction and bituminous surfacing	"	2,390*
Mittagong	260	1.08 km to 2.8 km south of SH2	"	"	54,341
Molong	359	10.47 km to 13.35 km south of Molong	Gravelling and sealing surface	"	95,134
"	359	11.27 km to 16.09 km south of Molong	Reconstruction and bituminous surfacing	"	4,778
Mumbulla	272	Long Swamp, 2.5 km to 9.0 km north of Bermagui	Deviation	"	80,879
Namoi	127	Unnamed creek, 7.68 km west of Wee Waa	Reinforced concrete box culvert	"	63,187
Narraburra	398	19.0 km to 23.7 km south of Arah Park	Reconstruction and bituminous surfacing	"	105,407
Nymboida	74	Cockatoo Creek, 84.8 km to 85.5 km south of Grafton	Reinforced concrete box culvert and approaches	"	42,712
"	74	Bridge over Koukandowie Creek, 19.0 km south of Grafton	Approaches	"	33,777
"	74	Blicks River, 86.1 km south of Grafton	Prestressed concrete bridge	Department	153,936
"	74	Blicks River, 85.5 km to 87 km south of Grafton	Reconstruction and bituminous surfacing northern approach	Council	96,836
Oberon	256	39.36 km to 41.12 km south of Oberon	Reconstruction and bituminous surfacing	"	44,705
Parkes	61	Eugowra Rd to Billabong Creek Bridge	Reconstruction and bituminous surfacing including junction MR238	"	18,743

\*Credit



**APPENDIX No. 6 — continued**  
**COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the Roads Grants Act on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(A) SCHEDULE 2 — RURAL ARTERIAL ROADS — continued</b>					\$
<b>(i) COUNTRY RURAL AREA — continued</b>					
<b>(b) TRUNK AND ORDINARY MAIN ROADS — continued</b>					
Patrick Plains	503	Mellong Creek, 91.5 km, and Kangaroo Waterholes, 93.2 km south of Singleton	Reinforced concrete box culvert and approaches	Department	79,354
"	503	Various locations, 36.9 km to 91.8 km south of Singleton	Replace small timber culverts	"	19,018
Queanbeyan	51	0.35 km to 1.25 km east of Queanbeyan	Deviation including approaches to Queanbeyan Bridge	Council	71,921
"	51	0 km to 2.5 km east of Canberra	Approaches	"	65,917
"	51	Queanbeyan River at Queanbeyan	6 span steel girder bridge	Department	35,028
"	51	Bridge over Queanbeyan River at Queanbeyan	Cement rendering of piers	"	20,417
"	51	Deviation 0 km to 2.5 km east of A.C.T. boundary	Railway overbridge	"	355,894
Rylstone	54	11.84 km to 12.8 km west of Ilford	Reconstruction and bituminous surfacing	Council	41,072
"	54	10.56 km to 11.84 km west of Ilford	"	"	38,648
Talbragar	206	Plain Creek, 21.5 km east of Dubbo	Reinforced concrete bridge	"	94,453*
"	206	Plain Creek, 21.2 km east of Dubbo	Steel girder and reinforced concrete bridge	"	217,119
Tallaganda	51	Shoalhaven River, 13.0 km north of Braidwood	7 span steel girder bridge	Department	229,732
"	51	Warri Bridge over Shoalhaven River, 13.0 km north of Braidwood	Approaches	Council	126,374
"	51 & 79	Intersection TR51 and TR79, 27.4 km north of Braidwood	Reconstruction	"	39,808
"	51	3.2 km to 39.0 km east of Queanbeyan	Formation and widening	"	40,623
Tamarang	72	Bridge over Quipolly Creek, 14.6 km north of Quirindi	Approaches	"	154,176
"	129	47.3 km to 49.16 km west of Quirindi	Reconstruction and bituminous surfacing	"	103,627
Tenterfield	362	0 km to 6.5 km south of Urbenville	"	"	50,550
Terania	142	38.0 km to 41.28 km north of Lismore	"	"	60,660
Timbregongie	89	Backwater Cowal Bridge, 4.14 km south of Narromine	Approaches	"	120,055
Tomki	83	93.74 km to 95.3 km north of Grafton	Reconstruction and bituminous surfacing	"	48,275
Tumbarumba	282	37.0 to 42.0 km south of Tumbarumba	"	"	53,991
Turon	54	44.3 km to 47.0 km north of Bathurst	"	"	44,117
Tweed	399	Couchy Creek, 18.40 km to 18.96 km	Approaches	"	122,604
"	399	Couchy Creek, 20.6 km north of Murwillumbah	Reinforced concrete box culvert	"	44,551
Uralla	73	28.5 km to 31.7 km north of Uralla	Reconstruction and bituminous surfacing	"	63,341
Wakool	319	Yarrein Creek, 62.0 km north of Barham	Prestressed concrete bridge	"	83,407
Walgett	68	Bridge over Moonie River at Gundabloui, 50 km north of Collarenebri	Approaches	"	118,487
"	68	Moonie River at Gundabloui, 50.0 km north of Collarenebri	Prestressed concrete bridge	Department	10,963
Warren	347	6.43 km to 9.86 km south of Collie	Reconstruction and bituminous surfacing	Council	53,077
"	347	0 km to 9.87 km south of Collie	"	"	191,426
Waugoola	78	3.1 km to 4.45 km south of Cowra	"	"	26,539
Windouran	319	16.42 km to 20.05 km north of Moulamein	"	"	99,732
Wollondilly	259	6.49 km to 23.7 km west of SH2	"	Department	14,774
Yallaroi	63	45.6 km to 49.25 km north of Wyallda	"	Council	82,650
Yarrowlumla	51	6.18 km to 6.92 km east of Queanbeyan	Reconstruction and realignment of curve	"	2,864*
"	51	3.2 km to 9.6 km east of Queanbeyan	Formation and pavement widening and drainage improvement	"	89*
<b>Total Trunk and Ordinary Main Roads</b>					<b>9,106,078</b>

\*Credit

**APPENDIX No. 6 — continued**  
**COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the Roads Grants Act on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(A) SCHEDULE 2 — RURAL ARTERIAL ROADS — continued</b>					\$
<b>(i) COUNTRY RURAL AREA — continued</b>					
<b>(c) DEVELOPMENTAL ROADS</b>					
Coolah	1304	Bridge over Talbragar River at Urabry	Approaches	Council	164,286
..	1304	24.6 km to 29 km east of TR55	Reconstruction and bituminous surfacing	..	12,895
Merriwa	1304	0 km to 4.74 km west of MR214 towards Curryall	..	..	145,330
<b>Total Developmental Roads</b>					<b>322,511</b>
 <b>(B) SCHEDULE 3 — RURAL LOCAL ROADS</b>					
<b>(i) COUNTRY RURAL AREA</b>					
<b>(a) DEVELOPMENTAL ROADS</b>					
Bourke	1316	0 km to 62.1 km north of MR405	Drainage and gravel surfacing at selected locations	Council	1,467*
..	1316	(1) 0 km to 66 km, (2) 0 km to 19.83 km — north of MR405	1. Clearing of grids, 2. Construction of formation and drainage	..	1,985
Copmanhurst	1179	19.2 km to 27.1 km north of MR150	Reconstruction	..	10,000
..	1179	..	..	..	10,000*
Dungog	3163	12.87 km to 14.85 km north of Dungog	Formation and gravel surfacing	..	68,826
Gloucester	3224	62.8 km to 69.2 km north west of Gloucester	..	..	5,217
Goodradigbee	1315	4.83 km to 5.99 km from Dicks Creek	Construction	..	3,532
Great Lakes	3218	Deep Creek, 9.6 km north of Bulahdelah	Prestressed concrete bridge and approaches	..	47,172
Greater Cessnock	3222	6.44 km to 8.05 km south of SH9	Formation and gravel surfacing	..	21,899
Guyra	3212	Swallows Nest, 21.7 km to 23.3 km west of SH9	..	..	1*
Molong	1320	13.92 km to 20.36 km north west of Obley	Reconstruction and gravelling	..	3,015
..	1320	16.12 km to 21.13 km west of Obley	Reconstruction and gravel surfacing	..	687
..	1320	13.9 km to 20.4 km west of Obley	Reconstruction and bituminous surfacing including deviation culvert	..	687*
Monaro	1268	32 km to 33 km north of Kybayan	Formation and gravel surfacing	..	2,206
..	1268	35.65 km to 35.75 km north of Kybayan	..	..	704
Murrurundi	3213	Bridge over Phillips Creek, 31.06 km west of MR358	Approaches	..	35,059
..	3213	Phillips Creek, 31.06 km west of MR358	Reinforced concrete bridge	..	4,559*
Nambucca	1078	27.03 km to 30.26 km north of Argents Hill	Formation and gravel surfacing (including Argents Creek culvert)	..	3,425
Scone	1243	0 km to 5 km east of Pages Creek Rd, north of Timor	Formation and gravel surfacing	..	72,000*
..	1243	0 km to 5 km east of Pages Creek	..	..	72,000
..	1313	Proposed road linking Scone and Gloucester	Investigation, survey and design	..	3,642
Snowy River	1297	Bridge over Pinch River, 10.2 km south of Jacobs River	Supply of steel for fabrication	Department	228
..	1297	Jacobs River, 48.0 km south of Jindabyne	Reinforced concrete bridge	Council	2,075
Tallaganda	1268	67 km to 68.17 km south of Braidwood	Reconstruction and gravel surfacing	..	9,000
..	1268	77.3 km to 79 km south of Braidwood	Formation and gravel surfacing	..	50
Tumbarumba	1171	0 km (MR281) to 4.83 km east of Welaregang	..	..	11,459
Tumut	1215	32 km to 36.2 km south of SH4	Formation and gravel surfacing	..	3,782
Tweed	3220	7.2 km to 7.6 km east of MR142	..	..	152
Wellington	1310	4.38 km to 5.49 km east of MR573 near Euchareena	..	..	971
Wingecarribee	1299	19.31 km to 24.1 km from Canyonleigh Rd	Reconstruction and gravel surfacing	..	415
Yallaroi	1270	17.38 km to 20.60 km north west of Warialda	Construction	..	2,155*
..	1270	0.3 km to 35.9 km west of Warialda	Formation and gravel surfacing	..	3,546*
..	1290	12.59 km to 14.03 km east of Yallaroi	Construction	..	1,243*
..	1290	10.9 km to 12.58 km east of Yallaroi	Formation and gravel surfacing	..	2,955
..	1290	71.9 km to 73.15 km north east of Moree	..	..	2,886
<b>Total Developmental Roads</b>					<b>217,684</b>

\*Credit



**APPENDIX No. 6 — continued**  
**COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the Roads Grants Act on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(C) SCHEDULE 5 — URBAN ARTERIAL ROADS</b>					<b>\$</b>
<b>(i) COUNTY OF CUMBERLAND AREA</b>					
<b>(a) FREEWAYS</b>					
<b>Warringah Freeway</b>					
North Sydney	F1	Brook St, Naremburn	Overpass	Department	52,345
"	F1	West St, North Sydney	Prestressed concrete bridge	"	1,649
"	F1	Miller St to Willoughby Rd, Naremburn	Divided two lane carriageway	"	2,402,948
Willoughby	F1	Merrenburn Ave, Naremburn	Prestressed concrete bridge	"	21,514
					<b>2,478,456</b>
<b>Sydney-Newcastle Freeway</b>					
Sydney	F3	Druitt St, Sydney to Bridge Rd, Glebe	Public utility adjustment Public Transport Commission	Department	8,847
"	F3	North Western Freeway — Bathurst St area (B)	Foundations, substructures, viaducts and associated works	"	1,867,443
"	F3	North Western Freeway	Substructures in Darling Harbour Goods Yard	"	63,750
"	F3	Druitt St, Sydney to Bridge Rd, Glebe	Public utility adjustment Postmaster General's Department	"	21,681
"	F3	North Western Freeway — King St area (K)	Foundations, substructures, viaducts and associated works	"	483,600
"	F3	Darling Harbour Goods Yard	Bathurst St utility tunnel	"	2,120*
"	F3	"	Public utility adjustment Sydney County Council	"	206,438
"	F3	Druitt St, Sydney to Bridge Rd, Glebe	Public utility adjustments M.W.S.&D.B.	"	422,006
"	F3	Druitt St, Sydney to Bridge Rd, Glebe	Public utility adjustments Electricity Commission	"	13,119
"	F3	North Western Freeway — Pyrmont St area (P)	Foundations, substructures, viaducts and associated works	"	662,695
"	F3	Darling Harbour Goods Yard	Service road	"	5,849
"	F3	"	Construction of Deck ENW7	"	39,952
"	F3	Druitt St, Sydney to Bridge Rd, Glebe	Design by consultants	"	189,048
					<b>3,982,308</b>
<b>Western Freeway</b>					
Auburn	F4	Wentworth Rd to Wentworth St, Clyde	Divided two lane carriageway	Department	1,204,519
Strathfield					
Parramatta					
Auburn	F4	Eastern Abattoirs Railway Line	Steel bridge	"	3,441
"	F4	Melton St, Auburn	Pedestrian overbridge	"	36,372
"	F4	Haslams Creek stormwater channel	Prestressed concrete bridge — eastbound	"	93,018
"	F4	Haslams Creek stormwater channel — eastbound carriageway	Prestressed concrete bridge	"	383,543
"	F4	Silverwater Rd, Auburn	"	"	9
"	F4	Western Abattoirs Railway Line	Steel bridge	"	3,308
Sydney	F4	Sydney Harbour Bridge Toll Plaza to Day St	Asphaltic concrete surfacing	"	26,353
					<b>1,750,563</b>
<b>Total Freeways</b>					<b>8,211,327</b>
<b>(b) STATE HIGHWAYS</b>					
<b>Princes Highway</b>					
Sutherland	1	Waterfall Village	Deviation and approaches to MR393	Department	22,222*
"	1	President Ave to SH1 at Loftus	Construction of dual carriageway	"	26,436
					<b>4,214</b>
<b>Hume Highway</b>					
Bankstown	2	Avoca St to Cooper St, Yagoona	Stormwater drainage	Department	4,153*
Liverpool	2	Bringelly Rd, Leppington	Reconstruction of intersection	"	195,535
					<b>191,382</b>

\*Credit

# **APPENDIX No. 6 — continued** **COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the Roads Grants Act on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(C) SCHEDULE 5 — URBAN ARTERIAL ROADS — continued</b>					<b>\$</b>
<b>(I) COUNTY OF CUMBERLAND AREA — continued</b>					
<b>(b) STATE HIGHWAYS — continued</b>					
<b>Great Western Highway</b>					
Blacktown	5	Church L to Old Western Rd, Blacktown	Access ramps to Church L overpass and associated works	Department	1,047,920
Holroyd	5	Wentworthville to Prospect	Right hand storage bays at six intersections	..	8,552*
					<b>1,039,368</b>
					<b>Total State Highways 1,234,964</b>
<b>(c) TRUNK AND ORDINARY MAIN ROADS</b>					
Auburn	190	The Boulevard to Lewis St, Lidcombe near Amy St	Widening narrow underpass	Department	204,382
Bankstown	167	Lloyd Ave to Boardman St, Yagoona	Dual carriageway	..	541,721
Botany	344	Southern Cross Dr, Eastlakes to Bay St, Pagewood	..	..	201,610
Camden	154	Narellan Creek, 1.6 km north of Narellan	Prestressed concrete plank bridge	Council	155,567
..	154	0 km to 3.4 km north of Narellan	Reconstruction of alignment and approaches to Narellan Creek Bridge	..	167,440
..	178	Cowpastures Bridge over Nepean River at Camden	Reinforced concrete bridge	..	377,290*
Campbelltown	177	Bradbury Ave to The Parkway, Campbelltown	Deviation	Department	276,697
Canterbury	315 & 167	King Georges Rd and Canterbury Rd, Wiley Park	Channellised intersection	..	727,870
Fairfield	609	Fairfield St to Allan St, Fairfield	Duplication and lengthening of existing railway overbridge	..	267,360
Ku-ring-gai	162	Killeaton St to Richard Ave, St Ives	Dual carriageways	..	309,985
..	162	Highlands Ave to Cowan Rd, St Ives	Dual carriageway	..	1,219,611
Liverpool	515	Copeland St to Maxwell St, Liverpool	Divided carriageway	..	718,925
..	608	Copeland St, Liverpool	..	..	397,652
..	608	Hinkler Ave to Elizabeth Dr, Liverpool	Six lane divided carriageway	..	249,023
Marrickville	183	Burrows Rd, St Peters	Channellised intersection	..	14,069*
North Sydney	164	Wycombe Rd to Cabramatta Rd, Cremorne Junction	Reconstruction and widening	..	45,536
Parramatta	158	Stewart St to Morris St, Eastwood	Dual carriageway	..	215,933
..	309	Eleanor St to Hassall St, Rosehill	Widening to six lanes	..	612,931
Ryde	373 & 162	Lane Cove Rd and Epping Rd, North Ryde	Interchange	..	1,099,865
..	373 & 162	Over MR162 (Lane Cove Rd), North Ryde	Prestressed concrete girder bridge	..	572,311
South Sydney	170	Beauchamp Rd to Bunnerong Rd (1st stage), Matraville	Dual carriageway	..	183,788
Strathfield	318	Railway overbridge, Marlborough Rd, Homebush	Approaches	Council	164,104
Sutherland	512	1.3 to 2.4, 4.8 to 5.8 and 15.0 to 16.1 km west of SH1	Slow vehicle lane including intersection with New Illawarra Rd	Department	783,306
Sydney	173	Kings Cross Tunnel project	Public utility adjustments — Postmaster General's Department	..	3,546*
..	173	Victoria St Tunnel	Overpass	..	38*
..	173	Kings Cross Tunnel project	Public utility adjustments — Sydney County Council	..	19,840*
..	173	Kings Cross Tunnel project	Approaches and ancillary works	..	4,254
..	173	Victoria St to Kellet Ave, Kings Cross	Road tunnel	..	217,368
..	173	Kings Cross Tunnel project	Pedestrian footbridge at Roslyn St	..	38
Warringah	162	Kimbriki Rd, Terrey Hills	Improvement of intersection	..	89*
..	164	Bassett St to Bardo Rd, Newport	Reconstruction and widening	..	24,436
..	164	Mona Vale Rd to Darley St, Mona Vale	Dual carriageway including channellised intersections	..	400,166
..	164	Pittwater Rd from Dee Why Lagoon to Long Reef Golf Course	Bitumen sealing of eastern shoulder	Council	2,403*
..	328	Daines Pde to Pittwater Rd, Brookvale	Dual carriageway including Intersection with MR164	Department	820,427
..	397	Frenchs Forest Rd and Wakehurst Parkway	Improvement of intersection	..	253,979
<b>Total Trunk and Ordinary Main Roads</b>					<b>10,419,010</b>

\*Credit



**APPENDIX No. 6 — continued**  
**COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the Roads Grants Act on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(C) SCHEDULE 5 — URBAN ARTERIAL ROADS — continued</b>					\$
<b>(I) COUNTY OF CUMBERLAND AREA — continued</b>					
<b>(d) SECONDARY ROADS</b>					
Blacktown	2084	Railway overbridge at Seven Hills	Approaches	Council	544,169
"	2084	Seven Hills Railway Station	Railway overbridge	"	720*
Holroyd	2071	Prospect Creek (Kenyons Bridge), Smithfield	Single span steel beam bridge	"	142,912
Ryde	2081	Trelawney St to Ryedale St, Eastwood	Reconstruction and widening railway overbridge	Department	573,638
<b>Total Secondary Roads</b>					<b>1,259,999</b>
<b>(e) ROADS OTHER THAN MAIN ROADS</b>					
Bankstown	5016	Alfords Point Bridge northern approach	Extension	Department	338,149
"	5016	Old Kent Rd to SH2, Bankstown	Reconstruction and asphaltic concrete surfacing	"	209,974
Parramatta	5037	Pennant Hills Rd near Burnside St to Windsor Rd, Parramatta	Dual carriageway including access to Lake Parramatta Reserve	"	324,634
"	5037	Kissing Point Rd to Pennant Hills Rd near Burnside St	Dual carriageway	"	1,162,991
"	5037	Pennant Hills Rd near Burnside Homes, North Parramatta	Steel box girder underpass bridge	"	220,379
<b>Total Roads other than Main Roads</b>					<b>2,256,127</b>
<b>(II) COUNTRY URBAN AREA</b>					
<b>(a) FREEWAYS</b>					
<b>Southern Freeway</b>					
Wollongong	F6	Twin bridges over freeway at Northcliffe Dr, Berkeley	Superstructure	Department	121,171
"	F6	Hernes estate access at Figtree	Twin prestressed concrete bridges	"	1,779,192
"	F6	Harvey St, Dapto	Reinforced concrete box girder bridge	"	336,446
"	F6	Five Islands Rd to Northcliffe Dr	Dual carriageway including interchange at Five Islands Rd	"	77,031
"	F6	Kanahooka Rd to Emerson Rd, Dapto	Dual carriageway	"	260,102
"	F6	Northcliffe Dr to Kanahooka Rd, Kembla Grange	"	"	600,629
<b>Total Freeways</b>					<b>3,174,571</b>
<b>(b) STATE HIGHWAYS</b>					
<b>Princes Highway</b>					
Wollongong	1	Mullet Creek, 92 km to 95 km south of Sydney	Deviation	Department	218,621
"	1	Central Rd to Victoria St, Unanderra	Subsoil drainage and asphaltic concrete surfacing	Council	292*
					<b>218,329</b>
<b>Pacific Highway</b>					
Lake Macquarie	10	Mark St to Red Rose Ave, Belmont	Restoration of damaged pavement	Department	3,135
					<b>3,135</b>
<b>Total State Highways</b>					<b>221,464</b>
<b>(c) TRUNK AND ORDINARY MAIN ROADS</b>					
Camden	259	0.0 km to 3.4 km municipal boundary, west of SH2	Deviation including culverts	Department	1,008*
Greater Cessnock	218	Black Creek Bridge, Wollombi Rd, Cessnock	Prestressed concrete bridge	Council	71,760
"	220	Cessnock towards Freemans Waterholes, 23.4 km to 24.4 km	Reconstruction and bituminous surfacing	"	107,640
Lake Macquarie	325	0 km to 1.31 km west of MR217	Deviation	"	94,407
Newcastle	82	Lloyd St to Croudace St, Lambton	Reconstruction and bituminous surfacing	"	176,680

\*Credit

**APPENDIX No. 6 — continued**  
**COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the Roads Grants Act on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(C) SCHEDULE 5 — URBAN ARTERIAL ROADS — continued</b>					\$
<b>(II) COUNTRY URBAN AREA — continued</b>					
<b>(c) TRUNK AND ORDINARY MAIN ROADS — continued</b>					
Port Stephens	601	3.7 km east of MR104	Reconstruction and bituminous surfacing	Council	37,029
Shellharbour	522	Redall Pde to Peterborough Ave. Lake Illawarra	Reconstruction and provision of dual carriageway	..	11,341
..	522	Lake Entrance Rd to Bass St, Warilla	Provide dual carriageway by reconstructing northbound carriageway	..	49,306
..	611	Lang St to Devonshire Cres Oak Flats	Reconstruction of eastbound carriageway	..	122,520
Wollongong	186	0 km Kembla St to 1.1 km public school, Mt Keira	Reconstruction and widening	..	77,209
..	295	Port Kembla North	Railway overpass and approaches	..	190,439
..	522	Shellharbour Rd to Windang Rd, Windang	Deviation	..	119,600
..	522	Primbee Deviation to Wattle Ave, Windang	Reconstruction of northbound carriageway	..	71,760
..	522	Boronia Ave to Primbee Deviation	Public utility adjustment	..	211,582
<b>Total Trunk and Ordinary Main Roads</b>					<b>1,340,265</b>
<b>(D) SCHEDULE 6 — URBAN LOCAL ROADS</b>					
<b>(I) COUNTY OF CUMBERLAND AREA</b>					
<b>(a) ROADS OTHER THAN MAIN ROADS</b>					
Ashfield		Urban local roads	Annual grant 1976/77	Council	43,913
Auburn		..	..	..	62,295
Bankstown		..	..	..	198,118
Baulkham Hills		..	..	..	126,632
Blacktown		..	..	..	207,309
Blue Mountains		Old Bathurst Rd to beyond public school, Glenbrook	Widening	..	39,521
..		Urban local roads	Annual grant 1976/77	..	51,061
Botany		..	..	..	55,146
Burwood		..	..	..	34,722
Campbelltown		Bounded by Chester Rd, Brenda St, Sackville St and Ingleburn Rd, Ingleburn	..	..	8,783*
..		Parliament Rd between Atchison Rd and Harold St, Macquarie Fields	Reconstruction and construction	..	8,783
..		Urban local roads	Annual grant 1976/77	..	84,762
Canterbury		..	..	..	137,866
Concord		..	..	..	29,616
Drummoyne		..	..	..	36,764
Fairfield		..	..	..	142,972
Holroyd		..	..	..	99,059
Hornsby		..	..	..	117,441
Hunters Hill		Urban local roads	Annual grant 1976/77	..	18,382
Hurstville		..	..	..	75,571
Kogarah		..	..	..	55,146
Ku-ring-gai		..	..	..	154,205
Lane Cove		..	..	..	34,722
Leichhardt		..	..	..	73,528
Liverpool		..	..	..	103,144
Manly		Boyle St, Griffith St to Balgowlah Rd, Balgowlah	Reconstruction	..	5,121*
..		Munoora St between Grandview St and Ellery St, Seaforth	Restoration of damaged pavement	..	5,121
..		Urban local roads	Annual grant 1976/77	..	43,913
Marrickville		..	..	..	97,017
Mosman		Prince Albert and Queen Sts, Mosman	Reconstruction	..	6,127*
..		Prince St, Mosman	Kerb, gutter and footpath forming cul-de-sac	..	10,110*
..		Urban local roads	Annual grant 1976/77	..	34,722
..		Awaba St from Moruben Rd to Waitovu St	Removal of corrugations in asphalt surface	..	16,238
North Sydney		Urban local roads	Annual grant 1976/77	..	53,104
Parramatta		..	..	..	154,205

\*Credit



**APPENDIX No. 6 — continued**  
**COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the Roads Grants Act on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(D) SCHEDULE 6 — URBAN LOCAL ROADS — continued</b>					<b>\$</b>
<b>(I) COUNTY OF CUMBERLAND AREA — continued</b>					
<b>(a) ROADS OTHER THAN MAIN ROADS — continued</b>					
Penrith		Urban local roads	Annual grant 1976/77	Council	99,059
Randwick		"	"	"	122,547
Rockdale		"	"	"	91,910
Ryde		"	"	"	103,144
South Sydney		"	"	"	41,870
Strathfield		Homebush Rd — Redmyre Rd to Albert Rd, Strathfield	Reconstruction and strengthening existing pavement (1975/76)	"	26,041
"		Urban local roads	Annual grant 1976/77	"	32,679
Sutherland		"	"	"	249,179
Sydney		"	"	"	60,252
Warringah		"	"	"	255,304
Waverley		"	"	"	57,189
Willoughby		"	"	"	57,189
Windsor		"	"	"	47,998
Wollongong		"	"	"	200,160
Woollahra		"	"	"	62,295
<b>Total Roads other than Main Roads</b>					<b>3,871,673</b>

**(II) COUNTRY URBAN AREA**

**(a) ROADS OTHER THAN MAIN ROADS**

Camden		Urban local roads	Annual grant 1976/77	Council	23,488
Greater Cessnock		"	"	"	93,953
Kiama		Barney St, Kiama	Reconstruction and bituminous surfacing	"	21,344
"		Urban local roads	Annual grant 1976/77	"	27,573
Lake Macquarie		Flowers Dr, Catherine Hill Bay	Reconstruction and bituminous surfacing	"	17,714*
"		"	Reconstruction and bituminous surfacing (1975/76)	"	20,425
"		Mt Faulk Rd, Cooranbong	Reinforced concrete box culverts	"	2,239*
"		Border St, Eraring	Reconstruction and bituminous surfacing	"	741
"		Terrigal St and Russell Rd, Morisset	"	"	4,086
"		Urban local roads	Annual grant 1976/77	"	242,031
"		Awaba to Rathmines Rd, Awaba	Reinforced concrete box culvert	"	5,298*
Maitland		Urban local roads	Annual grant 1976/77	"	87,825
Newcastle		Morehead St, Lambton	Reconstruction	"	28,799*
"		From Griffiths Rd to Acacia Ave, Lambton	"	"	64,337
"		Woodford St, Minmi	"	"	8,374
"		Angus Ave, Waratah	Reconstruction	"	43,913*
"		Urban local roads	Annual grant 1976/77	"	183,821
Port Stephens		"	"	"	82,719
Shellharbour		"	"	"	57,189
<b>Total Roads other than Main Roads</b>					<b>819,943</b>

\*Credit

**APPENDIX No. 6 — continued**  
**COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the Roads Grants Act on Construction and Maintenance Works

Council	General Grants for		Restoration of	Western Division	Total
	Construction and Maintenance Item 3	Item 5	Flood Damage Item 9	Shires Item 16	
<b>(E) SCHEDULE 3 — RURAL LOCAL ROADS</b>					
<b>(a) Items 3, 5 and 16 — General Grants and Item 9 — Restoration of Flood Damage</b>					
	\$	\$	\$	\$	\$
Abercrombie	84,900	—	—	—	84,900
Albury	—	19,777	—	—	19,777
Armidale City	—	—	10,262	—	10,262
Ashford	86,100	—	—	—	86,100
Ballina	—	30,800	—	—	30,800
Balranald	99,800	—	—	10,000	109,800
Barraba	88,500	—	4,780	—	93,280
Bathurst	—	15,800	—	—	15,800
Bega	—	20,500	—	—	20,500
Bellingen	141,900	—	26,862	—	168,762
Berrigan	96,700	—	—	—	96,700
Bibbenluke	88,000	—	—	—	88,000
Bingara	92,500	—	—	—	92,500
Bland	193,771	—	—	—	193,771
Blaxland	87,774	—	—	—	87,774
Blue Mountains	73,274	—	—	—	73,274
Bogan	88,500	—	—	10,000	98,500
Bombala	—	5,000	—	—	5,000
Booolooroo	102,200	—	17,251*	—	84,949
Boomi	101,016	—	744	—	101,760
Boorowa	107,900	—	—	—	107,900
Boree	108,000	—	—	—	108,000
Bourke	131,100	—	—	10,000	141,100
Bowral	—	22,500	—	—	22,500
Brewarrina	94,600	—	3,475*	10,000	101,125
Broken Hill	—	15,100	—	—	15,100
Burrangong	91,000	—	—	—	91,000
Byron	101,200	—	—	—	101,200
Canobolas	112,700	—	—	—	112,700
Carrathool	100,900	—	—	10,000	110,900
Casino	—	31,300	—	—	31,300
Central Darling	137,800	—	—	10,000	147,800
Cobar	138,300	—	—	10,000	148,300
Coffs Harbour	161,200	—	4,119	—	165,319
Colo	128,000	—	—	—	128,000
Conargo	85,500	—	—	—	85,500
Condobolin	—	20,800	—	—	20,800
Coolah	85,650	—	—	—	85,650
Coolamon	101,100	—	3,092	—	104,192
Cooma	—	8,881	—	—	8,881
Coonabarabran	139,500	—	—	—	139,500
Coonamble	119,600	—	—	—	119,600
Cootamundra	57,636	—	—	—	57,636
Copmanhurst	109,200	—	—	—	109,200
Corowa	114,499	—	—	—	114,499
Cowra	—	14,800	—	—	14,800
Crookwell	107,900	—	—	—	107,900
Culcairn	135,735	—	2,800	—	138,535
Deniliquin	—	21,400	—	—	21,400
Denman	99,100	—	50	—	99,150
Dubbo	—	14,100	—	—	14,100
Dumaresq	121,000	—	—	—	121,000
Dungog	141,700	—	—	—	141,700
Eurobodalla	42,000	—	—	—	42,000
Forbes	—	19,300	—	—	19,300
Gilgandra	97,200	—	—	—	97,200
Glen Innes	—	23,800	—	—	23,800
Gloucester	65,000	—	—	—	65,000
Goobang	109,600	—	—	—	109,600
Goodradigbee	86,000	—	—	—	86,000
Gosford	154,956	—	—	—	154,956
Goulburn City	—	16,700	—	—	16,700

\*Credit



**APPENDIX No. 6 — continued**  
**COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the Roads Grants Act on Construction and Maintenance Works

Council	General Grants for		Restoration of	Western Division	Total
	Construction and Maintenance	Item 5	Flood Damage	Shires	
	Item 3		Item 9	Item 16	\$
<b>(E) SCHEDULE 3 — RURAL LOCAL ROADS — continued</b>					
<b>(a) Items 3, 5 and 16 — General Grants and Item 9 — Restoration of Flood Damage — continued</b>					
Grafton City	—	35,200	—	—	35,200
Great Lakes	85,400	—	4,650	—	90,050
Greater Cessnock	83,300	—	—	—	83,300
Gundagai	114,064	—	—	—	114,064
Gunnedah	—	15,200	—	—	15,200
Gunning	56,829	—	—	—	56,829
Guyra	91,820	—	—	—	91,820
Harden	91,400	—	—	—	91,400
Hastings	25,061	—	8,753*	—	16,308
Hay	95,799	—	—	10,000	105,799
Holbrook	104,575	—	4,283	—	108,858
Hume	117,566	—	—	—	117,566
Illabo	125,418	—	—	—	125,418
Imlay	23,000	—	3,774	—	26,774
Inverell	—	23,800	—	—	23,800
Jemalong	116,000	—	—	—	116,000
Jerilderie	80,000	—	—	—	80,000
Junee	—	20,462	—	—	20,462
Kempsey	123,000	—	1,820	—	124,820
Kyeamba	93,516	—	—	—	93,516
Kyogle	162,700	—	7,357*	—	155,343
Lachlan	161,600	—	—	—	161,600
Leeton	107,883	—	—	—	107,883
Lismore	308,000	16,800	5,000	—	329,800
Lithgow	—	15,100	—	—	15,100
Liverpool Plains	112,700	—	—	—	112,700
Lockhart	80,126	—	—	—	80,126
Lyndhurst	89,700	—	—	—	89,700
Macintyre	120,900	—	—	—	120,900
Maclean	113,700	—	—	—	113,700
Manilla	110,085	—	—	—	110,085
Manning	162,700	—	—	—	162,700
Merriwa	95,300	—	—	—	95,300
Mitchell	108,364	—	—	—	108,364
Mittagong	52,500	—	—	—	52,500
Molong	99,000	—	—	—	99,000
Monaro	87,122	—	—	—	87,122
Moree	—	13,600	—	—	13,600
Mudgee	113,275	—	—	—	113,275
Mullumbimby	—	14,862	—	—	14,862
Mulwaree	160,900	—	—	—	160,900
Mumbulla	25,046	—	24*	—	25,022
Murray	95,400	—	—	—	95,400
Murrumbidgee	76,427	—	—	—	76,427
Murrurundi	73,054	—	—	—	73,054
Muswellbrook Munic.	—	2,514	—	—	2,514
Nambucca	76,700	—	7,682	—	84,382
Namoi	156,200	—	—	—	156,200
Narrabri	—	16,600	—	—	16,600
Narraburra	96,300	—	—	—	96,300
Narrandera	105,616	—	—	—	105,616
Narromine	—	12,700	—	—	12,700
Nundle	85,400	—	—	—	85,400
Nymboida	130,300	—	—	—	130,300
Oberon	138,974	—	—	—	138,974
Orange	—	12,300	—	—	12,300
Parkes	—	13,800	—	—	13,800
Parry	247,900	—	—	—	247,900
Port Macquarie	—	24,800	—	—	24,800
Queanbeyan	—	14,400	—	—	14,400
Quirindi	—	14,000	—	—	14,000
Richmond River	262,100	—	—	—	262,100

\*Credit

**APPENDIX No. 6 — continued**  
**COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the Roads Grants Act on Construction and Maintenance Works

Council	General Grants for Construction and Maintenance		Restoration of Flood Damage	Western Division Shires	Total
	Item 3	Item 5	Item 9	Item 16	
<b>(E) SCHEDULE 3 — RURAL LOCAL ROADS — continued</b>					\$
<b>(a) Items 3, 5 and 16 — General Grants and Item 9 — Restoration of Flood Damage — continued</b>					
Rylstone	139,728	—	—	—	139,728
Scone	123,300	—	—	—	123,300
Severn	137,000	—	—	—	137,000
Shoalhaven	162,700	—	7,300	—	170,000
Singleton	135,100	—	—	—	135,100
Snowy River	68,370	—	—	—	68,370
Talbragar	93,700	—	—	—	93,700
Tallaganda	102,500	—	—	—	102,500
Tamarang	98,100	—	—	—	98,100
Tamworth	—	19,100	—	—	19,100
Taree	—	19,500	—	—	19,500
Temora	—	24,018	—	—	24,018
Tenterfield Shire	171,440	—	—	—	171,440
Timbregongie	96,600	—	—	—	96,600
Tintenbar	134,800	—	—	—	134,800
Tumbarumba	67,031	—	4,139	—	71,170
Tumut	105,484	—	—	—	105,484
Turon	81,300	—	—	—	81,300
Tweed	162,700	—	—	—	162,700
Ulmarra	130,200	—	—	—	130,200
Uralla	116,400	—	—	—	116,400
Urana	133,779	—	—	—	133,779
Wade	148,872	—	—	—	148,872
Wagga Wagga	—	29,981	—	—	29,981
Wakool	116,300	—	—	—	116,300
Walcha	124,900	—	—	—	124,900
Walgett	159,100	—	—	10,000	169,100
Warren	101,300	—	—	—	101,300
Waugoola	103,300	—	—	—	103,300
Weddin	107,800	—	—	—	107,800
Wellington	112,000	—	—	—	112,000
Wentworth	120,000	—	—	10,000	130,000
Windouran	83,300	—	—	—	83,300
Wingham	—	15,900	—	—	15,900
Wingecarribee	104,400	—	—	—	104,400
Wollondilly	131,100	—	—	—	131,100
Woodburn	—	—	158*	—	158*
Wyong	112,300	—	51,300	—	163,600
Yallaroi	116,500	—	125*	—	116,375
Yarrowlumla	94,600	—	—	—	94,600
Yass	—	15,400	—	—	15,400
Young	—	16,400	—	—	16,400
<b>Total</b>	<b>14,049,235</b>	<b>706,995</b>	<b>105,514</b>	<b>100,000</b>	<b>14,961,744</b>

City, Municipal or Shire Area	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(E) SCHEDULE 3 — RURAL LOCAL ROADS — continued</b>				\$
<b>(b) Item 8 — Bridges to Replace Ferries</b>				
Kempsey	Macleay River at Jerseyville	Prestressed and reinforced concrete bridge	Council	77,497
"	Bridge over Macleay River at Jerseyville	"	"	177,205
Maclean	Warregah Island, north arm, Clarence River	"	"	38,479
			<b>Total</b>	<b>293,181</b>
<b>(c) Item 10 — Road Dedication Surveys</b>				
Bourke	Bourke — Llandillo Rd	Centreline dedication survey	Council	1,700
Cobar	Shire Road No. 6	"	"	4,564
"	Cobar — Mount Gap Rd	"	"	5,022
			<b>Total</b>	<b>11,286</b>

\*Credit



**APPENDIX No. 6 — continued**  
**COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the Roads Grants Act on Maintenance and Construction Works

City, Municipal or Shire Area	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(E) SCHEDULE 3 — RURAL LOCAL ROADS — continued</b>				<b>\$</b>
<b>(d) Item 14 — Bridge Subsidy Scheme</b>				
Abercrombie	Caloola Creek on Rockley Newbridge Rd	Steel and concrete composite bridge	Council	39,782
Armidale City	Donnelly St, Armidale — Dumaresq Creek	Prestressed concrete bridge	..	2,844
Barraba	Crow Mountain Creek on the Pera Rd	Reinforced concrete bridge	..	5,550
Bingara	Gwydir River at Cooringoora	..	..	13,974
Blaxland	Browns Gap Rd, Blackmans Creek	..	..	23,000
Boree	Bears Bge (Mandagery Creek) on Cudal to Manildra Rd	..	..	18,845
Burrangong	Burrangong Creek on Old Forbes Rd	..	..	53,517
Coffs Harbour	North Bonville Rd, Shepherds Creek, 0.96 km north of SH10	Reinforced concrete box culvert	..	10,851
Cootamundra	Bland Creek on Stockingbingal to Milvale Rd	Reinforced concrete bridge	..	4,121
Gloucester	Barrington West Rd, Merchants Creek, 4.05 km west of Walcha	Reinforced concrete box culvert	..	38*
..	Waukivory Rd — Oaky Creek at the 1st and 2nd crossings	..	..	200*
..	Cut Hill Rd, Sandy Creek	..	..	7,300
Hastings	Saddlers Creek on Stewarts River Rd	Reinforced concrete bridge	..	22,984
Kyogle	Gradys Creek on Gradys Creek Rd	..	..	75,171
Macintyre	Back Creek on Copeton Dam Rd	3 span prestressed concrete girder and concrete deck bridge	..	11,350
Mumbulla	Illawambra Creek on Yourie Rd	Steel and concrete composite bridge	..	32,950
Narraburra	Trigalong Creek, 9.7 km south-east of Temora on Old Cootamundra Rd	Reinforced concrete box culvert	..	14,100
Nundle	Oakenville Creek at Nundle	Prestressed concrete bridge	..	31,150
Nymboida	Old Glen Innes Rd, O B X Creek	..	..	4,384*
Patrick Plains	Singleton — Miranie Rd — Reedy Creek, 18.8 km west of Singleton	Reinforced concrete bridge	..	15,000
Scone	Kingdom Ponds on Turanville Rd	..	..	21,000
Snowy River	Dalgety — Jimenenbuen Rd, Stockyard Creek, 3 km south of Dalgety	Reinforced concrete box culvert	..	14,500
..	Eucumbene Dam Rd, Biggin Creek	Armco pipe culvert	..	11,000
Tintenbar	Emigrant Creek on Tevan Tintenbar Rd	Prestressed concrete bridge	..	10,207
Uralla	Bundarra Rd — King John Creek	..	..	768
Wagga Wagga	Eastern Bridge over Murrumbidgee River	Prestressed and reinforced concrete bridge	..	57,178
Walcha	Ingleba Creek, 31.4 km south of Walcha (Gloucester-Walcha Rd)	Prestressed concrete bridge	..	30,912
Waugoola	Limestone Creek on Canowindra to Mandurama Rd	2 span steel girder bridge	..	32,450
Yallaroi	Gwydir River at Yagobie on Gravesend — Biniguy Rd	Reinforced concrete bridge	Council	27,500
..	Croppa Creek — North Star Rd, Yallaroi Creek at Tullin Tulla	..	..	66,315
			<b>Total</b>	<b>649,697</b>
<b>(e) Item 24 — Maintenance of Special Subsidy Bridges</b>				
Abercrombie	Bathurst — Monkey Hill Rd at Macquarie River	Maintenance of Rankins Bridge	Department	7,327
Booloroo	Pallamallawa — Biniguy Railway Station Rd at Gwydir River	Maintenance of Pallamallawa Bridge	..	16,859
Boree and Jemalong	Eugowra Forbes — Cowra Rd at Lachlan River	Maintenance of Colletts Crossing Bridge	..	186
Condobolin	Goobang Creek at Condobolin	Maintenance of Goobang Bridge	..	8,181
Dungog	Dungog — Upper Wangat Rd at Williams River	Maintenance of Bandongrove Bridge	..	190
Goulburn	Goulburn — Bungonia Rd at Mulwaree Ponds	Maintenance of Lansdowne Bridge	..	17,690
Gundagai and Illabo	June — Tumblong Rd at Murrumbidgee River	Maintenance of Mundarlo Bridge	..	2,362
Imlay	Cathcart — Rocky Hall — Wyndham Rd at Towamba River	Maintenance of New Buildings Bridge	..	13,299

\*Credit:

**APPENDIX No. 6 — continued**  
**COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the Roads Grants Act on Maintenance and Construction Works

City, Municipal or Shire Area	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(E) SCHEDULE 3 — RURAL LOCAL ROADS — continued</b>				<b>\$</b>
<b>(e) Item 24 — Maintenance of Special Subsidy Bridges — continued</b>				
Jemalong	Waroo — Yarrabinda Rd at Lachlan River	Maintenance of Waroo Bridge	Department	402
Kempsey	West Kempsey — South	Maintenance of Kempsey		
	Kempsey Rd at Macleay River	Railway Footbridge	..	13,994
	Green Hills — Dungay Creek Rd			
	at Macleay River	Maintenance of Sherwood Bridge	..	2,186
Leeton	Leeton — Eurolie Rd			
	at Murrumbidgee River	Maintenance of Eurolie Bridge	..	1,188
Maitland	Lochinvar — Elderslie Rd at Hunter River	Maintenance of Luskintyre Bridge	..	30,889
Mudgee	Cullenbone — Cobbora Rd at			
	Wyaldra Creek	Maintenance of Beryle Bridge	..	1,887
Nymboida	Grafton — Glen Innes Rd at Orara River	Maintenance of Bawden Bridge	..	36
Port Stephens	Maitland — Eccleston Rd at			
	Paterson River	Maintenance of Paterson Bridge	..	4,555
Severn	Glen Innes — Newton Boyd Rd at			
	Mann River	Maintenance of Mann Bridge	..	36,455
	Glen Innes — Emmaville Rd at			
	Severn River	Maintenance of Fladbury Bridge	..	1,927
	Glen Innes — Newton Boyd Rd at			
	Henry River	Maintenance of Newton Boyd Bridge	..	185
Singleton	Ravensthorpe — Coorangoola Rd			
	at Glennies Creek	Maintenance of Middle Falbrook Bridge	..	18,751
Talbragar	Minore — Coolbaggie			
	Creek Rd at Macquarie River	Maintenance of Minore Bridge	..	49,184
Tweed	Middle Arm of Tweed River	Maintenance of McKenzies Crossing	..	4,642
Ullmarra	Glenreagh Railway Station Rd at			
	Orara River	Maintenance of Glenreagh Bridge	..	107
	Ullmarra — Tucabia Rd at	Maintenance of Upper		
	Coldstream Creek	Coldstream Creek Bridge	..	3,010
Wellington	Geurie — Arthurville Rd at			
	Macquarie River	Maintenance of Scabbing Flat Bridge	..	2,926
Wollondilly	Picton — Upper Picton Rd at			
	Stone Quarry Creek	Maintenance of Victoria Bridge	..	11,582
<b>Total</b>				<b>250,000</b>
<b>(f) Item 26 — Contingencies</b>				
Cowra	Cowra	Annual grant 1975/76 (Item 5)	Council	188*
Murrurundi	Murrurundi	Annual grant 1975/76 (Item 3)	..	22,245
Shoalhaven	Shoalhaven	Annual grant 1975/76 (Item 3)	..	40,000
<b>Total</b>				<b>62,057</b>
<b>(g) SUMMARY</b>				
<b>Item</b>				<b>Amount</b>
				<b>\$</b>
3	Shires			14,049,235
5	Municipalities			706,995
8	Bridges to replace ferries			293,181
9	Restoration of flood damage			105,514
10	Road dedication surveys (1975/76 programme)			11,286
10	Reconstruction of Alpine Way in Kosciusko National Park (1976/77 programme)			200,000
12	Payments to Forestry Commission			217,000
14	Bridge subsidy scheme			649,697
15	Payments to Soil Conservation Service			25,000
16	Western Division shires			100,000
23	Developmental roads			217,684
24	Maintenance of special subsidy bridges			250,000
25	Unclassified roads in unincorporated area of Western Division			150,000
26	Contingencies			62,057
	Long service leave for works on developmental roads			2,076
	Engineering administration			128,639
	General administration			201,987
	Total as shown in receipts and payments statements — Appendix 1(A)			<b>17,370,351</b>

\*Credit



**APPENDIX No. 6 — continued  
COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the Roads Grants Act

<b>SUMMARY</b>	<b>\$</b>	<b>\$</b>
Construction and reconstruction		
Freeways	11,385,898	
State Highways	7,457,839	
Trunk and Ordinary Main Roads	20,865,353	
Secondary Roads	1,259,999	
Developmental Roads	540,195	
Roads other than Main Roads	2,256,127	43,765,411
Property acquisitions on Urban Arterial Roads		
Freeways	3,898,296	
State Highways	347,812	
Trunk and Ordinary Main Roads	3,716,197	
Secondary Roads	77,201	
Roads other than Main Roads	442,320	8,481,826
Adjustments to properties		447
Construction, reconstruction and maintenance of Rural Local Roads		17,152,867
Construction and reconstruction of Urban Local Roads		4,691,616
Total as shown in receipts and payments statements — Appendix No. 1(A)		74,091,967

# **APPENDIX No. 7** **COUNTY OF CUMBERLAND MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(I) FREEWAYS</b>					<b>\$</b>
<b>Castlereagh Freeway</b>					
Ryde	F2	Ryde	Public utility adjustments	Council	3,769
					<u>3,769</u>
<b>Western Freeway</b>					
Auburn	F4	Homebush to Clyde	Design by consultants	Department	301
Blacktown	F4	Prospect to Wallgrove Rd, Eastern Creek	Public utility adjustment	Council	52,081
Parramatta	F4	Bridge over F4 at Pitt St, Merrylands	Design by consultants	Department	9,786
"	F4	Clyde to Mays Hill	Foundation test boring	"	546
Penrith	F4	Bridge over Nepean River at Regentville	Design by consultants	"	23,373
"	F4	Prospect to Regentville	Erection of manproof fencing on freeway boundary	"	75,015
					<u>161,102</u>
				<b>Total Freeways</b>	<u><b>164,871</b></u>
<b>(II) STATE HIGHWAYS</b>					
<b>Princes Highway</b>					
Sutherland	1	Heathcote to Waterfall	Dual carriageway	Department	28,089
"	1	Railway overbridge, Acacia St, Sutherland	Approaches	"	1,554
Wollongong	1	Bulli Pass	Geological investigation of land slips	"	45,122
"	1	69.1 km south of Sydney	Relocation of short section of pavement in unstable area	"	281,450
					<u>356,215</u>
<b>Hume Highway</b>					
Bankstown	2	Wycombe St to Rookwood Rd, Yagoona	Replacement of failed concrete slabs	Department	10,206
"	2	William St to Dutton St, Yagoona (westbound)	Reconstruction and bituminous surfacing kerbside lane	"	270
"	2	Intersection, SH2 and Stacey St, Greenacre	Foundation test boring	"	1,655
Camden	2	Bridge over South Creek, 7.35 km north of Camden	Approaches	"	229,337
Liverpool	2	Lot 2 DP516649, south of Grahame Ave, Casula	Piping of easement	"	5,316
"	2	Lachlan St to Campbell St, Liverpool	Kerbside lane	"	333*
"	2	Cowpasture Rd, Leppington	Improvement to intersection	"	222,121
"	2	Prospect Creek, Lansvale to Hinkler Ave, Liverpool	Reconstruction of damaged pavement	"	280,771
"	2	Australian Jockey Club Sub-division, Warwick Farm	Storage bay access	"	32,058
					<u>781,401</u>
<b>Great Western Highway</b>					
Auburn	5	Rawson Rd to Bombay St, Auburn	Replacement of failed concrete slabs	Department	91,094
Auburn					
Burwood	5	Wentworth Rd to Woodville Rd (SH13), Parramatta	Replace concrete pavement at selected locations	"	69,227
Parramatta					
Blacktown	5	Horsley Rd, Eastern Creek	Improvement to intersection	"	4,416
Blue Mountains	5	Selected sections	Reshaping and strengthening with asphaltic concrete	"	1,255,610
"	5	18 km to 19 km west of Penrith at Valley Heights	Slow vehicle lane	"	70
"	5	44.9 km to 45.6 km west of Penrith at Wentworth Falls	"	"	170,599
"	5	5.16 km to 66.63 km west of Parramatta	Heavy patching	"	171,185
"	5	35.22 km to 96.69 km west of Parramatta	"	"	348,304
"	5	Railway overpass at Medlow Bath	Improvement to alignment in western approach	"	1,785
"	5	57.6 km to 59.37 km west of Parramatta at Woodford	Reconstruction of overtaking lane	"	4,470
Holroyd	5	Greystanes Rd to Ettalong Rd, Girraween	Reconstruction of asphaltic concrete surface	"	239,597
Penrith	5	Brougham St to Divisional boundary, 6.1 km west of Penrith	Dual carriageway	"	575
Strathfield	5	Welfare St to Telopea Ave, Homebush	Reconstruction and widening for turning traffic	"	37,708
Sydney	5	Harris St, Ultimo to Municipal boundary	Channellisation	Council	1,358*
<b>*Credit</b>					<u><b>2,393,282</b></u>



**APPENDIX No. 7 — continued**  
**COUNTY OF CUMBERLAND MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(II) STATE HIGHWAYS — continued</b>					<b>\$</b>
<b>Pacific Highway</b>					
Hornsby	10	Leonard St to Edgeworth David Ave, Hornsby	Widening	Department	8,414*
"	10	College Cres to Carns St, Waitara	Reconstruction of damaged pavement	"	85,289
"	10	College Cres, Waitara	Improvement of intersection	"	93,377
"	10	Yirra Rd, Mt Colah	Provision of right turning bay	"	12,334
Ku-ring-gai	10	Ryde Rd to Bridge St, Gordon	Additional lane to provide right-turn lanes	"	3,341
North Sydney	10	Railway overbridge at St. Leonards	Approaches	"	6,792
					<b>192,719</b>
<b>State Highway No. 13</b>					
Bankstown	13	Villawood Rd, opposite Llewellyn Ave, Villawood	Relocation of junction	Department	92,936
Bankstown					
Fairfield	13	Railway overbridge at Villawood	Approaches	"	461
Bankstown	13	Villawood	Railway overbridge	"	113,609
Hornsby	13	Pennant Hills	Widening of railway overpass	"	5,891
"	13	Loch Maree Ave to Dartford Rd, Thornleigh	Reconstruction of kerbside lanes	"	48
"	13	Pearces Corner to Normanhurst Rd, Normanhurst	Reconstruction of side strips	"	169,125
Parramatta					
Hornsby	13	Maraden Rd to Carlingford Rd, Carlingford	Six lane carriageway including channellised intersections	"	113,671
Baulkham Hills	13	Granville	Railway underpass (work by Public Transport Commission)	"	745*
					<b>494,996</b>
<b>Total State Highways</b>					<b>4,218,613</b>
<b>(III) ORDINARY MAIN ROADS</b>					
Auburn	190	Leila St, Lidcombe to Amy St, Regents Park	Reconstruction and widening	Council	146,996
"	190	Joseph St from The Boulevard to Lewis St, Berala	Six lane carriageway	"	59,955
"	190	Joseph St near Weeroona Rd	Widening of narrow underpass to suit dual carriageways	"	145,265
Bankstown	167	River Rd to Henry Lawson Dr, Revesby	Resheeting with asphaltic concrete surface	Department	773
"	167	Fairford Rd and Short St, Padstow	Channellised intersection	"	3
"	167	River Rd to Henry Lawson Dr, Milperra	Public utility adjustment	Council	626
"	167	Milperra Rd and Edgar St, Condell Park	Improvement of intersections	Department	8,105
"	190	Boardman St to Auburn Municipal boundary, Bankstown	Dual carriageway	"	54,863
"	190	Brunker Rd to Amy St, Regents Park	Public utility adjustment	Council	6,262
"	508	Bankstown Airport, 0.25 km north of MR167	Access road	Department	2,967*
Baulkham Hills	157	Cattai Creek Bridge to MR184 (Windsor Rd), Castle Hill	Reconstruction and bituminous surfacing	Council	5,078
"	160	Cross St to Kerrs Rd, Baulkham Hills	Reconstruction and widening	"	970*
"	160	Cross St to Kerrs Rd, Baulkham Hills	Public utility adjustment	"	1,240
"	160	Windsor Rd to Hill St, Baulkham Hills	Reconstruction of failed pavement	"	18,375
"	160	Glenhaven Rd to Glenorie, Baulkham Hills	Heavy patching at selected locations	"	18,417
"	160	MR161 to Maroota	Heavy patching	"	6,125
"	181	MR182, Sackville to MR160, Maroota	Reconstruction of damaged pavement	Department	55
"	184	Schofields and Commercial Rds, Rouse Hill and Nelson Rd, Box Hill	Provision of right-turn bays	"	7,721
"	574	Bridge over Ponds Creek, Kissing Point Rd, Telopea	Widening	"	1,248
Blacktown	537	Plumpton St to Jersey St, Plumpton	Asphaltic concrete surfacing	"	69*
"	537	Rooty Hill Rd to South Creek, Marsden Park	Reconstruction and strengthening of failed pavement	"	2,002
"	537	Short St to Spencer St, Rooty Hill	Drainage improvement	Council	5,248
"	537	North Pde to Spencer St, Rooty Hill	Construction of side strip (west side)	Department	114,252
Blue Mountains	184	44.17 km to 77.98 km west of Windsor	Heavy patching	"	30,862
"	184	44.17 km to 77.98 km west of Windsor	Formation widening and cable fencing	"	38,151

\*Credit

**APPENDIX No. 7 — continued**  
**COUNTY OF CUMBERLAND MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(H) ORDINARY MAIN ROADS — continued</b>					
Botany	183	Maitland Ave to Isaac Smith St, Daceyville	Divided dual carriageway	Department	177,667
"	194	Joyce Dr to Millpond Dr, Mascot	Reconstruction of failing pavement on southbound carriageway	"	170,057
"	194	Millpond Dr, Mascot to airport tunnel, Kyeemagh	Asphaltic concrete overlay	"	6,962*
"	344	Southern Cross Dr to Bay St, Pagewood (adj. 5th green)	Pedestrian underpass	"	11,218
Camden	154	10.4 km to 12.2 km from Campbelltown	Reconstruction and improvement of intersection	Council	6,125
Camden	178	Somerset St to Queen St, Narellan	Kerbside lane including kerb and gutter	Council	116,372
Campbelltown	177	15.08 km to 15.85 km south of SH2	Reconstruction and bituminous surfacing	Department	12,523
"	177	Moore St to Oxley St, Campbelltown	Deviation	Council	48,991
"	177	Bridge over Fishers Ghost Creek Junction with MR178	Approaches	Department	2,190*
Canterbury	315	King Georges Rd and Punchbowl Rd, Wiley Park	Channellised intersection	"	133,204
"	315	Intersection with Punchbowl Rd, Lakemba	Public utilities adjustment	Council	3,751
"	315	Railway overpass at Wiley Park	Approaches	Department	101,571
"	315	Edge St to Hilton Ave, Lakemba	Public utility adjustment	Council	39,894
"	315	Intersection with Canterbury Rd (MR167), Wiley Park	"	"	25,419
"	315	King Georges Rd, Wiley Park	Widening of railway overbridge	Department	194,117
Colo	184	26.0 km to 27.4 km west of Windsor	Stengthening of pavement	"	2,703
Concord	200	Llewellyn St to Ryde Bridge, Rhodes	Public utility adjustment	Council	8,451
Drummoyne	165	Intersection with Westbourne St, Drummoyne	Left and right-turn lanes and bus bay	Department	6,451
"	165	Intersection with Westbourne St	Public utility adjustment	Council	444
Fairfield	609	Fairfield St to Alan St, Fairfield	Improvement of intersection	Department	162,804
Hornsby	156	New Line Rd to Victoria Rd, Pennant Hills	Dual carriageway	Council	67,373
"	156	MR160 to Highs Rd, West Pennant Hills	Reconstruction and widening	"	100,146
"	161	Selected lengths through Galston Gorge	Improvement to curves	"	3,062*
"	161	1.0 km west of Galston Gorge	Repairs to slip	"	34,299
"	373	Terrys Creek to Crandon Rd, Epping	Dual carriageway	Department	5,062
"	373	Midson Rd to Ray Rd, Epping	Reconstruction and asphaltic concrete surfacing	Council	78,100
Hurstville	168	Edith Creek, Lugarno	Stormwater drainage	"	7,336
"	168	Belmore Rd to Lime Kiln Rd, Lugarno	Drainage improvement	"	4,277
"	168	Forest Rd from Mavis Ave to Foreshaw Ave, Riverwood	Reconstruction including intersection with Stoney Creek road	"	97,980
"	168	Mavis Ave to Collaroy Ave, Peakhurst	Public utility adjustment	"	147,736
"	168	Valentia Ave, Lugarno	Reconstruction including kerb and gutter	"	20,076
"	508	Henry Lawson Dr from MR168 to Hymen St, Peakhurst	Reconstruction and asphaltic concrete surfacing	"	98,498
Ku-ring-gai	162	Cultowa Rd to Ridge St, Pymble	Dual carriageway	Department	43,486
"	366	Nambucca St to SH10, Turramurra	Reconstruction and widening	Council	50,827
Lane Cove	166	Burns Bay Rd and Penrose St	Provision of right-turn bay at intersection	Department	114,495
Leichhardt	165	Bridge over Iron Cove at Drummoyne	Design by consultants	"	1,580
"	523	From Booth St to Parramatta Rd, Camperdown	Reconstruction and bituminous surfacing	Council	30,012
Liverpool	154	Bridge over Thompsons Creek, 1.6 km north of Bringelly	Approaches	"	73,498
"	154	Approaches to bridge over Thompsons Creek	Public utility adjustment	"	2,252
"	154	Thompsons Creek near Badgerys Creek Rd, Bringelly	Prestressed concrete bridge	"	57,574
"	535	Judds Hill, 0.7 km to 2.38 km west of MR515	Reconstruction and widening	"	9,108
Marrickville	167	Livingstone Rd to Marrickville Rd, Lewisham	Reconstruction and bituminous surfacing	"	24,245
Mosman	164	Glover St, Cremorne to Clifford St, Spit Junction	Dual carriageway	Department	5
Parramatta	139	In Beecroft Rd, Epping, north of Bridge St	Footpath reconstruction	Council	2,450

\*Credit



**APPENDIX No. 7 — continued**  
**COUNTY OF CUMBERLAND MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(III) ORDINARY MAIN ROADS — continued</b>					<b>\$</b>
Parramatta	158	Victoria Rd, Ermington to	Reconstruction, bituminous		
Ryde		Stewart St, Eastwood	surfacing and surface drainage	Department	1,558
Parramatta	165	Pemberton St to McArthur St, Parramatta	Three lane carriageway	"	122,335
"	184	By St to Briens Rd, Northmead	Dual carriageway	"	100,216
Parramatta					
Blacktown					
Windsor	184	SH13 Parramatta to Western	Resheeting of selected lengths		
Colo		Colo Shire boundary	with asphaltic concrete	"	363*
Parramatta	184	Bridges over North Rocks Rd, Darling			
		Mills Creek and Lake Parramatta access	Design by consultants	"	24,709
Parramatta	574	Marsden Rd to Kissing Point Rd Dundas	Reconstruction and widening	Department	76,295
Penrith	154	F4 at Orchard Hills to Kings Hill Rd Mulgoa	Stage 2 Asphaltic concrete surfacing	"	673
"	155	Jamison St to Batt St Penrith	Reconstruction and		
		bituminous surfacing	Council	59,631	
"	155	Boundary Creek 1.11 km north of SH5	Reconstruction of culvert	"	2,450
"	155	11.6 km north of SH5	Two cell reinforced		
		concrete box culverts	"	13,475	
"	155	Batt St to Rodley Ave Penrith	Reconstruction and widening	"	96,237
"	535	3.54 km to 5.47 km east of MR154	Reconstruction and		
		bituminous surfacing	Department	24,300	
"	536	F4 to Luddenham Rd Erskine Park	"	"	88,097
Randwick	171	Flint St to Beauchamp Rd Matraville	Six lane divided carriageway	"	230,372
Rockdale	194	Cooks River to Bestic St Kyeemagh	Kerb and guttering and		
		sealing kerbside lanes	Council	27,562	
"	194 &	Intersection of Grand Pde &			
	2079	President Ave Brighton-le-Sands	Public utility adjustment	"	6,011
"	194 &				
	2079	President Ave Brighton-le-Sands	Channellisation of intersection	"	3,871
Ryde	158	Morris St Eastwood to SH13 Carlingford	Dual carriageway	Department	136,126
"	162	Goulding Rd to Epping Rd Ryde	"	"	81,918
"	162	Waterloo Rd North Ryde	Improvement of intersection	"	64,801
"	162	Blaxland Rd to Pittwater Rd North Ryde	Public utility adjustment	Council	39,675*
"	162	Epping Rd to Fontenoy Rd North Ryde	Dual carriageway	Department	31,307
"	165	Bellevue Rd to Glenayr Ave West Ryde	Asphaltic concrete surfacing	"	34,708
"	191	Lane Cove River to			
		Crematorium Fullers Bridge	Third lane	Council	138,748
"	200	Church St to Riverside Ave Ryde	Reconstruction of damaged		
		concrete pavement	Department	18,486	
"	200	Well St to Ryde Bridge Ryde	Amplification of drainage system	"	369*
"	200	Devlin St to Church St Ryde	Reconstruction of damaged		
		concrete pavement	"	11,015	
"	373	MR191 Dehli Rd to MR139			
		Blaxland Rd North Ryde	Public utility adjustment	Council	1,236*
South Sydney	170	Cleveland St and Regent St Redfern	Channellised intersection	"	1*
"	170	Regent St and Redfern St Redfern	"	"	508
"	170	Cleveland St to Boundary St Redfern	Public utility adjustments	"	442
Strathfield	315	Redmyre Rd to Carrington Ave Strathfield	Asphaltic concrete resurfacing	"	22,738
"	315	Raw Square underpass	Proposal to alleviate flooding	"	1,960
"	318	Parramatta Rd to Arthur St Homebush	Retaining walls at		
		railway overbridge approaches	Department	58,522	
"	318	Main suburban railway line at			
		Marlborough Rd Homebush	Prestressed concrete bridge	"	12,635*
"	318	SH5 to Arthur St Homebush	Public utilities adjustment —		
		P.M.G. Department	Council	33,348	
"	318	Bridge over main suburban railway			
		line Marlborough Rd Homebush	Design by consultants	Department	10,954
Sutherland	227	Jackaranda Rd Caringbah to			
		Croydon St Cronulla	Dual carriageway	Council	9,271
"	227	Jackaranda Rd Caringbah to			
		Croydon St Cronulla	Public utility adjustment	"	38,733
"	227	The Kingsway and Cronulla St Cronulla	Channellised intersection	"	830
"	227	Wandella Rd to Kareena Rd Miranda	Public utility adjustment	"	2,372
"	227	SH1 to Port Hacking Rd Miranda	Dual carriageway	"	104,919
Sydney	171 &	Anzac Pde Alison Rd and			
	327	Dacey Ave Kensington	Improvement of intersection	"	3,185
"	593	Flinders St to Crescent Moore Park	Public utility adjustment	"	49,498

\*Credit

**APPENDIX No. 7 — continued**  
**COUNTY OF CUMBERLAND MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(III) ORDINARY MAIN ROADS — continued</b>					<b>\$</b>
Warringah	162	Forest Way Terrey Hills	Channellised intersection	Department	2,742
"	162	St. Ives to Mona Vale	Photogrammetric survey	"	7,415
"	164	Down stream side of four cell box culvert opp Warringah Mall	Elimination of scour	Council	39,181
"	164	Turrimetta St to The Avenue Newport	Public utility adjustment	"	88,807*
"	164	Campbell Pde to Kenneth Rd Manly Vale	Dual carriageway	"	24,499
"	164	Kenneth Rd to Campbell Pde Manly Vale	Public utility adjustment	"	93,415
Warringah	164	Bassett St to Bardo Rd Newport	Reconstruction and widening	Department	24,627
"	328	Wakehurst Parkway to Daines Pde Beacon Hill	Dual carriageway	"	26
"	328	Northern approach to Roseville Bridge	Rock-bolting and guniting of batter	"	64,732
"	529	Frenchs Forest to Terrey Hills	Photogrammetric survey	"	2,035
Willoughby	191	Intersection with Millwood Ave and Fullers Rd Chatswood	Public utility adjustment	Council	7,022
Windsor	184	Paget St to Toxana St Richmond	Kerb and gutter and drainage	"	8,575
"	184	0.5 km west of MR154 at Windsor to Clarendon	Improvement to approaches to Bridge over Rickabys Creek	Department	200,211
"	184	Bridge over South Creek at Bridge St Windsor	Widening of approaches	"	79,965
"	184	Bridge over First Ponds Creek Vineyard	Excavation of channel	"	13,401*
"	184	Deviation from Groves Ave Mulgrave to Forbes St Windsor	Hydraulic model study	"	4,663
"	537	Bridge over Rickabys Creek	Design by consultants	"	10,075
"	537	Lennox St to March St Richmond	Sealing of side strip	"	332
Wollondilly	177	Kings Falls Bridge 31.46 km to 32.14 km south of SH2	Western approach	Council	1,166
"	177	Intersection with road to Westcliffe Colliery 6.1 km south of Appin	Reconstruction and additional lanes	"	43,382
"	177 & 610	Appin township	Improvement of intersection	"	96,034
Woollahra	339	Intersection with New South Head Rd Vaucluse	Channellisation	"	12,007*
<b>Total Ordinary Main Roads</b>					<b>5,221,343</b>
<b>(IV) SECONDARY ROADS</b>					
Ashfield	2028	Lackey St to SH2 Summer Hill	Widening, kerb and gutter	Council	42,874*
"	2028	Lackey St to Smith St Summer Hill	Reconstruction and widening to four lanes (Section B)	"	134,746
"	2056	Dobroyd Pde from Crane Ave to Boomerang St Haberfield	Reconstruction and asphaltic concrete surfacing	"	7,841
Bankstown	2068	Intersection the River Rd and Prince St Revesby	Reconstruction and widening	"	24,499
"	2068	Neptune St to Sandakan Rd Revesby	"	"	28,245
"	2068	Sandakan Rd to Prince St Revesby	"	"	21,069
"	2090	Wentworth St to Roberts Rd Greenacre	Reconstruction and sealing	"	36,749
"	2090	Punchbowl Rd to Wentworth St Chullora	Public utility adjustment	"	11,937
"	2094	SH2 to Rookwood Rd Yagoona	Heavy patching at selected locations	"	12,250
Blacktown	2084	Intersection SR2084 and Abbott Rd Seven Hills	Reconstruction of intersection	"	104,122
"	2084	Railway overbridge at Seven Hills	Public utility adjustment	"	1,120
"	2084	Intersection with Wall Park Ave Blacktown	Improvement	"	11,025
"	2084	Railway overbridge at Seven Hills	Public utility adjustment	"	44,521
"	2085	Intersections with Lyton St and Davis Rd Blacktown	"	"	28,735
"	2085	SH5 to Leabons L Prospect	Reconstruction and bituminous surfacing	"	15,312*
"	2085	Lyton St to Davis St Blacktown	"	"	498*
"	2085	Intersection with Davis Rd and Lyton St Blacktown	Public utility adjustment	"	636
"	2085	Patrick St from Newton St to Alpha St Blacktown	Kerb and guttering and drainage	"	5,512*
"	2085	SH5 to Church L Prospect	Reconstruction and bituminous surfacing	"	18,375
"	2085	Intersection SR2085 and Seven Hills Rd South Blacktown	Temporary improvement	"	5,329
"	2085	Church L to Leabons L Seven Hills	Reconstruction and widening	"	9,983

\*Credit



**APPENDIX No. 7 — continued**  
**COUNTY OF CUMBERLAND MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77 \$
<b>(iv) SECONDARY ROADS — continued</b>					
Blacktown	2085	Eastern Creek, Blacktown	Prestressed concrete bridge — sidetrack construction	Council	18,375
Canterbury	2014	Northcote St to Canterbury Rd, Campsie	Public utility adjustment	..	40,365
Concord	2059	Burwood Rd to Loftus St, Concord	Reconstruction and bituminous surfacing	..	44,221
Drummoyne	2059	William St to Regatta Rd, Five Dock	Reconstruction and asphaltic concrete surfacing	..	4,903
"	2059	St Lukes Park to MR395, Concord	Public utility adjustment	..	3,167
"	2095	Hythe St to Marlborough St, Drummoyne	Reconstruction and widening	..	1,946
Fairfield	2071	Kenyons Bridge over Prospect Creek, Smithfield	Southern approaches	Department	50,625
"	2088	Dublin St to O'Connell St, Smithfield	Reconstruction of pavement	Council	68,598
"	2088	Bourke St to Gipps St, Fairfield	Drainage and pavement	..	30,087
"	2088	Bourke St to Gipps St, Smithfield	Public utility adjustment	..	24,950
"	2088	From Gipps St to Bourke St, Smithfield	Reconstruction and bituminous surfacing	..	47,774
Holroyd	2071	Old Prospect Rd to Bates Ave, South Wentworthville	Reconstruction of eastern shoulder	..	22,049
"	2071	Bridge over Prospect Creek at Smithfield	Northern approach	..	12,250
"	2071	Bridge over Sydney water supply line	Design by consultants	Department	9,435
Holroyd Fairfield	2071	Kenyons Bridge over Prospect Creek, Smithfield	Public utility adjustment	Council	161
Hornsby	2035 & 160	Intersection SR2035 and MR160, Dural	..	..	13,629
Hunters Hill	2052	Princes St to High St, Hunters Hill	Reconstruction of kerbside lanes	..	10,458
Lane Cove	2070	Longueville Rd and River Rd, West Lane Cove	Improvement of intersection	..	25,421
"	2070	Intersection of Longueville Rd and Kenneth St, Lane Cove	Public utility adjustment	..	58,944
"	2092	Epping Rd to Mowbray Rd, Lane Cove	Reconstruction and widening	..	93,617
"	2092	Epping Rd to Mowbray Rd, West Lane Cove	Public utility adjustment	..	78,333
Leichhardt	2046	James St to Balmain Rd, Leichhardt	Public utility adjustment	..	7,910
"	2046	Mary St to Balmain Rd, Leichhardt	Reconstruction and asphaltic concrete surfacing	..	40,412
"	2046	James St to Balmain Rd, Lilyfield	Public utility adjustment	..	3,494
"	2046 & 2056	James, Mary and Perry Sts, Lilyfield	Channellised intersection	..	44,436
"	2073	Minogue Cres near Harold Park Raceway, Forest Lodge	Median strip	..	633*
Mosman	2036	McPherson St to Spit Rd, Spit Junction	Pavement strengthening	..	5,349
North Sydney	2091	Brook St to SH10, St Leonards	Public utility adjustment	..	3,131
Parramatta	2049	Wentworth St to Station St, Parramatta	Reconstruction and bituminous surfacing	..	61,248
Penrith	2048	Austin Anderson Ltd	Replace culvert with reinforced concrete box culvert	..	2,450*
"	2063	Cranebrook Rd, Cranebrook to the Driftway Agnes Banks	Widening and sealing	..	36,749
"	2063	Cranebrook Rd, Llandilo to the Driftway Londonderry	Widening and bituminous surfacing	..	20,816
Rockdale	2014	Forest Rd to SH1, Rockdale	Public utilities adjustment	..	23,205
"	2014	The Seven Ways, Rockdale	Channellisation of intersection	..	3,695
"	2080	Intersection SR2080 and Sandringham St, Ramsgate	Improvement	..	11,438
Ryde	2024	Blaxland Rd and Ball Ave, Eastwood	Channellised intersection	..	4,900*
"	2052	Kittys Creek, East Ryde	Prestressed concrete bridge	..	9,800
"	2058	0 km to 1.3 km south of MR373	Reconstruction and widening to four lanes	..	36,749
"	2081	Shaftsbury Rd to Ryedale Rd, Eastwood	Public utility adjustment	..	22,310
"	2081	Bridge over Northern Railway, Eastwood	Approaches	..	55,124
"	2081	Eastwood Railway overbridge and approaches	Foundation test boring	Department	3,568

\*Credit

**APPENDIX No. 7 — continued**  
**COUNTY OF CUMBERLAND MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(iv) SECONDARY ROADS — continued</b>					<b>\$</b>
Strathfield	2087	SH2 to Cooks River	Drainage scheme	Council	264
"	2087	Hume Highway to Ada St, Strathfield	Reconstruction and widening	"	59,084
Sutherland	2075	Fenton Ave to Elouera Rd, Caringbah	Reconstruction and asphaltic concrete surfacing	"	80,848
Willoughby	2092	Epping Rd to Mowbray Rd, West Lane Cove	Public utilities adjustment	Council	17,148
"	2093	Ashley St to Boundary St, Roseville	Reconstruction of kerbside lane	"	10,995*
Windsor	2030 & 182	George and Bridge Sts, Windsor	Improvement of intersection	Department	1,924
"	2063	Londonderry Rd to Paget St, Richmond	Kerb gutter and drainage	Council	10,883
"	2063	2.0 km to 2.7 km south of Richmond	Reconstruction and drainage	"	11,044
<b>Total Secondary Roads</b>					<b>1,647,945</b>
<b>(v) TOURIST ROADS</b>					
Baulkham Hills	4006	Wisemans Ferry to Lower Portland	Reconstruction and widening	Council	12,862
"	4006	Between Wisemans Ferry and Lower Portland	"	"	12,250
<b>Total Tourist Roads</b>					<b>25,112</b>
<b>(vi) ROADS OTHER THAN MAIN ROADS</b>					
Bankstown		Overbridge at Henry Lawson Dr	Approaches	Department	346,244*
"		Bridge over Clancy St, Padstow	Design by consultants	"	862
Baulkham Hills		Bridge over CR5037 at	Fabrication and delivery to	"	
Parramatta		Windsor Rd, Northmead	site of steel girders	"	40,038
Baulkham Hills		Bridge over North Rocks Rd, North Parramatta	Prestressed concrete steel deck bridge	"	161,883
"		Old Windsor Rd, 1.56 km to 3.83 km north of Seven Hills Rd	Public utility adjustment	Council	11,886
Fairfield		North Liverpool Rd to Mount St, Bonnyrigg	Reconstruction and bituminous surfacing	"	21,089
Liverpool		Hoxton Park Rd from Flowerdale Rd to Hill Rd	"	"	1,715
"		Hoxton Park Rd from Gillespie St to Flowerdale Rd, Liverpool	Asphaltic concrete surfacing	"	52,429
Parramatta		Hunts Creek at North Parramatta	Reinforced concrete box culvert	Department	7,571
Penrith		F4 to SH5 Emu Plains — River Rd	Widening	Council	15,312
"		Station St, Emu Plains	Relocation	"	2,058*
Sutherland		Railway overpass, Acacia St, Sutherland	Widening	Department	36,401
<b>Total Roads other than Main Roads</b>					<b>884</b>

**SUMMARY**

	<b>Works Expenditure</b>	<b>Property Acquisitions</b>
	<b>\$</b>	<b>\$</b>
Freeways	164,871	1,238,498
State Highways	4,218,613	53,439
Ordinary Main Roads	5,221,343	912,179
Secondary Roads	1,647,945	169,107
Tourist Roads	25,112	—
Roads other than Main Roads	884	645,037
Miscellaneous, minor works etc.	11,278,768	3,018,260
Total (including administration) as shown in receipts and payments statements — Appendix No. 1(B)(i)	<b>12,241,336</b>	<b>4,665,059</b>

\*Credit



# **APPENDIX No. 7A** **COUNTY OF CUMBERLAND MAIN ROADS FUND — SPECIAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
					\$
<b>(I) FREEWAYS</b>					
<b>Warringah Freeway</b>					
North Sydney	F1	Northern end of Sydney Harbour Bridge to Miller St	Construction	Department	354,230
					354,230
<b>North Western Freeway</b>					
Sydney	F3	Darling Harbour Goods Yard	Foundations and substructures for viaduct — Stage 1B	Department	115,325
"	F3	Darling Harbour Goods Yard	Bathurst Street utility tunnel	"	13,000
"	F3	Darling Harbour Goods Yard	Foundations and substructures for viaduct — Stage 1A	"	9,099
"	F3	North Western Freeway	Substructures in Darling Harbour Goods Yard	"	595,757
"	F3	Darling Harbour Goods Yard	Miscellaneous site works for viaduct — Stage 1C	"	6,632
"	F3	Darling Harbour Goods Yard	Service road	"	230,202
"	F3	Druitt St, Sydney to Bridge Rd, Glebe	Public utility adjustment — Postmaster General's Department	"	61,401
"	F3	Darling Harbour Goods Yard	Supply precast CQL segments, Darling Harbour Goods Yard	"	15,316
"	F3	Darling Harbour Goods Yard	Public utility adjustment, Sydney County Council	"	117,939
"	F3	Darling Harbour Goods Yard	Prestressing of pier headstocks	"	8,024
"	F3	North Western Freeway — Bathurst St area (B)	Foundations, substructures, viaducts and associated works	"	425,277
"	F3	Druitt St, City to Bridge Rd, Glebe	Public utility adjustments M.W.S.&D.B.	"	127,719
"	F3	Darling Harbour Goods Yard	Prestressing of pier headstocks	"	549
"	F3	Druitt St, City to Bridge Rd, Glebe	Public utility adjustment Public Transport Commission	"	42,539
"	F3	North Western Freeway — King St area (K)	Foundations, substructures, viaducts and associated works	"	101,822
"	F3	Darling Harbour Goods Yard	Foundations and substructures for viaducts — Stage 3	"	571,573
"	F3	Darling Harbour Goods Yard	Superstructures for viaduct — Stage 1C	"	71,852
"	F3	Darling Harbour Goods Yard	Foundations and substructures for viaduct — Stage 1C	"	393,079
"	F3	Darling Harbour Goods Yard	Foundations and substructures for viaduct — Stage 2	"	46,118
"	F3	Darling Harbour Goods Yard	Foundations and substructures for viaduct — Stage 5	"	125,488
"	F3	Druitt St, Sydney to Bridge Rd, Glebe	Public utility adjustment — Sydney City Council	"	148,681
"	F3	North Western Freeway — Pyrmont St area (P)	Foundations, substructures, viaducts and associated works	"	171,098
					3,398,490
<b>Southern Freeway</b>					
Wollongong	F6	Waterfall Tollwork	Driver aid and toll registration systems	Department	87,922
"	F6	Waterfall Tollwork	Administrative building	"	53
"	F6	Waterfall to Bulli Pass, 43 km to 55 km south of Sydney	Divided two lane carriageway	"	5,920*
"	F6	Waterfall to Bulli Pass, 55 km to 66 km south of Sydney	"	"	17,945
					100,000
					<b>Total Freeways</b>
					3,852,720
<b>(II) ORDINARY MAIN ROADS</b>					
Woollahra	172	Vernon St to Adelaide St, Bondi Junction	Viaduct	Department	416,186
"	172	Viaduct from Vernon St to Adelaide St, Bondi Junction	Approaches	"	278,489
"	172	Bondi Junction Works Office	Establishment	"	106,835
					<b>Total Ordinary Main Roads</b>
					801,510

\*Credit

**APPENDIX No. 7A — continued**  
**COUNTY OF CUMBERLAND MAIN ROADS FUND — SPECIAL PURPOSES**  
 Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(III) ROADS OTHER THAN MAIN ROADS</b>					<b>\$</b>
Sydney		Darling Harbour Goods Yard at William Henry St, Ultimo	Railway overbridge	..	<b>770</b>
<b>Total Roads other than Main Roads</b>					<b>770</b>

**SUMMARY**

	Works Expenditure \$	Property Acquisitions \$
Freeways	<b>3,852,720</b>	—
Ordinary Main Roads	<b>801,510</b>	—
Roads other than Main Roads	<b>770</b>	—
<b>Total as shown in receipts and payments statements — Appendix No. 1(B)(ii)</b>	<b>4,655,000</b>	—



# **APPENDIX No. 8** **COUNTRY MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(I) FREEWAYS</b>					<b>\$</b>
<b>Southern Freeway</b>					
Mittagong	F5	102.27 km to 110.45 km south of Sydney	Divided two lane carriageway	Department	83
					83
<b>Southern Freeway</b>					
Wollongong	F6	Gilmore St, West Wollongong	Installation of drainage pipe	Department	1,636
"	F6	Gladstone Ave to Five Islands Rd, Figtree	Dual carriageway	"	1,727
"	F6	Over F6 at Kanahooka Rd, Dapto	Prestressed concrete bridge	"	29,981
"	F6	Over freeway on SH1 at Ghost Creek	Prestressed concrete girder bridge — pitching at abutments	"	33
"	F6	Hernes Estate access at Figtree	Twin prestressed concrete bridges	"	11,879
"	F6	Australian Iron and Steel Siding and access road	Prestressed concrete bridge	"	52
"	F6	Bridge at Harvey St, Dapto	Design by consultants	"	1,014
					46,322
				<b>Total Freeways</b>	<b>46,405</b>
<b>(II) STATE HIGHWAYS</b>					
<b>Princes Highway</b>					
Bega	1	Bega River at North Bega	Demolition and removal of old timber bridge	Department	10,311
"	1	Bridge over Bega River, Bega, 11.7 km to 15.1 km south of Allsops Creek	Northern and southern approaches (Stage 1 of Bega By-pass)	"	22,648
Eurobodalla	1	Mogo Shopping Centre	Reconstruction and bituminous surfacing	"	29,177
"	1	Vulcan St, Moruya	"	Council	39,726
Imlay	1	Wolumia By-pass, 17.5 km to 19.6 km south of Bega	Reconstruction and bituminous surfacing	Department	33,996
"	1	13.2 km to 17.5 km south of Bega	"	"	18
Mumbulla	1	3.7 km to 5.0 km north of Bega (north of Coopers Gully)	Slow vehicle lane	"	1,691
"	1	Dignams Creek, 97.4 km to 99.2 km south of Batemans Bay	Climbing lane	"	74,893
Shoalhaven	1	Meroo Meadow, 152.1 km to 155.3 km south of Sydney	Improvement to alignment and grading	"	1
"	1	37.3 km to 45.4 km south of Nowra	Provision of climbing lanes	"	206,984
"	1	Abernathys Creek, 156 km to 156.9 km south of Sydney	Improvement to alignment	"	15
"	1	Jaspers Creek, 11.70 km north of Nowra	Prestressed concrete bridge	"	2,230
"	1	Jaspers Creek, 11.65 km north of Nowra	Channel excavation	"	750
"	1	Tullian Creek, 6.0 km north of Nowra	Reinforced concrete box culvert	"	889
Wollongong	1	Fairy Creek, 81.27 km south of Sydney	Prestressed concrete bridge	"	8
Wollongong	1	Bridge over Macquarie Rivulet, Albion Park	Approaches including intersection with SH25	"	2
Wollongong	1 & F8	Junction, SH1 and F8 at North Wollongong	Public utility adjustments	"	87,034
"	1	MR513 at Bulli to Lake Illawarra at Windang — full length	Heavy patching, pavement restoration and drainage correction	"	62,495
"	1	Northcliffe Dr, 8.95 km south of Wollongong	Reconstruction of intersection	"	13,348
"	1	Station St to Fairy Creek Bridge at North Wollongong	Duplication of carriageway	"	7,907*
"	1	Flagstaff Rd, 7.7 km to Orange Grove Rd, 8.3 km south of Wollongong	Kerbside lanes	Council	10,000
"	1	Orange Grove Rd to Northcliffe Dr, Kembla Grange	Reconstruction and widening to four lanes	Department	3,333
"	1	6.9 km to 7.7 km south of Wollongong	Kerbside lanes	Council	5,665
"	1	American Creek Bridge	Approaches	"	89,221
"	1	Rothery Rd to Bellambi L, Bellambi	Asphaltic concreting on sidestrips and central lanes	"	16,424
					<b>702,952</b>

\*Credit

**APPENDIX No. 8 — continued**  
**COUNTRY MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(II) STATE HIGHWAYS — continued</b>					<b>\$</b>
<b>Hume Highway</b>					
Gunning	2	Quarry entrance, 42.6 km south of Goulburn	Acceleration and deceleration lanes	Department	480*
Wollondilly	2	74 km to 76 km south of Sydney	Reconstruction and bituminous surfacing	..	91
..	2	76.4 km to 78.4 km south of Sydney	..	..	18
					<u>371*</u>
<b>Snowy Mountains Highway</b>					
Cooma	4	Cooma Back Creek in Sharp St, Cooma	2 span prestressed concrete bridge	Department	1,349
Monaro	4	56 km to 64 km west of Bega	Pavement strengthening	..	24,005
Snowy River	4	14.6 km east 22.9 km west of Kiandra	Asphaltic concrete surfacing	..	314*
..	4	13.49 km to 21 km west of Kiandra	Reconstruction and bituminous surfacing	..	473*
Tumut	4	Blowering Dam Deviation, 9.0 km east of Tumut	Remedial culvert and drainage works	..	123,812
..	4	Capper St to Winyard St, Tumut	Deviation	..	106
..	4	52.94 km to 63.39 km east of Tumut	Reconstruction and bituminous surfacing	..	32,695
..	4	43.6 km to 52.9 km east of Tumut	..	..	6,462
..	4	Nacka Nacka Creek, 28.6 km west of Tumut	Prestressed concrete bridge	..	2,965
					<u>190,607</u>
<b>Great Western Highway</b>					
Blaxland	5	River Lett at Hartley, 129.6 km west of Sydney	Prestressed concrete bridge	Department	1,375
..	5	Marrangaroo Creek, 5.8 km west of Lithgow	Prestressed concrete plank bridge	..	292,552
..	5	30.7 km to 34.6 km west of Katoomba	Widening of formation	..	10,404
..	5	Intersection with TR55	Reconstruction as partial grade separated section	..	70
..	5	Bridges over Marrangaroo Creek, 2.0 km and 5.84 km west of Lithgow	Design by consultants	..	13,972
Blaxland	5	8.0 km to 40.0 km west of Lithgow	Provision of asphaltic concrete slick sections	Department	276
..	5	Meadow Flat, 28.5 km to 32.2 km west of Lithgow	Reconstruction and bituminous surfacing	..	1,230
..	5	Bridge over Lett River at Hartley, 129.6 km west of Sydney	Approaches	..	274,942
..	5	MR516, 0 km to Marrangaroo Creek, 5.84 km west of Lithgow	Dual carriageway	..	355,557
Blue Mountains	5	19.0 km to 36.0 km west of Katoomba	Heavy patchings	..	115,212
Turon	5	Williamsons Springs, Bathurst, 38.6 km to 62.5 km west of Lithgow	Reconstruction strengthening and drainage correction	..	41,221
..	5	32 km to 34.8 km west of Lithgow	Reconstruction and bituminous surfacing	..	165,876
					<u>1,272,687</u>
<b>Mid Western Highway</b>					
Bland	6	Floodway at 23.74 km west of West Wyalong	Reinforced concrete bridge	Department	3,601*
..	6	Culvert over floodway, 18.83 km west of West Wyalong	Approaches	..	11,696
..	6	Floodway (Tea Tree Creek), 6.6 km west of West Wyalong	Approaches	..	6,328
..	6	5.5 km west of West Wyalong	Reinforced concrete box culvert and approaches	..	96*
Waugoola	6	(1) 13.2 km to 14.64 km, (2) 14.64 km to 15.25 km east of Cowra	1. sealing, 2. widening of formation	Council	29,126
..	6	13.9 km to 14.5 km east of Cowra	Widening formation and pavement strengthening	..	1,916
Weddin	6	48.3 km to 50.0 km west of Grenfell	Widening and strengthening	..	29,171
..	6	44.8 km to 67.2 km west of Grenfell	Formation widening	..	3,182
					<u>77,722</u>

\*Credit



**APPENDIX No. 8 — continued**  
**COUNTRY MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(II) STATE HIGHWAYS — continued</b>					<b>\$</b>
<b>Mitchell Highway</b>					
Abercrombie	7	7.6 km to 12.4 km west of Bathurst	Widening	Department	117*
"	7	13.5 km to 16.7 km west of Bathurst	"	"	242*
Bourke	7	6 km to 24 km north of Bourke	Reconstruction and widening	"	222,216
"	7	Levee Bank crossings, 2.2 km north and 2 km south of Bourke	Improvement	"	90,198*
"	7	Bridge over Darling River at Bourke	Foundation test boring	"	2,305
"	7	28.18 km to 30.58 km from Bourke	Reconstruction	"	12,739
"	7	182.9 km to 185.1 km north of Nyngan	Reconstruction and widening	"	377,789
Canobolas	7	47.7 km to 50.6 km west of Bathurst	Widening and pavement strengthening	"	76,462
"	7	4.06 km to 4.86 km west of Orange	"	"	63
Dubbo	7	Bridge over Macquarie River at Dubbo	Post constructional adjustments	"	204
Molong	7	Molong Creek, 6.8 km east of Molong	Steel girder and reinforced concrete bridge	"	135,102
"	7	Bridge over Molong Creek, Erambie	Approaches	"	6,314
"	7	6.3 km to 10.9 km north of Molong	Reconstruction and bituminous surfacing	"	96
"	7	Three Rivers Bridge, 20.3 km to 22.4 km north of Molong	Approaches	"	177*
"	7	13.5 km to 20.27 km north of Molong	Reconstruction and bituminous surfacing	"	59,174
Orange	7	Woodward St to Clinton St, Orange	Reconstruction of pavement	Council	14,162
"	7	TR61 and MR573 at Orange	Reconstruction of intersection	"	39,287
"	7	Summer St, Orange	Drainage improvement	"	932
Talbragar	7	Bridge over Sandy Creek, 6.75 km west of Dubbo	Foundation test boring	Department	735
Timbreebongie	7	Bridge over Goan Waterhole, 0.14 km north of East Trangie Level Crossing	"	"	1,149
"	7	Two level crossings at Trangie, 72.3 km and 75.8 km west of Dubbo	Installation of Type "F" flashing lights	"	67,911
Warren	7	59.9 km to 75 km south of Nyngan	Reconstruction and widening	"	397,316
Wellington	7	58 km to 63.17 km north of Molong	Reconstruction and bituminous surfacing	"	855,828
"	7	49.9 km to 55.5 km north of Molong	Strengthening and pavement widening	"	11,593
"	7	38.6 km to 46.2 km north of Molong	Strengthening and widening pavement	"	5,143
"	7	Reinforced concrete box culvert over unnamed creek, 5.1 km north of Wellington	Widening	"	189
"	7	Geurie Creek, 21.3 km west of Wellington	Reinforced concrete box culvert	"	44
					<b>2,196,019</b>
<b>Barrier Highway</b>					
Broken Hill	8	2.2 km to 2.8 km east of Broken Hill	Reconstruction and widening	Department	67,967
Central Darling	8	42 km to 48.3 km west of Wilcannia	Reconstruction including approaches to Grassmere Creek Overflow Bridge	"	15,351*
Murray Darling Division	8	77.73 km to 78.86 km east of Broken Hill at Little Topar	Raising and strengthening	"	1,128
"	8	6.4 km to 12.0 km west of Broken Hill	Reconstruction and widening	"	16,728
"	8	50.0 km to 70.0 km east of Broken Hill	Restoration of damaged pavement	"	777
"	8	3.0 km to 10.0 km east of Broken Hill	Reconstruction and bituminous surfacing	"	499,824
"	8	Selected lengths, 12.0 km to 49.3 km west of Broken Hill	Reconstruction of shoulders	"	85,643
"	8	39.06 km to 46.82 km east of Broken Hill	Reconstruction and bituminous surfacing	"	15,638*
					<b>641,078</b>
<b>New England Highway</b>					
Glen Innes	9	2.4 km to 6.0 km north of Glen Innes	Reconstruction and bituminous surfacing	Department	158
Maitland	9	Bridge over Four Mile Creek, 7.73 km south of Maitland	Abutment piles	"	45*
Tenterfield	9	3.2 km to 15.3 km south of Tenterfield	Reconstruction, widening and climbing lanes	"	12,083*
					<b>11,970*</b>

\*Credit

**APPENDIX No. 8 — continued**  
**COUNTRY MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(II) STATE HIGHWAYS — continued</b>					<b>\$</b>
<b>Pacific Highway</b>					
Ballina	10	0.46 km south to 0.14 km north of Ballina (Grant St to Tamar St)	Asphaltic concrete surfacing	Council	11,563
"	10	0.2 km to 0.8 km south of Ballina	Reconstruction and bituminous surfacing	"	8,116*
Byron	10	Railway overbridge bangalow, 26.1 km to 26.7 km south of Tweed Heads	Approaches	Department	275,471
"	10	Skidders Creek, 23 km north of Ballina	Reinforced concrete box culvert and approaches	"	251,753
"	10	23.2 km to 24.4 km north of Bangalow	Reforming and strengthening of formation	"	3,554
"	10	Bridge over Brunswick River, 21.0 km north of Bangalow	Approaches	"	4,659
"	10	Middle arm at Brunswick Heads, 21 km north of Bangalow	Approaches	"	205
"	10	Bangalow, 36.85 km north of Ballina	Railway overbridge	Council	103,781*
"	10	Bangalow, 36.85 km north of Ballina	"	Department	168,509
"	10	Railway overbridge at Tyagarah, 10.7 km north of Bangalow	Foundation test boring	"	13,252
Coffs Harbour	10 & 540	6.55 km south of Coffs Harbour	Improvement of intersection	"	4,095
"	10	20.0 km to 21.0 km and 48.5 km to 49.5 km south of Grafton	Strengthening and bituminous surfacing	"	40,746
"	10	19 km to 24.17 km north of Coffs Harbour	Reconstruction and bituminous surfacing	"	496,668
"	10	Bridge over Coffs Harbour Creek at Coffs Harbour	Design by consultants	"	5,683
"	10	McAuleys Headland, 2.70 km to 3 km north of Coffs Harbour	Heavy patching	"	38
Coffs Harbour	10	90.0 km to 101.57 km north of Kempsey	Strengthening and bituminous surfacing widening on sections	"	60,554
Coffs Harbour	10	Diamond Head Rd, 21.4 km north of Coffs Harbour	Prestressed concrete bridge	"	152,528
"	10	0.3 km to 1.2 km north of Coffs Harbour	Reconstruction and bituminous surfacing	Council	1,068
Gostford	10	Slip near Jolls Bridge, 52.9 km north of Sydney	Exploratory boring and geomechanical investigation	Department	15,007
Grafton City	10	Alipou Creek, 0.3 km north of Grafton	Reinforced concrete box culvert	"	7,695*
"	10	1.1 km to 2.1 km south of Grafton	Heavy patching	"	6,049
"	10	Reinforced concrete box culvert over Alipou Creek, 0.3 km north of Grafton	Approaches	"	11,659
Great Lakes	10	Bridge over Traynors Creek, 3.4 km north of Bulahdelah	"	"	399,673
"	10	Traynors Creek, 3.4 km north of Bulahdelah	Prestressed concrete bridge	"	2,049
Hastings	10	Wilson River at Telegraph Point	"	"	4,511
"	10	Walkers Creek, 53.4 km north of Taree	Reinforced concrete box culvert	"	85,920
"	10	Bridge over Herons Creek, 55.7 km north of Taree	Widening	"	54,751
"	10	Wilson River at Telegraph Point, 94.8 to 96.5 km north of Taree	Northern approach to bridge	"	57
"	10	Wilson River at Telegraph Point, 89.8 to 92.9 km north of Taree	Southern deviation and bridge approaches	"	5,915*
"	10	Herons Creek, 55.4 km to 55.5 km north of Taree	Widening of approaches	"	41,476
"	10	Walkers Creek, 53.2 km to 53.68 km north of Taree	Approaches	"	98,523
"	10	Various sections in Shire	Heavy patching	"	393,549
Kempsey	10	4.0 km to 5.5 km north of Kempsey	Reconstruction of distressed pavement	"	75,268
"	10	Various sections in Shire	Heavy patching	"	3,962
"	10	1.19 km to 1.61 km north of Kempsey	Improvement to level crossing	"	6,631
"	10	Nambucca Heads, 63.7 km to 68.93 km north of Kempsey	Deviation	"	5,465
Lake Macquarie	10	156.87 to 172.45 km north of Sydney	Reconstruction of intersection	Department	122
"	10	Robert St to Ada St, South Belmont	Dual carriageway including approaches to Cold Tea Creek	"	2
"	10	Mark St to Red Rose Ave, Belmont	Restoration of damaged pavement	"	6,804

\*Credit



**APPENDIX No. 8 — continued**  
**COUNTRY MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(II) STATE HIGHWAYS — continued</b>					<b>\$</b>
<b>Pacific Highway — continued</b>					
Maclean	10	Tynedale, 31.4 km to 33.0 km north of Grafton	Restoration of river banks and protection of roadside shoulders	Department	10,808
"	10	Bridge over Tabbimobile Creek, 31.1 km south of Woodburn	Foundation test boring	"	1,548
"	10	31.1 km to 37.8 km south of Woodburn	Reconstruction and bituminous surfacing	Council	669
Manning	10	Various sections in Shire	Heavy patching	Department	116,380
"	10	13.68 km to 16.09 km north of Taree	Reconstruction of damaged pavement	"	27,729
"	10	Two Mile Creek, 23.0 km to 24.8 km north of Taree	Deviation	"	651,967
"	10	4.36 km to 16.32 km south of Taree	Slow vehicle lanes	"	3,671*
"	10	79.5 km to 79.7 km north of Taree	Reconstruction of distressed pavement	"	66,635
"	10	24.8 km to 28.8 km south of Taree	Reconstruction of distressed pavement	"	2
"	10	Bridge over Herons Creek, 62.02 km north of Taree	Design by consultants	"	6,089
"	10	2.4 km north of Taree	Widen Railway overbridge	Council	28,324
"	10	Two Mile Creek, 24.1 km north of Taree	Prestressed concrete bridge	Department	20,338
Nambucca	10	16.45 km to 18.25 km north of Macksville	Reconstruction of distressed pavement	"	69,980
"	10	13.0 km to 16.45 km north of Macksville	"	"	52,479
"	10	0 km to 3.5 km north of Macksville	Deviation	"	7,888
"	10	32.93 km north of Kempsey to Nambucca Heads	Heavy patching	"	28,126*
"	10	Bridge over Boggy Creek, 16.8 km north of Macksville	Design by consultants	"	6,690
"	10	Railway overbridge, 8.9 km south of Macksville	Foundation test boring	"	248
Newcastle	10	Intersection with City Rd, Merewether	"	"	10,448
"	10	City Rd, Merewether — roadworks widening	"	"	337
"	10	12.4 km south of Newcastle at Charlestown	"	"	2,623
Port Stephens	10	12.52 km (Balikera Canal) to 17.96 km north of Raymond Terrace	Reconstruction and bituminous surfacing	"	13,844
Taree	10	Browns Creek, Victoria St, Taree	Prestressed concrete bridge	Council	21,243
"	10	Browns Creek Bridge to Oxley St, Taree	Reconstruction and widening	"	88,513
Tintenbar	10	114.3 km to 117.0 km north of Grafton	Replacement timber culverts with concrete box culverts	Department	82,066
"	10	7.2 km to 9.0 km north of Ballina	Strengthening and bituminous surfacing	"	19,918
Tweed	10	61.85 km to 62.54 km north of Ballina	Strengthening and bituminous surfacing	"	25,939
"	10	Bridge over Condong Creek, 1.3 km north of Murwillumbah	Approaches	"	4,169
"	10	16.6 km to 19.5 km north of Murwillumbah	Restoration of southbound carriageway	"	144,728
"	10	15.8 km to 19.6 km north of Murwillumbah (Oak Ave)	Reconstruction and bituminous surfacing northbound carriageway	"	131,154
"	10	Alma St Intersection, Murwillumbah	Channellisation of intersection	"	2,095
"	10	Condong Village, 4.1 km to 6.9 km north of Murwillumbah	Deviation	"	12,652
"	10	Bridge over Condong Creek, 1.3 km north of Murwillumbah	Widening and provision of footpath	"	667*
"	10	Barneys Point Bridge over Tweed River, 7.2 km south of Tweed Heads	Foundation test boring	"	1,379
"	10	Mooball to Kingscliff	"	"	47,607
"	10	Bridge over Cudgen Creek, 79.0 km north of Ballina	"	"	472
Ulmarras	10	10.0 km to 30.0 km south of Grafton	Reconstruction and pavement strengthening	"	8,586
"	10	40.6 km to 43.6 km south of Grafton (Cassons Creek to Dirty Creek)	Reconstruction and bituminous surfacing	"	398*
"	10	20.5 km to 64.3 km north of Grafton	"	"	504
"	10	Ferry between Ulmarra and South Gate, 13.0 km north of Grafton	Reconstruction of eastern approach	"	9,666
"	10	8 km to 10 km south of Grafton	Heavy patching	"	9,082*
Woodburn	10 & 145	Pacific Highway and Coraki Road, Woodburn	Improvement of intersection	"	5,416
<b>*Credit</b>					<b>4,235,506</b>

**APPENDIX No. 8 — continued**  
**COUNTRY MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(II) STATE HIGHWAYS — continued</b>					<b>\$</b>
<b>Oxley Highway</b>					
Coonabarabran	11	2.57 km to 16.0 km east of Coonabarabran	Widening of shoulders on selected lengths	Department	33,511
Gilgandra	11	13.0 km to 32.0 km east of Gilgandra	Widen culverts	"	76
Hastings	11	1.5 km to 10.9 km west of Port Macquarie	Reconstruction of distressed pavement	"	22,629
Peel	11	44.6 km west of Tamworth	Reinforced concrete box culvert	"	169
Walcha	11	Various locations, Wauchope to Walcha	Restoration of landslides	"	49,626
"	11	1.6 km to 3.2 km west of Walcha	Reconstruction and bituminous surfacing	"	1,202
"	11	54.71 km to 58.73 km east of Walcha	"	"	57,276*
Warren	11	Bridge over Macquarie River at Warren	Foundation test boring	"	2,305
"	11	Bridge over Ewenmar Creek, 3.2 km east of Warren	"	"	2,305
					<b>54,547</b>
<b>Gwydir Highway</b>					
Ashford	12	15.6 km to 18.4 km west of Yetman	Deviation	Council	14,162
Boomi	12	59.55 km to 64.4 km west of Moree	Reconstruction and bituminous surfacing	Department	18,772
"	12	Bridge over Black Gully, 98.8 km west of Moree	Approaches	"	248
Grafton City	12	2.67 km west of Grafton	Improvement to intersection	Council	118
Macintyre	12	1.93 km east of Delungra	Improvement of curve	"	2,418
Nymboida	12	21.2 km to 38.2 km west of Grafton	Reconstruction and pavement strengthening	Department	83,560
Severn	12	Selected lengths, 78.0 km to 87.0 km east of Glen Innes	Replacement of guard fencing	"	18,885
"	12	3.67 km to 6.44 km west of Glen Innes	Widening and strengthening	Council	113
Yallaroi	12	27.6 km to 41.4 km west of Warialda	"	"	128,875
					<b>266,951</b>
<b>Sturt Highway</b>					
Balranald	14	0 km to 3.0 km east of Euston	Reconstruction and replacement of irrigation culvert	Department	262,144
"	14	9.2 km to 16.3 km east of Euston	Reconstruction and widening	"	153
"	14	8.9 km to 27.4 km west of Euston	Improving crests and widening	"	74*
"	14	73.4 km to 79 km east of Euston	Widening and improvement of two crests	"	12,630
Hay	14	0.2 km to 80.9 km west of Hay	Widening of pavement, shoulders and formation of selected lengths	"	59,251
"	14	19.3 km to 31.4 km west of Hay	Reconstruction and bituminous surfacing	"	23,276*
"	14	19.3 km to 27.2 km west of Hay	Restoration of failed sections of pavement	"	104,312*
Kyeamba	14	Kyeamba Creek Bridge	Approaches	"	1,126
Mitchell	14	51 km to 51.7 km north of Wagga Wagga	"	"	14,565*
Murrumbidgee	14 & 321	Sturt Highway and Jerilderie Rd. Darlington Point	Improvement to intersection	"	71*
Narrandera	14	Arajoel Causeway, 51.35 km west of Wagga Wagga	Supply and delivery of crown sections	"	35,317
Wagga Wagga	14	Edward St, Wagga Wagga	Railway subway	Council	456,331
"	14	5.0 km to 9.2 km west of Wagga Wagga	Bituminous surfacing including channellisation with TR78	Department	4,606
"	14	Edward St west to Ashmont Ave, Wagga Wagga	Deviation	Council	235,479
Wakool	14	43.0 km to 50.95 km east of Balranald	Reconstruction and bituminous surfacing	Department	65
"	14	29.0 km to 43.0 km east of Balranald	"	"	958*
"	14	16.22 km to 29 km east of Balranald	"	"	2,891
"	14	28.96 km to 33.80 km east of Balranald	Reconstruction and widening and bituminous surfacing	"	131,619
Wentworth	14	27.4 km to 32.0 km west of Euston	Improving crests and widening	"	19,513
"	14	41.8 km to 45.6 km west of Euston	Reconstruction and deviation	"	506,894
"	14	32.5 km to 41.8 km west of Euston	Reconstruction and bituminous surfacing	"	125,707
					<b>1,710,470</b>

\*Credit



**APPENDIX No. 8 — continued**  
**COUNTRY MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(II) STATE HIGHWAYS — continued</b>					<b>\$</b>
<b>Bruxner Highway</b>					
Boolooroo	16	0 km to 7 km east of Boggabilla	Reconstruction and widening	Council	63,472
Gundurimba	16	8.11 km to 8.36 km west of Lismore	Extension of climbing lane	"	32,573
"	16	24.71 km to 25.15 km west of Ballina	Reconstruction and bituminous surfacing	"	16,711*
Guyra	16	12.87 km to 16.4 km west of Lismore (Section 15.95 km to 16.25 km)	Strengthening of existing road	"	17,506
Tenterfield	16	37 km to 40.2 km east of Bonshaw	Reconstruction and bituminous surfacing	Department	57*
"	16	9.65 km to 14.26 km west of Tenterfield	Strengthening and widening existing pavement	Council	14,162
"	16	44.90 km to 46.67 km east of Bonshaw	Reconstruction and bituminous surfacing	Department	17,834
"	16	62.8 km to 65.5 km west of Tenterfield	"	"	51,904
"	16	Unnamed creek, 63.25 km west of Tenterfield	Reinforced concrete box culvert	"	11*
"	16	Yellow Gully, 69.92 km west of Tenterfield	One span prestressed concrete bridge	"	4,447
"	16	Black Creek, 83.27 km west of Tenterfield	Reinforced concrete box culvert	"	97*
"	16	Black Creek, Billabong, 27.42 km east of Bonshaw	"	"	360
"	16	Bridge over Reedy Creek, 68.6 km east of Tenterfield	Foundation test boring	"	7,528
"	16	Bridge over Beardy River, 88.3 km west of Tenterfield	"	"	8,184
"	16	Bridge over Mole River, 58.6 km west of Tenterfield	"	"	6,711
Tomki	16	48.64 km to 51.86 km west of Ballina	Reconstruction and bituminous surfacing	Council	18,835
"	16	57.2 km to 58.9 km west of Ballina	"	"	174*
"	16	12.7 km to 13.8 km west of Casino	Pavement strengthening	Department	25
					<b>226,491</b>
<b>Newell Highway</b>					
Berrigan	17	SH20 at Finley	Improvement of intersection	Department	573
"	17	Bridge over Mulwala Canal, 1.1 km north of Finley	Approaches	"	143
"	17	2.4 km to 8.7 km north of Finley	Widening and bituminous surfacing	"	244,147
"	17	3.7 km to 13 km north of Finley	Widening of Water Resources Commission structures	"	7,455
Boolooroo	17	4.0 km to 46.0 km north of Moree	Reconstruction of existing failed pavement edges	"	35,252
"	17	14.6 km to 15.4 km south of Moree	Pavement Strengthening	"	6,267
Dubbo	17	Railway overbridge, Fitzroy St, Dubbo	Foundation test boring	"	667
Gilgandra	17	64.36 km to 64.80 km north of Dubbo	Reconstruction and bituminous surfacing	"	2,896
"	17	Railway level crossing at 2.4 km south of Gilgandra	Approaches	"	2,896*
Goobang	17	Junction with Parkes Telescope turn-off, 18.80 km north of Parkes	Reconstruction and widening	"	2,327
"	17	30.57 km to 33.79 km north of Parkes	Reconstruction and bituminous surfacing	"	11,235
"	17	16.09 km to 27.36 km north of Forbes	Widening of formation	"	8,316
Jemalong	17	3.1 km to 6.53 km east of Forbes	Improvement to alignment	Council	115,973
"	17	Southern approach to Fitzgeralds Bridge to junction with MR377	Pavement widening	"	49,199
"	17	13.7 km to 16.9 km north of Forbes	Widening	"	3,303*
Jerilderie	17	30.6 km to 39.35 km north of Jerilderie	Reconstruction of shoulder edges including shoulder sealing	Department	222,740
"	17	13.3 km to 34.2 km north of Finley	Reconstruction and widening of formation	"	33,510
"	17	Turn Back Jimmy Creek, 13.7 km to 14.7 km north of Jerilderie	Approaches	"	161,245
"	17	Turn Back Jimmy Creek, 13.89 km north of Jerilderie	Reinforced concrete box culvert	"	58,421
Moree	17	Joyce Ave to Gosport St, Moree	Sealing of shoulders	Council	2,741*

\*Credit

**APPENDIX No. 8 — continued**  
**COUNTRY MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(II) STATE HIGHWAYS — continued</b>					<b>\$</b>
<b>Newell Highway — continued</b>					
Narrabri	17	Bridge over Eathers Creek, Cooma St, Narrabri	Foundation test boring	Department	2,318
"	17	Bridge over Namoi River at Narrabri	Approaches	"	5,523
Narrandera	17	Whitton St, 0.2 km to 0.4 km south of Narrandera	Improvement of intersection	"	56,604
"	17	107.96 km to 108.56 km north of Jerilderie	Foundation test boring	"	12,659
Parkes	17	Clarinda St, Parkes	Reconstruction and bituminous surfacing	"	28,009
"	17	Baker St to Hartigan Ave, Parkes	"	Council	22,659
"	17	Hartigan Ave to Medlyn St, Parkes	"	Department	57,866
Talbragar	17	58.9 km to 64.0 km north of Peak Hill	Widening formation prior to resealing	"	23
					<b>1,137,087</b>
<b>Castlereagh Highway</b>					
Coonamble	18	Coonamble to Walgett	Restoration of isolated sections of failed pavement	Department	87,055
					<b>87,055</b>
<b>Monaro Highway</b>					
Bibbenluke	19	26.7 km to 28.29 km south of Bombala	Reconstruction and gravel surfacing	Council	5,223
"	19	16.0 km to 21.7 km south of Bombala	Reconstruction and bituminous surfacing	"	1,028*
"	19	17.36 km to 20.47 km south of Bombala	Reconstruction and gravel surfacing	"	2,505
"	19	36.11 km to 36.8 km south of Bombala	Reconstruction and bituminous surfacing	"	3,227
Cooma	19	Curve at 106.1 km south of Canberra	Reconstruction to improved alignment	"	1,680
Monaro	19	3.14 km to 5.40 km and 5.86 km to 10.63 km south of Cooma	Pavement strengthening	Department	94
"	19	94.0 km to 95.0 km south of Canberra (Driscolls Hill)	Extension of climbing lane	"	76,035
"	19	Harry Willow Creek, 84.1 km south of Canberra	Precast concrete box culvert	"	112*
					<b>87,624</b>
<b>Riverina Highway</b>					
Conargo	20	31.7 km to 50.6 km west of Finley	Reconstruction of shoulder edges including shoulder sealing	Department	134,217
Deniliquin	20	4.6 km to 8.14 km east of Deniliquin	Reconstruction and bituminous surfacing	Council	139,380
					<b>273,597</b>
<b>Cobb Highway</b>					
Central Darling	21	At Ivanhoe	Raising of level crossing	Council	3,509
Deniliquin	21	Bridge over Mulwala Canal, 2.4 km south of Deniliquin	Widening	Department	90
Hay	21	Level crossing at Hay	Widening	"	9,521
"	21	Belmore St to Murray St Hay	Reconstruction and bituminous surfacing	Council	11,757
"	21 & 14	Norma St and Palmer St South Hay	Channellisation of intersection	Department	1,396
					<b>26,273</b>
<b>Silver City Highway</b>					
Wentworth	22	Tincha deviation 1.6 km to 17.7 km north of Wentworth	Reconstruction and bituminous surfacing	Department	2,082
"	22	Bridge over Darling River at Wentworth	Demolition	"	60
					<b>2,122</b>

\*Credit



**APPENDIX No. 8 — continued**  
**COUNTRY MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(II) STATE HIGHWAYS — continued</b>					<b>\$</b>
<b>State Highway No. 23</b>					
Lake Macquarie	23	Griffith St Charlestown	Improvement of intersection	Council	5,665
Newcastle	23	Hugo Ave to Moore St (Junction with MR605)	Construction of passing lane	..	201
					5,866
<b>Mount Lindesay Highway</b>					
Kyogle	24	7.64 km to 14.77 km north of Woodenbong	Reconstruction and bituminous surfacing	Department	6,574
					6,574
<b>Illawarra Highway</b>					
Wingecarribee	25	39.6 km to 46.3 km west of SH1	Strengthening and widening of pavement	Department	2,324
Mittagong	25	Black Bobs Creek 11.1 km south of Moss Vale	Prestressed concrete bridge	..	721
Wingecarribee					3,045
<b>State Highway No. 26</b>					
Gosford	26	Calga interchange to 4.0 km north of Calga	Additional lane	Department	1,450
					1,450
<b>Total State Highways</b>					<b>13,193,382</b>
<b>(III) TRUNK AND ORDINARY MAIN ROADS</b>					
Ashford	63	Bridge over Ottleys Creek 52.5 km north of Wialda	Approaches	Council	12,052
..	63	Rocky Dam 22.1 km south of Yetman	Prestressed concrete bridge	..	3,424
..	137	Myall Creek 18.51 km north of Ashford	..	..	32,573
..	137	29 km to 36.3 km north of Ashford	Reconstruction and bituminous surfacing	..	28,433
..	137	19.15 to 19.47 km north of Ashford Water Hole Creek	Approaches	..	21,243
..	137	31.16 km to 33.00 km north of Ashford	Reconstruction and bituminous surfacing	..	35,296
Ballina	145	SH10 to Missingham Bridge via River St Ballina	..	..	3,541
..	145	SH10 to Missingham Bridge via River St. Ballina	Reconstruction including bituminous surfacing	..	3,541*
Balranald	67	156.72 km to 158.32 km north of Balranald	Reconstruction and gravel surfacing	..	3,478*
..	67	32.0 km to 34.6 km north of Balranald	Reconstruction and bituminous surfacing	..	7,760
..	67	39 km to 41 km north of Balranald	..	..	42,486
..	67	34.6 km to 37.5 km north of Balranald	..	..	7,211
Barraba	63	Bridge over Sheepstation Creek 18.5 km north of Barraba	Approaches	..	58,333
..	63	Sheepstation Creek 18.5 km north of Barraba	Prestressed concrete bridge	..	15,393
..	132	15.3 km to 18.9 km east of Barraba	Reconstruction and bituminous surfacing	..	27,616
Bathurst	54	Railway overbridge at Rocket St Bathurst	Approaches	..	14,162
..	253	Body Creek on deviation at Kelso	Reinforced concrete box culvert	..	31,168
..	253	3.3 km east of Bathurst at Kelso	Eliminate level crossing at Kelso	..	31,168*
Bellingen	76	26.5 km to 27.4 km west of Bellingen including Sandy Creek at 24.2 km	Improvement to alignment	..	33,329
..	76	26.49 km to 26.56 km west of Bellingen	..	..	1,901*
Berrigan	363	8.0 km to 12.1 km north of MR550 at Baroogaa	Reconstruction and bituminous surfacing	..	49,567
..	363	4.02 km to 8.05 km north of MR550	Reconstruction and bituminous surfacing	..	49,567

\*Credit

**APPENDIX No. 8 — continued**  
**COUNTRY MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(III) TRUNK AND ORDINARY MAIN ROADS — continued</b>			Reconstruction and		\$
Bibbenluke	91	10.54 km to 13.53 km east of Bombala	bituminous surfacing	Council	1,755*
"	91	16.7 km to 19.6 km east of Bombala	"	"	18,170
"	91	23.41 km east of Bombala	Reinforced concrete box culvert	"	48,813
Blaxland	55	7.25 km to 53.85 km north of Lithgow	Heavy patching	Department	23,654
"	581	Level crossing at Cullen Bullen	Installation of "F" type flashing lights and warning bells	Council	2,035
Bogan	57	Bridge over Bogan River 46.9 km south of Nyngan at Buddabedah	Foundation test boring	Department	1,812
"	70	Coolabah to Gongolgon 7.53 km to 8.16 km north of SH7	Reconstruction and bituminous surfacing	Council	13,668
"	70	12.00 km to 16.1 km from Coolabah	Bituminous surfacing	"	7,506
"	70	Coolabah to Gongolgon (12.0 km to 16.1 km north of SH7)	Reconstruction to basecourse level	"	35,405
"	70	Coolabah to Gongolgon 4.53 km to 7.53 km north of SH7	Reconstruction and bituminous surfacing	"	31,513*
Boolooroo	507	5.2 km to 10.2 km east of Boomi	"	"	36,821
"	507	2.0 km to 5.2 km east of Boomi	"	"	100,865
"	507	48.28 km to 53.91 km west of Goondiwindi	"	"	85*
Boomi	232	74.10 km to 75.25 km north of Moree	"	"	67,978
"	367	57.94 km to 59.7 km north west of Moree	"	"	13,243
Boorowa	56	Woolpack Creek 29.8 km north of Boorowa	Six span reinforced concrete bridge	"	700
"	248	12.6 km to 15.1 km east of Boorowa	Reconstruction and bituminous surfacing	"	45,319
Boree	237	Grove Creek 46.4 km south-west of Orange	Reinforced concrete box culvert	"	27,117
Bourke	68	6.02 km to 7.52 km east of Bourke	Reconstruction and bituminous surfacing	"	42,486
Brewarrina	70	40.4 km to 41.4 km north of Brewarrina	"	"	93,617
"	70	3.15 km to 10.2 km north of Brewarrina	Pavement strengthening	"	22,659
"	70	26.2 km to 34.3 km north of Brewarrina	Reconstruction and bituminous surfacing	"	107,631*
Broken Hill	66	3.9 km to 4.1 km east of Broken Hill	"	Department	34,770
Burrangong	78	39.4 km to 40.0 km north of Young	Pavement strengthening	Council	13,033
"	78	38.52 km to 39.41 km north of Young	Pavement strengthening and widening	"	577
"	78	30.71 km to 31.63 km and 38.03 km to 38.52 km north of Young	Reconstruction and bituminous surfacing	"	14,856
"	239	Burrangong Creek 19.31 km north of Young	Construction of bridge	"	509
"	241	Wambanumba Creek 8.8 km east of Young	Reinforced concrete bridge	"	24,846
"	241	9.55 km to 12.0 km east of Young	Reconstruction and bituminous surfacing	"	9,523
Canobolas	61	1.3 km to 2.55 km west of Orange	"	"	205,350
"	61	2.55 km to 4.80 km from Orange city boundary	"	"	21,243
Carrathool	368	0 km to 8.8 km west of Rankins Springs	Improvement of drainage	"	8,214
"	368	2.2 km to 3.9 km west of Rankins Springs	Reconstruction and bituminous surfacing	"	28,324
"	501	13.0 km to 18.0 km east of Hillston	"	"	42,486
"	501	4.26 km to 8.0 km east of TR80	"	"	11,547
"	501	8.0 km to 13.3 km south of Hillston	"	"	16,800
Casino	149	Bridge over Oakey Creek 4.2 km east of Casino	Foundation test boring	Department	8,814
Central Darling	68	0.4 km to 1.1 km south of Menindee	Approaches	Council	16,432
"	405	Bridges over Paroo River and By-washes 1 and 2, 186 km to 190 km west of Bourke	"	"	29,386*
"	435	42.2 km to 70.7 km north of Wilcannia	Reconstruction and bituminous surfacing	"	6,373
Cobar	61	58 km to 64.9 km south of Cobar	"	"	57,466
"	407 & 421	Intersection with MR421	Improvement	"	7,654
"	411	Euabolong West to Murrin Bridge (0 km to 10 km West Euabolong)	Reconstruction and bituminous surfacing	"	38,946
Cockburn	63	30.06 km to 30.70 km north of Tamworth	"	"	6,798
"	63	28.9 km to 29.6 km north of Tamworth	"	"	15,424

\*Credit



**APPENDIX No. 8 — continued**  
**COUNTRY MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(iii) TRUNK AND ORDINARY MAIN ROADS — continued</b>			Reconstruction and		\$
Coffs Harbour	151	57.63 km to 59.06 km south of Grafton	bituminous surfacing	Council	4,428
"	151	Coffs Creek 5.6 km west of Coffs Harbour	Reinforced concrete box culvert	"	43,902
"	151	Coffs Creek 5.6 km west of Coffs Harbour	"	"	43,902*
"	151	Duckan Duckan Creek 17.8 km north of Coffs Harbour	"	"	72,935*
Colo	181	Unnamed creek 22.7 km north of St. Albans	Reinforced concrete bridge	"	30,760*
"	181	Unnamed creek 2.57 km north of St. Albans	Replacement of timber bridge	"	30,760
"	503	Bridge over Roberts Creek 17.7 km north of Windsor	Bored piles	Department	365
"	503	MR182 to Colo Shire boundary north of Windsor	Heavy patching of selected lengths	"	72
"	503	18.3 km to 19.6 km north of Windsor	Reconstruction and widening	"	18,802
Conargo	552	34.3 km to 37.2 km east of Deniliquin	Reconstruction and bituminous surfacing	Council	17,993
Condobolin	57	Bridge over Lachlan River at Condobolin	Foundation test boring	Department	669
Coolah	55	13.0 km to 14 km north of Coolah	Reconstruction and bituminous surfacing	Council	25,877
"	55	14.0 to 18.0 km north of Coolah	"	"	10,338*
"	55	10.95 km to 13.0 km north of Coolah	"	"	12,640
"	55	19.0 km to 25.7 km north of Coolah	"	"	52,824
"	77	Bridge over Merrygoen Creek 0 km to 0.64 km south of Mendooran	Approaches	"	28,324
"	77	Merrygoen Creek at Wongoni Crossing 31.4 km west of TR55	Prestressed concrete bridge and approaches	"	5,690
Coolamon	398	8.5 km to 11.30 km north of MR240	Reconstruction and bituminous surfacing	"	21,112
"	398	11.5 km to 14.8 km north of MR240	"	"	28,157
"	398	29.24 km to 32.97 km north of Coolamon	"	"	24,825
Coonabarabran	55	33.2 km north of Coolah	Reinforced concrete box culvert	"	3,932
"	129	24.94 km east of Coonabarabran	Reinforced concrete box culvert and approaches	"	2,813
"	129	52.24 km to 57.07 km west of Coonabarabran	Reconstruction and bituminous surfacing	"	20,586
"	334	13.6 km south of SH11	Prestressed concrete bridge	"	35,826
"	396	Merryula Creek 25.4 km north of Binnaway	Reinforced concrete box culvert	"	7,541
"	396	Bridge over Merryula Creek 29.4 km north of Binnaway	Approaches	"	33,883
"	396	24.9 km to 25.3 km north of Binnaway	Reconstruction and bituminous surfacing	"	15,595
Coonamble	205	20.3 km to 26.7 km east of Coonamble	"	"	53,834
"	383	15.9 km to 20 km north of Coonamble	"	"	106,330
Cootamundra	78	15.1 km to 18.8 km north of Cootamundra	Formation and widening	"	18,075
"	84	Connaughtmans Creek 18.6 km west of Murrumburrah	Reinforced concrete bridge	"	6,084*
"	84	Bridge over Connaughtmans Creek 18.6 km west of Murrumburrah	Approaches	"	8,328
"	84	13.36 km to 18.31 km west of Murrumburrah	Formation and widening and provision of climbing lane	"	10,671
Copmanhurst	83	Sheep Creek 34.20 km north of Grafton	Prestressed concrete bridge	"	5,299
"	83	Bridge over Sheep Creek 34.20 km north of Grafton	Approaches	"	15,560
"	83	Rileys Creek 44.9 km north of Grafton	Prestressed concrete bridge and approaches	"	11,224
"	83	Bridge at Two Mile Creek 69.2 km north of Grafton	Foundation test boring	Department	4,093
"	150	15.3 km to 16.2 km north west of Grafton	Reconstruction and bituminous surfacing	Council	4,312
Corowa	86	0 km to 3 km south of SH20	"	"	48,859
"	331	8.7 km to 12.9 km east of MR131	Surface course gravelling and bituminous surfacing	"	36,821*
"	398	19.0 km to 23.8 km south of Ariah Park	Reconstruction and bituminous surfacing	"	30,873*
Cowra	310	2.90 km to 3.95 km north Cowra	"	"	7,081
"	310	Dowell St to Cemetery Rd, Cowra	"	"	104

\*Credit

**APPENDIX No. 8 — continued**  
**COUNTRY MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(III) TRUNK AND ORDINARY MAIN ROADS — continued</b>					<b>\$</b>
Crookwell	54	Binda Vale Creek at Binda	Reinforced concrete box culvert	Council	17,456
"	201	56.15 km to 57.45 km and 58.3 km to 60.45 km north of Crookwell	Reconstruction and bituminous surfacing	"	2,892
Cudgegong	214	44.7 km to 48.9 km north of Mudgee	Surface course gravelling and bituminous surfacing	"	519
Culcairn	331	49.2 km to 58.6 km west of Holbrook Shire boundary	Reconstruction and bituminous surfacing	"	4,181
"	547	Railway level crossing, Jindera Rd, Walla Walla	Widening	"	5,948
Deniliquin	552	2.21 km to 2.96 km north of Deniliquin	Widening of formation and bituminous surfacing	"	21,243*
"	552	2.21 km to 2.96 km north of Deniliquin	"	"	21,243
Denman	209	Bridge over Wybong Creek (Lower Wybong Bridge) at Hollydeen	Foundation test boring	Department	13,784
Dubbo	206	Railway overbridge at River St, Dubbo	"	"	4,685
Eurobodalla	271	Moruya River at Kiora	Temporary footbridge	Council	559
"	271	Bridge over Moruya River at Kiora, 3.94 km west of Moruya	Approaches	"	2,832
"	271	Moruya River at Kiora, 3.94 km west of Moruya	Supply of steelwork by A.I.&S.	Department	32,366
"	271	Moruya River at Kiora, 3.94 km west of Moruya	"	Council	23,485*
Forbes	56	Bandon St to Berkley St, Forbes	Regrading	"	8,718
Gilgandra	77	31.0 km to 34.0 km east of Gilgandra	Reconstruction and bituminous surfacing	"	16,582*
"	77	32.3 km to 34.0 km east of Gilgandra	"	"	22,019
"	205	Tooraweenah Creek, 3.7 km north of SH11	Reinforced concrete bridge	"	6,489
Gloucester	90	1.0 km east of Gloucester	Installation of "F" type flashing lights and warning bells	"	9,913
"	90	0.5 km to 0.9 km east of Gloucester	Reconstruction and bituminous surfacing	"	4,249
"	90	0.9 km to 1.4 km east of Gloucester	"	"	17,578
"	90	Gloucester South to SH10, various locations	Reconstruction of damaged pavement	"	11,330
"	90	3.4 km to 5.5 km east of Gloucester	Reconstruction and bituminous surfacing	"	26,518
Goobang	57	Bridge over Bullock Creek, 0.8 km west of Tullamore	Approaches	"	6,798*
Lachlan	238	Mugincoble to Jemalong Shire boundary	Reconstruction and bituminous surfacing	"	31,776
Goobang	350	Murderers Waterhole, 17.42 km north of Forbes	Elimination of causeways	"	12,362
Goodradigbee	52	32.1 km to 36.5 km south to Gunning	Reconstruction and bituminous surfacing	"	113,296
"	56	Boorowa River, 23.2 km north of Yass	Steel and concrete bridge and approaches	"	5,891
"	249	4.51 km to 6.12 km south of Gundaroo	Reconstruction and bituminous surfacing	"	12,108
Gosford	336	2.6 km to 4.2 km north of Gosford	"	"	287,238
"	349	Bridge over Brisbane Waters at the Rip	Approaches	"	2,910
"	349	Coorumbene Creek 0.5 km south of Gosford	Prestressed concrete bridge	"	13,050
"	504	MR336 to Kincumber	Reconstruction and widening	"	38,238
Goulburn	54	1.9 km to 2.43 km west of Goulburn	Reconstruction and bituminous surfacing	"	3,494
"	54	0 km to 0.8 km west of Goulburn	Drainage improvement	"	3,889
"	54	Marsden Bridge, 2.41 km north of SH2	Foundation test boring	Department	574
Grafton	74	Bridge over Musk Valley Creek, 0.4 km south of Grafton	"	"	2,055
"	74	2.96 km to 4.12 km south of Grafton	Reconstruction and bituminous surfacing	Council	4,391
"	74	Cambridge St to George St, Grafton	"	"	14,162
Great Lakes	90	39.18 km to 60.24 km south of Taree	Reconstruction of failed section	"	7,081
"	111	Various lengths, 56.4 km to 60.5 km north of Bulahdelah	Reconstruction of failed pavement	"	7,081

\*Credit

**APPENDIX No. 8 — continued**  
**COUNTRY MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(III) TRUNK AND ORDINARY MAIN ROADS — continued</b>					<b>\$</b>
Greater Cessnock	195	Swamp Creek, 2.49 km north of Kurri Kurri (Homestead Bridge)	Reinforced concrete bridge	Council	6,256
"	218	Bridge over Black Creek at Cessnock	Reconstruction and widening	"	84,972*
Gundagai	279	5.62 km to 7.11 km south of Gundagai	Relocation and reconstruction and bituminous surfacing	"	16,994
Gundurimba	147	16.2 km to 18.8 km north of Woodburn	Reconstruction and bituminous surfacing	"	11,555
"	544	9.96 km to 11.85 km west of Lismore	Reconstruction and bituminous surfacing	"	13,897*
Gunning	52	26.0 km to 29.34 km south of Gunning	"	"	40,884
"	52	15.58 km to 25.99 km south of Gunning	"	"	702
"	249	19.38 km to 21.08 km south of Gunning	Reconstruction and gravel surfacing	"	5,270
"	249	25.99 km to 29.34 km south of Gunning	"	"	5,079
Guyra	73	4.54 km to 8.64 km north of Bundarra	Reconstruction and bituminous surfacing	"	27,150
"	73	19.0 km to 23.0 km south of Inverell	"	"	31,729
"	135	19.89 km to 23.74 km west of Guyra	"	"	1,743
"	135	27.36 km to 28.65 km west of Guyra	"	"	7,789
Harden	84	Bridge over Spring Creek, 14.5 km east of Murrumburrah	Approaches	"	14,162
"	84	11.30 km to 13.8 km west of Harden	Widening of formation and pavement	"	2,687
"	84	7.7 km to 9.55 km west Harden	Reconstruction and bituminous surfacing	"	7,081
"	84	9.55 km to 11.30 km west of Harden	Reconstruction and bituminous surfacing	"	6,455
"	84	1.7 km to 1.9 km west of Harden (Albury St, Murrumburrah)	"	"	2,620
Hastings	538	0 km to 1.6 km east of Lorne	"	"	12,783
"	600	Bridge over Fernbank Creek, 8.0 km north of Port Macquarie	Approaches	"	11,330
Hay	514	63.0 km to 66.21 km west of Hay	Reconstruction and bituminous surfacing	"	37,323
"	514	66.21 km to 69.47 km west of Hay	"	"	16,013
"	514	68.8 km to 73.0 km west of Hay	"	"	35,405
Holbrook	284	Little Billabong Creek, 0.08 km east of SH2	Reinforced concrete bridge	"	75
"	331	28.65 km to 35.25 km east of TR78	Reconstruction and base course gravelling	"	9,781
"	331	34.2 km to 46.3 km east of Holbrook	Surface course gravelling and bituminous surfacing	"	55,903
Hume	78	10.6 km to 12.7 km north of Albury	Reconstruction and bituminous surfacing	"	28,324
"	78	37.53 km to 38.85 km north of Albury	Reconstruction and bituminous surfacing	"	13,082
"	547	28.11 km to 29.64 km north of Albury	"	"	38,505
Imlay	91	13.28 km to 13.8 km east of SH1	"	"	2,471
"	91	Bridge over Honeysuckle Creek, 25.4 km west of SH1	Design by consultants	Department	2,194
"	275	Candelo Creek at Candelo	Prestressed concrete bridge	Council	64,510*
Jemalong	237	32.7 km to 35.6 km north of Grenfell	Reconstruction and bituminous surfacing	"	18,858
"	377	Bridge over Jemalong Creek, 23.3 km west of Forbes	Foundation test boring	Department	444
Jerilderie	323	27.85 km to 32.36 km east of SH17	"	Council	50,170
"	323	23.01 km to 27.84 km east of SH17	"	"	24,978
"	552	0 km to 2.5 km west of Jerilderie	"	"	28,324
Junee	243	Victoria St, 0.5 km west of Junee	Twin reinforced concrete box culvert	"	9,087
Kempsey	198	32.74 km to 32.76 km north of Kempsey	Intersection	"	11,330
Kyeamba	211	18.1 km to 19.8 km south of Wagga Wagga	Reconstruction and bituminous surfacing	"	7,357
"	211	14.0 km to 15.98 km south of Wagga Wagga	"	"	33,963
Kyogle	83	Black Gully 22.74 km north of Casino	Reinforced concrete bridge	"	1,342
Lachlan	57	Bullock Creek, 0.8 km west of Tullamore	Prestressed concrete bridge	"	1,277
"	57	50.25 km to 51.96 km north of Condobolin	Reconstruction and bituminous surfacing	"	4,702

\*Credit



**APPENDIX No. 8 — continued**  
**COUNTRY MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(III) TRUNK AND ORDINARY MAIN ROADS — continued</b>					<b>\$</b>
Lachlan	57	Wallamundry Creek, 11.5 km south of Condobolin	Approaches	Council	14,918
"	57	45.9 km to 46.2 km north of West Wyalong	Reconstruction and bituminous surfacing	"	3,492
"	57	0 km to 4.8 km south of Fifield	"	"	36
Lake Macquarie	509	Mannering Creek at Wyee	Prestressed concrete bridge	"	56,848
"	509	Bridge over Mannering Creek at Wyee	Approaches	"	36,821
Lismore	65	0.55 km to 1.88 km north of intersection with SH16	Reconstruction and bituminous surfacing	"	7,081
"	65	1.26 km to 4.76 km north of Lismore	"	"	5,232
"	65	2.77 km to 3.41 km north of SH16	"	"	644
"	555	Elizabeth St to Skyline Rd, Wardell	"	"	14,162
Liverpool Plains	55	Unnamed creek, 23.87 km south of SH11	Reinforced concrete box culvert	"	50,983
Lockhart	370	13.2 km to 14.2 km and 18.8 km to 20.4 km south of Narrandera Shire boundary	Reconstruction and bituminous surfacing	"	4,196
Lyndhurst	246	2.83 km to 7.05 km north of Newbridge	"	"	4,572
"	246	6.1 km to 7.36 km north of Newbridge	"	"	46,735
Macintyre	135	40.25 km to 42.8 km south of Inverell	"	"	16,994
"	136	12.13 km to 16.9 km north of Inverell	"	"	24,046
"	137	Bridge over Swanbrook Creek, 5.6 km north of Inverell	Approaches	"	44,930
"	137	Swanbrook Creek, 5.6 km north of Inverell	Reinforced concrete bridge	"	6,408
"	187	Jessies Gully, 14.3 km north of Inverell	Prestressed concrete bridge	"	10,622
"	187	14.3 to 14.4 km north of Inverell	Reinforced concrete box culvert and approaches	"	31,865
Maclean	151	31.65 km to 32.65 km north of Grafton	Reconstruction and raising of formation	"	451*
"	152	2.5 km to 2.9 km east of Yamba	Drainage and associated earthworks	"	1,699
"	152	6 km to 7 km east of Maclean	Reconstruction and bituminous surfacing	"	45,319
"	152	0 km to 0.24 km west of SH10	"	"	4,249
Macleay	75	55 km to 59.5 km west of Kempsey	"	"	26,908
Maitland	104	8.5 km to 13.9 km north of SH9	Reconstruction and surface course gravelling	"	486
"	218	1.43 km to 1.6 km south of Maitland	Surfacing correction and bituminous surfacing	"	9,289
Manilla	357	12.87 km to 16.58 km west of Manilla	Reconstruction and bituminous surfacing	"	55,232
Manning	90	0.7 km to 3.5 km west of SH10 at Purfleet	Reconstruction and sealing	"	21,243
Mitchell	78	10.94 km to 12.36 km north of Wagga Wagga	Reconstruction and bituminous surfacing	"	10,068
"	78	12.36 km to 15.74 km north of Wagga Wagga	"	"	46,581
Moree	232	Intersection with SH17	Improvement	"	2,741
Mudgee	233	35.4 km to 40.1 km west of Gulgong	Reconstruction and bituminous surfacing	"	21,356
"	233	35.4 km to 40.1 km west of Gulgong	"	"	4,285*
Mulwaree	256	34.44 km to 35.41 km north of Goulburn	Reconstruction and bituminous surfacing	"	17,342
"	256	Tarlo River, 19.6 km north of Goulburn	Prestressed concrete bridge	"	15,449
Mumbulla	272	Booths Creek, 19.2 km north of Bega	Reinforced concrete box culvert	"	48
"	272	Bridge over Narira Creek, 1.1 km to 2.2 km east of Cobargo	Approaches	"	11,330
"	272	Booths Creek Bridge, 18.5 km to 20.0 km north of Bega	"	"	28,324
"	320	6.6 km to 8.21 km east of SH1	Reconstruction and bituminous surfacing	"	15,214
Murray	94	42.8 km to 46.3 km west of Deniliquin	"	"	22,122
Murray Darling Division	66	63.5 km to 65.0 km east of Broken Hill	Raising of formation and bituminous surfacing	Department	1,665
Murrumbidgee	321	68.3 km to 76.0 km north of SH17	Widening and bituminous surfacing	Council	49,567
"	321	Bridges over Murrumbidgee River at Darlington Point	Approaches	"	28,324
"	321	0 km to 1.21 km from SH14 at Waddi	Deviation	"	5,169
"	321	Bridge over Murrumbidgee River at Darlington Point	Design by consultants	Department	1,132

\*Credit

# **APPENDIX No. 8 — continued** **COUNTRY MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(III) TRUNK AND ORDINARY MAIN ROADS — continued</b>					<b>\$</b>
Murrurundi	358	25.6 km to 28.8 km south of SH9	Reconstruction and bituminous surfacing	Council	14,162
"	358	20.12 km to 24.62 km west of SH9, Willow Tree	"	"	32,988
Nambucca	118	18.06 km to 19.38 km north west of Macksville	"	"	29,740
"	533	22.1 km to 23.2 km west of Macksville	"	"	25,492
Namoi	127	8.64 km to 9.66 km west of Wee Waa	Construction of base course	"	35,106
"	127	7.48 km to 7.88 km west of Wee Waa	Reconstruction and bituminous surfacing (including reinforced concrete box culvert)	"	43,173
"	127	9.66 km to 10.32 km west of Wee Waa	Construction of base course	"	8,405
"	343	2.4 km west of Wee Waa	Reinforced concrete box culvert	"	29,811
"	343	Talladunna Bridge, 2.4 km west of Wee Waa	"	"	17,703*
Narraburra	398	13.0 km to 19.0 km south of Ariah Park	Culverts in approaches Reconstruction and bituminous surfacing	"	41,625
Narrandera	80	4 km to 5 km west of SH17	"	"	29,076
"	80	3.0 km to 4.0 km west of SH17 at Narrandera	"	"	11,761
Newcastle	82	Railway overbridge at Donald St, Hamilton	Extension of approaches Passing lane	"	8,923*
"	82	Lawson St to Samdon St, Hamilton	"	"	144,453
"	82	Donald St, Hamilton	Railway overbridge	Department	160,191
"	108	North Arm of Hunter River at Stockton	Reinforced concrete bridge	"	247,459
"	217	Cobby St to McArthur St, Birmingham Gardens	Reconstruction and bituminous surfacing	Council	10,954
"	316	Bridge over railway between Perry and Hannel Sts, Wickham	"	"	9,627
"	603	SH23 (Charlestown Rd) to MR223 (Cardiff Rd)	Foundation test boring Reconstruction and bituminous surfacing	Department Council	7,604*
"	605	SH23 to Lorna St, Waratah	Second carriageway	"	5,573
Nundle	106	6.46 km to 7.77 km south of Nundle	Reconstruction and bituminous surfacing	"	4,429
Nymboida	74	Blicks River Bridge, 86.1 km south of Grafton	Provision of asphaltic concrete surface	Department	10,513
"	74	Koukandowie Creek, 19.0 km south of Grafton	Prestressed concrete plank bridge	Council	10,999*
Oberon	255	Reinforced concrete box culvert at Kings Stockyard Creek, 2.74 km north of Oberon	"	"	4,249
"	255	2.58 km to 6.6 km north of Oberon	Approaches Reconstruction and bituminous surfacing	"	2,173*
"	255	Kings Stockyard Creek, 2.74 km north of Oberon	Reinforced concrete box culvert	"	12,491
"	256	34.15 km to 39.5 km south of Oberon	Surface course gravelling and bituminous surfacing	"	19,167
Orange	526	McKay Crescent to City boundary	Reconstruction and bituminous surfacing	"	11,924
Parry	63	20.70 to 21.96 km north of Tamworth	"	"	14,870
Patrick Plains	213	9.58 km to 11.49 km west of MR503	"	"	5,402*
"	503	23.56 km to 25.23 km south of Singleton	"	"	5,321*
"	503	21.69 km to 23.56 km south of Singleton	"	"	4,336
Peel	130	9.45 km to 11.0 km south of Tamworth	"	"	26,758
Port Stephens	108	Newcastle Golf Club to Stanley Park	Provision of kerbing, guttering and drainage	"	12,762
"	518	3.51 km south of Medowie	Deviation	"	73,947
Queanbeyan	51	Queanbeyan-Cooma Overbridge near Gilmore Rd, Queanbeyan	Public utility adjustment	"	4,640
"	51	Deviation overbridge between Canberra and Queanbeyan	"	"	9,242
"	52	Endurance St to Thurralilly St, Queanbeyan	Approaches Reconstruction and bituminous surfacing	"	128,648
"	584	Fergus St to Bulgar St, Queanbeyan	"	"	3,096
Quirindi	126	Henry St level crossing at Quirindi	Flashing lights and warning bells	"	14,162

\*Credit

# **APPENDIX No. 8 — continued** **COUNTRY MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(III) TRUNK AND ORDINARY MAIN ROADS — continued</b>					<b>\$ —</b>
Scone	62	Railway crossing, Liverpool St. Scone	Installation of "F" type flashing lights	Council	<b>515*</b>
"	62	40.51 km to 42.51 km west of Scone	Reconstruction and bituminous surfacing	"	<b>36,821</b>
"	62	37.1 km to 40.5 km west of Scone	"	"	<b>3,275</b>
Severn	136	29.6 km to 38.6 km west of SH9 (Deepwater to Emmaville)	"	"	<b>28,324</b>
"	382	33.2 km to 34.1 km west of Glen Innes	"	"	<b>8,029</b>
"	382	Bridge over Camerons Creek, 32 km north of Glen Innes	Approaches	"	<b>7,832</b>
"	382	Camerons Creek, 32.0 km north of Glen Innes	Prestressed concrete bridge	"	<b>7,640</b>
"	382	Stoney Creek, 35.4 km north-west of Glen Innes	Reinforced concrete box culvert	"	<b>87,805</b>
Shellharbour	522	Windang Bridge to Redall Parade, Lake Illawarra	Southern approach	"	<b>20,814</b>
"	522	Redall Pde to Peterborough Ave. Lake Illawarra	Reconstruction and provision of dual carriageway	"	<b>7,435</b>
Shoalhaven	261	Cambewarra Mountain, 10.4 km north of Nowra	Realignment of lower elbow	Department	<b>3,945</b>
"	261	2.57 km to 4.43 km north of SH1	Realignment and provision of slow vehicle lane	"	<b>1,616</b>
"	267	0 km to 1.6 km east of SH1	Reconstruction and bituminous surfacing	Council	<b>26,200</b>
"	267	6.1 km to 7.7 km west of Huskisson	"	"	<b>39,654</b>
Singleton	128	15.2 km to 16.77 km east of Singleton	Reconstruction and bituminous surfacing	"	<b>42,486</b>
Snowy River	286	37.3 km to 40 km west of Jindabyne	Reconstruction and bituminous surfacing	Department	<b>93,116</b>
"	286	54.0 km to 55.6 km west of Cooma	Pavement strengthening	Council	<b>45,319</b>
Talbragar	572	12.39 km to 14.96 km west of SH17 at Eumungerie	Reconstruction and bituminous surfacing	"	<b>13,184</b>
"	572	Drillwarrina Creek at Eumungerie	Reinforced concrete bridge and approaches	"	<b>4,117</b>
Tallaganda	51	27.4 km to 35.8 km east to Braidwood	Strengthening and drainage improvement	"	<b>10,090</b>
"	92	10.0 km to 14.0 km east of Braidwood	Reconstruction and bituminous surfacing	"	<b>7,200</b>
"	270	2.5 km to 5.6 km south of Braidwood	"	"	<b>2,523</b>
Tamarang	72	Quipolly Creek, 13.70 km to 15.25 km north of Quirindi	Approaches	"	<b>21,243</b>
Temora	57	0.3 km south to 0.6 km north of Temora	Reconstruction and bituminous surfacing	"	<b>41,051</b>
"	241	0.9 km to 1.7 km east of Temora	"	"	<b>8,091</b>
Terania	65	Selected sections, 10.18 km to 10.60 km north of Lismore	"	"	<b>6,209</b>
"	65	Railway overbridge near Bex Hill, 10.1 km east of Lismore	Foundation test boring	Department	<b>147</b>
Timbregongie	89	Bridge over Fiddlers Creek, 7.08 km north of Tomingley	Approaches	Council	<b>9,935</b>
"	89	Backwater Cowal, 4.4 km south of Narromine	Prestressed concrete bridge	"	<b>3,701*</b>
"	89	Backwater Cowal Bridge, 4.14 km south of Narromine	Approaches	"	<b>42,486*</b>
"	89	Bridge over Fiddlers Creek, 7.08 km north of Tomingley	"	"	<b>8,837*</b>
"	347	22.4 km to 30.4 km south of Trangie	Reconstruction and bituminous surfacing	"	<b>51,975</b>
"	572	19.96 km to 24.14 km north of Narromine	"	"	<b>9,531*</b>
Tintenbar	146	5.65 km to 6.37 km north west of SH10	Widening and strengthening of existing pavement	"	<b>103</b>
Tumbarumba	281	2.32 km to 4.83 km south of MR282	Reconstruction and bituminous surfacing	"	<b>2,949*</b>
"	282	31.9 km to 33.8 km south of Tumbarumba	"	"	<b>25,492</b>
Tumut	85	18.99 km to 23.17 km south of SH4	"	"	<b>59,481</b>
Turon	54	42.7 km to 47.88 km north of Bathurst	"	"	<b>32,056</b>
"	253	18.43 km to 20.12 km south of Kelso	"	"	<b>216</b>

\*Credit



**APPENDIX No. 8 — continued**  
**COUNTRY MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(III) TRUNK AND ORDINARY MAIN ROADS — continued</b>					<b>\$</b>
Tweed	142	50.65 km to 52.3 km north of Lismore	Reconstruction and bituminous surfacing	Council	7,854
"	399	19.4 km to 23 km west of MR143	"	"	6,860
"	399	19.4 km to 23.0 km west of MR143	"	"	9,517
Ulmarra	74	Bridge over Musk Valley Creek, 4.7 km south of Grafton	Foundation test boring	Department	4,856
"	151	Glenreagh Creek, 46.15 km south of Grafton	Reinforced concrete bridge	Council	3,844
Uralla	132	1.29 km to 2.29 km west of Bundarra	Reconstruction and bituminous surfacing	"	10,970
Urana	59	21.0 km west of Urana	Reinforced concrete box culvert	"	3,144
"	323	23 km to 33.6 km west of MR131	Reconstruction and bituminous surfacing	"	22,659
"	385	36.5 km to 44.1 km north of Urana	"	"	43,752
Wade	80	3.7 km to 4.1 km east of Griffith	Channellisation of intersection	"	17,241
"	80	1.2 km to 2.68 km west of Griffith	Reconstruction and bituminous surfacing	"	31,586
"	80	9.92 km to 12.14 km east of Griffith	"	"	36,232
"	80	6.7 km to 8.3 km east of Griffith	"	"	124
"	321	2.41 km to 2.7 km south of Griffith	"	"	50,693
Wagga Wagga	78	0.58 km to 2.25 km south of SH14	"	"	17,023
"	211	2.94 km to 4.84 km south of Wagga Wagga	Reconstruction and channellisation of intersection	"	93,859*
Wakool	65	Bridge over Wakool River at Kyalite	Design by consultants	Department	6,353
"	319	Bridge over Yarrein Creek, 62.0 km north of Barham	Approaches	Council	35,688
"	319	Bridge over Yarrein Creek, 62.0 km north of Barham	Approaches	"	35,688*
"	319	Yarrein Creek, 62.0 km north of Barham	Reinforced concrete box culvert	"	93,469*
"	386	21.48 km to 29.5 km west of MR319	Reconstruction and bituminous surfacing	"	26,860
"	386	14.78 km to 21.48 km west of MR319	"	"	12,084
Wagool	56	Unnamed creek, 21.4 km north of Cowra	Reinforced concrete box culvert	"	3,237
"	237	35.5 km to 37.5 km north of Grenfell	Reconstruction and bituminous surfacing	"	8,749
Weddin	237	24.78 km to 28.0 km north of Grenfell	Reconstruction and bituminous surfacing	"	12,478
"	237	24.7 km north of Grenfell	Reinforced concrete box culvert	"	28,324*
"	237	24.7 km north of Grenfell	"	"	44,072
"	398	4.35 km to 7.35 km south of Grenfell	Reconstruction and bituminous surfacing	"	15,162
"	398	44.25 km to 46.45 km west of Grenfell	"	"	14,162
Wellington	573	57.8 km to 59.7 km from Orange towards Wellington	"	"	68,686
"	573	Stoney Creek, 57.32 km north of Orange	Prestressed concrete bridge	"	28,324
"	573	55.35 km to 56.80 km north of Orange	Reconstruction and bituminous surfacing	"	10,803
Wentworth	68	55.5 km to 72.7 km north of Wentworth	"	"	8,124
"	68	74.82 km to 93.34 km north of Wentworth	"	"	51,633
"	68	78.3 km to 81.45 km north of Wentworth	"	"	16,343
"	431	0 km to 2.74 km north of SH22	"	"	6,176
Wingham	192	Intersection with MR112	Improvement	"	24,075
Wingecarribee	263	Wildes Meadow to Fitzroy Falls	Reconstruction and bituminous surfacing	"	39,745
"	264	3.5 km to 5.8 km south of SH25	"	"	15,487
Wollondilly	95	Main Southern Railway Line, 5.15 km east of Picton	Overbridge (Bailey Bridging only)	Department	105
Wollongong	95	0 km to 14.5 km west of MR513	Reconstruction and pavement strengthening	"	13
"	95	MR186 to F6, Gwynneville	Reconstruction and provision of dual carriageway	"	12,897
"	95	Bryburghs Property at Mt. Ousley	Provision of alternate access	"	55
"	295	Glastonbury Ave, Unanderra to SH1	Deviation	Council	27,418
"	513	Bulli Pass to Bellambi Creek, 3.2 km south of Bulli Pass	Reconstruction and asphaltic concrete surfacing	Department	3

\*Credit

**APPENDIX No. 8 — continued**  
**COUNTRY MAIN ROADS FUND — GENERAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(iii) TRUNK AND ORDINARY MAIN ROADS — continued</b>					<b>\$</b>
Wollongong	522	Bridge over entrance to Lake Illawarra, Windang	Northern approaches	Council	25*
..	613	King St and Northcliffe Dr, Warrawong	Improvement of intersection	..	15,578
..	613	F6 to SH1, Berkeley	Dual carriageway	Department	23,291
Woodburn	145	0.82 km to 1.27 km west of SH10	Reconstruction and bituminous surfacing	Council	7,741
..	145	0.32 km to 1.93 km west of SH10	..	..	7,741*
..	145	Rocky Mouth Creek at Woodburn	Reinforced concrete bridge	..	4,412
Wyong	335	Bridge over Ourimbah Creek, 2.5 km east of Tuggerah	Foundation test boring	Department	9,653
..	509	Bridge over Tuggerah Lake at Wallarah Point	..	..	21,567
Yallaro	63	Oakey Creek, 15.0 km south of Warialda	Prestressed concrete bridge	Council	2,172
..	63	Bridge over Oakey Creek, 15.0 km south of Warialda	Approaches	..	23,629
..	63	16.26 km to 19.07 km south of Warialda	Widening and strengthening of pavement	..	11,330
Yarrowlumla	51	3.0 km to 10.0 km east of Queanbeyan	Formation, widening and drainage improvement	..	6,230
..	268	34.55 km to 36.42 km north east of Queanbeyan	Surface course gravelling and bituminous surfacing	..	3,126*
..	268	32.0 km to 36.0 km north of Queanbeyan	Reconstruction and bituminous surfacing	..	20,821
..	268	35.16 km to 36.42 km north of Queanbeyan	Reconstruction and base course gravelling	..	11,925
..	268	36.42 km to 39.1 km north of Queanbeyan	Surface course gravelling and bituminous surfacing	..	345
<b>Total Trunk and Ordinary Main Roads</b>					<b>6,447,582</b>
<b>(iv) TOURIST ROADS</b>					
Eurobodalla	4054	0 km to 2.8 km east of Sunpatch	Formation and bituminous surfacing	Council	8,041
Imlay	4037	3.22 km to 5.75 km east of SH1	Reconstruction and widening	..	7,382
Maclean	4034	0 km to 14.48 km south of Angourie	Southern carriageway	..	219*
Tintenbar	4051	0 km to 4.02 km north of Ballina Municipal boundary	Reconstruction and bituminous surfacing	..	2,756*
Ulmarra	4049	Wooli Rd towards Minnie Water (2.95 km to 3.60 km)	..	..	31,298
..	4049	Wooli Rd towards Minnie Water (3.60 km to 4.19 km)	..	..	10,055*
<b>Total Tourist Roads</b>					<b>33,691</b>
<b>(v) ROADS OTHER THAN MAIN ROADS</b>					
Coffs Harbour		Park Beach Rd, 0.045 km to 0.37 km east of SH10	Reconstruction and bituminous surfacing	Council	575
Gosford		Brisbane Waters at the Rip	Asphaltic concrete surfacing on bridge	Department	2,648*
..		Brisbane Waters at the Rip	Prestressed concrete bridge	..	12,340
Narrabri		Narrabri Creek, Violet St, Narrabri	Reinforced concrete bridge	Council	6,618
Patrick Plains		Glennies Creek Bridge, 20.1 km north of Singleton at Upper Falbrook	Approaches	..	6,386
<b>Total Roads other than Main Roads</b>					<b>23,271</b>
<b>SUMMARY</b>					
				<b>Works Expenditure</b>	<b>Property Acquisitions</b>
				<b>\$</b>	<b>\$</b>
Freeways				46,405	56,122
State Highways				13,193,382	1,153,309
Trunk and Ordinary Main Roads				6,447,582	133,307
Tourist Roads				33,691	30,440
Roads other than Main Roads				23,271	1,971
				<b>19,744,331</b>	<b>1,375,149</b>
Miscellaneous, minor works etc				452,370	1,049,970
Total (including administration) as shown in receipts and payments statements — Appendix No. 1(C)(i)				<b>20,196,701</b>	<b>2,425,119</b>
*Credit					

**APPENDIX No. 8A**  
**COUNTRY MAIN ROADS FUND — SPECIAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(I) FREEWAYS</b>					<b>\$</b>
<b>Southern Freeway</b>					
Wollongong	F6	Gladstone Ave to Five Islands Rd, Figtree	Dual carriageway	Department	105,838
<b>Total Freeways</b>					<b>105,838</b>
 <b>(II) STATE HIGHWAYS</b>					
<b>Princes Highway</b>					
Imlay	1	Bega to Frogs Hollow	Reconstruction and bituminous surfacing	Department	507,087
Shoalhaven	1	Meroo Meadow, 152.1 km to 155.3 km south of Sydney	Improvement to alignment and grading	..	923,119
..	1	Jaspers Creek, 148.4 km to 150.5 km south of Sydney	Deviation	..	632,144
					<b>2,062,350</b>
 <b>Mid Western Highway</b>					
Abercrombie	6	Bridge over Evans Plains Creek, 8.6 km west of Bathurst	Approaches	Department	211,238
Lyndhurst	6	Railway level crossing to Martha St, Blayney	Reconstruction and bituminous surfacing	..	368,255
					<b>579,493</b>
 <b>Mitchell Highway</b>					
Bourke	7	185.1 km to 187.0 km south of Bourke	Reconstruction and widening	Department	199,419
					<b>199,419</b>
 <b>Pacific Highway</b>					
Byron	10	52.8 km to 54.4 km north of Ballina	Strengthening and bituminous surfacing	Department	197,404
Grafton	10	Swan Creek, 5.8 km north of Grafton	Prestressed concrete bridge	..	678,068
Hastings	10	Telegraph Point, 96.5 km to Barries Creek, 102.9 km north of Taree	Deviation	Department	591,700
Lake Macquarie	10	12.6 km to 13.7 km south of Newcastle	Dual carriageway	..	430,126
Macleay	10	14.48 km to 19.31 km north of Kempsey	Reconstruction of damaged pavement and concrete surfacing	..	399,338
..	10	Unnamed creek, 20.3 km north of Kempsey	Prestressed concrete bridge	..	767
Nambucca	10	33.4 km to 37.9 km north of Kempsey	Reconstruction of distressed pavement	..	284,409
Ulmarra	10	Bridge over Swan Creek, 4.0 km to 6.3 km north of Grafton	Approaches	..	450,673
					<b>3,032,485</b>
 <b>Oxley Highway</b>					
Coonabarabran	11	54.7 km to 61.1 km east of Coonabarabran	Reconstruction and bituminous surfacing	Department	346,235
..	11	38.49 km to 38.98 km west of Gunnedah	Approaches to Coxs River Bridge	..	295,455
Coonabarabran	11	Coxs Creek, 63.7 km east of Coonabarabran	Prestressed concrete plank bridge	..	264,194
Liverpool Plains	11	54.71 km to 58.73 km east of Walcha	Reconstruction and bituminous surfacing	..	945,780
Walcha	11	Various locations, 9.5 km to 43.05 km east of Walcha	Reconstruction of distressed pavement	..	216
..	11	38.5 km to 48.27 km east of Walcha	Reconstruction and bituminous surfacing	..	2,985
..	11	48.27 km to 54.71 km east of Walcha	..	..	131,946
..	11	58.73 km to 79.65 km east of Walcha	..	..	159,874
					<b>2,146,685</b>



**APPENDIX No. 8A — continued**  
**COUNTRY MAIN ROADS FUND — SPECIAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(II) STATE HIGHWAYS — continued</b>					<b>\$</b>
<b>Sturt Highway</b>					
Hay	14	45.0 km to 50.0 km west of Hay	Reconstruction and widening	Department	178,621
"	14	27.2 km to 31.4 km west of Hay	Reinstatement and bituminous surfacing of stabilised pavement	"	308,541
Kyeamba	14	49.5 km to 60.6 km west of Gundagai	Reconstruction and bituminous surfacing	"	626,438
"	14	44.3 km to 49.4 km west of Gundagai	"	"	182,980
Wakool	14	24.6 km to 28.96 km east of Balranald (82.2 km to 114.4 km west of Hay)	"	"	348,834
					<u>1,645,414</u>
<b>Bruxner Highway</b>					
Boolooloo	16	0 km to 8.9 km west of Boggabilla	Reconstruction and bituminous surfacing	Department	906,372
					<u>906,372</u>
<b>Newell Highway</b>					
Narrabri	17	Narrabri Creek and Narrabri Rivulet Bridges, 0.24 km to 0.67 km south of Narrabri	Approaches	Department	58,201
"	17	Narrabri Rivulet at Narrabri	Reinforced concrete bridge	"	199,290
"	17	Narrabri Creek at Narrabri	Prestressed concrete girder bridge	"	1,012,091
					<u>1,269,582</u>
<b>Monaro Highway</b>					
Monaro	19	Bridge over Bredbo River at Bredbo	Fabrication of steel girders	Department	62,994
"	19	82.0 km to 89.0 km south of Canberra	Reconstruction and bituminous surfacing	"	731,542
"	19	78.0 km to 82.0 km south of Canberra including approaches to Bredbo River	"	"	55,712
					<u>850,248</u>
<b>Cobb Highway</b>					
Central Darling	21	12.87 km to 36.2 km south of SH8 near Wilcannia	Reconstruction and bituminous surfacing	Department	461,153
					<u>461,153</u>
<b>Illawarra Highway</b>					
Wingecarribee	25	62.8 km to 63.9 km west of SH1	Reconstruction to improved alignment	Department	534,150
"	25	58.9 km to 62.83 km west of SH1	Reconstruction and approaches to bridges over Wells and Black Bobs Creeks	"	380,164
					<u>914,314</u>
<b>Total State Highways</b>					<u>14,067,515</u>
<b>(III) TRUNK AND ORDINARY MAIN ROADS</b>					
Cobar	421	North of Cobar towards Bourke	Reconstruction	Council	271,521
Mudgee	321	Bridge over Murrumbidgee River, Darlington Point	Prestressed concrete bridge in approaches	Department	655
"	321	Murrumbidgee River, Darlington Point	Prestressed concrete bridge	"	219,630
Wollongong	295	Port Kembla North Railway Station	Railway overpass and approaches	Council	3,270
"	513	Bellambi Creek to TR95 near Brokers Nose	Fourth lane	Department	306,362
<b>Total Trunk and Ordinary Main Roads</b>					<u>801,438</u>

**APPENDIX No. 8A — continued**  
**COUNTRY MAIN ROADS FUND — SPECIAL PURPOSES**

Summary of Payments from Department's Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
					\$
<b>(iv) ROADS OTHER THAN MAIN ROADS</b>					
Ballina		Cane roads	Upgrading	Council	82,000
Byron		"	"	"	4,500
Lismore		"	"	"	7,000
Maclean		"	"	"	142,500
Richmond River		"	"	"	54,500
Tumbarumba		Alpine way 39.80 km to 41.56 km west of Jindabyne	Reconstruction and gravel surfacing	Department	90,439
Tweed		Cane roads	Upgrading	Council	9,500
<b>Total Roads other than Main Roads</b>					<b>390,439</b>

<b>SUMMARY</b>	<b>Works Expenditure \$</b>	<b>Property Acquisitions \$</b>
Freeways	105,838	—
State Highways	14,067,515	—
Trunk and Ordinary Main Roads	801,438	—
Roads other than Main Roads	390,439	—
Total as shown in receipts and payments statements — Appendix No. 1(C)(ii)	15,365,230	—

# **APPENDIX No. 9** **COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the National Roads Act on Maintenance and Minor Improvement Works

Road No.	City, Municipal or Shire Area	Work carried out by		Total
		Department	Council	
<b>(A) COUNTY OF CUMBERLAND AREA</b>		\$	\$	\$
<b>(I) Freeways</b>				
F3 — Sydney to Newcastle Freeway				
	Hornsby	1,918	—	1,918
F5 — South Western Freeway				
	Campbelltown	138,152	—	138,152
	<b>Total — Freeways</b>	<b>140,070</b>	<b>—</b>	<b>140,070</b>
<b>(II) State Highways</b>				
SH2 — Hume Highway				
	Camden	45,809	—	45,809
	Liverpool	15,445	—	15,445
		61,254	—	61,254
SH10 — Pacific Highway				
	Hornsby	20,414	—	20,414
	<b>Total — State Highways</b>	<b>81,668</b>	<b>—</b>	<b>81,668</b>
<b>(III) Ordinary Main Roads</b>				
MR177	Liverpool	15,445	—	15,445
MR178	Camden	1,213	—	1,213
	<b>Total — Ordinary Main Roads</b>	<b>16,658</b>	<b>—</b>	<b>16,658</b>
<b>(B) COUNTRY URBAN AREA</b>				
<b>(I) State Highways</b>				
SH2 — Hume Highway				
	Camden	37,006	—	37,006
SH9 — New England Highway				
	Greater Cessnock	29,712	—	29,712
	Maitland	134,685	16,041	150,726
	Newcastle	42,170	—	42,170
		206,567	16,041	222,608
SH10 — Pacific Highway				
	Lake Macquarie	58,896	—	58,896
	<b>Total — State Highways</b>	<b>302,469</b>	<b>16,041</b>	<b>318,510</b>
<b>(C) COUNTRY RURAL AREA</b>				
<b>(I) Freeways</b>				
F3 — Sydney to Newcastle Freeway				
	Gosford	929,227	—	929,227
	<b>Total — Freeways</b>	<b>929,227</b>	<b>—</b>	<b>929,227</b>
<b>(II) State Highways</b>				
SH2 — Hume Highway				
	Albury	50,451	—	50,451
	Goodradigbee	337,069	—	337,069
	Goulburn	60,827	22,089	82,916
	Gundagai	626,398	—	626,398
	Gunning	356,757	—	356,757
	Harden	181,885	—	181,885
	Holbrook	176,579	—	176,579
	Hume	120,797	—	120,797
	Kyeamba	220,726	—	220,726
	Mittagong	318,540	—	318,540
	Mulwaree	331,552	—	331,552
	Wingecarribee	254,434	—	254,434
	Wollondilly	374,382	—	374,382
	Yass	30,059	—	30,059
		3,440,456	22,089	3,462,545



**APPENDIX No. 9 — continued**  
**COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the National Roads Act on Maintenance and Minor Improvement Works

Road No.	City, Municipal or Shire Area	Work carried out by		Total
		Department	Council	
(C) COUNTRY RURAL AREA — continued				
		\$	\$	\$
(II) State Highways — continued				
SH3 — Federal Highway				
	Gunning .. .. .	84,928	—	84,928
	Mulwaree .. .. .	46,261	—	46,261
	Yarrowlumla .. .. .	41,869	—	41,869
		<u>173,058</u>	<u>—</u>	<u>173,058</u>
SH9 — New England Highway				
	Armidale .. .. .	—	7,690	7,690
	Denman .. .. .	80,833	—	80,833
	Dumaresq .. .. .	84,275	—	84,275
	Glen Innes .. .. .	—	802	802
	Guyra .. .. .	120,025	—	120,025
	Murrurundi .. .. .	129,467	—	129,467
	Muswellbrook .. .. .	42,693	6,971	49,664
	Nundle .. .. .	37,865	—	37,865
	Parry .. .. .	270,982	—	270,982
	Scone .. .. .	220,398	—	220,398
	Severn .. .. .	195,530	—	195,530
	Singleton .. .. .	291,007	—	291,007
	Tamarang .. .. .	92,447	—	92,447
	Tamworth .. .. .	—	15,958	15,958
	Tenterfield .. .. .	204,777	9,900	214,677
	Uralla .. .. .	89,237	—	89,237
		<u>1,859,536</u>	<u>41,321</u>	<u>1,900,857</u>
SH10 — Pacific Highway				
	Wyong .. .. .	284,989	—	284,989
SH15 — Barton Highway				
	Goodradigbee .. .. .	92,152	—	92,152
	Yarrowlumla .. .. .	23,799	—	23,799
		<u>115,951</u>	<u>—</u>	<u>115,951</u>
	<b>Total — State Highways</b> .. .. .	<u>5,873,990</u>	<u>63,410</u>	<u>5,937,400</u>
<b>SUMMARY</b>				
		Department	Council	Total
		\$	\$	\$
	Freeways .. .. .	1,069,297	—	1,069,297
	State Highways .. .. .	6,258,127	79,451	6,337,578
	Ordinary Main Roads .. .. .	16,658	—	16,658
	Engineering administration, allowances to councils, etc. .. .. .	332,672	4,188	336,860
	Sub-total .. .. .	7,676,754	83,639	7,760,393
	General administration .. .. .	310,416	—	310,416
	<b>Total</b> .. .. .	<u>7,987,170</u>	<u>83,639</u>	<u>8,070,809</u>

**APPENDIX No. 9A  
COMMONWEALTH AID ROADS FUND**

Summary of Payments from Grants under the National Roads Act on Maintenance and Minor Improvement Works on Export  
and Major Commercial Roads

Road No.	City, Municipal or Shire Area	Work carried out by		Total
		Department	Council	
(A) COUNTRY URBAN AREA				
(I) Trunk and Ordinary Main Roads		\$	\$	\$
TR95	Wollongong	137,376	—	137,376
MR177	Wollongong	77,195	—	77,195
	Total	214,571	—	214,571
(B) COUNTRY RURAL AREA				
(I) Trunk and Ordinary Main Roads				
TR95	Wollondilly	65,417	—	65,417
SUMMARY				
Trunk and Ordinary Main Roads		279,988	—	279,988
General administration		11,200	—	11,200
Total		291,188	—	291,188

**APPENDIX No. 10**  
**COUNTY OF CUMBERLAND MAIN ROADS FUND**

Summary of Payments from Department's Funds on Maintenance and Minor Improvement Works

Road No.	City, Municipal or Shire Area	Work carried out by		Total
		Department	Council	
<b>FREEWAYS</b>				
F1 — Warringah Freeway		\$	\$	\$
	North Sydney	4,396	—	4,396
		4,396	—	4,396
F3 — North Western Freeway				
	Drummoyne	34,295	—	34,295
	Gosford	2,037	—	2,037
	Hornsby	1,762	—	1,762
	Hunters Hill	141,907	—	141,907
	Sydney City Council	1,925	—	1,925
		181,926	—	181,926
F4 — Western Freeway				
	Auburn	7,205	—	7,205
	Blacktown	113,804	—	113,804
	Penrith	122,873	—	122,873
	Sydney City Council	32,595	—	32,595
		276,477	—	276,477
F6 — Southern Freeway				
	Rockdale	10,498	—	10,498
	Sutherland	41,226	—	41,226
		51,724	—	51,724
	<b>Total — Freeways</b>	<b>514,523</b>	—	<b>514,523</b>
<b>STATE HIGHWAYS</b>				
SH1 — Princes Highway				
	Kogarah	54,717	—	54,717
	Marrickville	16,579	—	16,579
	Rockdale	26,414	—	26,414
	South Sydney	—	9,706	9,706
	Sutherland	144,629	—	144,629
	Sydney	—	2,900	2,900
	Wollongong	240,871	—	240,871
		483,210	12,606	495,816
SH2 — Hume Highway				
	Ashfield	16,922	—	16,922
	Bankstown	67,347	—	67,347
	Burwood	21,156	—	21,156
	Camden	30,604	—	30,604
	Fairfield	31,713	—	31,713
	Liverpool	184,728	2,670	187,398
	Strathfield	49,765	—	49,765
		402,235	2,670	404,905
SH5 — Great Western Highway				
	Ashfield	70,827	—	70,827
	Auburn	93,575	—	93,575
	Blacktown	116,352	—	116,352
	Blue Mountains	510,378	—	510,378
	Burwood	16,408	—	16,408
	Concord	16,408	—	16,408
	Holroyd	11,110	—	11,110
	Leichhardt	68,479	599	69,078
	Parramatta	25,591	—	25,591
	Penrith	144,728	—	144,728
	Strathfield	38,285	—	38,285
	Sydney	—	1,750	1,750
		1,112,141	2,349	1,114,490



**APPENDIX No. 10 — continued**  
**COUNTY OF CUMBERLAND MAIN ROADS FUND**

Summary of Payments from Department's Funds on Maintenance and Minor Improvement Works

Road No.	City, Municipal or Shire Area	Work carried out by		Total
		Department	Council	
STATE HIGHWAYS — continued				
		\$	\$	\$
SH10 — Pacific Highway				
	Gosford	1,008	—	1,008
	Hornsby	347,135	—	347,135
	Ku-ring-gai	80,107	240*	79,867
	Lane Cove	13,732	—	13,732
	North Sydney	16,021	—	16,021
	Willoughby	27,465	—	27,465
		485,468	240*	485,228
SH13				
	Bankstown	8,150	—	8,150
	Baulkham Hills	32,336	—	32,336
	Fairfield	8,150	—	8,150
	Holroyd	1,111	—	1,111
	Hornsby	61,991	—	61,991
	Parramatta	69,037	—	69,037
		180,775	—	180,775
	Total — State Highways	2,663,829	17,385	2,681,214
ORDINARY MAIN ROADS				
Ashfield		—	1,096	1,096
Auburn		51,344	22,000	73,344
Bankstown		689,503	—	689,503
Baulkham Hills		217,847	111,515	329,362
Blacktown		337,575	—	337,575
Blue Mountains		214,642	63,854	278,496
Botany		186,177	—	186,177
Burwood		2,598	3,784	6,382
Camden		—	398,682	398,682
Campbelltown		276,348	117,131	393,479
Canterbury		345,904	—	345,904
Colo		348,931	87,032	435,963
Concord		—	41,800	41,800
Drummoyne		187,718	6,489	194,207
Fairfield		647,425	—	647,425
Hornsby		34,587	173,500	208,087
Hunters Hill		118,916	—	118,916
Hurstville		—	98,063	98,063
Kogarah		3,098	18,150	21,248
Ku-ring-gai		131,026	11,017	142,043
Lane Cove		56,172	—	56,172
Leichhardt		252,270	4,967	257,237
Liverpool		259,190	138,074	397,264
Manly		59,617	20,030	79,647
Marrickville		5,959	6,600	12,559
Mosman		49,590	10,288	59,878
North Sydney		—	1,360	1,360
Parramatta		318,375	—	318,375
Penrith		274,250	122,680	396,930
Randwick		136,793	14,161	150,954
Rockdale		236,949	116,293	353,242
Ryde		284,162	9,050	293,212
South Sydney		6,933	30,482	37,415
Strathfield		2,599	22,200	24,799
Sutherland		302,680	60,305	362,985
Sydney		419,174	29,850	449,024
Warringah		573,729	133,426	707,155
Waverley		—	32,161	32,161
Willoughby		58,171	25,022	83,193
Windsor		346,198	—	346,198
Wollondilly		—	252,000	252,000
Wollongong		268,785	—	268,785
Woolahra		10,513	14,274	24,787
Total — Ordinary Main Roads		7,715,748	2,197,336	9,913,084

\*Credit

**APPENDIX No. 10 — continued**  
**COUNTY OF CUMBERLAND MAIN ROADS FUND**

Summary of Payments from Department's Funds on Maintenance and Minor Improvement Works

City, Municipal or Shire Area	Work carried out by		Total
	Department	Council	
<b>SECONDARY ROADS</b>	\$	\$	\$
Ashfield .....	—	37,404	37,404
Auburn .....	—	12,650	12,650
Bankstown .....	—	45,370	45,370
Baulkham Hills .....	—	8,563	8,563
Blacktown .....	—	45,000	45,000
Blue Mountains .....	—	11,296	11,296
Botany .....	—	22,587	22,587
Burwood .....	—	600	600
Canterbury .....	—	33,689	33,689
Concord .....	—	3,300	3,300
Drummoyne .....	—	4,471	4,471
Fairfield .....	—	66,730	66,730
Holroyd .....	—	8,136	8,136
Hornsby .....	—	45,200	45,200
Hunters Hill .....	5,561	8,135	13,696
Hurstville .....	—	25,804	25,804
Ku-ring-gai .....	—	7,520	7,520
Lane Cove .....	—	8,950	8,950
Leichhardt .....	—	58,359	58,359
Liverpool .....	—	19,973	19,973
Manly .....	—	7,220	7,220
Marrickville .....	633	19,900	20,533
Mosman .....	—	854	854
North Sydney .....	—	20,640	20,640
Parramatta .....	—	19,800	19,800
Penrith .....	—	14,000	14,000
Randwick .....	—	23,457	23,457
Rockdale .....	—	42,313	42,313
Ryde .....	—	24,250	24,250
South Sydney .....	—	16,738	16,738
Strathfield .....	—	8,580	8,580
Sutherland .....	73,484	86,484	159,968
Willoughby .....	2,071	17,121	19,192
Windsor .....	—	1,650	1,650
Woollahra .....	—	8,523	8,523
<b>Total — Secondary Roads</b>	<b>81,749</b>	<b>785,267</b>	<b>867,016</b>
<b>TOURIST ROADS</b>	—	33,500	33,500
Baulkham Hills .....	—	9,374	9,374
Blue Mountains .....	19,932	—	19,932
Sutherland .....	10,959	—	10,959
Warringah .....	30,891	42,874	73,765
<b>Total — Tourist Roads</b>	<b>30,891</b>	<b>42,874</b>	<b>73,765</b>
<b>SUMMARY</b>			
Freeways .....	514,523	—	514,523
State Highways .....	2,663,829	17,385	2,681,214
Ordinary Main Roads .....	7,715,748	2,197,336	9,913,084
Secondary Roads .....	81,749	785,267	867,016
Tourist Roads .....	30,891	42,874	73,765
Allowances to councils, miscellaneous, etc. ....	707,807	392,268*	315,539
Engineering Administration .....	671,179	168,312	839,491
<b>Total as shown in receipts and payments statements — Appendix No. 1(B)(i)</b>	<b>12,385,726</b>	<b>2,818,906</b>	<b>15,204,632</b>

\*Credit

**APPENDIX No. 11  
COUNTRY MAIN ROADS FUND**

Summary of Payments from Department's Funds on Maintenance and Minor Improvement Works

Road No.	City, Municipal or Shire Area	Work carried out by		Total
		Department	Council	
<b>(I) FREEWAYS</b>				
		\$	\$	\$
F3 — Sydney to Newcastle Freeway	Hornsby	1,968	—	1,968
F6 — Southern Freeway	Wollongong	360,736	—	360,736
F8 — Wollongong Freeway	Wollongong	29,323	—	29,323
	<b>Total — Freeways</b>	<b>392,027</b>	<b>—</b>	<b>392,027</b>
<b>(II) STATE HIGHWAYS</b>				
SH1 — Princes Highway				
	Bega	26,246	—	26,246
	Eurobodalla	373,391	—	373,391
	Imlay	548,196	—	548,196
	Kiama	343,445	—	343,445
	Mumbulla	223,607	—	223,607
	Shellharbour	65,299	—	65,299
	Shoalhaven	672,877	—	672,877
	Wollongong	194,672	5,500	200,172
		<b>2,447,733</b>	<b>5,500</b>	<b>2,453,233</b>
SH2 — Hume Highway				
	Goulburn	—	5,500*	5,500*
	Mittagong	—	84	84
		—	<b>5,416*</b>	<b>5,416*</b>
SH4 — Snowy Mountains Highway				
	Bega	4,596	—	4,596
	Cooma	—	1,371	1,371
	Gundagai	32,453	—	32,453
	Imlay	40,393	—	40,393
	Monaro	20,831	—	20,831
	Mumbulla	175,188	—	175,188
	Snowy River	312,174	—	312,174
	Tumut	358,838	—	358,838
		<b>944,473</b>	<b>1,371</b>	<b>945,844</b>
SH5 — Great Western Highway				
	Bathurst	35,529	—	35,529
	Lithgow	186,104	—	186,104
	Turon	112,837	—	112,837
		<b>334,470</b>	<b>—</b>	<b>334,470</b>
SH6 — Mid Western Highway				
	Abercrombie	206,272	—	206,272
	Bathurst	2,897	—	2,897
	Bland	218,704	—	218,704
	Carrathool	224,792	—	224,792
	Cowra	—	13,953	13,953
	Hay	98,032	2,235	100,267
	Lyndhurst	467,266	—	467,266
	Waugoola	19,142	88,144	107,286
	Weddin	—	109,896	109,896
		<b>1,237,105</b>	<b>214,228</b>	<b>1,451,333</b>

\*Credit



**APPENDIX No. 11 — continued**  
**COUNTRY MAIN ROADS FUND**

Summary of Payments from Department's Funds on Maintenance and Minor Improvement Works

Road No.	City, Municipal or Shire Area	Work carried out by		Total
		Department	Council	
(II) STATE HIGHWAYS — continued				
		\$	\$	\$
SH7 — Mitchell Highway				
	Abercrombie	128,070	—	128,070
	Bogan	154,433	4,148	158,581
	Bourke	387,140	—	387,140
	Canobolas	223,581	—	223,581
	Dubbo	7,850	—	7,850
	Molong	214,235	—	214,235
	Narromine	867	—	867
	Orange	—	15,291	15,291
	Talbragar	269,966	—	269,966
	Timbregongie	128,294	—	128,294
	Warren	88,868	—	88,868
	Wellington	180,133	—	180,133
		1,783,437	19,439	1,802,876
SH8 — Barrier Highway				
	Bogan	161,872	—	161,872
	Broken Hill	—	36,220	36,220
	Cobar	186,573	522	187,095
	Central Darling	338,073	188	338,261
	Murray Darling Division	338,497	—	338,497
		1,025,015	36,930	1,061,945
SH9 — New England Highway				
	Armidale	—	7,880	7,880
		—	7,880	7,880
SH10 — Pacific Highway				
	Ballina	195,323	1,063	196,386
	Bellingen	113,632	—	113,632
	Byron	205,261	—	205,261
	Coffs Harbour	205,613	6,360	211,973
	Gosford	307,268	4,500	311,768
	Grafton	113,185	—	113,185
	Great Lakes	482,522	—	482,522
	Hastings	810,925	—	810,925
	Kempsey	264,025	4,809	268,834
	Lake Macquarie	194,269	—	194,269
	Maclean	538,868	—	538,868
	Manning	500,595	—	500,595
	Nambucca	377,757	—	377,757
	Newcastle	49,992	32,783	82,775
	Port Stephens	204,929	—	204,929
	Richmond River	357,890	—	357,890
	Taree	19,575	15,533	35,108
	Tweed	313,512	10,477	323,989
	Ulmarra	699,185	—	699,185
	Wyong	16,271	—	16,271
		5,970,597	75,525	6,046,122
SH11 — Oxley Highway				
	Coonabarabran	257,229	—	257,229
	Gilgandra	262,448	—	262,448
	Gunnedah	—	11,343	11,343
	Hastings	209,744	—	209,744
	Liverpool Plains	—	134,879	134,879
	Parry	32,763	56,354	89,117
	Port Macquarie	—	826	826
	Tamworth	—	19,392	19,392
	Walcha	186,569	—	186,569
	Warren	121,216	—	121,216
		1,069,969	222,794	1,292,763

**APPENDIX No. 11 — continued**  
**COUNTRY MAIN ROADS FUND**

Summary of Payments from Department's Funds on Maintenance and Minor Improvement Works

Road No.	City, Municipal or Shire Area	Work carried out by		Total
		Department	Council	
(II) STATE HIGHWAYS — continued				
		\$	\$	\$
SH12 — Gwydir Highway				
	Boolooroo	—	23,727	23,727
	Boomi	246,204	—	246,204
	Glen Innes	—	26,443	26,443
	Grafton	5,666	—	5,666
	Inverell	3,094	15,451	18,545
	Macintyre	—	81,606	81,606
	Moree	—	10,580	10,580
	Nymboida	225,225	—	225,225
	Severn	138,813	30,932	169,745
	Walgett	7,285	37,830	45,115
	Yallaroi	1,632	64,730	66,362
		627,919	291,299	919,218
SH14 — Sturt Highway				
	Balranald	157,866	987	158,853
	Hay	313,749	—	313,749
	Kyeamba	52,911	—	52,911
	Mitchell	102,823	—	102,823
	Murrumbidgee	231,663	—	231,663
	Narrandera	141,144	—	141,144
	Wagga Wagga	1,368	14,537	15,905
	Wakool	100,580	—	100,580
	Wentworth	284,003	—	284,003
		1,386,107	15,524	1,401,631
SH16 — Bruxner Highway				
	Ashford	350,244	34,346	384,590
	Ballina	—	34,008	34,008
	Boolooroo	23,484	12,397	35,881
	Casino	—	14,126	14,126
	Kyogle	350,567	—	350,567
	Lismore	—	89,495	89,495
	Richmond River	91,764	9,300	101,064
	Tenterfield	406,183	46,847	453,030
	Yallaroi	—	11,276	11,276
		1,222,242	251,795	1,474,037
SH17 — Newell Highway				
	Berrigan	41,389	—	41,389
	Bland	47,764	—	47,764
	Boolooroo	322,849	—	322,849
	Coolamon	75,323	—	75,323
	Coonabarabran	82,609	—	82,609
	Dubbo	634	—	634
	Forbes	—	9,089	9,089
	Gilgandra	73,577	—	73,577
	Goobang	264,597	—	264,597
	Jemalong	—	55,370	55,370
	Jerilderie	329,401	—	329,401
	Moree	—	12,420	12,420
	Namoi	241,137	—	241,137
	Narrabri	6,760	38,464	45,224
	Narrandera	202,520	—	202,520
	Parkes	6,060	—	6,060
	Talbragar	95,302	—	95,302
	Timbregongie	194,284	—	194,284
	Urana	126,083	—	126,083
	Weddin	16,675	—	16,675
		2,126,964	115,343	2,242,307

**APPENDIX No. 11 — continued**  
**COUNTRY MAIN ROADS FUND**

Summary of Payments from Department's Funds on Maintenance and Minor Improvement Works

Road No.		City, Municipal or Shire Area	Work carried out by		Total
			Department	Council	
(II) STATE HIGHWAYS — continued			\$	\$	\$
SH18 — Castlereagh Highway					
	Brewarrina		4,997	—	4,997
	Coonamble		146,744	—	146,744
	Gilgandra		94,027	—	94,027
	Walgett		407,421	218	407,639
			653,189	218	653,407
SH19 — Monaro Highway					
	Bibbenluke		87,465	76,003	163,468
	Bombala		—	3,484	3,484
	Cooma		—	12,792	12,792
	Monaro		416,038	—	416,038
	Yarrowlumla		54,107	—	54,107
			557,610	92,279	649,889
SH20 — Riverina Highway					
	Albury		36,701	—	36,701
	Berrigan		122,819	—	122,819
	Conargo		89,783	—	89,783
	Corowa		163,788	—	163,788
	Deniliquin		—	3,286	3,286
	Hume		155,898	—	155,898
			568,989	3,286	572,275
SH21 — Cobb Highway					
	Carrathool		31,331	—	31,331
	Central Darling		195,832	3,593	199,425
	Deniliquin		—	20,330	20,330
	Hay		207,344	564	207,908
	Murray		139,725	—	139,725
	Windouran		165,407	—	165,407
			739,639	24,487	764,126
SH22 — Silver City Highway					
	Broken Hill		—	26,000	26,000
	Murray Darling Division		785,521	—	785,521
	Wentworth		393,021	7,787	400,808
			1,178,542	33,787	1,212,329
SH23					
	Newcastle		—	10,400	10,400
			—	10,400	10,400
SH24 — Mount Lindsay Highway					
	Tenterfield		280,935	1,011	281,946
			280,935	1,011	281,946
SH25 — Illawarra Highway					
	Shellharbour		128,477	—	128,477
	Wingecarribee		243,306	—	243,306
			371,783	—	371,783
Total State Highways			24,526,718	1,417,680	25,944,398

**(III) TRUNK AND ORDINARY MAIN ROADS**

Abercrombie	—	92,905	92,905
Albury	—	8,341	8,341
Armidale	—	18,843	18,843
Ashford	12,712	155,918	168,630
Ballina	—	38,179	38,179
Balranald	21,113	95,197	116,310
Barraba	2,050	82,095	84,145
Bathurst	23,907	6,950	30,857



**APPENDIX No. 11 — continued**  
**COUNTRY MAIN ROADS FUND**

Summary of Payments from Department's Funds on Maintenance and Minor Improvement Works

City, Municipal or Shire Area	Work carried out by		Total
	Department	Council	
(III) TRUNK AND ORDINARY MAIN ROADS — continued			
	\$	\$	\$
Bega	—	14,220	14,220
Bellingen	—	314,376	314,376
Berrigan	61,715	60,000	121,715
Bibbenluke	2,467	82,578	85,045
Bingara	3,453	101,478	104,931
Bland	—	124,413	124,413
Blaxland	—	68,177	68,177
Bogan	—	188,694	188,694
Bombala	—	2,121	2,121
Booolooroo	—	87,383	87,383
Boomi	33,175	594,403	627,578
Boorowa	—	52,066	52,066
Boree	—	163,332	163,332
Bourke	100,091	533,967	634,058
Bowral	—	45,840	45,840
Brewarrina	2,214	383,570	385,784
Broken Hill	—	34,991	34,991
Burrangong	—	46,597	46,597
Byron	—	86,750	86,750
Camden	—	10,719	10,719
Canobolas	—	74,311	74,311
Carrathool	29,563	191,213	220,776
Casino	—	22,066	22,066
Central Darling	3,559	505,850	509,409
Cobar	—	487,213	487,213
Coffs Harbour	4,232	196,420	200,652
Colo	629,294	268,663	897,957
Conargo	—	76,763	76,763
Condobolin	14,213	41,203	55,416
Coolah	—	159,738	159,738
Coolamon	—	90,336	90,336
Coonabarabran	—	193,215	193,215
Coonamble	—	257,134	257,134
Cootamundra	—	128,889	128,889
Copmanhurst	46,455	165,282	211,737
Corowa	25,053	61,984	87,037
Cowra	—	13,102	13,102
Crookwell	—	153,444	153,444
Culcairn	—	77,658	77,658
Deniliquin	—	11,440	11,440
Denman	17,638	143,429	161,067
Dubbo	—	6,179	6,179
Dumaresq	—	150,438	150,438
Dungog	1,849	113,754	115,603
Eurobodalla	—	72,400	72,400
Forbes	—	4,043	4,043
Gilgandra	—	68,410	68,410
Glen Innes	—	3,087	3,087
Gloucester	—	43,626	43,626
Goobang	—	191,442	191,442
Goodradigbee	76,620	179,128	255,748
Gosford	—	647,570	647,570
Goulburn	47,806	8,875	56,681
Grafton	16,486	32,328	48,814
Great Lakes	16,080	245,339	261,419
Greater Cessnock	12,116	317,605	329,721
Gundagai	—	36,442	36,442
Gunnedah	—	6,728	6,728
Gunning	1,572	123,653	125,225
Guyra	—	101,433	101,433
Harden	—	108,856	108,856
Hastings	333	100,007	100,340
Hay	—	104,097	104,097
Holbrook	—	106,466	106,466
Hornsby	—	11,000	11,000
Hume	116,499	184,533	301,032

**APPENDIX No. 11 — continued**  
**COUNTRY MAIN ROADS FUND**

Summary of Payments from Department's Funds on Maintenance and Minor Improvement Works

City, Municipal or Shire Area	Work carried out by		Total
	Department	Council	
<b>(III) TRUNK AND ORDINARY MAIN ROADS — continued</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Illabo	—	139,349	139,349
Imlay	—	123,739	123,739
Inverell	—	14,935	14,935
Jemalong	707	140,328	141,035
Jerilderie	—	118,780	118,780
Junee	—	24,098	24,098
Kempsey	206,954	131,033	337,987
Kiama	—	100,110	100,110
Kyeamba	—	72,635	72,635
Kyogle	74,092	540,026	614,118
Lachlan	4,307	365,377	369,684
Lake Macquarie	3,162	324,632	327,794
Leeton	—	89,642	89,642
Lismore	—	384,309	384,309
Lithgow	340,597	13,595	354,192
Liverpool Plains	—	126,939	126,939
Lockhart	—	73,494	73,494
Lyndhurst	—	46,875	46,875
Macintyre	—	103,020	103,020
Maclean	58,436	115,198	173,634
Maitland	64,479	99,788	164,267
Manilla	46,726	77,600	124,326
Manning	—	133,853	133,853
Merriwa	—	205,031	205,031
Mitchell	—	79,684	79,684
Mittagong	—	120,565	120,565
Molong	—	61,889	61,889
Monaro	—	2,792	2,792
Moree	—	5,219	5,219
Mudgee	57,330	248,789	306,119
Mullumbimby	—	5,395	5,395
Mulwaree	109	153,710	153,819
Mumbulla	11,666	79,030	90,696
Murray	—	20,000	20,000
Murray Darling Division	271,497	—	271,497
Murrumbidgee	14,509	22,023	36,532
Murrurundi	—	43,099	43,099
Muswellbrook	21,477	225	21,702
Nambucca	—	96,797	96,797
Namoi	—	420,943	420,943
Narrabri	—	5,875	5,875
Narraburra	—	128,261	128,261
Narrandera	—	89,131	89,131
Narromine	—	5,100	5,100
Newcastle	6,188	74,404	80,572
Nundle	—	60,174	60,174
Nymboida	79,141	106,282	185,423
Oberon	142,968	133,195	276,163
Orange	—	10,386	10,386
Parkes	—	9,588	9,588
Parry	—	158,846	158,846
Patrick Plains	—	23,142	23,142
Port Macquarie	—	9,595	9,595
Port Stephens	—	138,751	138,751
Queanbeyan	—	60,612	60,612
Quirindi	—	12,988	12,988
Richmond River	317,776	122,836	440,612
Rylstone	—	182,806	182,806
Scone	6,187	63,943	70,130
Severn	—	52,593	52,593
Shellharbour	—	43,122	43,122
Shoalhaven	238,612	93,843	332,655
Singleton	284,616	151,915	436,531
Snowy River	367,067	107,373	474,440
Talbragar	—	34,953	34,953
Tallaganda	4,976	206,276	211,252

**APPENDIX No. 11 — continued**  
**COUNTRY MAIN ROADS FUND**

Summary of Payments from Department's Funds on Maintenance and Minor Improvement Works

City, Municipal or Shire Area	Work carried out by		Total
	Department	Council	
(III) TRUNK AND ORDINARY MAIN ROADS — continued			
Tamarang	—	86,088	86,088
Tamworth	—	14,196	14,196
Taree	—	3,790	3,790
Temora	—	17,932	17,932
Tenterfield	—	63,558	63,558
Timbregongie	48,888	81,482	130,370
Tumbarumba	10,257	130,695	140,952
Tumut	13,636	127,360	140,996
Turon	—	49,021	49,021
Tweed	—	144,951	144,951
Ulmarra	—	60,380	60,380
Uralla	8,343	102,621	110,964
Urana	—	96,544	96,544
Wade	—	165,585	165,585
Wagga Wagga	5,222	18,536	23,758
Wakool	75,578	294,042	369,620
Walcha	—	10,822	10,822
Walgett	73,485	645,181	718,666
Warren	—	152,700	152,700
Waugoolia	—	65,692	65,692
Weddin	—	33,000	33,000
Wellington	—	115,862	115,862
Wentworth	204	202,836	203,040
Windouran	—	67,980	67,980
Wingham	—	3,300	3,300
Wingecarribee	—	147,891	147,891
Wollondilly	385,683	330,133	715,816
Wollongong	162,785	134,067	296,852
Wyong	—	192,312	192,312
Yallaro	—	92,534	92,534
Yarrowlumia	—	194,597	194,597
Yass	—	2,884	2,884
Young	—	8,535	8,535
Total Trunk and Ordinary Main Roads	4,730,105	20,648,538	25,378,643
(IV) TOURIST ROADS			
Abercrombie	—	51	51
Ballina	—	2,791	2,791
Coffs Harbour	—	1,269	1,269
Coonamble	—	42	42
Coonabarabran	—	5,977	5,977
Dumaresq	—	4,726	4,726
Eurobodalla	—	629*	629*
Goodradigbee	—	2,093	2,093
Gosford	—	2,325	2,325
Great Lakes	—	8,171	8,171
Guyra	—	677*	677*
Hastings	—	14,898	14,898
Imlay	—	4,273	4,273
Kempsey	—	6,833	6,833
Maclean	—	762	762
Nambucca	—	5,015	5,015
Port Macquarie	—	9,854	9,854
Scone	—	1,250	1,250
Snowy River	1,813	10,627	12,440
Tamarang	—	575	575
Tweed	—	22,415	22,415
Ulmarra	—	1,786	1,786
Wade	—	10,907	10,907
Wagga Wagga	—	410	410
Wingecarribee	—	760	760
Wollondilly	—	550	550
Wollongong	—	2*	2*
Total — Tourist Roads	1,813	117,052	118,865
*Credit			

\*Credit



**APPENDIX No. 11 — continued**  
**COUNTRY MAIN ROADS FUND**

Summary of Payments from Department's Funds on Maintenance and Minor Improvement Works

City, Municipal or Shire Area	Work carried out by		Total
	Department	Council	
<b>SUMMARY</b>	\$	\$	\$
Freeways	392,027	—	392,027
State Highways	24,526,718	1,417,680	25,944,398
Trunk and Ordinary Main Roads	4,730,105	20,648,538	25,378,643
Tourist Roads	1,813	117,052	118,865
Other Roads	186	24,130	24,316
Allowances to councils, miscellaneous, etc.	1,252,363*	2,941,838*	4,194,201*
Engineering services	268,695	182,294	450,989
Total as shown in receipts and payments statement — Appendix No. 1(C)(i)	28,667,181	19,447,856	48,115,037

\*Credit

# **APPENDIX No. 12** **TRAFFIC FACILITIES FUND**

(A) Summary of Payments from Grants under the National Roads Act for Construction and Maintenance

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(I) FREEWAYS</b>					<b>\$</b>
<b>Sydney to Newcastle Freeway</b>					
Gosford	F3	National Highway	Roadmarking maintenance		
Hornsby		Planning Length 211A	by direct control	Department	53,140
Hornsby	F3	"	Signals maintenance		
Gosford			by direct control	"	140
					<u>53,280</u>
<b>South Western Freeway</b>					
Camden	F5 & 178	National Highway	Roadmarking maintenance		
		Planning Length 201A	by direct control	Department	41
Mittagong	F5	Divided two lane carriageway, Aylmerton to Yanderra	Signposting and roadmarking by direct control	"	84,593
Wollondilly	F5	National Highway	Signposting maintenance		
		Planning Length 201A	by direct control	"	12,881
					<u>97,515</u>
<b>Total — Freeways</b>					<u><u>150,795</u></u>
<b>(II) STATE HIGHWAYS</b>					
<b>Hume Highway</b>					
Goodradigbee	2	Yass to Bowning, 5.6 km to 12.1 km south of Yass	Signposting and roadmarking by direct control	Department	2,039
Goodradigbee					
Gunning	2	National Highway	Roadmarking maintenance		
Mulwaree		Planning Length 202A	by direct control	"	21,243
Goodradigbee					
Gundagai					
Harden	2	National Highway Planning Length 203A	"	"	47,847
Goodradigbee	2	Bridge over Connors Creek, 35.2 km south of Yass	Signposting and roadmarking by direct control	"	53
Goulburn City	2	82.1 km to 85.6 km south of Mittagong — dual carriageway	"	"	2,398
"	2	Intersection of Auburn St and Clinton St, Goulburn	Signals — Site No. 1022	"	19,171
"	2	National Highway Planning Length 202A	Signals maintenance by contract	"	4,037
Goulburn City	2	National Highway	Signposting maintenance		
Mulwaree		Planning Length 201B	by direct control	"	2,137
Gundagai	2	Deviation around Gundagai and approaches to Murrumbidgee River Bridge	Signposting and linemarking	"	23,913
Gunning	2	National Highway	Signposting maintenance		
		Planning Length 202A	by direct control	"	981
Holbrook					
Hume	2	National Highway	Roadmarking maintenance		
Kyeamba		Planning Length 204A	by direct control	"	67,399
Kyeamba					
Holbrook	2	National Highway	Signposting maintenance		
Hume		Planning Length 204A	by direct control	"	2,956
Liverpool	2 & 177	National Highway Planning Length 201A	"	"	7,364
Mittagong	2	National Highway Planning Length 201A	"	"	8,934
"	2	National Highway Planning Length 201B	"	"	2,065
Mittagong					
Mulwaree	2	National Highway	Roadmarking maintenance		
Wingecarribee		Planning Length 201B	by direct control	"	42,074
Mittagong					
Wollondilly	2	National Highway Planning Length 201A	"	"	4,220
Yass					
Gundagai	2	National Highway	Signposting maintenance		
Goodradigbee		Planning Length 203A	by direct control	"	35,064
					<u>293,895</u>

**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(A) Summary of Payments from Grants under the National Roads Act for Construction and Maintenance

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(II) STATE HIGHWAYS — continued</b>					<b>\$</b>
<b>Federal Highway</b>					
Gunning					
Mulwaree	3	National Highway	Roadmarking maintenance		
Yarrowlumla		Planning Length 214A	by direct control	Department	8,755
"	3	"	Signposting maintenance		
"		"	by direct control	"	952
Mulwaree	3	Second carriageway, 14.3 km to 22.2 km south of Goulburn	Signposting and roadmarking		
"		"	by direct control	"	389
					<b>10,096</b>
<b>New England Highway</b>					
Cockburn	9	National Highway	Signposting maintenance		
Tamworth		Planning Length 237B	by direct control	Department	3,116
"	9	"	Signals maintenance by direct control	"	318
"	9	"	"	"	9,552
Cockburn	9	"	Signals maintenance		
"		"	by County Councils	Council	2,092
Denman					
Singleton	9	National Highway Planning Length 237A	Signals maintenance by direct control	Department	54
"	9	"	Signposting maintenance		
"		"	by direct control	"	5,662
Denman	9	38.9 km to 45.8 km north of Singleton	Signposting and roadmarking	"	331
Dumaresq	9	National Highway	Roadmarking maintenance		
Uralla		Planning Length 237B	by direct control	"	38,759
Greater Cessnock	9	National Highway	Signposting maintenance		
Singleton		Planning Length 236A	by direct control	"	3,328
Guyra					
Severn					
Glen Innes	9	National Highway Planning Length 237B	"	"	7,594
Guyra	9	"	Roadmarking maintenance		
Severn			by direct control	"	11,251
Muswellbrook	9	National Highway	Signposting and roadmarking		
"		Planning Length Part 237A	by Council	Council	45
Newcastle	9 &				
Maitland	10	National Highway Planning Length 236A	Signals maintenance by direct control	Department	10,878
"	9 &	"	Signposting maintenance		
"	10	"	by direct control	"	11,019
Scone					
Murrurundi					
Tamarang	9	National Highway Planning Length 237A	"	"	1,741
"	9	"	Signals maintenance by direct control	"	685
Severn	9	National Highway	Signposting maintenance		
Glen Innes		Planning Length 237C	by direct control	"	10,726
Severn	9	"	Roadmarking, new marking and re-marking by direct control	"	13,064
Singleton	9	National Highway	Roadmarking maintenance		
Denman		Planning Length 237A	by direct control	"	2,518
Singleton	9	National Highway Planning Length 236A	"	"	3,924
Singleton to					
Tamworth	9	National Highway Planning Length 237A	"	"	13,986
Singleton	9	National Highway Planning Length 236A	"	"	9,635
"	9	Coal entrance, 24.98 km west of Maitland	Provision of passing lane	"	1,570
Tamworth	9	National Highway	Signposting and roadmarking		
"		Planning Length 237B	by Council	Council	85
Tenterfield	9	National Highway Planning Length 237C	"	"	97
"	9	3.2 km to 15.3 km south of Tenterfield	Signposting and roadmarking		
"		"	by direct control	Department	4,579
"	9	National Highway	Roadmarking maintenance		
"		Planning Length 237C	by direct control	"	16
Uralla					
Dumaresq					
Armidale	9	National Highway Planning Length 237B	Signals maintenance by direct control	"	77
"	9	"	Signposting maintenance		
"		"	by direct control	"	11,183
					<b>177,885</b>



**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(A) Summary of Payments from Grants under the National Roads Act for Construction and Maintenance

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(II) STATE HIGHWAYS — continued</b>					<b>\$</b>
<b>Pacific Highway</b>					
Hornsby	10	National Highway Planning Length 211A	Roadmarking maintenance by direct control	Department	2,354
Hornsby	10	"	Signposting maintenance by direct control	"	3,775
"	10	"	Signals maintenance by direct control	"	72
Lake Macquarie					
Wyong	10	National Highway Planning Length 212A	"	"	6,668
"	10	National Highway Planning Length 211A	Signposting maintenance by direct control	"	6,747
"	10	National Highway Planning Length 212A	"	"	36,209
Newcastle	10	Junction, SH10 and SH9 at Hexham, 16.4 km north of Newcastle	Widening to extend left turn lane	"	12
Wyong	10	National Highway Planning Length 212A	Priority roads signposting	"	9,043
"	10	Junction with Kanangra Dr, 125.54 km north of Sydney	Widening of pavement	"	16,680
					<b>81,560</b>
<b>Barton Highway</b>					
Goodradigbee	15	National Highway Planning Length 215A	Roadmarking maintenance by direct control	Department	4,800
Yarrowlumla	15	"	Signposting maintenance by direct control	"	1,487
Goodradigbee	15	4.8 km to 40.0 km south of Yass	Signposting and roadmarking by direct control	"	97
					<b>6,384</b>
<b>State Highway No. 26</b>					
Gosford	26	National Highway Planning Length 211A	Roadmarking maintenance by direct control	Department	5,019
Wyong	26	"	Signposting maintenance by direct control	"	4,103
					<b>9,122</b>
<b>Total — State Highways</b>					<b>578,942</b>
<b>TOTAL<sup>(1)</sup></b>					<b>729,737</b>

<sup>(1)</sup> Note: Expenditure on national roads was financed as follows —

Grants under National Roads Act, 1974 — Schedule 1 — Construction	125,612	
— Schedule 2 — Maintenance	529,191	654,803
State funds		74,934
		<b>729,737</b>

(B) Summary of Payments from Grants under the Roads Grants Act for Minor Traffic Engineering and Road Safety Improvements

**(I) FREEWAYS**

**Western Freeway**

Blacktown					
Penrith	F4	Prospect to Penrith	Emergency telephones	Department	7,600
<b>Total — Freeways</b>					<b>7,600</b>

**(II) STATE HIGHWAYS**

**Princes Highway**

Eurobodalla	1	Intersection with Wharf St, Batemans Bay	Additional lanes	Department	6,312
Eurobodalla					
Mumbulla	1	Narooma to Cobargo	Guardrail on crest and curves	"	24,634
Imlay	1	Junction with Quarantine Bay Rd, 3.37 km south of Eden	Improve visibility and widening	"	2,864
Kiama	1	Fox Ground Turnoff	Guardrail on crests and curves	"	4,827
Kogarah	1	Intersection, SH1 and Woniora Rd, Blakehurst	Roadworks associated with signals — Site No. 1208	"	123
"	1	Intersection of SH1 and Woniora Rd, Blakehurst	Signals — Site No. 1208	"	13,405

**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(B) Summary of Payments from Grants under the Roads Grants Act for Minor Traffic Engineering and Road Safety Improvements

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(II) STATE HIGHWAYS — continued</b>					<b>\$</b>
<b>Princes Highway — continued</b>					
Rockdale	1	Intersection of SH1 and Kyle St, Arncliffe	Signals — Site No. 960	Department	156
South Sydney	1	MR330, Chippendale to Waterfall	Median closures at various locations	..	4,575
Sutherland	1	Railway level crossing at Loftus	Adjust superelevation	..	39,330
..	1	Intersection of SH1 and Railway Pde, Engadine	Signals — Site No. 1290	..	5,269
..	1 & 227	Intersection of SH1 and The Kingsway Kirrawee	Signals	..	5,931
..	1	Intersection of SH1 and Oak Rd, Kirrawee	Additional lanes	..	11,177
Wollongong	1	Foot of Bulli Pass	Provision of safety ramp and deceleration bed	..	139,846
Wollongong Shellharbour	1	0 km to 31.35 km south of Wollongong	Raised reflective pavement markers	..	14,182
					<b>272,431</b>
<b>Hume Highway</b>					
Ashfield	2 & 2065	Intersection of SH2 and Victoria Rd, Ashfield	Signals — Site No. 1227	Department	19,327
Bankstown	2	Intersection with Jacob St and Beresford Ave, Bankstown	Modified channellisation	..	2,634
..	2	Intersection with Meredith St and The Boulevarde, Bankstown	Modified channellisation	..	22,285
..	2	Intersection of SH2 and Meredith St, Yagoona	Signals — Site No. 1135	..	2,969
..	2	Intersection of SH2 and Beresford Ave, Bankstown	Signals — Site No. 1124	..	1,718
..	2	Intersection of SH2, Jacob St and Beresford Av, Bankstown	Improvement of channellised intersection	Council	11,081
Burwood	2	Intersection of SH2, Weldon St and Claremont Rd, Burwood	Signals — Site No. 1161	Department	3,000
..	2	Intersection with Wentworth Rd, Enfield	Modify existing channellisation	..	54,875
Camden	2	Narellan to Leppington	Additional lanes at intersection	..	65,706
Fairfield	2	Intersection with Cabramatta Rd, East Cabramatta	Modified channellisation	..	6,063*
..	2 & 534	Intersection of SH2 and Cabramatta Rd, East Cabramatta	Signals — Site No. 1146	..	181
Goulburn	2	Intersection of SH2 and Vernier St, Goulburn	Channellisation	Council	1,435
Liverpool	2	Intersection of SH2 and Bigge St, Liverpool	Signals — Site No. 1238	Council	1,525
..	2	Intersection of SH2 and Reilly St, Liverpool	Signals	..	1,208
..	2	Intersection of SH2 and Mannix Pde, Warwick Farm	Signals — Site No. 1271	..	9,883
..	2	Intersection of SH2 and Mannix Pde, Liverpool	Roadworks associated with signals — Site No. 1238	..	7,511
Strathfield	2	Intersection of SH2 and Wallis Ave, South Strathfield	Signals — Site No. 1253	..	27,854
					<b>227,109</b>
<b>Snowy Mountains Highway</b>					
Mumbulla	4	Brown Mountain	Raised reflective pavement markers	Department	3,101
Snowy River	4	22.0 km west of Cooma	Adjust superelevation	..	1,254*
					<b>1,847</b>
<b>Great Western Highway</b>					
Ashfield	5	Curve near Great North Rd, Haberfield	Realign short section	Department	11,092
Blacktown	5	Intersection of SH5 and Reservoir Rd, Blacktown	Roadworks associated with signals — Site No. 1237	..	224,560
..	5	Intersection of SH5 and Reservoir Rd, Prospect	Signals — Site No. 1237	..	28,869
..	5	Intersection of SH5 and Station St, Mt. Druitt	Signals — Site No. 1234	..	23,828

\*Credit

**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(B) Summary of Payments from Grants under the Roads Grants Act for Minor Traffic Engineering and Road Safety Improvements

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(II) STATE HIGHWAYS — continued</b>					<b>\$</b>
<b>Great Western Highway — continued</b>					
Blaxland	5	Approaches to Railway overbridge, 16.9 km west of Lithgow	Guardrail	Department	279
"	5	10.0 km to 27.8 km west of Lithgow	Widening of shoulders	"	64,968
Blue Mountains	5	1.5 km to 16.0 km west of Katoomba	Widen shoulders	"	39,223
"	5	Wascoe St, Glenbrook, Kabinda Rd, Bullaburra, Hargraves St, Blackheath	Eliminate three intersections	Council	34,684
Holroyd	5	Intersection of SH5 and Toongabbie Rd, Girraween	Signals — Site No. 1233	Department	12,690
Marrickville					
Ashfield	5	SH1, Sydney to Lucas Rd. Five Dock	Median Closures	"	10,267
Penrith	5	Intersection of SH5 and Glossop St, St. Marys	Signals — Site No. 1236	"	21,743
"	5	Intersection of SH5 and Sydney St, St. Marys	Signals — Site No. 1126	"	13,884
"	5	Intersection of SH5 and Castlereagh Rd, Penrith	Roadworks associated with signals — Site No. 1267	"	16,769
					<b>502,856</b>
<b>Mid Western Highway</b>					
Weddin	6	20.0 km. west of Cowra to Marsden	Advisory speed signs on curves	Council	651
					<b>651</b>
<b>Mitchell Highway</b>					
Bogan	7	Bridge over Bogan River at Nyngan	Guardrail on bridge approaches	Department	17,170
"	7	34.0 km east of Nyngan	Truck parking area	"	7,399
Dubbo	7 & 17	Intersection of Darling St and Cobra St, Dubbo	Signals	"	1,106
Orange	7	Intersection of Summer St and Anson St, Orange	Signals — Site No. 1021	"	5,328
					<b>31,003</b>
<b>Barrier Highway</b>					
Cobar	8	Isolated curve, 29.0 km east of Cobar	Adjust superelevation	Department	209
					<b>209</b>
<b>New England Highway</b>					
Denman	9	Isolated curve, 4.0 km north of Muswellbrook	Adjust superelevation	Department	12,948
Murrurundi	9	Blandford School, Murrurundi	Realign short section and improve curve	"	5,010
					<b>17,958</b>
<b>Pacific Highway</b>					
Bellingen	10	96.75 km north of Kempsey	Guardrail around roadside objects	Department	6,324
Byron	10	27.6 km to 28.9 km north of Ballina	"	"	659
Gosford	10	Intersection of Mann St and Erina St, Gosford	Signals — Site No. 1173	"	31,120
"	10	Intersection of Mann St and Denison St, Gosford	Signals	"	5,600
Grafton	10	Bridge over Clarence River at Grafton	Raised reflective pavement markers	"	196
Great Lakes	10	Karuah to Bulahdelah	"	"	11,149
Greater Cessnock	10	Hexham Bridge to 20.0 km south of Karuah	Raised reflective pavement markers	"	2,700
Hastings	10	Sapling Creek, Gills Creek and railway overbridge, 3 km south of Kempsey	Guardrail on bridge approaches	"	24,726
Hastings	10	61.0 km north of Taree	Adjust superelevation on isolated curve	"	118,735
"	10	40.0 km north of Taree to 25.0 km north of Macksville	Advisory speed signs on curves	"	5,075
Hornsby	10	At Mt. Ku-ring-gai Shopping Centre	Pedestrian Overbridge	"	64,861
"	10	Intersection with Jersey St, Asquith	Modified channellisation	"	3
Kempsey	10	Various locations, 16.35 km south to 32.92 km north of Kempsey	Remove, relocate and guard roadside objects	"	3,319
"	10 & 75	Intersection of SH10 and TR75, Kempsey	Street lighting	Council	20,332



# **APPENDIX No. 12 — continued** **TRAFFIC FACILITIES FUND**

(B) Summary of Payments from Grants under the Roads Grants Act for Minor Traffic Engineering and Road Safety Improvements

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(II) STATE HIGHWAYS — continued</b>					<b>\$</b>
<b>Pacific Highway — continued</b>					
Lake Macquarie	10	Northbound carriageway, 17.0 km south of Newcastle	Improved skid resistance	Department	241
Maclean	10	64.0 km north of Grafton	Realignment	..	4,262
Manning	10	Various locations, 36.0 km south to 39.93 km north of Taree	Remove, relocate and guard roadside objects	..	741
..	10	Harrington Rd, 20.4 km north of Taree	Additional lanes	..	92,746
..	10	36 km south to 73 km north of Taree and 0 km to 33 km north of Kempsey	Raised reflective pavement markers	..	10,701
Newcastle	10	Intersection of Hunter and Denison Sts, Newcastle	Improvement	Council	3,588
North Sydney	10	Intersection of SH10 and Berry St, North Sydney	Roadworks associated with signals — Site No. 1206	Department	4,453
North Sydney	10	Intersection of SH10 and Berry St, North Sydney	Signals — Site 1206	Department	30,614
Richmond River	10	Various locations, 69.0 km to 72.0 km north of Grafton	Improve skid resistance	..	2,272
..	10	66.0 km to 74.0 km north of Grafton	Remove, relocate and guard roadside objects	..	7,398
..	10	93.0 km to 95.0 km north of Grafton	Provision of roadside shoulders	..	14,877
..	10	Bridge over Rattle Creek, 12.8 km north of Maclean	Guardrail on approaches	..	63
Tweed	10	70.0 km to 89.0 km north of Ballina	Guardrail on bridge approaches at three locations	..	76
Ulmara	10	46.4 km to 51.0 km and 56.2 km to 58.9 km north of Coffs Harbour	Clearing of shoulders	..	1,011
..	10	30 km to 40 km north of Coffs Harbour	Guardrail around roadside objects	..	1,239*
..	10	16 locations, 19.99 km to 79.18 km north of Coffs Harbour	Provision of bus bays	..	2,188
..	10	46.4 km north of Coffs Harbour	Remove, relocate and guard roadside objects	..	1,202
..	10	43.0 km to 46.4 km north of Coffs Harbour	Provision or clearing of shoulders	..	13,613
..	10	44.0 km north of Coffs Harbour	Remove, relocate and guard roadside objects	..	4,251
..	10	Intersection of SH10 and Kungala Rd	Visibility improvement	Council	4,784
Willoughby	10	Intersection of SH10, Wyvern Av and William St, Chatswood	Signals — Site No. 1305	Department	49,333
..	10	Intersection of SH10 and Railway St, Chatswood	Signals — Site No. 1219	..	31,004
..	10	Intersection of SH10, Wyvern St and William St, Chatswood	Roadworks associated with signals — Site No. 1305	..	5,989
..	10	Intersection of SH10 and Railway St, Chatswood	Roadworks associated with signals — Site No. 1219	..	9,981
Woodburn	10	2.0 km to 5.0 km north of Woodburn	Guardrail on bank of Richmond River	..	167
Wyong	10 & 509	Intersection of SH10 and MR509, Doyalson	Signals — Site No. 1311	..	19,437
					<b>608,552</b>
<b>Oxley Highway</b>					
Hastings	11	0 km to 107.02 km west of Port Macquarie	Advisory speed signs on curves	Department	1,545
Liverpool Plains	11	48.9 km to 74.5 km west of Tamworth and 17.9 km west of Gunnedah	..	Council	97*
<b>Gwydir Highway</b>					
Nymboida	12	32.66 km west of Grafton	Guardrail around roadside objects	Department	1,873
..	12	25.0 km to 45.0 km west of Grafton	Provision or clearing of shoulders	..	6,450
..	12	19.0 km west of Grafton	Widen cuttings	..	1,239
..	12	10.0 km to 25.0 km west of Grafton	Provision or clearing of shoulders	..	6,436
Severn	12	13.5 km west of Glen Innes	Realign curve and adjust superelevation	Council	3,142
..	12	Intersection 69.0 km east of Glen Innes	Additional lane at intersection	Department	18,797
Yallaro	12	13.0 km west of Wyallda	Realign short section	Council	4,784
..	12 & 63	Intersection of SH12 and TR63 west of Wyallda	Channellised intersection	..	5,920
					<b>50,089</b>

\*Credit

**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(B) Summary of Payments from Grants under the Roads Grants Act for Minor Traffic Engineering and Road Safety Improvements

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(II) STATE HIGHWAYS — continued</b>					<b>\$</b>
<b>State Highway No. 13</b>					
Bankstown	13	Intersection of Woodville Rd and Orchardleigh St, Guildford	Signals — Site No. 1149	Department	41,453
Baulkham Hills	13 &	Intersection of SH13 and			
Hornsby	156	MR156 west Pennant Hills	Signals — Site No. 1150	..	16,006
Hornsby	13 &	Intersection of SH13 and			
	139	Beecroft Rd (east), Beecroft	Signals — Site No. 1226	..	19,739
	13 &	Intersection of SH10 and			
	139	Jersey St, Asquith	Signals — Site No. 1083	..	1,247
					<u>78,445</u>
<b>Sturt Highway</b>					
Balranald	14	Intersection of Market and McCabe Sts, Balranald	Modification of existing channellisation	Department	6,885
Hay	14	Roundabout at intersection with SH21, South Hay	..	..	11,225
					<u>18,110</u>
<b>Bruxner Highway</b>					
Kyogle					
Tomki					
Gundurimba	16	Tabulam to Ballina	Advisory speed signs on curves	Department	3,033
Lismore	16	Hunter, Zadoc and Milton St intersections, Lismore	Bus bays	Council	4,784
					<u>7,817</u>
<b>Newell Highway</b>					
Jerilderie	17	9.9 km to 21.0 km south of Urana Shire boundary	Seal shoulders on curves	Department	11,705
Talbragar	17	Obley Rd at Open Range Zoo, Dubbo	Additional lanes at intersection	..	2,284
					<u>13,989</u>
<b>Monaro Highway</b>					
Monaro	19	30.0 km south of Cooma	Improve skid resistance	Department	1,003*
	19	58.6 km to 66.0 km and 67.9 km to 72.3 km south of Canberra	Improved skid resistance	..	2,690
					<u>1,687</u>
<b>State Highway No. 23</b>					
Lake Macquarie	23	Intersection of Charlestown and Hillsborough Rds, Charlestown	Signals	Department	1,103
					<u>1,103</u>
<b>Illawarra Highway</b>					
Shellharbour	25	2.78 km at Albion Park to 19.79 km west of SH1	Raised reflective pavement markers	Department	14,182
Wingecarribee	25	Intersection of SH25 and Oldbury Rd	Seal shoulders on crest	Council	17,940
					<u>32,122</u>
<b>Total — State Highways</b>					<u>1,865,978</u>
<b>(III) TRUNK AND ORDINARY MAIN ROADS</b>					
Bankstown	167	Intersection of Milperra Rd and Edgar St, Revesby	Signals — Site No. 853	Department	1,109
Baulkham Hills	184	Intersection of Windsor Rd and			
Parramatta		Moxhams Rd, Northmead	Signals — Site No. 1086	..	5,742
Baulkham Hills	184	Intersection of Windsor Rd and			
		Cook St, Baulkham Hills	Signals	..	9,975
Bellingen	76	Intersection of TR76 and Rocky Creek Rd	Visibility improvement	Council	2,392
Bingara	63	27.0 km south of Bingara	Realign short section	..	5,980
	133	Killarney Gap	Guardrail on curves	..	7,176
	133	At Killarney Gap	Realign short section	..	3,588

\*Credit

**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(B) Summary of Payments from Grants under the Roads Grants Act for Minor Traffic Engineering and Road Safety Improvements

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(III) TRUNK AND ORDINARY MAIN ROADS —continued</b>					<b>\$</b>
Blaxland	516	5.5 km to 6.61 km east of Lithgow	Provision of shoulders	Department	2,179
"	516	12.56 km to 12.71 km east of Lithgow	Guardrail on curve	"	5,946
"	516	7.6 km to 8.4 km east of Lithgow	Provision of shoulders	"	14,336
Blue Mountains	184	43.63 km to 77.44 km west of Windsor	Raised reflective pavement markers	"	11,350
"	516	66.71 km to 79.62 km west of Windsor	"	"	191
Boomi	367	Millie Creek Bridge 15.0 km east of Garah	Guardrail on bridge approaches	Council	3,588
Botany	170	Intersection of Botany Rd and Banksia St, Botany	Signals — Site No. 1211	Department	25,823
"	183	Gardeners Rd and Racecourse Place, Eastlakes	Modified channellisation	"	44
Botany					
Rockdale	194	Mascot to Brighton-Le-Sands	Raised reflective pavement markers	"	2
Bourke	68	Adjacent to Bourke High School, Bourke	Bus bay	Council	4,838
"	68	Jandra Creek Bridge No. 2, 10.0 km south of Bourke	Guardrail on bridge approaches	"	25,475
"	404	Green Creek Bridge approaches	Guardrail	"	6,757
Brewarrina	68	Approaches to Billabong Creek Bridge at Brewarrina	Guardrail	"	4,425
Burrangong	78	Intersection with road to Bendick Murrell	Seal shoulders on curve	"	7,535
"	241	Young to Narraburra Shire boundary	Advisory speed signs on curves	"	24
Byron	65	27.3 km north of Lismore	Adjust superelevation on isolated curve	"	1,544
Canterbury	167	Canterbury Rd — full length	Raised reflective pavement marking	Department	1,978
"	167	Intersection of Canterbury Rd and Wonga St, Canterbury	Signals — Site No. 1167	"	20,665
Carrathool	501	18.2 km east of TR80	Advisory speed signs on curves	Council	32
Coffs Harbour	151	Intersection of MR151 and Mt. Brown Rd	Realign short section	"	2,392
Colo	184	Intersection with Grose Vale and Terrace Rds, North Richmond	Channellised intersection	"	4,987
Cootamundra	78	Two railway overbridges at Cootamundra	Removal of brick parapet	"	3,588
Crookwell	52 &				
"	54	Intersection TR52 and TR54	Channellisation	"	8,372
"	201	Sandy Creek, 29.2 km north of TR54	Guardrail on bridge approaches	"	241
Denman	209	Full length within Shire — various locations	Advisory speed signs on curves	"	6,483
Dumaresq	74	6.87 km to 51.85 km east of Armidale	"	"	493*
"	75	50.0 km east of Armidale	Realign short section	"	6,698
Dungog	301	Isolated curve, 2.6 km north of Clarencetown	Adjust superelevation	"	8,372
Fairfield	534	Cabramatta Rd and Church St, Cabramatta	Convert cross intersections to 'T' junctions	Department	1,654
Gloucester	90	Craven at Wards River to Bakers Hill, 40.23 km west of SH10	Advisory speed signs on curves	Council	500*
Great Lakes	90	MR567 to Craven at Wards River	"	"	14,047
"	111	Isolated curve, 28.6 km north of Bulahdelah at Bungwahl	Adjust superelevation	"	11,960
Greater Cessnock	181	3.3 km and 3.4 km north of Bucketty	Improvement of superelevation on curves	"	13,156
"	218	Maitland City boundary to Colo Shire boundary	Advisory speed signs on curves	"	8,644
"	220	0 km to 21.5 km north of Cessnock and 57.5 km to 74.9 km north of Wyong	"	"	4,127
Harden	84	Demondrille Creek Bridge	Guardrail around roadside objects	"	11,362
"	380	Northern Shire boundary to TR84 at Cunningbar	Advisory speed signs on curves	"	217*
"	381	Murrumburrah to SH2 at Jugiong	"	"	875
Hornsby	139	Intersection with Lyne Rd, Cheltenham	Curve improvement	"	10,764
"	587	Intersection with Bridge Rd and Railway Pde, Hornsby	Modified channellisation	Department	24
Hunters Hill	165	Intersection of Victoria Rd and Crown St, Henley	Signals — Site No. 1297	"	6,450
"	165	Intersection of Victoria Rd and Crown St, Henley	Signals — Site No. 1297	"	5,524
Hurstville	168	Intersection of Forest Rd and Jacques Ave, Peakhurst	Signals — Site No. 641	"	12,312
"	168 &	Intersection of Henry Lawson Dr and Forest Rd, Peakhurst	"	"	10,633
"	508				

\*Credit



**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(B) Summary of Payments from Grants under the Roads Grants Act for Minor Traffic Engineering and Road Safety Improvements

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(III) TRUNK AND ORDINARY MAIN ROADS — continued</b>					<b>\$</b>
Inverell	73	O'Connor St Bridge, Inverell	Pedestrian precincts	Council	7,774
Kogarah	194	Bay St to SH1	Raised reflective pavement marking	Department	255
"	315	At South Hurstville Public School	Pedestrian overbridge	"	209,902
Ku-ring-gai	328	Intersection of Archer St and Boundary St, Roseville	Signals — Site No. 1207	"	14,713
Willoughby					
Lake Macquarie	217	42.47 km to 44.37 km south of SH23, Wyee	Widen and seal road shoulders on curves	Council	9,885*
"	217	Junction of Lake Rd with Reservoir Rd, Glendale	Improvement of visibility	"	79,709
"	217	Full length within Shire — various locations	Advisory speed signs on curves	"	7,438
"	217	Fishery Point Rd, Morisset, 34.94 km south of SH23	Provision of passing lane	"	2,364
"	217	Junction with previous route of MR325 at Cockle Creek	Modify existing channellisation	"	13,156
"	217 & 392	Intersection of MR217 and MR392, 1.5 km south of Morisset	Additional lane	"	10,764
"	223	2.24 km to 14.32 km west of Cardiff	Advisory speed signs on curves	"	3,873
"	527	Intersection of Hillsborough Rd and Macquarie Rd, Warners Bay	Signal — Site No. 1331	Department	16,073
"	527	Junction of Croudace Bay Rd with Andrew Rd, Valentine	Provision of passing lane	Council	1,589
Leeton	80 & 539	Intersection with MR539, 22.5 km west of Leeton	Visibility improvement	"	8,372*
"	80 & 539	Intersection of TR80 and MR539	"	"	23,920
Leichhardt	165	Pittwater Rd, Gladesville to Murray St, Pyrmont	Raised reflective pavement markers	Department	2,553
Hunters Hill			Improvement	Council	91
Maclean	152	Intersection with Angourie Rd, Yamba			
Maitland	101	SH9 at Maitland to Dungog Shire boundary	Advisory speed signs on curves	"	2,377
"	102	SH9 at East Maitland to Port Stephens Shire boundary	Advisory speed signs on curves	"	1,405
"	104	"	"	"	2,918
"	301	MR101 at Bolwarra to Port Stephens Shire boundary	"	"	864
Manly	164	Avona Crescent to the Spit Bridge, Seaforth	Improve skid resistance	Department	29,619
Merriwa	62	17.25 km east to 59.41 km west of Merriwa	Bridge width markers	Council	1,062
"	62	Isolated curve, 8.0 km west of Merriwa	Adjust superelevation	"	10,345
"	209	0 km to 24.86 km south of Merriwa	Bridge width markers at various locations	"	212
"	209	9.4 km and 10.5 km east of Merriwa	Provide guardrail on curves and adjust superelevation	"	1,840
"	214	0 km to 41.44 km south of TR62	Bridge width markers at various locations	"	238
Molong	61	19.2 km to 24.0 km west of Orange	Improved skid resistance	"	1,201
Mosman	164	Intersection of Military Rd and Cowles Rd, Mosman	Roadworks associated with signals — Site No. 1224	Department	27,524
"	164	Intersection with Cowles Rd, Mosman	Signals — Site No. 1224	"	21,213
Murray Darling Division	66	9.0 km east of Broken Hill	Realignment	"	16,757
"	66	20.0 km east of Broken Hill	Adjust superelevation	"	34,753
Nambucca	118	3.4 km north of Macksville	Realign short section to improve sight distance	Council	17,940
Namoi	72	Bridge over Deadmans Gully	Guardrail on bridge approaches	"	4,545
Newcastle	82	Intersection of Broadmeadow Rd and Brisbane Rd, Broadmeadow	Signals — Site No. 1122	Department	5,099
"	82	Intersection of Griffiths Rd, and Orlando Rd, Lambton	Signals — Site No. 1168	"	2,586
"	82	Broadmeadow Rd and Brisbane Rd, Broadmeadow	Channellised intersection	Council	8,372
"	82	Intersection of Donald St and Beaumont St, Hamilton	Improvement	"	3,588

\*Credit

**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(B) Summary of Payments from Grants under the Roads Grants Act for Minor Traffic Engineering and Road Safety Improvements

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(III) TRUNK AND ORDINARY MAIN ROADS — continued</b>					<b>\$</b>
Newcastle	108	8.37 km to 16.58 km north of Newcastle	Raised reflective pavement markers	Council	1,381
"	188 & 605	Intersection of Lorna and Maud Sts, Waratah	Improvement	"	2,392
"	217	SH23 at Shortland to Lake Macquarie Shire boundary	Advisory speed signs on curves	"	864
"	223	Curley Rd, Broadmeadow	Channellised intersection	"	10,764
"	316	Intersection of Hunter St and Denison St, Wickham	Signals — Site No. 1137	Department	944
"	316	SH10 at Mayfield to SH10 at Newcastle West	Advisory speed signs on curves	Council	3,458
"	316	Intersection of Hannell St and Cowper St, Newcastle	Improvement	"	20,332
"	326	Turton and Georgetown Rds, Georgetown	"	"	3,588
"	326	Bridge Rd, north of Rydal St, New Lambton	Signals — Site No. P264	Department	377
"	605	Rankin Dr, Hugo Ave and Moore St, Birmingham Gardens	Channellised intersection	Council	3,588
"	605	Intersection of Rankin Dr, Hugo Av and Moore St, Birmingham Gardens	Signals — Site No. 641	Department	24,165
Parramatta	184	Intersection of Old Windsor Rd and Briens Rd, Wentworthville	Improvement of channellised intersection	Council	59,800
"	184	Intersection with Barney St, North Parramatta	Modified channellisation	Department	3,285*
"	184	SH13, Parramatta to divisional boundary at Berambing	Raised reflective pavement markers	"	16,697
Parry	105	21.2 km to 21.43 km and 22.05 km to 22.17 km south of Tamworth	Chainwire protection fencing adjacent to curves	Council	4,437
Peel	130	23.95 km to 27.1 km south of Tamworth	Advisory speed signs on curves	"	47
Port Stephens	90	SH10 to Great Lakes Shire boundary	"	"	8,753
"	108	From SH10 and Lake Macquarie Rd to Shoal Bay	Advisory speed signs on curves	"	9,294*
"	108	Southbound lane at Nelson Bay	Passing lane	"	15,548
"	302	SH10 at Hexham to MR108 at Williamtown	Advisory speed signs on curves	"	2,441*
Queanbeyan	51	Intersection TR51 and Kendall Ave, Queanbeyan	Channellisation	"	9,568
Randwick	171	Intersection of Anzac Pde and Barker St, Kensington	Roadworks associated with signals — Site No. 1189	Department	3,749
"	171	Intersection of Anzac Pde and Middle St, Kingsford	Signal — Site No. 1136	"	1,035
"	171	Intersection of Anzac Pde and High St, Kensington	Signals — Site No. 1169	"	12,996
"	171	"	"	"	76
"	317 & 2074	Intersection of Anzac Pde and Fitzgerald Ave, Maroubra	Signals — Site No. 847	"	1,497
"	327	Intersection of Anzac Pde and Barker St, Kensington	Signals — Site No. 1189	"	29,922
Rockdale	194 & 2079	Intersection of Grand Pde and President Ave, Brighton	Signals — Site No. 878	"	642
Ryde	139 & 2024	Intersection of Blaxland Rd and Balaclava Rd, Eastwood	Signals — Site No. 957	"	270
"	139 & 2024	Intersection of Blaxland Rd and Balaclava Rd, Eastwood	Modify existing channellisation	Council	4,784
Scone	62	0 km to 47.15 km west of Scone	Bridge width markers	"	341*
"	105	0 km to 47.0 km east of Scone	"	"	1,447
South Sydney	170	Intersection of Botany Rd and Epsom Rd, Zetland	Signals — Site No. 1232	Department	29,964
"	170	Intersection of Botany Rd and Collins St, Rosebery	Signals — Site No. 1231	"	15,640
"	528 & 2008	Intersection of Bourke St and McEvoy St, Waterloo	Signals	"	551
"	593	MR330, Moore Park	Additional lanes at intersection	Council	10,166
Sutherland	227	Intersection of Kingsway, Milburn Rd and Gympie Bay Rd, Gympie	Signals — Site No. 1127	Department	23,318

\*Credit

**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(B) Summary of Payments from Grants under the Roads Grants Act for Minor Traffic Engineering and Road Safety Improvements

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(III) TRUNK AND ORDINARY MAIN ROADS — continued</b>					<b>\$</b>
Sutherland	227	Intersection of Kingsway and Wandella Rd, Miranda	Signals	Department	861
..	327	Intersection of Port Hacking Rd and The Kingsway, Miranda	Signals — Site No. 871	..	1,155
Sydney	172	Wentworth Ave, East Sydney to Ramsgate Ave, Bondi	Raised reflective pavement markers	..	16
Woollahra	592	Intersection of Sir John Young Cres and Cahill Expressway	Modified channellisation	Council	12,533
Sydney	592	Cahill Expressway under Botanic Gardens, north of tunnel	Median barrier	Department	49,275
Tamarang	129	TR72 to Bundella	Adjust superelevation on isolated curves	Council	105
Terania	142 & 141	Intersection of MR142 and MR141, 19.87 km north of Lismore	Visibility improvement	..	7
Urana	125 & 59	Intersection of MR125 and TR59	Visibility improvement	..	1,196
Wade	254 & 80	Intersection with TR80 at Wumbulgal	Improvement	..	10,764
..	321	Beelbanger and Bilbul Rds, Beelbanger	Improvement of intersection	..	10,156
Wakool	94	58.93 km to 59.52 km west of SH21	Improve skid resistance	..	3,349
Walgett	329	Approaches to Cashells Bridge, 6.0 km north of Pilliga	Improvement of traffic facilities	..	14,094
Warren	202	Marthaugy Creek Bridge, 20.0 km north of SH11	Guardrail on bridge approaches	..	9,568
Warringah	164	Intersection of Pittwater Rd and South Creek Rd, Dee Why	Signals — Site No. 1205	Department	22,121
..	164	Intersection of Pittwater Rd and Waterloo Rd, Narrabeen	Roadworks associated with signals — Site No. 1257	Council	1,794
..	164	Intersection of MR164 and Ocean Grove Collaroy	Roadworks associated with signals — Site No. 1220	..	215
..	164	Intersection of MR164 and Ocean Grove Collaroy	Signals — Site No. 1220	Department	24,755
..	164	Intersection of Pittwater Rd and Garden St, North Narrabeen	Signals — Site No. 1178	..	19,403
..	164	Intersection of Pittwater Rd and Waterloo St, Narrabeen	Signals — Site No. 1257	..	10,011
..	164	Intersection of MR164 and Plateau Rd, Avalon	Channellisation	..	10,568
..	529	Intersection of the Forestway and Glen St, Belrose	Signals	..	3,149
Waverley	339	Intersection of Old South Head Rd and Victoria St, Bondi	Signals — Site No. 1147	..	686
Woollahra	353	Coomabella to SH7	Provide shoulders	Council	15,548
Wellington	573	Stuart Town to Canobolas Shire boundary	Clear shoulders	Council	573
Willoughby	373	Mowbray Rd, West Lane Cove	Improvement of intersection	Department	14,427
..	599	Intersection of Eastern Valley Rd and Smith St, Castle Cove	Signals — Site No. 1295	..	22,270
Windsor	184	Intersection of MR184 and level crossing road, Mulgrave	Provision of passing lane	..	18,423
Wollondilly	177	Appin to Wollondilly Shire boundary	Bituminous surfacing of shoulders on crest	Council	35,880
Wollongong	177	42.0 km to 47.65 km, south of SH2	Raised reflective pavement markers	Department	14,182
..	522 & 613	Intersection of King St and Northcliffe Dr, Warrawong	Signals — Site No. 537	..	1,780
Woollahra	173	New South Head Road — full length	Raised reflective pavement marking — centre line	..	2,306
..	339	Old South Head Rd — full length	Raised reflective pavement marking — centre line	..	1,836
Wyang	217	SH10 at Wyong to Lake Macquarie Shire boundary	Advisory speed signs on curves	Council	2,161
Yarrowlumla	51	Queanbeyan to TR79	Reflective delineators on lightweight posts	..	2,392
<b>Total — Trunk and Ordinary Main Roads</b>					<b>1,539,482</b>

\*Credit



# **APPENDIX No. 12 — continued** **TRAFFIC FACILITIES FUND**

(B) Summary of Payments from Grants under the Roads Grants Act for Minor Traffic Engineering and Road Safety Improvements

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(iv) DEVELOPMENTAL ROADS</b>					\$
Bogan	1163	Bogan Bridge and approaches	Guardrail	Council	6,279
"	1178	Murrawombie Bridge approaches	"	"	8,795
<b>Total — Developmental Roads</b>					<b>15,074</b>
<b>(v) SECONDARY ROADS</b>					
Ashfield	2056	Bridge over Hawthorn Canal	Steps to bridge underpass	Council	1,869
Bankstown	2068	Intersection of River Rd and Marco Avenue, Revesby	Signals — Site No. 1134	Department	7,043
Blacktown	2084	Intersection with Wall Park Ave, Blacktown	Channellisation	Council	10,764*
Burwood	2027	Wentworth Rd and Railway Pde, Burwood	Channellised intersection	"	32,890
Leichhardt	2042	The Crescent, north of Railway Pde, Rozelle	Adjust superelevation	"	11,960
North Sydney	2036	Intersection of Belgrave St and Young St, Cremorne	Signals — Site No. 1221	Department	21,209
Parramatta	2066	Intersection of Campbell St and Marsden St, Parramatta	Signals — Site No. 1098	"	13,408
Randwick	2074	Intersection of Anzac Pde and Beauchamp Rd, Maroubra	Signals — Site No. 1020	"	45
Sutherland	2075	Intersection of President Ave and Kareena Rd, Caringbah	Signals — Site No. 1219	"	23,449
"	2075	Intersection of President Ave and Oak Rd, Kirrawee	Signals — Site No. 1076	"	814
"	2075	President Ave, west of the Kingsway, Caringbah	Channellised intersection	Council	548*
Willoughby	2092	Intersection of Mowbray Rd and Archer St, Chatswood	Signals — Site No. 1296	"	17,433
<b>Total — Secondary Roads</b>					<b>118,810</b>
<b>(vi) ROADS OTHER THAN MAIN ROADS</b>					
Armidale		Intersection of Dumaresq St and Dangar St, Armidale	Additional lanes	Council	7,176
Ashfield		Eastern and western ends of Graham Reserve and Palace St, Ashfield	Guardrail inside kerblines around roadside objects	"	1,196
"		Intersection of Holden St and Arthur St, Ashfield	"	"	1,196
"		Intersection of Queen St and Arthur St, Ashfield	"	"	1,196
"		Lackey St intersection, Summer Hill	Remove, relocate and guard roadside objects	"	1,508
Bankstown		Intersection of Marion St and William St, Condell Park	Signals	Department	762
Baulkham Hills		Intersection with Oaks Rd and North Rocks Rd, Carlingford	Turning lanes	Council	14,352
Berrigan		Intersection of Tuppal St and Tocumwal St, Berrigan	Channellisation	"	8,372
Blacktown		Intersection of Johnson Ave and Northcott Rd, Seven Hills	Modify channellisation	"	3,421
"		Intersection of Newton St and Balmoral St, Blacktown	Signals — Site No. 1123	Department	345
"		Intersection of Sunnyholt Rd, Sackville St and Fifth Ave, Blacktown	Signals — Site No. 1324	"	19,761
Boolooroo		Milroy Rd, 2.0 km west of SH17	Realign short section	Council	2,392
Boomi		Caidmurra Bridge (Morialta Rd), 16.4 km north of SH12	Guardrail on bridge approaches	"	4,186
Boorowa		Frogmore to Wyangala Rd — various locations	Guardrail on bridge approaches	"	7,654
Boree		Paydens Bridge on Eugowra Rd	"	"	3,417
Bowral		Oxley Dr and Oxley Hill Rd, Bowral	Guardrail on curves	"	35,880
"		Junction of Bridge Park Rd and Osborne Rd, Bowral	Visibility improvement	"	8,372

\*Credit

**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(B) Summary of Payments from Grants under the Roads Grants Act for Minor Traffic Engineering and Road Safety Improvements

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(vi) ROADS OTHER THAN MAIN ROADS — continued</b>					<b>\$</b>
Burrangong		Young to Binalong Rd, 8.0 km south of Young	Improvement to alignment	Council	54
Burwood		Intersection of Victoria St and Shaftesbury Rd, Burwood	Signals — Site No. 1157	Department	11,271
Byron		Coorabell Rd	Seal shoulders on curves	Council	3,588
Camden		Macquarie Gr and Cobbity Rd and Catherine Fields and Deepfields Rd	Upgrade street lighting at intersections	..	54,961
Campbelltown		Georges River Rd and Wamanda Ave, Campbelltown	Channellised intersection	..	10,393
..		Short length of Georges River Rd, Campbelltown	Realignment and widening	..	9,568
Canterbury		Intersection of Burwood Rd and Leyland Rd, Belmore	Additional lane	..	22,246
..		Intersection of Haldon St and The Boulevard, Lakemba	Signals — Site No. 1299	Department	33,694
..		Intersection of Lakemba St and Haldon St, Lakemba	Signals — Site No. 958	..	928
Canterbury		Intersection of Broadarrow Rd and Hannans Rd, Narwee	Signals — Site No. 1164	..	19,965
Hurstville		Intersection of Bonds Rd and Hannons Rd, Riverwood	Signals — Site No. 995	..	688
Canterbury		Blakey St, Cobar	Provision of bus bay	Council	13,156
Cobar		Taragala railway overbridge linking Argoon St to Baronga St, Cowra	Guardrail on bridge approaches	..	2,272
Cowra		Intersection of Henley Marine Drive, Arthur St and Timberell St	Channellisation	..	17,940
Drummoyne		Intersection of Myall St and Wheelers St, Dubbo	Channellisation	..	16,385
Dubbo		Wangat Rd, 1.8 km north of Dungog	Widening and bituminous surfacing of shoulders on crests	..	3,588
Dungog		Intersection of Railway Pde and Frederick St, Fairfield	Passing lane	..	7,535
Fairfield		Intersection of The Boulevard and Avenal St, Fairfield	Seal shoulder on curve	..	5,023
..		Intersection of Barrington East Rd and Walcha Rd (Gloucester-Nowendoc Rd)	Improvement of sight distance	..	13,156
Gloucester		MR278 to Goodhope — various locations	Advisory speed signs on curves	..	2,161
Goodradigbee		Blackwall Rd and Orange Grove Rd, Gosford	Intersection improvement	..	23,920
Gosford		Intersection of Prime St and Fitzroy St, Grafton	Modify existing channellisation	..	1,196
Grafton		Intersection of Congewoi Rd and Middle Rd, Paxton	Visibility improvement	Council	10,764
Greater Cessnock		Intersection of Fowler Rd and Hawksview Rd, Guildford	Realignment of short section	..	5,980
Holroyd		Intersection of Guildford Rd and Fowler Rd, Guildford	Channellisation	..	22,724
..		Chilvers Rd and Sefton Rd, Thornleigh	Channellised intersection	..	13,590
Hornsby		Malsbury Rd at railway station, Normanhurst	Signals — Site No. P263	Department	304
Hunters Hill		Flagstaff St, Gladesville	Realignment of short section	Council	5,382
Hurstville		Intersection of Bonds Rd and Talbot Rd, Riverwood	Channellisation	..	7,176
Inverell		Ring St and Bannockburn Rd, Inverell	Additional lanes at intersection	..	8,372
Jemalong		Back Marsden Rd	Seal pavement on shoulders	..	3,837
Kiama		Mt. Brandon Rd and Jerrara Rd, Kiama	Guardrail on curves	..	23,178
Ku-ring-gai		Intersection of Comenarra Parkway and Kissing Pt Rd, Turrumurra	Signals	Department	898
Liverpool		Cowpastures Rd and Bringelly Rd, Leppington	Improve visibility at intersection	Council	4,784
Liverpool Plains		Emerald Hill to Goulhi Rd, 11.7 km to 12.2 km west of TR72	Improvement of alignment	..	1,070
Marrickville		Intersection of Illawarra Rd and Addison Rd, Marrickville	Signals	Department	25,269

**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(B) Summary of Payments from Grants under the Roads Grants Act for Minor Traffic Engineering and Road Safety Improvements

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(VI) ROADS OTHER THAN MAIN ROADS — continued</b>					<b>\$</b>
Mittagong		Range Rd, Glen Quarry, 0.6 km length north of TR4038	Bituminous surfacing of shoulders on crests and curves	Council	5,980
"		Wilson Drive, Hilltop	"	"	25,415
Molong		Hillians Creek Bridge, 1.0 km north of Cumnock towards SH7	Guardrail on bridge approaches	"	6,291
Monaro		Cooma to Shannons Flat Rd	"	"	5,621
Mulwaree		SH2 to Wingella — various locations	Advisory speed signs on curves	"	7,024
Murrumbidgee		Various council local roads	"	"	35
Newcastle		Hunter St and Steel St, Newcastle	Channellised intersection	"	3,588
North Sydney		Intersection of Burton St and Broughton St, Milsons Point	Channellisation	"	17,940
Nundle		Dungowan Creek Rd	Realign short section	"	11,362
Parramatta		Intersection Terry Rd and Midson Rd, Eastwood	Signals — Site No. 1139	Department	225
Ryde		Soldiers Point Rd, 0.5 km south of Soldiers Point	Realign short section	Council	21,591
Port Stephens		Hill St, Quirindi	Raise level of pavement to improve visibility	"	4,784
Quirindi		Intersection of Malabar Rd and Maroubra Rd, Rosebery	Modify existing channellisation	"	2,990
Randwick		Intersection of High St and Botany St, Randwick	Signals — Site No. 1213	Department	3,123
"		Intersection of Frenchman Rd and Avoca St, Randwick	Signals — Site No. 1079	"	895
Richmond River		Bridges on Eilan Gowan Rd	Guardrail on bridge approaches	Council	3,229
Shellharbour		Central Ave and The Boulevard, Oak Flats	Convert cross intersection to "T" junction	"	18,538
"		Macquarie St, north of Church St, Dubbo	Signals — Site No. P265	Department	466
Shoalhaven		Intersection Naval College Rd and Hyams Beach Rd	Regrade to improve sight distance	Council	16,744
Singleton		Mirrannie Rd and Carrowbrook Rd, Singleton	Reflective delineators on lightweight posts	"	17,940
South Sydney		Intersection of Moorehead St and Phillip St, Redfern	Signals	Department	10,807
Sutherland		Intersection of Old Princes Hwy and Waratah Rd, Engadine	Modify channellisation	Council	41,860
"		Various sites within shire	Remove, relocate and guard roadside objects	"	546
"		Bellingara Rd and Garnet Rd, Miranda	Channellisation	"	8,970
Talbragar		Westella Rd and Plain Creek Rd	Elimination of intersection	"	7,188
Tallaganda		Monga Lane, 0.4 km east of TR51	Realign short section	"	5,980
Tamarang		Various unclassified roads — various locations	Advisory speed signs on curves	"	5,403
Timbrellongie		Weemabah Rd, 5.0 km east of Trangie	Seal shoulders and clear sight obstructions	"	2,727
Tweed		Coraki Bridge	Guardrail on bridge approaches	"	3,827
Waugoola		Woodstock and Wyangla Rd	Realign short section	"	11,163
Wentworth		Unclassified road intersections at Pomona (2) Wentworth (1) Curlwaa (7)	Visibility improvements at intersections	"	2,392
Willoughby		Artamon Rd, west of Chelmsford Ave, Willoughby	Adjust superelevation	"	5,860
"		Albany St, Crows Nest	Modify existing channellisation	"	584
Wingham		Lobban Rd, 0.7 km south of Wingham Post Office	Guardrail on bridge approaches	"	532
Wingecarribee		Wildes Meadow Rd, 3.5 km west of Wildes Meadow	Improvement of alignment	"	4,485
Wollondilly		Thirlmere to Mittagong Rd	Realign short section	"	18,299
Wollongong		George Hanley Drive	Modify and provide additional length	"	164,486
Woollahra		Intersection of Glenmore St and Hargrave St, Paddington	Channellisation	"	3,588
Yaffaroi		Intersection of North Star Valley Rd and Yetman Rd, Boggabilla	Improvement	Council	4,784
<b>Total — Roads other than Main Roads</b>					<b>1,005,244</b>
<b>TOTAL</b>					<b>4,552,188</b>



**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(C) Summary of Payments from State Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(I) FREEWAYS</b>					<b>\$</b>
<b>Warringah Freeway</b>					
Sydney	F1	Sydney Harbour Bridge Driver Aid Scheme	Moveable medians	Department	<b>93,773</b>
<b>Southern Freeway</b>					<b>93,773</b>
Wollongong	F6	Waterfall to Bulli Tollwork	Driver aid system	..	<b>1,321</b>
..	F6	Intersection of F6 and Wollongong By-pass Rd, Wollongong	Signals — Site No. 1182	..	<b>19,570</b>
..	F6 & F8	Intersection of F6 and F8, Wollongong	Channellisation associated with signal installation	..	<b>175,721</b>
					<b>196,612</b>
					<b>Total — Freeways 290,385</b>
<b>(II) STATE HIGHWAYS</b>					
<b>Princes Highway</b>					
Kogarah	1	Tom Uglys Bridge over Georges River at Blakehurst	Extension of median approach	Department	<b>1,470</b>
..	1	SH1 at entrance to Southside Plaza, Kogarah	Roadworks associated with signals — Site No. 975	..	<b>5,121</b>
..	1	Intersection of SH1 and Lower West St, Allawah	Roadworks associated with signals — Site No. 1286	..	<b>2,499</b>
..	1	Intersection of SH1 and Torrens St, Blakehurst	Roadworks associated with signals — Site No. 1287	..	<b>2,508</b>
Marrickville	1	Intersection of SH1, Smith St and Union St, Tempe	Roadworks associated with signals — Site No. 1285	..	<b>4,853</b>
..	1	Intersection with Smith St and Union St, Tempe	Signals — Site No. 1285	..	<b>10,436</b>
Rockdale	1	Intersection of SH1, Smith St and Union St, Tempe	..	..	<b>14,537</b>
Sutherland	1	Intersection with Old Princes Highway, South Engadine	Signals — Site No. 1290	..	<b>10,155</b>
..	1 & 227	Intersection of SH1 and MR227, Kirrawee	Signals — Site No. 1289	..	<b>16,353</b>
Wollongong	1	Intersection of SH1 and Kanhooka Rd, Dapto	Signals — Site No. 1118	..	<b>1,907</b>
..	1	Princes Highway, Fairy Meadow	Co-ordinated traffic control signals system	..	<b>60,188</b>
..	1	Intersection of SH1 and Daisy St, Fairy Meadow	Signals — Site No. 1036	..	<b>5,258</b>
..	1	Intersection of SH1 and Mt. Ousley Rd, Fairy Meadow	Signals — Site No. 1032	..	<b>8,487</b>
..	1	Intersection of SH1 and Lysaght St, Fairy Meadow	Signals — Site No. 1031	..	<b>4,356</b>
..	1	Intersection of SH 1 and Elliotts Rd, Fairy Meadow	Signals — Site No. 1035	..	<b>26,013</b>
					<b>174,141</b>
<b>Hume Highway</b>					
Ashfield	2	Intersection of SH2 and Holden St, Ashfield	Signals — Site No. 1254	Department	<b>18,978</b>
Bankstown	2 & 2090	Intersection of SH2 and Boronia Rd, Greenacre	Signals — Site No. 1270	..	<b>20,993</b>
..	2	Intersection of SH2 and Miller St, Bass Hill	Signals — Site No. 1040	..	<b>29</b>
..	2	Intersection of SH2 and Railway Workshops, Chullora	Signals — Site No. 1269	..	<b>64</b>
Burwood	2	Intersection of SH2 and Claremont Rd, Burwood	Signals — Site No. 1161	..	<b>1,555</b>
					<b>41,619</b>
<b>Great Western Highway</b>					
Blacktown	5	Intersection of SH5 and Reservoir Rd, Blacktown	Reconstruction of intersection	Department	<b>2,098</b>
Blue Mountains	5	Kidman St, Blaxland	Provision of chain-wire fencing	..	<b>315</b>
Penrith	5 & 2082	Intersection of SH5 and Henry St, (West), Penrith	Signals — Site No. 1266	..	<b>14,376</b>
..	5	Intersection of SH5 and Henry St, Penrith	Roadworks associated with signals — Site No. 1266	..	<b>28,131</b>
					<b>44,920</b>

**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(C) Summary of Payments from State Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(II) STATE HIGHWAYS — continued</b>					<b>\$</b>
<b>Pacific Highway</b>					
Gosford	10	Intersection of Mann St and William St, Gosford	Signals	Department	8,354
Kempsey	10	12.0 km south of Kempsey	Elimination of crest	..	30,448
Ku-ring-gai	10	Intersection of SH10 and Grosvenor Rd, Lindfield	Roadworks associated with signals — Site No. 1184	..	1,822
..	10	Intersection of SH10 and Fox Valley Rd, Turramurra	Signals — Site No. 1225	..	2,777
..	10	Intersection with Marian St and Buckingham St, Killara	Signals — Site No. 1108	..	18,481
..	10	Intersection of SH10 and Grosvenor St, Lindfield	Signals — Site No. 1184	..	37,746
..	10	Intersection of SH10 and Cecil St, Gordon	Signals — Site No. 1113	..	1,744
Lake Macquarie	10	Intersection of SH10, Sydney St and The Crescent, Gateshead	Signals — Site No. 383	..	27,279
..	10	Intersection of SH10 and Ridley St, Charlestown	Signals — Site No. 929	..	486
Newcastle	10	Hunter St and Stewart Ave, Wickham	Signals — Site No. 1197	..	434
Willoughby	10	Intersection of SH10 and Ashley St, Chatswood	Roadworks associated with signals — Site No. 1283	..	11,918
Willoughby	10	Intersection with Ashley St, Chatswood	Signals — Site No. 1283	..	19,369
					<b>160,836</b>
<b>State Highway No. 13</b>					
Baulkham Hills	13	Intersection with Jenkins Rd, Carlingford	Signals — Site No. 1240	Department	21,271
Hornsby	13	Intersection of SH13 and Boundary Rd, Pennant Hills	Signals — Site No. 1170	..	20,499
..	13	Intersection of SH13 and Normanhurst Rd, Normanhurst	Signals — Site No. 1274	..	2,883
..	13	..	Roadworks associated with signals — Site No. 1274	..	123
Parramatta	13	Intersection with Adderton Rd, Carlingford	Signals — Site No. 1242	..	12,661
..	13	Intersection of SH13 and Louis St, Merrylands	Signals — Site No. 1195	..	1,396
..	13	Pennant Hills Rd Ramp No. 1, North Parramatta	Signals — Site No. 1026	..	16,113
					<b>74,946</b>
<b>Sturt Highway</b>					
Wagga Wagga	14	Intersection Hammond Ave, Edward St and Lake Albert Rd, Wagga	Signals — Site No. 1322	Department	27,487
					<b>27,487</b>
<b>Castlereagh Highway</b>					
Walgett	18	Single lane bridge over Namoi Rver at Walgett	Temporary installation of traffic signals	Department	5,595
					<b>5,595</b>
<b>Total — State Highways</b>					<b>529,546</b>
<b>(III) ORDINARY MAIN ROADS</b>					
Bankstown	190	Intersection of Chapel St and Rickard St, Bankstown	Signals — Site No. 1203	Department	1,238
..	194	Intersection of Brunner Rd and Rookwood Rd, Yagoona	Signals — Site No. 225	..	542
Baulkham Hills	184	Intersection of Windsor Rd, Junction Rd and Linton St, Baulkham Hills	Signals — Site No. 1243	..	26,238
..	160	Intersection with Castle St and Crane Rd, Castle Hill	Signals — Site No. 1174	..	3,860

**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(C) Summary of Payments from State Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(III) ORDINARY MAIN ROADS — continued</b>					<b>\$</b>
Botany	171 & 344	Intersection of Bunnerong Rd and Wentworth Ave, Pagewood	Signals — Site No. 1140	Department	17
..	171 & 317	Intersection of Bunnerong Rd and Fitzgerald Ave, Pagewood	Signals — Site No. 1263	..	10,341
..	183	Gardeners Rd, east of Doncaster Ave, Kensington	Signals — Site No. P267	..	6,458
Botany	183	Intersection of Gardeners Rd and Eastern Ave, Kingsford	Signals — Site No. 898	..	923
Randwick	167 &	Intersection of MR167 and	Reconstruction of signals —	..	
Canterbury	315	MR315, Wiley Park	Site No. 64	..	553
..	167 & 2040	Intersection of Canterbury Rd and Jeffrey St, Canterbury	Reconstruction of signals — Site No. 855	..	370
Concord	200	Intersection of Concord Rd and Llewellyn Rd, Rhodes	Signals — Site No. 849	..	28
Drummoyne	395	Intersection of Lyons Rd and Brent St, Russell Lea	Signals	..	17,123
Hornsby	373	Intersection of Northwood Rd and Kenneth St, Northwood	Signals — Site No. 1223	..	3,813
..	587	Intersection of George St and Bridge Rd, Hornsby	Signals — Site No. 1133	..	694
Hurstville	168	Intersection of MR168 and Croydon Rd, Hurstville	Signals — Site No. 1025	..	17,724
Rockdale	328	Intersection of Archer St and Boundary St, Roseville	Signals — Site No. 1207	..	5,080
Ku-ring-gai	217	Intersection of Toronto Boulevard and Cary St, Toronto	Signals — Site No. 1116	..	57*
Lake Macquarie	608 & 515	Intersection of Copeland St and Elizabeth Drive, Liverpool	Signals — Site No. 402	..	247
Liverpool	164	Intersection of Baigowlah Rd and Condamine St, Manly	Signals — Site No. 1053	..	13,992
Manly	167	New Canterbury Rd and Duntroon St, Hurlstone Park	Signals — Site No. 1303	..	16,842
Marrickville	164	Intersection with Cowles Rd, Mosman	Signals — Site No. 1224	..	14,215
Mosman	326	Intersection of Turton Rd and Georgetown Rd, Georgetown	Signals — Site No. 1142	..	6,115
Newcastle	164	Intersection of Miller St and Ridge St, North Sydney	Signals — Site No. 1309	..	17,619
North Sydney	164	Intersection of Miller St and McLaren St, North Sydney	Signals — Site No. 1156	..	18,524
..	165	Intersection of Wylde Ave and Victoria Rd, Parramatta	Signals — Site No. 1055	..	760
Parramatta	184	Intersection of Church St and Barney St, North Parramatta	Signals — Site No. 1085	..	14,328
..	171	Intersection of Bunnerong Rd and Fitzgerald Ave, Maroubra	Roadworks associated with signals — Site No. 1263	..	12,837
Randwick	171	Intersection of Bunnerong Rd and Perry St, Matraville	Roadworks associated with signals — Site No. 1262	..	2,408
..	139	Intersection of Blaxland Rd and Lovell Rd, Eastwood	Signals — Site No. 1275	..	20,953
Ryde	139	Intersection of Blaxland Rd and North Rd, East Denistone	Roadworks associated with signals — Site No. 1276	Council	10,048
..	165	Intersection of Victoria Rd and Meriton St, Gladesville	Roadworks associated with signals — Site No. 1016	Department	12,436
..	373	Intersection of Epping Rd and Pembroke St, Epping	Roadworks associated with signals — Site No. 1223	..	2,354
Shellharbour	522	Intersection of Shellharbour Rd and Queen St, Warilla	Signals — Site No. 1364	..	22,395
..	522	Intersection of MR522 and MR611 at Warilla	Installation of traffic signals	..	29,610
South Sydney	170	Botany Rd and Harcourt Parade, Rosebery	Signals — Site No. 1264	..	15,806
..	193 & 2005	Intersection of Copeland St and Mitchell Rd, Alexandria	Signals — Site No. 1340	..	5,537

\*Credit



**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(C) Summary of Payments from State Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(III) ORDINARY MAIN ROADS — continued</b>					<b>\$</b>
Sydney	165	Eastern approach to Glebe Island Bridge, Pyrmont	Improvement to curve	Council	17,732
Wakool	319	Junctions of MR319 and 25.0 km, 34.2 km and 60.8 km north of Barham	Pavement widening	..	17,141
Warringah	164	Condamine St and Old Pittwater Rd, Manly North	Signals — Site No. 1259	Department	15,284
..	164	Intersection with Park St and Golf Ave, Mona Vale	Signals — Site No. 1050	..	26,262
..	164	Intersection of Pittwater Rd and Mactier St, Narrabeen	Signals — Site No. 1256	..	120
..	164	Intersection of Barrenjoey Rd and Mona Vale Rd, Mona Vale	Signals — Site No. 1049	..	27,350
..	164	Intersection of Condamine St and Old Pittwater Rd, North Manly	Roadworks associated with signals — Site No. 1259	Council	2,128
Warringah	162 & 164	Intersection of Pittwater Rd and Mona Vale Rd, Mona Vale	Signals — Site No. 587	Department	24,750
..	328	Warringah Rd, Currie Rd and Brown St, Forestville	Signals — Site No. 1261	..	22,146
..	328	Intersection of Warringah and Willandra Rd, Beacon Hill	Signals — Site No. 800	..	23,732
..	397	Intersection of Wakehurst Parkway and Frenchs Forest Rd	Signals — Site No. 848	..	511
..	529	Intersection of Forest Way and Adams St, Frenchs Forest	Roadworks associated with signals — Site No. 1304	Council	946
Waverley	172	Campbell Pde near Sir Thomas Mitchell Rd, Bondi	Median extension	..	2,364
..	339	Intersection of Old South Head Rd and Dover Rd, Rose Bay	Signals — Site No. 1265	Department	23,951
Wollongong	295	Intersection of Five Islands Rd and Flinders St, Port Kembla	Signals — Site No. 608	..	906
Woollahra	172	Bondi Junction By-pass	Construction	..	100,000
<b>Total — Ordinary Main Roads</b>					<b>637,294</b>
<b>(IV) SECONDARY ROADS</b>					
Auburn	2057	Intersection of Bachell Ave and Church St, Lidcombe	Signals — Site No. 1066	Department	533
Bankstown	2068	Intersection of the River Rd, Uranus Rd and Weston St, Revesby	Signals — Site No. 1316	..	9,942
Burwood	2027	Intersection of Railway Pde and Wentworth Rd, Burwood	Signals — Site No. 1183	..	31,418
Canterbury	2021	Intersection of Homer St and Bayview Ave, Hurstville	Roadworks associated with signals — Site No. 1317	Council	1,123
..	2050	Intersection of Belmore Rd and Hannans Rd, Riverwood	Signals — Site No. 995	Department	16,627
Ku-ring-gai	2043	Intersection of Archbold Rd and Eastern Arterial Rd, Killara	Signals — Site No. 1130	..	626
Lane Cove	2070	Intersection of Longueville and Northwood Rds, Northwood	Signals — Site No. 708	..	39,939
Leichhardt	2046 & 2056	Intersection of Lilyfield Rd and Mary St, Leichhardt	Signals — Site No. 1081	..	22,711
..	2046	Intersection of Brennan St and Catherine St, Lilyfield	Signals — Site No. 862	..	428
..	2073	Intersection of Wigram Rd and Minogue Crescent, Glebe	Roadworks associated with signals — Site No. 1209	Council	2,955
..	2073	Intersection of Wigram Road and Minogue Crescent, Glebe	Signals — Site No. 1209	Department	24,626
..	2073	Intersection of the Crescent, Nelson and William Sts, Annandale	Improvements	Council	35,465
Marrickville	2007	Intersection of Gleeson and Burrows Ave, Sydenham	Signals — Site No. 1152	Department	25,135
Mosman	2036	Intersection of Macpherson St and Ourimbah Rd, Mosman	Signals — Site No. 1222	..	24,196
North Sydney	2019	Intersection of Ben Boyd Rd and Kurraba Rd, Neutral Bay	Signals — Site No. 1162	..	24,496

**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(C) Summary of Payments from State Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
					\$
<b>(iv) SECONDARY ROADS — continued</b>					
Parramatta	2066	Intersection of O'Connell St and Victoria Rd, Parramatta	Signals — Site No. 1105	Department	21,584
Penrith	2082	Intersection of Station St and Henry St, Penrith	Signals — Site No. 1073	..	680
Randwick	2074	Anzac Pde, north of Rainbow St, Kingsford	Roadworks associated with pedestrian signals	..	4,215
..	2074	North of Rainbow St, Kensington	Pedestrian signals — Site No. 1216	..	9,635
Rockdale	2014	Harrow Rd and Watkin St, Bexley	Signals — Site No. 1314	..	19,621
South Sydney	2005	Intersection of Mitchell St and Buckland St, Alexandria	Reconstruction	Council	5,911
..	2077	Intersection with Abercrombie, Lawson and Ivy Sts, Chippendale	Signals — Site No. 1141	Department	19,138
Strathfield	2087	Intersection of Pemberton St and Barker Rd, Strathfield	Signals — Site No. 1163	..	3,468
Sutherland	2075	President Ave, west of Park Lane, Caringbah	Signals — Site No. 1190	..	587
Willoughby	2092 & 2093	Intersection of Mowbray Rd and Alpha Rd, Willoughby	Signals — Site No. 1151	..	20,523
..	2092	Intersection of Sydney St and Mowbray Rd, Willoughby	Signals — Site No. 1044	..	912
..	2093	Brook St to on and off ramps, Warringah Freeway extension	Signals — Site No. 1337	..	171
..	2093	Intersection of Brooks St and Merrenburn Ave, Naremburn	Signals — Site No. 1165	..	639
..	2093	Intersection of Penshurst St and Ashley St, Chatswood	Realignment of south-west kerbs	Council	4,729
..	2093	Penshurst St from Ashley St to Eden St, Chatswood	Reconstruction of kerb and gutter and eastern shoulders	..	17,732
<b>Total — Secondary Roads</b>					<b>389,767</b>
<b>(v) ROADS OTHER THAN MAIN ROADS</b>					
Ashfield		Intersection of Boomerang, Waratah and Dalhousie Sts, Haberfield	Improvements	Council	2,364
Bankstown		Intersection of Hector St and Waldron Rd, Chester Hill	Signals — Site No. 209	Department	1,558
Baulkham Hills		North Rocks Rd, east of Barclay Rd, North Rocks	Signals — Site No. 1204	..	2,949
..		Junction of Jenkin Rd, North Rocks Rd and Oakes Rd, Carlingford	Signals — Site No. 1199	..	1,443
Blacktown		Intersection of Best Rd and Fuller St, Seven Hills	Signals — Site No. P272	..	318
..		Intersection of Lancaster St and Newton Rd, Blacktown	Signals — Site No. 1247	..	20,124
Canterbury		Intersection of Burwood Rd and Leylands Pde, Belmore	Signals	..	26,052
Holroyd		Intersection of Old Prospect Rd and Etalong Rd, Greystanes	Pedestrian signals	..	6,130
Kogarah		Intersection of Railway Pde and Regent St, Kogarah	Signals — Site No. 1192	..	820
Ku-ring-gai		Intersection of Fox Valley Rd and the Comenarra Parkway, Fox Valley	Signals — Site No. 1310	..	11,721
..		Archer St from Ashley St to Nicholson St, Chatswood	Reconstruction of shoulders	Council	17,732
Marrickville		Intersection of Railway Ave, Liberty and Trade Sts, Stanmore	Improvement	..	17,732
..		Intersection of Marrickville Rd and Petersham Rd, Marrickville	Roadworks associated with signals — Site No. 1153	..	11,822
North Sydney		Intersection of Ernest St and Alexander St, Crows Nest	Roadworks associated with signals — Site No. 1306	..	189
..		..	Signals — Site No. 1306	Department	6,301
Parramatta		George St and Smith St, Parramatta	Signals — Site No. 1101	..	22,628
..		Intersection of Marsden St and George St, Parramatta	Signals — Site No. 1093	..	703
..		Intersection of Marsden St and Macquarie St, Parramatta	Signals — Site No. 1095	..	703
					147

**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(C) Summary of Payments from State Funds on Construction and Reconstruction Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(v) ROADS OTHER THAN MAIN ROADS — continued</b>					<b>\$</b>
Parramatta		Intersection of Clyde St and Mona St, Granville	Signals — Site No. 1325	Department	23,007
Randwick		Intersection of Carr St, Carrington Rd and Dudley St, Randwick	Channellisation	Council	14,186
"		Intersection of Todman Ave and Lenthall St, Kensington	"	"	3,546
Rockdale		Intersection of Kingsgrove Rd and Commercial Rd, Kingsgrove	Reconstruction of signals — Site No. 859	Department	2,119
South Sydney		Huntley St and Euston Rd, Alexandria	Signals — Site No. 1300	"	17,131
"		Intersection of Moorehead St, and Phillip St, Redfern	Signals — Site No. 1212	"	9,921
Sutherland		Intersection of Railway Crescent and Box Rd, Jannali	Reconstruction of signals — Site No. 919	"	1,571
Sydney		Liverpool St from Elizabeth St to College St, Sydney	Concrete median	Council	17,732
Warringah		Intersection of Willandra, Lee and Tristram Rds, Beacon Hill	Roadworks associated with signals	"	5,320
"		Intersection of Willandra Rd and McIntosh Rd, Beacon Hill	Reconstruction	"	17,732
"		Intersection of Hakea Avenue and Ashworth Ave, Belrose	Channellisation	"	14,186
Waverley		Intersection of Fletcher St and Farrellys Ave, Waverley	Reconstruction	"	11,822
"		Intersection of Blair St, Wairoa Ave and Wallis Pde, North Bondi	"	"	9,457
Willoughby		Intersection of Hampden Rd and Herbert St, Artarmon	Signals — Site No. 1047	Department	579
		Miscellaneous, minor works, etc.	Signals reconstruction by direct control — minor works	"	1,519
		"	Guardrail around roadside objects	"	3,713
<b>Total — Roads other than Main Roads</b>					<b>304,830</b>
<b>TOTAL</b>					<b>2,151,822</b>

(D) Summary of Payments from State Funds on Maintenance and Minor Improvement Works

**(I) FREEWAYS**

<b>Warringah Freeway</b>					
Sydney	F1	Sydney Harbour Bridge	Tow truck service	Department	865,433
					<b>865,433</b>
<b>Sydney to Newcastle Freeway</b>					
Hornsby					
Gosford	F3	Berowra to Calga Tollwork	Tow service	Department	119,593
					<b>119,593</b>
<b>Southern Freeway</b>					
Wollongong	F6	Waterfall to Bulli Pass Tollwork	Cost of providing towing service	Department	100,508
"	F6	"	Cost of operation of driver aid scheme	"	34,368
					<b>134,876</b>
<b>Total — Freeways</b>					<b>1,119,902</b>

**(II) MAIN ROADS**

<b>Warringah</b>					
Ku-ring-gai	328	Roseville Bridge, Roseville	Tow truck service	Department	80,208
<b>Total — Main Roads</b>					<b>80,208</b>



**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(D) Summary of Payments from State Funds on Maintenance and Minor Improvement Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(III) ROADS OTHER THAN MAIN ROADS</b>					<b>\$</b>
Abercrombie		Classified roads	Roadmarking and signposting	Council	3,099
"		Unclassified roads	"	"	2
Albury		Classified roads	"	"	296
"		Unclassified roads	"	"	2,730
"		Classified roads	Signals maintenance	"	1,027
"		Unclassified roads	"	"	8,058
Armidale		Classified roads	Roadmarking and signposting	"	1,186
"		Unclassified roads	"	"	1,861
Ashfield		Classified roads	Signals maintenance	"	387*
"		"	Roadmarking and signposting	"	58
Ashford		Unclassified roads	"	"	86
Auburn		Classified roads	"	"	12
Ballina		"	"	"	872
"		Unclassified roads	"	"	525
"		Classified roads	Signals maintenance	"	64
Bairnald		"	Roadmarking and signposting	"	2,062
Bankstown		Classified roads	Roadmarking and signposting	"	36
"		Unclassified roads	"	"	592
"		Classified roads	Signals maintenance	"	392*
Barraba		"	Roadmarking and signposting	"	239
Bathurst		"	"	"	2,850
"		Unclassified roads	"	"	5,516
"		"	Signals maintenance	"	533
Baulkham Hills		Classified roads	Roadmarking and signposting	"	26
"		"	Signals maintenance	"	1,890
Bellingen		"	Roadmarking and signposting	"	772
Berrigan		"	"	"	910
"		Unclassified roads	"	"	274
Bibbenluke		Classified roads	"	"	1
Bingara		"	"	"	64
"		Unclassified roads	"	"	4
"		Classified roads	Signals maintenance	"	52
Blacktown		"	Roadmarking and signposting	"	33
Bland		"	"	"	209
Blaxland		"	"	"	2,865
Blue Mountains		"	"	"	781
"		Unclassified roads	"	"	852
Bogan		Classified roads	"	"	715
"		Unclassified roads	"	"	700
Bombala		Classified roads	Roadmarking and signposting	"	423
Boolooroo		"	"	"	128
Boorowa		"	"	"	3,612*
Boree		"	"	"	1,937
"		Unclassified roads	"	"	30
Botany		Classified roads	"	"	67
Bourke		"	"	"	366
"		Unclassified roads	"	"	168
Bowral		Classified roads	"	"	1,487
Brewarrina		"	"	"	99
"		Unclassified roads	"	"	63
Broken Hill		Classified roads	"	"	1,070
"		Unclassified roads	"	"	554
"		Classified roads	Signals maintenance	"	1,979
Burrangong		"	Roadmarking and signposting	"	62
"		Unclassified roads	"	"	12
Burwood		Classified roads	"	"	986
Byron		"	"	"	1,090
Camden		"	"	"	305
Campbelltown		"	"	"	115
"		Unclassified roads	"	"	1,749
Canobolas		Classified roads	"	"	6,671
"		Unclassified roads	"	"	301
Canterbury		Classified roads	Roadmarking and signposting	"	222
"		"	Signals maintenance	"	209
"		Unclassified roads	"	"	135

\*Credit

**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(D) Summary of Payments from State Funds on Maintenance and Minor Improvement Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77 \$
<b>(III) ROADS OTHER THAN MAIN ROADS — continued</b>					
Carrathool		Classified roads	Roadmarking and signposting	Council	156
Casino		"	"	"	5,500
"		Unclassified roads	"	"	849
Central Darling		Classified roads	"	"	1,874
Cessnock		"	"	"	505
"		Unclassified roads	"	"	112
Cobar		Classified roads	"	"	268
"		Unclassified roads	"	"	109
Coffs Harbour		Classified roads	"	"	2,425
"		Unclassified roads	"	"	1,242
"		Classified roads	Signals maintenance	"	856
"		Unclassified roads	"	"	393
Conargo		Classified roads	Roadmarking and signposting	"	745
Condobolin		"	"	"	239
"		Unclassified roads	"	"	127
Coolah		Classified roads	"	"	3,754
"		Unclassified roads	"	"	119
Coolamon		Classified roads	"	"	267
"		Unclassified roads	"	"	147
Cooma		Classified roads	"	"	207
"		Unclassified roads	"	"	436
Coonabarabran		Classified roads	"	"	479
"		Unclassified roads	"	"	355
Coonamble		Classified roads	"	"	437
"		Unclassified roads	"	"	298
Cootamundra		Classified roads	"	"	2,885
"		Unclassified roads	"	"	16
Copmanhurst		Classified roads	"	"	1,877
Corowa		"	"	"	204
"		Unclassified roads	"	"	175
Cowra		Classified roads	"	"	1322
"		Unclassified roads	"	"	845
Crookwell		Classified roads	"	"	327
"		Unclassified roads	"	"	108
Culcairn		Classified roads	"	"	573
Deniliquin		"	"	"	1531
"		Unclassified roads	"	"	332
Denman		Classified roads	"	"	1294
"		Unclassified roads	"	"	34
Drummoyne		Classified roads	"	"	246
Dubbo		"	"	"	607
"		Unclassified roads	"	"	839
"		Classified roads	Signals maintenance	"	3,620
"		Unclassified roads	"	"	4,706
Dumaresq		Classified roads	Roadmarking and signposting	"	1,564
Dungog		Classified roads	"	"	2,467
"		Unclassified roads	"	"	1,024
Eurobodalla		Classified roads	"	"	1,165
"		Unclassified roads	"	"	110
Fairfield		Classified roads	"	"	18
Forbes		"	"	"	1,605
"		Unclassified roads	"	"	179
Gilgandra		Classified roads	"	"	458
"		Unclassified roads	"	"	28
Glen Innes		Classified roads	"	"	4,091
"		Unclassified roads	"	"	614
Gloucester		Classified roads	"	"	511
"		Unclassified roads	"	"	14
Goobang		Classified roads	"	"	2,340
"		Unclassified roads	"	"	84
Goodradigbee		Classified roads	"	"	396
Gosford		"	"	"	324
"		Unclassified roads	Signals maintenance	"	145

**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(D) Summary of Payments from State Funds on Maintenance and Minor Improvement Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(III) ROADS OTHER THAN MAIN ROADS — continued</b>					<b>\$</b>
Goulburn		Classified roads	Roadmarking and signposting	Council	821
"		Unclassified roads	"	"	510
Grafton		Classified roads	"	"	2,740
"		Unclassified roads	"	"	1,110
Great Lakes		Classified roads	"	"	5,899
Gundagai		"	"	"	659
Gundurimba		Classified roads	Roadmarking and signposting	"	1,155
Gunnedah		"	"	"	424
"		Unclassified roads	"	"	427
"		Classified roads	Signals maintenance	"	265
"		Unclassified roads	"	"	264
Gunning		Classified roads	Roadmarking and signposting	"	1,442
Guyra		"	"	"	76
"		Unclassified roads	"	"	131
Harden		Classified roads	"	"	491
"		Unclassified roads	"	"	69
Hastings		Classified roads	"	"	3,984
Hay		"	"	"	504
"		Unclassified roads	"	"	76
Holbrook		"	"	"	51
Holroyd		Classified roads	"	"	5
Hornsby		"	Signals maintenance	"	527
"		Unclassified roads	Roadmarking and signposting	"	14*
Hume		Classified roads	"	"	213
Hurstville		"	"	"	23
"		"	Signals maintenance	"	533*
Illabo		"	Roadmarkings and signposting	"	48
"		Unclassified roads	"	"	74
Inverell		Classified roads	"	"	1,163
"		Unclassified roads	Roadmarking and signposting	"	757
"		Classified roads	Signals maintenance	"	78
Jemalong		"	Roadmarking and signposting	"	1,444
"		Unclassified roads	"	"	28
Jerilderie		Classified roads	"	"	831
"		Unclassified roads	"	"	16
Kempsey		Classified roads	"	"	4,819
"		Unclassified roads	"	"	131
"		Classified roads	Signals maintenance	"	275
Kogarah		"	"	"	299
Ku-ring-gai		"	Roadmarking and signposting	"	144
"		Unclassified roads	Signals maintenance	"	142
Kyeamba		Classified roads	Roadmarking and signposting	"	47
Kyogle		"	"	"	573
"		Unclassified roads	"	"	100
Lachlan		Classified roads	"	"	541
"		Unclassified roads	"	"	32
Lake Macquarie		Classified roads	"	"	9,140
Lane Cove		"	Signals maintenance	"	252
Leeton		Unclassified roads	Roadmarking and signposting	"	78
Leichhardt		Classified roads	"	"	74
"		"	Signals maintenance	"	25
Lismore		"	Roadmarking and signposting	"	3,183
"		Unclassified roads	"	"	4,056
"		Classified roads	Signals maintenance	"	19
Lithgow		"	Roadmarking and signposting	"	1,746
"		Unclassified roads	"	"	832
"		Classified roads	Signals maintenance	"	647
"		Unclassified roads	"	"	42
Liverpool		Classified roads	Roadmarking and signposting	"	179
Liverpool Plains		"	"	"	451
"		Unclassified roads	"	"	110
Lockhart		"	"	"	27

\*Credit



**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(D) Summary of Payments from State Funds on Maintenance and Minor Improvement Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
(III) ROADS OTHER THAN MAIN ROADS — continued					\$
Lyndhurst		Classified roads	Roadmarking and signposting	Council	2,418
"		Unclassified roads	"	"	132
Macintyre		Classified roads	"	"	33
Maitland		"	"	"	3,072
"		Unclassified roads	"	"	58
Manilla		Classified roads	"	"	74
"		Unclassified roads	"	"	47
Manly		Classified roads	"	"	293
"		Unclassified roads	"	"	7,884
"		Classified roads	Signals maintenance	"	6
Manning		Classified roads	Roadmarking and signposting	"	3,130
"		Unclassified roads	"	"	72
Marrickville		Classified roads	"	"	59
"		"	Signals maintenance	"	1,219*
"		Unclassified roads	Signals maintenance	"	134
Merriwa		Classified roads	Roadmarking and signposting	"	473
"		Unclassified roads	"	"	45
Mitchell		Classified roads	"	"	316
Mittagong		"	"	"	10*
Molong		"	"	"	1,780
"		Unclassified roads	"	"	800
Moree		Classified roads	"	"	493
"		Unclassified roads	"	"	406
"		Classified roads	Signals maintenance	"	275
Mosman		"	"	"	24
Mudgee		"	Roadmarking and signposting	"	6,434
"		Unclassified roads	"	"	11
"		Classified roads	Signals maintenance	"	53
Mullumbimby		"	Roadmarking and signposting	"	105
"		Unclassified roads	"	"	713
Mulwaree		Classified roads	"	"	2,390
Mumbulla		"	"	"	362
Murray		"	"	"	787
Murrumbidgee		"	"	"	713
"		Unclassified roads	"	"	234
Muswellbrook		Classified roads	"	"	9
Nambucca		"	"	"	1,709
"		Unclassified roads	"	"	1,180
"		Classified roads	Signals maintenance	"	37
"		Unclassified roads	"	"	9
Namoi		Classified roads	Roadmarking and signposting	"	56
"		Unclassified roads	"	"	710
Narrabri		Classified roads	"	"	1,008
"		Unclassified roads	"	"	1,116
Narraburra		Classified roads	"	"	1,660
"		Unclassified roads	"	"	28
Narrandera		Classified roads	"	"	648
"		Unclassified roads	"	"	600
Narromine		Classified roads	"	"	979
"		Unclassified roads	"	"	44
Newcastle		Classified roads	"	"	15,829
"		Unclassified roads	"	"	118*
"		Parking Advisory Committee	Signposting	Department	224
North Sydney		Classified roads	Roadmarking and signposting	Council	6,449
"		Unclassified roads	"	"	9,499
Nymboida		Classified roads	"	"	1,361
Oberon		"	"	"	4,683
"		Unclassified roads	"	"	183
Orange		Classified roads	"	"	2,224
"		Unclassified roads	"	"	818
"		Classified roads	Signals maintenance	"	4,428
"		Unclassified roads	"	"	3,281
Parkes		Classified roads	Roadmarking and signposting	"	1,658
"		Unclassified roads	"	"	946

\*Credit

**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(D) Summary of Payments from State Funds on Maintenance and Minor Improvement Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(III) ROADS OTHER THAN MAIN ROADS — continued</b>					<b>\$</b>
Parramatta		Classified roads	Roadmarking and signposting	Council	2,944
"		"	Signals maintenance	"	261
Parry		"	Roadmarking and signposting	"	1,213
Penrith		"	"	"	201
"		"	Signals maintenance	"	317
Port Macquarie		"	Roadmarking and signposting	"	267
"		Unclassified roads	"	"	663
Port Stephens		Classified roads	"	"	8,078
Queanbeyan		"	"	"	3,225
"		Unclassified roads	"	"	226
Quirindi		Classified roads	"	"	72
Randwick		"	"	"	112
Richmond River		"	"	"	630
Rockdale		"	"	"	35
"		"	Signals maintenance	"	511
Ryde		"	Roadmarking and signposting	"	97
Rylstone		"	"	"	3,769
"		Unclassified roads	"	"	10
Scone		Classified roads	"	"	953
"		Unclassified roads	"	"	58
Severn		Classified roads	"	"	1,910
Shellharbour		"	"	"	961
Shoalhaven		"	"	"	1,401
Singleton		"	"	"	2,040
"		Unclassified roads	Roadmarking and signposting	"	326
"		Classified roads	Signals and maintenance	"	275
Snowy River		"	Roadmarking and signposting	"	1,608
"		Unclassified roads	"	"	35
South Sydney		Classified roads	"	"	64
Strathfield		"	"	"	44
Sutherland		"	"	"	26
"		"	Signals maintenance	"	1,865
Sydney		"	Roadmarking and signposting	"	1,107
"		Unclassified roads	"	"	26,986
"		"	Signals maintenance	"	36,751
"		City area	Tow service	Department	16,052
Talbragar		Classified roads	Roadmarking and signposting	Council	778
"		Unclassified roads	"	"	197
Tallaganda		Classified roads	"	"	2,050
Tamarang		"	"	"	433
"		Unclassified roads	"	"	267
Tamworth		Classified roads	"	"	2,642
"		Unclassified roads	"	"	1,734
"		Classified roads	Signals maintenance	"	112
"		Unclassified roads	"	"	748
Taree		Classified roads	Roadmarking and signposting	"	2,041
"		Unclassified roads	"	"	855
"		Classified roads	Signals maintenance	"	29
Temora		Classified roads	Roadmarking and signposting	"	2,241
"		Unclassified roads	"	"	380
Tenterfield		Classified roads	"	"	937
"		Unclassified roads	"	"	195
Terania		Classified roads	"	"	771
Timbregongie		"	"	"	706
"		Unclassified roads	"	"	358
Tintenbar		Classified roads	"	"	53
Tumbarumba		Unclassified roads	"	"	59
Tumut		Classified roads	"	"	399
"		Unclassified roads	"	"	41
"		Classified roads	Signals maintenance	"	56
Turon		Unclassified roads	Roadmarking and signposting	"	40
Tweed		Classified roads	"	"	3,935
"		Unclassified roads	"	"	1,393
Ulmarra		Classified roads	"	"	58

**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(D) Summary of Payments from State Funds on Maintenance and Minor Improvement Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>(III) ROADS OTHER THAN MAIN ROADS — continued</b>					<b>\$</b>
Uralla		Classified roads	Roadmarking and signposting	Council	287
"		Unclassified roads	"	"	165
Wade		Classified roads	"	"	530
"		Unclassified roads	"	"	517
Wagga Wagga		Classified roads	"	"	10,717
"		Unclassified roads	"	"	4,718
"		Classified roads	Signals maintenance	"	4,423
"		Unclassified roads	"	"	5,909
Wakool		Classified roads	Roadmarking and signposting	Council	406
"		Unclassified roads	"	"	438
Walcha		Classified roads	"	"	597
"		Unclassified roads	"	"	696
Walgett		Classified roads	"	"	5,254
"		Unclassified roads	"	"	37
Warren		Classified roads	"	"	89
"		Unclassified roads	"	"	28
Warringham		Classified roads	"	"	198
Waugoola		"	"	"	2,432
"		Unclassified roads	"	"	439
Waverley		Classified roads	"	"	147
"		Unclassified roads	"	"	1,910
"		Classified roads	Signals maintenance	"	78
Weddin		"	Roadmarking and signposting	"	7,142
"		Unclassified roads	"	"	298
Wellington		Classified roads	"	"	5,454
"		Unclassified roads	"	"	786
Wentworth		"	"	"	131
Willoughby		Classified roads	"	"	17
Windsor		"	"	"	1,697
Wingecarribee		"	"	"	102
Wollondilly		"	"	"	1,185
"		Unclassified roads	"	"	188
"		"	Signals maintenance	"	22
Wollongong		Classified roads	Roadmarking and signposting	"	6,809
"		Unclassified roads	"	"	188
"		Classified roads	Signals maintenance	"	1,858
Woollahra		"	Roadmarking and signposting	"	296
"		Unclassified roads	"	"	2,706
"		"	Signals maintenance	"	80
Wyong		Classified roads	Roadmarking and signposting	"	1,089
Yallaroi		"	"	"	925
"		Unclassified roads	"	"	506
Yarrowlumla		Classified roads	"	"	2,342
Yass		"	"	"	92
"		Unclassified roads	"	"	133
Young		Classified roads	"	"	827
"		Unclassified roads	"	"	467
					<b>479,339</b>

**DIVISIONS**

Metropolitan	Classified roads	Roadmarking and signposting	Department	1,092,916
"	Unclassified roads	"	"	326,817
"	Classified roads	Signals maintenance	"	1,355,783
"	Unclassified roads	"	"	93,178
Illawarra	Classified roads	Roadmarking and signposting	"	119,063
"	Unclassified roads	"	"	35,086
"	Classified roads	Signals maintenance	"	34,166
"	Unclassified roads	"	"	1,743
Parramatta	Classified roads	Roadmarking and signposting	"	1,070,236
"	Unclassified roads	"	"	37,872
"	Classified roads	Signals maintenance	"	441,352
"	Unclassified roads	"	"	7,900



**APPENDIX No. 12 — continued**  
**TRAFFIC FACILITIES FUND**

(D) Summary of Payments from State Funds on Maintenance and Minor Improvement Works

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>DIVISIONS — continued</b>					<b>\$</b>
Hunter Valley		Classified roads	Roadmarking and signposting	Department	407,634
"		Unclassified roads	"	"	79,678
"		Classified roads	Signals maintenance	"	133,590
"		Unclassified roads	"	"	17,511
North Western		Classified roads	Roadmarking and signposting	"	146,815
"		Unclassified roads	"	"	168
"		Classified roads	Signals maintenance	"	118
Upper Northern		Classified roads	Roadmarking and signposting	"	37,727
North Eastern		Classified roads	"	"	215,002
"		Unclassified roads	"	"	1,284
"		Classified roads	Signals maintenance	"	812
"		Unclassified roads	"	"	371
Southern		Classified roads	Roadmarking and signposting	"	77,678
"		Unclassified roads	"	"	11,346
"		Classified roads	Signals maintenance	"	654
South Coast		Classified roads	Roadmarking and signposting	"	175,802
"		Unclassified roads	"	"	14,899
South Western		Classified roads	"	"	168,339
"		Unclassified roads	"	"	21
Central Murray		Classified roads	"	"	117,599
Central Western		Classified roads	"	"	314,904
"		"	Signals maintenance	"	654
"		Unclassified roads	"	"	654
Murray Darling		Classified roads	Roadmarking and signposting	"	65,482
"		Unclassified roads	"	"	378
Central Northern		Classified roads	"	"	116,936
Lower North Coast		Classified roads	"	"	109,598
"		Unclassified roads	"	"	1,580
"		"	Signals maintenance	"	9
Central Mountains		Classified roads	Roadmarking and signposting	"	24,995
"		Unclassified roads	"	"	1,367
"		Classified roads	Signals maintenance	"	234
"		Unclassified roads	"	"	558
Inner Freeways		Classified roads	Roadmarking and signposting	"	6,060
Traffic Signals					
Workshop, Burwood		Classified roads	"	"	40,240
"		Unclassified roads	"	"	39,523
"		Classified roads	Signals maintenance	"	268,829
"		Classified roads	"	"	236,118
		Ex Department of Motor Transport radio	Removal, relocation and operations	"	6,361
		Development Group,	Supply of materials	"	
		Brisbane St. Sydney	for signals maintenance	"	339,164
		"	Operating co-ordinated traffic signals	"	182,615
		"	Administration expenses	"	337,578
		Miscellaneous, minor works, etc.		"	826,175
		Engineering administration		"	377,334
		General administration		"	670,496
					<b>10,171,002</b>
Total — Roads other than Main Roads					<b>10,850,341</b>
<b>TOTAL</b>					<b>11,850,451</b>

**APPENDIX No. 12 — continued  
TRAFFIC FACILITIES FUND**

City, Municipal or Shire Area	Road No.	Location of Work	Class of Construction	Constructing Authority	Amount 1976/77
<b>SUMMARY</b>				<b>\$</b>	<b>\$</b>
A.		Construction and maintenance of national highways		729,737 <sup>(1)</sup>	
B.		Minor traffic engineering and road safety improvements		4,552,188	
C.		Construction and reconstruction ex State Funds		2,151,822	
D.		Maintenance and minor improvements ex State Funds		11,850,451	19,284,198
Planning and research					36,251
Transfer of Department of Motor Transport organisation to Department of Main Roads					200,916
Total as shown in receipts and payments statement — Appendix No. 1(E)					19,521,365
<sup>(1)</sup> Note: Expenditure on National Roads was financed as follows —					
		Grants under National Roads Act, 1974 — Schedule 1 — Construction		125,812	
		— Schedule 2 — Maintenance		529,191	654,803
		State Funds			74,934
					729,737

**APPENDIX No. 13  
PROCLAMATION OF MAIN ROADS 1976-1977**

During the year the following Main Roads or amendments to existing Main Roads were Proclaimed

Road No.	City, Municipal or Shire Area	Date of Proclamation	Description	Kilometres
4	Imlay	12.11.76	By Government Gazette No. 145 of 12 November 1976 the proclamation of SH4 (Monaro Highway) was amended to exclude that section from Tathra Wharf to the north eastern boundary of Tathra Street, Tathra.	1.25
168	Rockdale Hurstville	1.4.77	By Government Gazette No. 32 of 1 April 1977 the proclamation of MR168 was amended to deproclaim that part from MR508 at Peakhurst to Lugarno via Forest Road and proclaim the road from the eastern abutment of the bridge over Cooks River Deviation Channel at Sydney Airport via that bridge, Marsh Street, West Botany Street and Wickham Street to the Princes Highway (SH1) at Arncliffe, thence from the Princes Highway at Arncliffe via Forest Road to Henry Lawson Drive (MR508) at Peakhurst.	4.16 12.38
393	Sutherland	17.6.77	By Government Gazette No. 64 of 17 June 1977 the proclamation of MR393 was amended to include Koorabin Street and part of Warabin and Yanagan Streets, Waterfall.	0.55
518	Port Stephens	2.7.76	By Government Gazette No. 88 of 2 July 1976 the proclamation of MR518 was amended to exclude that part from a point 3.6 km north of Medowie to Italia and proclaim the road from the Stockton-Nelson Bay Road (MR108) near Williamtown, via Medowie, to the Pacific Highway (SH10) near Euwylong.	16.61
545	Ballina	2.7.76	By Government Gazette No. 88 of 2 July 1976 the proclamation of MR545 was amended to exclude that part from SH10 (Pacific Highway) via Bentinck St to Missingham Bridge and proclaim the road from the intersection of River Street and Cherry Street (Pacific Highway — SH10) Ballina, via River Street, thence adjacent to the training wall along Richmond River fronting Reserve No. 82164 for Public Recreation, thence via Missingham Bridge over North Creek to the lighthouse at East Ballina.	4.39

# **APPENDIX No. 14** **DECLARATION OF SECONDARY ROADS**

During the year the following Secondary Roads were Declared or Rescinded

Road No.	City, Municipal or Shire Area	Date of Declaration	Description	Kilometres
2076	Sutherland	1 4 77	By Government Gazette No. 32 of 1 April 1977 the route of SR2076 as published in Government Gazette No. 70 of 15 July 1966 was rescinded and the following route declared. From the intersection of Acacia Road and Princes Highway (SH1) at Kirrawee, thence generally westerly and southerly via the old route of Princes Highway through Sutherland to the Princes Highway (SH1) at Loftus.	2.68

## **APPENDIX No. 15** **DISTANCES OF FREEWAYS, STATE HIGHWAYS, TRUNK ROADS, ORDINARY MAIN ROADS,** **SECONDARY ROADS, TOURIST ROADS AND DEVELOPMENTAL ROADS** **IN NEW SOUTH WALES FOR THE FIVE YEARS ENDED 30 JUNE 1977**

Road Class	At 30 June				
	1973 miles	1974 km	1975 km	1976 km	1977 km
<b>County of Cumberland Area —</b>					
Freeways	25	58	86	86	86
State Highways	194	313	314	314	314
Ordinary Main Roads	671	1,082	1,085	1,087	1,087
<b>Total all Main Roads and Freeways</b>	<b>890</b>	<b>1,453</b>	<b>1,485</b>	<b>1,487</b>	<b>1,487</b>
Secondary Roads	180	291	287	285	287
Tourist Roads	53	85	85	85	85
Developmental Roads	14	30	30	30	30
<b>Total all Classified Roads</b>	<b>1,137</b>	<b>1,859</b>	<b>1,887</b>	<b>1,887</b>	<b>1,889</b>
<b>Country Area —</b>					
Freeways	14	26	28	28	41
State Highways	6,333	10,188	10,178	10,162	10,164
Trunk Roads	4,374	7,037	7,081	7,080	7,074
Ordinary Main Roads	10,800	17,379	17,230	17,230	17,218
<b>Total all Main Roads and Freeways</b>	<b>21,521</b>	<b>34,630</b>	<b>34,517</b>	<b>34,500</b>	<b>34,497</b>
Tourist Roads	193	320	314	310	318
Developmental Roads	2,407	3,631	3,588	3,578	3,588
<b>Total all Classified Roads</b>	<b>24,121</b>	<b>38,581</b>	<b>38,419</b>	<b>38,388</b>	<b>38,403</b>
<b>Total for whole State —</b>					
Freeways	39	84	114	114	127
State Highways	6,527	10,501	10,492	10,476	10,478
Trunk Roads	4,374	7,037	7,081	7,080	7,074
Ordinary Main Roads	11,471	18,461	18,316	18,317	18,305
<b>Total all Main Roads and Freeways</b>	<b>22,411</b>	<b>36,083</b>	<b>36,003</b>	<b>35,987</b>	<b>35,984</b>
Secondary Roads	180	291	287	285	287
Tourist Roads	246	405	399	395	403
Developmental Roads	2,421	3,661	3,618	3,608	3,618
<b>Total all Classified Roads*</b>	<b>25,258</b>	<b>40,440</b>	<b>40,307</b>	<b>40,275</b>	<b>40,292</b>

\*In addition, the Department is responsible for the full cost of works on unclassified roads in the unincorporated area in the western part of the State totalling 2,398 km and is also responsible for a length of 82 km in the incorporated area.



**APPENDIX No. 16**  
**DISTRIBUTION BETWEEN THE DEPARTMENT AND COUNCILS OF RESPONSIBILITY FOR CARE**  
**AND CONTROL OF ROADS AT 30 JUNE 1977 IN ACCORDANCE WITH THE**  
**PROVISIONS OF THE MAIN ROADS ACT, 1924**

	County of Cumberland*	Countryside km	Total km
1. Roads which are the responsibility of the Department of Main Roads —			
(a) Where work was carried out by the Department —			
Freeways	102	25	127
State Highways	297	8,652	8,949
Trunk and Ordinary Main Roads in the Eastern and Central			
Divisions other than the County of Cumberland	—	990	990
Ordinary Main Roads in the County of Cumberland	614	—	614
Unincorporated area of the Western Division —			
Trunk and Ordinary Main Roads	—	748	748
Unclassified Roads	—	2,398	2,398
(b) Where work was carried out for the Department by Councils —			
State Highways	—	1,529	1,529
Ordinary Main Roads in the County of Cumberland	778	—	778
2. Roads which are the responsibility of Councils assisted by the Department			
of Main Roads —			
Trunk and Ordinary Main Roads other than in the			
County of Cumberland	—	22,250	22,250
	1,791	36,592	38,383

\* County of Cumberland refers to the area defined in Part IV Section 9 of the Main Roads Act, 1924.